

IMI

Precision Engineering

Hannover
2015
Edition

store.norgren.com

Engineering
GREAT Solutions



**Performance
products,
expertise & service**

 IMI NORGREN®

 IMI BUSCHJOST®

 IMI FAS®

 IMI HERION®

 IMI MAXSEAL®

ADDING ADVANTAGE AND VALUE THROUGH ADVICE, EXPERTISE AND SERVICE. **YOU CAN SEE OUR THINKING.**

NORGREN EXPRESS HAS THOUSANDS OF HIGH PERFORMANCE PNEUMATIC MOTION AND FLUID CONTROL PRODUCTS, STOCKED FOR SAME DAY DESPATCH AND RAPID DELIVERY. OUR PRODUCTS, PLUS OUR EXPERT ADVICE AND ADDED VALUE SERVICES, MEANS WE CAN HELP YOU KEEP MAINTENANCE AND DOWNTIME TO A MINIMUM – AND ENSURE YOUR EQUIPMENT RUNS AT OPTIMUM EFFICIENCY.

WHO WE ARE

Norgren Express is a service division within IMI Precision Engineering, the world leading specialist in fluid and motion control. Combining the strength of a major distributor with the capability of a premium brand manufacturer, we make IMI Precision Engineering's expertise and high performance products easily and readily available, whenever and wherever they're needed.

WHY NORGREN EXPRESS?

→ **CONVENIENCE**

With one of the world's most extensive range of fluid and motion control products, services and support in one place, Norgren Express is a convenient and high quality 'one-stop shop' for all your fluid and motion control needs.

→ **EASY TO CONTACT**

Our expert teams are available 8.30 am to 5.00 pm Monday to Friday, and our webstore's open 24/7/365. You're never far away from the product or solution you need.

→ **EXPERTISE**

We're product and technical experts who understand your technical challenges. Our dedicated support team is fully trained to help you find the product, data or application support you need – fast.

→ **SPEED OF DELIVERY**

Many of our products are available for same day despatch, and we operate a truly global sales and service network, helping keep your equipment running – wherever you are.

→ **TRUSTED PRODUCT RANGES**

Manufactured to the most exacting standards, Norgren Express product ranges include names such as Pneufit, Enots, IMI Herion, Martonair, IMI Buschjost, Lintra Plus, Excelon, Olympian Plus and Fleetfit.

→ **RELIABILITY**

Norgren Express products have been proven over many years and in the most challenging environments, and are backed by an industry leading 2-year warranty.

→ **ADVANCED FEATURES**

Norgren Express products have been developed for specific applications and industry sectors, including rail, commercial vehicles and ATEX. They include robust and advanced features, and deliver superior performance at value for money prices.

→ **ADDED SERVICES**

We offer in-house capability to engineer and deliver complete pneumatic systems, and can supply high quality management information to help drive down your total cost of ownership.

EXPRESS LINKS AND EXPRESS PLUS

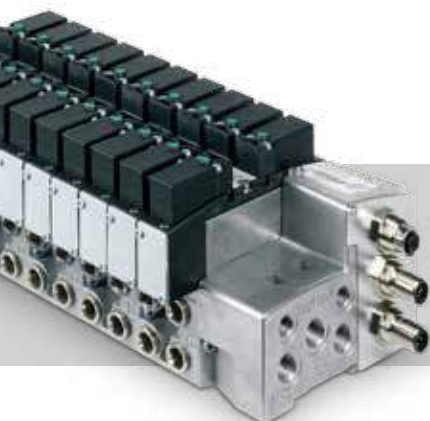
To save you time, our express links box recommends products that support and complement the ones you're buying. Express Plus also offers additional tips on product application and 'best practice'.

EXPRESS LINKS

V50...53 Valves

Are supplied with basic wireable connectors as standard.

For a full selection of cables and connectors please see page 171



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All of our products are backed with an industry leading 2-year warranty. Our dedicated team of experts is on hand with technical advice, support and recommendations to help you get the most effective products, in the shortest timescales, and with the best possible service.

Call the Express Team

SOURCING THE PARTS YOU NEED COULDN'T BE SIMPLER

EASY SELECTION, EASY ORDERING – FINDING THE PARTS YOU NEED IS SIMPLICITY ITSELF!

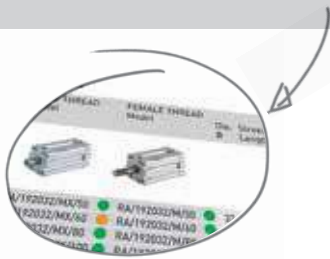
USING THE NORGREN EXPRESS CATALOGUE

The Norgren Express catalogue includes a number of features designed to help you select and order the best parts, quickly and efficiently.

AVAILABILITY – AT A GLANCE

We've developed a unique 'traffic-light' system for product availability

-  In-stock and ready for immediate despatch subject to prior sale
-  Can be quickly assembled from components held in stock
-  Made to order. Lead times depend on complexity, **Call our team for more details**



PART NUMBERS & TECHNICAL INFORMATION

Each product page has a full listing of part numbers, a photo and summary of technical information – everything you need to order the right part.

NEED MORE THAN ONE PRODUCT?

Our 'easy link' boxes lead you to associated and auxiliary products. We also supply helpful tips to guide your decision-making.

INDEXING, MADE EASY

We have four easy to use indices, depending on your needs. One allows you to search by product description, the other by part number. Both make it easy to select the parts – and accessories – you need.

FAST-TRACK ACTUATORS

We can assemble a bespoke actuator tailored to your exact requirements at short notice.

Call or email us for more information.

CLASSIC AND ORIGINAL REPLACEMENT PARTS?

We still stock most of our classic product ranges – you'll find them at the end of each relevant section – and ordering is quick and easy. If the product you're looking for carries this icon, it means we've developed an updated alternative.

RESPONSIBLE BUSINESS

This symbol highlights products which make a special contribution to sustainable engineering – e.g. energy efficient components or energy savings.



NEED MORE DETAILED INFORMATION ON FEATURED PRODUCTS?

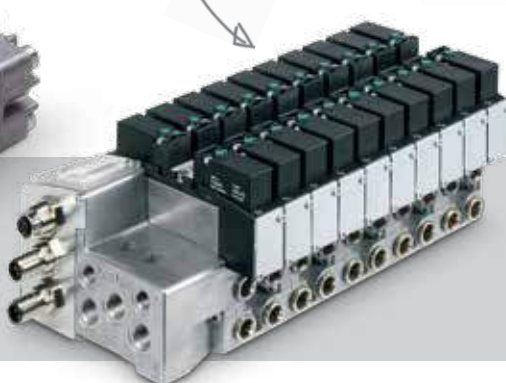
Our key featured products carry a QR code, giving you instant access to detailed information via your smartphone.



INDUSTRY STANDARD
BUT MORE ACCESSORIES
THAN MOST
COMPETITORS

ONLINE
VALVE ISLAND
CONFIGURATOR

TRIED, TRUSTED
AND RELIABLE



store.norgren.com

VISIT TODAY AND EXPERIENCE
IT FOR YOURSELF

STORE.NORGREN.COM



GIVING YOU ACCESS TO OUR PRODUCTS AND PRICING 24/7/365, WEBSTORE MAKES IT EVEN EASIER TO FIND AND ORDER EXACTLY WHAT YOU NEED – QUICKLY AND EFFICIENTLY.

- Easy search, by complete or partial serial number. Access over 10,000 stocked catalogue items, as well as our full extended range
- Intuitive browsing. Easy to use navigation helps you quickly find what you're looking for
- Detailed product information, helping you with your decision-making
- Cross-referencing for auxiliary products, making it easy to source all the products you need on the same visit
- CAD drawings. Downloadable in 15 formats and 2 and 3D models
- Data library. Thousands of data sheets in many languages, ready for you to download
- Real-time pricing and availability

- Valve island configurator. Helping you specify, price and order the optimum solution for your application
- Order history. Find your orders quickly, get detailed line-by-line status, and re-order items from any order – including web, fax and telephone orders
- Create and save quotes
- Quickbasket facility to add up to 10 items with one click – ideal if you know the part numbers
- Pastebasket options, allowing you to copy large lists of items from your purchasing system, spreadsheet, email or word document
- Help and support via links in the top right hand corner of the screen, or just call your Express Team

ORDERING COULDN'T BE SIMPLER

- Find your parts quickly with our intuitive systems
- Order online securely 24/7, with instant email acknowledgment
- We notify you the moment orders are shipped (often same or next day)
- Track your parcel in real-time via links in Order History





A GLOBAL LEADER IN FLUID AND MOTION CONTROL, AND WITH OVER 80 YEARS' DESIGN EXPERIENCE, IMI PRECISION ENGINEERING SPECIALISES IN THE ON-GOING DEVELOPMENT OF HIGHLY TECHNICAL PRODUCTS AND SOLUTIONS ACROSS KEY INDUSTRY SECTORS.

Built for bespoke applications, these solutions have been tried, tested and proven in the most demanding environments, and have evolved to become industry 'standards', available off the shelf in countless variations – all guaranteeing the very best performance.

Norgren Express has been created with the specific purpose of making this expertise, and these products, easily and readily accessible online or on the telephone. Our knowledge and ability to recommend high quality replacements, compatible alternatives and auxiliary parts makes it easier for customers to get the right products, at the right time.

CONVENIENCE, SPEED & AVAILABILITY (PARTNERSHIPS & PROBLEM SOLVING)

Giving customers access to IMI Precision Engineering's products quickly and easily by phone, catalogue or by webstore, Norgren Express offers a convenient and high quality 'one-stop shop' for all MRO needs.

QUALITY AND CHOICE (HIGH PERFORMANCE PRODUCTS)

Norgren Express gives customers rapid access to thousands of proven, high quality products which deliver superior performance, reduced maintenance and long-term cost benefit.

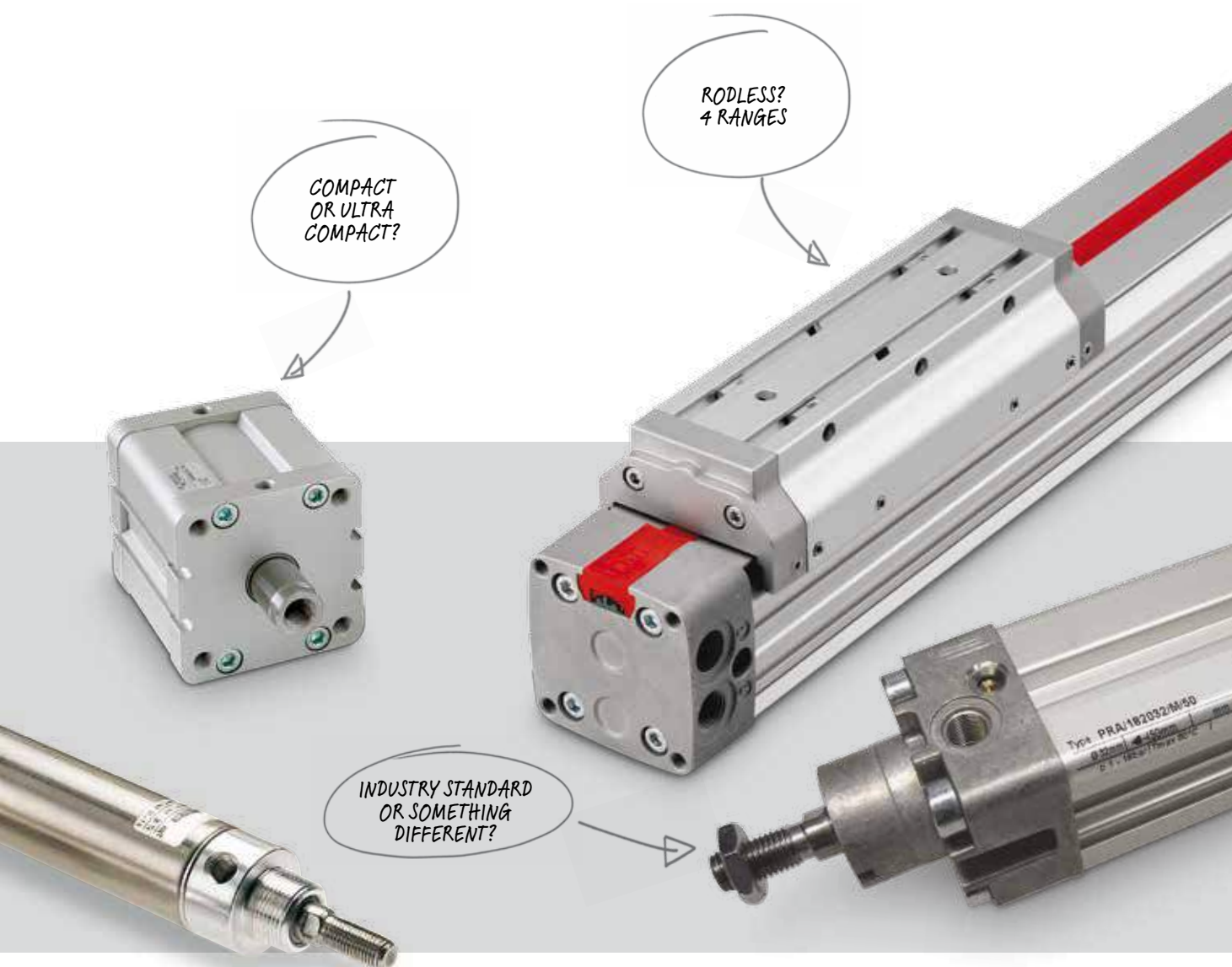
TECHNICAL ADVICE & SUPPORT (RELIABILITY)

Norgren Express offers unrivalled back-up, including expert technical advice, on-going training, in-house engineering and in-depth management information, helping customers get the most out of their products and driving down the total cost of ownership.

ACTUATORS

A vast array of actuators – from ISO/VDMA profile to compact short stroke, rodless and roundline cylinders to rotary actuators, a range of shock absorbers and our classics section, including more traditional actuator ranges. In this edition of the Norgren Express catalogue we have listed the part numbers of hundreds of ex-stock configurations, available off the shelf for rapid delivery.

A whole selection of simple and complex specifications are just a phone call or email away contact the Express Team for rapid, expert advice on the right product for your application. Each item is clearly listed to help ensure you get everything you need to get the job done.



Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering actuator range. If you can't see the option you require contact your Express team.

■ Single Acting

■ Double Acting

ROUNDLINE CYLINDERS

RM/28000/M ■
ISO 6432
Ø 10 ... 25 mm



Page 13

RM/8000/M ■
ISO 6432
Ø 10 ... 25 mm



Page 14

RT/57100/M ■
Ø 20 ... 40 mm



Page 17

RT/57200/M ■
Ø 10 ... 63 mm



Page 18

RM/55401/M ■
Ø 32 ... 63 mm



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COMPACT CYLINDERS

**RA/191000/M and
RA/193000/M** ■
ISO 21287
Ø 20 ... 63 mm



Page 26

RA/192000/M ■
ISO 21287
Ø 20 ... 125 mm



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RM/91000/M ■
Ø 20 ... 63 mm



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RM/92000/M ■
Ø 12 ... 100 mm



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M/50100, M/50200 ■
Ø 8 ... 63 mm



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PROFILE CYLINDERS

PRA/181000/M ■
ISO, VDMA, NFE
Ø 32 ... 50 mm



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PRA/182000/M ■
ISO, VDMA, NFE
Ø 32 ... 125 mm



Page 38

RA/8000/M ■
ISO, VDMA, NFE
Ø 32 ... 320 mm



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**RA/8000/L4,
PRA/182000/L4** ■
Ø 32 ... 125 mm



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INTEGRATED VALVE AND CYLINDER (IVAC)

PRA/88200 ■
Ø 32 ... 100 mm



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LINTRA® PLUS RODLESS CYLINDERS

M/146000 ■
Internal Guide
Ø 16 ... 80 mm



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M/146100 ■
External Guide
Ø 16 ... 80 mm



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M/146200 ■
Precision Roller Guide
Ø 16 ... 80 mm



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CYLINDERS WITH GUIDING

M/60100/M ■
Ø 10 ... 40 mm



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**M/61000/M,
M/61000/MR** ■
Ø 32 ... 100 mm



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ROTARY ACTUATORS

M/60280 ■
30° ... 270° rotation angles
0,2...241,73 Nm/6 bar



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M/162000/MI ■
VDMA
Ø 32 ... 125 mm



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*New to this catalogue

Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering actuator range. If you can't see the option you require contact your Express team.

■ Single Acting

■ Double Acting

STAINLESS STEEL

KM/8000/M
ISO 6432
Ø 12 ... 25 mm



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KA/8000
Ø 32 ... 200 mm



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AIR BELLOWS

PM/31000
Compact air bellows
Ø 2 3/4 ... 12"



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M/31000
Servicable air bellows
Ø 6 ... 26"



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SWITCHES

M/50 (Reed)
M/50/E (Solid State)



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SHOCK ABSORBERS

ACE Shock Absorbers
MC Series
Self-compensating



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ACE Shock Absorbers
MA Series
Adjustable



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CLASSIC PRODUCTS

RM/900
Ø 1,25 ... 14"



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M/3000
Impact Cylinder
24, 5-253 Joule



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M/1525, M/1540
Fixed range positioners



Page 72

M/6000
Repairable Roundline



Page 73

M/1000
Heavy duty cylinder



Page 74

QM/32 (Reed)
QM/132 (Solid state)
TQM/31 (Reed)



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Technical Data

Actuator sizing, control and air consumption

Correct sizing of pneumatic actuators is based upon knowledge of the required force and the applied air pressure. Theoretical thrust and pull of both single and double acting cylinders is shown on the accompanying tables and is calculated by multiplying the effective piston area by the working pressure. Units are generally shown in Newtons ($\text{kg} \times 9.81 = \text{N}$). Note the difference in thrust and pull figures on double acting rodless cylinders due to the reduction made by the piston rod area. These figures are purely theoretical, and make no allowance for frictional losses, pressure differences, leakage, or a 'safety factor'. It is strongly recommended that a factor of safety be

included in all sizing calculations – on all dynamic applications this should be 50%, and on static applications 5%. Pneumatic actuators generally work best and can be better controlled when well within their load capacity, and this safety factor should always be considered to reduce potential issues during operation. In addition, when working at ultra slow speeds, control will be improved if the cylinder is oversized and working well within its total capacity. All figures shown represent theoretical thrust at 6 bar (gauge). For working pressures other than this figure, simply divide the figure shown by 6 and multiply by the desired pressure to arrive at new values.

Table of Thrust and Pull (Single Acting)

Cylinder bore (mm)	10	12	16	20	25	32	40	50	63	80	100
Thrust (N at 6 bar)	37	59	105	165	258	438	699	1102	1760	2892	4583
Pull (N at 6 bar)	3	4	7	14	23	27	39	48	67	86	99

Table of Thrust and Pull (Double Acting)

Cylinder bore (mm)	8	10	12	16	20	25	32	40	44 (1,75")	50	63	76 (3")	80	100	125	152 (6")	160	200	250	304 (12")	320	335 (14")
Piston rod diameter (mm)	3	4	6	6	8	10	12	16	16	20	20	25	25	25	32	(1,5")	40	40	50	(2,25")	63	(2,25")
Thrust (N at 6 bar)	30	47	67	120	188	294	482	753	931	1178	1870	2736	3015	4712	7363	10944	12063	18849	29452	43779	48254	59588
Pull (N at 6 bar)	25	39	50	103	158	246	414	633	810	989	1681	2441	2721	4418	6881	10260	11309	18095	28274	42240	46384	58049

Table of Consumption

Cylinder bore (mm)	10	12	16	20	25	32	40	50	63	80	100	125	160	200	250
Piston rod diameter (mm)	4	6	6	8	10	12	16	20	20	25	25	32	40	40	50
Push stroke consumption (litre/mm of stroke at 6 bar)	0,00054	0,00079	0,00141	0,0022	0,00344	0,00563	0,0088	0,01374	0,02182	0,03519	0,05498	0,0859	0,14074	0,21991	0,34361
Pull stroke consumption (litre/mm of stroke at 6 bar)	0,00046	0,00065	0,00121	0,00185	0,00289	0,00484	0,00739	0,01155	0,01962	0,03175	0,05154	0,08027	0,13195	0,21112	0,32987
Combined consumption (litre/mm of stroke per cycle)	0,001	0,00144	0,00262	0,00405	0,00633	0,01047	0,01619	0,02529	0,04144	0,06694	0,10652	0,16617	0,27269	0,43103	0,67348

Technical Data

Actuator sizing, control and air consumption

Technical Option Range Selector

	Bore size	Max stroke length	Single / Double acting	Sprung in / out (single acting)	Cushioning type	Non magnetic / magnetic	End cap with integral eye mount	End cap with axial port	Flat faced end cap	Non rotating piston rod	Double ended piston rod	Piston rod locking unit	Extended piston rod	Heavy duty wiper seal	Chrome plated piston rod	Stainless steel piston rod	Female piston rod thread	Guided piston rod	Precision guided piston rod	Low friction version	Tandem cylinder	Multi-position cylinder	High temperature seals	Hydraulic version	Piston rod bellows	Non cushioned	Dual ported end cap	Adjustable end position	External hydraulic damping	Female pinion	Impact cylinder	Air bellows	Fixed range positioner
RM/28000	10-25mm	50mm	S	In only	Fixed	Magnetic only	*S	Y	Y																								
RM/8000	10-25mm	500mm	D		Fixed/Adjustable	Magnetic only	*S	Y	Y	Y	Y	Y	Y																				
RT/57100	8-40mm	150mm	S	Both	Fixed	Magnetic only	*S	Y																									
RT/57200	8-63mm	500mm	D		Fixed	Magnetic only	*S	Y	Y		Y		Y																				
RM/55401	32-100mm	300mm	D		Adjustable	Magnetic only					Y		Y	Y	Y	Y																	
RA/191000	20-63mm	50mm	S	Both	Fixed	Magnetic only				Y			Y			Y	Y																
RA/192000	20-125mm	500mm	D		Fixed	Magnetic only				Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y											
RM/91000	20-63mm	50mm	S	Both	None	Magnetic only				Y							*S																
RM/92000	12-100mm	300mm	D		None	Magnetic only				Y	Y		Y				*S	Y				Y	Y										
M/50100	8-63mm	25mm	S	In only	None	Magnetic only											*S																
M/50200	8-63mm	25mm	D		None	Magnetic only					Y						*S																
PRA/181000	32-100mm	250mm	S	Both	Adjustable	Both				Y				Y	Y	Y																	
PRA/182000	32-125mm	3000mm	D		Adjustable	Both				Y	Y	Y	Y	Y	Y	Y				Y		Y	Y	Y	Y	Y							
RA/8000	32-320mm	3000mm	D		Adjustable	Both				Y	Y	Y	Y	Y	Y	Y				Y		Y	Y	Y	Y	Y							
M/146000	16-80mm	8500mm	D		Adjustable	Both																					*S						
M/60100	10-40mm	225mm	D		Fixed	Magnetic only					*S								*S														
M/61000	32-100mm	100mm	D		None	Magnetic only					*S			Y					*S						Y								
M/60280	Vane type	Not valid	D		None	Non magnetic																						Y	Y				
M/162000	32-125mm	360°	D		Adjustable	Magnetic																						Y		Y			
KM/8000	10-25mm	500mm	D		Fixed/Adjustable	Magnetic only	*S		Y		Y	Y	Y			*S																	
KA/8000	32-200mm	2500mm	D		Adjustable	Both					Y	Y	Y	Y		*S									Y								
PM/31000	2,75-12"	215mm	S	Not valid	Not valid	Not valid																										Y	
M/31000	2-6"	410mm	S	Not valid	Not valid	Not valid																										Y	
RM/900	1,25-14"	3000mm	D		Adjustable	Both					Y		Y		Y	Y	Y					Y	Y	Y									
M/3000	2-6"	Not valid	D		None	Non magnetic																									Y		
M/15**	2,5-4"	320mm	D		None	Non magnetic																											Y
M/6000	0,75-1"	150mm	D		Fixed	Non magnetic	*S				Y		Y																				
M/1000	2,5-12"	3000mm	D		Adjustable	Non magnetic					Y		Y		*S	Y	Y						Y	Y	Y								

*S = Standard

ISO ROUNDLINE CYLINDERS

WHEN APPLYING PNEUMATIC ACTUATORS TO LIGHTER DUTY, LOWER FORCE APPLICATIONS, MANY MACHINE BUILDERS TEND TO SELECT A SIMPLE 'ROUNDLINE' PRODUCT. THE MOST COMMON OF THESE ARE ACTUATORS THAT CONFORM TO ISO6432, A DIMENSIONAL STANDARD ENSURING INTERCHANGEABILITY BETWEEN MANUFACTURERS.

A number of features make the Express range of ISO roundline cylinders stand apart from the competition:

- IMI Precision Engineering uses a 'Z' type low friction seal to support both low and high speed applications with operating life up to 10 million cycles – one product applied to all manner of applications, with reduced maintenance scheduling, downtime and therefore cost of ownership
- The standard actuator is fully non-corrodible in standard applications. For more arduous environments, you can choose a stainless version, reducing the need for more costly modification to machine functions
- If you're looking for a more specialised and cost-effective solution, choose from double ended or non-rotating piston rods, add a rod lock, select different end-cap styles to save space, add a guide block to improve load capacity, or fit high temperature seals
- Uses the standard IMI Norgren M/50 series switch (reed or solid state) as fitted to virtually the entire IMI Norgren actuator range – reducing expensive spares stockholding to a minimum and ensuring total familiarity across all types of actuator



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

WHAT IF THE AIR FAILS?

ANYTHING MORE COMPACT?

LOAD TOO HEAVY?



ISO ROUNDLINE CYLINDERS RM/28000/M

Single acting, ISO 6432 – Ø 10 ... 25 mm



Perfect for small to medium force applications

Low friction 'Z' seals offer both high and low speed working and extremely long life

Unit is fully non corrodible reducing the need for costly protection in more aggressive environments

Choice of three end cap styles, and other technical variants, allows a wider use of standard products

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Single acting (sprung in), magnetic piston, buffer cushioning

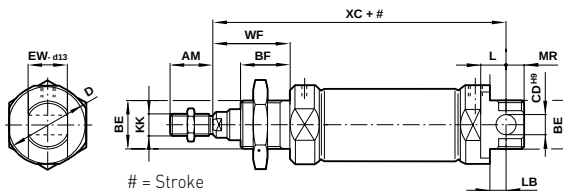
Operating pressure:

2 ... 10 bar

Operating temperature:

–10°C ... +80°C max.

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AM	BE	BF	Ø CDH9	ØD	EW d13	KK	L	LB	MR	WF	XC
10	12	M12x1,25	12	4	16,5	7,9	M4	6	2	8	16	64
12	16	M16x1,5	17	6	21	11,9	M6	9	3	8	22	75
16	16	M16x1,5	17	6	21	11,9	M6	9	4	7	22	82
20	20	M22x1,5	20	8	30	15,9	M8	12	3	11	24	95
25	22	M22x1,5	22	8	30	15,9	M10x1,25	12	7	9	28	104

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Straight fitting	Elbow fitting



RM/28010/M/10	●	10	10	M5	4	M/50/LSU/5V	QM/33/010/23	–	C02250405	C02470405
RM/28010/M/25	●	10	25	M5	4	M/50/LSU/5V	–	QM/33/010/22	C02250405	C02470405
RM/28010/M/50	●	10	50	M5	4	M/50/LSU/5V	–	QM/33/010/22	C02250405	C02470405
RM/28012/M/10	●	12	10	M5	6	M/50/LSU/5V	QM/33/012/23	–	C02250405	C02470405
RM/28012/M/25	●	12	25	M5	6	M/50/LSU/5V	–	QM/33/012/22	C02250405	C02470405
RM/28012/M/50	●	12	50	M5	6	M/50/LSU/5V	–	QM/33/012/22	C02250405	C02470405
RM/28016/M/10	●	16	10	M5	6	M/50/LSU/5V	QM/33/016/23	–	C02250405	C02470405
RM/28016/M/25	●	16	25	M5	6	M/50/LSU/5V	–	QM/33/016/22	C02250405	C02470405
RM/28016/M/50	●	16	50	M5	6	M/50/LSU/5V	–	QM/33/016/22	C02250405	C02470405
RM/28020/M/10	●	20	10	G1/8	8	M/50/LSU/5V	QM/33/020/23	–	C02250618	C02470618
RM/28020/M/25	●	20	25	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C02250618	C02470618
RM/28020/M/50	●	20	50	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C02250618	C02470618
RM/28025/M/10	●	25	10	G1/8	10	M/50/LSU/5V	QM/33/025/23	–	C02250618	C02470618
RM/28025/M/25	●	25	25	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C02250618	C02470618
RM/28025/M/50	●	25	50	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C02250618	C02470618

Service kits are not available for this range of cylinders

For information on alternative magnetic switches see page 67

Other stroke lengths available up to 50mm maximum, please call your Express Team

For mountings, refer to double acting versions as shown on page 16

For alternative fitting types, shapes or sizes, refer to our fittings section

See page 246

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO ROUNDLINE CYLINDERS RM/8000/M

Double acting, ISO 6432 – Ø 10 ... 25 mm

Perfect for small to medium force applications

Low friction 'Z' seals offer both high and low speed working and extremely long life

Unit is fully non corrosible reducing the need for costly protection in more aggressive environments

Choice of three end cap styles, and other technical variants, allows a wider use of standard products



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston with buffer or adjustable air cushioning

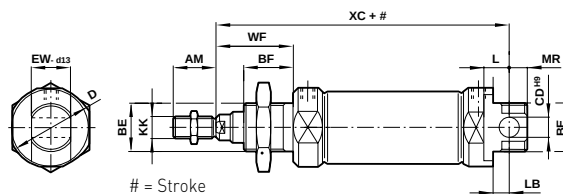
Operating pressure:

1 ... 10 bar

Operating temperature:

–10°C ... +80°C max.

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AM	BE	BF	Ø CDH9	ØD	EW d13	KK	L	LB	MR	WF	XC
10	12	M12x1,25	12	4	16,5	7,9	M4	6	2	8	16	64
12	16	M16x1,5	17	6	21	11,9	M6	9	3	8	22	75
16	16	M16x1,5	17	6	21	11,9	M6	9	4	7	22	82
20	20	M22x1,5	20	8	30	15,9	M8	12	3	11	24	95
25	22	M22x1,5	22	8	30	15,9	M10x1,25	12	7	9	28	104

Models

Accessories

BUFFER CUSHIONING Model	ADJUSTABLE CUSHIONING Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
RM/8010/M/10	● –	10	10	M5	4	M/50/LSU/5V	QM/33/010/23	–	C0K510405	C02250405	C02470405
RM/8010/M/25	● –	10	25	M5	4	M/50/LSU/5V	–	QM/33/010/22	C0K510405	C02250405	C02470405
RM/8010/M/40	● –	10	40	M5	4	M/50/LSU/5V	–	QM/33/010/22	C0K510405	C02250405	C02470405
RM/8010/M/50	● –	10	50	M5	4	M/50/LSU/5V	–	QM/33/010/22	C0K510405	C02250405	C02470405
RM/8010/M/80	● –	10	80	M5	4	M/50/LSU/5V	–	QM/33/010/22	C0K510405	C02250405	C02470405
RM/8010/M/100	● –	10	100	M5	4	M/50/LSU/5V	–	QM/33/010/22	C0K510405	C02250405	C02470405
RM/8012/M/10	● –	12	10	M5	6	M/50/LSU/5V	QM/33/012/23	–	C0K510405	C02250405	C02470405
RM/8012/M/25	● –	12	25	M5	6	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RM/8012/M/40	● –	12	40	M5	6	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RM/8012/M/50	● –	12	50	M5	6	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RM/8012/M/80	● –	12	80	M5	6	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RM/8012/M/100	● –	12	100	M5	6	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO ROUNDLINE CYLINDERS RM/8000/M

Double acting, ISO 6432 – Ø 10 ... 25 mm

Models

Accessories

BUFFER CUSHIONING Model	ADJUSTABLE CUSHIONING Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
RM/8016/M/10	–	16	10	M5	6	M/50/LSU/5V	QM/33/016/23	–	C0K510405	C02250405	C02470405
RM/8016/M/25	RM/8017/M/25	16	25	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/40	RM/8017/M/40	16	40	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/50	RM/8017/M/50	16	50	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/80	RM/8017/M/80	16	80	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/100	RM/8017/M/100	16	100	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/125	RM/8017/M/125	16	125	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/160	RM/8017/M/160	16	160	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/200	RM/8017/M/200	16	200	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8020/M/10	–	20	10	G1/8	8	M/50/LSU/5V	QM/33/020/23	–	C0K510618	C02250618	C02470618
RM/8020/M/25	RM/8021/M/25	20	25	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/40	RM/8021/M/40	20	40	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/50	RM/8021/M/50	20	50	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/80	RM/8021/M/80	20	80	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/100	RM/8021/M/100	20	100	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/125	RM/8021/M/125	20	125	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/160	RM/8021/M/160	20	160	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/200	RM/8021/M/200	20	200	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/250	RM/8021/M/250	20	250	G1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8025/M/10	–	25	10	G1/8	10	M/50/LSU/5V	QM/33/025/23	–	C0K510618	C02250618	C02470618
RM/8025/M/25	RM/8026/M/25	25	25	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/40	RM/8026/M/40	25	40	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/50	RM/8026/M/50	25	50	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/80	RM/8026/M/80	25	80	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/100	RM/8026/M/100	25	100	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/125	RM/8026/M/125	25	125	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/160	RM/8026/M/160	25	160	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/200	RM/8026/M/200	25	200	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/250	RM/8026/M/250	25	250	G1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0K510618	C02250618	C02470618

Other stroke lengths available up to 500mm maximum, please call your Express Team
Service kits are not available for this range of cylinders
For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

EXPRESS PLUS

AK Mount...

Misalignment during operation is the most common cause of actuator failure which can result in expensive down time. Fitting a swivel mount (AK style) between the piston rod and machine will ensure that any error is removed and costs much less than a breakdown!



FOR HIGHER PERFORMANCE AND RELIABILITY, CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

USE THIS RANGE OF ISO CYLINDERS TO REPLACE:

- Festo DSNU
- SMC C85
- Camozzi series 24N
- Parker P1A
- Bosch Rexroth MNI
- Plus many others

EXPRESS LINKS

Valves...

Despite their different bore sizes and stroke length, improvements in valve technology mean that only a 1/8" ported valve is required to operate this entire range of actuators. Look to our V60 series on page 109 for more information for the simplest solution, or speak to your Express team if you have more complex requirements



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MOUNTINGS FOR RM/28000/M & RM/8000/M ISO Roundline cylinders

Single and double acting

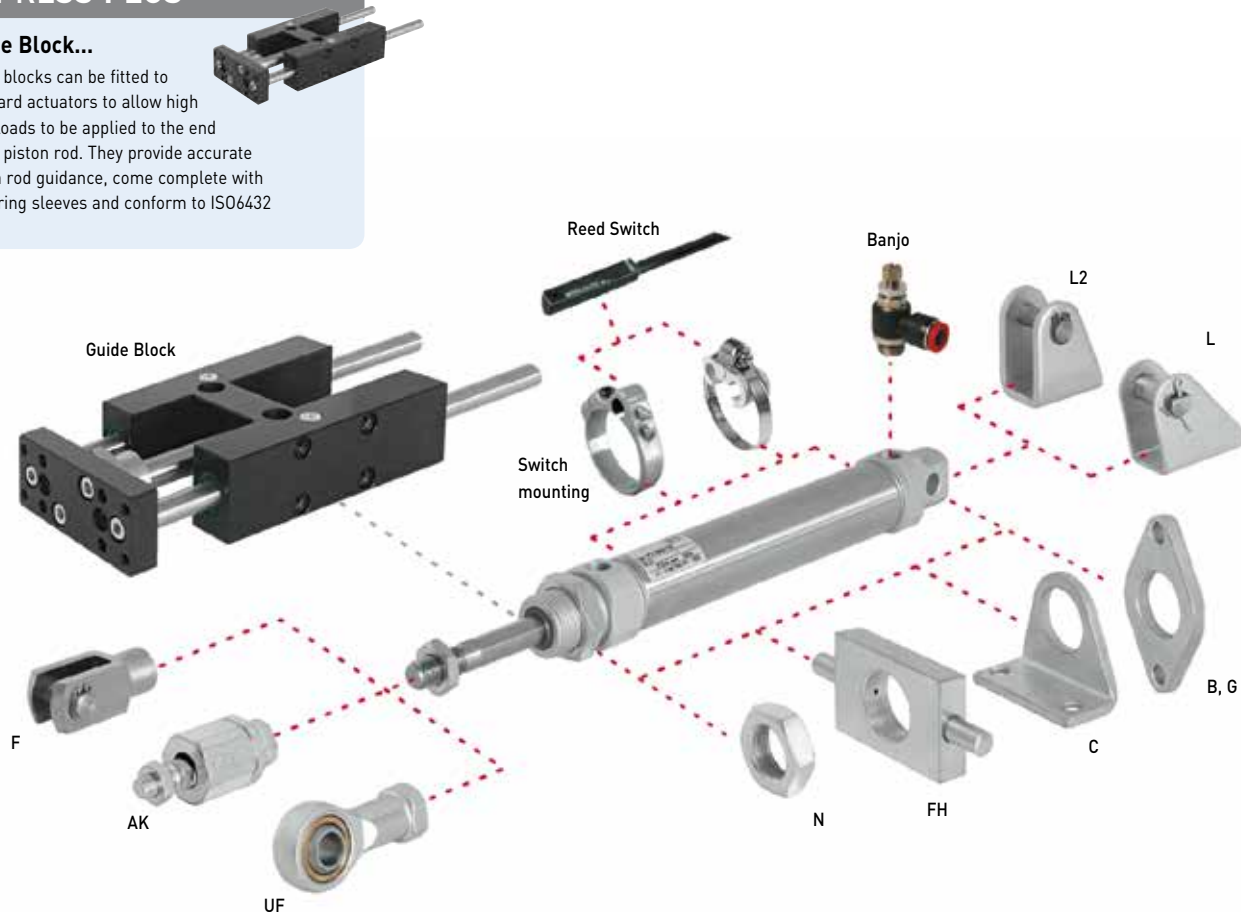
■ Single and Double Acting

■ Double Acting Only

EXPRESS PLUS

Guide Block...

Guide blocks can be fitted to standard actuators to allow high axial loads to be applied to the end of the piston rod. They provide accurate piston rod guidance, come complete with centering sleeves and conform to ISO6432



Dia. Ø	AK	B, G	C	F	FH	L	L2
10	QM/8010/38 ●	M/P19407 ●	M/P19369 ●	QM/8010/25 ●	–	QM/947 ●	QM/8010/44 ●
12	QM/8012/38 ●	M/P19408 ●	M/P19389 ●	QM/8012/25 ●	QM/8012/34 ●	QM/8012/24 ●	QM/8012/44 ●
16	QM/8012/38 ●	M/P19408 ●	M/P19389 ●	QM/8012/25 ●	QM/8012/34 ●	QM/8012/24 ●	QM/8012/44 ●
20	QM/8020/38 ●	M/P19409 ●	M/P19406 ●	QM/8020/25 ●	QM/8020/34 ●	QM/8020/24 ●	QM/8020/44 ●
25	QM/8025/38 ●	M/P19409 ●	M/P19406 ●	QM/8025/25 ●	QM/8020/34 ●	QM/8020/24 ●	QM/8020/44 ●

Dia. Ø	N	UF	Guide block*
10	M/P1501/90 ●	QM/8010/32 ●	–
12	M/P13834 ●	QM/8012/32 ●	QM/8012/61/* ●
16	M/P13834 ●	QM/8012/32 ●	QM/8012/61/* ●
20	M/P13615 ●	QM/8020/32 ●	QM/8020/61/* ●
25	M/P13615 ●	QM/8025/32 ●	QM/8025/61/* ●

* Insert standard stroke length: Ø 12 mm: 50 mm; Ø 16 ... 25 mm: 50, 100, 160, 200, 250 mm
Other stroke lengths are not available, use nearest standard stroke

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ROUNDLINE CYLINDERS RT/57100/M

Single acting – Ø 20 ... 40 mm



Saves 20% space over the basic length
of a corresponding ISO/VDMA cylinder

Low friction, long life seals

High strength, double crimped end cap design

Standard magnetic piston for full control
system versatility

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Single acting, sprung in

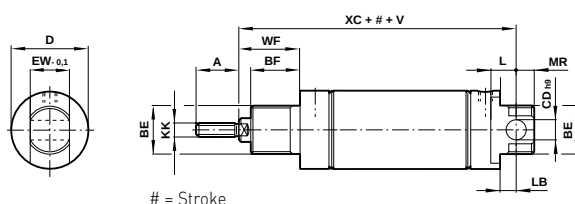
Operating pressure:

2 ... 10 bar

Operating temperature:

–5°C ... +80°C max.

Consult our Technical Service for use below +2°C



= Stroke

Dimensions

Dia. Ø	A	BE	BF	Ø CDh9	Ø D	EW-0,1	KK	L	LB	MR	V (#10 and 25)	V (#50)	WF	XC
20	14	M16 x 1,5	12	6	22	12	M8	–	7	6	17	34	15,5	75,5
25	16	M18 x 1,5	12	8	26,5	14	M10 x 1,25	–	9	8	18	36	16,5	78,5
32	22	M22 x 1,5	15	8	33,5	16	M10 x 1,25	12	7	8	19	38	23	93
40	23	M30 x 1,5	15	10	41,5	20	M12 x 1,25	14	5	10	20	40	24	96

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
	20	10	Rc 1/8	8	M/50/LSU/5V	QM/33/020/23	–	C0SA00618	C01250618	C01470618
RT/57120/M/25	20	25	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0SA00618	C01250618	C01470618
RT/57120/M/50	20	50	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0SA00618	C01250618	C01470618
RT/57125/M/10	25	10	Rc 1/8	10	M/50/LSU/5V	QM/33/025/23	–	C0SA00618	C01250618	C01470618
RT/57125/M/25	25	25	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0SA00618	C01250618	C01470618
RT/57125/M/50	25	50	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0SA00618	C01250618	C01470618
RT/57132/M/25	32	25	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0SA00618	C01250618	C01470618
RT/57132/M/50	32	50	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0SA00618	C01250618	C01470618
RT/57140/M/25	40	25	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0SA00618	C01250618	C01470618
RT/57140/M/50	40	50	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0SA00618	C01250618	C01470618

Other bore sizes and stroke lengths available up to 150mm maximum, please call your Express Team

Service kits are not available for this range of cylinders

For information on alternative magnetic switches see page 67

For mountings, refer to double acting versions as shown on page 21

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ROUNDLINE CYLINDERS RT/57200/M

Double acting – Ø 10 ... 63 mm

**Saves 20% space over the basic length
of a corresponding ISO/VDMA cylinder**

Low friction, long life seals

High strength, double crimped end cap design

Standard magnetic piston for full control system versatility



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, buffer cushioning

Side port, integral eye mounting (Ø 8 ... 40 mm),
fixing holes in the end cover (Ø 50 and 63 mm)

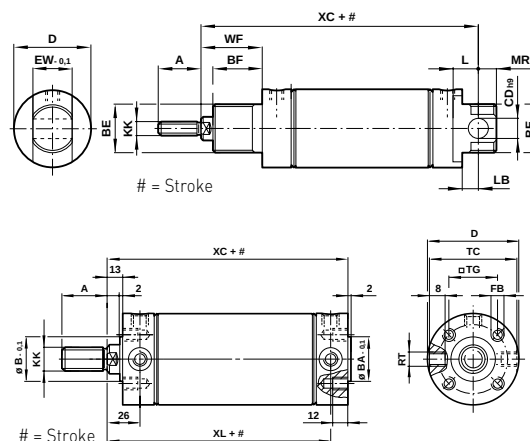
Operating pressure:

1 ... 10 bar

Operating temperature:

-10°C ... +80°C

Consult our Technical Service for use below +2°C



Dimensions (Ø 10 ... 40mm)

Dia. Ø	A	BE	BF	Ø CDh9	Ø D	EW-0,1	KK	L	LB	MR	WF	XC
10	9	M10 x 1	8	4	15	8	M4	–	5	4	10	54
12	9	M10 x 1	8	4	15	8	M4	–	5	4	10	54
16	12	M12 x 1,25	10	5	17,5	10	M6	–	7	5	13,5	64,5
20	14	M16 x 1,5	12	6	22	12	M8	–	7	6	15,5	75,5
25	16	M18 x 1,5	12	8	26,5	14	M10 x 1,25	–	9	8	16,5	78,5
32	22	M22 x 1,5	15	8	33,5	16	M10 x 1,25	12	7	8	23	93
40	23	M30 x 1,5	15	10	41,5	20	M12 x 1,25	14	5	10	24	96

Dimensions (Ø 50 and 63 mm)

Dia. Ø	A	Ø B/BA-0,1	Ø D	FB	KK	RT	TC	TG	XC	XL
50	23	28	52,5	M 6	M 12 x 1,25	M 10 x 1	49	28,5	97	84
63	30	35	65,5	M 8	M 16 x 1,5	M 12 x 1,5	62	35,5	99	86

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting



RT/57210/M/10	●	10	10	M5	4	M/50/LSU/5V	QM/33/010/23	-	C0K510405	C02250405	C02470405
RT/57210/M/25	●	10	25	M5	4	M/50/LSU/5V	-	QM/33/010/22	C0K510405	C02250405	C02470405
RT/57210/M/40	●	10	40	M5	4	M/50/LSU/5V	-	QM/33/010/22	C0K510405	C02250405	C02470405
RT/57210/M/50	●	10	50	M5	4	M/50/LSU/5V	-	QM/33/010/22	C0K510405	C02250405	C02470405

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ROUNDLINE CYLINDERS RT/57200/M

Double acting – Ø 10 ... 63 mm

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
										
RT/57212/M/10	● 12	10	M5	4	M/50/LSU/5V	QM/33/016/23	–	C0K510405	C02250405	C02470405
RT/57212/M/25	● 12	25	M5	4	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RT/57212/M/40	● 12	40	M5	4	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RT/57212/M/50	● 12	50	M5	4	M/50/LSU/5V	–	QM/33/012/22	C0K510405	C02250405	C02470405
RT/57216/M/10	● 16	10	M5	6	M/50/LSU/5V	QM/33/016/23	–	C0K510405	C02250405	C02470405
RT/57216/M/25	● 16	25	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RT/57216/M/40	● 16	40	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RT/57216/M/50	● 16	50	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RT/57216/M/80	● 16	80	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RT/57216/M/100	● 16	100	M5	6	M/50/LSU/5V	–	QM/33/016/22	C0K510405	C02250405	C02470405
RT/57220/M/10	● 20	10	Rc 1/8	8	M/50/LSU/5V	QM/33/020/23	–	C0TA00618	C01250618	C01470618
RT/57220/M/25	● 20	25	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/40	● 20	40	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/50	● 20	50	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/80	● 20	80	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/100	● 20	100	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/125	● 20	125	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/160	● 20	160	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/200	● 20	200	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/250	● 20	250	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57220/M/320	● 20	320	Rc 1/8	8	M/50/LSU/5V	–	QM/33/020/22	C0TA00618	C01250618	C01470618
RT/57225/M/10	● 25	10	Rc 1/8	10	M/50/LSU/5V	QM/33/025/23	–	C0TA00618	C01250618	C01470618
RT/57225/M/25	● 25	25	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/40	● 25	40	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/50	● 25	50	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/80	● 25	80	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/100	● 25	100	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/125	● 25	125	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/160	● 25	160	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/200	● 25	200	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/250	● 25	250	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57225/M/320	● 25	320	Rc 1/8	10	M/50/LSU/5V	–	QM/33/025/22	C0TA00618	C01250618	C01470618
RT/57232/M/10	● 32	10	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/25	● 32	25	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/40	● 32	40	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/50	● 32	50	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/80	● 32	80	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/100	● 32	100	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/125	● 32	125	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/160	● 32	160	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/200	● 32	200	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/250	● 32	250	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57232/M/320	● 32	320	Rc 1/8	12	M/50/LSU/5V	–	QM/33/032/22	C0TA00618	C01250618	C01470618
RT/57240/M/25	● 40	25	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/40	● 40	40	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/50	● 40	50	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/80	● 40	80	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/100	● 40	100	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/125	● 40	125	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/160	● 40	160	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/200	● 40	200	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/250	● 40	250	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618
RT/57240/M/320	● 40	320	Rc 1/8	14	M/50/LSU/5V	–	QM/33/040/22	C0TA00618	C01250618	C01470618

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ROUNDLINE CYLINDERS RT/57200/M

Double acting – Ø 10 ... 63 mm

Models

Accessories

Model		Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting <15 mm stroke	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
											
RT/57250/M/25	●	50	25	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/40	●	50	40	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/50	●	50	50	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/80	●	50	80	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/100	●	50	100	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/125	●	50	125	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/160	●	50	160	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/200	●	50	200	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/250	●	50	250	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57250/M/320	●	50	320	Rc 1/4	16	M/50/LSU/5V	–	QM/33/050/22	C0TA00828	C01250828	C01470828
RT/57263/M/25	●	63	25	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/40	●	63	40	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/50	●	63	50	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/80	●	63	80	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/100	●	63	100	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/125	●	63	125	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/160	●	63	160	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/200	●	63	200	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/250	●	63	250	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828
RT/57263/M/320	●	63	320	Rc 1/4	20	M/50/LSU/5V	–	QM/33/063/22	C0TA00828	C01250828	C01470828

Other bore sizes and stroke lengths available up to 500mm maximum, please call your Express Team

Service kits are not available for this range of cylinders

For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

EXPRESS LINKS

Additional ranges...

Central rear port and side port flat end.
For more information call your Express Team



EXPRESS LINKS

Valves...

Despite their different bore sizes and stroke length, improvements in valve technology mean that only a 1/8" ported valve is required to operate this entire range of actuators. Look to our V60 series on page 109 for more information for the simplest solution, or speak to your Express team if you have more complex requirements

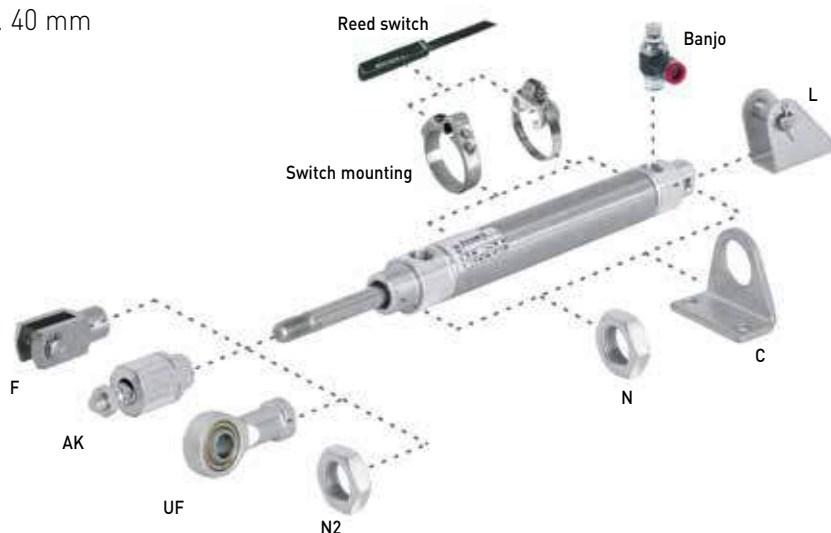


For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MOUNTINGS FOR RT/57100/M & RT/57200/M Roundline cylinders

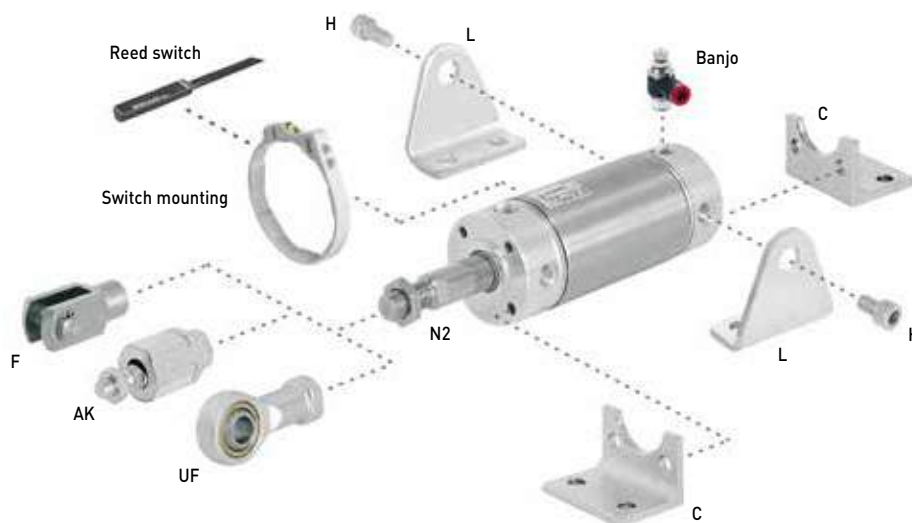
Single and Double Acting

Ø 10 ... 40 mm



Double Acting Only

Ø 50 ... 63 mm



Dia. Ø	AK		C		F		H		L		N		N2		UF	
10	QM/8010/38	●	M/P71273/2	●	QM/8010/25	●	–		QM/947	●	M/P71364	●	M/P1501/80	●	QM/8010/32	●
12	QM/8010/38	●	M/P71273/2	●	QM/8010/25	●	–		QM/947	●	M/P71364	●	M/P1501/80	●	QM/8010/32	●
16	QM/8012/38	●	M/P19369	●	QM/57016/25	●	–		QM/946	●	M/P1501/90	●	M/P1501/79	●	QM/8012/32	●
20	QM/8020/38	●	M/P19389	●	QM/57020/25	●	–		QM/8012/24	●	M/P13834	●	M/P1501/60	●	QM/8020/32	●
25	QM/8025/38	●	M/P40381	●	QM/57025/25	●	–		QM/57025/25	●	M/P13607	●	M/P1501/89	●	QM/8025/32	●
32	QM/8025/38	●	M/P19406	●	QM/57032/25	●	–		QM/8020/24	●	M/P13615	●	M/P1501/89	●	QM/8025/32	●
40	QM/8040/38	●	M/P71273/3	●	QM/57040/25	●	–		QM/57040/24	●	M/P29254	●	M/P1501/90	●	QM/8040/32	●
50	QM/8040/38	●	QM/57050/21	●	QM/57040/25	●	QM/55240/28	●	QM/57050/24*	●	–		M/P1501/90	●	QM/8040/32	●
63	QM/8050/38	●	QM/57063/21	●	QM/57063/25	●	QM/55250/28	●	QM/57063/24*	●	–		M/P1501/91	●	QM/8050/32	●

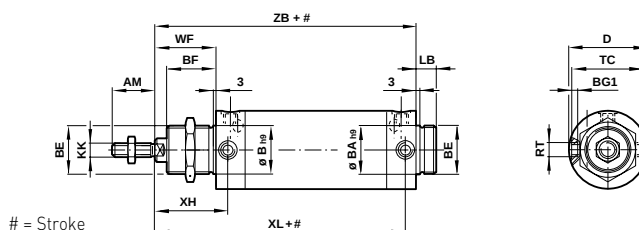
* Includes pivot nuts

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

Double acting – Ø 32 ... 63 mm

Non-lube operation

Consult our Technical Service for use below +2°C



Dia. Ø	AM	Ø B/Bah9	BE	BF	BG1	D	FB	KK	LB	RT	TC	TG	WF	XH	XL	ZB
32	22	30	M 30 x 1,5	30	6	36,5	–	M 10 x 1,25	14	M 8 x 1	35	–	38	47	123	132
40	24	38	M 38 x 1,5	35	8	45,5	–	M 12 x 1,25	16	M 10 x 1	44	–	45	57	142	154
50	32	45	M 45 x 1,5	38	9,5	55,5	–	M 16 x 1,5	18	M 12 x 1,5	54	–	50	62	152	164
63	32	45	M 45 x 1,5	38	10	69,5	–	M 16 x 1,5	18	M 14 x 1,5	67	–	51	64	159	172

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting



RM/55433/M/25	32	25	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/50	32	50	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/80	32	80	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/100	32	100	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/125	32	125	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/160	32	160	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/200	32	200	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/250	32	250	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618
RM/55433/M/300	32	300	G1/8	12	M/50/LSU/5V	QM/33/432/22	C0K510618	C02250618	C02470618

Online at **store.norgren.com**

ROUNDLINE CYLINDERS RM/55401/M

Double acting – Ø 32 ... 63 mm

Models

Accessories

Model		Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting
										
RM/55441/M/25	●	40	25	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/50	●	40	50	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/80	●	40	80	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/100	●	40	100	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/125	●	40	125	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/160	●	40	160	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/200	●	40	200	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/250	●	40	250	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55441/M/300	●	40	300	G1/4	16	M/50/LSU/5V	QM/33/440/22	C0K510628	C02250628	C02470628
RM/55451/M/25	●	50	25	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/50	●	50	50	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/80	●	50	80	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/100	●	50	100	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/125	●	50	125	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/160	●	50	160	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/200	●	50	200	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/250	●	50	250	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55451/M/300	●	50	300	G1/4	20	M/50/LSU/5V	QM/33/450/22	C0K510828	C02250828	C02470828
RM/55464/M/25	●	63	25	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/50	●	63	50	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/80	●	63	80	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/100	●	63	100	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/125	●	63	125	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/160	●	63	160	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/200	●	63	200	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/250	●	63	250	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838
RM/55464/M/300	●	63	300	G3/8	20	M/50/LSU/5V	QM/33/463/22	C0K510838	C02250838	C02470838

Other bore sizes and stroke lengths available up to 300mm maximum, please call your Express Team
For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

EXPRESS PLUS

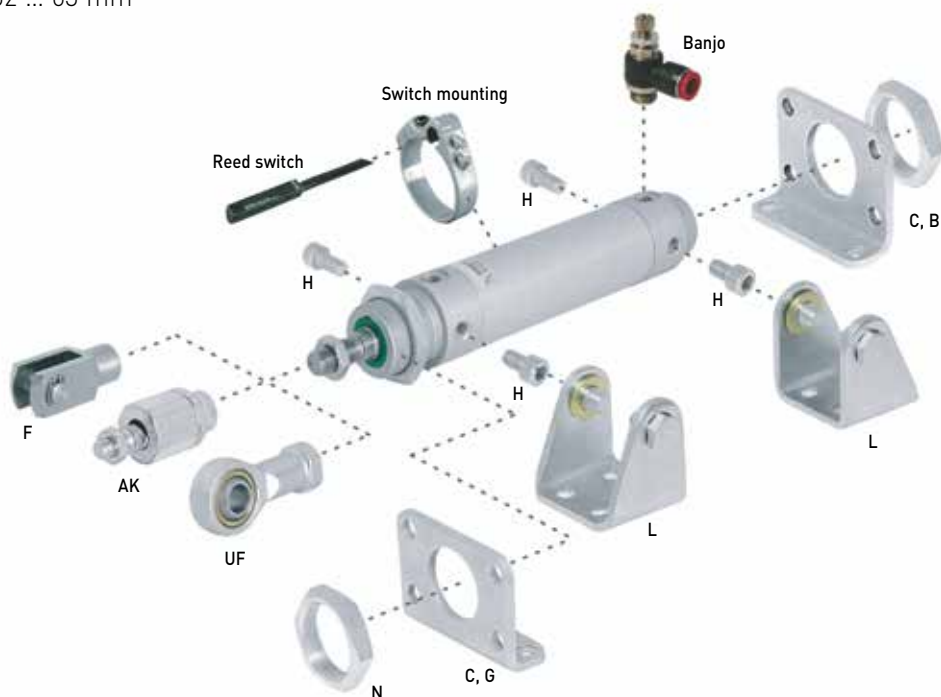
Have you thought about...

- Reducing air pressure by only 1 bar will reduce ongoing running costs by 7% – always fit pressure regulators to a system
- When moving light loads in only one direction, the use of single acting cylinders saves money

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MOUNTINGS FOR RM/55401/M Roundline cylinders

Ø 32 ... 63 mm



Dia. Ø	AK	B, G*	C*	F	H	L	N	UF
32	QM/8025/38	QM/55232/22	QM/55232/21	QM/8025/25	QM/55232/28	QM/55232/24	M/P29254	QM/8025/32
40	QM/8040/38	QM/55240/22	QM/55240/21	QM/8040/25	QM/55240/28	QM/55240/24	M/P29255	QM/8040/32
50	QM/8050/38	QM/55250/22	QM/55250/21	QM/8050/25	QM/55250/28	QM/55250/24	M/P29256	QM/8050/32
63	QM/8050/38	QM/55263/22	QM/55263/21	QM/8050/25	QM/55263/28	QM/55263/24	M/P29256	QM/8050/32

* This actuator is supplied with one nose nut, an additional lock nut style 'N' is required when ordering mountings 'B, G' and 'C' to connect to the rear end cap.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO COMPACT CYLINDERS

ISO21287 IS THE MOST RECENTLY-ADDED ACTUATOR STANDARD. NATURALLY, THE EXPRESS RANGE CONFORMS TOTALLY.

Replacing previous models made obsolete by the new standard, these compact cylinders are perfect for high force/short stroke applications where space is at a premium. Not just meeting the standard for compliance, but exceeding it, this range of actuators includes many unique technical variants:

→ Sleek, anodised aluminium profile barrel housing switch mounting grooves (standard IMI Norgren M/50 switch) coupled with pressure die cast end caps for pleasing appearance – for state of the art machine design

- Wide range of standard bore and stroke combinations from stock with male or female piston rod thread, plus non-standard stroke length units on fast availability – makes best use of standard, stocked parts to ensure that downtime is kept to a minimum
- Accepts standard ISO/VDMA mounting brackets, and is also available in non-rotating versions, linear slide version, with heavy duty wiper seal, tandem and multi-position versions, and also can accept guide block assembly – simple to complex applications covered in one range

MULTI-POSITION
AND TANDEM VERSIONS

GUIDED

INTEGRAL SWITCH
GROOVES



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

ISO COMPACT CYLINDERS RA/191000/M and RA/193000/M

Single acting, ISO 21287 – Ø 20 ... 63 mm

Conforms to ISO 21287

Up to 30% shorter than full ISO/VDMA actuators

Uses standard ISO/VDMA mountings

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

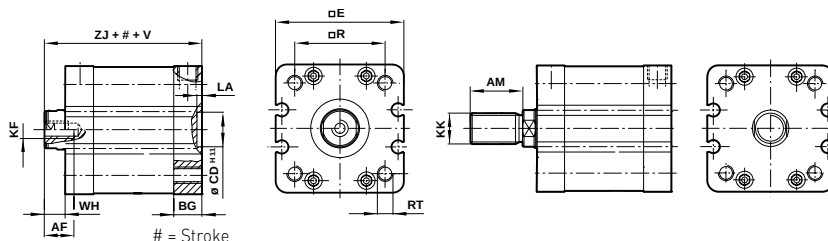
Operating pressure:

2 ... 10 bar

Operating temperature:

-5°C ... +80°C

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AF	AM	BG	Ø CD H11	E	KF	KK	LA	R	RT	V (#0 ... 25)	V (#26 ... 50)	WH	ZJ
20	10	16	12	10	37	M6	M8x1,25	2,5	22	M5	17	34	6	43
25	10	16	13	10	41	M6	M8x1,25	2,5	26	M5	18	36	6	45
32	12	19	14,5	14	48	M8	M10x1,25	2,5	32,5	M6	19	38	7	51
40	12	19	14,5	14	54,5	M8	M10x1,25	2,5	38	M6	20	40	7	52
50	16	22	14	18	66	M10	M12x1,25	2,5	46,5	M8	30	60	8	53
63	16	22	14	18	76	M10	M12x1,25	2,5	56,5	M8	30	60	8	57

Models

Accessories

SPRUNG IN FEMALE THREAD	MALE THREAD	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service Kit



RA/191020/MX/10	RA/191020/M/10	20	10	M5	10	M/50/LSU/5V	COL510405	C02250405	C02470405	QM/192020/00
RA/191025/MX/10	RA/191025/M/10	25	10	M5	10	M/50/LSU/5V	COL510405	C02250405	C02470405	QM/192025/00
RA/191032/MX/10	RA/191032/M/10	32	10	G1/8	12	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192032/00
RA/191032/MX/25	RA/191032/M/25	32	25	G1/8	12	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192032/00
RA/191040/MX/25	RA/191040/M/25	40	25	G1/8	16	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192040/00
RA/191050/MX/25	RA/191050/M/25	50	25	G1/8	20	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192050/00
RA/191063/MX/25	RA/191063/M/25	63	25	G1/8	20	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192063/00

SPRUNG OUT FEMALE THREAD	MALE THREAD	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service Kit



RA/193020/MX/10	RA/193020/M/10	20	10	M5	10	M/50/LSU/5V	COL510405	C02250405	C02470405	QM/192020/00
RA/193025/MX/10	RA/193025/M/10	25	10	M5	10	M/50/LSU/5V	COL510405	C02250405	C02470405	QM/192025/00
RA/193032/MX/10	RA/193032/M/10	32	10	G1/8	12	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192032/00
RA/193032/MX/25	RA/193032/M/25	32	25	G1/8	12	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192032/00
RA/193040/MX/25	RA/193040/M/25	40	25	G1/8	16	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192040/00
RA/193050/MX/25	RA/193050/M/25	50	25	G1/8	20	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192050/00
RA/193063/MX/25	RA/193063/M/25	63	25	G1/8	20	M/50/LSU/5V	COL510618	C02250618	C02470618	QM/192063/00

Other stroke lengths available up to 50mm, please call your Express Team
For mountings, refer to double acting versions as shown on page 29
For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

ISO COMPACT CYLINDERS RA/192000/M

Double acting – Ø 20 ... 125 mm



Conforms to ISO 21287

Up to 30% shorter than full ISO/VDMA actuators

Uses standard ISO/VDMA mountings

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

RA/192000/M

Double acting, magnetic piston, male piston rod thread, buffer cushioning

RA/192000/MX

Double acting, magnetic piston, female piston rod thread, buffer cushioning

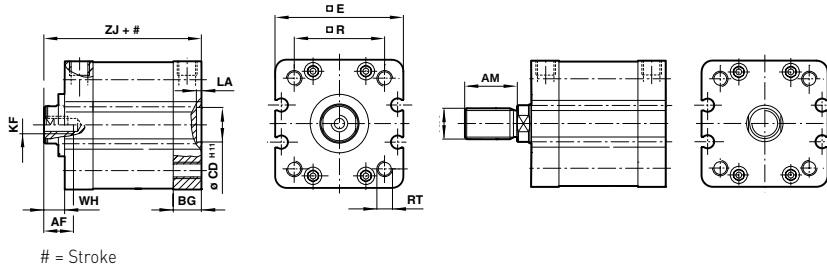
Operating pressure:

1 ... 10 bar

Operating temperature:

–5°C ... +80°C max.

Consult our Technical Service for use below +2°C.



= Stroke

Dimensions

Dia. Ø	AF	AM	BG	Ø CDH11	E	KF	KK	LA	R	RT	WH	ZJ
20	10	16	12	10	37	M6	M8x1,25	2,5	22	M5	6	43
25	10	16	13	10	41	M6	M8x1,25	2,5	26	M5	6	45
32	12	19	14,5	14	48	M8	M10x1,25	2,5	32,5	M6	7	51
40	12	19	14,5	14	54,5	M8	M10x1,25	2,5	38	M6	7	52
50	16	22	14	18	66	M10	M12x1,25	2,5	46,5	M8	8	53
63	16	22	14	18	76	M10	M12x1,25	2,5	56,5	M8	8	57
80	20	28	15,5	23	96	M12	M16x1,5	3	72	M10	10	64
100	20	28	21,5	26	116	M12	M16x1,5	3	89	M10	10	77
125	30	54	20,5	28	142	M20	M27x2	3	110	M12	18	89

Models

Accessories

FEMALE THREAD		MALE THREAD		Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit
												
RA/192020/MX/10		RA/192020/M/10		20	10	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/15		RA/192020/M/15		20	15	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/20		RA/192020/M/20		20	20	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192020/00
RA/192025/MX/10		RA/192025/M/10		25	10	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/15		RA/192025/M/15		25	15	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/20		RA/192025/M/20		25	20	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/25		RA/192025/M/25		25	25	M5	10	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/192025/00
RA/192032/MX/10		RA/192032/M/10		32	10	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/15		RA/192032/M/15		32	15	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/20		RA/192032/M/20		32	20	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/25		RA/192032/M/25		32	25	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/30		RA/192032/M/30		32	30	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/40		RA/192032/M/40		32	40	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

COMPACT CYLINDERS RA/192000

Double acting – Ø 20 ... 125 mm

Models

Accessories

FEMALE THREAD	MALE THREAD	Dia. Ø	Stroke Length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit
										
RA/192032/MX/50	RA/192032/M/50	32	50	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/60	RA/192032/M/60	32	60	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/80	RA/192032/M/80	32	80	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/100	RA/192032/M/100	32	100	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192032/00
RA/192040/MX/10	RA/192040/M/10	40	10	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/15	RA/192040/M/15	40	15	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/20	RA/192040/M/20	40	20	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/25	RA/192040/M/25	40	25	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/30	RA/192040/M/30	40	30	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/40	RA/192040/M/40	40	40	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/50	RA/192040/M/50	40	50	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/60	RA/192040/M/60	40	60	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/80	RA/192040/M/80	40	80	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/100	RA/192040/M/100	40	100	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192040/00
RA/192050/MX/10	RA/192050/M/10	50	10	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/15	RA/192050/M/15	50	15	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/20	RA/192050/M/20	50	20	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/25	RA/192050/M/25	50	25	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/30	RA/192050/M/30	50	30	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/40	RA/192050/M/40	50	40	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/50	RA/192050/M/50	50	50	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/60	RA/192050/M/60	50	60	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/80	RA/192050/M/80	50	80	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/100	RA/192050/M/100	50	100	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192050/00
RA/192063/MX/10	RA/192063/M/10	63	10	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/15	RA/192063/M/15	63	15	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/20	RA/192063/M/20	63	20	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/25	RA/192063/M/25	63	25	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/30	RA/192063/M/30	63	30	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/40	RA/192063/M/40	63	40	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/50	RA/192063/M/50	63	50	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/60	RA/192063/M/60	63	60	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/80	RA/192063/M/80	63	80	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192063/MX/100	RA/192063/M/100	63	100	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/192063/00
RA/192080/MX/15	RA/192080/M/15	80	15	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192080/00
RA/192080/MX/20	RA/192080/M/20	80	20	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192080/00
RA/192080/MX/25	RA/192080/M/25	80	25	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192080/00
RA/192080/MX/30	RA/192080/M/30	80	30	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192080/00
RA/192080/MX/40	RA/192080/M/40	80	40	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192080/00
RA/192080/MX/50	RA/192080/M/50	80	50	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192080/00
RA/192100/MX/25	RA/192100/M/25	100	25	G1/8	25	M/50/LSU/5V	C0K510818	C02250818	C02470818	QM/192100/00
RA/192125/MX/25	RA/192125/M/25	125	25	G1/4	32	M/50/LSU/5V	C0K510828	C02250828	C02470828	QM/192125/00

Other stroke lengths available up to 500mm maximum, depending upon bore size, please call your Express Team
For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

EXPRESS LINKS

Valves...

Despite their different bore sizes and stroke length, improvements in valve technology mean that only a 1/8" ported valve is required to operate this entire range of actuators. Look to our V60 series on page 109 for more information for the simplest solution, or speak to your Express team if you have more complex requirements

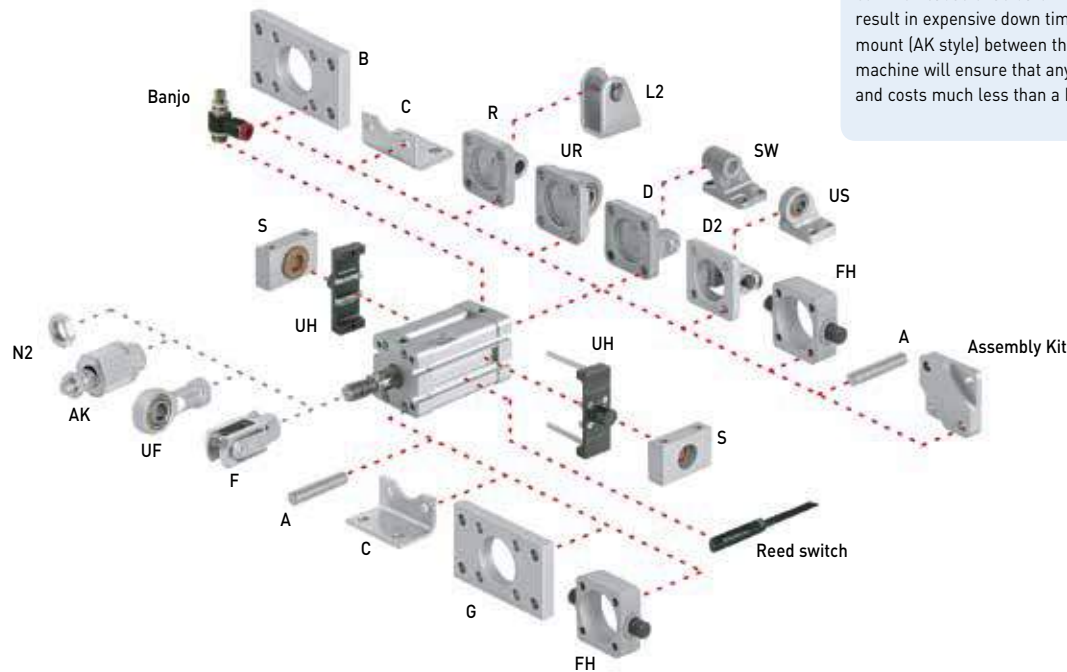


For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MOUNTINGS FOR RA/191000/M and RA/193000/M and RA/192000/M Compact cylinders

Male and Female Piston Rod Thread

Male Piston Rod Thread Only



EXPRESS PLUS

AK Mount...

Misalignment during operation is the most common cause of actuator failure which can result in expensive down time. Fitting a swivel mount (AK style) between the piston rod and machine will ensure that any error is removed and costs much less than a breakdown!

For cylinders with male and female piston rod thread

Dia. Ø	A	B, G	C	D	D2	FH	L2
20	-	QA/192020/22	QM/192020/21	-	-	-	QM/8020/44
25	-	QA/192025/22	QM/192025/21	-	-	-	QM/8020/44
32	QM/8032/35	QA/8032/22	QA/192032/21	QA/8032/23	QA/8032/42	QA/8032/34	-
40	QM/8032/35	QA/8040/22	QA/8040/21	QA/8040/23	QA/8040/42	QA/8040/34	-
50	QM/8050/35	QA/8050/22	QA/192050/21	QA/8050/23	QA/8050/42	QA/8050/34	-
63	QM/8050/35	QA/8063/22	QA/192063/21	QA/8063/23	QA/8063/42	QA/8063/34	-
80	QM/8080/35	QA/8080/22	QA/192080/21	QA/8080/23	QA/8080/42	QA/8080/34	-
100	QM/8080/35	QA/8100/22	QA/192100/21	QA/8100/23	QA/8100/42	QA/8100/34	-
125	QM/8125/35	QM/8125/22	QM/8125/21	QM/8125/23	QA/8125/42	QA/8125/34	-

Dia. Ø	R	S	SW	UH	UR	US	Assembly kit*
20	QM/192020/27	-	-	-	-	-	QA/192020/55
25	QM/192025/27	-	-	-	-	-	QA/192025/55
32	QA/8032/27	QA/8032/41	M/P19493	PQA/182032/40	QA/8032/33	M/P40310	QA/192032/55
40	QA/8040/27	QA/8040/41	M/P19494	PQA/182040/40	QA/8040/33	M/P40311	QA/192040/55
50	QA/8050/27	QA/8040/41	M/P19495	PQA/182050/40	QA/8050/33	M/P40312	QA/192050/55
63	QA/8063/27	QA/8063/41	M/P19496	PQA/182063/40	QA/8063/33	M/P40313	QA/192063/55
80	QA/8080/27	QA/8063/41	M/P19497	PQA/182080/40	QA/8080/33	M/P40314	QA/192080/55
100	QA/8100/27	QA/8100/41	M/P19498	PQA/182100/40	QA/8100/33	M/P40315	QA/192100/55
125	QM/8125/27	QA/8100/41	M/P19499	PQA/182125/40	QM/8125/33	M/P71355	QA/192125/55

* For connecting 2 similar bore actuators together via the rear end cap

For cylinders with male piston rod thread

Dia. Ø	AK	F	N2	UF
20	QM/8020/38	QM/8020/25	M/P1501/60	QM/8020/32
25	QM/8020/38	QM/8020/25	M/P1501/60	QM/8020/32
32	QM/8025/38	QM/8025/25	M/P1501/89	QM/8025/32
40	QM/8025/38	QM/8025/25	M/P1501/89	QM/8025/32
50	QM/8040/38	QM/8040/25	M/P1501/90	QM/8040/32
63	QM/8040/38	QM/8040/25	M/P1501/90	QM/8040/32
80	QM/8050/38	QM/8050/25	M/P1501/91	QM/8050/32
100	QM/8050/38	QM/8050/25	M/P1501/91	QM/8050/32
125	QM/8125/38	QM/8125/25	M/P1501/105	QM/8125/32

EXPRESS PLUS

Need a non-rotating piston rod?

We have three versions available including an externally mounted precision slide unit. Please call your Express Team.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

COMPACT CYLINDERS RM/91000/M

Single acting – Ø 20 ... 63 mm

One third the basic length of a corresponding ISO/
VDMA model

Low friction, long life seal design

Fully non-corrodible specification

Standard magnetic piston

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Single acting, magnetic, piston non-cushioned

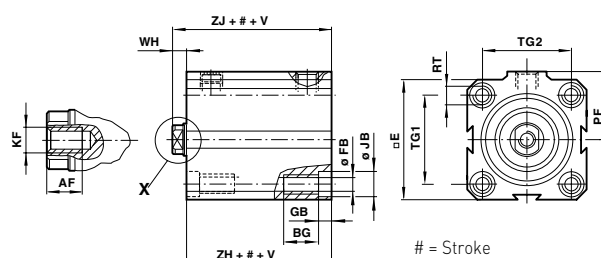
Operating pressure:

2 ... 10 bar

Operating temperature:

–5°C ... +80°C

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AF	BG	E	Ø FB	GB	Ø JB	KF	PF	RT	TG 1	TG 2	V (#0 ... 25)	V (#26 ... 50)	WH	ZH	ZJ
20	8	9	32	3,3	3,5	6	M 5	19,5	M 4	23	23	17	34	6	26	32
25	9	12	37	4,2	4,5	7,5	M 6	22	M 5	27	27	18	36	6,5	28,5	35
32	12	12	45	4,2	4,5	7,5	M 8	27,5	M 5	33	33	19	38	6,5	29	35,5
40	12	16	55	6,8	6,5	10,5	M 8	31,5	M 8	41	41	20	40	6,5	31,5	38
50	14	16	63	6,8	6,5	10,5	M 10	37	M 8	48	48	30	60	8	35	43
63	16	20	80	8,5	8,5	13,5	M 12	48	M 10	61	61	30	60	8	42,5	50,5

Models

FEMALE THREAD SPRUNG IN Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
	20	10	M5	10	M/50/LSU/5V	M/P72487B	C0L510405	C02250405	C02470405	–
	25	10	M5	12	M/50/LSU/5V	M/P72487B	C0L510405	C02250405	C02470405	–
	32	10	G1/8	16	M/50/LSU/5V	M/P72487B	C0L510618	C02250618	C02470618	–
	32	25	G1/8	16	M/50/LSU/5V	M/P72487B	C0L510618	C02250618	C02470618	–
	40	10	G1/8	16	M/50/LSU/5V	M/P72487B	C0L510618	C02250618	C02470618	–
	40	25	G1/8	16	M/50/LSU/5V	M/P72487B	C0L510618	C02250618	C02470618	–
	50	25	G1/8	20	M/50/LSU/5V	M/P72487B	C0L510618	C02250618	C02470618	QM/92050/00
	63	25	G1/4	20	M/50/LSU/5V	M/P72487B	C0L510628	C02250628	C02470628	QM/92063/00

Other bore sizes and stroke lengths available up to 50mm maximum,
please call your Express Team

For information on additional magnetic switches see page 67

For mountings refer to double acting versions as shown on page 33

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

COMPACT CYLINDERS RM/92000/M

Double acting – Ø 12 ... 100 mm



One third the basic length of a corresponding ISO/VDMA model

Low friction, long life seal design

Fully non-corrodible specification

Standard magnetic piston for full control system versatility

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston non-cushioned

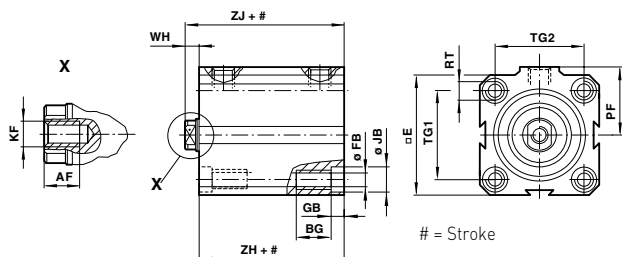
Operating pressure:

1 ... 10 bar

Operating temperature:

–5°C ... +80°C

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AF	BG	E	Ø FB	GB	Ø JB	KF	PF	RT	TG1	TG2	WH	ZH	ZJ
12	6	9	25	3,3	3,5	6	M 3	15	M 4	17	13	4,5	24	28,5
16	7	9	28	3,3	3,5	6	M 4	17	M 4	20	20	5,5	24,5	30
20	8	9	32	3,3	3,5	6	M 5	19,5	M 4	23	23	6	26	32
25	9	12	37	4,2	4,5	7,5	M 6	22	M 5	27	27	6,5	28,5	35
32	12	12	45	4,2	4,5	7,5	M 8	27,5	M 5	33	33	6,5	29	35,5
40	12	16	55	6,8	6,5	10,5	M 8	31,5	M 8	41	41	6,5	31,5	38
50	14	16	63	6,8	6,5	10,5	M 10	37	M 8	48	48	8	35	43
63	16	20	80	8,5	8,5	13,5	M 12	48	M 10	61	61	8	42,5	50,5
80	22	20	94	8,5	8,5	13,5	M 16	57	M 10	73	73	9	47	56
100	22	25	116,5	10,2	10,5	16,5	M 16	67	M 12	90,5	90,5	10	48,5	58,5

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit



RM/92012/M/5	●	12	5	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92012/M/10	●	12	10	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92012/M/15	●	12	15	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92012/M/20	●	12	20	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92012/M/25	●	12	25	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/5	●	16	5	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/10	●	16	10	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/15	●	16	15	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/20	●	16	20	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/25	●	16	25	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/30	●	16	30	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92016/M/40	●	16	40	M5	8	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/5	●	20	5	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/10	●	20	10	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/15	●	20	15	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/20	●	20	20	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/25	●	20	25	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

COMPACT CYLINDERS RM/92000/M

Double acting – Ø 12 ... 100 mm

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
RM/92020/M/30	20	30	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/40	20	40	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92020/M/50	20	50	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/5	25	5	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/10	25	10	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/15	25	15	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/20	25	20	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/25	25	25	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/30	25	30	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/40	25	40	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/50	25	50	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92025/M/60	25	60	M5	12	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	–
RM/92032/M/5	32	5	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/10	32	10	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/15	32	15	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/20	32	20	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/25	32	25	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/30	32	30	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/40	32	40	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/50	32	50	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/60	32	60	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/80	32	80	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92032/M/100	32	100	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/5	40	5	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/10	40	10	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/15	40	15	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/20	40	20	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/25	40	25	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/30	40	30	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/40	40	40	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/50	40	50	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/60	40	60	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/80	40	80	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92040/M/100	40	100	G1/8	16	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	–
RM/92050/M/5	50	5	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/10	50	10	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/15	50	15	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/20	50	20	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/25	50	25	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/30	50	30	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/40	50	40	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/50	50	50	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/60	50	60	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/80	50	80	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92050/M/100	50	100	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/92050/00
RM/92063/M/10	63	10	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/15	63	15	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/20	63	20	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/25	63	25	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/30	63	30	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/40	63	40	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/50	63	50	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/60	63	60	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/80	63	80	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92063/M/100	63	100	G1/4	20	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92063/00
RM/92080/M/15	80	15	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/20	80	20	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/25	80	25	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/30	80	30	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/40	80	40	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/50	80	50	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/80	80	80	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00
RM/92080/M/100	80	100	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92080/00

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

COMPACT CYLINDERS RM/92000/M

Double acting – Ø 12 ... 100 mm

Models

Accessories

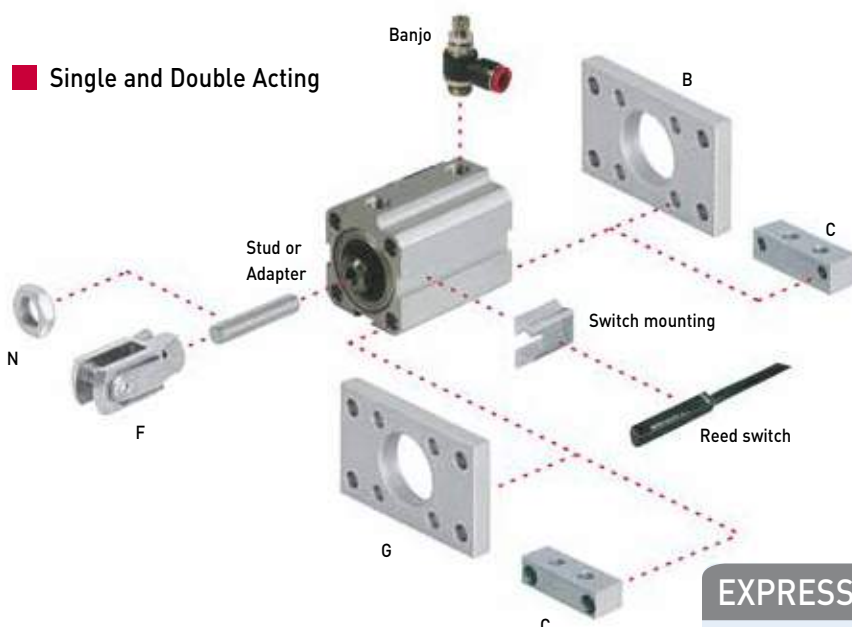
Model		Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
RM/92100/M/15	●	100	15	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/20	●	100	20	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/25	●	100	25	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/30	●	100	30	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/40	●	100	40	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/50	●	100	50	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/80	●	100	80	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00
RM/92100/M/100	●	100	100	G1/4	25	M/50/LSU/5V	M/P72487B	C0K510628	C02250628	C02470628	QM/92100/00

Other stroke lengths available up to 300mm maximum, please call your Express Team
For information on additional magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

MOUNTINGS FOR RM/91000/M and RM/92000/M Compact cylinders

Single and double acting



Single and Double Acting

EXPRESS PLUS

Need a non-rotating piston rod?

We have three versions available including an externally mounted precision slide unit. Please call your Express Team.



EXPRESS LINKS

Valves...

Despite their different bore sizes and stroke length, improvements in valve technology mean that only a 1/8" ported valve is required to operate this entire range of actuators. Look to our V60 series on page 109 for more information for the simplest solution, or speak to your Express team if you have more complex requirements



Dia. Ø	B, G	C	F	N	Stud or adaptor*
12	QM/90012/22 ●	QM/90012/21 ●	QM/57008/25 ●	M/P1500/111 ●	M/P1710/18 ●
16	QM/90016/22 ●	QM/90016/21 ●	QM/8010/25 ●	M/P1501/80 ●	M/P1710/19 ●
20	QM/90020/22 ●	QM/90020/21 ●	QM/92020/25 ●	M/P1501/109 ●	M/P1710/20 ●
25	QM/90025/22 ●	QM/90025/21 ●	QM/57016/25 ●	M/P1501/79 ●	M/P1710/21 ●
32	QM/90032/22 ●	QM/90032/21 ●	QM/57020/25 ●	M/P1501/60 ●	M/P1710/22 ●
40	QM/90040/22 ●	QM/90040/21 ●	QM/57020/25 ●	M/P1501/60 ●	M/P1710/22 ●
50	QM/90050/22 ●	QM/90050/21 ●	QM/57025/25 ●	–	M/P71470/1 ●
63	QM/90063/22 ●	QM/90063/21 ●	QM/57040/25 ●	–	M/P71470/2 ●
80	QM/90080/22 ●	QM/90080/21 ●	QM/57063/25 ●	–	M/P71470/3 ●
100	QM/90100/22 ●	QM/90100/21 ●	QM/57063/25 ●	–	M/P71470/3 ●

* For attaching F mounting to female piston rod thread

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLAMPING CYLINDERS M/50100

Single acting – Ø 8 ... 63 mm

Enable high thrusts to be achieved in restricted space

Neat, clean appearance

One-piece body construction

TECHNICAL DATA

Medium:

Compressed air, filtered and lubricated

Operating pressure:

2 ... 10 bar (single acting)

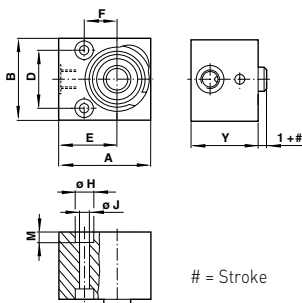
Operating temperature:

–10°C ... +70°C

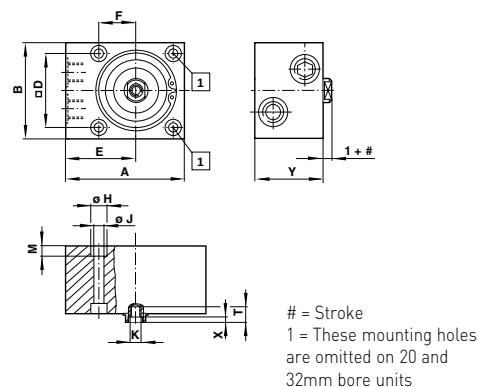
Consult our Technical Service for use below +2°C



M/50108 and M/50112



M/50120 ... M/50163



Dimensions

Dia. Ø	A	B	D	E	F	Ø H	Ø J	K	M	T	X	Dia. Ø	#	Y	Dia. Ø	#	Y
8		20	18	11	13,5	8	6	3,4	–	3,2	M 5	8	4	15	32	10	31
12	25	20	13	16	9	6	3,4	–	3,4			12	4	15	32	25	46
20	40	32	20	24	15	10	5,5	M 5	5,5	8	2	12	10	23	50	10	30
32	55	45	32	32	18	10	5,5	M 6	5,5	14,5	2,5	20	4	20	50	25	45
50	80	65	50	47,5	25	11	6,6	M 8	6,8	15	3	20	10	26	63	10	35
63	90	80	62	50	31	15	9	M 8	9	15	3	32	5	26	63	25	50

Models

SINGLE ACTING Model	Dia. Ø	Stroke	Port size	Piston rod Ø



M/50108/4	8	4	M5	4
M/50112/4	12	4	M5	6
M/50112/10	12	10	M5	6
M/50120/4	20	4	M5	10
M/50120/10	20	10	M5	10
M/50132/5	32	5	G1/8	16
M/50132/10	32	10	G1/8	16
M/50132/25	32	25	G1/8	16
M/50150/10	50	10	G1/8	20
M/50150/25	50	25	G1/8	20
M/50163/10	63	10	G1/8	20
M/50163/25	63	25	G1/8	20

Accessories

Straight fitting	Elbow fitting



C02250405	C02470405
C02250405	C02470405
C02250405	C02470405
C02250405	C02470405
C02250405	C02470405
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLAMPING CYLINDERS M/50200

Double acting – Ø 8 ... 63 mm



Enable high thrusts to be achieved in restricted space

Neat, clean appearance

One-piece body construction

TECHNICAL DATA

Medium:

Compressed air, filtered and lubricated

Operating pressure:

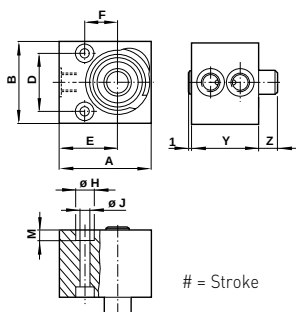
1,5 ... 10 bar (double acting)

Operating temperature:

-10°C ... +70°C

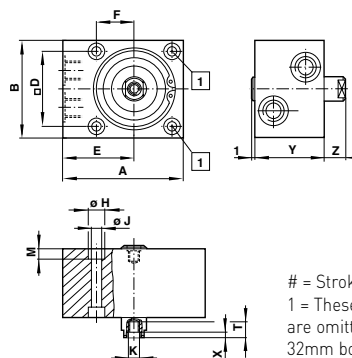
Consult our Technical Service for use below +2°C

M/50208 and M/50212



M/50220 ... M/50263

Please note that this range features a double ended piston rod as standard



= Stroke
1 = These mounting holes are omitted on 20 and 32mm bore units

Dimensions

Dia. Ø	A	B	Ø C	D	E	F	Ø H	Ø J	K	M	T	X
8	20	18	–	11	13,5	8	6	3,4	–	3,2	–	–
12	25	20	–	13	16	9	6	3,4	–	3,4	–	–
20	40	32	5,3	20	24	15	10	5,5	M 5	5,5	8	2
32	55	45	6,4	32	32	18	10	5,5	M 6	5,5	14,5	2,5
50	80	65	8,4	50	47,5	–	11	6,6	M 8	6,8	15	3
63	90	80	8,4	62	50	–	15	9	M 8	9	15	3

Dia. Ø	#	Y	Z
8	4	22	5
12	4	24	5
12	10	30	11
20	4	25	8
20	10	31	14
32	5	33,5	10

Dia. Ø	#	Y	Z
32	10	38,5	15
32	25	53,5	30
50	10	36,5	15
50	25	51,5	30
63	10	41,5	15
63	25	56,5	30

Models

DOUBLE ACTING Model	Dia. Ø	Stroke	Port size	Piston rod Ø



M/50208/4	●	8	4	M5	4
M/50212/4	●	12	4	M5	5
M/50212/10	●	12	10	M5	5
M/50220/4	●	20	4	M5	10
M/50220/10	●	20	10	M5	10
M/50232/5	●	32	5	G1/8	12
M/50232/10	●	32	10	G1/8	12
M/50232/25	●	32	25	G1/8	12
M/50250/10	●	50	10	G1/8	16
M/50250/25	●	50	25	G1/8	16
M/50263/10	●	63	10	G1/8	16
M/50263/25	●	63	25	G1/8	16

Accessories

Straight fitting	Elbow fitting



C02250405	C02470405
C02250405	C02470405
C02250405	C02470405
C02250405	C02470405
C02250405	C02470405
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618
C02250618	C02470618

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.



ISO/VDMA RANGE

NOT ALL 'ISO/VDMA' ACTUATORS LOOK ALIKE AND PERFORM TO A SIMILAR STANDARD. THE NORGREN EXPRESS RANGE IS UNIQUE FOR A NUMBER OF REASONS.

The range covers standard and specific use products, up to 320mm bore and 3,000mm stroke length and is possibly the only unit on the market capable of working up to 16 bar of pressure as standard.

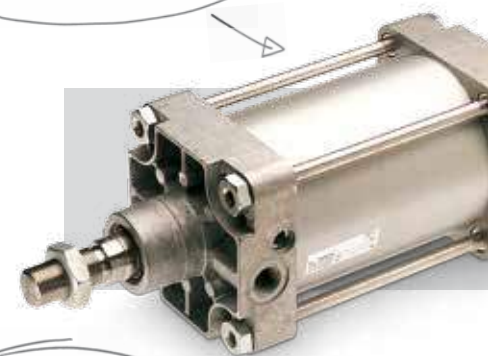
What's more, IMI Precision Engineering were the first to utilise a flush-mounted switch system, now standard for almost ten years, which ensures that switches are fully protected from all kinds of mechanical damage.

→ Very low static and dynamic friction characteristics allow low pressure working at speeds down to 3mm/sec and for ultra-low friction applications a special version is available. Running costs can be optimised for maximum efficiency without use of special products, reducing cost of ownership and inventory holding

→ A wide range of standard bore and stroke combinations is available as dictated by ISO requirements. Additional items can be sourced for immediate delivery supported by a standard mounting range larger than many competitors. You have the optimum product selection over wide application requirements, and stock cost can be kept to a minimum in end-user environments

→ The vast IMI Norgren range includes both profile and traditional round barrel versions, a stainless steel version, heavy duty wiper and low friction options, non or extended cushion, integrated valve and actuator combined on one unit (IVAC), piston rod lock, guide block and unit complete with position sensor. From one supplier you have total availability of both standard and more specialised products meeting most industrial requirements

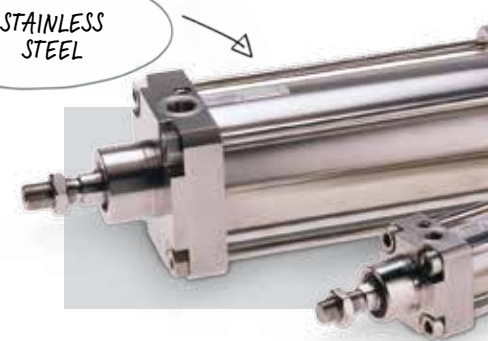
TRADITIONAL TIE ROD OPTION



INTEGRATED VALVE AND ACTUATOR COMBINED



STAINLESS STEEL



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

ISO/VDMA PROFILE CYLINDERS PRA/181000/M

Single acting – Ø 32 ... 50 mm



Conforms to ISO 15552, ISO 6431, VDMA 24562 and NFE 49-003-1

Flush mounted switch system

Low friction levels and long life expectancy

More stocked bore/stroke combinations than many competitors

Large range of standard mountings

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Single acting, magnetic piston, adjustable cushioning

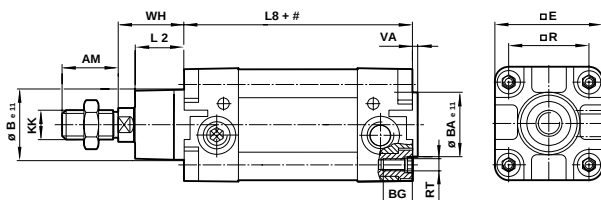
Operating pressure:

2 ... 10 bar

Operating temperature:

-20°C ... +80°C max.

Consult our Technical Service for use below +2°C

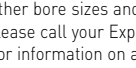


= Stroke

Dimensions

Dia. Ø	AM	Ø B/BA e11	BG	E	KK	L2	L8 (25, 50 #)	L8 (100 #)	R	RT	VA	WH
32	22	30	16	47	M10x1,25	20	119	147	32,5	M 6	3	26
40	24	35	16	53	M12x1,25	22	130	158	38	M 6	3,5	30
50	32	40	16	65	M16x1,5	27	131	159	46,5	M 8	3,5	37

Models

SPRUNG IN Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Straight fitting	Elbow fitting	Service kit
	32	25	G1/8	12	M/50/LSU/5V	C02250618	C02470618	QA/8032/00
PRA/181032/M/50	32	50	G1/8	12	M/50/LSU/5V	C02250618	C02470618	QA/8032/00
PRA/181032/M/100	32	100	G1/8	12	M/50/LSU/5V	C02250618	C02470618	QA/8032/00
	40	25	G1/4	16	M/50/LSU/5V	C02250628	C02470628	QA/8040/00
PRA/181040/M/50	40	50	G1/4	16	M/50/LSU/5V	C02250628	C02470628	QA/8040/00
PRA/181040/M/100	40	100	G1/4	16	M/50/LSU/5V	C02250628	C02470628	QA/8040/00
	50	25	G1/4	20	M/50/LSU/5V	C02250828	C02470828	QA/8050/00
PRA/181050/M/50	50	50	G1/4	20	M/50/LSU/5V	C02250828	C02470828	QA/8050/00
PRA/181050/M/100	50	100	G1/4	20	M/50/LSU/5V	C02250828	C02470828	QA/8050/00

Other bore sizes and stroke lengths available up to 100mm, please call your Express Team
For information on additional magnetic switches see page 67
For mountings, refer to double acting version shown on page 41

Accessories



For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO/VDMA PROFILE CYLINDERS PRA/182000/M

Double acting – Ø 32 ... 125 mm

Conforms to ISO 15552, ISO 6431, VDMA 24562 and NFE 49-003-1

Flush mounted switch system

Low friction levels and long life expectancy

More stocked bore/stroke combinations than many competitors

Large range of standard mountings

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston, adjustable cushioning

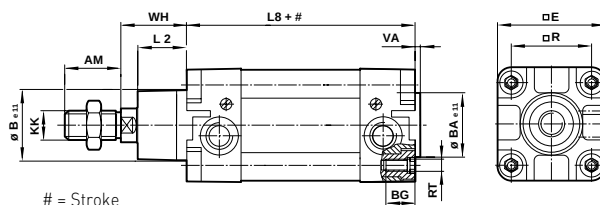
Operating pressure:

1 ... 16 bar

Operating temperature:

–20°C ... +80°C max.

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AM	Ø BA/Be11	BG	E	KK	L2	L8	R	RT	VA	WH
32	22	30	16	47	M10x1,25	20	94	32,5	M 6	3	26
40	24	35	16	53	M12x1,25	22	105	38	M 6	3,5	30
50	32	40	16	65	M16x1,5	27	106	46,5	M 8	3,5	37
63	32	45	16	75	M16x1,5	29	121	56,5	M 8	4	37
80	40	45	17	95	M20x1,5	33	128	72	M 10	4	46
100	40	55	17	115	M20x1,5	36	138	89	M 10	4	51
125	54	60	20	140	M27x2	45	160	110	M 12	6	65

Models

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit
PRA/182032/M/25	32	25	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/50	32	50	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/80	32	80	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/100	32	100	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/125	32	125	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/160	32	160	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/200	32	200	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/250	32	250	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/320	32	320	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/400	32	400	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00
PRA/182032/M/500	32	500	G1/8	12	M/50/LSU/5V	C0K510618	C02250618	C02470618	QA/8032/00

Accessories



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO/VDMA PROFILE CYLINDERS PRA/182000/M

Double acting – Ø 32 ... 125 mm

Models

Accessories

Model		Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit
PRA/182040/M/25	●	40	25	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/50	●	40	50	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/80	●	40	80	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/100	●	40	100	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/125	●	40	125	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/160	●	40	160	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/200	●	40	200	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/250	●	40	250	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/320	●	40	320	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/400	●	40	400	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182040/M/500	●	40	500	G1/4	16	M/50/LSU/5V	C0K510628	C02250628	C02470628	QA/8040/00
PRA/182050/M/25	●	50	25	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/50	●	50	50	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/80	●	50	80	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/100	●	50	100	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/125	●	50	125	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/160	●	50	160	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/200	●	50	200	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/250	●	50	250	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/320	●	50	320	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/400	●	50	400	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182050/M/500	●	50	500	G1/4	20	M/50/LSU/5V	C0K510828	C02250828	C02470828	QA/8050/00
PRA/182063/M/25	●	63	25	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/50	●	63	50	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/80	●	63	80	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/100	●	63	100	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/125	●	63	125	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/160	●	63	160	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/200	●	63	200	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/250	●	63	250	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/320	●	63	320	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/400	●	63	400	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182063/M/500	●	63	500	G3/8	20	M/50/LSU/5V	C0K510838	C02250838	C02470838	QA/8063/00
PRA/182080/M/25	●	80	25	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/50	●	80	50	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/80	●	80	80	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/100	●	80	100	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/125	●	80	125	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/160	●	80	160	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/200	●	80	200	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/250	●	80	250	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/320	●	80	320	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/400	●	80	400	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182080/M/500	●	80	500	G3/8	25	M/50/LSU/5V	C0K511038	C02251038	C02471038	QA/8080/00
PRA/182100/M/25	●	100	25	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/50	●	100	50	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/80	●	100	80	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/100	●	100	100	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/125	●	100	125	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/160	●	100	160	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/200	●	100	200	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/250	●	100	250	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/320	●	100	320	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/400	●	100	400	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00
PRA/182100/M/500	●	100	500	G1/2	25	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8100/00

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO/VDMA PROFILE CYLINDERS PRA/182000/M

Double acting – Ø 32 ... 125 mm

Models

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit
PRA/182125/M/160	125	160	G1/2	32	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8125/00
PRA/182125/M/200	125	200	G1/2	32	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8125/00
PRA/182125/M/250	125	250	G1/2	32	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8125/00
PRA/182125/M/320	125	320	G1/2	32	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8125/00
PRA/182125/M/400	125	400	G1/2	32	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8125/00
PRA/182125/M/500	125	500	G1/2	32	M/50/LSU/5V	C0K511248	C02251248	C02471248	QA/8125/00

Accessories

Other stroke lengths available up to 3,000mm maximum, please call your Express Team
For information on additional magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

EXPRESS LINKS

Valves...

This range of actuators generally requires greater flow rates from the control valve due to higher consumption rates. Even so, matching the valve to the actuator port for port is usually adequate – if the actuator has 1/4" ports, so will a suitable valve. Since modern valves usually have higher flow rates than older ones, you may even be able to reduce the valve port by one size – for example a 3/8" ported actuator could use a 1/4" valve. Need a suitable valve ? – try the V60 series shown on page 109



FOR HIGHER PERFORMANCE AND RELIABILITY,
CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

WITH BENEFITS UNIQUE TO NORGREN EXPRESS
AND DIMENSIONAL CONFORMANCE TO ISO6432,
THIS PRODUCT CAN REPLACE:

- Festo DNCB range
 - Parker P1D range
 - SMC C95, CP95 and CP96 range
 - Bosch Rexroth PRA range
 - Airtac ISO/VDMA
 - Camozzi series 61
 - Univer series K
 - Hoerbiger DZ range
 - Pneumax series 1300
- Plus many others...

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

MOUNTINGS FOR PRA/181000/M and PRA/182000/M ISO/VDMA Profile cylinders

Single and double acting

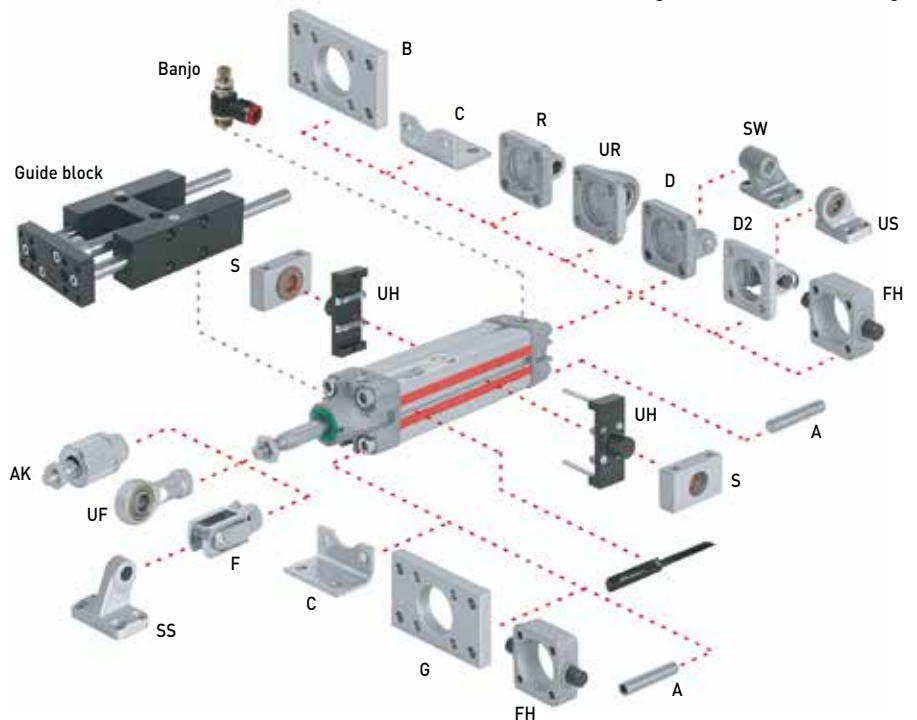
Single and Double Acting

Double Acting Only

EXPRESS PLUS

AK Mount...

Misalignment during operation is the most common cause of actuator failure which can result in expensive down time. Fitting a swivel mount (AK style) between the piston rod and machine will ensure that any error is removed and costs much less than a breakdown!



Dia. Ø	A	AK	B, G	C	D	D2	F	FH
32	QM/8032/35	QM/8025/38	QA/8032/22	QA/8032/21	QA/8032/23	QA/8032/42	QM/8025/25	QA/8032/34
40	QM/8032/35	QM/8040/38	QA/8040/22	QA/8040/21	QA/8040/23	QA/8040/42	QM/8040/25	QA/8040/34
50	QM/8050/35	QM/8050/38	QA/8050/22	QA/8050/21	QA/8050/23	QA/8050/42	QM/8050/25	QA/8050/34
63	QM/8050/35	QM/8050/38	QA/8063/22	QA/8063/21	QA/8063/23	QA/8063/42	QM/8050/25	QA/8063/34
80	QM/8080/35	QM/8080/38	QA/8080/22	QA/8080/21	QA/8080/23	QA/8080/42	QM/8080/25	QA/8080/34
100	QM/8080/35	QM/8080/38	QA/8100/22	QA/8100/21	QA/8100/23	QA/8100/42	QM/8080/25	QA/8100/34
125	QM/8125/35	QM/8125/38	QM/8125/22	QM/8125/21	QM/8125/23	QA/8125/42	QM/8125/25	QA/8125/34

Dia. Ø	R	S	SS	SW	UF	UH	UR	US
32	QA/8032/27	QA/8032/41	M/P19931	M/P19493	QM/8025/32	PQA/182032/40	QA/8032/33	M/P40310
40	QA/8040/27	QA/8040/41	M/P19932	M/P19494	QM/8040/32	PQA/182040/40	QA/8040/33	M/P40311
50	QA/8050/27	QA/8040/41	M/P19933	M/P19495	QM/8050/32	PQA/182050/40	QA/8050/33	M/P40312
63	QA/8063/27	QA/8063/41	M/P19934	M/P19496	QM/8050/32	PQA/182063/40	QA/8063/33	M/P40313
80	QA/8080/27	QA/8063/41	M/P19935	M/P19497	QM/8080/32	PQA/182080/40	QA/8080/33	M/P40314
100	QA/8100/27	QA/8100/41	M/P19936	M/P19498	QM/8080/32	PQA/182100/40	QA/8100/33	M/P40315
125	QM/8125/27	QA/8100/41	M/P19937	M/P19499	QM/8125/32	PQA/182125/40	QM/8125/33	M/P71355

Dia. Ø	Guide Blocks	Guide Blocks
32	QA/8032/51/*	QA/8032/61/*
40	QA/8040/51/*	QA/8040/61/*
50	QA/8050/51/*	QA/8050/61/*
63	QA/8063/51/*	QA/8063/61/*
80	QA/8080/51/*	QA/8080/61/*
100	QA/8100/51/*	QA/8100/61/*

* Insert stroke length in mm from table on the right
Note: QA/8_/_/51* = Plain bearing; QA/8_/_/61* = Ball bearing

Standard strokes for guide blocks

Ø	50	100	160	200	250	320	400	500
32	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•

Other stroke lengths are not available, use nearest standard stroke
Maximum stroke 500 mm

EXPRESS PLUS

Plain and Roller bearings...

Each offer different advantages, for higher side loads choose a plain bearing, for higher speeds and greater accuracy choose a roller bearing.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO/VDMA CYLINDERS RA/8000/M

Double acting – Ø 32 ... 320 mm

Conforms to ISO 15552, ISO 6431, VDMA 24562 and NFE 49-003-1

Capable of working up to 16 bar of pressure as standard

Low static and dynamic friction allows working at speeds down to 3mm/sec

Wide range of standard bore and stroke combinations available

Switches mounted via bracket



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston, adjustable cushioning

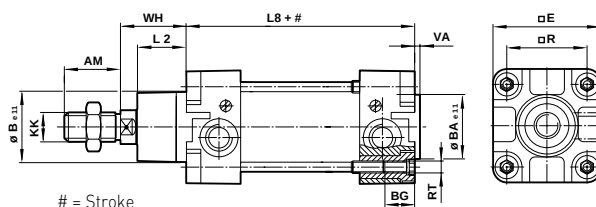
Operating pressure:

1 ... 16 bar (1 ... 10 bar for Ø 250 and 320 mm)

Operating temperature:

–20°C ... +80°C max.

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AM	Ø BA/Be11	BG	E	KK	L2	L8	R	RT	VA	WH
32	22	30	18	47	M10x1,25	20	94	32,5	M 6	3	26
40	24	35	18	53	M12x1,25	22	105	38	M 6	3,5	30
50	32	40	18	65	M16x1,5	27	106	46,5	M 8	3,5	37
63	32	45	17,5	75	M16x1,5	29	121	56,5	M 8	4	37
80	40	45	21,5	95	M20x1,5	33	128	72	M 10	4	46
100	40	55	21,5	115	M20x1,5	36	138	89	M 10	4	51
125	54	60	30	140	M27x2	45	160	110	M12	6	65
160	72	65	28,5	183,5	M36x2	58	180	140	M16	4	80
200	72	75	28,5	224	M36x2	67	180	175	M16	5	95
250	84	90	35	280	M42x2	80	200	220	M20	7	105
320	96	110	30	350	M48x2	90	220	270	M24	7	120

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
RA/8032/M/25	32	25	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/50	32	50	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/80	32	80	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/100	32	100	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/125	32	125	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/160	32	160	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/200	32	200	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/250	32	250	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/320	32	320	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/400	32	400	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00
RA/8032/M/500	32	500	G1/8	12	M/50/LSU/5V	QM/27/2/1	C0K510618	C02250618	C02470618	QA/8032/00

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO/VDMA CYLINDERS RA/8000, RA/8000/M

Double acting – Ø 32 ... 320 mm

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
RA/8040/M/25	40	25	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/50	40	50	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/80	40	80	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/100	40	100	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/125	40	125	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/160	40	160	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/200	40	200	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/250	40	250	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/320	40	320	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/400	40	400	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8040/M/500	40	500	G1/4	16	M/50/LSU/5V	QM/27/2/1	C0K510628	C02250628	C02470628	QA/8040/00
RA/8050/M/25	50	25	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/50	50	50	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/80	50	80	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/100	50	100	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/125	50	125	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/160	50	160	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/200	50	200	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/250	50	250	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/320	50	320	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/400	50	400	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8050/M/500	50	500	G1/4	20	M/50/LSU/5V	QM/27/2/1	C0K510828	C02250828	C02470828	QA/8050/00
RA/8063/M/25	63	25	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/50	63	50	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/80	63	80	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/100	63	100	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/125	63	125	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/160	63	160	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/200	63	200	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/250	63	250	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/320	63	320	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/400	63	400	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8063/M/500	63	500	G3/8	20	M/50/LSU/5V	QM/27/2/1	C0K510838	C02250838	C02470838	QA/8063/00
RA/8080/M/25	80	25	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/50	80	50	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/80	80	80	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/100	80	100	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/125	80	125	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/160	80	160	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/200	80	200	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/250	80	250	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/320	80	320	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/400	80	400	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8080/M/500	80	500	G3/8	25	M/50/LSU/5V	QM/27/2/1	C0K511038	C02251038	C02471038	QA/8080/00
RA/8100/M/50	100	50	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/80	100	80	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/100	100	100	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/125	100	125	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/160	100	160	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/200	100	200	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/250	100	250	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/320	100	320	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/400	100	400	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00
RA/8100/M/500	100	500	G1/2	25	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8100/00

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO/VDMA CYLINDERS RA/8000/M

Double acting – Ø 32 ... 320 mm

Models

Accessories

Model		Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
RA/8125/M/250	●	125	250	G1/2	32	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8125/00
RA/8125/M/320	●	125	320	G1/2	32	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8125/00
RA/8125/M/400	●	125	400	G1/2	32	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8125/00
RA/8125/M/500	●	125	500	G1/2	32	M/50/LSU/5V	QM/27/2/1	C0K511248	C02251248	C02471248	QA/8125/00
RA/8160/M/250	●	160	250	G3/4	40	M/50/LSU/5V	QM/27/2/1	M/840 (Inline)	–	–	QA/8160/00
RA/8160/M/320	●	160	320	G3/4	40	M/50/LSU/5V	QM/27/2/1	M/840 (Inline)	–	–	QA/8160/00
RA/8160/M/400	●	160	400	G3/4	40	M/50/LSU/5V	QM/27/2/1	M/840 (Inline)	–	–	QA/8160/00
RA/8160/M/500	●	160	500	G3/4	40	M/50/LSU/5V	QM/27/2/1	M/840 (Inline)	–	–	QA/8160/00
RA/8200/M/***	●	200	made to order	G3/4	40	M/50/LSU/5V	QM/27/2/1	M/840 (Inline)	–	–	QA/8200/00
RA/8250/M/***	●	250	made to order	G1	50	QM/32/5	QM/31/250/22	M/855 (Inline)	–	–	QA/8250/00
RA/8320/M/***	●	320	made to order	G1	63	QM/32/5	QM/31/320/22	M/855 (Inline)	–	–	QA/8320/00

*** insert stroke length in mm

Other stroke lengths available up to 3,000mm maximum, please call your Express Team
For information on alternative magnetic switches see page 67For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

EXPRESS LINKS

Valves...

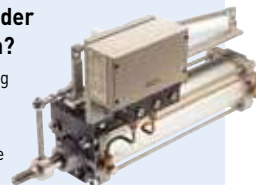
This range of actuators generally requires greater flow rates from the control valve due to higher consumption rates. Even so, matching the valve to the actuator port for port is usually adequate – if the actuator has 1/4" ports, so will a suitable valve. Since modern valves usually have higher flow rates than older ones, you may even be able to reduce the valve port by one size – for example a 3/8" ported actuator could use a 1/4" valve. Need a suitable valve ? – try the V60 series shown on page 109



EXPRESS PLUS

Looking for a cylinder positioning system?

IMI Precision Engineering offers positioning actuators in a whole series of bore and stroke combinations controlled by either a IMI Norgren control box or other proprietary manufactured units like Siemens, Eckhart, and others. Please call your Express Team.

FOR HIGHER PERFORMANCE AND RELIABILITY,
CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

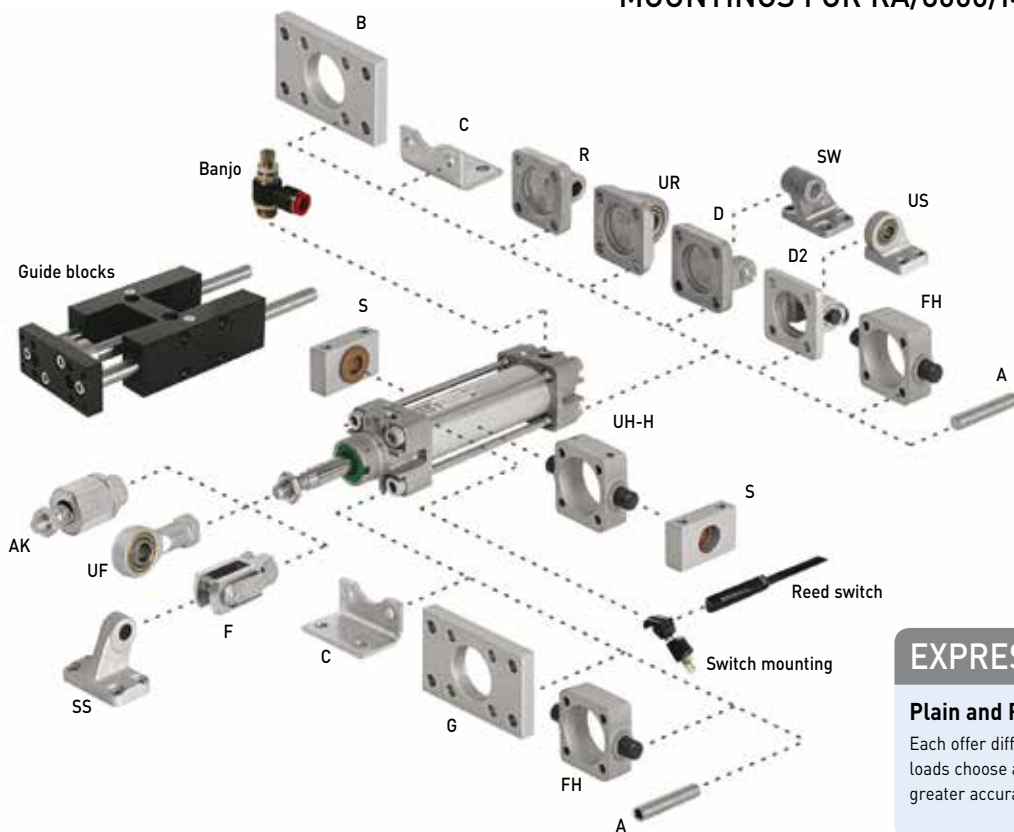
- Always in stock
- Rapid delivery
- Free 2-year warranty

WITH BENEFITS UNIQUE TO NORGREN EXPRESS
AND DIMENSIONAL CONFORMANCE TO ISO6432,
THIS PRODUCT CAN REPLACE:

- Festo DNCB range
- Parker P1D range
- SMC C95, CP95 and CP96 range
- Bosch Rexroth PRA range
- Airtac ISO/VDMA
- Camozzi series 61
- Univer series K
- Hoerbiger DZ range
- Pneumax series 1300
- Plus many others...

For further information, visit store.norgren.com
and use the new improved search function. If you cannot see the option you require contact your Express Team.

MOUNTINGS FOR RA/8000/M ISO/VDMA Cylinders



EXPRESS PLUS

Plain and Roller bearings...

Each offer different advantages, for higher side loads choose a plain bearing, for higher speeds and greater accuracy choose a roller bearing.

Dia. Ø	A	AK	B, G	C	D	D2	F	FH	H
32	QM/8032/35	QM/8025/38	QA/8032/22	QA/8032/21	QA/8032/23	QA/8032/42	QM/8025/25	QA/8032/34	QA/8032/28
40	QM/8032/35	QM/8040/38	QA/8040/22	QA/8040/21	QA/8040/23	QA/8040/42	QM/8040/25	QA/8040/34	QA/8040/28
50	QM/8050/35	QM/8050/38	QA/8050/22	QA/8050/21	QA/8050/23	QA/8050/42	QM/8050/25	QA/8050/34	QA/8050/28
63	QM/8050/35	QM/8050/38	QA/8063/22	QA/8063/21	QA/8063/23	QA/8063/42	QM/8050/25	QA/8063/34	QA/8063/28
80	QM/8080/35	QM/8080/38	QA/8080/22	QA/8080/21	QA/8080/23	QA/8080/42	QM/8080/25	QA/8080/34	QA/8080/28
100	QM/8080/35	QM/8080/38	QA/8100/22	QA/8100/21	QA/8100/23	QA/8100/42	QM/8080/25	QA/8100/34	QA/8100/28
125	QM/8125/35	QM/8125/38	QM/8125/22	QM/8125/21	QM/8125/23	QA/8125/42	QM/8125/25	QA/8125/34	QM/8125/28
160	QM/8160/35	QM/8160/38	QM/8160/22	QM/8160/21	QM/8160/23	QA/8160/42	QM/8160/25	-	QM/8160/28
200	QM/8160/35	QM/8160/38	QM/8200/22	QM/8200/21	QM/8200/23	QA/8200/42	QM/8160/25	-	QM/8200/28
250	QM/8250/35	-	QM/8250/22	QM/8250/21	QM/8250/23	-	QM/8250/25	-	QM/8250/28
320	QM/8320/35	-	QM/8320/22	QM/8320/21	QM/8320/23	-	QM/8320/25	-	QM/8320/28

Dia. Ø	R	S	SS	SW	UF	UH	UR	US
32	QA/8032/27	QA/8032/41	M/P19931	M/P19493	QM/8025/32	QA/8032/40	QA/8032/33	M/P40310
40	QA/8040/27	QA/8040/41	M/P19932	M/P19494	QM/8040/32	QA/8040/40	QA/8040/33	M/P40311
50	QA/8050/27	QA/8040/41	M/P19933	M/P19495	QM/8050/32	QA/8050/40	QA/8050/33	M/P40312
63	QA/8063/27	QA/8063/41	M/P19934	M/P19496	QM/8050/32	QA/8063/40	QA/8063/33	M/P40313
80	QA/8080/27	QA/8063/41	M/P19935	M/P19497	QM/8080/32	QA/8080/40	QA/8080/33	M/P40314
100	QA/8100/27	QA/8100/41	M/P19936	M/P19498	QM/8080/32	QA/8100/40	QA/8100/33	M/P40315
125	QM/8125/27	QA/8100/41	M/P19937	M/P19499	QM/8125/32	QA/8125/40	QM/8125/33	M/P71355
160	QM/8160/27	QA/8160/41	M/P19938	M/P19679	QM/8160/32	QA/8160/40	QM/8160/33	M/P71356
200	QM/8200/27	QA/8160/41	M/P19939	M/P19683	QM/8160/32	QA/8200/40	QM/8200/33	M/P71357
250	-	-	-	M/P19446	QM/8250/32	-	QM/8250/33	-
320	-	-	-	M/P19447	QM/8320/32	-	QM/8320/33	-

Standard strokes for guide blocks

Ø	Guide blocks	Guide blocks
32	QA/8032/51/*	QA/8032/61/*
40	QA/8040/51/*	QA/8040/61/*
50	QA/8050/51/*	QA/8050/61/*
63	QA/8063/51/*	QA/8063/61/*
80	QA/8080/51/*	QA/8080/61/*
100	QA/8100/51/*	QA/8100/61/*

Ø	50	100	160	200	250	320	400	500
32	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•

* Insert stroke length in mm from table on the right

Note: QA/8_/_/51* = Plain bearing

QA/8_/_/61* = Roller bearing

Other stroke lengths are not available, use nearest standard stroke

Maximum stroke 500 mm

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CYLINDERS WITH PISTON ROD LOCKING UNITS

RA/8000/L4, PRA/182000/L4

Double acting – Ø 32 ... 125 mm

Magnetic and non-magnetic piston conforms to ISO 15552, ISO 6431, VDMA 24562 and NFE 49-003-1

Secure locking of piston rod in any position

Locks when air is removed

Compact, maintenance-free design



Unit shown is fitted to PRA/182000 series. This unit is also available to fit our RA/8000 series – see detail below

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Passive model – pressure applied to release

Operating pressure:

4,5 ... 10 bar

Operating temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C

Please note: for all new applications, actuator should be purchased complete with locking unit

Models

RA/8000/M	PRA/182000/M	Dia. Ø	Port size	Piston rod Ø
				
RA/8032/L4/*	PRA/182032/L4/*	32	G1/8	12
RA/8040/L4/*	PRA/182040/L4/*	40	G1/8	16
RA/8050/L4/*	PRA/182050/L4/*	50	G1/8	20
RA/8063/L4/*	PRA/182063/L4/*	63	G1/8	20
RA/8080/L4/*	PRA/182080/L4/*	80	G1/8	25
RA/8100/L4/*	PRA/182100/L4/*	100	G1/8	25
RA/8125/L4/*	PRA/182125/L4/*	125	G1/8	32

* Insert stroke length in mm

Accessories

Reed switch with integral 5 m cable*	Banjo flow control	Straight fitting	Elbow fitting
			
M/50/LSU/5V	C0K510618	C02250618	C02470618
M/50/LSU/5V	C0K510618	C02250618	C02470618
M/50/LSU/5V	C0K510618	C02250618	C02470618
M/50/LSU/5V	C0K510618	C02250618	C02470618
M/50/LSU/5V	C0K510618	C02250618	C02470618
M/50/LSU/5V	C0K510618	C02250618	C02470618
M/50/LSU/5V	C0K510618	C02250618	C02470618

For information on alternative magnetic switches see page 67
For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

* when using RA/8000 actuator, switch requires a mounting clip
See page 42 for details

Replacement parts

Ø	Model Locking unit	Locking cartridge
32	QA/8032/59	QA/8032/63
40	QA/8040/59	QA/8040/63
50	QA/8050/59	QA/8050/63
63	QA/8063/59	QA/8063/63
80	QA/8080/59	QA/8100/63
100	QA/8100/59	QA/8100/63
125	QA/8125/59	–

Locking unit includes cartridge.

For all applications please call your Express Team.

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.



IVAC

INTEGRATED VALVE AND ACTUATOR CONTROL

PRA/88200 Series

32 TO 100MM BORE – UP TO 1,000MM STROKE LENGTH

IMI PRECISION ENGINEERING HAS WORKED CLOSELY WITH CUSTOMERS IN KEY INDUSTRY SECTORS TO FULLY UNDERSTAND WHAT IMPROVEMENTS THEY WANTED FROM THEIR PNEUMATIC CONTROLS. THE RESPONSE HIGHLIGHTED A WIDESPREAD NEED FOR IMPROVED ENERGY EFFICIENCY, REDUCED DOWNTIME AND GREATER EASE OF USE.

THE IVAC FROM IMI NORGREN NOW ANSWERS THESE NEEDS

A family of products incorporating proven technology, IVAC is a light weight, strong, actuator with integrated solenoid valve, cushion and speed control plus position sensors. The ISO/VDMA dimensions mean that it can be used to replace existing traditional systems, or used on new installations. Using IVAC rather than traditional components, energy consumption can be reduced by up to 50%.

The unit has been rigorously tested in operational conditions by customers in a wide range of industries.

THE UNIQUE PATENTED DESIGN DELIVERS SIGNIFICANT BENEFITS

SAVES COST

- Simplified specification and design, ordering, installation and maintenance
- Only 1 air connection and 1 electrical connector per unit
- Integrated sensor adjustment
- Glandless spool valve for life expectancy of over 200 million cycles
- Cleanline body offers simple washdown when used in critical applications
- Integrated pressure protection

SAVES ENERGY

- Reduction in 'dead volume' of compressed air within system
- Faster response times improve machine efficiency and increase production
- Can achieve compressed air savings of up to 50% compared to conventional systems



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

FASTER
RESPONSE TIMES



FULLY MODULAR
DESIGN

LINTRA® PLUS RANGE

THE IMI NORGREN RODLESS ACTUATOR RANGE, KNOWN GENERALLY BY THE 'LINTRA' (LINEAR TRANSPORTER) BRAND HAS, OVER THE LAST 25 YEARS, DEVELOPED FROM THE ORIGINAL M/45000 TO THE CURRENT M/146000 'LINTRA® PLUS' SERIES.

This range is one of the widest and most comprehensive rodless ranges available. Still unique are the integrated guides housed in the main extrusion and the user-friendly sealing strip.

The latest version also has slots to take the standard IMI Norgren M/50 series switch, along with grooves which accept industry-standard aluminium machine building systems.

→ Four basic versions, covering light to heavy duty applications, all based around the same high strength, low weight aluminium profile and identical internal parts. This enables consistency of design across all machine functions, reduced spare parts holding and ease of maintenance

→ Quality, long-life sealing system with unique zip action on seal/cover strip and protection system preventing dust ingress. Extremely low static leakage values when in use – offers responsive, reliable operation up to 6,000 km of travel, and low costs of ownership

→ Improved version (M/146000) is totally interchangeable with previous M/46000 model, with lower weight, greater load capacity, improved end caps and carriage design, and improved sealing performance now with added dust protection to meet ATEX requirements. Ongoing product development means that existing machine life cycles can be extended without compromise on expensive conversions or increased maintenance schedules

TWIN PORTED
END CAP

HIGH STRENGTH
LIGHT WEIGHT

USER FRIENDLY
SEALING STRIP



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

LINTRA® PLUS RODLESS CYLINDERS

M/146000 Internal Guide, M/146100 External Guide, M/146200 Precision Roller Guide

Double acting – Ø 16 ... 80 mm



Widest rodless range covers all requirements from lighter to heavier duties

Unique integrated guides housed in the main extrusion

Unique zip action sealing system

Protection system preventing dust ingress

Reliable operation up to 6,000 Km of travel

Interchangeable with previous M/46*00 series units

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston, adjustable cushioning

Operating pressure:

1 ... 8 bar

Operating temperature:

–30°C ... +80°C max.

Consult our Technical Service for use below +2°C

MAXIMUM STROKE

Ø16 ... 40 mm stroke up to 8500 mm

Ø50 and 63 mm stroke up to 8000 mm

Ø80 stroke up to 5500 mm

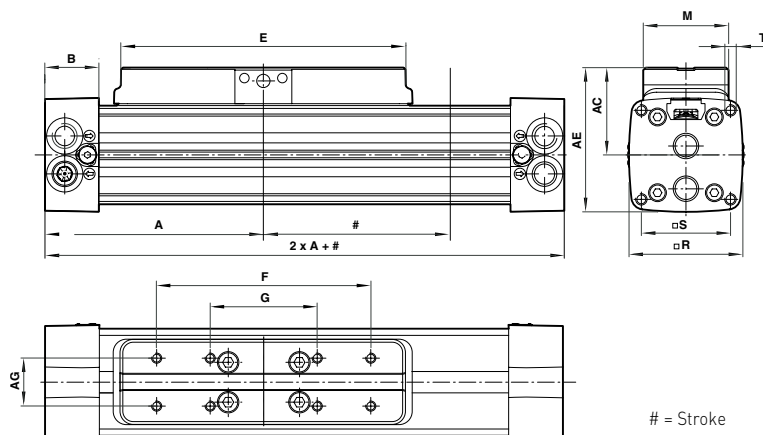
Any stroke length can be made to order, very best availability in multiples of 100mm

Please note: Precision Roller versions have a maximum stroke of 3,000mm

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

LINTRA®PLUS RODLESS CYLINDERS M/146000 Internal guide

Double acting – Ø 16 ... 80 mm



Dimensions – Internal guide

Dia. Ø	A	AC	AE	AG	B	E	F	G	M	R	S	T (by depth)
16	62,5	-	38	8	17,5	80	60	-	18	27	16	M3 x 5
20	85	-	54	18	23	110	80	40	27	40	32	M5 x 12
25	100	36	56	60	23	130	90	45	32	48	37	M5 x 13
32	120	46	76	25	28,5	160	120	60	45	60	47	M6 x 17
40	150	52,5	90	25	28,5	215	160	80	45	74,5	58	M8 x 20
50	180	65,5	110	25	38	250	190	95	50	89	70	M8 x 20
63	215	82,5	125	25	38	320	240	120	50	105	84	M10 x 24
80	260	-	154	25	45	390	300	150	50	130	100	M12 x 26

Models - Internal guide

Accessories

Model	Piston Ø	Stroke length	Port size	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit (includes sealing strip)



M/146016/M/****	16	made to order	M5	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/146016/88/****
M/146020/M/****	20	made to order	G1/8	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/146020/88/****
M/146025/M/****	25	made to order	G1/8	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/146025/88/****
M/146032/M/****	32	made to order	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/****
M/146032/M/300	32	300	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/400	32	400	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/500	32	500	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/600	32	600	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/700	32	700	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/800	32	800	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/900	32	900	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146032/M/1000	32	1000	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146040/M/****	40	made to order	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/****
M/146040/M/300	40	300	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/400	40	400	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/500	40	500	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/600	40	600	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/700	40	700	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/800	40	800	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/900	40	900	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146040/M/1000	40	1000	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146050/M/****	50	made to order	G3/8	M/50/LSU/5V	C0K510838	C02250838	C02470838	QM/146050/88/****
M/146063/M/****	63	made to order	G1/2	M/50/LSU/5V	C0K510848	C02250848	C02470848	QM/146063/88/****
M/146080/M/****	80	made to order	G1/2	M/50/LSU/5V	C0K511048	C02251048	C02471048	QM/146080/88/****

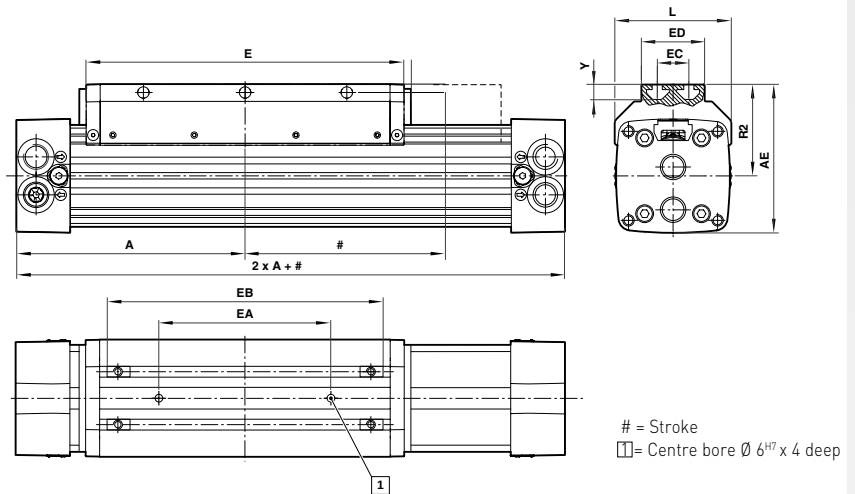
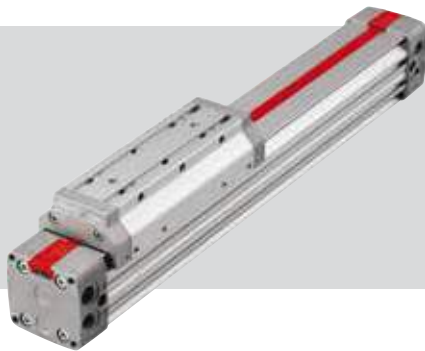
**** insert stroke length in mm – very best availability in multiples of 100 mm
For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

LINTRA®PLUS RODLESS CYLINDERS M/146100 External guide

Double acting – Ø 16 ... 80 mm



Dimensions – External guide

Dia. Ø	A	AE	E	ED	EC	EA±0,05	EB	L	R2	Y
16	62,5	38	80	-	-	-	-	31	-	5
20	85	59	110	-	-	-	-	42	-	12
25	100	67,5	130	32	20	50	102	52	43,5	-9,5
32	120	82	160	45	25	70	138	64	52	6,5
40	150	97,5	215	45	25	105	193	79	60	9,5
50	180	116,5	250	50	25	135	228	92	72	11,5
63	215	137	320	50	25	150	292	110	84,5	16,5
80	260	165	390	-	-	-	-	130	-	25

Models - External guide

Accessories

Model	Piston Ø	Stroke length	Port size	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit (includes sealing strip)
M/146116/M/****	16	made to order	M5	M/50/LSU/5V	C0K510405	C02250405	C02470405	QM/146116/88/****
M/146120/M/****	20	made to order	G1/8	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/146120/88/****
M/146125/M/****	25	made to order	G1/8	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/146125/88/****
M/146132/M/****	32	made to order	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/****
M/146132/M/300	32	300	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/400	32	400	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/500	32	500	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/600	32	600	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/700	32	700	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/800	32	800	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/900	32	900	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146132/M/1000	32	1000	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146132/88/1000
M/146140/M/****	40	made to order	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/****
M/146140/M/300	40	300	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/400	40	400	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/500	40	500	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/600	40	600	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/700	40	700	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/800	40	800	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/900	40	900	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146140/M/1000	40	1000	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146140/88/1000
M/146150/M/****	50	made to order	G3/8	M/50/LSU/5V	C0K510838	C02250838	C02470838	QM/146150/88/****
M/146163/M/****	63	made to order	G1/2	M/50/LSU/5V	C0K510848	C02250848	C02470848	QM/146163/88/****
M/146180/M/****	80	made to order	G1/2	M/50/LSU/5V	C0K511048	C02251048	C02471048	QM/146180/88/****

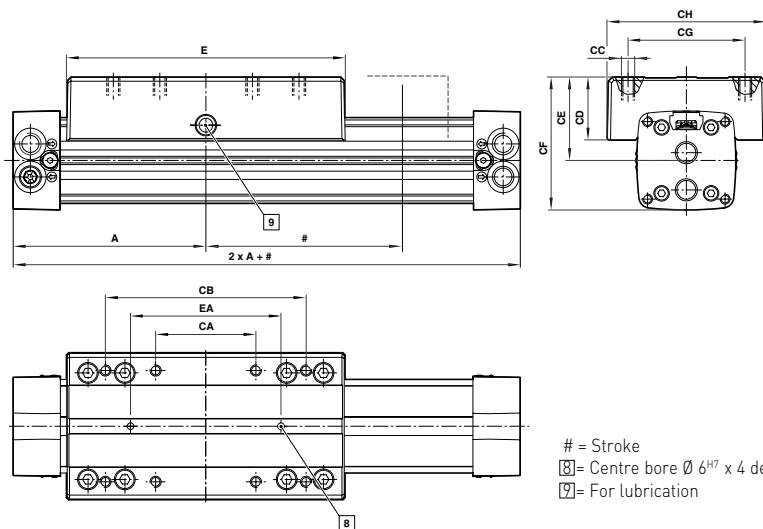
**** insert stroke length in mm – best availability in multiples of 100 mm
For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot see the option you require contact your Express Team.

LINTRA®PLUS RODLESS CYLINDERS M/146200 Precision roller guide

Double acting – Ø 16 ... 80 mm



Dimensions – Precision roller guide

Dia. Ø	A	CA	CB	CC	CD	CE	CF	CG	CH	E	EA ± 0,05
25	100	45	90	M6-14*1]	36	42	66	60	85	150	70
32	120	60	120	M8-16*1]	38	50	80	75	98	180	90
40	150	80	150	M8-16*1]	42	57,5	95	92	118	215	115
50	180	90	180	M10-20*1]	44	67	111,5	100	132	250	135
63	215	120	240	M10-20*1]	47	74,5	127	110	140	320	200

Models - Precision roller guide

Accessories

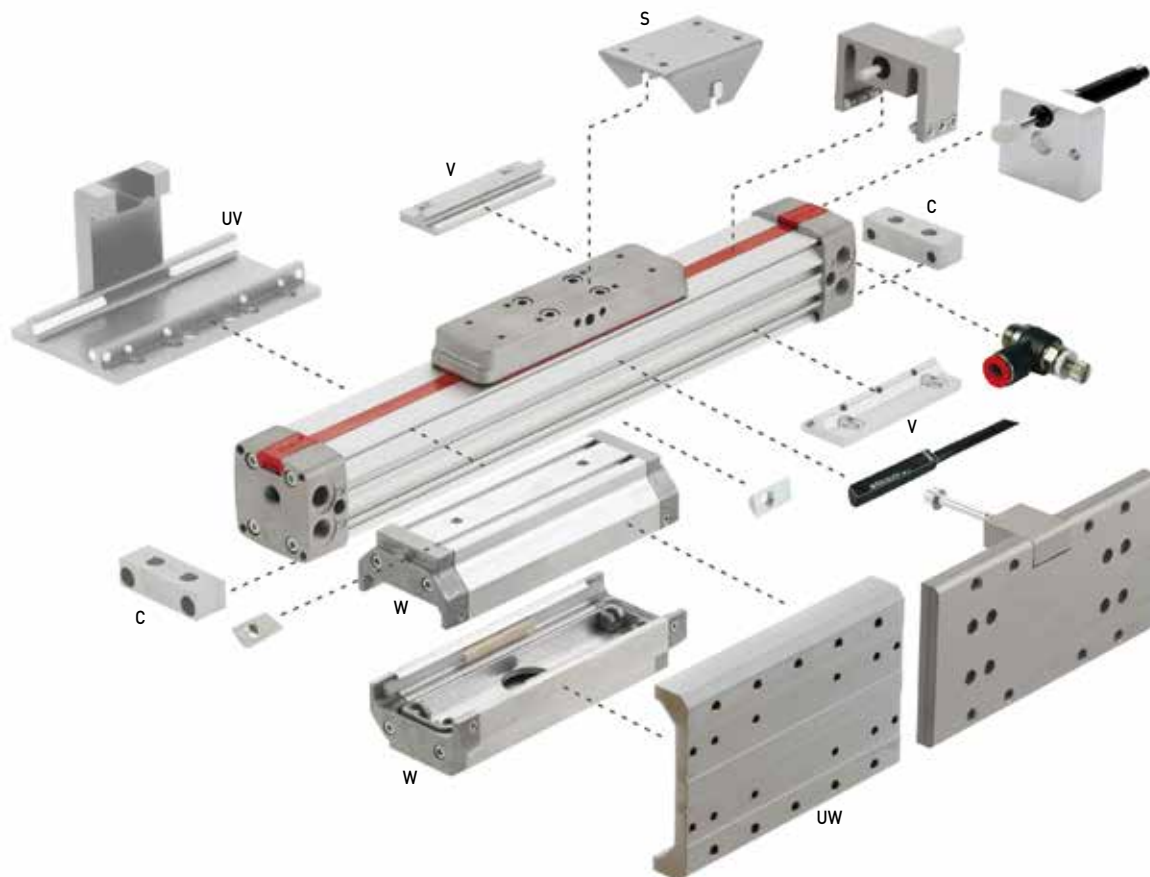
Model	Piston Ø	Stroke length	Port size	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service kit (includes sealing strip)
M/146225/M/****	25	made to order	G1/8	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/146025/88/****
M/146232/M/****	32	made to order	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/****
M/146232/M/300	32	300	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/400	32	400	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/500	32	500	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/600	32	600	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/700	32	700	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/800	32	800	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/900	32	900	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146232/M/1000	32	1000	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146032/88/1000
M/146240/M/****	40	made to order	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/****
M/146240/M/300	40	300	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/400	40	400	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/500	40	500	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/600	40	600	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/700	40	700	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/800	40	800	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/900	40	900	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146240/M/1000	40	1000	G1/4	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/146040/88/1000
M/146250/M/****	50	made to order	G3/8	M/50/LSU/5V	C0K510838	C02250838	C02470838	QM/146050/88/****
M/146263/M/****	63	made to order	G1/2	M/50/LSU/5V	C0K510848	C02250848	C02470848	QM/146063/88/****

**** insert stroke length in mm – very best availability in multiples of 100 mm
 For information on alternative magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
 See page 246

For further information, visit store.norgren.com
 and use the new improved search function. If you cannot
 see the option you require contact your Express Team.

MOUNTINGS FOR M/146000, M/146100 AND M/146200 LINTRA® Plus Rodless Cylinders



Dia. Ø	C	S*	UV*	UW**	V	W**
16	QM/146016/21 ●	QM/146016/37 ●	QM/146016/34 ●	–	QM/146016/32 ●	QM/146116/35 ●
20	QM/146020/21 ●	QM/146020/37 ●	QM/146020/34 ●	QM/146120/36 ●	QM/146020/32 ●	QM/146120/35 ●
25	QM/146025/21 ●	QM/146025/37 ●	QM/146025/34 ●	QM/146125/36 ●	QM/146025/32 ●	QM/146125/35 ●
32	QM/146032/21 ●	QM/146032/37 ●	QM/146032/34 ●	QM/146132/36 ●	QM/146032/32 ●	QM/146132/35 ●
40	QM/146040/21 ●	QM/146032/37 ●	QM/146040/34 ●	QM/146140/36 ●	QM/146040/32 ●	QM/146140/35 ●
50	QM/146050/21 ●	QM/146050/37 ●	QM/146050/34 ●	QM/146150/36 ●	QM/146050/32 ●	QM/146150/35 ●
63	QM/146063/21 ●	QM/146050/37 ●	QM/146063/34 ●	QM/146163/36 ●	QM/146063/32 ●	QM/146163/35 ●
80	QM/146080/21 ●	QM/146080/37 ●	QM/146080/34 ●	–	QM/146080/32 ●	QM/146180/35 ●

Dia. Ø	Assembly kit for caged ball linear motion guide	Adjustable stop	Assembly kit for shock absorbers	Groove key for guiding bridge	Groove key for profile barrel
16	–	–	–	–	–
20	–	QM/146120/75 ●	–	–	–
25	QM/146225/P/70 ●	QM/146125/75 ●	QM/146125/67 ●	M/P74065 ●	M/P74065 ●
32	QM/146232/P/70 ●	QM/146132/75 ●	QM/146132/67 ●	M/P74065 ●	M/P74065 ●
40	QM/146240/P/70 ●	QM/146140/75 ●	QM/146140/67 ●	M/P74066 ●	M/P74065 ●
50	QM/146250/P/70 ●	–	QM/146150/67 ●	M/P41858 ●	M/P74065 ●
63	QM/146263/P/70 ●	–	QM/146163/67 ●	M/P41858 ●	M/P74065 ●

* Suitable for internally guided models only, ** Suitable for external guided models only

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

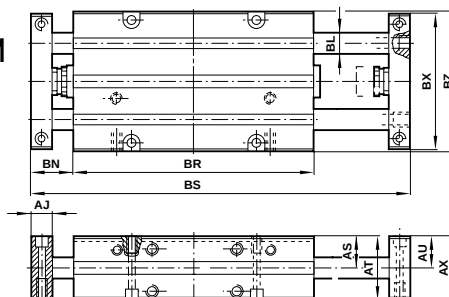
Double acting – Ø 10 ... 40 mm

Easy to install – reduces costly design time

Consult our Technical Service for use below +2°C



Technical drawing of a mechanical part, showing a side view and a top view. The side view includes dimensions: 8, 19, 8.5, 8, 10, 46, 44, 6, 18, and BR. The top view includes dimensions: 8, 18, and BS. The drawing also shows a cross-section of the part, indicating a hollow structure with a central bore.



Strokes (mm)	BR	BS
25	100	161
50	100	186
75	150	261

Model	AJ	AS	AT	AU	AX	Ø BL	BN	BX	BZ
M/60116	10	16	30	15	30	10	20	64	66
M/60125	12	21,5	40	20,5	40	16	22	90	92
M/60132	15	27,5	50	26,5	50	20	28	116	118
M/60140	20	32,5	60	31,5	60	25	31	144	146

Model		Strokes (mm)							
		25	50	75	100	125	150	175	200
M/60116	BR	113,5	113,5	163,5	163,5	213,5	213,5	–	–
M/60116	BS	179	204	279	304	379	404	–	–
M/60125	BR	–	152	152	202	202	252	252	–
M/60125	BS	–	246	271	346	371	446	471	–
M/60132	BR	–	–	190	190	240	240	290	290
M/60132	BS	–	–	321	346	421	446	521	546
M/60140	BR	–	–	–	236,5	236,5	286,5	286,5	336,5
M/60140	BS	–	–	–	398	423	498	523	598

Online at **store.norgren.com**

SLIDE UNITS M/60100/M

Double acting – Ø 10 ... 40 mm

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Guide Rod Ø (x2)	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
										
M/60111/M/25	10	25	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60111/M/00
M/60111/M/50	10	50	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60111/M/00
M/60111/M/75	10	75	M5	6	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60111/M/00
M/60116/M/25	16	25	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60116/M/00
M/60116/M/50	16	50	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60116/M/00
M/60116/M/75	16	75	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60116/M/00
M/60116/M/100	16	100	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60116/M/00
M/60116/M/125	16	125	M5	10	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60116/M/00
M/60125/M/50	25	50	M5	16	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60125/M/00
M/60125/M/75	25	75	M5	16	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60125/M/00
M/60125/M/100	25	100	M5	16	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60125/M/00
M/60125/M/125	25	125	M5	16	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60125/M/00
M/60125/M/150	25	150	M5	16	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60125/M/00
M/60125/M/175	25	175	M5	16	M/50/LSU/5V	M/P72487B	C0K510405	C02250405	C02470405	QM/60125/M/00
M/60132/M/75	32	75	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60132/M/00
M/60132/M/100	32	100	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60132/M/00
M/60132/M/125	32	125	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60132/M/00
M/60132/M/150	32	150	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60132/M/00
M/60132/M/175	32	175	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60132/M/00
M/60132/M/200	32	200	G1/8	20	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60132/M/00
M/60140/M/100	40	100	G1/8	25	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60140/M/00
M/60140/M/125	40	125	G1/8	25	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60140/M/00
M/60140/M/150	40	150	G1/8	25	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60140/M/00
M/60140/M/175	40	175	G1/8	25	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60140/M/00
M/60140/M/200	40	200	G1/8	25	M/50/LSU/5V	M/P72487B	C0K510618	C02250618	C02470618	QM/60140/M/00

For information on additional magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

GUIDING AND STOPPER CYLINDER

M/61000/M and M/61000/MR

Double acting – Ø 32 ... 80 mm

Guiding accuracy $\pm 0,02$ mm

Non-rotation accuracy $\pm 0,02^\circ$

Integrated heavy duty guide rods

Linear ball bearing option provides precision guiding for higher speeds

Plain bearing option offers higher side load capacity

Easy installation

Magnetic piston as standard

Buffer pad for noise reduction

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operating pressure:

1 ... 10 bar

Operating temperature:

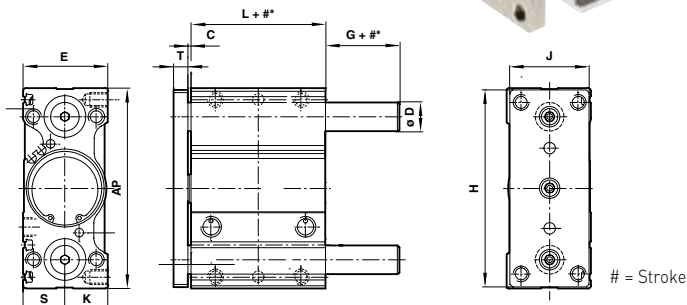
-10°C ... $+80^\circ\text{C}$

Consult our Technical Service for use below $+2^\circ\text{C}$

Dimensions

Dia. Ø	AP	C	D *1	D *2	E	G	H	J	K	L	S	T
32	114	1,5	16	20	51	8,5	112	48	26	38	25	8
40	124	2	16	20	51	2	122	48	26	44	25	8
50	140	2	20	25	59	7	138	56	30	44	29	10
63	150	2	20	25	72	2	148	69	36,5	49	35,5	10
80	188	1,5	25	30	92	2	185	88	46,5	57	45,5	16

*1 = MR version – ball bearings *2 = M version – plain bearings



Models

PLAIN BEARINGS Model	BALL BEARINGS Model	Dia. Ø	Stroke length	Port size	Guide rod Ø [X2]	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow Fitting	Service kit



M/61032/M/25	●	32	25	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61032/00
M/61032/M/50	●	32	50	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61032/00
M/61032/M/75	●	32	75	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61032/00
M/61032/M/100	●	32	100	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61032/00
M/61040/M/25	●	40	25	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61040/00
M/61040/M/50	●	40	50	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61040/00
M/61040/M/75	●	40	75	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61040/00
M/61040/M/100	●	40	100	G1/8	20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61040/00
M/61050/M/25	●	50	25	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61050/00
M/61050/M/50	●	50	50	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61050/00
M/61050/M/75	●	50	75	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61050/00
M/61050/M/100	●	50	100	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61050/00
M/61063/M/25	●	63	25	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61063/00
M/61063/M/50	●	63	50	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61063/00
M/61063/M/75	●	63	75	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61063/00
M/61063/M/100	●	63	100	G1/4	25	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61063/00
M/61080/M/25	●	80	25	G1/4	30	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61080/00
M/61080/M/50	●	80	50	G1/4	30	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61080/00
M/61080/M/75	●	80	75	G1/4	30	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61080/00
M/61080/M/100	●	80	100	G1/4	30	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61080/00
M/61032/MR/25	●	32	25	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61032/00
M/61032/MR/50	●	32	50	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61032/00
M/61040/MR/25	●	40	25	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61040/00
M/61040/MR/50	●	40	50	G1/8	16	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/61040/00
M/61050/MR/25	●	50	25	G1/4	20	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61050/00
M/61050/MR/50	●	50	50	G1/4	20	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/61050/00

Other bore sizes and stroke lengths available up to 100mm maximum, please call your Express Team.

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

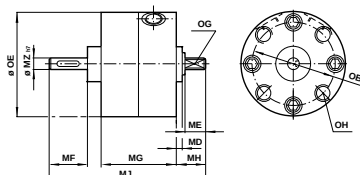
ROTARY VANE ACTUATORS

M/60280

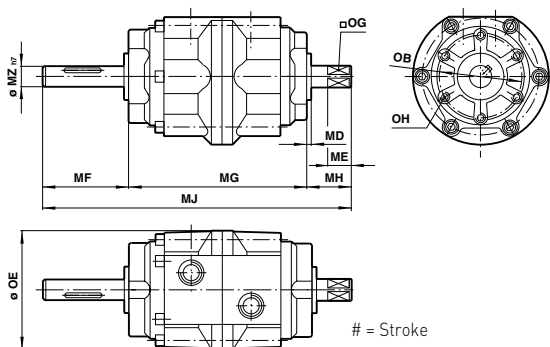
Double acting – 30° ... 270° rotation angles



M/60280/1/2/3/4



M/60285/6/7/8



Dimensions

Model	MD	ME	MF	MG	MJ	MH	Ø MZ h7	Ø OB	Ø OE	OG-0,1	OH	Keyway
M/60280	2	6	13	20	46	10	4	26	29	Ø4 h7	M3 x 6	–
M/60281	2	7	15	26	55	10	5	30	36,5	Ø5 h7	M3 x 6	–
M/60282	2	7	18	40	73	10	6	35	42,5	Ø6 h7	M3 x 6	–
M/60283	2	7	23	55	93,5	10	8	40	49,5	6	M5 x 8	3-0,03; 2+0,1*
M/60284	2,5	10	26	60	105	13,5	10	56	64	8	M5 x 8	4-0,03; 2,5+0,1*
M/60285	2,5	13	39,5	86	145	19,5	12	45	79	10	M6 x 9	4-0,03; 2,5+0,1*
M/60286	3	16	53,5	103	180	23,5	17	70	110	13	M8 x 12	5-0,03; 3+0,1*
M/60287	3,5	22	65	125	220	30	25	80	141,5	19	M10 x 15	7-0,038; 4+0,2*
M/60288	4,5	35	69,5	171	285	44,5	40	120	196	32	M12 x 18	12-0,043; 5+0,2*

Dimensions and drawings valid for fixed rotation units only - refer to full data sheets for detail on adjustable units

Models

Accessories

MODELS WITH FIXED OR ADJUSTABLE ROTATION ANGLES							Banjo flow control	Straight fitting	Elbow Fitting	Service kit
Model	Angle of rotation/ Adjustment	Output shaft Ø	Port	Number of vanes	Torque at 6 bar (Nm)					
	M/60280/90	90°	4	M5	Single	0,15	C0K510405	C02250405	C02470405	QM/60280/00
	M/60280/180	180°	4	M5	Single	0,15	C0K510405	C02250405	C02470405	QM/60280/00
	M/60281/90	90°	5	M5	Single	0,38	C0K510405	C02250405	C02470405	QM/60281/00
	M/60281/180	180°	5	M5	Single	0,38	C0K510405	C02250405	C02470405	QM/60281/00
	M/60281/IE	30 ... 180°	5	M5	Single	0,38	C0K510405	C02250405	C02470405	QM/60281/00
	M/60282/90	90°	6	M5	Single	1,20	C0K510405	C02250405	C02470405	QM/60282/00
	M/60282/180	180°	6	M5	Single	1,20	C0K510405	C02250405	C02470405	QM/60282/00
	M/60282/IE	30 ... 180°	6	M5	Single	1,20	C0K510405	C02250405	C02470405	QM/60282/00

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ROTARY VANE ACTUATORS M/60280

Double acting – 30° ... 270° rotation angles

Models

MODELS WITH FIXED OR ADJUSTABLE ROTATION ANGLES						Accessories			
Model	Angle of rotation/ Adjustment	Output shaft Ø	Port	Number of vanes	Torque at 6 bar (Nm)	Banjo flow control	Straight fitting	Elbow Fitting	Service kit
M/60283/90	90°	8	M5	Single	2,10	C0K510405	C02250405	C02470405	QM/60283/00
M/60283/180	180°	8	M5	Single	2,10	C0K510405	C02250405	C02470405	QM/60283/00
M/60283/IE	30 ... 180°	8	M5	Single	2,10	C0K510405	C02250405	C02470405	QM/60283/00
M/60284/90	90°	10	G1/8	Single	4,10	C0K510618	C02250618	C02470618	QM/60284/00
M/60284/TI/90	90°	10	G1/8	Double	9,50	C0K510618	C02250618	C02470618	QM/60284/TI/00
M/60284/180	180°	10	G1/8	Single	4,10	C0K510618	C02250618	C02470618	QM/60284/00
M/60284/270	270°	10	G1/8	Single	4,10	C0K510618	C02250618	C02470618	QM/60284/00
M/60284/IE	30 ... 270°	10	G1/8	Single	4,10	C0K510618	C02250618	C02470618	QM/60284/00
M/60284/TE	30 ... 90°	10	G1/8	Double	9,50	C0K510618	C02250618	C02470618	QM/60284/TI/00
M/60285/90	90°	12	G1/8	Single	5,80	C0K510618	C02250618	C02470618	QM/60285/00
M/60285/TI/90	90°	12	G1/8	Double	12,80	C0K510618	C02250618	C02470618	QM/60285/TI/00
M/60285/180	180°	12	G1/8	Single	5,80	C0K510618	C02250618	C02470618	QM/60285/00
M/60285/270	270°	12	G1/8	Single	5,80	C0K510618	C02250618	C02470618	QM/60285/00
M/60286/90	90°	17	G1/4	Single	18,00	C0K510628	C02250628	C02470628	QM/60286/00
M/60286/TI/90	90°	17	G1/4	Double	41,50	C0K510628	C02250628	C02470628	QM/60286/TI/00
M/60286/180	180°	17	G1/4	Single	18,00	C0K510628	C02250628	C02470628	QM/60286/00
M/60286/270	270°	17	G1/4	Single	18,00	C0K510628	C02250628	C02470628	QM/60286/00
M/60287/90	90°	25	G3/8	Single	34,50	C0K510838	C02250838	C02470838	QM/60287/00
M/60287/TI/90	90°	25	G3/8	Double	83,00	C0K510838	C02250838	C02470838	QM/60287/TI/00
M/60287/180	180°	25	G3/8	Single	34,50	C0K510838	C02250838	C02470838	QM/60287/00
M/60287/270	270°	25	G3/8	Single	34,50	C0K510838	C02250838	C02470838	QM/60287/00
M/60288/90	90°	40	G1/2	Single	123,00	C0K510848	C02250848	C02470848	QM/60288/00
M/60288/TI/90	90°	40	G1/2	Double	247,00	C0K510848	C02250848	C02470848	QM/60288/TI/00
M/60288/180	180°	40	G1/2	Double	123,00	C0K510848	C02250848	C02470848	QM/60288/00
M/60288/270	270°	40	G1/2	Single	123,00	C0K510848	C02250848	C02470848	QM/60288/00

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

MOUNTINGS FOR M/60280 Rotary vane actuators



Model	B, G	C
M/60280	QM/60280/22	QM/60280/21
M/60281	QM/60281/22	QM/60281/21
M/60282	QM/60282/22	QM/60282/21
M/60283	QM/60283/22	QM/60283/21
M/60284	QM/60284/22	QM/60284/21

Model	B, G	C
M/60285	QM/60285/22	QM/60285/21
M/60286	QM/60286/22	QM/60286/21
M/60287	-	QM/60287/21
M/60288	-	QM/60288/21

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

ROTARY ACTUATORS – RACK & PINION

M/162000/MI

Double acting – Ø 32 ... 125 mm



Suitable torques from 1,2 ... 51,0 Nm/bar

Rotation angles 90°, 180°, 270°, 360°

Switches can be mounted flush with the profile

VDMA 24562 pitch to use standard
VDMA mountings

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston, adjustable cushioning

Operating pressure:

1,5 ... 10 bar

Operating temperature:

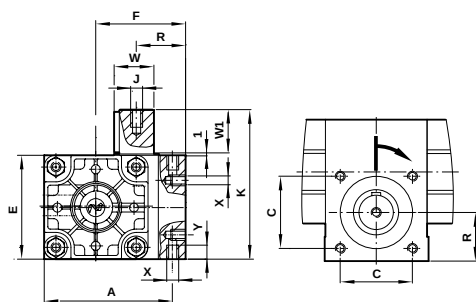
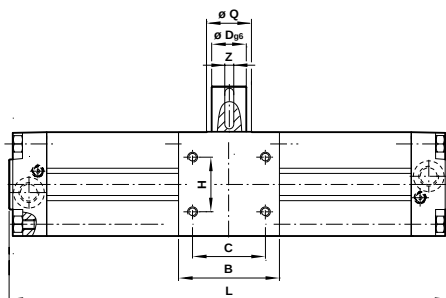
-5°C ... +80°C max.

Consult our Technical Service for use below +2°C

Rotation angles:

90°, 180°, with rotational tolerance of -0/+8°

(270°, 360° also available)



EXPRESS PLUS

Additional range...

For female pinion and
adjustable angle +/- 5°
please call your
Express Team



Dimensions

Dia. Ø	A	B/E	C	Ø Dg6	F	H	J	K	Ø Q	R	W	W1	X	Y	Z	L (90°)	L (180°)
32	71,5	50	33	14	46,5	18	M 5	81	25	25	16	30	M 6	10	5	227	274
40	82	60	40	14	54,5	22	M 5	91	25	30	16	30	M 6	10	5	266	323
50	94	70	50	19	60,5	25	M 6	106	30	32,5	21,5	40	M 8	13	6	282	345
63	110	75	60	24	71	35	M 8	116	30	37	27	40	M 8	13	8	331	406
80	142	99	80	28	93,5	50	M 8	150	45	50	31	50	M 10	16	8	396	495
100	156,5	115	80	38	99	60	M 10	166	50	54	41	50	M 10	16	10	414	521
125	188	125	90	38	118	70	M 10	191	60	60	41	50	M 12	20	10	483,5	615,5

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

ROTARY ACTUATORS - RACK & PINION M/162000/MI

Double acting – Ø 32 ... 125 mm

Models

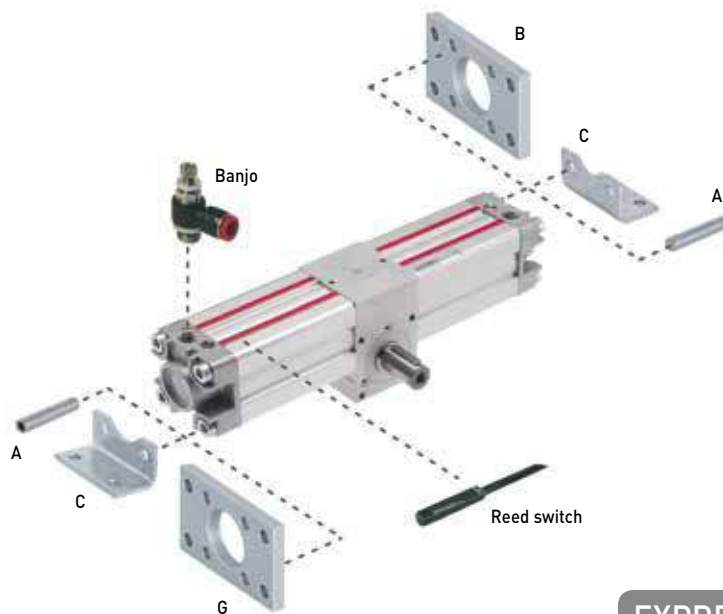
Accessories

Model	Dia. Ø	Angle of rotation	Output shaft Ø	Port	Theoretical torque at 6 bar (Nm)	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow Fitting	Service kit
										
M/162032/MI/90	32	90°	14	G1/8	7,20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/162032/00
M/162032/MI/180	32	180°	14	G1/8	7,20	M/50/LSU/5V	C0K510618	C02250618	C02470618	QM/162032/00
M/162040/MI/90	40	90°	14	G1/4	13,80	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/162040/00
M/162040/MI/180	40	180°	14	G1/4	13,80	M/50/LSU/5V	C0K510628	C02250628	C02470628	QM/162040/00
M/162050/MI/90	50	90°	19	G1/4	23,40	M/50/LSU/5V	C0K510828	C02250828	C02470828	QM/162050/00
M/162050/MI/180	50	180°	19	G1/4	23,40	M/50/LSU/5V	C0K510828	C02250828	C02470828	QM/162050/00
M/162063/MI/90	63	90°	24	G3/8	43,80	M/50/LSU/5V	C0K510838	C02250838	C02470838	QM/162063/00
M/162063/MI/180	63	180°	24	G3/8	43,80	M/50/LSU/5V	C0K510838	C02250838	C02470838	QM/162063/00
M/162080/MI/90	80	90°	28	G3/8	94,20	M/50/LSU/5V	C0K511038	C02251038	C02471038	QM/162080/00
M/162080/MI/180	80	180°	28	G3/8	94,20	M/50/LSU/5V	C0K511038	C02251038	C02471038	QM/162080/00
M/162100/MI/90	100	90°	38	G1/2	157,80	M/50/LSU/5V	C0K511248	C02251248	C02471248	QM/162100/00
M/162100/MI/180	100	180°	38	G1/2	157,80	M/50/LSU/5V	C0K511248	C02251248	C02471248	QM/162100/00
M/162125/MI/90	125	90°	38	G1/2	306,00	M/50/LSU/5V	C0K511248	C02251248	C02471248	QM/162125/00
M/162125/MI/180	125	180°	38	G1/2	306,00	M/50/LSU/5V	C0K511248	C02251248	C02471248	QM/162125/00

270°, 360° rotation angles also available, please call your Express Team
For information on additional magnetic switches see page 67

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

MOUNTINGS FOR Rotary Actuators M/162000/MI



Dia. Ø	A	B, G	C
32	QM/8032/35	QA/8032/22	QA/8032/21
40	QM/8040/35	QA/8040/22	QA/8040/21
50	QM/8050/35	QA/8050/22	QA/8050/21
63	QM/8063/35	QA/8063/22	QA/8063/21
80	QM/8080/35	QA/8080/22	QA/8080/21
100	QM/8100/35	QA/8100/22	QA/8100/21
125	QM/8125/35	QA/8125/22	QA/8125/21

EXPRESS LINKS

Have you thought about...

Shock absorbers are a good method of increasing the life of your actuator by decelerating the mass of a rotating object.

See page 68



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

STAINLESS STEEL ROUNDLINE CYLINDERS (ISO)

KM/8000/M

Double acting, ISO 6432 – Ø 12 ... 25 mm



High corrosion and acid resistance

Magnetic piston as standard

Conforms to ISO 6432

Suitable for applications in the food industry

Buffer or adjustable cushioning

Nose mounting nut and piston rod locknut as standard

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

Double acting, magnetic piston with buffer or adjustable cushioning

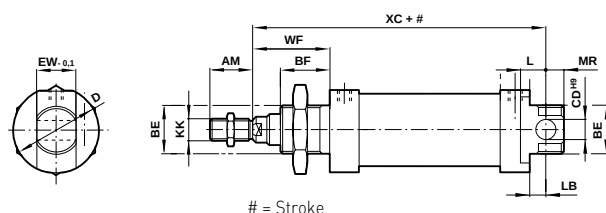
Operating pressure:

1 ... 10 bar

Operating temperature:

–10°C ... +80°C max.

Consult our Technical Service for use below +2°C



Dimensions

Dia. Ø	AM	BE	BF	Ø CDH9	Ø D	EW-0,1	KK	L	LB	MR	WF	XC
12	16	M16x1,5	17	6	20	11,9	M6	9	3	8	22	75
16	16	M16x1,5	17	6	20	11,9	M6	9	4	7	22	82
20	20	M22x1,5	20	8	30	15,9	M8	12	3	11	24	95
25	22	M22x1,5	22	8	30	15,9	M10x1,25	12	7	9	28	104

Models

Accessories

BUFFER CUSHIONING Model	ADJUSTABLE CUSHIONING Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting
KM/8012/M/25		12	25	M5	6	M/50/LSU/5V	QM/33/012/22	10K510405	102250405	102470405
KM/8012/M/40		12	40	M5	6	M/50/LSU/5V	QM/33/012/22	10K510405	102250405	102470405
KM/8012/M/50		12	50	M5	6	M/50/LSU/5V	QM/33/012/22	10K510405	102250405	102470405
KM/8016/M/25		16	25	M5	6	M/50/LSU/5V	QM/33/016/22	10K510405	102250405	102470405
KM/8016/M/40		16	40	M5	6	M/50/LSU/5V	QM/33/016/22	10K510405	102250405	102470405
KM/8016/M/50		16	50	M5	6	M/50/LSU/5V	QM/33/016/22	10K510405	102250405	102470405
KM/8020/M/25	KM/8021/M/25	20	25	G1/8	8	M/50/LSU/5V	QM/33/020/22	10K510618	102250618	102470618
KM/8020/M/40	KM/8021/M/40	20	40	G1/8	8	M/50/LSU/5V	QM/33/020/22	10K510618	102250618	102470618
KM/8020/M/50	KM/8021/M/50	20	50	G1/8	8	M/50/LSU/5V	QM/33/020/22	10K510618	102250618	102470618
KM/8020/M/80	KM/8021/M/80	20	80	G1/8	8	M/50/LSU/5V	QM/33/020/22	10K510618	102250618	102470618
KM/8020/M/100	KM/8021/M/100	20	100	G1/8	8	M/50/LSU/5V	QM/33/020/22	10K510618	102250618	102470618
KM/8025/M/25	KM/8026/M/25	25	25	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/40	KM/8026/M/40	25	40	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/50	KM/8026/M/50	25	50	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/80	KM/8026/M/80	25	80	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/100	KM/8026/M/100	25	100	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/125	KM/8026/M/125	25	125	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/160	KM/8026/M/160	25	160	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618
KM/8025/M/200	KM/8026/M/200	25	200	G1/8	10	M/50/LSU/5V	QM/33/025/22	10K510618	102250618	102470618

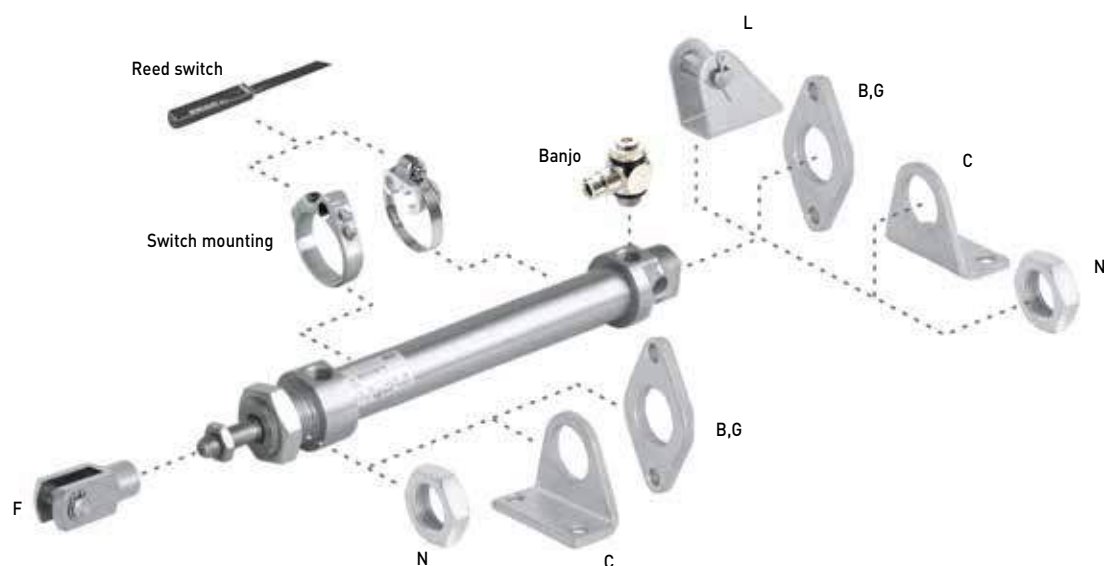
Service kits are not available for this range of cylinders
For information on alternative magnetic switches see page 67

Note that the fittings shown are nickel plated brass.
Alternatively our Pneufit S range offers full stainless steel versions.
See page 278

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

STAINLESS STEEL ROUNDLINE CYLINDERS KM/8000/M

Double acting, ISO 6432 – Ø 12 ... 25 mm



Dia. Ø	B, G	C	F	L	N
12	M/P72405 ●	M/P72403 ●	KQM/8012/25 ●	KQM/8012/24 ●	M/P72398 ●
16	M/P72405 ●	M/P72403 ●	KQM/8012/25 ●	KQM/8012/24 ●	M/P72398 ●
20	M/P72406 ●	M/P72404 ●	KQM/8020/25 ●	KQM/8020/24 ●	M/P72399 ●
25	M/P72406 ●	M/P72404 ●	KQM/55433/25 ●	KQM/8020/24 ●	M/P72399 ●

* This actuator is supplied with one nose nut, an additional lock nut style 'N' is required when ordering mountings 'B, G' and 'C' to connect to the rear end cap.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

STAINLESS STEEL TIE-ROD CYLINDERS

KA/8000

Double acting Ø 32 ... 200mm



High corrosion and acid resistance

Conforms to ISO 6431, VDMA 24562 and
NFE 49-003-1

Ideal for applications in the food industry

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

KA/8000: double acting, adjustable cushioning

KA/8000/M: double acting, adjustable cushioning and
magnetic piston

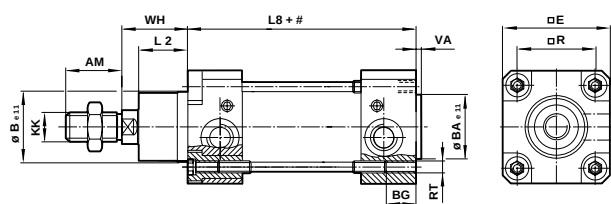
Operating pressure:

1 ... 16 bar

Operating temperature:

80°C max.

Consult our Technical Service for use below +2°C



= Stroke

EXPRESS PLUS

Alternative ranges available...

Stainless steel (Clean line)
roundline cylinder range
also available, please
call your Express Team



Dimensions

Dia. Ø	AM	Ø B/BA e11	BG	□E	KK	L2	L8	□R	RT	VA	WH
32	22	30	18	47	M10x1,25	20	94	32,5	M 6	3	26
40	24	35	18	53	M12x1,25	22	105	38	M 6	3,5	30
50	32	40	18	65	M16x1,5	27	106	46,5	M 8	3,5	37
63	32	45	17,5	75	M16x1,5	29	121	56,5	M 8	4	37
80	40	45	21,5	95	M20x1,5	33	128	72	M 10	4	46
100	40	55	21,5	115	M20x1,5	36	138	89	M 10	4	51
125	54	60	32	140	M27x2	45	160	110	M 12	6	65
160	72	65	28,5	180	M36x2	58	180	140	M 16	4	80
200	72	75	28,5	220	M36x2	67	180	175	M 16	5	95

Models

MAGNETIC Model	NON-MAGNETIC Model	Dia. Ø	Port size	Piston rod Ø
KA/8032/M/*	KA/8032/*	32	G1/8	12
KA/8040/M/*	KA/8040/*	40	G1/4	16
KA/8050/M/*	KA/8050/*	50	G1/4	20
KA/8063/M/*	KA/8063/*	63	G3/8	20
KA/8080/M/*	KA/8080/*	80	G3/8	25
KA/8100/M/*	KA/8100/*	100	G1/2	25
KA/8125/M/*	KA/8125/*	125	G1/2	32
KA/8160/M/*	KA/8160/*	160	G3/4	40
KA/8200/M/*	KA/8200/*	200	G3/4	40

Accessories

Reed switch integral with 5m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
M/50/LSU/5V	QM/27/2/1	10K510618	102250618	102470618	KQA/8032/00
M/50/LSU/5V	QM/27/2/1	10K510628	102250628	102470628	KQA/8040/00
M/50/LSU/5V	QM/27/2/1	10K510828	102250828	102470828	KQA/8050/00
M/50/LSU/5V	QM/27/2/1	10K510838	102250838	102470838	KQA/8063/00
M/50/LSU/5V	QM/27/2/1	10K511038	102251038	102471038	KQA/8080/00
M/50/LSU/5V	QM/27/2/1	10K511248	102251248	102471248	KQA/8100/00
M/50/LSU/5V	QM/27/2/1	10K511248	102251248	102471248	KQA/8125/00
M/50/LSU/5V	QM/27/2/1	-	-	-	KQA/8160/00
M/50/LSU/5V	QM/27/2/1	-	-	-	KQA/8200/00

* Insert stroke length up to a maximum of 2,500mm
Standard stroke lengths: 25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500
Please call your Express Team for latest availability

Note that the fittings shown are nickel plated brass.
Alternatively our Pneufit S range offers full stainless steel versions. See page 278

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

COMPACT AIR BELLOWS PM/31000

Single acting – Ø 2 3/4 ... 12"

Frictionless operation

No maintenance or lubrication

Ideal for short stroke, high-force applications

High vibration isolation level

Easy, compact installation

TECHNICAL DATA

Medium:

Compressed air lubricated or unlubricated, Nitrogen, water (with glycol)

Operation:

Single acting

Operating pressure:

5,5 bar recommended dynamic pressure 8 bar max.

Operating temperature:

-40 ... +70°C "Static"

-30 ... +50°C "Dynamic"

When operated at this temperature (+70°C) for pro-longed periods, the bellow will experience a reduce working life.

Static = constant/unchanging external load

Dynamic = vibration or a changing internal pressure as a result of changing external load

Important instructions:

Thrust:

The thrust depends on the height of the bellow. When height increases - the thrust decreases.

- Before installing the air bellow, check it carefully for any damage it may have suffered from transport or improper storage.

- Do not inflate the air bellow until it has been secured properly.

Clearance:

There must be enough clearance around the air bellow.

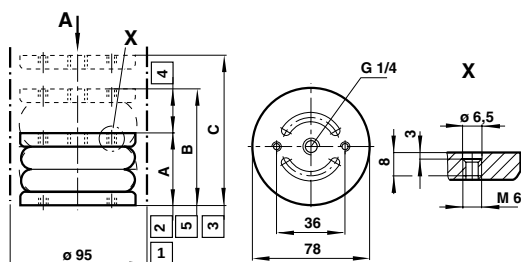
- The full surface of the metal parts is to be used to bear the forces.
- Air bellows must be equipped with lateral guides.
- Deflate the air bellows fully before removing.
- Ensure that the bellows is not constantly in contact with hydraulic oil, lubricants, solvents, metal cuttings and welding sparks.
- Should the air bellow be subjected to special media in an application, ask IMI Precision Engineering for further information, specifying the medium, temperature and concentration.

Stops:

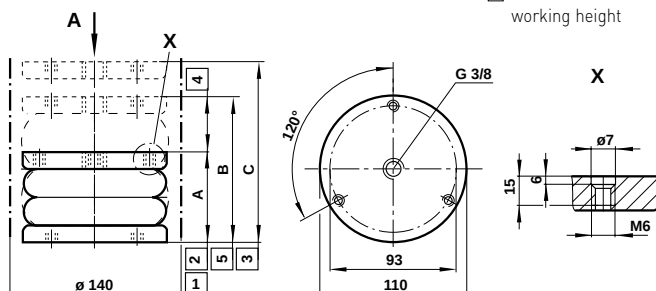
To avoid damage when the bellow is compressed or extended mechanical stops at both end positions have to be used.

Dimensions

PM/31021, PM/31022, PM/31023



PM/31041, PM/31042, PM/31043



- 1 Installation room
- 2 Installation height min.
- 3 Installation height max.
- 4 Stroke
- 5 Recommended max. working height

Table 1.1

Model	Normal Ø (inch) x convolutions	Recommended max. stroke (mm)	Recommended [B] working height (mm)	Stroke (mm)	Installation [A] height min (mm)	Installation [C] height max. (mm)	Max. torque for mounting holes (Nm)	Weight (kg)
PM/31021	2 3/4 x 1	17	67	20	50	70	5	0,5
PM/31022	2 3/4 x 2	39	104	45	65	110	5	0,5
PM/31023	2 3/4 x 3	50	130	60	80	140	5	0,6
PM/31041	4 1/2 x 1	40	85	35	50	90	11	0,8
PM/31042	4 1/2 x 2	75	140	85	65	150	11	1
PM/31043	4 1/2 x 3	80	180	100	100	200	11	1,2

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

COMPACT AIR BELLOWS PM/31000

Single acting – Ø 2 3/4 ... 12"

PM/31061 to PM/31063

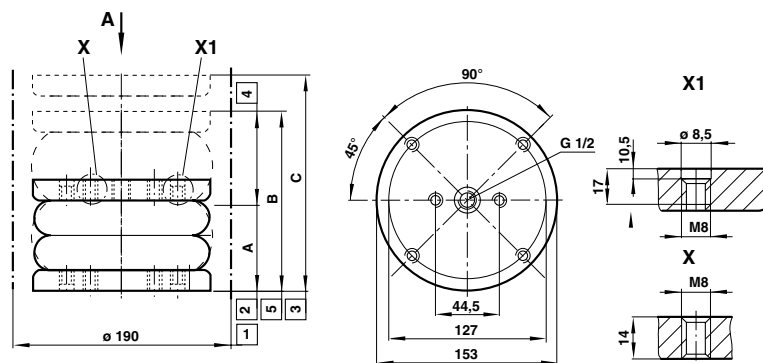
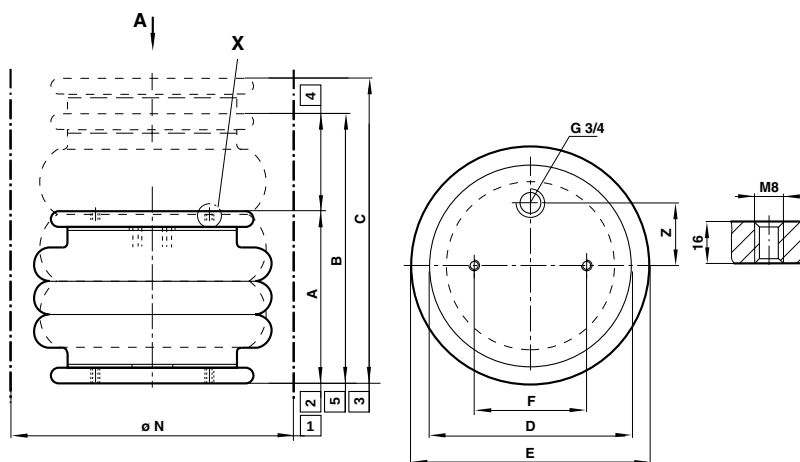


Table 1.2

Model	Normal Ø (inch) x convolutions	Recommended max. stroke (mm)	Recommended working height [B] (mm)	Stroke (mm)	Installation [A] height min (mm)	Installation [C] height max. (mm)	Max. torque for mounting holes (Nm)	Weight (kg)
PM/31061 ●	6 x 1	45	100	55	55	110	12	2
PM/31062 ●	6 x 2	95	175	115	80	195	12	2,7
PM/31063 ●	6 x 3	160	260	140	100	290	12	3

PM/31081 to PM/31123



- 1 Installation room
- 2 Installation height min.
- 3 Installation height max.
- 4 Stroke
- 5 Recommended max.
working height

Table 1.3

Model	Normal Ø (inch) x convolutions	Recommended max. stroke (mm)	Recommended working height [B] (mm)	Stroke (mm)	Installation [A] height min (mm)	Installation [C] height max. (mm)	Max. torque for mounting holes (Nm)	Ø E	Ø D	Ø F	Ø N	Z	Weight (kg)
PM/31081 ●	8 x 1	107	158	119	51	170	12	225	135	70	250	-	1,8
PM/31082 ●	8 x 2	153	230	193	77	270	12	220	135	70	235	-	2,5
PM/31091 ●	9 1/4 x 1	84	135	104	51	155	12	255	160	89	275	38	2,3
PM/31092 ●	9 1/4 x 2	183	260	218	77	295	12	255	160	89	265	38	2,8
PM/31121 ●	12 x 1	100	151	129	51	180	12	335	228	157	360	73	3,4
PM/31122 ●	12 x 2	190	265	230	75	305	12	325	228	157	340	73	5,3
PM/31123 ●	12 x 3	285	395	320	110	430	12	325	228	157	345	73	7,0

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

AIR BELLOWS M/31000

Single acting – Ø 6 ... 16"

Frictionless operation

No maintenance or lubrication

Ideal for short stroke, high-force applications

High vibration isolation level

Simple to install

TECHNICAL DATA

Medium:

Compressed air lubricated or unlubricated, Nitrogen, water (with glycol)

Operation:

Single acting

Operating pressure:

5,5 bar recommended dynamic pressure 8 bar max.

Operating temperature:

-40 ... +70°C "Static"

-30 ... +50°C "Dynamic"

When operated at this temperature (+70°C) for pro-longed periods, the bellow will experience a reduce working life.

Static = constant/unchanging external load

Dynamic = vibration or a changing internal pressure as a result of changing external load

Important instructions:

Thrust:

The thrust depends on the height of the bellow. When height increases - the thrust decreases.

- Before installing the air bellow, check it carefully for any damage it may have suffered from transport or improper storage.
- Do not inflate the air bellow until it has been secured properly.



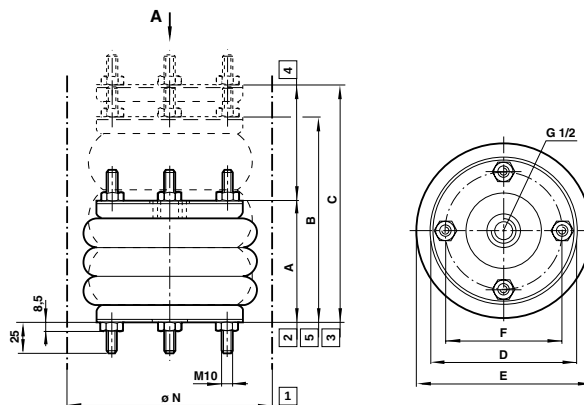
Clearance:

There must be enough clearance around the air bellow.

- The full surface of the metal parts is to be used to bear the forces.
- Air bellows must be equipped with lateral guides.
- Deflate the air bellows fully before removing.
- Ensure that the bellows is not constantly in contact with hydraulic oil, lubricants, solvents, metal cuttings and welding sparks.
- Should the air bellow be subjected to special media in an application, ask IMI Precision Engineering for further information, specifying the medium, temperature and concentration.

Stops:

To avoid damage when the bellow is compressed or extended mechanical stops at both end positions have to be used.



- 1 Installation diameter min.
- 2 Installation height min.
- 3 Installation height max.
- 4 Stroke
- 5 Recommended max. working height

Dimensions

Models	Normal Ø (inch) x convolutions	Recommended max. stroke (mm)	Recommended max. working height B (mm)	Stroke (mm)	Installation height A min. (mm)	Installation height C max. (mm)	Max. torque for mounting studs (Nm)	Ø E	Ø D	Ø F	Ø N	Weight (kg)
M/31061	6 x 1	45	95	55	50	105	25	175	153,5	127	190	2,4
M/31062	6 x 2	95	170	115	75	190	25	175	153,5	127	190	2,7
M/31081	8 x 1	65	115	80	50	130	25	230	184	155	245	3
M/31082	8 x 2	145	220	175	75	250	25	230	184	155	245	3,8
M/31101	10 x 1	85	135	100	50	150	25	270	210	181	300	3,4
M/31102	10 x 2	170	245	225	75	300	25	270	210	181	300	5,0
M/31103	10 x 3	250	350	330	100	430	25	270	210	181	300	5,6
M/31121	12 x 1	85	135	100	50	150	25	330	260	232	350	5,2
M/31122	12 x 2	170	245	225	75	300	25	330	260	232	350	6,7
M/31123	12 x 3	250	350	330	100	430	25	330	260	232	350	8,1
M/31141	14 1/2 x 1	100	150	125	50	175	25	400	310	282	425	6,9
M/31142	14 1/2 x 2	215	290	265	75	340	25	400	310	282	425	9,1
M/31143	14 1/2 x 3	320	420	380	100	480	25	400	310	282	425	10,7
M/31162	16 x 2	275	350	325	75	400	25	435	310	282	460	9,7
M/31163	16 x 3	355	475	450	100	550	25	435	310	282	460	12,4

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MAGNETICALLY OPERATED SWITCHES

Reed and Solid state

M/50



Suitable for all cylinder ranges with magnetic piston

When used on profile bodied actuators, switch fits flush with surface and requires no mounting bracket or adaptor

LED indicator – Solid State (standard), Reed (LSU models only)

Solid State switches are up to 4000 times faster in operation and have greater life expectancy

TECHNICAL DATA

Operation:

Reed normally open

Solid State normally open PNP/NPN

Voltage a.c.:

Reed 10 ... 240V (M/50/LSU/CP 10 ... 60V)

Voltage d.c.:

Reed 10 ... 170V (M/50/LSU/CP 10 ... 60V)

Solid State 10 ... 30V

Current max.:

Reed 180mA

Solid State 150mA

Response time:

Reed 1,8 ms

Solid State <0,5 ms

Models - Reed switches

Model	LED (Yellow) / plug	Cable length / plug	Temperature range	Cable material	Features
M/50/LSU/2V	●	2 m	-20 ... +80°C	PVC	-
M/50/LSU/5V	●	5 m	-20 ... +80°C	PVC	-
M/50/LSU/10V	●	10 m	-20 ... +80°C	PVC	-
M/50/LSU/CP	●	0,3 m with M8 Plug	-20 ... +80°C	PVC	-
M/50/LSU/5U	●	5 m	-20 ... +80°C	PUR	Very flexible cable
M/50/RAC/5V	●	5 m	-20 ... +80°C	PVC	Changeover contacts
TM/50/RAU/2S	●	2 m	-20 ... +150°C	Silicon	High temperature

Accessories

Extension cable 5 m (PVC)	Extension cable 10 m (PVC)	Extension cable 5 m (PUR)
-	-	-
-	-	-
-	-	-
M/P73001/5	M/P73001/10	M/P73002/5
-	-	-
-	-	-
-	-	-

Models - Solid State and Atex approved switches

Model	LED (Yellow) / plug	Cable length	Switching function	Temp range	Cable material	Ex-Identification
M/50/EAP/2V	●	2 m	PNP	-20 ... +80°C	PVC	-
M/50/EAP/5V	●	5 m	PNP	-20 ... +80°C	PVC	-
M/50/EAP/10V	●	10 m	PNP	-20 ... +80°C	PVC	-
M/50/EAP/CP	●	0,3 m with M8 Plug	PNP	-20 ... +80°C	PVC	-
M/50/EAP/CC	●	0,3 m with M12 Plug	PNP	-20 ... +80°C	PVC	-
M/50/EAP/5U	●	5 m	PNP	-20 ... +80°C	PUR	-
M/50/EAP/10U	●	10 m	PNP	-20 ... +80°C	PUR	-
M/50/EXP/5V	●	5 m	PNP	-20 ... +50°C	PVC	II 3D T110°C IP67 X
M/50/EAN/2V	●	2 m	NPN	-20 ... +80°C	PVC	-
M/50/EAN/5V	●	5 m	NPN	-20 ... +80°C	PVC	-
M/50/EAN/CP	●	0,3 m with M8 Plug	NPN	-20 ... +80°C	PVC	-

Accessories

Extension cable 5 m (PVC)	Extension cable 10 m (PVC)	Extension cable 5 m (PUR)
-	-	-
-	-	-
-	-	-
M/P73001/5	M/P73001/10	M/P73002/5
M/P34614/5	-	M/P34595/5
-	-	-
-	-	-
-	-	-
M/P73001/5	M/P73001/10	M/P73002/5

Note: If a bracket/adaptor is required to attach a switch to a cylinder this part number is shown on the relevant actuator product page.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE SHOCK ABSORBERS MC Series

Self-Compensating

Maintenance free, self-contained hydraulic components

Provides the highest possible cycle lifetime; up to 25 million cycles

Extremely low rod return force

Can be directly mounted into the end cover of pneumatic cylinders (up to 7 bar)

Integral positive stop incorporated on all models

TECHNICAL DATA

Impact velocity range:

0,08 ... 6 m/s

(ensure that effective weight of application is within range of unit selected.)

W₄ capacity rating (max. energy per hour Nm/hr):

If your application exceeds tabulated W₄ figures consider additional cooling i. e. cylinder exhaust air etc.

Mounting:

In any position. If precise end position datum is required consider use of the optional stop collar type AH

Operating temperature range:

0°C ... +66°C

MATERIALS

Body:

Steel with black oxide finish.

Piston rod:

Hardened stainless steel

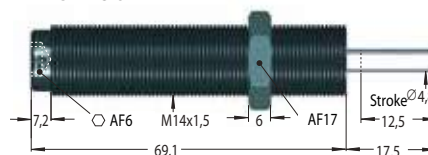
Rolling diaphragm seal:

EPDM

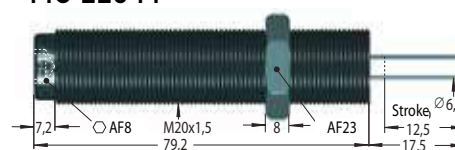
Note: seal not compatible with petroleum based fluids



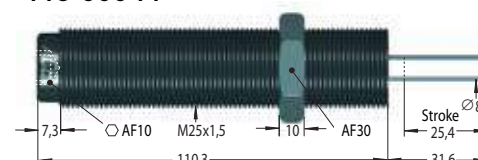
MC 150 M



MC 225 M



MC 600 M



Models

Model	Max. energy capacity Nm per cycle W ₃	per hour W ₄	Effective weight me Self-compensating min kg max	Return force N	Rod reset time s	Max. side load angle °



MC 150 M	20	34 000	0,9 - 10	3 - 5	0,4	4
MC 150 MH	20	34 000	8,6 - 86	3 - 5	0,4	4
MC 150 MH2	20	34 000	70 - 200	3 - 5	0,4	4
MC 225 M	41	45 000	2,3 - 25	4 - 6	0,3	4
MC 225 MH	41	45 000	23 - 230	4 - 6	0,3	4
MC 225 MH2	41	45 000	180 - 910	4 - 6	0,3	4
MC 600 M	136	68 000	9 - 136	5 - 9	0,6	2
MC 600 MH	136	68 000	113 - 1 130	5 - 9	0,6	2
MC 600 MH2	136	68 000	400 - 2 300	5 - 9	0,6	2

Accessories

Nylon button	Rectangular flange	Clamp mount	Stop collar



PP 150	RF 14	MB 14	AH14
PP 150	RF 14	MB 14	AH14
PP 150	RF 14	MB 14	AH14
PP 225	RF 20	MB 20	AH20
PP 225	RF 20	MB 20	AH20
PP 225	RF 20	MB 20	AH20
PP 225	RF 20	MB 20	AH20
PP 600	RF 25	MB 25	AH25
PP 600	RF 25	MB 25	AH25
PP 600	RF 25	MB 25	AH25

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE SHOCK ABSORBERS MA Series

Adjustable



Maintenance free, self-contained hydraulic components

Integrated mechanical stop (MA 225 upwards)

Long stroke lengths to provide smooth deceleration and low reaction forces

TECHNICAL DATA

Adjustment:

On model MA 150: by turning the adjustment screw at rear. On MA 225 and MA 600: by turning the adjustment knob against the scale marked 0 to 9. After installation, cycle the machine a few times and turn the adjustment knob until optimum deceleration is achieved (i.e. smooth deceleration throughout stroke). Hard impact at start of stroke → Turn adjuster towards '9' Hard setdown at end of stroke → Turn adjuster towards '0'.

Impact velocity range:

0,3 ... 3,6 m/s (check effective weight calculation.):
FA units max. 2 m/s.

W₄ capacity rating (max. energy per hour Nm/hr):

If your application exceeds tabulated W₄ figures consider additional cooling i. e. cylinder exhaust air etc.

Mounting:

In any position. If precise end position datum is required consider use of the optional stop collar type AH.

Operating temperature range:

0°C ... +66°C

MATERIALS

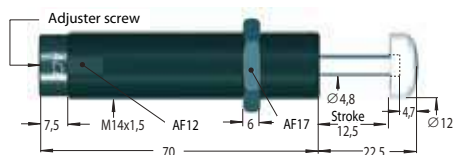
Body:

Steel with black oxide finish.

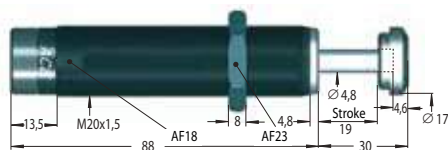
Piston rod:

Hardened stainless steel

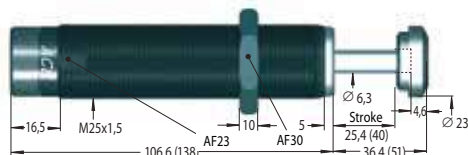
MA 150 M



MA 225 M



MA 600 M



Models

Model	Max. energy capacity Nm per cycle W ₃	Max. energy capacity Nm per hour W ₄	Effective weight me Adjustable min kg max	Return force N	Rod reset time s	Max. side load angle °
MA 150 M	22	35 000	1,0 – 109	3 - 5	0,4	5
MA 225 M	25	45 000	2,3 – 226	5 - 10	0,1	2
MA 600 M	68	68 000	9 – 1360	10 - 30	0,2	2

Accessories

Rectangular flange	Clamp mount	Stop collar
RF 14	MB14	AH14
RF 20	MB 20	AH20
RF 25	MB 25	AH25

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

TRADITIONAL 'IMPERIAL' CYLINDERS

Martonair RM/900

Magnetic and non-magnetic Ø 1,25 ... 14"

Large range of bore sizes – ideal for a wide variety of industrial applications

Long established design – proven ruggedness and reliability

Extensive choice of mountings

Adjustable cushioning

Magnetic and non-magnetic piston



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Operation:

RM/900: double acting, adjustable cushioning and non-magnetic

RM/900/M: double acting, adjustable cushioning and magnetic piston

Operating pressure:

1 ... 10 bar

Operating temperature:

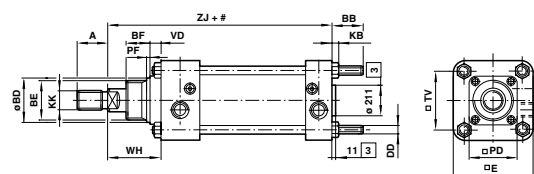
-20°C ... +80 °C

Consult our Technical Service for use below +2°C

Dimensions

Model	Dia. Ø inch	A	BB	Ø BD	BE	BF	DD	E	KB	KK	PD	PF	TV	VD	WH	ZJ
RM/9125	1 1/4	14,5	22	22	M 22 x 2	19	M 6	45	5	M 10	–	–	30,5	8	37	125,5
RM/9175	1 3/4	19	26,5	27	M 27 x 2	19	M 8	57	6,5	M 12	–	–	43	8	37	132,5
RM/920	2	24	25	34	M 33 x 2	20	M 8	63,5	6,5	M 16	–	3	47,5	9,5	46	137
RM/925	2 1/2	33,5	25	40	M 39 x 2	25,5	M 8	74,5	6,5	M 22	–	3	55,5	8	53	152,5
RM/930	3	33,5	33	40	M 39 x 2	25,5	M 10	91	8	M 22	59	3	66,5	13	56,5	179,5
RM/940	4	38	32	–	Ø 43	–	M 10	114	8	M 24	63,5	–	89	13	64	187,5
RM/950	5	47,5	48	–	Ø 58,5	–	M 12	140	10	M 30	82,5	–	108	18	83	228,5
RM/960	6	47,5	49,5	–	Ø 58,5	–	M 16	167	13	M 30	82,5	–	128,5	18	83	235
RM/980	8	57	53,5	–	Ø 63,5	–	M 18	219	15	M 36	89	–	168,5	19	86	276
RM/9100	10	76	70,5	–	Ø 77	–	M 24	270	19	M 48	111	–	209,5	22	109	343
RM/9120	12	76	70,5	–	Ø 77	–	M 24	321	19	M 48	111	–	246	22	109	343
RM/9140	14	76	93	–	Ø 89	–	M 30	375	24	M 48	–	–	292	32	128	366,5

= Stroke



Models

MAGNETIC Model	NON-MAGNETIC Model	Dia. Ø	Piston rod Ø	Port size	Service kit
RM/9125/M/*	RM/9125/*	1 1/4	12 mm	G 1/8	QM/9125/00
RM/9175/M/*	RM/9175/*	1 3/4	16 mm	G 1/4	QM/9175/00
RM/920/M/*	RM/920/*	2	20 mm	G 1/4	QM/920/00
RM/925/M/*	RM/925/*	2 1/5	25 mm	G 3/8	QM/925/00
RM/930/M/*	RM/930/*	3	25 mm	G 3/8	QM/930/00
RM/940/M/*	RM/940/*	4	32 mm	G 3/8	QM/940/00
–	RM/950/*	5	1 1/2"	G 1/2	QM/950/00
–	RM/960/*	6	1 1/2"	G 1/2	QM/960/00
–	RM/980/*	8	1 3/4"	G 3/4	QM/980/00
–	RM/9100/*	10	2 1/4"	G 1	QM/9100/00
–	RM/9120/*	12	2 1/4"	G 1	QM/9120/00
–	RM/9140/*	14	2 1/4"	G 1	QM/9140/00

* Insert stroke length up to a maximum of 3,000mm
Standard stroke lengths: RM/9125; 50, 75, 100, 125, 150, 200, 300
RM/9175 to RM/980; 100, 150, 200, 300, 400, 500
Please call your Express Team for latest availability

Accessories

Mountings



Model	B/G	C	D	F	L	R
RM/9125	M/P6938	QM/754	M/P6937	QM/402	QM/394	M/P11966
RM/9175	QM/888	QM/753	M/P7457	QM/404	QM/922	M/P1219
RM/920	QM/875	QM/752	M/P10228	QM/405	QM/909	M/P10349
RM/925	QM/876	QM/748	M/P10311	QM/407	QM/910	M/P10351
RM/930	QM/878	QM/983	M/P10229	QM/407	QM/911	M/P10353
RM/940	QM/887	QM/982	QM/758	QM/408	QM/912	QM/763
RM/950	QM/886	QM/981	QM/759	QM/409	QM/913	QM/764
RM/960	QM/884	QM/826	QM/761	QM/409	QM/914	QM/765
RM/980	QM/883	QM/825	QM/762	QM/410	QM/915	QM/766
RM/9100	QM/882	QM/824	–	QM/411	QM/917	QM/767
RM/9120	QM/889	QM/756	–	QM/411	QM/918	QM/768
RM/9140	QM/741	QM/755	–	QM/411	QM/924	QM/769

Please note that these comprehensive service kits are also suitable for older versions of the original M/900 series actuators built prior to introduction of the RM/900 range.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

IMPACT CYLINDERS Martonair M/3000

Double Acting – 2 ... 6" diameter



High energy output

Ideally suited to a wide range of marking, piercing and light presswork applications

Rugged, corrosion-resistant construction

TECHNICAL DATA

Operating pressure:

2,7 ... 10 bar

Operating temperature:

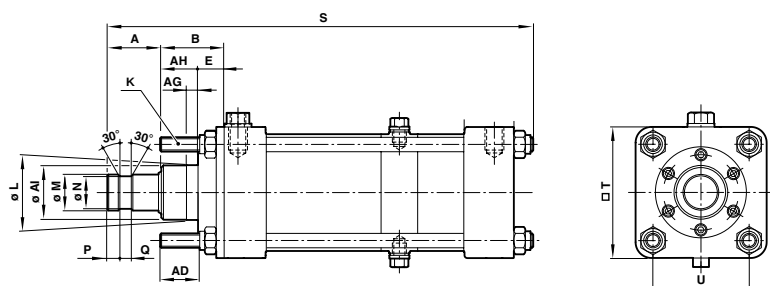
-20°C ... +80°C

For use below +5°C consult IMI Precision Engineering technical sales.

Mounting position:

Vertical

For all applications complete guarding must be incorporated, either fixed or interlocked with the control circuit. For further information consult IMI Precision Engineering technical sales. An Impact Cylinder gives an output rated in energy i.e. thrust x distance. This energy is achieved by rapidly accelerating the piston rod and tool assembly over a free stroke of approximately 65 mm, before contacting the work. The rapid acceleration is produced by the differential area arrangement which quickly exposes the full area of the piston to high pressure air built up in the reservoir at rear end of the cylinder.



Dimensions

Dia. Ø	A	AD	Ø AI	AG	AH	B	E	K	Ø L	Ø M	Ø N	P	Q	S	T	U
2"	37,5	17	31,5	8	20,5	35	14,3	M 8	31,72/31,67	20	17,5	9,5	6	461	63,5	48
3"	37,5	27,5	37,5	8	25,5	38	12,7	M 10	38,07/38,02	25	23	9	8	506	89	67
4"	44,5	34,5	44	8	31,5	44,5	12,7	M 11	44,42/44,37	32	28,5	11	9,5	516	114	89
6"	63,5	48	69,5	9,5	35	68	15,9	M 16	69,82/69,75	44,5	40,5	19	12,5	587	167	129

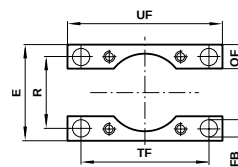
Models

Accessories

Model	Dia. Ø	Energy joules at 5,5 bar	Max. Cycle rate/min	Max. tool weight to be carried	Port size	Piston rod dia. Ø	Straight fitting	Elbow fitting	Service kit
M/3020M	2"	24,5	60	3,6kg	G 1/4	20,0	C02250628	C02470628	QM/3020/00
M/3030M	3"	63,0	50	9,0kg	G 3/8	25,0	C02250838	C02470838	QM/3030/00
M/3040M	4"	125,5	40	15,8kg	G 3/8	32,0	C02251038	C02471038	QM/3040/00
M/3060	6"	253,0	35	36,2kg	G 1/2	44,5	C02251248	C02471248	QM/3060/00



Mountings



Dimensions

Dia. Ø	B, G
2"	QM/871
3"	QM/984
4"	QM/987
6"	QM/990

Dia. Ø	E	FB	OF	R	TF	UF
2"	64	9	16	47,5	86	104
3"	114	11	25	66,5	112	134
4"	121	14	32	89	146	178
6"	114	17	40	128,5	204	242

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

FIXED RANGE POSITIONER CYLINDERS

Martonair M/1525, M/1540

Double acting Ø2 1/2", 4" bore

Robust and reliable for long, maintenance free life

High positioning speeds

Vibration resistant

Square, clean line design makes them suitable for hygiene controlled environments

TECHNICAL DATA

Medium:

Compressed air, filtered and non-lubricated

Installation:

Air supply must incorporate a pre-filter, and a high efficiency (5µm) filter

Standards:

Tested in accordance with BS4151

Operation:

Double acting, fixed range positioner cylinders

Operating pressure:

2-10 bar

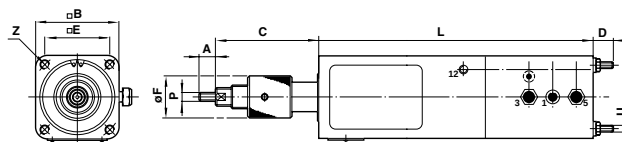
Control pressure:

0,2-1 bar

Operating temperature:

+5°C* ... +80°C

*100% dry air



Dimensions

Ø	Stroke	A	B	C	D	E	F	L	P	U	Z
2,5"	75	15	76,8	93	17,5	55,9	38	288	M10 x 1,5	M6 x 1	M6 x 1 x 22 deep
2,5"	125	15	76,8	93	17,5	55,9	38	338	M10 x 1,5	M6 x 1	M6 x 1 x 22 deep
2,5"	200	15	76,8	93	17,5	55,9	38	413	M10 x 1,5	M6 x 1	M6 x 1 x 22 deep
4"	200	15	115	84,4	30,5	89	38	423,5	M10 x 1,5	M8 x 1,25	M8 x 1,25 x 22 deep

Models

Model	Dia. Ø	Stroke length	Port size	Force at bar 7

Accessories

Straight fitting	Elbow fitting	Service kit



M/1525/75	●	2,5"	75	G1/4	1222N	C02250828	C02470828	QM/1525/00
M/1525/125	●	2,5"	125	G1/4	1222N	C02250828	C02470828	QM/1525/00
M/1525/200	●	2,5"	200	G1/4	1222N	C02250828	C02470828	QM/1525/00
M/1540/200	●	4"	200	G1/4	3118N	C02251028	C02471028	QM/1540/00

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

CLASSIC RANGE

REPAIRABLE ROUNDLINE CYLINDERS

Martonair M/6000 series

Double acting Ø 10 ... 25 mm bore



- Rugged, compact units
- Integral rear eye mounting
- Corrosion resistant construction
- Synthetic rubber buffers at end of stroke

TECHNICAL DATA

Medium:

Compressed air, filtered and lubricated

Operation:

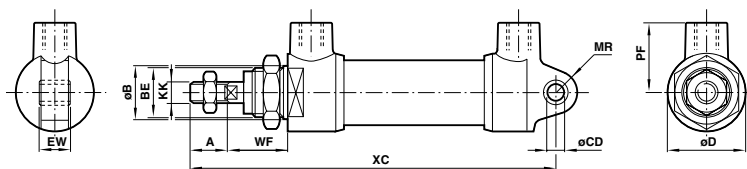
Double acting

Operating temperature:

-20°C ... +60°C 10 and 16 mm bore models

-20°C ... +80°C 20 and 25 mm bore models

Consult our Technical Service for use below +2°C



Dimensions

Model	Dia. Ø	A	ØB	ØD	BE	ØCD	EW	KK	MR	PF	WF	XC (stroke)					
												15 mm	25 mm	50mm	75mm	100mm	125mm
M/6010	10	8	11	16,6	M10x1,25	4,10 4,02	8,3	M4x0,7	4,5	13	16	59	79	-	-	-	-
M/6016	16	12	17	25,4	M16x1,5	5,10 5,02	10	M6x1	6	14	19,5	81	91	116	-	-	-
M/6020	20	15	19h11	28	M18x1,5	5,01 5,00	12,1 11,8	M8x1,25	8	26	22,9	93,5	93,5	118,5	143,5	168,5	-
M/6025	25	20	23h11	33	M22x1,5	6,01 5,99	16,1 15,8	M10x1,5	9	28	25,9	-	99,5	124,5	149,5	174,5	199,5

Models

Accessories

Model	Dia. Ø	Stroke length	Port size	Piston rod dia. Ø	Banjo flow control	Straight fitting	Elbow fitting	Service kit



M/6010/15	●	10	15	M5	4	10K510405	102250405	102470405	-
M/6010/25	●	10	25	M5	4	10K510405	102250405	102470405	-
M/6016/15	●	16	15	M5	6	10K510405	102250405	102470405	-
M/6016/25	●	16	25	M5	6	10K510405	102250405	102470405	-
M/6016/50	●	16	50	M5	6	10K510405	102250405	102470405	-
M/6020/15	●	20	15	G1/8	8	10K510618	102250618	102470618	QM/6020/00
M/6020/25	●	20	25	G1/8	8	10K510618	102250618	102470618	QM/6020/00
M/6020/50	●	20	50	G1/8	8	10K510618	102250618	102470618	QM/6020/00
M/6020/75	●	20	75	G1/8	8	10K510618	102250618	102470618	QM/6020/00
M/6020/100	●	20	100	G1/8	8	10K510618	102250618	102470618	QM/6020/00
M/6025/25	●	25	25	G1/8	10	10K510618	102250618	102470618	QM/6025/00
M/6025/50	●	25	50	G1/8	10	10K510618	102250618	102470618	QM/6025/00
M/6025/75	●	25	75	G1/8	10	10K510618	102250618	102470618	QM/6025/00
M/6025/100	●	25	100	G1/8	10	10K510618	102250618	102470618	QM/6025/00
M/6025/125	●	25	125	G1/8	10	10K510618	102250618	102470618	QM/6025/00

For alternative fitting types, shapes or sizes, refer to our fittings section
See page 246

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

CLASSIC RANGE

HEAVY DUTY CYLINDER Martonair M/1000

Extremely rugged heavy duty construction – ideal for use in the most arduous conditions

Long, adjustable cushioning

Large range of bore sizes – ideal for a wide variety of industrial applications

Extensive choice of mountings

TECHNICAL DATA

Medium:

Compressed air, filtered and lubricated

Operation:

Double acting with adjustable cushioning

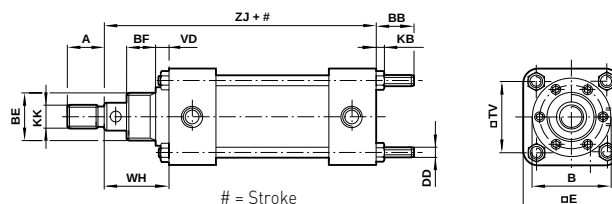
Operating pressure:

2 ... 17 bar (up to 8"), 2 ... 13,5 bar (10 and 12")

Operating temperature:

-20C ... +80C max.

Consult our Technical Service for use below +2°C



Dimensions

Model	Ø inch	A	B	BB	BE	BF	DD	E	KB	KK	TV	VD	WH	ZJ
M/1020	2	33,5	51	28	M 45 x 2	30	M8	63,5	7,5	M22	47,5	9,5	55,5	178
M/1025	2 1/2	33,5	58	31	M 52 x 2	35	M8	76	7,5	M22	55,5	12,5	63	190,5
M/1026	2 1/2	38	58	31	M 52 x 2	35	M8	76	7,5	M24	55,5	12,5	63	190,5
M/1030	3	33,5	64	37	M 52 x 2	38	M10	90	9	M22	66,5	14,5	68	201,5
M/1031	3	38	64	37	M 52 x 2	38	M10	90	9	M24	66,5	14,5	68	201,5
M/1040	4	38	89	29	M 64 x 2	46	M10	114	9	M24	89	11	76	228,5
M/1041	4	47,5	89	29	M 64 x 2	46	M10	114	9	M30	89	11	76	228,5
M/1050	5	38	108	39	-	41	M12	140	11	M24	108	13	73	241,5
M/1051	5	57	108	39	-	41	M12	140	11	M36	108	13	76	244,5
M/1060	6	57	127	48	-	52,5	M16	167	14	M36	128,5	16	100	262
M/1061	6	76	127	48	-	52,5	M16	167	14	M48	128,5	16	100	262
M/1080	8	57	168	57	-	65	M18	219	16,5	M36	168,5	19	115,5	325,5
M/1081	8	76	168	57	-	65	M18	219	16,5	M48	168,5	19	115,5	325,5
M/1101	10	95,5	210	68	-	76,5	M24	270	20,5	M64 x 4	209,5	22	130	416
M/1121	12	95,5	210	68	-	76,5	M24	321	20,5	M64 x 4	246	22	130	416

Models

Accessories Mountings

Model	Dia. Ø	Piston rod Dia. Ø	Port size	Service kit



Model	Ø	Piston rod Ø	Port size	Service kit
M/1020/*	2	1	G1/4	QM/1020/00
M/1025/*	2 1/2	1	G3/8	QM/1025/00
M/1026/*	2 1/2	1 1/4	G3/8	QM/1026/00
M/1030/*	3	1	G1/2	QM/1030/00
M/1031/*	3	1 1/4	G1/2	QM/1031/00
M/1040/*	4	1 1/4	G1/2	QM/1040/00
M/1041/*	4	1 1/2	G1/2	QM/1041/00
M/1050/*	5	1 1/4	G1/2	QM/1050/00
M/1051/*	5	1 3/4	G1/2	QM/1051/00
M/1060/*	6	1 3/4	G3/4	QM/1060/00
M/1061/*	6	2 1/4	G3/4	QM/1061/00
M/1080/*	8	1 3/4	G1	QM/1080/00
M/1081/*	8	2 1/4	G1	QM/1081/00
M/1101/*	10	3	G1	QM/1101/00
M/1121/*	12	3	G1	QM/1121/00



Model	Dia. Ø	Piston rod Ø	B or G	C	D	F	L	R
M/1020	2	1	QM/871	QM/751	M/P9822	QM/407	QM/909	M/P10349
M/1025	2 1/2	1	QM/877	QM/748	M/P9825	QM/407	QM/910	M/P10351
M/1026	2 1/2	1 1/4	QM/877	QM/748	M/P9825	QM/408	QM/910	M/P10351
M/1030	3	1	QM/984	QM/747	M/P9828	QM/407	QM/911	M/P10353
M/1031	3	1 1/4	QM/984	QM/747	M/P9828	QM/408	QM/911	M/P10353
M/1040	4	1 1/4	QM/987	QM/746	QM/758/2	QM/408	QM/912	QM/763
M/1041	4	1 1/2	QM/987	QM/746	QM/758/2	QM/409	QM/912	QM/763
M/1050	5	1 1/4	QM/988	QM/981	QM/759/2	QM/408	QM/913	QM/764
M/1051	5	1 3/4	QM/988	QM/981	QM/759/2	QM/410	QM/913	QM/764
M/1060	6	1 3/4	QM/884/1	QM/826	QM/761/2	QM/410	QM/914	QM/765
M/1061	6	2 1/4	QM/884/1	QM/826	QM/761/2	QM/411	QM/914	QM/765
M/1080	8	1 3/4	QM/883/1	QM/745	QM/762/2	QM/410	QM/915	QM/766
M/1081	8	2 1/4	QM/883/1	QM/745	QM/762/2	QM/411	QM/915	QM/766
M/1101	10	3	QM/882/2	QM/744	-	QM/412	QM/917	QM/767
M/1121	12	3	QM/889/1	QM/743	-	QM/412	QM/918	QM/768

* Insert stroke length in mm. Please call your Express Team for latest availability

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

SERVICE KIT

LINTRA® Rodless cylinders
M/46000, M/46100, M/46200

Double acting – Ø 16 ... 80 mm



Models - Service kit

Model	Cylinder Model			Cylinder Ø
QM/46116/88/*	● M/46016 Series	M/46116 Series	M/46216 Series	16
QM/46120/88/*	● M/46020 Series	M/46120 Series	M/46220 Series	20
QM/46125/88/*	● M/46025 Series	M/46125 Series	M/46225 Series	25
QM/46132/88/*	● M/46032 Series	M/46132 Series	M/46232 Series	32
QM/46140/88/*	● M/46040 Series	M/46140 Series	M/46240 Series	40
QM/46150/88/*	● M/46050 Series	M/46150 Series	M/46250 Series	50
QM/46163/88/*	● M/46063 Series	M/46163 Series	M/46263 Series	63
QM/46180/88/*	● M/46080 Series	M/46180 Series	M/46280 Series	80

*Insert stroke length in mm – very best availability in multiples of 100 mm

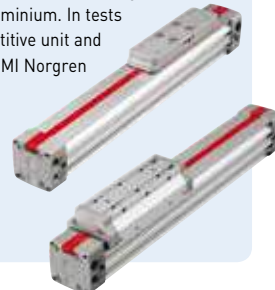


EXPRESS LINKS

Have you thought about...

The IMI Norgren Lintraplus is the latest generation of rodless cylinders from IMI Precision Engineering. Completely interchangeable with its predecessor, this model features improved strength, load carrying capacity, dust protection and is lighter than previous models. The extrusion now contains machine mounting grooves and both end caps and carriage are now die cast aluminium. In tests the Lintraplus static leak rate is lower than any other competitive unit and is therefore less costly in terms of running costs. Unique to IMI Norgren are the integral guides included within the extrusion, and with four basic guiding systems to choose from, the Lintraplus can be applied to virtually any industrial application.

For complete Lintra Plus range please see page 48



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

MAGNETICALLY OPERATED SWITCHES

Reed and Solid State

QM/132, TQM/31, QM/32

LED indicator as standard (QM series)

Solid State switches particularly suited for areas with high levels of vibration

TECHNICAL DATA

Operation:

Reed normally open (QM/32 with LED)

PNP open collector output with LED

Voltage a.c.:

Reed 10 ... 240 V

Voltage d.c.:

Reed 10 ... 240 V

Solid State 10 ... 30 V

Current max.:

Reed 1 A max.

Solid State 200 mA max.

Response time:

3 ms (Reed)

0,2 ms (Solid State)



Models - Reed switches

QM 32 Series Model	LED (Yellow)	Cable length / plug	Temperature range	Cable material	Features
QM/32/2	•	2 m	-20 ... +80°C	PVC	-
QM/32/5	•	5 m	-20 ... +80°C	PVC	-
QM/32/10	•	10 m	-20 ... +80°C	PVC	-
QM/32/P	•	M12 Plug	-20 ... +80°C	-	-
TQM/31/2	-	2 m	-20 ... +150°C	Silicone	High temperature
TQM/31/5	-	5 m	-20 ... +150°C	Silicone	High temperature
TQM/31/10	-	10 m	-20 ... +150°C	Silicone	High temperature

Accessories

Extension cable 5 m (PVC)	Extension cable 10 m (PVC)	Extension cable 5 m (PUR)
-	-	-
-	-	-
-	-	-
M/P34692/5	M/P34594/5	M/P34594/10
-	-	-
-	-	-
-	-	-

Models - Solid State

QM 132 Series Model	LED (Yellow)	Cable length / plug	Temperature range	Switching function	Cable material	Features
QM/132/5	•	5 m	-20 ... +80°C	PNP	PVC	-
QM/132/10	•	10 m	-20 ... +80°C	PNP	PVC	-
QM/132/P	•	M12 Plug	-20 ... +80°C	PNP	-	-
QM/132/E/5	•	5 m	-20 ... +80°C	PNP	PVC	Pulse stretcher

Accessories

Extension cable 5 m (PVC)	Extension cable 10 m (PVC)	Extension cable 5 m (PUR)
-	-	-
-	-	-
M/P34692/5	M/P34594/5	M/P34594/10
-	-	-

QM/32 and QM/132 Series switches with RA/8000 Actuators

Models - Mounting brackets

Model	Actuator Diameter
QM/31/032/22	Ø32 ... 63
QM/31/080/22	Ø80 ... 125
QM/31/160/22	Ø160 and 200
QM/31/250/22	Ø250
QM/31/320/22	Ø320



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VACUUM

Ex stock from Norgren Express now, single stage and multi stage vacuum pumps, a wide range of suction cups, plus switches, gauges and silencers. Use the fast find guide to get the part you need to get the job done. For rapid advice or order support, call the Express Team Today.

ENERGY
EFFICIENT



CUPS FOR
MOST
APPLICATIONS



USER
FRIENDLY
SWITCHES



Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering vacuum range. If you can't see the option you require contact your Express team.

VACUUM PUMPS

M/58112
Single stage



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M/58102
Multi stage



Page 80

VACUUM CUPS & BELLOWS

M/58300, M/58400
Ø 6 ... 150 mm



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**Flexible connectors
for vacuum cups**



Page 83

**Level compensators
for vacuum cups**



Page 83

VACUUM SWITCHES

18D Mechanical
-1 ... 1 bar



Page 84

50D Electronic
-1 ... 0 bar, -1 ... 1 bar



Page 85

33D Electronic
-1 ... 1 bar



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ACCESSORIES

Gauges



Page 83

Silencers



Page 83

SINGLE STAGE VACUUM PUMPS M/58112



Very high induced air capacity

14% lower air consumption than comparable single stage units

No wearing parts

Allows direct connection of suction cups and piped exhaust facility

TECHNICAL DATA

Medium:

Compressed air, filtered and non-lubricated

Operating pressure:

5 bar optimum

8 bar maximum

Operating temperature:

-20°C ... +150°C

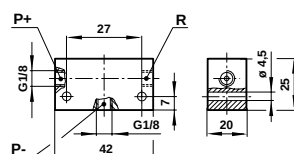
Consult our Technical Service for use below +2°C

Vacuum:

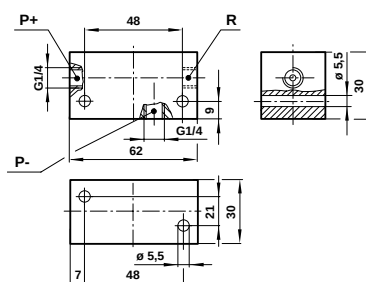
-0,85 bar maximum (M/58112/09)

-0,90 bar maximum (M/58112/11)

M/58112/09



M/58112/11



Induced air (NL/min), free air

Model	0 bar	-0,1 bar	-0,2 bar	-0,3 bar	-0,4 bar	-0,5 bar	-0,6 bar	-0,7 bar	-0,8 bar
M/58112/09	28	24	18	14	11	8	5,5	3	1
M/58112/11	55	47	36	28	23	17	12	6	2,5

Time (sec) for evacuation of 1 litre volume to vacuum

Model	-0,1 bar	-0,2 bar	-0,3 bar	-0,4 bar	-0,5 bar	-0,6 bar	-0,7 bar	-0,8 bar	-0,85 bar	-0,9 bar
M/58112/09	0,27	0,56	0,89	1,44	2,00	2,88	4,31	7,97	14,36	-
M/58112/11	0,15	0,31	0,49	0,72	1,00	1,41	2,08	3,71	5,60	8,11

Note: Values given in the tables are theoretical and apply to an operating pressure of 5 bar.

Recommended tube dimensions (internal diameter)

Model	Compressed air	Vacuum	Exhaust
M/58112/09	> Ø 3	> Ø 5	> Ø 6
M/58112/11	> Ø 3	> Ø 7	> Ø 9

EXPRESS LINKS

Tubing and fittings for vacuum applications...

See page 246



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MULTI STAGE VACUUM PUMPS M/58102

- Fast response
- Compact, lightweight
- Low sound level
- Compressed air driven
- Simple installation
- Standard and non-return valve types

TECHNICAL DATA

Medium:

Compressed air, filtered and non-lubricated

Operating pressure:

6 bar maximum

Operating temperature:

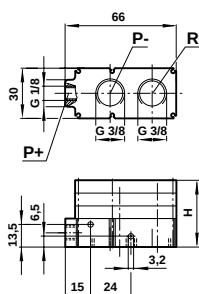
-20°C ... +80°C for M/58102/10 ... M/58102/30

-20°C ... +60°C for M/58102/60 ... M/58102/120

Consult our Technical Service for use below +2°C

Vacuum:

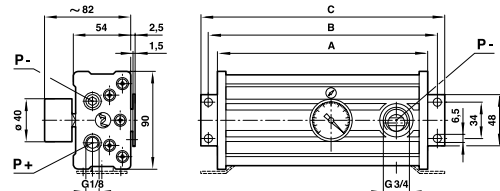
-0,87 bar maximum



Dimensions

Model	H
M/58102/10	24,5
M/58102/20	32
M/58102/30	39,5

For vacuum gauge, see page 83.



Dimensions

Model	A	B	C
M/58102/60	136	154	168
M/58102/90	196	214	228
M/58102/120	196	214	228

Vacuum gauge supplied with these units.



Models

Model	Type	Silencer**	Induced air (NL/min)*	Air consumption (NL/min)*	kg
M/58102/10	Standard	Ported	80	49	0,080
M/58102/20	Standard	Ported	160	98	0,095
M/58102/30	Standard	Ported	240	144	0,110
M/58102/60	Standard	Integral	480	285	0,855
M/58102/90	Standard	Integral	708	471	1,105
M/58102/120	Standard	Integral	910	528	1,150
M/58102/N/10	Non-return valve	Ported	80	49	0,080
M/58102/N/20	Non-return valve	Ported	160	98	0,095
M/58102/N/30	Non-return valve	Ported	240	144	0,110
M/58102/N/60	Non-return valve	Integral	480	285	0,855
M/58102/N/90	Non-return valve	Integral	708	471	1,105
M/58102/N/120	Non-return valve	Integral	910	528	1,150

*Values given are theoretical and apply to an operating pressure of 6 bar.

**For models with ported silencer, use silencer number M/58019 as shown on page 83.

Vacuum flow performance

INDUCED AIR (NL/MIN), FREE AIR									
Model	0 bar	-0,1 bar	-0,2 bar	-0,3 bar	-0,4 bar	-0,5 bar	-0,6 bar	-0,7 bar	-0,8 bar
M/58102/10	80	55	32	28	25	18	13	5	1,5
M/58102/20	160	110	64	56	50	36	26	10	3
M/58102/30	240	165	96	84	75	54	39	15	4,5
M/58102/60	480	270	182	168	150	108	78	30	9
M/58102/90	708	427	273	252	225	162	117	45	13,5
M/58102/120	910	568	355	336	300	216	156	60	18

Time (sec) for evaluation of 1 litre volume to vacuum

Model	-0,1 bar	-0,2 bar	-0,3 bar	-0,4 bar	-0,5 bar	-0,6 bar	-0,7 bar	-0,8 bar	-0,85 bar
M/58102/10	0,070	0,200	0,450	0,750	1,150	1,730	2,610	4,130	5,820
M/58102/20	0,035	0,100	0,230	0,370	0,570	0,860	1,320	2,070	2,920
M/58102/30	0,023	0,070	0,150	0,250	0,380	0,580	0,870	1,380	1,940
M/58102/60	0,012	0,034	0,080	0,120	0,190	0,290	0,440	0,690	0,970
M/58102/90	0,007	0,023	0,050	0,080	0,130	0,190	0,290	0,460	0,650
M/58102/120	0,006	0,017	0,040	0,060	0,100	0,150	0,220	0,350	0,490

Note: Values given in the tables are theoretical and apply to an operating pressure of 6 bar.

Recommended tube size (internal diameter)

Model	Compressed air	Vacuum	Exhaust
M/58102/10	> Ø 3	> Ø 7	> Ø 9
M/58102/20	> Ø 3	> Ø 7	> Ø 9
M/58102/30	> Ø 4	> Ø 9	> Ø 9
M/58102/60	> Ø 4	> Ø 19	-
M/58102/90	> Ø 5	> Ø 19	-
M/58102/120	> Ø 5	> Ø 22	-

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VACUUM CUPS & BELLOWS M/58300, M/58400

Ø 6 ... 150 mm



Flat cups ideal where minimal movement is required for pliable materials

Bellows cups ideal where level compensation is required

TECHNICAL DATA

Medium:

Vacuum

Operating temperature:

–10°C ... +70°C for nitrile rubber cups –30°C ... +200°C for silicone cups

Consult our Technical Service for use below +2°C

MATERIALS

M/58***/01

Cups: nitrile rubber

Connection fittings: aluminium

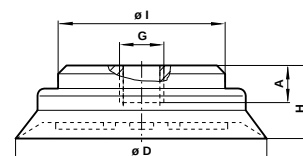
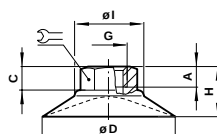
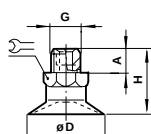
M/58***/02

Cups: silicone

Connection fittings: aluminium

Material characteristics

	Nitrile rubber	Silicone
Wear resistance	Good	Fair
Oil resistance	Excellent	Fair
Weather resistance	Good	Excellent
Ozone resistance	Fair	Excellent



Dimensions (Flat cups)

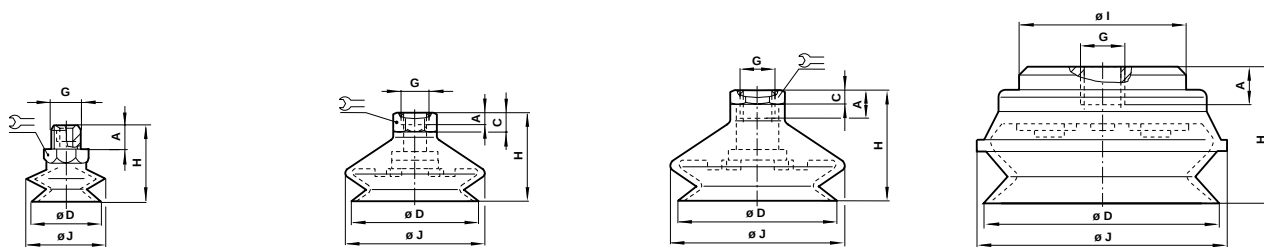
Model	M/58301/*	M/58302/*	M/58303/*	M/58304/*	M/58305/*	M/58306/*	M/58307/*	M/58308/*	M/58309/*	M/58310/*	M/58311/*	M/58312/*
Ø D	6	8	10	15	20	25	30	40	50	80	120	150
A	4,5	4,5	4,5	4,5	8	8	8	6	6	13	9,5	9,5
C	–	–	–	–	–	–	–	9	11	3,5	–	–
G	M 5	M 5	M 5	M 5	G1/8 A	G1/8 A	G1/8 A	G1/8	G1/8	G1/8	G1/2	G1/2
H	15	16	20	21	19,5	20	20,5	23	26	21,5	34,5	41,5
Ø I	–	–	–	–	–	–	–	24	26	53	65	65
	8	8	8	8	14	14	14	14	14	19	–	–

*Material of suction cups: 01 = NBR, 02 = silicone

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VACUUM CUPS & BELLOWS M/58300, M/58400

Ø 6 ... 150 mm



Dimensions (Bellows cups)

Model	M/58403/*	M/58404/*	M/58405/*	M/58407/*	M/58408/*	M/58409/*	M/58410/*	M/58411/*	M/58412/*
Ø	10	15	20	30	40	50	75	110	150
A	5	5	7,5	7,5	6	6	12	9,5	9,5
C	–	–	–	–	9	9	4	–	–
Ø D	11	16	22	33	43	53	78	110	150
G	M 5	M 5	G1/8 A	G1/8 A	G1/8	G1/8	G1/8	G1/2	G1/2
H	26	29	30,5	39	37	43	50	66,5	85,5
Ø I	–	–	–	–	–	–	–	65	65
Ø J	12	17	24	36	46	59	83	122	167
≡	7	7	14	17	17	17	21	–	–

*Material of suction cups: 01 = NBR, 02 = silicone

Models

FLAT							
Model Nitrile	Model Silicone	Dia. Ø mm	-0,2 bar	Force (N) -0,6 bar	-0,9 bar	Volume cm ³	
M/58301/01	M/58301/02	6	0,5	1,5	2,3	0,017	
M/58302/01	M/58302/02	8	1	2,5	3,5	0,041	
M/58303/01	M/58303/02	10	1,5	4	6	0,065	
M/58304/01	M/58304/02	15	2,7	8	12	0,330	
M/58305/01	M/58305/02	20	5	15,5	23	0,500	
M/58306/01	M/58306/02	25	9	26,5	40	0,750	
M/58307/01	M/58307/02	30	11	34	51	1,3	
M/58308/01	M/58308/02	40	19	57,5	86	3	
M/58309/01	M/58309/02	50	30	91	135	4,2	
M/58310/01	M/58310/02	80	86	260	390	21	
M/58311/01	M/58311/02	120	180	540	810	82	
M/58312/01	M/58312/02	150	280	842	1250	177	

BELLOWS							
Model Nitrile	Model Silicone	Dia. Ø mm	-0,2 bar	Force (N) -0,6 bar	-0,9 bar	Volume cm ³	
M/58403/01	M/58403/02	10	1,5	3,5	5	0,225	
M/58404/01	M/58404/02	15	3	6	8	0,750	
M/58405/01	M/58405/02	20	6	10	14	1,40	
M/58407/01	M/58407/02	30	12	22	28	4,75	
M/58408/01	M/58408/02	40	22	40	50	9,25	
M/58409/01	M/58409/02	50	34	66	84	26,25	
M/58410/01	M/58410/02	75	75	170	230	76	
M/58411/01	M/58411/02	110	140	350	460	111	
M/58412/01	M/58412/02	150	300	700	900	260	

Note: Theoretical values are given in this table. Always allow a safety factor of > 2.

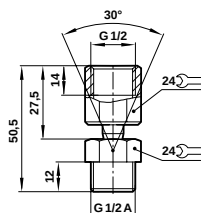
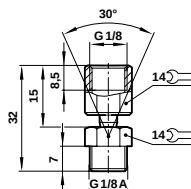
For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VACUUM ACCESSORIES

FLEXIBLE CONNECTORS FOR VACUUM CUPS

For use where a vertical offset motion is involved on curved surfaces

Simple to install



Models

Model	Type	Size
M/58001	Flexible connector	G1/8
M/58002	Flexible connector	G1/2

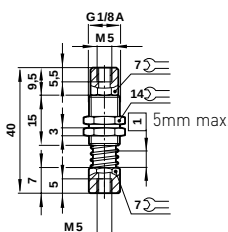
LEVEL COMPENSATORS FOR VACUUM CUPS

Allows for variations in product positioning

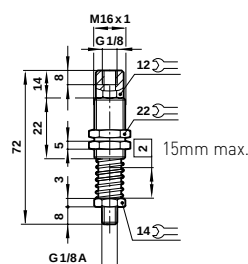
For use with uneven product forms



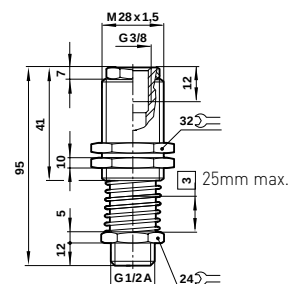
M/58007



M/58008



M/58009



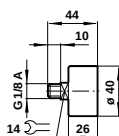
Models

Model	Type	Size
M/58007	Level compensator	M5
M/58008	Level compensator	G1/8
M/58009	Level compensator	G1/2

VACUUM GAUGES

0 ... -1 bar calibration

Accurate vacuum level indication



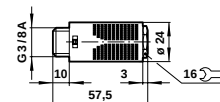
Models

Model	Range
M/58080	0 ... -1 bar

SILENCERS

Compact

Optimum air silencing characteristics



Models

Model	Port size
M/58019	G3/8

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ELECTRO-MECHANICAL VACUUM SWITCH

18D Series

-1 ... 1 bar

Gold-plated contacts

High cycle life

Vibration resistant to 15 g

Microswitch approved by UL and CSA

Intrinsically safe operation



TECHNICAL DATA

Medium:

Neutral gases

Operation:

Diaphragm

Operating pressure:

-1 ... 1 bar

Over pressure:

80 bar max.

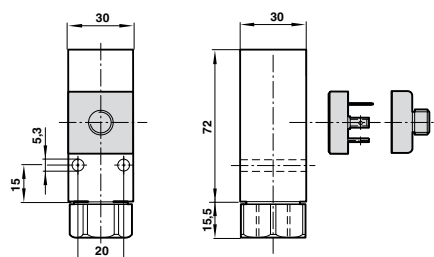
Ambient temperature:

-10°C ... +80°C

Consult our Technical Service for use below +2°C

Repeatability:

±3%, of full scale



Models

Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference (bar)	Max. over pressure (bar)	Electrical connector M12 x 1		
						Straight x 2 m long	Straight x 5 m long	90° x 2 m long
								
								
0880100000000000	-1 ... 0	G1/4	* DIN EN 175301-803 Form A	0,15 ... 0,18	80	-	-	-
0880110000000000	-1 ... 1	G1/4	* DIN EN 175301-803 Form A	0,25 ... 0,35	80	-	-	-
0880160000000000	-1 ... 0	G1/4	M12 x 1	0,15 ... 0,18	80	0523057000000000	0523052000000000	0523058000000000

* DIN plug is supplied as standard.

Accessories



1st choice

FOR HIGHER PERFORMANCE AND RELIABILITY,
CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

USE THIS RANGE OF SWITCHES TO REPLACE:

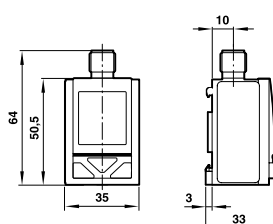
- Bosch Rexroth PM1 range
- Festo VPEV range

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ELECTRONIC VACUUM SWITCH

50D Series

-1 ... 0 bar, -1 ... 1 bar



Fast error detection through changing colour displays

Easy to use vacuum switch with clear display and intuitive programming

Flexible assembly with DIN panel or wall mounting

User selected connection; rear or base

LABS free materials, conforming to RoHS

TECHNICAL DATA

Medium:

Neutral gases

Temperature:

Fluid 0°C ... +60°C

Ambient 0°C ... +60°C

Consult our technical service for use below +2°C

Display:

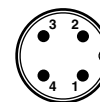
Pressure units bar, psi, kPa, InHg Vacuum

Electrical parameters

Electrical connection:	M12 x 1
Power supply:	UB = 24 V d.c. (17 ... 30 V d.c.)

Electrical connection M12 x 1

PIN-	Signal	Cable colour
1	+UB 24 V d.c.	Brown
2	Out 2 (PNP; NPN)	White
3	0 V	Blue
4	Out 1 (PNP; NPN)	Black



Models

Model	Pressure range (bar)	Over pressure (bar)	Fluid connection	Output signal

Accessories

Wall Mounting clip	Electrical connector M12 x 1 Straight x 2 m long	Electrical connector M12 x 1 Straight x 5 m long	90° x 2 m long	Front Frame	Front Frame with Keyboard Cover



DS-E1V10F4B2PR00	-1 ... 0	5	G1/4	2 x PNP	0523962000000000	0523057000000000	0523052000000000	0523058000000000	0524038000000000	0524036000000000
DS-E1V10P4B2PR00	-1 ... 0	5	4 mm Dia. Push-in fitting	2 x PNP	0523962000000000	0523057000000000	0523052000000000	0523058000000000	0524038000000000	0524036000000000
DS-E1V11F4B2PR00	-1 ... +1	5	G1/4	2 x PNP	0523962000000000	0523057000000000	0523052000000000	0523058000000000	0524038000000000	0524036000000000
DS-E1V11P4B2PR00	-1 ... +1	5	4 mm Dia. Push-in fitting	2 x PNP	0523962000000000	0523057000000000	0523052000000000	0523058000000000	0524038000000000	0524036000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ELECTRONIC VACUUM SWITCH

33D Series

-1 ... 1 bar

Display of system pressure and unit (pressure unit programmable)

Compact and robust design

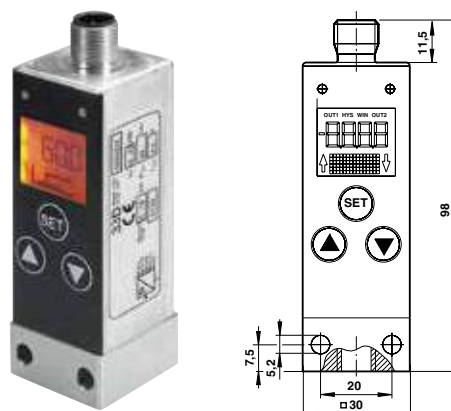
Easy programming of set points and additional functions

Transistor output signals 1 x PNP/2 x PNP/1 x PNP + 4 to 20 mA

Electronic lock

Switching status indicated by LED

Standard M12x1 electrical connection (IP 65)



TECHNICAL DATA

Medium:

Neutral gases

Display:

LCD 4 digits illuminated, pressure unit programmable for bar, psi, mpa

Mounting position:

Optional

Operating pressure:

-1 ... 1 bar

Ambient temperature:

-10°C ... 60°C

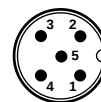
Consult our Technical Service for use below +2°C

Electrical parameters

Electrical connection:	M12 x 1
Power supply:	10 ... 32 V d.c. (polarity safe) digital models 15 ... 32 V d.c. (polarity safe) analogue models

Electrical connection M12 x 1

PIN-	Signal	Cable colour
1	+UB	Brown
2	Out 2 (PNP) / analog 4 ... 20 mA	White
3	0 V	Blue
4	Out 1 (PNP)	Black
5	PE	Grey



Models

Model	Pressure range (bar)	Over pressure (bar)	Fluid connection	Output signal



0863012000000000	-1 ... 1	10	G1/4	1 x PNP
0863022000000000	-1 ... 1	10	G1/4	2 x PNP
0863042000000000	-1 ... 1	10	G1/4	1 x PNP / analog 4 ... 20 mA
0863016000000000	-1 ... 1	10	Flange	1 x PNP

Accessories

Electrical connector M12 x 1			
Straight	Straight	90°	90°
x 2 m long	x 5 m long	x 2 m long	x 5 m long



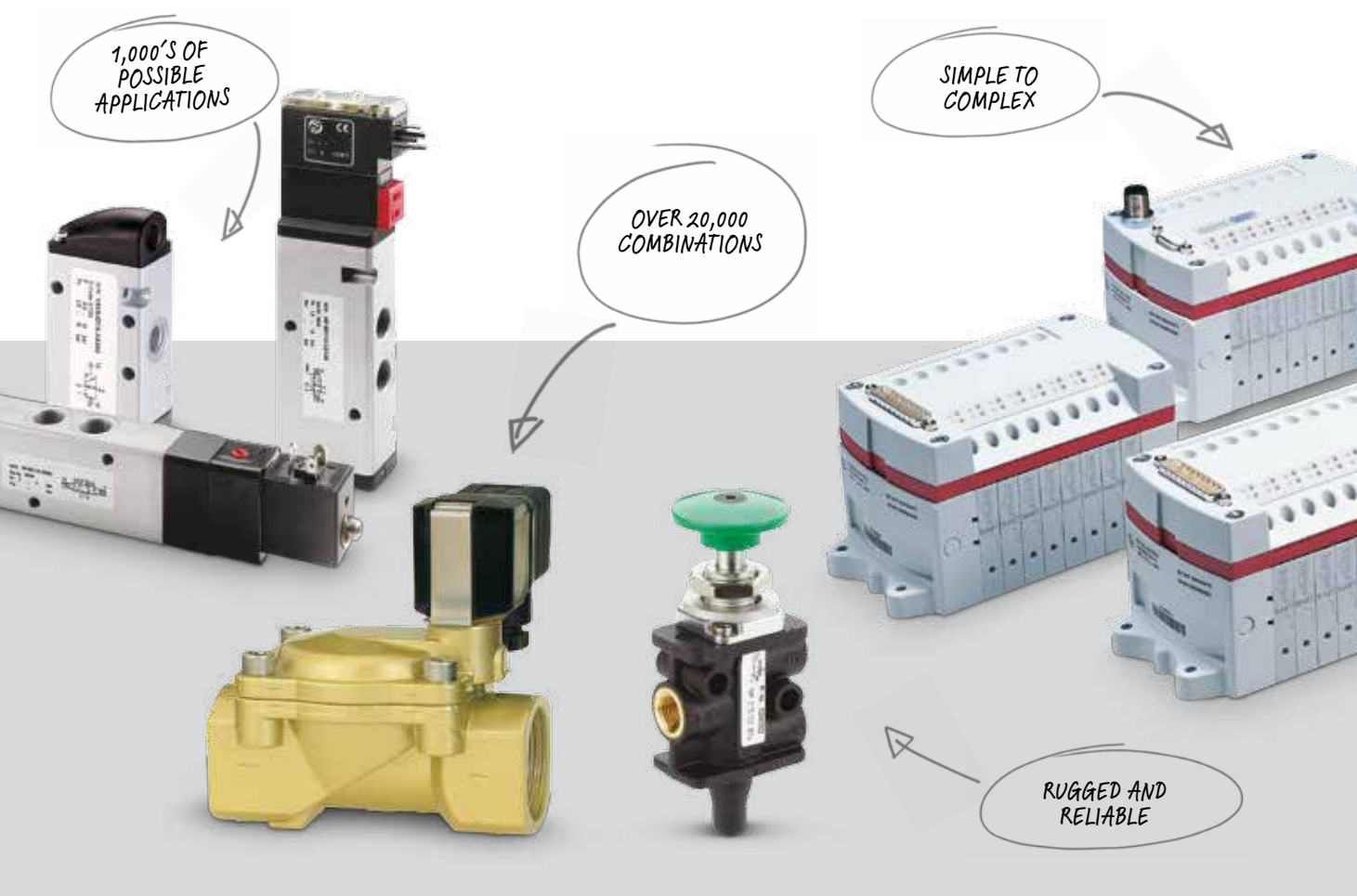
0523057000000000	0523052000000000	0523058000000000	0523053000000000
0523057000000000	0523052000000000	0523058000000000	0523053000000000
0523057000000000	0523052000000000	0523058000000000	0523053000000000
0523057000000000	0523052000000000	0523058000000000	0523053000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VALVES

Norgren Express has all manner of control valves – in line, sub base, valve islands, electrically or air operated, manual and mechanical valves, for just compressed air or complex fluid control requirements. We have ISO and NAMUR standard ranges and cover many ATEX requirements. Tried and trusted product ranges like IMI Buschjost, IMI Herion, Walter, IMI FAS, Webber, Enots and Martonair.

Many ranges in stock for immediate delivery or configured to requirements. Our valve islands feature a 24/7 online configurator for specification, technical information including CAD, pricing, lead time and ordering. For expert advice and guidance, contact the Express team.



Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering valves range. If you can't see the option you require contact your Express team.

VALVE ISLANDS

VM10/VM15
2 x 3/2, 5/2 & 5/3
10 mm & 15 mm



Page 92

VS18/VS26
2 x 2/2, 2 x 3/2, 5/2 &
5/3 valves, ISO 15407-2
18 mm & 26 mm



Page 93

VS45
2 x 3/2, 5/2 & 5/3 valves
45 mm



Page 94

*new**

SUB-BASE VALVES

V40/V41
2 x 3/2, 5/2 & 5/3 Valve
ISO 15407-1/VDMA 24 563
18 mm



Page 95

V44/V45
2 x 3/2, 5/2 & 5/3 Valve
ISO 15407-1/VDMA 24 563
26 mm



Page 99

ISO★STAR
5/2 & 5/3
ISO #1 ... ISO #3



Page 103

UM/22000
5/2 & 5/3
ISO #4



Page 107

IN-LINE AND MANIFOLD VALVES

V60 ... 63
3/2, 5/2, 5/3 & 2 x 3/2
G1/8... G1/2



Page 109

V50 ... 53
3/2, 5/2 & 5/3
G1/8... G1/2



Page 115

VE
2/2, 3/2
M5



Page 117

*new**

EXCEL 22
3/2, NC
G1/8



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EXCEL 32
2/2 & 3/2
G1/8, G1/4, interface



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80200
3/2
G1/2... G1



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SPECIAL PURPOSE VALVES

Two-hand control unit
G1/8



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XSz safety valves
3/2
G1/2... G2



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MANUAL/MECHANICAL VALVES

Super X
3/2, 5/2 and 5/3
G1/8, G1/4



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VHLA
4/2, 4/3 APB
G1/4... G1/2



Page 130

PROPORTIONAL VALVES

VP10
G1/4
≤ 8 bar



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VP50
G1/4
≤ 10 bar



Page 132

VP50S
G1/4



Page 133

*new**

VP51
G1/4
≤ 10 bar



Page 134

VP60
G1/4



Page 135

*new**

**New to this catalogue*

Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering valves range. If you can't see the option you require contact your Express team.

PROCESS INDUSTRY/NAMUR VALVES

IMI Buschjost 82510 2/2 G1/4... G3/8  new* Page 137	IMI Buschjost 82530/82560 2/2 G1/4... G1/2  Page 138	IMI Buschjost 82540 2/2 G1/4... G1  new* Page 139	IMI Buschjost 85700/85740 2/2 G1/4... G1  Page 140	IMI Buschjost 85720 2/2 G3/8... G1  new* Page 141	IMI Buschjost 82400/82730 2/2 G1/4... G2  Page 142
IMI Buschjost 85360 2/2 G1/4... G2  new* Page 143	IMI Buschjost 84500/84520 2/2 G1/2... G2  Page 144	IMI Buschjost 84720/84740 2/2 G1/2... G1  Page 145	IMI Buschjost 82180/82280 2/2 G1/2... G2  new* Page 146	IMI Buschjost 84660 3/2 G1/4  Page 147	IMI Buschjost 82900 2/2 G3/4... G1 1/2  new* Page 148
IMI Buschjost 82960 2/2 G3/4... G1 1/2  new* Page 149	IMI Herion 97100 NAMUR 3/2, 5/2, 5/3 G1/4  Page 150	IMI Herion 97300 NAMUR 3/2 & 5/2 G1/4  Page 152	IMI Herion 24011 NAMUR 3/2 G1/4, 1/4 NPT  Page 154	IMI Herion 95000 2/2 G1/4  Page 156	IMI Herion 96000 3/2 G1/4  Page 157

FLOW CONTROL VALVES

C00GE, C00GP Ø 4 ... 12 mm  new* Page 164	T1000 Uni-directional M5, G1/8... G1/2  Page 165	T1100 Bi-directional G1/8 & 1/4  Page 165	M/800 G1/8... G1  Page 167	T20 M5, G1/8... G1/2  Page 168
COT, COK, COS, COL BANJO FLOW REGULATORS (COMPOSITE BODY)  Page 254-256	10TA, 10K BANJO FLOW REGULATORS (METAL BODY)  Page 272-273	16K51, BANJO FLOW REGULATORS (METAL BODY)  Page 300		

*New to this catalogue

Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering valves range. If you can't see the option you require contact your Express team.

OTHER VALVES AND ACCESSORIES

T60 Air fuses
G1/4... G1 1/2



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T55 Non-return
M5, G1/8... G1/2



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**C00GL, C01G, C02G
Non-return valves**
Ø 4 ... 12 mm
M5, 1/8 ... 1/2



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**Blocking, pressure
reducing and pneumatic
sensor fittings**
Ø 4... 12 mm PIF
G1/8... G1/2



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**T70, S/511, S/513,
S/514 Quick exhaust**
G1/8... G1/2



Page 169

T50 Non-return valves
Ø 4... 12mm PIF



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T65 Shuttle valves
G1/8 & G1/4



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**S/520 Non-return
valves**
G1/8... G1/2



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**Solenoid plugs
and cables**
15mm, 22mm & 30mm



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CLASSIC PRODUCTS

Martonair s/666
G1/8



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Martonair S/1340
G1/4



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Martonair M/1700
G1/4, G1/2



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Martonair M/21
G1/8



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Martonair M/1553
M5



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Enots Super X
G1/8, G1/4



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Martonair M/20000
G1/2



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**IMI Herion
26360, 80207**
G1/4



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IMI Herion 26230
5/2 & 5/3,
G1/4, G1/2



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IMI Herion 26220
4/2, G1/8, G1/4



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**New to this catalogue*

VALVE ISLANDS

FOR ALMOST 20 YEARS, IMI PRECISION ENGINEERING HAS BEEN ABLE TO OFFER A PRE-ASSEMBLED VALVE BLOCK GENERALLY KNOWN AS A 'VALVE ISLAND'. THE CURRENT VM AND VS SERIES OFFER A CHOICE OF PRODUCT TO MEET MOST INDUSTRIAL CONTROL APPLICATIONS.

VM is a lightweight, high-strength polymer manifold, while VS is a more traditional diecast aluminium base system which conforms to an ISO dimensional standard. Both can be configured online via our configurator software which gives immediate technical data including CAD, price and delivery information.

All common valve functions are covered, port connections can be threaded or complete with push-in fittings. Electrical connection is via individual wires, multipole connector or fieldbus in a number of industry-standard protocols.

- Light, strong assembly meeting IP65 protection standard – choose from an option of assembly methods (manifold or sub base) and materials suitable for every industrial environment
- All common valve functions (2/2, 3/2, 5/2 and 5/3) can be combined and up to 40 solenoids per island are possible. This reduces the need for separate islands on larger systems as dictated by many

competitors, less pneumatic and electrical connections, and quicker machine build times

- Choice of valve spool types (VS only), soft seal or glandless for higher flow or extended life in excess of 200 million cycles – island can be suited to specific machine requirements. Using glandless spool means that machine service periods can be extended, reducing cost of ownership
- Diagnostics as standard on all electrical connections, and full traceability of island throughout its life supported by the IMI Precision Engineering production system – any failure can be identified quickly and easily and spare parts obtained and retrofitted with minimum of disruption



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

ENGINEERED
POLYMER

USER FRIENDLY

CONFORMS TO
ISO15407-2

VALVE ISLANDS VM10 & VM15 Series

10 & 15 mm valve slices 2 x 3/2, 5/2 and 5/3 with integral push-in fittings
 Ø 3 mm, 4 mm, 6 mm, 8 mm, 10 mm

The VM family represents one of the most versatile compact valve island systems available - over 14,000,000 island combinations can be achieved

Light in weight and yet strong as aluminium under the right conditions, the polymer body offers maximum flow from minimum size

Individually wired units can be upgraded to multipole or fieldbus, both of which are protected to IP65 for trouble free operation

Islands can be specified and ordered via our online configurator



CANopen
DeviceNet

TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated or non-lubricated

Operation:

Spool valve indirectly actuated

Operating pressure:

Maximum 8 bar

Flow:

VM10: 430 l/min VM15: 1000 l/min

Voltage:

24 V d.c., 12 V d.c. (optional)

Ambient temperature:

-5°C ... +50°C

Consult our Technical Service for use below +2°C

Degree of protection:

Individually wired: IP40

Multipole and fieldbus: IP65

FEATURES

- 1 Engineered polymer provides increased strength and weight reduction
 - 2 Up to 32 solenoids enabling a reduction in the number of valve islands required
 - 3 Single screw and hinge locking mechanism for securing each valve to the next facilitates simple valve addition and exchange (no tie rods)
 - 4 Integral push-in fittings reduce installation time, valve island size, component count and eliminate potential leak paths
 - 5 Wide range of accessories
 - 6 Through hole mounting enable valve islands to be directly mounted
- > 430 l/min from a 10 mm body width and 1000 l/min from a 15 mm body width provides maximum flow to size ratio
 - > Balanced spool design enables the valves to be used with both pressure and vacuum
 - > Proven spool and seal pack design ensures a high life of up to 100 million cycles



EXPRESS PLUS

To configure your own valve island please visit vi.norgren.com



EXPRESS PLUS

The perfect solution...

Offering flow rates up to 430 l/min, VM10 is the perfect solution when needing to operate smaller roundline or compact cylinders on a machine system. Easier and quicker to install than traditional individual valves, islands can save money by vastly reducing build times

VM10 Spare Valves

VM10 - INTERNAL PILOT, PUSH ONLY MANUAL OVERRIDE

Model	Function	Actuation
VM106A11AB313B	2x3/2 NC	Sol/Spring
VM106B11AB313B	2x3/2 NO	Sol/Spring
VM106C11AB313B	2x3/2 NC/NO	Sol/Spring
VM106517AB313B	5/2	Sol/Spring
VM106511AB313B	5/2	Sol/Sol
VM106611AB313B	5/3 APB	Sol/Sol

VM15 Spare Valves

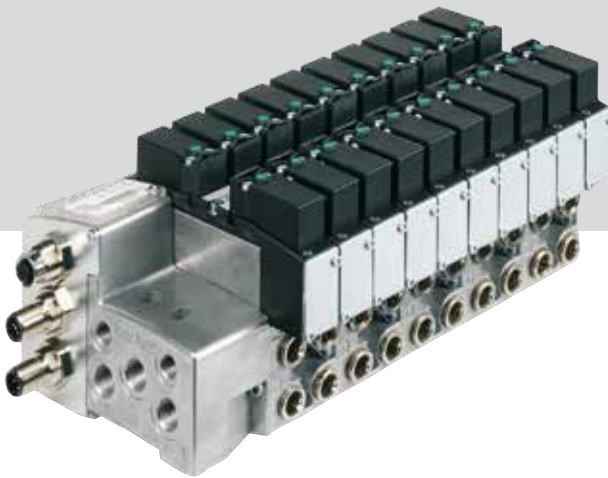
VM15 - INTERNAL PILOT, PUSH ONLY MANUAL OVERRIDE

Model	Function	Actuation
VM158A11AB313B	2x3/2 NC	Sol/Spring
VM158B11AB313B	2x3/2 NO	Sol/Spring
VM158C11AB313B	2x3/2 NO/NC	Sol/Spring
VM158517AB313B	5/2	Sol/Spring
VM158511AB313B	5/2	Sol/Sol
VM158611AB313B	5/3 APB	Sol/Sol

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PLUG-IN MINI ISO VALVE ISLANDS VS18 & VS26 Series

2 x 2/2, 2 x 3/2, 5/2 and 5/3 valves, ISO 15407-2 – Sizes 18 mm and 26 mm



EXPRESS PLUS

To configure your own valve island please visit vi.norgren.com

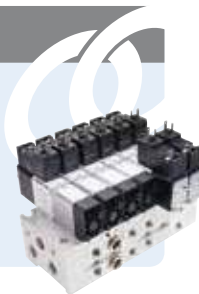


EXPRESS LINKS

If you require...

Individual hard wired valves on the VS valve islands, use V40/41 and V44/45.

See page 95 and 99



VS offers similar technology to VM but has a rugged aluminium base system conforming to ISO15407-2

Choose from threaded or push in fitting or combine both for optimized assembly

Valve spool type can be soft seal for higher flow rates or glandless for extended life cycle rates when in high cycling or arduous applications

The modular base system means that future expansion is easy using the readily available expansion kits

Our on line configurator can be used for ease of specification and ordering

TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated or non-lubricated

Operation:

Spool valve indirectly actuated

Operating pressure:

Glandless – maximum 16 bar

Softseal – maximum 10 bar

Flow:

VS18: 650 l/min VS26: 1350 l/min

Voltage:

24 V d.c., 115 V a.c.

Ambient temperature:

–15°C ... +50°C

Consult our Technical Service for use below +2°C

Degree of protection:

Multipole and fieldbus: IP65

Spare Valves

VS18 – 24 V d.c., INTERNAL PILOT, PUSH ONLY MO			
Model	Function	Actuation	Spool type
VS18SE11DF313A	2x 2/2 NC	Sol/Spring	Softseal
VS18SF11DF313A	2x 2/2 NO	Sol/Spring	Softseal
VS18SG11DF313A	2x 2/2 NO/NC	Sol/Spring	Softseal
VS18SA11DF313A	2x 3/2 NC	Sol/Spring	Softseal
VS18SB11DF313A	2x 3/2 NO	Sol/Spring	Softseal
VS18SC11DF313A	2x 3/2 NO/NC	Sol/Spring	Softseal
VS18S511DF313A	5/2	Sol/Sol	Softseal
VS18S517DF313A	5/2	Sol/Spring	Softseal
VS18S611DF313A	5/3 APB	Sol/Sol	Softseal
VS18S711DF313A	5/3 COE	Sol/Sol	Softseal

To order 115v ac valves, change 313A ... 318A

Island Expansion Kits

VS18 – INCLUDES SINGLE STATION SUB-BASE, PCB, GASKET & SCREWS	
Model	Ports 2 & 4
VS1872004-6FF0	6 mm PIF
VS1872004-8FF0	8 mm PIF
VS1872004-AFF0	G 1/8

Glandless spool valves also available, please contact your Express Team

Spare Valves

VS26 – 24 V d.c., INTERNAL PILOT, PUSH ONLY MO			
Model	Function	Actuation	Spool type
VS26SE11DF313A	2x 2/2 NC	Sol/Spring	Softseal
VS26SF11DF313A	2x 2/2 NO	Sol/Spring	Softseal
VS26SG11DF313A	2x 2/2 NO/NC	Sol/Spring	Softseal
VS26SA11DF313A	2x 3/2 NC	Sol/Spring	Softseal
VS26SB11DF313A	2x 3/2 NO	Sol/Spring	Softseal
VS26SC11DF313A	2x 3/2 NO/NC	Sol/Spring	Softseal
VS26S511DF313A	5/2	Sol/Sol	Softseal
VS26S517DF313A	5/2	Sol/Spring	Softseal
VS26S611DF313A	5/3 APB	Sol/Sol	Softseal
VS26S711DF313A	5/3 COE	Sol/Sol	Softseal

To order 115v ac valves, change 313A ... 318A

Island Expansion Kits

VS26 – INCLUDES SINGLE STATION SUB-BASE, PCB, GASKET & SCREWS	
Model	Ports 2 & 4
VS2672504-8GF0	8 mm PIF
VS2672504-YGF0	10 mm PIF
VS2672504-BGF0	G 1/4

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VS45 SERIES VALVE ISLANDS

2 x 3/2, 5/2 & 5/3 valves – 45 mm

Multipole, Fieldbus, individually wired and air pilot versions for installation flexibility

24 V d.c. Multipole

Integrated Fieldbus

Field expandable with single add-on stations

Dual spool technology

VS45G Glandless spool and sleeve for long life

VS45S Softseal spool for high flow

Wide range of accessories

Universal PNP/NPN 24 V d.c. Multipole



CANopen
DeviceNet

TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated or non-lubricated

Mounting:

Sub-base

Operation:

VS45G:

Glandless spool valve, solenoid and air pilot actuated

VS45S:

Softseal spool valve, solenoid and air pilot actuated

Temperature:

Ambient: -15°C ... +50°C

Medium: -5°C ... +50°C

Consult our Technical Service for use below +2°C.

Ports 2+4:

G3/8, G1/2

Flow:

Series	Function	Cv	l/min
VS45G	5/2	3,2	3200
VS45G	5/3	2,9	2900
VS45S	2x3/2	3,9	3900
VS45S	5/2	4,2	4200
VS45S	5/3	3,7	3700

Degree of protection:

IP65

MATERIALS

Body/sub-base: die-cast aluminium

Glandless spool and sleeve (VS45G): aluminium, hard anodized, PTFE coated

Softseal spool (VS45S): aluminium with HNBR seals

EXPRESS PLUS

To configure your own valve island please visit vi.norgren.com



EXPRESS PLUS

Why VS45?

If you are looking for a more modern alternative to traditional ISO valves, perhaps with a multipole connection, then VS45 may be the answer. IMI Precision Engineering offers both solenoid and air pilot operators, all which can be integrated into an island for pneumatic, multipole or fieldbus control.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

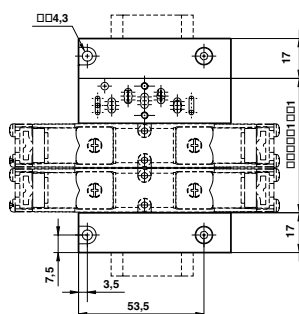
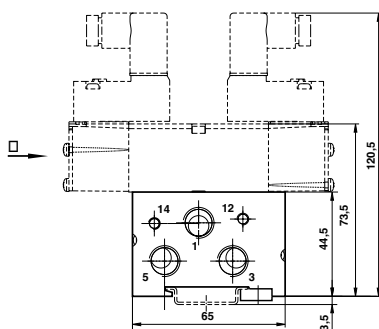
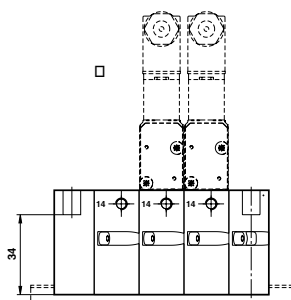
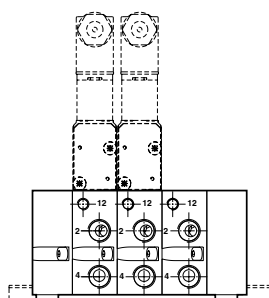
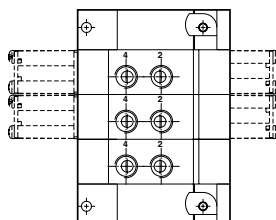
MINI ISO VALVES V40/V41 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 18 mm



Side ported

Bottom ported



High performance, compact design

Flexible sub-base system

Multipressure system capability

Wide range of accessories

Dual spool technology

– V40 Glandless spool and sleeve (long life)

– V41 Softseal spool (high flow)

Valve exchange under pressure

TECHNICAL DATA

Medium:

Compressed air, 40 µm filtered,
lubricated or non-lubricated

Operation:

V40: Glandless spool valve,

solenoid pilot or air pilot actuated

V41: Softseal spool valve,

solenoid pilot or air pilot actuated

Operating pressure:

Maximum 16 bar, see tables for individual details

Flow:

570-680 l/min

Ambient temperature:

–15°C ... +50°C V40/V41 solenoid & V41 air pilot models

–15°C ... +80°C V40 air pilot models

Consult our Technical Service for use below +2°C

1st choice

FOR HIGHER PERFORMANCE AND RELIABILITY,
CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

ISO15407 IS CONCERNED WITH THE STANDARDISATION OF
DIMENSIONS. THIS RANGE OF MINI ISO VALVES IS DIMENSIONALLY
VERY SIMILAR TO:

- SMC EVS 01, 02 series
- Festo VT1A / VTSA
- Parker P2V 'flowstar'
- Bosch Rexroth CD01/02
- Asco Joucomatic 539 series (26mm)
- Metalwork Mach 18
- Univer BD series
- And many others

EXPRESS PLUS

Looking for long life valves?

For high cycling applications or extended life expectancy, select a glandless spool. Whilst having slightly lower flow rates, operating life is extended above soft seals, friction levels are lower and operation remains constant throughout the life of the valve.

See page 97

EXPRESS LINKS

Connectors and cables

For a full selection
of 15 mm DIN EN175301-803
Form C plugs and cables

See page 171



For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

MINI ISO VALVES V40/V41 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 18 mm

Models – Softseal Spool (V41 Series)

Accessories

2 X 3/2 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY					Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)	



V415A11D-C313A	●	Sol/Spring NC	18 mm	610	2,5 ... 10	V10027-D00
V415B11D-C313A	●	Sol/Spring NO	18 mm	610	2,5 ... 10	V10027-D00
V415C11D-C313A	●	Sol/Spring NO/NC	18 mm	610	2,5 ... 10	V10027-D00

5/2 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY					Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)	



V415513D-C313A	●	Sol/Air spring	18 mm	650	1 ... 10	V10027-D00
V415517D-C313A	●	Sol/Spring	18 mm	650	2 ... 10	V10027-D00
V415511D-C313A	●	Sol/Sol	18 mm	650	2 ... 10	V10027-D00

5/3 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY					Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)	



V415611D-C313A	●	Sol/Sol APB	18 mm	680	2 ... 10	V10027-D00
V415711D-C313A	●	Sol/Sol COE	18 mm	680	2,5 ... 10	V10027-D00
V415811D-C313A	●	Sol/Sol COP	18 mm	680	2 ... 10	V10027-D00

2 X 3/2 VALVES – PILOT ACTUATED VALVES				
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)



V415A33A-X0020	●	Air/Spring NC	18 mm	610	0 ... 10
V415B33A-X0020	●	Air/Spring NO	18 mm	610	0 ... 10
V415C33A-X0020	●	Air/Spring NO/NC	18 mm	610	0 ... 10

5/2 VALVES – PILOT ACTUATED VALVES				
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)



V415537A-X0090	●	Air/Spring	18 mm	650	-0,9 ... 10
V415533A-X0090	●	Air/Air	18 mm	650	-0,9 ... 10

5/3 VALVES – PILOT ACTUATED VALVES				
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)



V415633A-X0020	●	Air/Air APB	18 mm	680	-0,9 ... 10
V415733A-X0020	●	Air/Air COE	18 mm	680	-0,9 ... 10
V415833A-X0020	●	Air/Air COP	18 mm	680	-0,9 ... 10

APB – All Ports Blocked, COE – Centre Open Exhaust, COP – Centre Open Pressure

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINI ISO VALVES V40/V41 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 18 mm

Models – Glandless Spool (V40 Series)

Accessories

5/2 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY 24 DC Push only M/O Model						Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)		
						
V405513D-C313A ●	Sol/Air spring	18 mm	570	1 ... 10		V10027-D00
V405516D-C313A ●	Sol/Spring	18 mm	570	1,6 ... 10		V10027-D00
V405511D-C313A ●	Sol/Sol	18 mm	570	2 ... 10		V10027-D00

5/3 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY 24 DC Push only M/O Model						Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)		
						
V405611D-C313A ●	Sol/Sol APB	18 mm	610	2 ... 10		V10027-D00
V405711D-C313A ●	Sol/Sol COE	18 mm	610	2 ... 10		V10027-D00
V405811D-C313A ●	Sol/Sol COP	18 mm	610	2 ... 10		V10027-D00

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure

5/2 VALVES – PILOT ACTUATED VALVES					
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)	
					
V405537A-X0090 ●	Air/Spring	18 mm	570	-0,9 ... 16	
V405533A-X0020 ●	Air/Air	18 mm	570	-0,9 ... 16	
V405533A-X0070 ●	Air/Air priority 14	18 mm	570	-0,9 ... 16	

BASES AND ACCESSORIES

Intermediate supply/exhaust module	Single valve shut-off plate	Single pressure regulator plate	Double pressure regulator plate	Flow regulator plate	Sandwich plate with additional pressure port 1
					
V70429-A50 (G1/8) ●	V70430-K50 (Port 1 blocked) ●	V70427-K51 (Port 1 reg.) ● V70427-K52 (Port 2 reg.) ● V70427-K53 (Port 4 reg.) ●	V70427-K54 (Ports 2+4 reg.) ●	V70428-K50 (Ports 3+5 reg.) ●	V70435-A50 (G1/8) ●

DIN EN 50 022 rail (1 metre)	DIN-rail mounting kit	Blanking plate for unused station	Blanking disk to modular sub-base	Manual override set-up kit	Transition plate #18 mm ... #26 mm
					
V10009-C00 (35 x 7,5 mm) ●	V70531-KA0 ●	V70400-K50 ●	V70422-K50 (Ports 1,3,5) ● V70423-K50 (Ports 12 + 14) ●	V70532-K00 ●	V70436-K00 ●

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINI ISO VALVES V40/V41 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 18 mm

BASES AND ACCESSORIES

Models

SINGLE STATION		Accessories		
Model	Description	Straight fitting	Elbow fitting	Silencer
				
V70401-A5B	Single station side ported with pilot ports – G 1/8	C02250618	C02470618	T40C1800
MODULAR SUB-BASES AND END PLATES		Straight fitting	Elbow fitting	Silencer
Model	Description			
				
V70425-A5F	Modular sub-base side ported without pilot ports – G1/8	C02250618	C02470618	–
V70426-A5F	Modular sub-base side ported with pilot ports – G1/8	C02250618	C02470618	–
V70425-65F	Modular sub-base side ported (PIF) without pilot ports – Ø6 mm	Included 6mm	–	–
V70426-65F	Modular sub-base side ported (PIF) with pilot ports – Ø6 mm	Included 6mm	–	–
V70425-A5E	Modular sub-base bottom ported without pilot ports – G1/8	C02250618	C02470618	–
V70426-A5E	Modular sub-base bottom ported with side pilot ports – G1/8	C02250618	C02470618	–
				
V70432-A5F	Double modular sub-base side ported without pilot ports – G1/8	C02250618	C02470618	–
				
V70424-B5C	End plate kit. End ported – G1/4	C02250828	C02470828	T40C2800
				
V70431-A5F	End plate kit with 2 side ported valve stations without pilot ports – G1/4, G1/8	C02250618 (2 & 4) C02250828 (1, 3 & 5)	C02470618 (2 & 4) C02470828 (1, 3 & 5)	T40C2800 –
				
V70402-A50	2 Station fixed length manifold. Bottom ported	C02250618 (2 & 4)	C02470618 (2 & 4)	T40C2800
V70404-A50	4 Station fixed length manifold. Bottom ported	C02250828 (1, 3 & 5)	C02470828 (1, 3 & 5)	–
V70406-A50	6 Station fixed length manifold. Bottom ported			
V70408-A50	8 Station fixed length manifold. Bottom ported			
V70410-A50	10 Station fixed length manifold. Bottom ported	For all models listed on the left		

EXPRESS LINKS

Tubing...

For our comprehensive range of nylon, polyurethane and other tubing,

See page 301



EXPRESS LINKS

Exhaust air...

Due to the large combined exhaust from valve islands, it is vital that to comply with COSHH requirements silencers are fitted. In addition, they must also be maintained regularly to eliminate restriction of exhausting air. **See page 309**



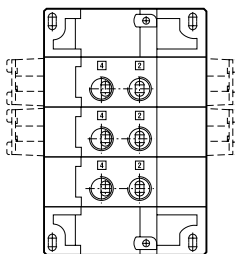
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MINI ISO VALVES V44/V45 Series

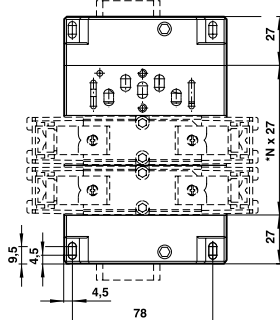
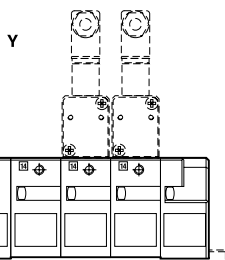
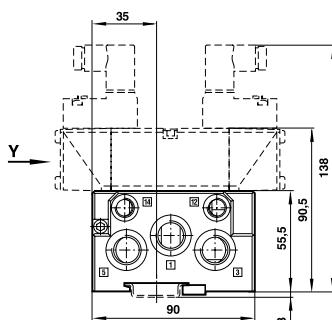
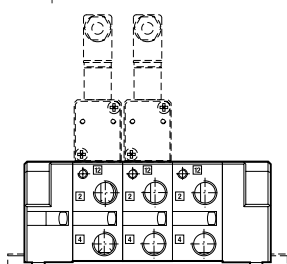
2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 26 mm



Bottom ported



Side ported



1st choice

FOR HIGHER PERFORMANCE AND RELIABILITY,
CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

ISO15407 STANDARDISES DIMENSIONS. THIS RANGE OF MINI
ISO VALVES IS DIMENSIONALLY SIMILAR TO:

- SMC EVS 01, 02 series
- Festo VT1A / VTSA
- Parker P2V 'flowstar'
- Bosch Rexroth CD01/02
- Asco Joucomatic 539 series (26mm)
- Metalwork Mach 18
- Univer BD series
- And many others

High performance, compact design

Flexible sub-base system

Multipressure system capability

Wide range of accessories

Dual spool technology

– V44 Glandless spool and sleeve (long life)

– V45 Softseal spool (high flow)

Valve exchange under pressure

TECHNICAL DATA

Medium:

Compressed air, 40 µm filtered, lubricated or non-lubricated

Operation:

V44: Glandless spool valve,

solenoid pilot or air pilot actuated

V45: Softseal spool valve,

solenoid pilot or air pilot actuated

Operating pressure:

Maximum 16 bar, see table for individual details

Flow:

900-1200 l/min

Ambient temperature:

–15°C ... +50°C V44/V45 solenoid and V45 air pilot models

–15°C ... +80°C V44 air pilot models

Consult our Technical Service for use below +2°C

EXPRESS PLUS

Looking for long life valves?

For high cycling applications or extended life expectancy, select a glandless spool. Whilst having slightly lower flow rates, operating life is extended above soft seals, friction levels are lower and operation remains constant throughout the life of the valve.

See page 101

EXPRESS LINKS

Connectors and cables

For a full selection of 15 mm DIN EN175301-803 Form C plugs and cables

See page 171



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MINI ISO VALVES V44/V45 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 26 mm

Models – Softseal Spool (V45 Series)

Accessories

2 X 3/2 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY					Basic plug
24 DC Push only M/O	Actuation	Size	Flow	Operating	
Model			(l/min)	pressure (bar)	



V45AA11D-C313A	●	Sol/Spring NC	26 mm	1100	3...10	V10027-D00
V45AB11D-C313A	●	Sol/Spring NO	26 mm	1100	3...10	V10027-D00
V45AC11D-C313A	●	Sol/Spring NO/NC	26 mm	1000/1100	3...10	V10027-D00

5/2 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY					Basic plug
24 DC Push only M/O	Actuation	Size	Flow	Operating	
Model			(l/min)	pressure (bar)	



V45A517D-C313A	●	Sol/Spring	26 mm	1200	2...10	V10027-D00
V45A511D-C313A	●	Sol/Sol	26 mm	1200	2...10	V10027-D00

5/3 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY					Basic plug
24 DC Push only M/O	Actuation	Size	Flow	Operating	
Model			(l/min)	pressure (bar)	



V45A611D-C313A	●	Sol/Sol APB	26 mm	1150	2,5...10	V10027-D00
V45A711D-C313A	●	Sol/Sol COE	26 mm	1150	2,5...10	V10027-D00
V45A811D-C313A	●	Sol/Sol COP	26 mm	1150	2,5...10	V10027-D00

2 X 3/2 VALVES – PILOT ACTUATED VALVES				
Model	Actuation	Size	Flow	Operating
			(l/min)	pressure (bar)



V45AA33A-X0020	●	Air/Spring NC	26 mm	1100	0...10
V45AB33A-X0020	●	Air/Spring NO	26 mm	1100	0...10
V45AC33A-X0020	●	Air/Spring NO/NC	26 mm	1000/1100	0...10

5/2 VALVES – PILOT ACTUATED VALVES				
Model	Actuation	Size	Flow	Operating
			(l/min)	pressure (bar)



V45A537A-X0090	●	Air/Spring	26 mm	1200	-0,9...10
V45A533A-X0020	●	Air/Air	26 mm	1200	-0,9...10

5/3 VALVES – PILOT ACTUATED VALVES				
Model	Actuation	Size	Flow	Operating
			(l/min)	pressure (bar)



V45A633A-X0020	●	Air/Air APB	26 mm	1150	-0,9...10
V45A733A-X0020	●	Air/Air COE	26 mm	1150	-0,9...10
V45A833A-X0020	●	Air/Air COP	26 mm	1150	-0,9...10

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINI ISO VALVES V44/V45 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 26 mm

Models – Glandless Spool (V44 Series)

Accessories

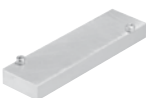
5/2 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY 24 DC Push only M/O Model						Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)		
						
V44A513D-C313A	 Sol/Air spring	26 mm	900	1...10		V10027-D00
V44A517D-C313A	 Sol/Spring	26 mm	900	1,6...10		
V44A511D-C313A	 Sol/Sol	26 mm	900	2...10		V10027-D00

5/3 VALVES – SOLENOID ACTUATED VALVES INTERNAL PILOT SUPPLY 24 DC Push only M/O Model						Basic plug
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)		
						
V44A611D-C313A	 Sol/Sol APB	26 mm	900	2...10		V10027-D00
V44A711D-C313A	 Sol/Sol COE	26 mm	900	2,5...10		V10027-D00
V44A811D-C313A	 Sol/Sol COP	26 mm	900	2...10		V10027-D00

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure

5/2 VALVES – PILOT ACTUATED VALVES					
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)	
					
V44A537A-X0090	 Air/Spring	26 mm	900	-0,9...16	
V44A533A-X0020	 Air/Air	26 mm	900	0,9...16	

BASES AND ACCESSORIES

Intermediate supply/exhaust module	Single valve shut-off plate	Single pressure regulator plate	Double pressure regulator plate	Flow regulator plate	Sandwich plate with additional pressure port 1
					
V70529-BA0 (G1/4) 	V70530-KA0 (Port 1 blocked) 	V70527-KA1 (Port 1 reg.)  V70527-KA2 (Port 2 reg.)  V70527-KA3 (Port 4 reg.) 	V70527-KA4 (Ports 2+4 reg.) 	V70528-KA0 (Ports 3+5 reg.) 	V70535-BA0 (G1/4) 
DIN EN 50 022 rail (1 metre)	DIN-rail mounting kit	Blanking plate for unused station	Blanking disk to modular sub-base	Manual override set-up kit	Transition plate #18 mm ... #26 mm
					
V10009-C00 (35 x 7,5 mm) 	V70531-KA0 	V70500-KA0 	V70522-K00 (Ports 1,3,5)  V70523-K00 (Ports 12+14) 	V70532-K00 	V70436-K00 

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MINI ISO VALVES V44/V45 Series

2 x 3/2, 5/2 and 5/3 Valves – Solenoid and pilot actuated – ISO 15407-1/VDMA 24 563 – Size 26 mm

BASES AND ACCESSORIES

Models

SINGLE STATION Model	Description	Straight fitting	Elbow fitting	Silencer
				
V70501-BAB ●	Single station side ported with pilot ports – G1/4	C02250828	C02470828	T40C2800
MODULAR SUB-BASES AND END PLATES Model	Description	Straight fitting	Elbow fitting	Silencer
				
V70525-BAF ●	Modular sub-base side ported without pilot ports – G1/4	C02250828	C02470828	–
V70526-BAF ●	Modular sub-base side ported with pilot ports – G1/4	C02250828	C02470828	–
V70525-8AF ●	Modular sub-base side ported (PIF) without pilot ports – Ø8 mm	Included 8mm	–	–
V70526-8AF ●	Modular sub-base side ported (PIF) with pilot ports – Ø8 mm	Included 8mm	–	–
V70525-BAE ●	Modular sub-base bottom ported without pilot ports – G1/4	C02250828	C02470828	–
V70526-BAE ●	Modular sub-base bottom ported with side pilot ports – G1/4	C02250828	C02470828	–
				
V70524-CAC ●	End plate kit. End ported – G3/8	C02251038 (Ports 1,3 & 5)	C02471038 (Ports 1,3 & 5)	T40C3800
				
V70502-BA0 ●	2 Station fixed length manifold. Bottom ported	C02250828 (2 & 4)	C02470828 (2 & 4)	T40C3800
V70504-BA0 ●	4 Station fixed length manifold. Bottom ported	C02251038 (1, 3 & 5)	C02471038 (1, 3 & 5)	–
V70506-BA0 ●	6 Station fixed length manifold. Bottom ported			
V70508-BA0 ●	8 Station fixed length manifold. Bottom ported			
V70510-BA0 ●	10 Station fixed length manifold. Bottom ported	For all models listed on the left		

EXPRESS LINKS

Exhaust air...

Due to the large combined exhaust from valve islands, it is vital that to comply with COSHH requirements silencers are fitted. In addition, they must also be maintained regularly to eliminate restriction of exhausting air.

See page 309

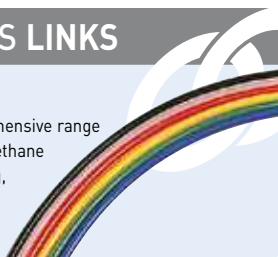


EXPRESS LINKS

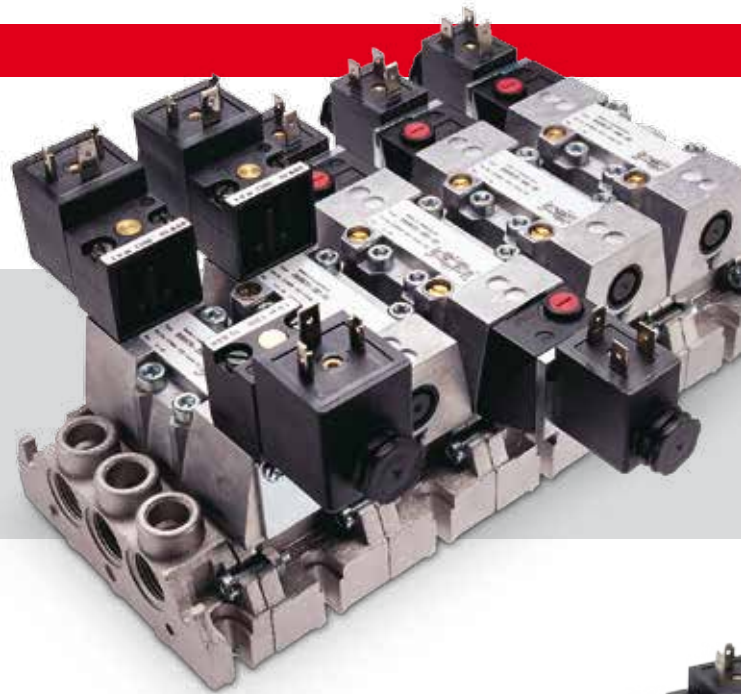
Tubing...

For our comprehensive range of nylon, polyurethane and other tubing,

See page 301



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ISO★STAR GLANDLESS VALVES SXE SERIES

GLANDLESS TECHNOLOGY WILL BE FAMILIAR TO YOU IF YOU'RE AN ESTABLISHED IMI PRECISION ENGINEERING CUSTOMER. THE 'MARTONAIR BEECH' RANGE USED A STAINLESS STEEL SPOOL AND SLEEVE, AND WAS THE FIRST CHOICE OF AUTOMOTIVE CUSTOMERS FOR MANY YEARS.

The ISOstar range now uses an aluminium spool but is still hugely valued. In many industries, it has effectively replaced Beech products with a more up-to-date, more cost-effective solution. Dimensionally interchangeable with other systems conforming to ISO, IMI Precision Engineering is a pioneer of the low friction, fast-switching, long-life glandless spool.

→ Three sizes of valve, with or without integral flow regulators, 5/2 and 5/3 function, with standard or CNOMO solenoids or air pilots and single station or manifold bases – meets requirements over a wide range of flow rates, on simple and complex installations

→ Hard-anodised, low friction aluminium spool and sleeve offers long life, and constant performance from start-up in all kinds of environments. Copes with many airline contaminants – valve can be relied upon to operate successfully in all manner of industrial applications including mining, quarrying, steel production and automotive production

→ Fast switching times coupled with low power solenoids, perfect in high cycling applications – increases machine capacity in order to meet production requirements, suitable for high speed packaging applications

16 BAR
CNOMO OPTION



INTEGRAL FLOW
REGULATORS



CONFORMS
TO ISO



TROUBLE
FREE LIFE!



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ISO★STAR Solenoid and pilot actuated spool valves

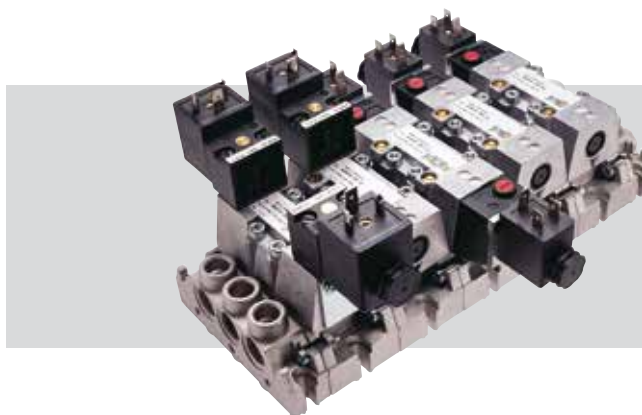
Sub-base 5/2 and 5/3, ISO #1 ... ISO #3

IMI Norgren's precision engineered aluminium, anodised, PTFE coated spool and sleeve offers life cycles well in excess of soft seal valves

Operation of these units is constant, from start up with no decline in performance over time

Hugely reliable and trouble free for total piece of mind, well tried and tested in stringent applications – for instance in the automotive industry

Can be purchased with integral flow regulators (size 1 & 2 only) for optimum control



TECHNICAL DATA

Medium:

Compressed air, 40 µm filtered, lubricated or non-lubricated

Operation:

Maximum 16 bar, see table for individual details

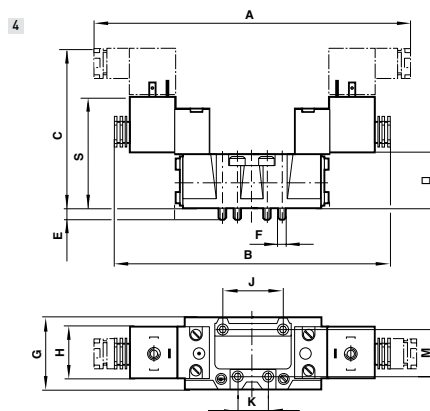
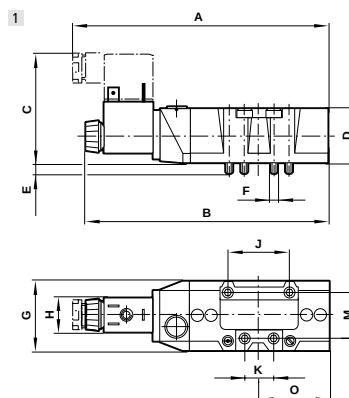
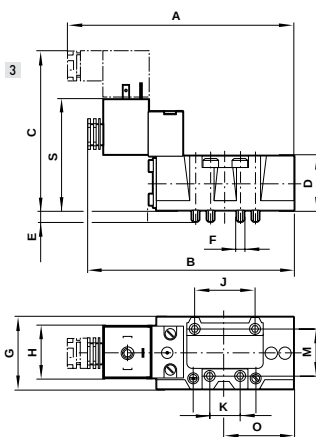
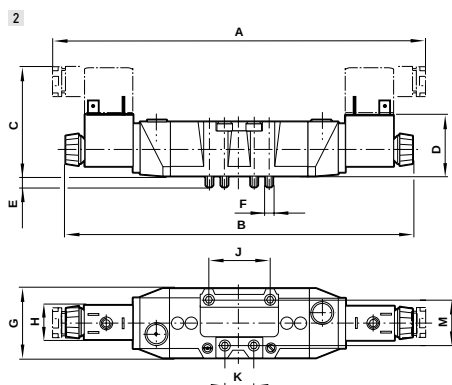
Flow:

ISO #1 – 1230 l/min, ISO #2 – 2450 l/min, ISO #3 – 4400 l/min

Ambient temperature:

–15°C ... +50°C solenoid models, –15°C ... +80°C pilot models

Consult our Technical Service for use below +2°C



Sol/spring (5/2 only) with 22mm coil

Model	ISO size	A	B	C	D	E	F	G	H	J	K	M	O	Drawing No.
SXE 9573-A...	1	153	144	65	33	7,5	M5	42	22	36	18	28	42	1
SXE 9574-A...	2	181	173	71	42	8	M6	55	22	48	24	38	53	1
SXE 9575-A...	3	207,5	197	72	43	11,5	M8	62,5	22	64	32	48	65,5	1

Sol/spring (5/2 only) with 30mm CNOMO interface coil

Model	ISO size	A	B	C	D	E	F	G	H	J	K	M	O	Drawing No.
SXE 9573-Z...	1	137,5	128	99,5	33	7,5	M5	42	30	36	18	28	42	3
SXE 9574-Z...	2	157	147	107	42	8	M6	55	30	48	24	38	53	3
SXE 9575-Z...	3	181	171	108,5	43	11,5	M8	62,5	30	64	32	48	65,5	3

Sol/sol (5/2 and 5/3) with 22mm coil

Model	ISO size	A	B	C	D	E	F	G	H	J	K	M	Drawing No.
SXE 0573-A...	1	222	204	65	33	7,5	M5	42	22	36	18	28	2
SXE 9*73-A...													
SXE 0574-A...	2	255	239	71	42	8	M6	55	22	48	24	38	2
SXE 9*74-A...													
SXE 0575-A...	3	284	263	72	43	11,5	M8	62,5	22	64	32	48	2
SXE 9*75-A...													

Sol/sol (5/2 & 5/3) with 30mm CNOMO interface coil

Model	ISO size	A	B	C	D	E	F	G	H	J	K	M	Drawing No.
SXE 0573-Z...	1	191	171,5	99,5	33	7,5	M5	42	30	36	18	28	4
SXE 9*73-Z...													
SXE 0574-Z...	2	208	189	107	42	8	M6	55	30	48	24	38	4
SXE 9*74-Z...													
SXE 0575-Z...	3	181	171	108,5	43	11,5	M8	62,5	30	64	32	48	4
SXE 9*75-Z...													

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ISO★STAR Solenoid and pilot actuated spool valves

Sub-base 5/2 and 5/3, ISO #1 ... ISO #3

Models – 22mm Coil, Industrial Standard

Accessories

5/2 VALVES – SOLENOID ACTUATED, INTERNAL PILOT SUPPLY		Actuation	Size	Flow (l/min)	Operating pressure (bar)	Drawing No.	Basic plug
24 DC Push lockable M/O Model	220 AC Push lockable M/O Model						
							
SXE9573-A81-00-13J ●	SXE9573-A81-00-19J ●	Sol/Spring	ISO 1	1230	1,8...10	1	M/P19063
SXE9574-A81-00-13J ●	SXE9574-A81-00-19J ●	Sol/Spring	ISO 2	2450	1,8...10	1	M/P19063
SXE9575-A71-00-13J ●	SXE9575-A71-00-19J ●	Sol/Spring	ISO 3	4400	1,8...10	1	M/P19063
SXE9573-A80-00-13J ●	SXE9573-A80-00-19J ●	Sol/Air spring	ISO 1	1230	1...10	1	M/P19063
SXE9574-A80-00-13J ●	SXE9574-A80-00-19J ●	Sol/Air spring	ISO 2	2450	1...10	1	M/P19063
SXE9575-A70-00-13J ●	SXE9575-A70-00-19J ●	Sol/Air spring	ISO 3	4400	1...10	1	M/P19063
SXE0573-A60-00-13J ●	SXE0573-A60-00-19J ●	Sol/Sol	ISO 1	1230	2...10	2	M/P19063
SXE0574-A60-00-13J ●	SXE0574-A60-00-19J ●	Sol/Sol	ISO 2	2450	2...10	2	M/P19063
SXE0575-A50-00-13J ●	SXE0575-A50-00-19J ●	Sol/Sol	ISO 3	4400	2...10	2	M/P19063

5/3 VALVES – SOLENOID ACTUATED, INTERNAL PILOT SUPPLY		Actuation	Size	Flow (l/min)	Operating pressure (bar)	Drawing No.	Basic plug
24 DC Push lockable M/O Model	220 AC Push lockable M/O Model						
							
SXE9673-A60-00-13J ●	SXE9673-A60-00-19J ●	Sol/Sol APB	ISO 1	1230	2...10	2	M/P19063
SXE9674-A60-00-13J ●	SXE9674-A60-00-19J ●	Sol/Sol APB	ISO 2	2450	2...10	2	M/P19063
SXE9675-A50-00-13J ●	SXE9675-A50-00-19J ●	Sol/Sol APB	ISO 3	4400	2...10	2	M/P19063
SXE9773-A60-00-13J ●	SXE9773-A60-00-19J ●	Sol/Sol COE	ISO 1	1230	2...10	2	M/P19063
SXE9774-A60-00-13J ●	SXE9774-A60-00-19J ●	Sol/Sol COE	ISO 2	2450	2...10	2	M/P19063
SXE9775-A50-00-13J ●	SXE9775-A50-00-19J ●	Sol/Sol COE	ISO 3	4400	2...10	2	M/P19063
SXE9873-A60-00-13J ●	SXE9873-A60-00-19J ●	Sol/Sol COP	ISO 1	1230	2...10	2	M/P19063
SXE9874-A60-00-13J ●	SXE9874-A60-00-19J ●	Sol/Sol COP	ISO 2	2450	2...10	2	M/P19063
SXE9875-A50-00-13J ●	SXE9875-A50-00-19J ●	Sol/Sol COP	ISO 3	4400	2...10	2	M/P19063

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure.

Note: ISO 1 and 2 with integral flow regulators

Models – 30mm Coil, CNOMO

5/2 VALVES – SOLENOID ACTUATED, INTERNAL PILOT SUPPLY		Actuation	Size	Flow (l/min)	Operating pressure (bar)	Drawing No.	Basic plug
24 DC Push only M/O Model	220 AC Push only M/O Model						
							
SXE9573-Z71-81-33N ●	SXE9573-Z71-81-89N ●	Sol/Spring	ISO 1	1230	1,8...16	3	M/P15737
SXE9574-Z71-81-33N ●	SXE9574-Z71-81-89N ●	Sol/Spring	ISO 2	2450	1,8...16	3	M/P15737
SXE9575-Z71-81-33N ●	SXE9575-Z71-81-89N ●	Sol/Spring	ISO 3	4400	1,8...16	3	M/P15737
SXE9573-Z70-81-33N ●	SXE9573-Z70-81-89N ●	Sol/Air spring	ISO 1	1230	1...16	3	M/P15737
SXE9574-Z70-81-33N ●	SXE9574-Z70-81-89N ●	Sol/Air spring	ISO 2	2450	1...16	3	M/P15737
SXE9575-Z70-81-33N ●	SXE9575-Z70-81-89N ●	Sol/Air spring	ISO 3	4400	1...16	3	M/P15737
SXE0573-Z50-81-33N ●	SXE0573-Z50-81-89N ●	Sol/Sol	ISO 1	1230	2...16	4	M/P15737
SXE0574-Z50-81-33N ●	SXE0574-Z50-81-89N ●	Sol/Sol	ISO 2	2450	2...16	4	M/P15737
SXE0575-Z50-81-33N ●	SXE0575-Z50-81-89N ●	Sol/Sol	ISO 3	4400	2...16	4	M/P15737

Other models, voltages and manual override options available. Please call your Express Team.

EXPRESS LINKS

For ISO #4 Valves...

Please see UM/22000 range

See page 107

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ISO★STAR Solenoid and pilot actuated spool valves

Sub-base 5/2 and 5/3, ISO #1 ... ISO #3

Models – 30mm Coil, CNOMO

Accessories

5/3 VALVES – SOLENOID ACTUATED, INTERNAL PILOT SUPPLY								Basic plug	
24 DC Push only M/O		220 AC Push only M/O		Actuation	Size	Flow (l/min)	Operating pressure (bar)		Drawing No.
Model		Model							
									
SXE9673-Z50-81-33N	●	SXE9673-Z50-81-89N	●	Sol/Sol APB	ISO 1	1230	2...16	4	M/P15737
SXE9674-Z50-81-33N	●	SXE9674-Z50-81-89N	●	Sol/Sol APB	ISO 2	2450	2...16	4	M/P15737
SXE9675-Z50-81-33N	●	SXE9675-Z50-81-89N	●	Sol/Sol APB	ISO 3	4400	2...16	4	M/P15737
SXE9773-Z50-81-33N	●	SXE9773-Z50-81-89N	●	Sol/Sol COE	ISO 1	1230	2...16	4	M/P15737
SXE9774-Z50-81-33N	●	SXE9774-Z50-81-89N	●	Sol/Sol COE	ISO 2	2450	2...16	4	M/P15737
SXE9775-Z50-81-33N	●	SXE9775-Z50-81-89N	●	Sol/Sol COE	ISO 3	4400	2...16	4	M/P15737
SXE9873-Z50-81-33N	●	SXE9873-Z50-81-89N	●	Sol/Sol COP	ISO 1	1230	2...16	4	M/P15737
SXE9874-Z50-81-33N	●	SXE9874-Z50-81-89N	●	Sol/Sol COP	ISO 2	2450	2...16	4	M/P15737
SXE9875-Z50-81-33N	●	SXE9875-Z50-81-89N	●	Sol/Sol COP	ISO 3	4400	2...16	4	M/P15737

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure.

Voltage codes and spare coils for 10 bar models

Voltage	22 mm Coil with connector interface acc. to Industrial Standard				22 mm Coil with connector interface acc. to DIN 43 650, table B				30 mm Coil with connector interface acc. to DIN 43 650, table A			
	Model	Code	Power inrush/hold		Model	Code	Power inrush/hold		Model	Code	Power inrush/hold	
24 V d.c.	QM/48/13J/21	13J	2 W		V10626-A13L	13L	2 W		V10633-A23N	23N	1,5 W	
220/240 V a.c. 50/60 Hz	QM/48/19J/21	19J	9/5 VA		V10626-A19L	19L	9/5 VA		V10633-A29N	29N	3/2 VA	

Other voltages available, please call your Express Team.

Voltage codes and spare coils for 16 bar models, (CNOMO only)

Voltage	30 mm Coil with connector interface acc. to DIN 43 650, table A			
	Model	Code	Power inrush/hold	
24 V d.c.	V10633-A33N	33N	4 W	
220/240 V a.c. 50/60 Hz	V10633-A89N	89N	10/8 VA	

Other voltages available, please call your Express Team.

EXPRESS LINKS

Connectors and cables

For a full selection of 22 mm and 30 mm DIN EN175301-803 Form C plugs and cables

See page 171



Models – Air Pilot Actuated

5/2 VALVES					5/3 VALVES						
Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)	Model	Actuation	Size	Flow (l/min)	Operating pressure (bar)		
											
SXP9573-180-00	●	Air/Spring	ISO 1	1230	-0,9...16	SXP9673-180-00	●	Air/Air APB	ISO 1	1230	-0,9...16
SXP9574-180-00	●	Air/Spring	ISO 2	2450	-0,9...16	SXP9674-180-00	●	Air/Air APB	ISO 2	2450	-0,9...16
SXP9575-170-00	●	Air/Spring	ISO 3	4400	-0,9...16	SXP9675-170-00	●	Air/Air APB	ISO 3	4400	-0,9...16
SXP0573-180-00	●	Air/Air	ISO 1	1230	-0,9...16	SXP9773-180-00	●	Air/Air COE	ISO 1	1230	-0,9...16
SXP0574-180-00	●	Air/Air	ISO 2	2450	-0,9...16	SXP9774-180-00	●	Air/Air COE	ISO 2	2450	-0,9...16
SXP0575-170-00	●	Air/Air	ISO 3	4400	-0,9...16	SXP9775-170-00	●	Air/Air COE	ISO 3	4400	-0,9...16
					SXP9873-180-00	●	Air/Air COP	ISO 1	1230	-0,9...16	
					SXP9874-180-00	●	Air/Air COP	ISO 2	2450	-0,9...16	
					SXP9875-170-00	●	Air/Air COP	ISO 3	4400	-0,9...16	

Note: ISO 1 and 2 with integral flow regulators.

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure.

Note: ISO 1 and 2 with integral flow regulators.

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure.

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UM/22000 Solenoid and pilot actuated spool valves

Sub-base 5/2 and 5/3, ISO #4

Models – UM/22000, ISO #4*

Accessories

SOLENOID ACTUATED VALVES		Actuation	Size	Flow (l/min)	Operating pressure (bar)	Basic plug
24 DC Push only M/O Model	220 AC Push only M/O Model					
						
UM/22456/172/61/13J	UM/22456/172/61/19J	5/2 Sol/Air Spring	ISO 4	5660	2,5...10	M/P19063
UM/22456/123/61/13J	UM/22456/123/61/19J	5/2 Sol/Sol	ISO 4	5660	2...10	M/P19063
UM/22456/6123/61/13J	UM/22456/6123/61/19J	5/3 Sol/Sol APB	ISO 4	5490	2,8...10	M/P19063

AIR PILOT ACTUATED VALVES		Actuation	Size	Flow (l/min)	Operating pressure (bar)
Model					
					
UM/22456/40		5/2 Air/Spring	ISO 4	5660	-0,9...16
UM/22456/3		5/2 Air/Air	ISO 4	5660	-0,9...16
UM/22456/63		5/3 Air/Air APB	ISO 4	5490	-0,9...16
UM/22466/63		5/3 Air/Air COE	ISO 4	5660	-0,9...16

APB = All Ports Blocked, COE = Centre Open Exhaust.

*Note: The UM/22000 series has a soft seal spool, not glandless

ISO★STAR AND UM/22000 Pilot solenoid actuated spool valves

Sub-base 5/2 and 5/3, ISO #1 ... ISO #4

BASES AND ACCESSORIES

Models

Accessories

VDMA 24345 SUB-BASES		Straight fitting	Elbow fitting	Silencer
Side ported Model	Size			
				
M/P19126	ISO 1	C02250828	C02470828	T40C2800
M/P19132	ISO 2	C02251038	C02471038	T40C3800
M/P19138	ISO 3	C02251248	C02471248	T40C4800
M/P19144	ISO 4	–	–	T40C6800

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ISO★STAR AND UM/22000 Solenoid and pilot actuated spool valves

Sub-base 5/2 and 5/3, ISO #1 ... ISO #4

BASES AND ACCESSORIES

Models

MANIFOLD Model	END PLATES Model	Size	Accessories				
			Straight fitting	Elbow fitting	Silencer	Blanking disk	Plugs
							
CQM/22152/3/21	●	ISO 1	C02250828	C02470828	–	FP 8382	–
CQM/22253/3/21	●	ISO 2	C02251038	C02471038	–	FP 8482	–
CQM/22354/3/21	●	ISO 3	C02251248	C02471248	–	FP 8582	–
CQM/22456/3/21	●	ISO 4	–	–	–	–	–



CQM/22152/3/22	●	ISO 1	C02251038	C02471038	T40C3800	–	160050038
CQM/22253/3/22	●	ISO 2	C02251248	C02471248	T40C4800	–	160050048
CQM/22354/3/22	●	ISO 3	–	–	T40C8800	–	160050088
CQM/22456/3/22	●	ISO 4	–	–	T40C8800	–	160050088

UNIVERSAL BASE OPTIONS							
Modular base	End plate	Size					
Side and bottom ported Model	End ports open Model		Straight fitting	Elbow fitting	Silencer	Blanking disk	Plugs
							
CQM/22152/3/27	●	ISO 1	C02250828	C02470828	–	M/P43173	–
CQM/22253/3/27	●	ISO 2	C02251038	C02471038	–	M/P43174	–



CQM/22152/3/31	●	ISO 1	C02251038	C02471038	T40C3800	–	160050038
CQM/22253/3/31	●	ISO 2	C02251248	C02471248	T40C4800	–	160050048

Accessories

Size	Single pressure regulator plate port 1 reg.	Single pressure regulator plate port 2 reg.	Single pressure regulator plate port 4 reg.	Double pressure regulator plate port 2 + 4 reg.
   				
ISO #1	V71010-KB1 ●	V71012-KB2 ●	V71012-KB3 ●	V71012-KB4 ●
ISO #2	V71010-KC1 ●	V71012-KC2 ●	V71012-KC3 ●	V71012-KC4 ●
ISO #3	V71010-KD1 ●	V71012-KD2 ●	V71012-KD3 ●	V71012-KD4 ●

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

V60 SERIES

IN-LINE VALVES ARE PROBABLY THE SINGLE MOST POPULAR STYLE OF CONTROL VALVE USED IN THE MAJORITY OF SIMPLE INDUSTRIAL APPLICATIONS. THE IMI NORGREN V60 SERIES IS ONE OF THE INDUSTRY'S LARGEST RANGE OF IN-LINE VALVES, WITH THOUSANDS OF PRODUCT COMBINATIONS.

Offering high flow together with a compact body size, V60 series valves can flow up to twice the value of older styles of similar spool valves. Not just simple – the series also includes twin 3/2 functions in one body, and 'twin coil' electrically operated versions where only one single connection is required.

→ Four sizes of valve, flowing 500 to 4,200 lit/min coupled with compact body size and a number of valve functions, to meet most requirements – allows use of smaller valves where possible, optimising space on a machine, improving aesthetics and reducing stockholding for production and spares requirements

- Quickly replaceable solenoid coils, choice of manual override and option of collected exhaust – highly adaptable, easy to use when carrying out commissioning duties or maintenance, and can be used in situations where contamination from exhausting air could be a hazard
- Manifold base system allows assembly of valves for more complex applications. Valve types can be mixed on one assembly and piped with multi-pressures- flexible and cost-effective, saving on installation time and component costs

HIGH FLOW
FOR BODY SIZE



MANIFOLD
SYSTEM



PNEUMATIC
PILOT OPTIONS



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

IN-LINE VALVES V60 ... 63 Series

3/2, 5/2, 5/3 and 2 x 3/2 solenoid actuated and air piloted G 1/8 ... G 1/2

The IMI Norgren V60 series represents one of the largest ranges of in line valves available today, offering flow rates from 500 to 4,200 l/min

Solenoid pilot or air operated, valves can also be manifold mounted for more complex yet still economic applications

TECHNICAL DATA

Medium:

Compressed air, filtered to 40µm, lubricated or non-lubricated

Operating pressure:

10 bar maximum, see individual tables

Flow:

500 – 4200 l/min

Voltage:

24 V d.c., 220 V a.c. (other options available)

Ambient and medium temperature:

–10°C ... +50°C

(consult our Technical Service for use below +2°C)

MATERIALS

Body/sub-base:

Aluminium

Softseal spool:

NBR/stainless steel

Springs:

Stainless steel



Models – 3/2 Valves

SOLENOID ACTUATED, INTERNAL PILOT, INDUSTRIAL STANDARD 22MM COIL
24 DC 220 AC Actuation Port Flow Operating Drawing
Push Only M/O Push Only M/O Size (l/min) pressure (bar) No.



V60A413A-A313J	V60A413A-A319J	Sol/Air spring NC	G1/8	750	2 ... 10	1
V61B413A-A313J	V61B413A-A319J	Sol/Air spring NC	G1/4	1300	2 ... 10	1
V62C413A-A313J	V62C413A-A319J	Sol/Air spring NC	G3/8	2600	2 ... 10	1
V63D413A-A313J	V63D413A-A319J	Sol/Air spring NC	G1/2	4200	2 ... 10	4
V60A417A-A313J	V60A417A-A319J	Sol/Spring NC	G1/8	750	2 ... 10	2
V61B417A-A313J	V61B417A-A319J	Sol/Spring NC	G1/4	1300	2 ... 10	2
V62C417A-A313J	V62C417A-A319J	Sol/Spring NC	G3/8	2600	2 ... 10	2
V63D417A-A313J	V63D417A-A319J	Sol/Spring NC	G1/2	4200	2 ... 10	5
V60A411A-A313J	V60A411A-A319J	Sol/Sol	G1/8	750	1,5 ... 10	3
V61B411A-A313J	V61B411A-A319J	Sol/Sol	G1/4	1300	1,5 ... 10	3
V62C411A-A313J	V62C411A-A319J	Sol/Sol	G3/8	2600	1,5 ... 10	3
V63D411A-A313J	V63D411A-A319J	Sol/Sol	G1/2	4200	2 ... 10	6

Note: For models with 22mm coil DIN EN 175301-803 (DIN 43650B) replace J by L.

Models – 2 x 3/2 Valves

SOLENOID ACTUATED, INTERNAL PILOT, INDUSTRIAL STANDARD 22MM COIL
24 DC 220 AC Actuation Port Flow Operating Drawing
Push Only M/O Push Only M/O size (l/min) pressure (bar) No.



V60AA11A-A313J	V60AA11A-A319J	Sol/Spring NC	G1/8	500	2 ... 10	7
V61BA11A-A313J	V61BA11A-A319J	Sol/Spring NC	G1/4	950	2 ... 10	7
V62CA11A-A313J	V62CA11A-A319J	Sol/Spring NC	G3/8	1900	2 ... 10	7

Note: For models with 22mm coil DIN EN 175301-803 (DIN 43650B) replace J by L.

Accessories

Straight fitting Elbow fitting Silencer Basic plug



C02250618	C02470618	T40C1800	M/P19063
C02250828	C02470828	T40C2800	M/P19063
C02251038	C02471038	T40C3800	M/P19063
C02251248	C02471248	T40C4800	M/P19063
C02250618	C02470618	T40C1800	M/P19063
C02250828	C02470828	T40C2800	M/P19063
C02251038	C02471038	T40C3800	M/P19063
C02251248	C02471248	T40C4800	M/P19063
C02250618	C02470618	T40C1800	M/P19063
C02250828	C02470828	T40C2800	M/P19063
C02251038	C02471038	T40C3800	M/P19063
C02251248	C02471248	T40C4800	M/P19063



C02250618	C02470618	T40C1800	M/P19063
C02250828	C02470828	T40C2800	M/P19063
C02251038	C02471038	T40C3800	M/P19063

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IN-LINE VALVES V60 ... 63 Series

Solenoid actuated 3/2, 5/2, 5/3 and 2 x 3/2

Models – 5/2 Valves

SOLENOID ACTUATED, INTERNAL PILOT, INDUSTRIAL STANDARD 22MM COIL							Straight fitting	Elbow fitting	Silencer	Basic plug
24 DC Push Only M/O	220 AC Push Only M/O	Actuation	Port size	Flow (l/min)	Operating pressure (bar)	Drawing No.				
										
V60A513A-A313J	V60A513A-A319J	Sol/Air spring	G1/8	750	2 ... 10	8	C02250618	C02470618	T40C1800	M/P19063
V61B513A-A313J	V61B513A-A319J	Sol/Air spring	G1/4	1300	2 ... 10	8	C02250828	C02470828	T40C2800	M/P19063
V62C513A-A313J	V62C513A-A319J	Sol/Air spring	G3/8	2600	2 ... 10	8	C02251038	C02471038	T40C3800	M/P19063
V63D513A-A313J	V63D513A-A319J	Sol/Air spring	G1/2	4200	3 ... 10	11	C02251248	C02471248	T40C4800	M/P19063
V60A517A-A313J	V60A517A-A319J	Sol/Spring	G1/8	750	3 ... 10	9	C02250618	C02470618	T40C1800	M/P19063
V61B517A-A313J	V61B517A-A319J	Sol/Spring	G1/4	1300	3 ... 10	9	C02250828	C02470828	T40C2800	M/P19063
V62C517A-A313J	V62C517A-A319J	Sol/Spring	G3/8	2600	3 ... 10	9	C02251038	C02471038	T40C3800	M/P19063
V63D517A-A313J	V63D517A-A319J	Sol/Spring	G1/2	4200	3 ... 10	12	C02251248	C02471248	T40C4800	M/P19063
V60A511A-A313J	V60A511A-A319J	Sol/Sol	G1/8	750	1,5 ... 10	10	C02250618	C02470618	T40C1800	M/P19063
V61B511A-A313J	V61B511A-A319J	Sol/Sol	G1/4	1300	1,5 ... 10	10	C02250828	C02470828	T40C2800	M/P19063
V62C511A-A313J	V62C511A-A319J	Sol/Sol	G3/8	2600	1,5 ... 10	10	C02251038	C02471038	T40C3800	M/P19063
V63D511A-A313J	V63D511A-A319J	Sol/Sol	G1/2	4200	2 ... 10	13	C02251248	C02471248	T40C4800	M/P19063

Note: For models with 22mm coil DIN EN 175301-803 [DIN 43650B] replace J by L.

Models – 5/3 Valves

Accessories

SOLENOID ACTUATED, INTERNAL PILOT, INDUSTRIAL STANDARD 22MM COIL							Straight fitting	Elbow fitting	Silencer	Basic plug
24 DC Push Only M/O	220 AC Push Only M/O	Actuation	Port size	Flow (l/min)	Operating pressure (bar)	Drawing No.				
										
V60A611A-A313J	V60A611A-A319J	Sol/Sol APB	G1/8	500	3 ... 10	14	C02250618	C02470618	T40C1800	M/P19063
V61B611A-A313J	V61B611A-A319J	Sol/Sol APB	G1/4	950	3 ... 10	14	C02250828	C02470828	T40C2800	M/P19063
V62C611A-A313J	V62C611A-A319J	Sol/Sol APB	G3/8	1900	3 ... 10	14	C02251038	C02471038	T40C3800	M/P19063
V63D611A-A313J	V63D611A-A319J	Sol/Sol APB	G1/2	2200	2,5 ... 10	15	C02251248	C02471248	T40C4800	M/P19063
V60A711A-A313J	V60A711A-A319J	Sol/Sol COE	G1/8	500	3 ... 10	14	C02250618	C02470618	T40C1800	M/P19063
V61B711A-A313J	V61B711A-A319J	Sol/Sol COE	G1/4	950	3 ... 10	14	C02250828	C02470828	T40C2800	M/P19063
V62C711A-A313J	V62C711A-A319J	Sol/Sol COE	G3/8	1900	3 ... 10	14	C02251038	C02471038	T40C3800	M/P19063
V63D711A-A313J	V63D711A-A319J	Sol/Sol COE	G1/2	2200	2,5 ... 10	15	C02251248	C02471248	T40C4800	M/P19063
V60A811A-A313J	V60A811A-A319J	Sol/Sol COP	G1/8	500	3 ... 10	14	C02250618	C02470618	T40C1800	M/P19063
V61B811A-A313J	V61B811A-A319J	Sol/Sol COP	G1/4	950	3 ... 10	14	C02250828	C02470828	T40C2800	M/P19063
V62C811A-A313J	V62C811A-A319J	Sol/Sol COP	G3/8	1900	3 ... 10	14	C02251038	C02471038	T40C3800	M/P19063

Note: For models with 22mm coil DIN EN 175301-803 [DIN 43650B] replace J by L.

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure

Voltage codes and spare coils

22MM COIL INDUSTRIAL STANDARD				22MM COIL DIN EN 175 301-803, TYPE B			
Model	Voltage	Coil code	Power inrush/hold	Model	Voltage	Coil code	Power inrush/hold
QM/48/13J/21	24 V d.c.	13J	2 W	V10626-A13L	24 V d.c.	13L	2 W
QM/48/19J/21	220/240 V 50/60 Hz	19J	6/5 VA	V10626-A19L	220/240 V 50/60 Hz	19L	6/5 VA

Connector plugs must be ordered separately. Other voltages available, please call your Express Team.

Models – Manifold system

FOR 2 X3/2, 5/2, 5/3 VALVES, SOLENOID OPERATED				Number of stations
V60	V61	V62		
				
2221002000000000	2221102000000000	2221202000000000		2
2221003000000000	2221103000000000	2221203000000000		3
2221004000000000	2221104000000000	2221204000000000		4
2221006000000000	2221106000000000	2221206000000000		6
2221008000000000	2221108000000000	2221208000000000		8
2221010000000000	2221110000000000	-		10
2221012000000000	2221112000000000	-		12

Not suitable for individual 3/2 valves.

EXPRESS LINKS

Connectors and cables

For a full selection of 22 mm Industrial Standard or DIN EN175301-803 Form B plugs and cables

See page 171



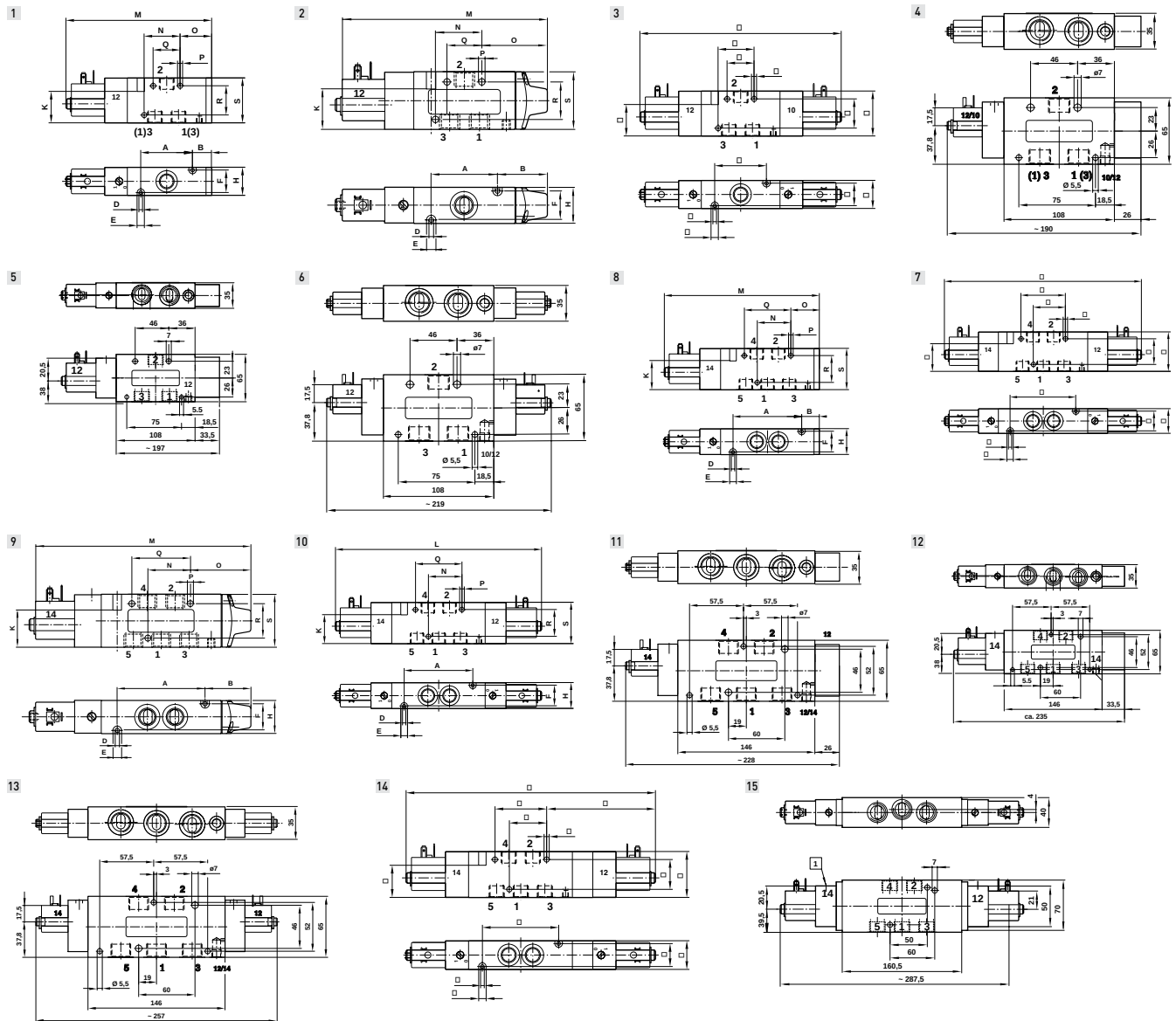
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IN-LINE VALVES V60 ... 63 Series

Solenoid actuated 3/2, 5/2, 5/3 and 2 x 3/2

Dimensions

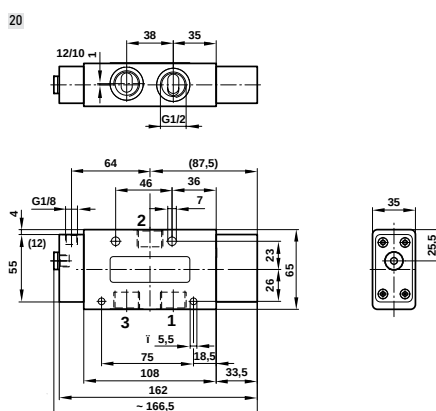
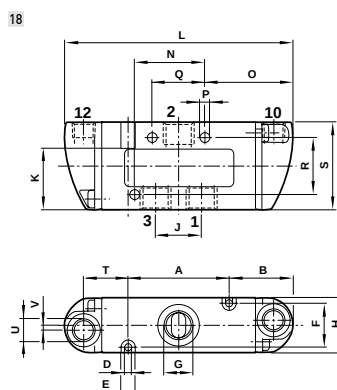
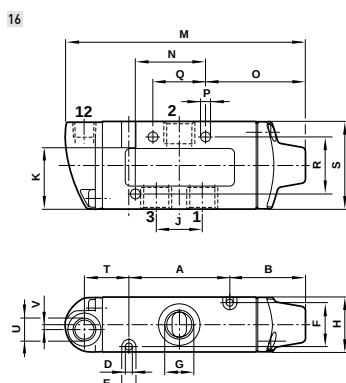
Drg. No.	Type	A	B	D	E	F	H	K	L	M	N	O	P	Q	R	S
1	V60	35	17	3,2	6,5	17	22	28	-	114	25	25	4,5	18	26	35
1	V61	46	20	3,2	6,5	20	25	28	-	132,5	32	31	4,5	24	26	40
1	V62	54	21	4,5	8	28	34	44	-	145	12	36	4,5	26	36	55
2	V60	35	27,4	3,2	6,5	17	22	28	-	125	25	35,9	4,5	18	26	35
2	V61	46	34,5	3,2	6,5	20	25	28	-	147	32	45,5	4,5	24	26	40
2	V62	54	43	4,5	8	28	34	44	-	166	26	58	4,5	26	36	55
3	V60	35	-	3,2	6,5	17	22	28	160	-	25	-	4,5	18	26	35
3	V61	46	-	3,2	6,5	20	25	28	179	-	32	-	4,5	24	26	40
3	V62	54	-	4,5	8	28	34	44	194	-	12	-	4,5	26	36	55
4	V63	See drawing for dimensions														
4	V63	See drawing for dimensions														
6	V63	See drawing for dimensions														
7	V60	50	-	3,2	6,5	17	22	28	175	-	25	-	4,5	33,6	26	35
7	V61	66	-	3,2	6,5	20	25	28	199	-	32	-	4,5	44	26	40
7	V62	78	-	4,5	8	28	34	44	218	-	12	-	4,5	26	36	55
8	V60	50	17	3,2	6,5	17	22	28	-	129	25	25	4,5	33,6	26	35
8	V61	66	20	3,2	6,5	20	25	28	-	152,5	32	31	4,5	44	26	40
8	V62	78	21	4,5	8	28	34	44	-	170	12	60	4,5	26	36	55
9	V60	50	17	3,2	6,5	17	22	28	-	140	25	35,7	4,5	33,6	26	35
9	V61	66	34,5	3,2	6,5	20	25	28	-	167	32	45,5	4,5	44	26	40
9	V62	78	43	4,5	8	28	34	44	-	191	12	82	4,5	26	36	55
10	V60	50	-	3,2	6,5	17	22	28	175	-	25	-	4,5	33,6	26	35
10	V61	66	-	3,2	6,5	20	25	28	199	-	32	-	4,5	44	26	40
10	V62	78	-	4,5	8	28	34	44	218	-	12	-	4,5	26	36	55
11	V63	See drawing for dimensions														
12	V63	See drawing for dimensions														
13	V63	See drawing for dimensions														
14	V60	50	-	3,2	6,5	17	22	28	-	189	25	84,5	4,5	33,6	26	35
14	V61	66	-	3,2	6,5	20	25	28	-	217	32	-	4,5	44	26	40
14	V62	78	-	4,5	8	28	34	44	-	241	12	132	4,5	26	36	55
15	V63	See drawing for dimensions														



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

Air pilot actuated 3/2

Accessories

[illegible]

Online at **store.norgren.com**

IN-LINE VALVES V60 ... 63 Series

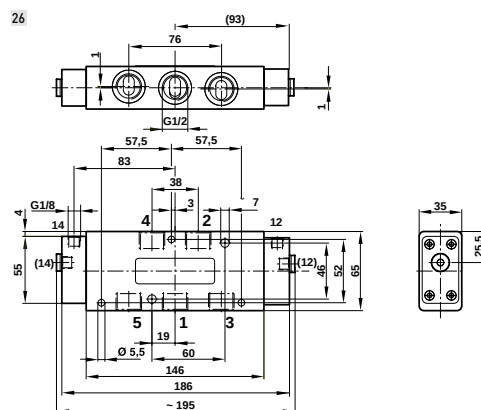
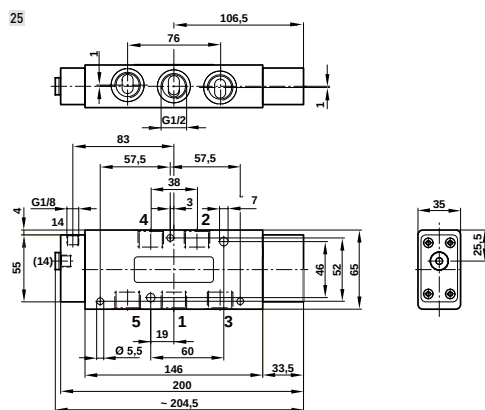
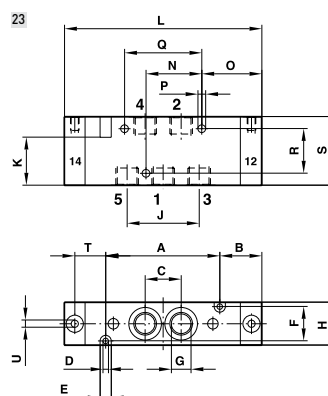
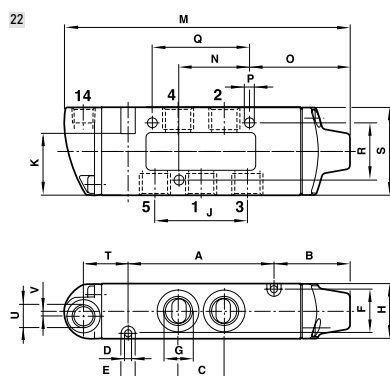
Air pilot actuated 5/2

Models – 5/2 Pilot actuated valves

Model	Actuation	Port size	Flow (l/min)	Operating pressure (bar)	Pilot pressure external (bar)	Drg. No.	Straight fitting	Elbow fitting	Pilot port fitting	Silencer
	 Air/Spring	G1/8	750	-0,9 ... 10	2,5 ... 10	22				
V60A5DDA-XA090	Air/Spring	G1/8	750	-0,9 ... 10	2,5 ... 10	22	C02250618	C02470618	C02250418	T40C1800
V61B5DDA-XA090	Air/Spring	G1/4	1300	-0,9 ... 10	2,5 ... 10	22	C02250828	C02470828	C02250418	T40C2800
V62C5DDA-XA090	Air/Spring	G3/8	2600	-0,9 ... 10	2,5 ... 10	22	C02251038	C02471038	C02250418	T40C3800
V63D5DDA-XA090	Air/Spring	G1/2	4200	-0,9 ... 16	3 ... 16	25	C02251248	C02471248	C02250418	T40C4800
V60A5DDA-XA020	Air/Air	G1/8	750	-0,9 ... 10	1,5 ... 10	23	C02250618	C02470618	C02250418	T40C1800
V61B5DDA-XA020	Air/Air	G1/4	1300	-0,9 ... 10	1,5 ... 10	23	C02250828	C02470828	C02250418	T40C2800
V62C5DDA-XA020	Air/Air	G3/8	2600	-0,9 ... 10	1,5 ... 10	23	C02251038	C02471038	C02250418	T40C3800
V63D5DDA-XA020	Air/Air	G1/2	4200	-0,9 ... 16	1,5 ... 16	26	C02251248	C02471248	C02250418	T40C4800

Dimensions

Drg. No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U
22	V60	50	27,5	16,2	3,2	6,5	17	G1/8; 8 deep	22	32,4	28	–	105	25	35,7	4,5	44	26	35	18,7	G1/8
22	V61	66	34,5	21	3,2	6,5	20	G1/4; 10 deep	25	42	28	–	130	32	45,5	4,5	26	26	40	20,2	G1/8
22	V62	78	43	24,5	4,5	8	28	G3/8; 11,5 deep	34	48,8	44	–	148	12	82	4,5	33,6	36	55	21	M5
23	V60	50	27,3	16,2	3,2	6,5	17	G1/8; 8 deep	22	32,4	28	104,5	–	25	35,5	4,5	44	26	35	18,7	G1/8
23	V61	66	29	21	3,2	6,5	20	G1/4; 10 deep	25	42	28	124	–	32	40	4,5	26	26	40	20,2	G1/8
23	V62	78	27	24,4	4,5	8	28	G3/8; 11,5 deep	34	48,8	44	132	–	12	66	4,5	33,6	36	55	21	M5
25	V63	See drawing for dimensions																			
26	V63	See drawing for dimensions																			



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

IN-LINE VALVES V50 ... 53 Series

3/2, 5/2 and 5/3. Solenoid actuated G1/8...G1/2



MATERIALS

Body/sub-base:

Die-cast aluminium alloy or aluminium alloy

Softseal spool:

NBR/aluminium alloy

Springs:

Stainless steel

High flow in-line valves

Compact and robust design

Flexible in-line and manifold mounting options

TECHNICAL DATA

Medium:

Compressed air, filtered to 40µm, lubricated or non-lubricated

Operating pressure:

8 bar maximum

Flow:

270 – 2480 l/min

Voltage:

24 V d.c. (other options available)

Ambient and medium temperature:

–5°C ... +50°C solenoid models
(consult our Technical Service for use below +2°C)

Accessories

Models

V50 – G1/8, 24 V d.c., Push & turn M/O, DIN EN 175301-803 Form C*

Model	Function	Actuation	Flow	Drawing No.	Straight fitting	Elbow fitting	Silencer	
								
V50A413A-A213A	●	3/2	Sol/Air	480	1	C02250618	C02470618	T40C1800
V50A411A-A213A	●	3/2	Sol/Sol	480	3	C02250618	C02470618	T40C1800
V50A513A-A213A	●	5/2	Sol/Air	480	5	C02250618	C02470618	T40C1800
V50A511A-A213A	●	5/2	Sol/Sol	480	7	C02250618	C02470618	T40C1800
V50A611A-A213A	●	5/3 APB	Sol/Sol	270	9	C02250618	C02470618	T40C1800
V50A711A-A213A	●	5/3 COE	Sol/Sol	270	9	C02250618	C02470618	T40C1800
V50A811A-A213A	●	5/3 COP	Sol/Sol	270	9	C02250618	C02470618	T40C1800

V51 – G1/4, 24 V d.c., Push & turn M/O, Industrial standard 22mm Coil*

Model		Function	Actuation	Flow	Drawing No.	Straight fitting	Elbow fitting	Silencer
V51B417A-A213J	●	3/2	Sol/Spring	1020	2	C02250828	C02470828	T40C2800
V51B411A-A213J	●	3/2	Sol/Sol	1020	4	C02250828	C02470828	T40C2800
V51B517A-A213J	●	5/2	Sol/Spring	1020	6	C02250828	C02470828	T40C2800
V51B511A-A213J	●	5/2	Sol/Sol	1020	8	C02250828	C02470828	T40C2800
V51B611A-A213J	●	5/3 APB	Sol/Sol	755	10	C02250828	C02470828	T40C2800
V51B711A-A213J	●	5/3 COE	Sol/Sol	755	10	C02250828	C02470828	T40C2800
V51B811A-A213J	●	5/3 COP	Sol/Sol	755	10	C02250828	C02470828	T40C2800

V52 – G3/8, 24 V d.c., Push & turn M/O, Industrial standard 22mm Coil*

Model		Function	Actuation	Flow	Drawing No.	Straight fitting	Elbow fitting	Silencer
V52C417A-A213J	●	3/2	Sol/Spring	1705	2	C02251038	C02471038	T40C3800
V52C411A-A213J	●	3/2	Sol/Sol	1705	4	C02251038	C02471038	T40C3800
V52C517A-A213J	●	5/2	Sol/Spring	1705	6	C02251038	C02471038	T40C3800
V52C511A-A213J	●	5/2	Sol/Sol	1705	8	C02251038	C02471038	T40C3800
V52C611A-A213J	●	5/3 APB	Sol/Sol	1190	11	C02251038	C02471038	T40C3800
V52C711A-A213J	●	5/3 COE	Sol/Sol	1190	11	C02251038	C02471038	T40C3800
V52C811A-A213J	●	5/3 COP	Sol/Sol	1190	11	C02251038	C02471038	T40C3800

V53 – G1/2, 24 V d.c., Push & turn M/O, Industrial standard 22mm Coil*

Model	Function	Actuation	Flow	Drawing No.	Straight fitting	Elbow fitting	Silencer	
V53D417A-A213J	●	3/2	Sol/Spring	2480	2	C02251248	C02471248	T40C4800
V53D411A-A213J	●	3/2	Sol/Sol	2480	4	C02251248	C02471248	T40C4800
V53D517A-A213J	●	5/2	Sol/Spring	2480	6	C02251248	C02471248	T40C4800
V53D511A-A213J	●	5/2	Sol/Sol	2480	8	C02251248	C02471248	T40C4800
V53D611A-A213J	●	5/3 APB	Sol/Sol	1910	11	C02251248	C02471248	T40C4800
V53D711A-A213J	●	5/3 COE	Sol/Sol	1910	11	C02251248	C02471248	T40C4800
V53D811A-A213J	●	5/3 COP	Sol/Sol	1910	11	C02251248	C02471248	T40C4800

*All valves supplied with basic wireable connectors.

Pilot actuated versions also available, please contact your Express team for further details

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

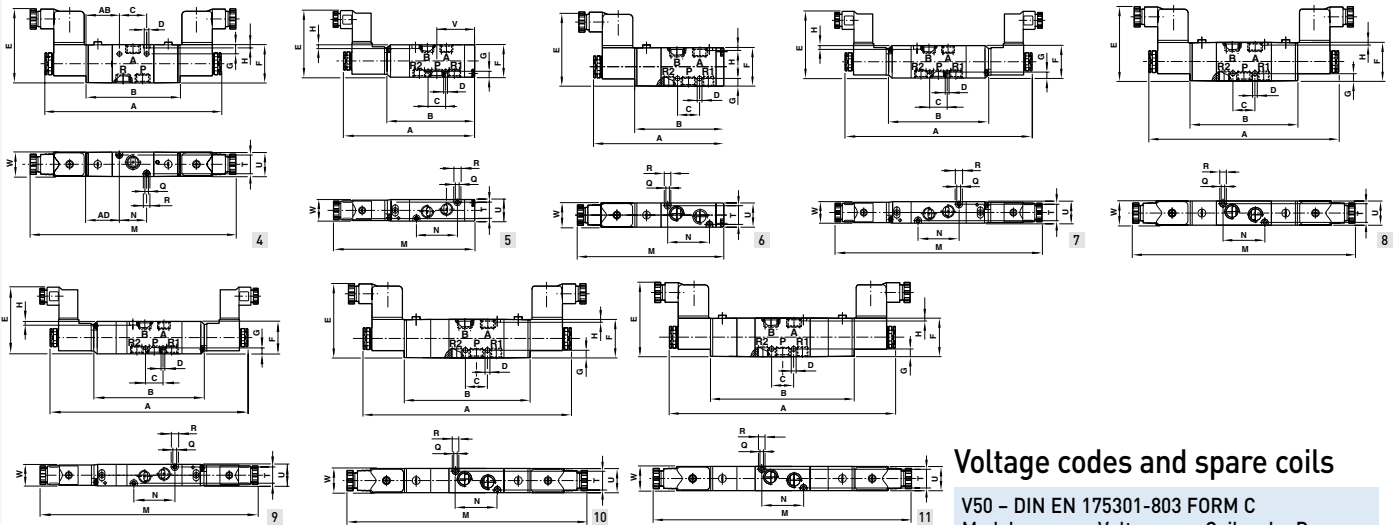
IN-LINE VALVES V50 ... 53 Series

3/2, 5/2 and 5/3. Solenoid actuated G1/8... G1/2

DIMENSIONS

Drg. No.	Type	A	AB	AC	AD	B	C	D	E	F	G	H	M	N	Q	R	T	U	W
1	V50	99,5	13,5	-	15,5	65	15	3,2	55,5	27	5	3	108	23	3,2	6	13	18	16
2	V51	106,5	13,5	-	13,5	69	25	4,2	67	35	8,5	3	120	25	3,2	6	17	22,5	22
2	V52	126,5	13	-	15	89	26	4,5	73	46,5	39,5	4	139,5	41	4,5	8	23	30	22
2	V53	133	12,5	-	15	96	29	4,5	73	46,5	39,5	4	146	48	4,2	8	23	30	22
3	V50	144,5	36,5	29	27	76,5	15	3,2	55,5	27	5	3	161,5	23	3,2	6	13	18	16
4	V51	144,5	30,5	34	30,5	86	25	4,2	67	35	8,5	3	188	25	3,2	6	17	22,5	22
4	V52	182	31	44	33	107	26	4,5	73	46,5	39,5	4	208	41	4,5	8	23	30	22
4	V53	188	30,5	45	33	114	29	4,5	73	46,5	39,5	4	214	48	4,2	8	23	30	22

Drg. No.	Type	A	B	C	D	E	F	G	H	M	N	Q	R	T	U	W
5	V50	110	76	14,5	3,2	54	27	5	3	118,5	34	3,2	6	13	18	16
6	V51	118,5	81	20	4,2	67	35	7	3	132	38	3,2	6	17	22,5	22
6	V52	145,5	108	26	5,5	73	46,5	4,5	4	158,5	13	4,5	8	23	30	22
6	V53	157	120	29	4,5	73	46,5	7	4	170	72	4,2	8	23	30	22
7	V50	155	87	14,5	3,2	55	27	5	3	172	34	3,2	6	13	18	16
8	V51	173	98	20	4,2	67	35	7	3	200	38	3,2	6	17	22,5	22
8	V52	201	126	26	5,5	73	46,5	4,5	4	228	13	4,5	8	23	30	22
8	V53	212	138	29	4,5	73	46,5	7	4	238	72	4,2	8	23	30	22
9	V50	164	96	14,5	3,2	55	27	5	3	181	34	3,2	6	13	18	16
10	V51	194	119	20	4,2	67	35	7	3	221	38	3,2	6	17	22,5	22
11	V52	254,5	179,5	26	5,5	73	46,5	4,5	4	281,5	13	4,5	8	23	30	22
11	V53	265,5	191,5	29	4,5	73	46,5	7	4	291,5	72	4,2	8	23	30	22



Models – Manifolds

Stations	Valve type	V50 model	Port size	Blanking plate	V51 model	Port size	Blanking plate	V52 model	Port size	Blanking plate	V53 model	Port size	Blanking plate
2	3/2	V50A302	● G1/4	V500351	V51B302	● G1/4	V510351	V52C302	● G3/8	V520351	V53D302	● G1/2	V530351
4	3/2	V50A304	● G1/4	V500351	V51B304	● G1/4	V510351	V52C304	● G3/8	V520351	V53D304	● G1/2	V530351
6	3/2	V50A306	● G1/4	V500351	V51B306	● G1/4	V510351	V52C306	● G3/8	V520351	V53D306	● G1/2	V530351
8	3/2	V50A308	● G1/4	V500351	V51B308	● G1/4	V510351	V52C308	● G3/8	V520351	V53D308	● G1/2	V530351
10	3/2	V50A310	● G1/4	V500351	V51B310	● G1/4	V510351	V52C310	● G3/8	V520351	V53D310	● G1/2	V530351
2	5/2	V50A502	● G1/4	V500551	V51B502	● G1/4	V510551	V52C502	● G3/8	V520551	V53D502	● G1/2	V530551
4	5/2	V50A504	● G1/4	V500551	V51B504	● G1/4	V510551	V52C504	● G3/8	V520551	V53D504	● G1/2	V530551
6	5/2	V50A506	● G1/4	V500551	V51B506	● G1/4	V510551	V52C506	● G3/8	V520551	V53D506	● G1/2	V530551
8	5/2	V50A508	● G1/4	V500551	V51B508	● G1/4	V510551	V52C508	● G3/8	V520551	V53D508	● G1/2	V530551
10	5/2	V50A510	● G1/4	V500551	V51B510	● G1/4	V510551	V52C510	● G3/8	V520551	V53D510	● G1/2	V530551

EXPRESS LINKS

V50...53 Valves

Are supplied with basic wireable connectors as standard.

For a further selection of cables and connectors please see page 171



Voltage codes and spare coils

V50 – DIN EN 175301-803 FORM C

Model	Voltage	Coil code	Power
V12958-A13	24 V d.c.	13A	2,5 W

V51...V53 – 22 MM INDUSTRIAL STANDARD

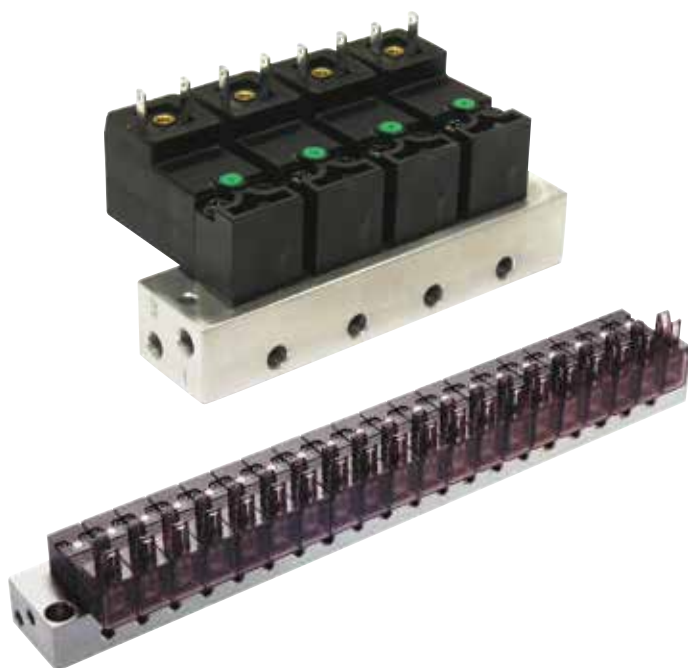
Model	Voltage	Coil code	Power
QM/48/13J/21	24 V d.c.	13J	2 W

Other voltages available, call your Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VE SERIES

Individually wired compact valve manifolds, 2/2, 3/2



Extremely compact 10 and 15 mm wide design

High flow rate

Low power consumption

High cycling rates up to 2,000 cpm

Long life in excess of 100 million cycles

TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated or non-lubricated

Operation:

Poppet valve, direct acting and pilot

Ambient temperature:

5°C ... +50°C

Models - Individually wired moxex connector

Picosol 2/2 normally closed

Model	Actuation	Port size	Flow (l/min)	Operating pressure	Voltage	Solenoid power (watts)	Drg. No.	Straight fitting	Elbow fitting	2-pin connector 1m
 VE10**WSA13-040	2/2 NC	M5	13	0 ... 8	24 V d.c.	1,2	1	 M02250405	 M02470405	 V11556-E10

** Insert number of stations 01, 02, 04, 06, 08 – other options are available, please call your Express Team

Picosol 3/2 normally closed

Model	Actuation	Port size	Flow (l/min)	Operating pressure	Voltage	Solenoid power (watts)	Drg. No.	Straight fitting	Elbow fitting	Silencer	2-pin connector 1m
 VE10**WSA33-001	3/2 NC	M5	12	2 ... 8	24 V d.c.	1,2	2	 M02250405	 M02470405	 T40M0500	 V11556-E10

** Insert number of stations 01, 04, 06, 08 – other options are available, please call your Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

VE SERIES

Individually wired compact valve manifolds, 2/2, 3/2

Models - Individually wired amp connector

Microsol 2/2 normally closed

Model	Actuation	Port size	Flow (l/min)	Operating pressure	Voltage	Solenoid power (watts)	Drg. No.	Straight fitting	Elbow fitting	2-pin connector 1m
 VE15**ASA13-043	 2/2 NC	M5	48	0 ... 10	24 V d.c.	2	4	 C02250405	 C02470405	 V10027-D00

** Insert number of stations 01, 02, 04, 06, 08 – other options are available, please call your Express Team

Microsol 3/2 normally closed

Model	Actuation	Port size	Flow (l/min)	Operating pressure	Voltage	Solenoid power (watts)	Drg. No.	Straight fitting	Elbow fitting	Silencer	2-pin connector 1m
 VE15**ASA33-002	 3/2 NC	M5	18	0 ... 10	24 V d.c.	1,5	4	 C02250405	 C02470405	 T40M0500	 V10027-D00
VE15**ASA38-001	 3/2 NC	M5	18	0 ... 10	110 V a.c.	1	4	 C02250405	 C02470405	 T40M0500	 V10027-D00
VE15**ASA39-001	 3/2 NC	M5	18	0 ... 10	220 V a.c.	1	4	 C02250405	 C02470405	 T40M0500	 V10027-D00

** Insert number of stations 01, 04, 06, 08 – other options are available, please call your Express Team

Dimensions

Drawing no. 1

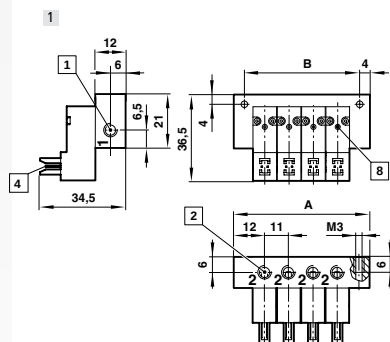
No. of stations	A	B
01	24	16
02	35	27
04	57	49
06	79	71
08	101	93

Drawing no. 2

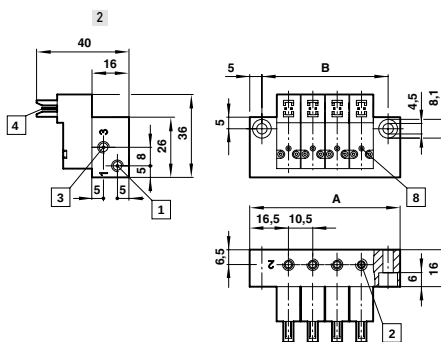
No. of stations	A	B
01	34	23,5
04	65	54,5
06	86	75,5
08	107	96,5

Drawing no. 4

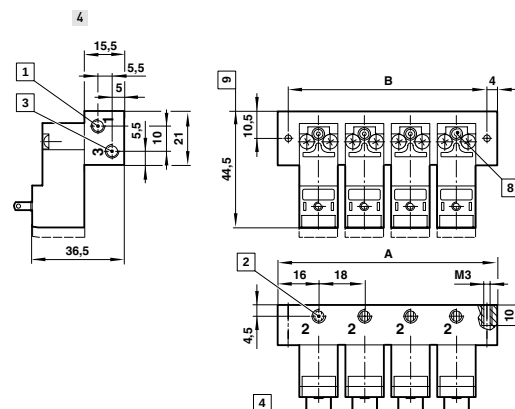
No. of stations	A	B
01	32	24
02	50	42
04	86	78
06	122	114
08	158	150



- 1 Inlet ports (both ends): M5 - 5 deep
- 2 Outlet ports: M5 - 5 deep
- 4 For 2-pin connector only
- 8 Manual override



- 1 Inlet ports (both ends): metric M5, imperial 10/32 UNF
- 2 Outlet ports: metric M5, imperial 10/32 UNF
- 3 Exhaust port (both ends): metric M5, imperial 10/32 UNF
- 4 For 2-pin connector only
- 5 Manual override



- 1 Inlet ports (both ends): M5 - 6 deep
- 2 Outlet ports: M5 - 6 deep
- 3 Exhaust ports (both ends): M5 - 6 deep
- 4 AMP 2,8 x 0,5 connection
- 8 Manual override
- 9 2/2 N/C & 3/2 N/C

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATED 22 MM POPPET VALVES

Excel 22, M/49 series

In-line and sub-base mounted – 3/2, NC, G1/8



Sub-base mounted and manifold mounted – compact and convenient

Manual override as standard

TECHNICAL DATA

Medium:

Compressed air, filtered to 40µm, lubricated or non-lubricated

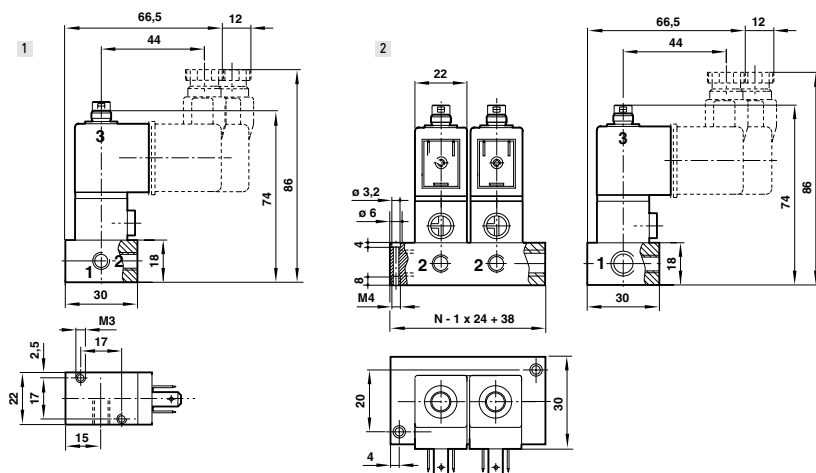
Operating pressure:

0 ... 10 bar

Ambient temperature:

-20°C ... +50°C

Consult our Technical Service for use below +2°C.



Models

1MM ORIFICE low power Model	Actuation	Port size	Flow (l/min)	Operating pressure (bar)	Mounting	Drawing No.	Straight fitting	Elbow fitting	Basic plug	
										
M/49/MAZ***		3/2 NC	G1/8	30	0...10	Single	1	C02250618	C02470618	M/P19063
DM/49/MAZ***/T#		3/2 NC	G1/8	30	0...10	Manifold	2	C02250618	C02470618	M/P19063

1,6MM ORIFICE Model	Actuation	Port size	Flow (l/min)	Operating pressure (bar)	Mounting	Drawing No.	Straight fitting	Elbow fitting	Basic plug



*** Insert voltage codes from table below. # Add number of valves in manifold up to 6 maximum.
Order connector plugs separately.

Voltage codes and spare coils

Voltage	1,0 mm orifice (low power)			1,6 mm orifice		
	Code	Power	Coil	Code	Power	Coil
12 V d.c.	12J	2 W	QM/48/12J/21	82J	7,5 W	QM/48/82J/21
24 V d.c.	13J	2 W	QM/48/13J/21	83J	6 W	QM/48/83J/21
24 V 50/60 Hz	14J	4/2,5 VA	QM/48/14J/21	84J	12/8 VA	QM/48/84J/21
110/120 V 50/60 Hz	18J	4/2,5 VA	QM/48/18J/21	88J	12/8 VA	QM/48/88J/21
220/240 V 50/60 Hz	19J	6/5 VA	QM/48/19J/21	89J	12/8 VA	QM/48/89J/21

EXPRESS LINKS

Connectors and cables

For a full selection of 22 mm Industrial Standard plugs and cables please see page 171



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATED 32 MM POPPET VALVES

Excel 32 V04 & V05 Series

In-line and sub-base mounted 2/2 and 3/2, NO/NC G1/8, G1/4

Extensive range of power and orifice size options

Compact installation

Removeable coil

Standard exhaust diffuser



TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated and non-lubricated

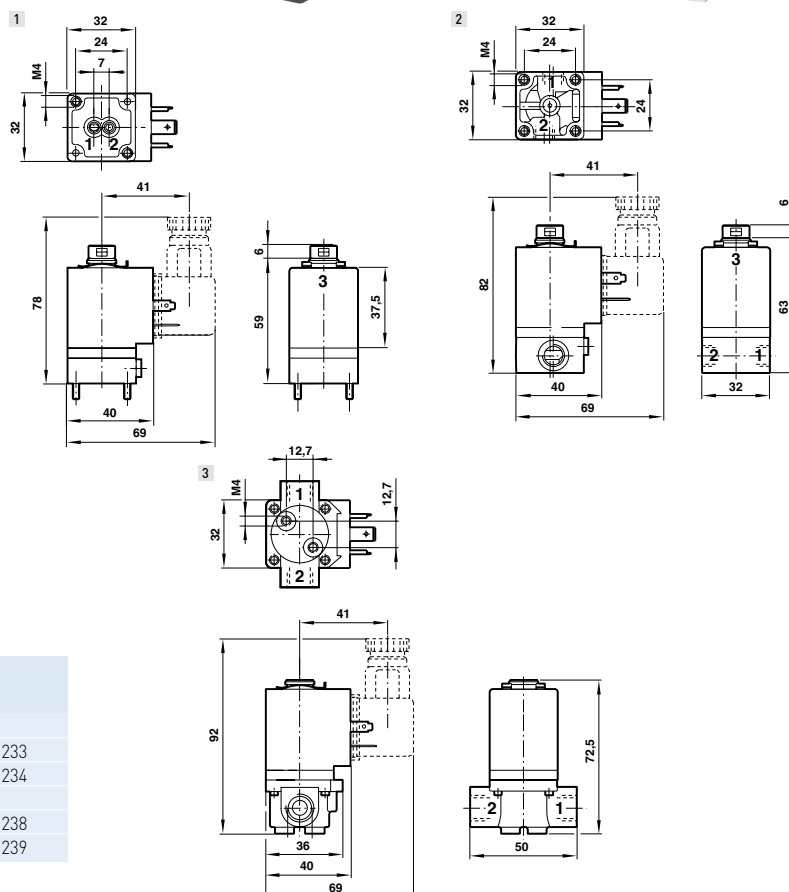
Operating pressure:

Maximum 16 bar. See individual details

Ambient temperature:

-20°C ... +50°C

Consult our Technical Service for use below +2°C



Voltage codes and spare coils

Voltage	Code	Coil V04	V05
12 V d.c.	2	V04X286A-Q1222	-
24 V d.c.	3	V04X286A-Q1223	V05X286A-Q1233
24 V 50/60 Hz	4	V04X286A-Q1224	V05X286A-Q1234
48 V 50/60 Hz	6	V04X286A-Q1226	-
110 ... 120 V 50/60 Hz	8	V04X286A-Q1228	V05X286A-Q1238
220 ... 240 V 50/60 Hz	9	V04X286A-Q1229	V05X286A-Q1239

Models

Model	Actuation	Port size	Flow (l/min)	Operating pressure (bar)	Drawing No.

Accessories

Straight fitting	Elbow fitting	Basic plug



V05X286M-B63*A	2/2 NC	Interface	150	0...16	1	C02250618	C02470618	M/P15737
V04A286M-B62*A	2/2 NC	G1/8	190	0...10	2	C02250618	C02470618	M/P15737
V04B286M-B42*A	2/2 NC	G1/4	190	0...10	3	C02250618	C02470618	M/P15737
V05B286N-B43*A	2/2 NC	G1/4	260	0...13	3	C02250618	C02470618	M/P15737
V04X386L-B62*A	3/2 NO	Interface	95	0...10	1	C02250618	C02470618	M/P15737
V04A386L-B62*A	3/2 NO	G1/8	120	0...10	2	C02250618	C02470618	M/P15737
V04X486L-B62*A	3/2 NC	Interface	95	0...10	1	C02250618	C02470618	M/P15737
V05X486M-B63*A	3/2 NC	Interface	150	0...10	1	C02250618	C02470618	M/P15737
V04A486L-B62*A	3/2 NC	G1/8	120	0...10	2	C02250618	C02470618	M/P15737
V05A486M-B63*A	3/2 NC	G1/8	190	0...10	2	C02250618	C02470618	M/P15737

* Insert voltage codes from table above. Order connector plugs separately.

For interface valves use manifold M/P35598/#. # = number of stations from 1 ... 6

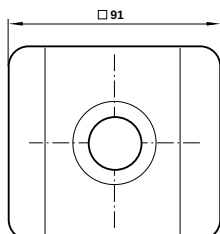
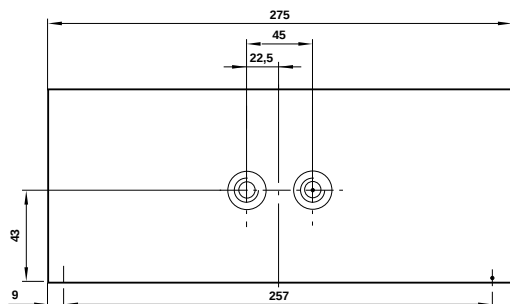
For more details, see full datasheet.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

TWO-HAND CONTROL UNIT

M/2720

3/2 G1/8



Certificate of Conformity supplied with every unit

Notified Body Approval from BSI Testing

Meets the requirements of EN574 Class IIIB*

Both hands must be engaged simultaneously

Single fault tolerant

Protection against accidental operation

No setting or adjustment required

TECHNICAL DATA

Medium:

Compressed air filtered to 40 µm, lubricated or non-lubricated.

Operating pressure:

3 ... 8 bar

Ambient temperature:

+5°C ... +40°C

Consult our Technical Service for use below +2°C

*The scope of the Machinery Directive encompasses safety components as well as machinery, and since two-hand control units are classed as safety components this requires the M/2720 to satisfy the essential health and safety requirements of the Directive. One method of ensuring this is to conform with published European Norm (EN) Standards. In the case of the M/2720 the main standard is EN574 Safety of Machinery – Two Hand Control Devices, Functional Aspects – Principles for Design. This standard classifies two-hand controls into various types, each requiring minimum performance and safety characteristics, such as simultaneous operation, fault tolerance, prevention of accidental operation etc. In addition, the M/2720 is dimensionally identical to the M/2710 which it directly replaces.

Models

Model	Function	Switch 'On'	Switch 'Off'
M/2720 ●	3/2 Normally closed	Both buttons must be operated within 0,5 secs	0,6 sec maximum following release of either button

Accessories

Straight fitting (inlet)	Straight fitting (outlet)
	
C01250818	C01250618

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SUPER X SERIES

LAUNCHED ALMOST 50 YEARS AGO AND STILL ONE OF THE MOST POPULAR MANUAL AND MECHANICAL VALVE RANGES IN THE INDUSTRY, SUPER X WAS ORIGINALLY KNOWN AS THE 'ENOTS INTEGRAL' SERIES.

Strong, robust and reliable, they employ a mixture of custom-made and electrical style operating heads on a modular body system covering 3/2, 5/2 and 5/3 functions. Newer options now include many 3/2 versions with a moulded body having either threaded ports or integral push-in fittings.

For heavier applications, traditional die-cast bodies are still available. SuperX are used extensively throughout industry, including many on-board road and rail vehicles where IMI Precision Engineering's record speaks for itself. In addition to the standard catalogued series, IMI Precision Engineering also produces many special options covering more diverse applications.

- Compact, high flow for body size with electrical style operators – complete integration with other control systems and aesthetically pleasing
- Wide range of operators in all functions, able to meet most control requirements – best use of standard product with total flexibility and minimum spares holding and inventory count
- Moulded body available with integral PIFs – up to 20% smaller and lighter than traditional valve, quicker to install with no pre-assembly required

LIGHTER AND MORE COMPACT

STRONG MECHANICAL OPERATORS

RECYCLABLE MATERIAL



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

IN-LINE VALVES Super X

Manually & mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4



The Super X series has been used throughout all kinds of industry for almost 50 years so is tried, trusted, and highly reliable

Features a combination of moulded polymer bodies (most 3/2 versions – see detail) with threaded ports or integral push in fittings and more traditional die cast aluminium

Electrical style manual operators offer ease of use, and include several special use versions which can be used to comply with health and safety requirements

TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated and non-lubricated

Operating pressure:

Maximum 10 bar.

Ambient temperature:

0°C ... +70°C

Consult our Technical Service for use below +2°C.

Models – 3/2 Mechanical Valves

Accessories

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
	03029302 ● Roller lever (heavy duty)/Spring	G1/8	335	A, 10			
	03029332 ● Roller lever (heavy duty)/Spring	6mm	335	A, 10	–	–	100110600
	03040202 ● Roller/Spring	G1/8	335	A, 2	C02250618	C02470618	T40C1800
	03040232 ● Roller/Spring	6mm	335	A, 2	–	–	100110600
	03060202 ● Roller/Spring	G1/4	965	B, 6	C02250828	C02470828	T40C2800
	03041102 ● Roller lever/Spring	G1/8	335	A, 4	C02250618	C02470618	T40C1800
	03041132 ● Roller lever/Spring	6mm	335	A, 4	–	–	100110600
	03061102 ● Roller lever/Spring	G1/4	965	B, 9	C02250828	C02470828	T40C2800
	03040002 ● Plunger/Spring	G1/8	335	A, 1	C02250618	C02470618	T40C1800
	03040032 ● Plunger/Spring	6mm	335	A, 1	–	–	100110600
	03060002 ● Plunger/Spring	G1/4	965	B, 3	C02250828	C02470828	T40C2800
	03042302 ● Sensitive roller lever/Spring	G1/8	335	A, 5	C02250618	C02470618	T40C1800
	03043202 ● Antenna/Spring	G1/8	335	A, 8	C02250618	C02470618	T40C1800

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

IN-LINE VALVES Super X

Manually and mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4

Models – 5/2 Mechanical Valves

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
 X3039302 ●	Roller lever (heavy duty)/Spring	G1/8	335	E, 10			
X3045102 ●	Roller lever/Spring	G1/8	335	E, 4	C02250618	C02470618	T40C1800
X3065102 ●	Roller lever/Spring	G1/4	965	F, 9	C02250828	C02470828	T40C2800
 X3044202 ●	Roller/Spring	G1/8	335	E, 2	C02250618	C02470618	T40C1800
X3064202 ●	Roller/Spring	G1/4	965	F, 6	C02250828	C02470828	T40C2800
 X3046302 ●	Sensitive roller lever/Spring	G1/8	335	E, 5	C02250618	C02470618	T40C1800
 X3047202 ●	Antenna/Spring	G1/8	335	E, 8	C02250618	C02470618	T40C1800

Accessories

Models – 3/2 Manual Valves

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
 03029602 ●	Lever/lever	G1/8	335	–			
 03040302 ●	Toggle/toggle	G1/8	335	A, 24	C02250618	C02470618	T40C1800
03040332 ●	Toggle/toggle	6mm	335	A, 24	–	–	100110600
 03043702 ●	Lever/lever	G1/8	335	A, 23	C02250618	C02470618	T40C1800
03063702 ●	Lever/lever	G1/4	965	B, 31	C02250828	C02470828	T40C2800
 03041902 ●	Rotary knob/rotary knob	G1/8	335	A, 27	C02250618	C02470618	T40C1800
03041932 ●	Rotary knob/rotary knob	6mm	335	A, 27	–	–	100110600
 03042802 ●	Emergency stop/twist ring	G1/8	335	A, 16	C02250618	C02470618	T40C1800
03042832 ●	Emergency stop/twist ring	6mm	335	A, 16	–	–	100110600

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

IN-LINE VALVES Super X

Manually and mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4

Models – 3/2 Manual Valves

Accessories

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
							
03040402	Black – Button/spring	G1/8	335	A, 12	C02250618	C02470618	T40C1800
03040432	Black – Button/spring	6mm	335	A, 12	–	–	100110600
03040502	Green – Button/spring	G1/8	335	A, 12	C02250618	C02470618	T40C1800
03040532	Green – Button/spring	6mm	335	A, 12	–	–	100110600
03040602	Red – Button/spring	G1/8	335	A, 12	C02250618	C02470618	T40C1800
03040632	Red – Button/spring	6mm	335	A, 12	–	–	100110600
							
03041402	Black – Button (shrouded)/spring	G1/8	335	A, 13	C02250618	C02470618	T40C1800
03041432	Black – Button (shrouded)/spring	6mm	335	A, 13	–	–	100110600
03041502	Green – Button (shrouded)/spring	G1/8	335	A, 13	C02250618	C02470618	T40C1800
03041532	Green – Button (shrouded)/spring	6mm	335	A, 13	–	–	100110600
03041602	Red – Button (shrouded)/spring	G1/8	335	A, 13	C02250618	C02470618	T40C1800
03041632	Red – Button (shrouded)/spring	6mm	335	A, 13	–	–	100110600
							
03042402	Knob/knob or pilot	G1/8	335	D, 21	C02250618	C02470618	T40C1800
03062702	Knob/knob or pilot	G1/4	965	D, 20	C02250828	C02470828	T40C2800
							
03042502	Knob/knob	G1/8	335	A, 21	C02250618	C02470618	T40C1800
03042532	Knob/knob	6mm	335	A, 21	–	–	100110600
03062502	Knob/knob	G1/4	965	B, 20	C02250828	C02470828	T40C2800
							
03048102	Pedal/spring	G1/8	335	29	C02250618	C02470618	T40C1800
03068102	Pedal/spring	G1/4	965	29	C02250828	C02470828	T40C2800
							
03043802	Lever/spring	G1/8	335	A, 23	C02250618	C02470618	T40C1800
03063802	Lever/spring	G1/4	965	B, 31	C02250828	C02470828	T40C2800

Models – 5/2 Manual Valves

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
							
X3029602	Lever/lever	G1/8	335	–	C02250618	C02470618	T40C1800
							
X3044302	Toggle/toggle	G1/8	335	E, 24	C02250618	C02470618	T40C1800

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

IN-LINE VALVES Super X

Manually and mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4

Models – 5/2 Manual Valves

Accessories

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
							
X3047702 ●	Lever/lever	G1/8	335	E, 23	C02250618	C02470618	T40C1800
X3067702 ●	Lever/lever	G1/4	965	F, 31	C02250828	C02470828	T40C2800
							
X3045902 ●	Rotary knob/rotary knob	G1/8	335	E, 27	C02250618	C02470618	T40C1800
							
X3046802 ●	Emergency stop/twist ring	G1/8	335	E, 16	C02250618	C02470618	T40C1800
							
X3045802801 ●	Key/key	G1/8	335	E, 28	C02250618	C02470618	T40C1800
							
X3046402 ●	Knob/knob or pilot	G1/8	335	G, 21	C02250618	C02470618	T40C1800
							
X3046502 ●	Knob, push/knob, pull	G1/8	335	E, 26	C02250618	C02470618	T40C1800
X3066502 ●	Knob, push/knob, pull	G1/4	965	F, 20	C02250828	C02470828	T40C2800
							
X3048202 ●	Pedal/spring	G1/8	335	29	C02250618	C02470618	T40C1800
X3068202 ●	Pedal/spring	G1/4	965	29	C02250828	C02470828	T40C2800
							
X3048402 ●	Pedal/pedal	G1/8	335	29	C02250618	C02470618	T40C1800
X3068402 ●	Pedal/pedal	G1/4	965	29	C02250828	C02470828	T40C2800
							
X3047802 ●	Lever/spring	G1/8	335	E, 22	C02250828	C02470828	T40C2800
X3067802 ●	Lever/spring	G1/4	965	F, 31	C02250618	C02470618	T40C1800

Models – 5/3 Manual Valves

Accessories

Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
							
X3343702 ●	Lever/lever/lever – APB	G1/8	335	J, 30	C02250618	C02470618	T40C1800
X3363702 ●	Lever/lever/lever – APB	G1/4	965	J, 32	C02250828	C02470828	T40C2800

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

IN-LINE VALVES Super X

Manually and mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4

Models – 5/3 Manual Valves

Accessories

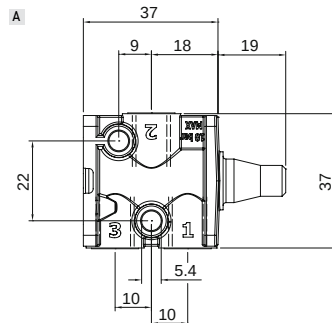
Model	Actuation	Port size	Flow (l/min)	Drawing no.	Straight fitting	Elbow fitting	Silencer
							
X3343802	Lever/spring/lever – APB	G1/8	335	J, 30	C02250618	C02470618	T40C1800
X3363802	Lever/spring/lever – APB	G1/4	965	J, 32	C02250828	C02470828	T40C2800
							
X3347702	Lever/lever/lever – COE	G1/8	335	J, 23	C02250618	C02470618	T40C1800
X3367702	Lever/lever/lever – COE	G1/4	965	J, 32	C02250828	C02470828	T40C2800
							
X3347802	Lever/spring/lever – COE	G1/8	335	J, 30	C02250618	C02470618	T40C1800
X3367802	Lever/spring/lever – COE	G1/4	965	J, 32	C02250828	C02470828	T40C2800

APB = All Ports Blocked COE = Centre Open Exhaust

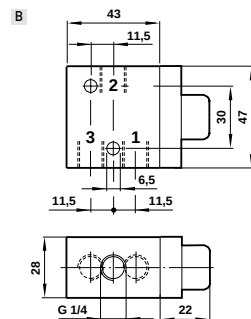
DIMENSIONS

Valve bodies

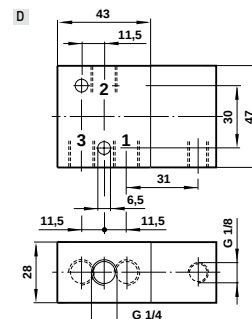
G1/8, 3/2 Spring return, basic body



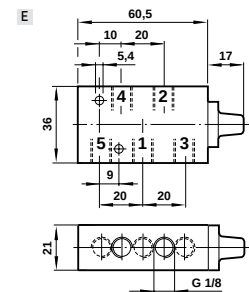
G1/4, 3/2 Spring return, basic body



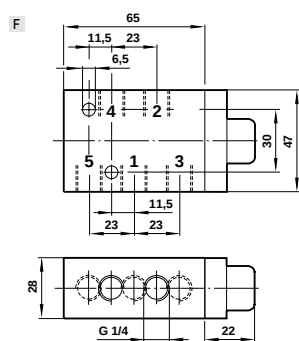
G1/4, 3/2 Pilot return, basic body



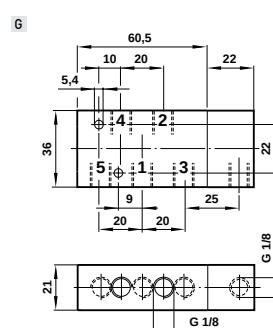
G1/8, 5/2 Spring return, basic body



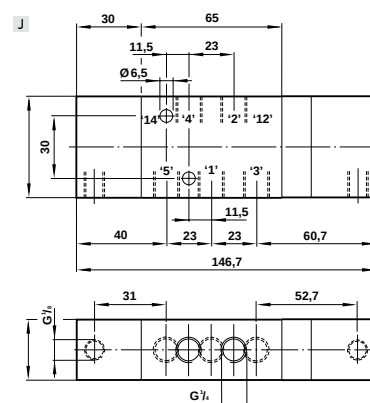
G1/4, 5/2 Spring return, basic body



G1/8, 5/2 Pilot return, basic body



G1/4, 5/3, basic body



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

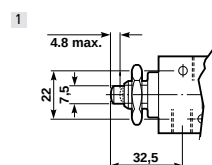
IN-LINE VALVES Super X

Manually and mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4

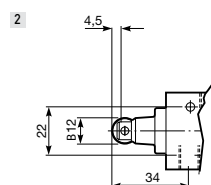
DIMENSIONS

Mechanical valve actuators

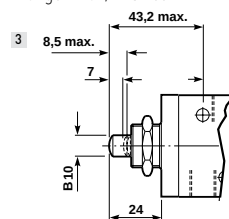
Plunger – G1/8 valves



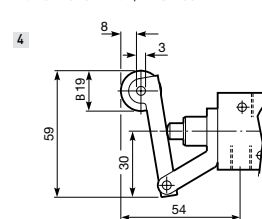
Roller – G1/8 valves



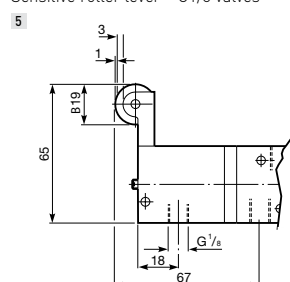
Plunger – G1/4 valves



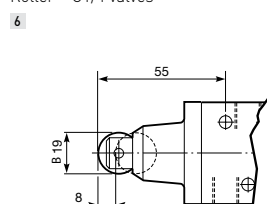
Roller lever – G1/8 valves



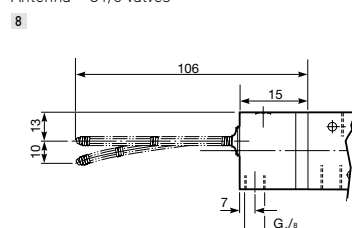
Sensitive roller lever – G1/8 valves



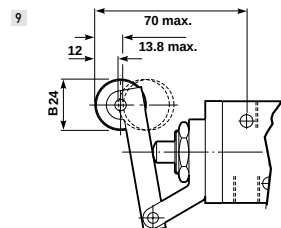
Roller – G1/4 valves



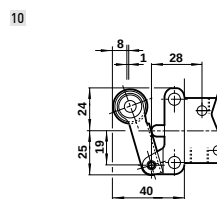
Antenna – G1/8 valves



Roller lever – G1/4 valves

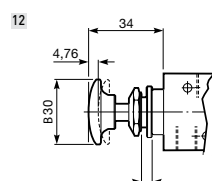


Heavy duty roller lever – G1/8 valves

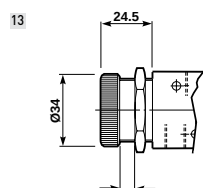


Manual valve actuators

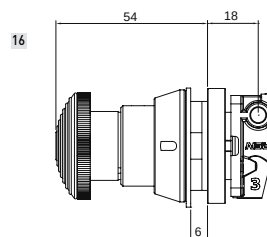
Button – G1/8 valves



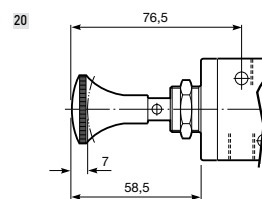
Button (shrouded) – G1/8 valves



Emergency stop – G1/8 valves



Knob – G1/4 valves



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

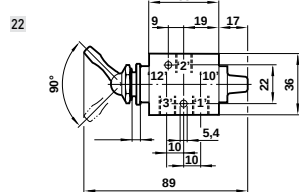
IN-LINE VALVES Super X

Manually and mechanically actuated spool valve – 3/2, 5/2 and 5/3, G1/8, G1/4

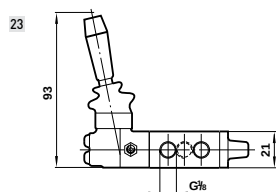
DIMENSIONS

Manual valve actuators

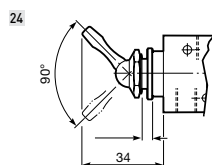
Lever operated spring return valve – G1/8 valves



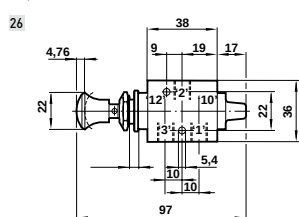
Lever operated spring return valve – G1/8 valves



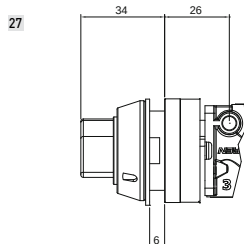
Switch – G1/8 valves



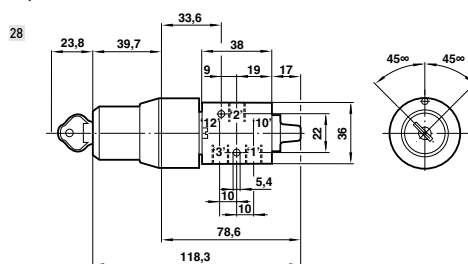
Knob operated knob return valve – G1/8 valves



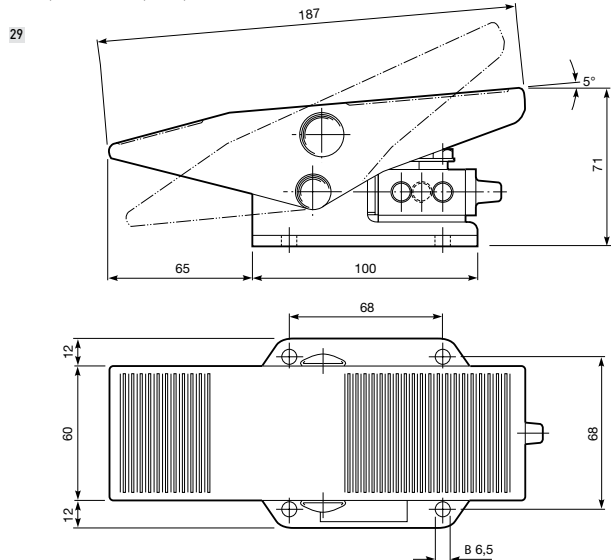
Rotary knob – G1/8 valves



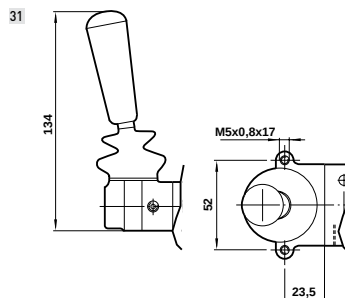
Key – G1/8 valves



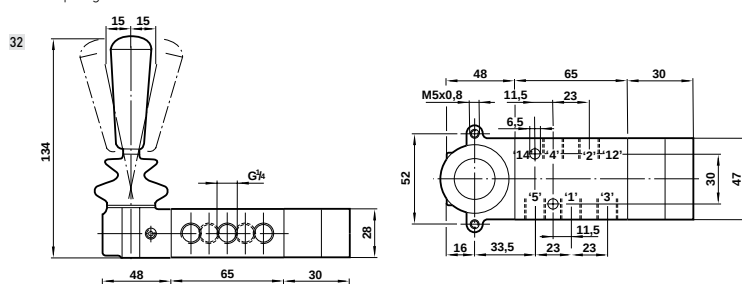
Pedal/treadle – G1/8-G1/4 valves



Lever – G1/4 valves



Lever/spring/lever – G1/4 valves



Operating force: 12 N [X3 3638 02 & X3 3678 02], 15 N [X3 3637 02 & X3 3677 02]

Panel hole: Ø 31 mm

Panel thickness: 8 mm maximum

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ROTARY HAND VALVE VHLA Series

Manually operated hand valve 4/2, 4/3, G1/4... G1/2

Easy to grasp and rotate handle

Detented centre position

Panel mounting option

2 or 3 position functions available

TECHNICAL DATA

Medium:

Compressed air, filtered to 40 µm, lubricated and non-lubricated

Operating pressure:

Maximum 9,7 bar

Flow:

400 – 3100 l/min

Ambient temperature:

5°C ... 60°C

MATERIALS

Body:

Die-cast aluminium

1st choice



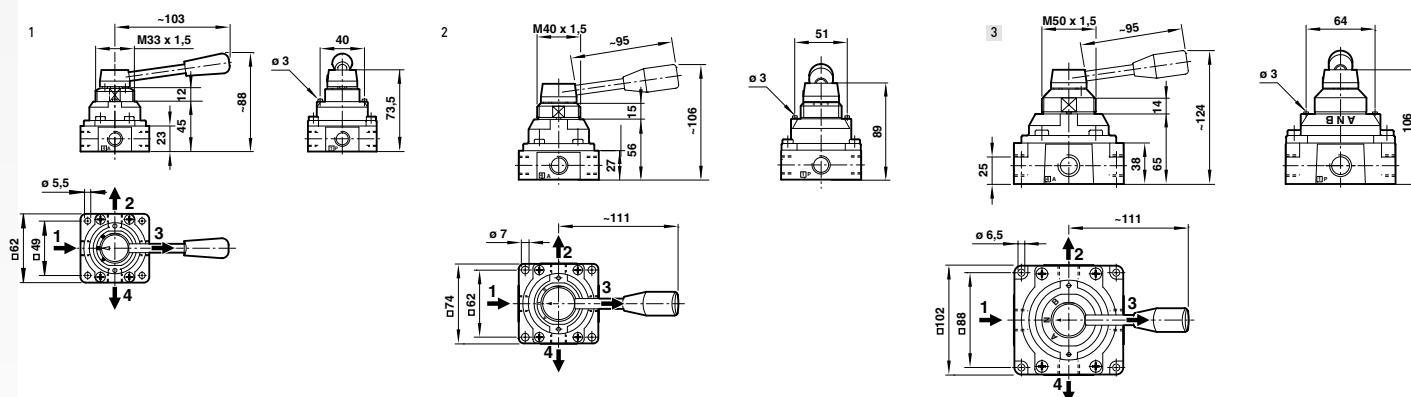
FOR HIGHER PERFORMANCE AND RELIABILITY, CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

THIS RANGE OF ROTARY VALVES IS FUNCTIONALLY AND DIMENSIONALLY SIMILAR TO:

- SMC VH series
- Kelm DKHV series
- Festo VHER series



Models

Model	Port size	Function	Flow (l/min)	Drawing No.
VHLA200-02G	G1/4	4/3 APB	400	1
VHLA202-02G	G1/4	4/2	400	1
VHLA300-03G	G3/8	4/3 APB	1100	2
VHLA302-03G	G3/8	4/2	1100	2
VHLA400-04G	G1/2	4/3 APB	3100	3
VHLA402-04G	G1/2	4/2	3100	3

Accessories

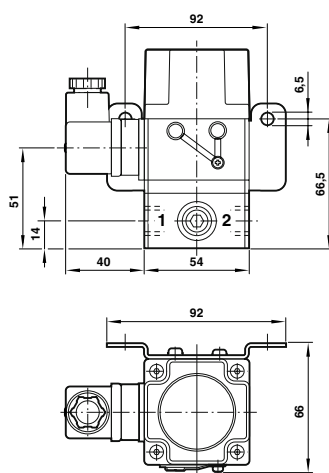
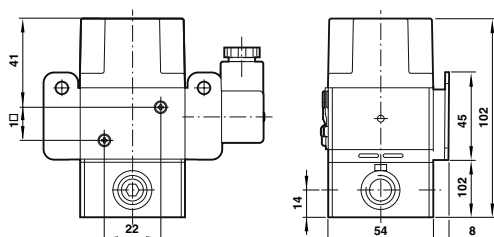
Straight fitting	Elbow fitting	Silencer	Panel mounting nut
C02250828	C02470828	T40C2800	VHLA-200N
C02250828	C02470828	T40C2800	VHLA-200N
C02251038	C02471038	T40C3800	VHLA-300N
C02251038	C02471038	T40C3800	VHLA-300N
C02251248	C02471248	T40C4800	VHLA-400N
C02251248	C02471248	T40C4800	VHLA-400N

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PROPORTIONAL PRESSURE CONTROL VALVE

VP10 Series

G1/4



Air piloted proportional pressure valve
Reliable, rugged design
Excellent accuracy
IP 65 environmental protection in normal position

TECHNICAL DATA

Medium:

Compressed air, filtered to 5 µm, dry and oil free

Output pressure:

0,2...1 bar, 0,2...2 bar, 0,2...4 bar, 0,2...6 bar, 0,2...8 bar

Flow capacity:

Up to 300 l/min

Air consumption:

up to 1 bar: 2,8NI/min, up to 2 bar: 4,0NI/min,
up to 4 bar: 7,5NI/min, up to 8 bar: 9,08NI/min

Supply Pressure:

Up to 2bar instruments: max 5bar, up to 8bar
instruments: max 10 bar

Operating temperature range:

-40 ... +70 °C

Consult our Technical Service for use below +2°C

Response time:

<2 bar: less than 0,5 s for 10...90% step change
>2 bar: 2 s for 10...90% step change

Supply sensitivity:

>0,025% span output change per % supply pressure
change

Failure mode:

Signal falls to bleed pressure when electrical supply fails

Models

Model	Port size	Flow (l/min)	Control signal	Output pressure (bar)	Straight fitting	Elbow fitting
VP1001BJ400A00	G1/4	300	4... 20 mA	0,2... 1	C02250828	C02470828
VP1006BJ401A00	G1/4	300	4... 20 mA	0,14... 6	C02250828	C02470828
VP1008BJ401A00	G1/4	300	4... 20 mA	0,14... 8	C02250828	C02470828

Accessories



For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

PROPORTIONAL PRESSURE CONTROL VALVE

VP50 Series

G1/4

Closed loop air pilot operated proportional pressure control valve

Adjustable for a wide range of applications

Fast response

Low power consumption

High flow

TECHNICAL DATA

Medium:

Compressed air, filtered to 5 µm, dry and oil free

Supply pressure:

Minimum 2 bar above maximum output required,
12 bar max.

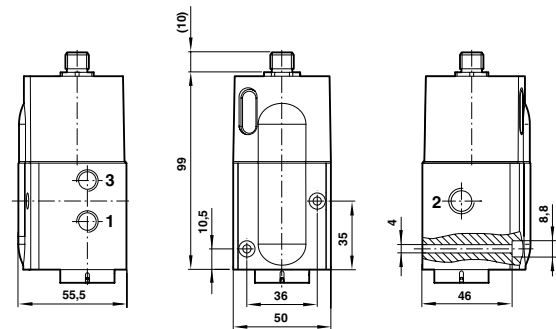
Flow:

Up to 1400 l/min

Ambient temperature:

0°C ... +50°C

Consult our Technical Service for use below +2°C.



Models

Model	Port Size	Flow (l/min)	Operating pressure (bar)	Control signal	Straight fitting	Elbow fitting	Silencer	Connector with 5m moulded cable
								
VP5002BJ111H00	G1/4	1200	0...2	0...10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5002BJ411H00	G1/4	1200	0...2	4...20 mA	C02250828	C02470828	T40C2800	0250081000000000
VP5006BJ111H00	G1/4	1200	0...6	0...10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5006BJ411H00	G1/4	1200	0...6	4...20 mA	C02250828	C02470828	T40C2800	0250081000000000
VP5008BJ111H00	G1/4	1200	0...8	0...10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5008BJ411H00	G1/4	1200	0...8	4...20 mA	C02250828	C02470828	T40C2800	0250081000000000
VP5010BJ111H00	G1/4	1200	0...10	0...10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5010BJ411H00	G1/4	1200	0...10	4...20 mA	C02250828	C02470828	T40C2800	0250081000000000

Accessories

Electrical Information

Electromagnetic compatibility	CE marked: conforms to EC requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical input signal	4 ... 20 mA or 0 ... 10 V factory set
Electrical power input	24 V d.c. ±25% (power consumption <1 W)
Output pressure feedback signal	0 ... 10 V full range
Connections	M12 5 pin

Pin configuration



1	+24 V d.c. supply
2	0 ... 10 full range
3	Control signal (+ve)
4	Common (DC supply, signal and feedback return)
5	Chassis (earth)

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PROPORTIONAL PRESSURE CONTROL VALVE

VP50S

G 1/4



Closed loop air pilot operated proportional pressure control valve with pressure output display

Fast response time

High flow

Excellent performance characteristics

Adjustable gain

Adjustable pressure range

Low power consumption

Feedback signal

Manifold mountable

TECHNICAL DATA

Medium:

Compressed air, filtered to 5 µm, dry and oil free

Operation:

Air piloted spool valve with integrated electronic pressure control

Output pressure:

0 ... 2 bar, 0 ... 6 bar, 0 ... 10 bar (or PSI equivalent)

Supply pressure:

Minimum 2 bar above maximum output required, 14 bar max.

Supply sensitivity:

Better than 0,75% span output change per bar supply pressure change

Flow:

Up to 1400 N l/min

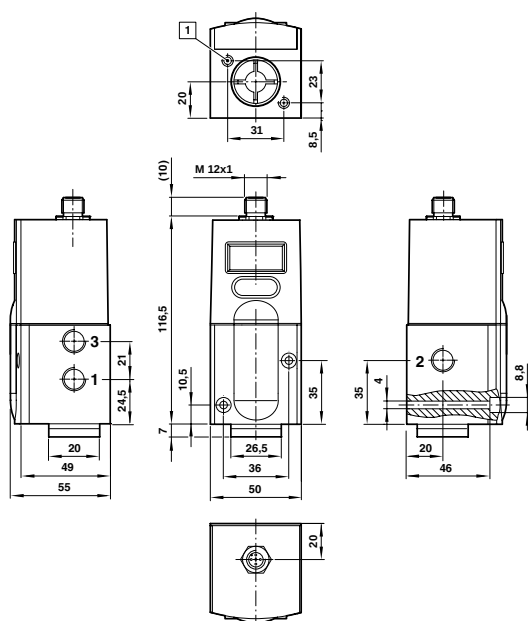
Air consumption:

<5 N l/min

Ambient temperature:

0°C ... +50°C

Contact our technical service for use below +2°C



Models

Model	Port size	Max. flow (N l/min)	Output pressure (bar)	Control signal
VP5002SBJ111H00	● G1/4	1400	0 ... 2	0 ... 10 V
VP5002SBJ411H00	● G1/4	1400	0 ... 2	4 ... 20 mA
VP5006SBJ111H00	● G1/4	1400	0 ... 6	0 ... 10 V
VP5006SBJ411H00	● G1/4	1400	0 ... 6	4 ... 20 mA
VP5010SBJ111H00	● G1/4	1400	0 ... 10	0 ... 10 V
VP5010SBJ411H00	● G1/4	1400	0 ... 10	4 ... 20 mA

Accessories

Straight fitting	Elbow fitting	Silencer	Connector with 5m moulded cable
			
C02250828	C02470828	T40C2800	0250081000000000
C02250828	C02470828	T40C2800	0250081000000000
C02250828	C02470828	T40C2800	0250081000000000
C02250828	C02470828	T40C2800	0250081000000000
C02250828	C02470828	T40C2800	0250081000000000
C02250828	C02470828	T40C2800	0250081000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PROPORTIONAL PRESSURE CONTROL VALVE

VP51 Series – Programmable

G1/4

Closed loop air pilot digital proportional control valve

Fully programmable with on-board diagnostics

Ability to set up offline

Multi-language menu option

Password protection option at first level functionality

Instant LED warning functions

Pressure output display; no gauge necessary

High speed response



TECHNICAL DATA

Medium:

Compressed air, filtered to 5 µm, dry and oil free

Output pressure:

User adjustable up to 10 bar

Supply pressure:

Minimum 2 bar above maximum output required,
12 bar max

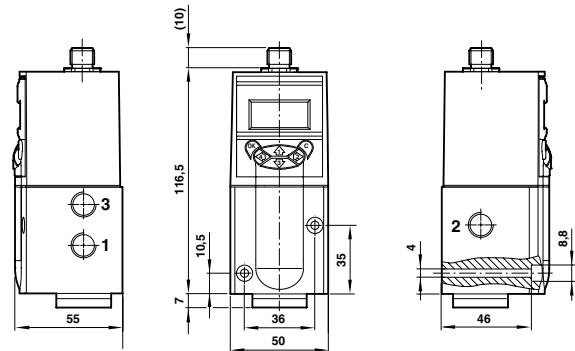
Flow:

Up to 1200 l/min

Ambient temperature:

0°C ... +50°C

Consult our Technical Service for use below +2°C.



Models

Model	Port Size	Flow (l/min)	Operating pressure (bar)	Control signal	Straight fitting	Elbow fitting	Silencer	Connector with 5m moulded cable
 VP5110BJ111H00	G1/4	1200	0...10	0...10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5110BJ411H00	G1/4	1200	0...10	4...20 mA	C02250828	C02470828	T40C2800	0250081000000000

Accessories



Electrical Information

Electromagnetic compatibility	CE marked: conforms to EC requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical input signal	4 ... 20 mA or 0 ... 10 V factory set
Electrical power input	24 V d.c. ±25% (power consumption <1 W)
Output pressure feedback signal	0 ... 10 V full range or user-configurable switched output
Connections	M12 5 pin

Pin configuration



1	+24 V d.c. supply
2	0 ... 10 feedback
3	Control signal (+ve)
4	Common (DC supply, signal and feedback return)
5	Chassis

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PROPORTIONAL FLOW CONTROL VALVE

VP60

G 1/4



High flow rate, low pressure loss

Calibrated, linear flow characteristic with zero crossover

Choice of setpoint input:

4 ... 20 mA, ± 5 V, 0 ... 10 V, fixed value, function generator, optional Profibus DP

Silicon-free to test spec P-VW 3.10.7/01.92

Fast dynamic response

Diagnostic function

CE compliant 89/336/EEC

TECHNICAL DATA

Medium: ISO8573-1 Class: 2-3-1, filtered,

dried, oil-free

The dynamic performance and service life of the valve may be significantly reduced if using unfiltered air containing water and oil!

Operation: Directly-controlled spool valve with fast dynamic response

Orifice (nominal): 8 mm

Operating pressure (nominal): -1 ... 16 bar

Vacuum up ... 16 bar

Filter: <3 μ m

Flow: 1200 N l/min at $p_1 = 6$ bar, $p_2 = 5$ bar

Temperature: Ambient: 0 ... +60°C

Medium: 5 ... +60°C

Leakage: Centre max. 16 N l/min

Typical value: 8 N l/min ($p_1 = 10$ bar and $p_2/4 = 0$ bar)

Degree of protection: IP65

Service life: >250 million full-travel operations with recommended air quality

Response sensitivity: $\pm 0,5$ [% max. Q]*

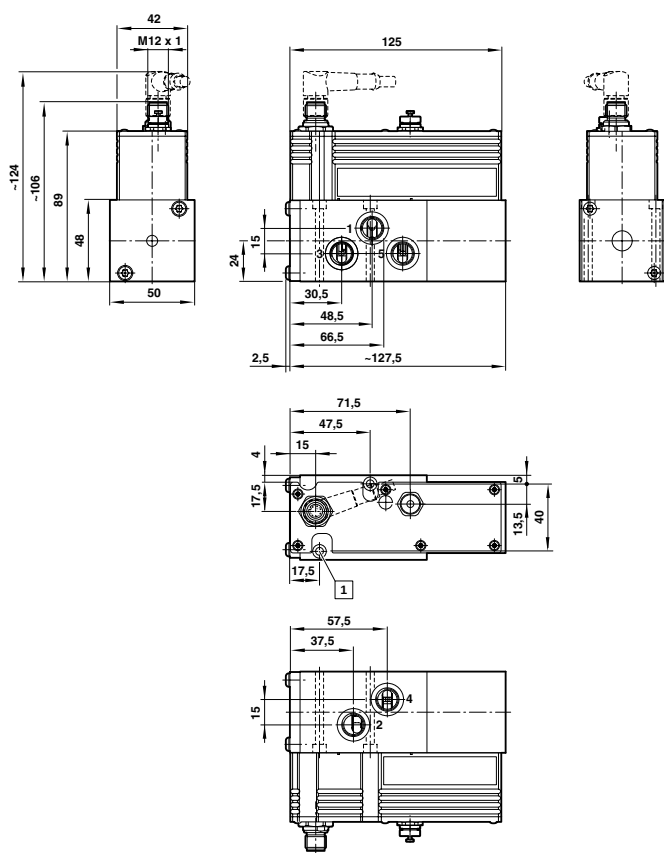
Hysteresis: $\pm 0,5$ [% max. Q]*

Repeat accuracy: $\pm 1,0$ [% max. Q]*

Linearity: $\pm 3,0$ [% max. Q]*

* Values related to 20°C

Dynamic values stated relate 24 V d.c. power supply



Models

Model	Orifice (mm)	Output pressure (bar)	Set point	Actual value
VP6010LJ461MB200	8	-1 ... 16	4 ... 20 mA	0 ... 10 V/4 ... 20 mA
VP6010LJ661MB200	8	-1 ... 16	-5 V ... +5 V	0 ... 10 V/4 ... 20 mA
VP6010LJ761MB200	8	-1 ... 16	0 ... 10 V	0 ... 10 V/4 ... 20 mA

Accessories

Straight fitting	Elbow fitting	Silencer	Straight connector M 12 x 1	Elbow connector M 12 x 1
C02250828	C02470828	T40C2800	0250811000000000	0250813000000000
C02250828	C02470828	T40C2800	0250811000000000	0250813000000000
C02250828	C02470828	T40C2800	0250811000000000	0250813000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.



IMI BUSCHJOST VALVES

THE IMI BUSCHJOST BRAND HAS BEEN WELL-KNOWN IN THE FIELD OF VALVE TECHNOLOGY FOR OVER 75 YEARS. NOW AN EXPANDED RANGE OF IMI BUSCHJOST VALVES ARE AVAILABLE FROM NORGRN EXPRESS, MAKING IT EASIER AND QUICKER TO GET YOUR HANDS ON THE VALVES YOU NEED, FROM A MARKET-LEADING NAME.

The constant research and continuing innovation behind the IMI Buschjost name has helped to create a market leader in process and multimedia valves, which can be found in a huge variety of applications worldwide. Customers from rail operators to energy companies depend on IMI Buschjost valves, and they can also be found in commercial vehicles, water treatment plants, food and beverage facilities, and in plant construction applications.

In fact, in Germany, IMI Buschjost process valves are amongst only three makes which are SIL certified for use in power plants. SIL certification relates to applications in which electrical, electronic, or programmable electronic systems are installed to perform safety functions – or in other words, where failure is not an option. No fewer than three series of IMI Buschjost piston valves in nominal sizes of DN 15 to DN 100, and connection sizes of 1/2" to 2" – suitable for liquid and gas media – are currently certified SIL2.

SOLENOID OPERATED VALVES

- Port sizes from G1/4 to G2 plus options of flange connections
- Range of body and seal materials to cover most industrial applications
- Extensive use of patented IMI Buschjost Click-on® coils
- ATEX versions available
- Diaphragm (up to 16 bar) and piston (up to 40 bar versions available)
- Range covers direct, indirect and forced lift versions

PRESSURE OPERATED VALVES

- Port sizes G1/4 to G2
- Diaphragm and piston versions available up to 16 bar depending upon size and actuator type
- Range of body and seal materials to cover most industry applications
- Suitable for fluid viscosities up to 600 centistokes and fluids with contamination
- Solenoid pilot operator available to directly mount to the valve actuator

CLICK-ON® BENEFITS

- Valve core tube completely sealed – fluid cannot escape
- Solenoid can be removed and replaced without tools
- Can be rotated through 360°
- Cannot be over tightened leading to damage to valve
- Totally IP65 protected

The Express range shown here covers a selection of valves for all manner of common applications. If you have a requirement outside of this range, please call your Express team – the entire IMI Buschjost product range covers in excess of 20,000 possible valve combinations!



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

DIRECT SOLENOID ACTUATED SEAT VALVE

IMI Buschjost 82510 series

2/2 N/C, G1/4....G3/8



Valve operates without differential pressure

High flow rate

Suitable for vacuum

Solenoid interchangeable without tools (Click-on®)

TECHNICAL DATA

Medium:

Neutral gases & liquids

Flow direction:

Fixed

Operational pressure:

0 ... 25 bar

Temperature:

-10°C ... +90°C max (fluid)

-10°C ... +50°C max (ambient)

MATERIALS

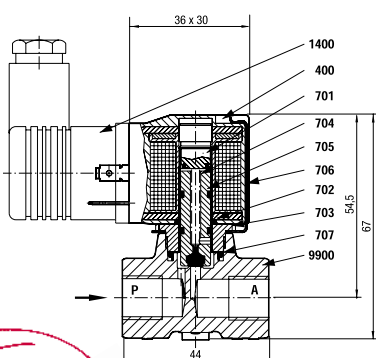
Body: Brass

Seat seal: NBR

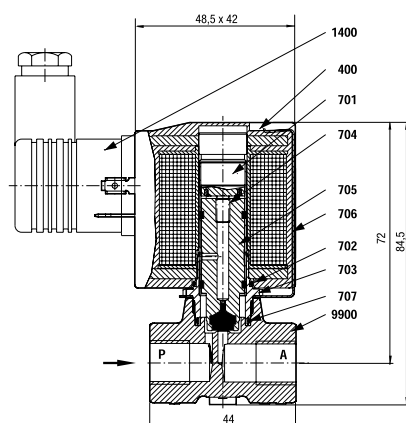
Internal parts: Stainless steel, brass

For contaminated fluids, installation of an upstream filter is recommended

With solenoid 9101



With solenoid 9151



1st choice

FOR HIGHER PERFORMANCE AND RELIABILITY,
CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY
SIMILAR TO:

- Asco 262, 106 and 263 series
- GSR 52 series
- Burkert 6027 series
- M & M D237 - 239 series

Models

Model (24 V d.c.)	Model (230 V a.c.)	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8251000.9101.02400	8251000.9101.23050	1,5	G1/4	0,07	0...25	1261629.0000.00000
8251020.9101.02400	8251020.9101.23050	2,5	G1/4	0,15	0...10	1261629.0000.00000
8251040.9101.02400	8251040.9101.23050	3	G1/4	0,21	0...4	1261629.0000.00000
8251060.9151.02400	8251060.9151.23050	4	G1/4	0,35	0...12	1262353.0000.00000
8251100.9101.02400	8251100.9101.23050	1,5	G3/8	0,07	0...25	1261629.0000.00000
8251120.9101.02400	8251120.9101.23050	2,5	G3/8	0,15	0...10	1261629.0000.00000
8251140.9101.02400	8251140.9101.23050	3	G3/8	0,21	0...4	1261629.0000.00000
8251160.9151.02400	8251160.9151.23050	4	G3/8	0,35	0...12	1262353.0000.00000

Solenoid details

Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
9101	8	15/12	IP65	DIN EN175301-803	Included
9151	18	45/35	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team

For further details please refer to technical data sheet.

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

SOLENOID ACTUATED DIAPHRAGM VALVES WITH FORCED LIFTING IMI Buschjost 82530 and 82560 Series

2/2 N/C, G1/4...G1/2

Valve operates without differential pressure

Suitable for vacuum

Compact solenoid with integrated core tube of brass or stainless steel to suit application

TECHNICAL DATA

Medium:

Neutral gases and liquids (82530 series)

Slightly aggressive gases and liquids (82560 series)

Flow direction:

Fixed

Operating pressure:

0 ... 10 bar

Temperature:

-10°C ... +90°C max. (fluid)

-10°C ... +50°C max. (ambient)

MATERIALS

Body: Brass, stainless steel

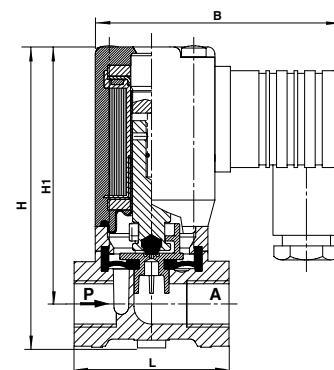
Seat seal: NBR

Internal parts: Stainless steel, PVDF

For contaminated fluids installation of an upstream filter is recommended.

Dimensions

Ports	B	H	H1	L
G1/4	70	85,5	73,0	44
G3/8	70	85,5	73,0	44
G1/2	70	85,5	74,5	60



1st choice

FOR HIGHER PERFORMANCE AND RELIABILITY, CHOOSE IMI PRECISION ENGINEERING.

Thousands of products and accessories available for immediate despatch.

• Always in stock • Rapid delivery • Free 2-year warranty

THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY SIMILAR TO:

• Asco 210 series • GSR E43 and 43VA series • Burkert 6213 series

Models

BRASS – FOR NEUTRAL GASES AND LIQUIDS

Model [24 V d.c.]	Model [230 V a.c.]	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8253000.8001.02400	8253000.8001.23050	10	G1/4	1,5	0...10	1256202.0000.00000
8253100.8001.02400	8253100.8001.23050	10	G3/8	1,7	0...10	1256202.0000.00000
8253200.8001.02400	8253200.8001.23050	10	G1/2	1,7	0...10	1256202.0000.00000

STAINLESS STEEL – FOR AGGRESSIVE GASES AND LIQUIDS

Model [24 V d.c.]	Model [230 V a.c.]	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8256000.8001.02400	8256000.8004.23049	10	G1/4	1,5	0...10	1257112.0000.00000
8256100.8001.02400	8256100.8004.23049	10	G3/8	1,7	0...10	1257112.0000.00000
8256200.8001.02400	8256200.8004.23049	10	G1/2	1,7	0...10	1257112.0000.00000

Solenoid details

Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
8001	12	20/16	IP65	DIN EN175301-803	Included
8004	–	13	IP65	DIN EN175301-803	Included

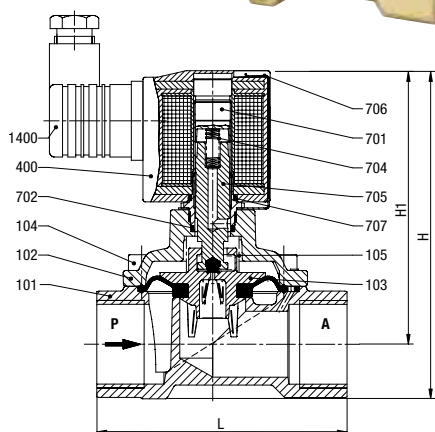
Other models and voltages available, please call the express team

For further details please refer to technical data sheet.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATED DIAPHRAGM VALVE WITH FORCED LIFTING IMI Buschjost 82540 series

2/2 N/C, G1/4...G1



Dimensions

Ports	L	B*	H	H1
G1/4	60	44	104	92,5
G3/8	60	44	104	92,5
G1/2	67	44	108	94,5
G3/4	80	50	115	99,0
G1	95	62	124	103,5

* B = Maximum width



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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY
SIMILAR TO:

- Asco 210 series
- GSR 43 series
- Burkert 6213 series
- M & M D187 - 189 and 190 - 192 series

Valve operates without differential pressure

High flow rate

Suitable for vacuum

For systems with low or fluctuating pressure

Solenoid interchangeable without tools (Click-on®)

TECHNICAL DATA

Medium:

Neutral gases and liquids

Flow direction:

Fixed

Operational pressure:

0 ... 16 bar

Temperature:

-10°C ... +90°C max (fluid)

-10°C ... +50°C max (ambient)

MATERIALS

Body: Brass

Seat seal: NBR

Internal parts: Stainless steel, PVDF, brass

For contaminated fluids, installation of an upstream filter is recommended

Models

Model (24 V d.c.)	Model (230 V a.c.)	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8254000.9151.02400	8254000.9154.23049	8	G1/4	1,9	0...10	1260177.0000.00000
8254100.9151.02400	8254100.9154.23049	10	G3/8	3	0...10	1260177.0000.00000
8254200.9151.02400	8254200.9154.23049	12	G1/2	3,4	0...10	1260177.0000.00000
8254300.9151.02400	8254300.9154.23049	20	G3/4	5,8	0...10	1260178.0000.00000
8254400.9151.02400	8254400.9154.23049	25	G1	8	0...10	1260179.0000.00000

Solenoid details

Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
9151	18	–	IP65	DIN EN175301-803	Included
9154	–	20	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team

For further details please refer to technical data sheet.

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SOLENOID ACTUATED, FORCED LIFT PISTON VALVE

IMI Buschjost 85700 and 85740 Series

2/2 N/C, G1/4....G1

Valve operates without differential pressure

High flow rate

Suitable for vacuum

For systems with low or fluctuating pressure

Solenoid interchangeable without tools (Click-on®)

TECHNICAL DATA

Medium:

Neutral gases & liquids (85700)

Slightly aggressive gases & liquids (85740)

Flow direction:

Fixed

Operating pressure:

0 ... 25 bar

Mounting position:

Optional, but preferably with solenoid facing vertically upwards

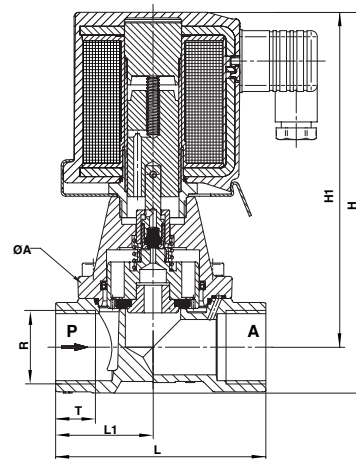
Temperature:

-20°C ... +90°C max. (fluid)

-20°C ... +50°C max. (ambient)

Dimensions

Ports	A mm	H	H1	L	L1	T
G1/2	44,0	154,5	140,5	67,0	31,0	14,0
G3/4	50,0	162,0	146,5	80,0	36,5	16,0
G1	62,0	183,0	162,0	95,0	44,0	18,0



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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY SIMILAR TO:

- GSR 49 and 49VA series

MATERIALS

Body: Brass, stainless steel

Seat seal: NBR (85700), NBR-K (85740)

Internal parts: Stainless steel, PTFE, carbon

For contaminated fluids installation of an upstream filter is recommended

Models

BRASS – FOR NEUTRAL GASES AND LIQUIDS

Model [24 V d.c.]	Model [230 V a.c.]	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8570000.9401.02400	8570000.9404.23049	8	G1/4	2,2	0...25	1263105.0000.00000
8570100.9401.02400	8570100.9404.23049	10	G3/8	3,4	0...25	1263105.0000.00000
8570200.9401.02400	8570200.9404.23049	12	G1/2	4,4	0...25	1263105.0000.00000
8570300.9401.02400	8570300.9404.23049	20	G3/4	7	0...25	1263108.0000.00000
8570400.9401.02400	8570400.9404.23049	25	G1	10,5	0...25	1263111.0000.00000

STAINLESS STEEL – FOR AGGRESSIVE GASES AND LIQUIDS

Model [24 V d.c.]	Model [230 V a.c.]	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8574000.9401.02400	8574000.9404.23049	8	G1/4	1,9	0...25	1269067.0000.00000
8574200.9401.02400	8574200.9404.23049	12	G1/2	3,8	0...25	1269067.0000.00000
8574300.9401.02400	8574300.9404.23049	20	G3/4	11	0...25	1269068.0000.00000
8574400.9401.02400	8574400.9404.23049	25	G1	13	0...25	1269069.0000.00000

Solenoid details

Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
9401	38	–	IP65	DIN EN175301-803	Included
9404	–	42	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team. For further details please refer to technical data sheet.

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SOLENOID ACTUATED PISTON VALVE WITH FORCED LIFTING IMI Buschjost 85720 series

2/2 N/C, G3/8...G1



Valve operates without differential pressure

High flow rate

Suitable for vacuum

For systems with low or fluctuating pressure

Solenoid interchangeable without tools (Click-on®)

TECHNICAL DATA

Medium:

Steam, hot water and other neutral liquids

Flow direction:

Fixed

Operational pressure:

0 ... 16 bar

Temperature:

0 ... +200°C max (fluid)

0 ... +60°C max (ambient)

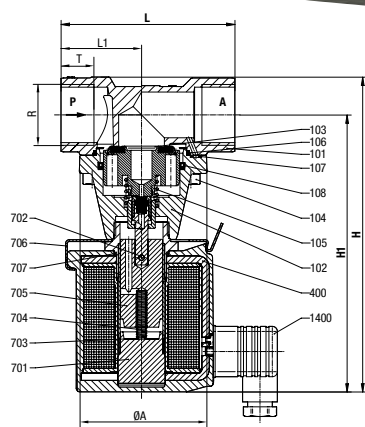
MATERIALS

Body: Brass

Seat seal: PTFE

Internal parts: Stainless steel, PTFE, carbon, FPM

For contaminated fluids, installation of an upstream filter is recommended



Dimensions

Ports	ØA	H	H1	L	L1	T
G3/8	44	152,0	140,5	60	27,5	12
G1/2	44	154,5	140,5	67	31,0	14
G3/4	50	162,0	146,5	80	36,5	16
G1	62	183,0	162,0	95	44,0	18

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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY SIMILAR TO:

- Asco 222 series
- GSR 49-TH series
- Burkert 0407 series

Models

Model [24 V d.c.]	Model (230 V a.c.)	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8572100.9402.02400	8572100.9406.23049	10	G3/8	3	0...16	1263978.0000.00000
8572200.9402.02400	8572200.9406.23049	12	G1/2	3,8	0...16	1263978.0000.00000
8572300.9402.02400	8572300.9406.23049	20	G3/4	6	0...16	1263979.0000.00000
8572400.9402.02400	8572400.9406.23049	25	G1	9,5	0...16	1263980.0000.00000

Solenoid details

Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
9402	29	–	IP65	DIN EN175301-803	Included
9406	–	33	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team
For further details please refer to technical data sheet.

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INDIRECT SOLENOID ACTUATED DIAPHRAGM VALVES IMI Buschjost 82400 and 82730 Series

2/2 N/C, G1/4...G2

Valve operates with differential pressure

High flow rate

Damped operation

Solenoid interchangeable without tools (Click-on®)

Particularly suitable for use as a water valve in accordance with DIN EN60730-2-8



Type-tested up to 25 mm orifice size in accordance with DIN EN 60730-2-8
Solenoid valves
Test institute
TÜV Rheinland / Brandenburg



TECHNICAL DATA

Medium:

Neutral gases and liquids (82400)

Slightly aggressive gases and liquids (82730)

Flow direction:

Fixed

Operating pressure:

0,1 ... 16 bar, see tables for details

Temperature:

-10°C ... +90°C max. (fluid)

-10°C ... +50°C max. (ambient)

MATERIALS

Body: Brass or stainless steel

Seat seal: NBR

Internal parts: Stainless steel, PVDF

For contaminated fluids installation of an upstream filter is recommended

Models

BRASS – FOR NEUTRAL GASES AND LIQUIDS								
Model [24 V d.c.]		Model [230 V a.c.]		Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8240000.9101.02400	●	8240000.9101.23050	●	8	G1/4	1,9	0,1...16	1256274.0000.00000
8240100.9101.02400	●	8240100.9101.23050	●	10	G3/8	3	0,1...16	1256274.0000.00000
8240200.9101.02400	●	8240200.9101.23050	●	12	G1/2	3,8	0,1...16	1256274.0000.00000
8240300.9101.02400	●	8240300.9101.23050	●	20	G3/4	6	0,1...16	1256275.0000.00000
8240400.9101.02400	●	8240400.9101.23050	●	25	G1	9,5	0,1...16	1256276.0000.00000
8240500.9101.02400	●	8240500.9101.23050	●	32	G1 1/4	23	0,1...10	1259344.0000.00000
8240500.9151.02400	●	8240500.9151.23050	●	32	G1 1/4	23	0,1...16	1259373.0000.00000
8240600.9101.02400	●	8240600.9101.23050	●	40	G1 1/2	25	0,1...10	1259344.0000.00000
8240600.9151.02400	●	8240600.9151.23050	●	40	G1 1/2	25	0,1...16	1259373.0000.00000
8240700.9101.02400	●	8240700.9101.23050	●	50	G2	41	0,1...10	1259367.0000.00000
8240700.9151.02400	●	8240700.9151.23050	●	50	G2	41	0,1...16	1259382.0000.00000
STAINLESS STEEL – FOR AGGRESSIVE GASES AND LIQUIDS								
Model [24 V d.c.]		Model [230 V a.c.]		Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8273000.9101.02400	●	8273000.9101.23050	●	8	G1/4	1,9	0,1...16	1256274.0000.00000
8273200.9101.02400	●	8273200.9101.23050	●	12	G1/2	3,8	0,1...16	1256274.0000.00000
8273300.9101.02400	●	8273300.9101.23050	●	20	G3/4	6	0,1...16	1256275.0000.00000
8273400.9101.02400	●	8273400.9101.23050	●	25	G1	9,5	0,1...16	1256276.0000.00000

Solenoid details

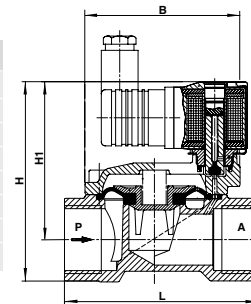
Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
9101	8	15/12	IP65	DIN EN175301-803	Included
9151	18	45/35	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team. For further details please refer to technical data sheet.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

Dimensions

Ports	B	H	H1	L
G1/4	44	78,5	67,0	60
G3/8	44	78,5	67,0	60
G1/2	44	81,0	67,0	67
G3/4	50	88,0	71,5	80
G1	62	97,5	77,0	95
G1 1/4	92	124,5	95,5	132
G1 1/2	92	124,5	95,5	132
G2	109	142,5	108,0	160



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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY
SIMILAR TO:

- Asco 238 series
- GSR 40Ms series
- Burkert 5281 series
- M & M D223-225, 203-206 and 222 series

INDIRECT SOLENOID ACTUATED PISTON VALVE

IMI Buschjost 85360 Series

2/2 N/C, G1/4...G2



Valve operates with differential pressure

High flow rate

Damped operation

Solenoid interchangeable without tools (Click-on®)

TECHNICAL DATA

Medium:

Neutral gases & liquids

Flow direction:

Fixed

Operational pressure:

0,5 ... 40 bar

Temperature:

-20°C...+90°C max (fluid)

-20°C...+50°C max (ambient)

MATERIALS

Body:

Brass

Seat seal:

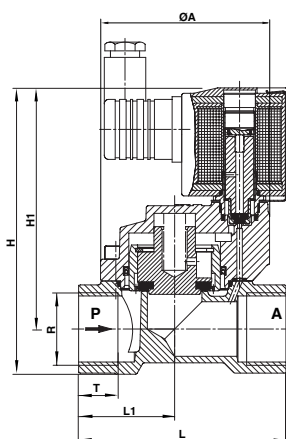
NBR

Internal parts:

Stainless steel, brass, PTFE

For contaminated fluids, installation of an upstream filter is recommended

Dimensions



Ports	A mm	H	H1	L	T
G1/4	44	105,0	93,5	60	12,0
G3/8	44	105,0	93,5	60	12,0
G1/2	44	107,5	93,5	67	14,0
G3/4	50	119,0	102,5	80	16,0
G1	62	131,5	110,5	95	18,0
G1 1/4	92	166,0	137,0	132	20,0
G1 1/2	92	166,0	137,0	132	22,0
G2	109	186,0	151,5	160	24,0

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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY
SIMILAR TO:

- Asco 223 series
- GSR 50 series
- Burkert 5404 series

Models

Model (24 V d.c.)	Model (230 V a.c.)	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8536000.9151.02400	8536000.9151.23050	8	G1/4	2,2	0,5...40	Contact your Express team
8536100.9151.02400	8536100.9151.23050	10	G3/8	3,4	0,5...40	Contact your Express team
8536200.9151.02400	8536200.9151.23050	12	G1/2	4,4	0,5...40	Contact your Express team
8536300.9151.02400	8536300.9151.23050	20	G3/4	7	0,5...40	Contact your Express team
8536400.9151.02400	8536400.9151.23050	25	G1	10,5	0,5...40	Contact your Express team
8536500.9151.02400	8536500.9151.23050	32	G1 1/4	25	0,5...40	Contact your Express team
8536600.9151.02400	8536600.9151.23050	40	G1 1/2	27	0,5...40	Contact your Express team
8536700.9151.02400	8536700.9151.23050	50	G2	43	0,5...40	Contact your Express team

Solenoid details

Type	Power consumption	Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)			
9151	18	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team

For further details please refer to technical data sheet.

For further information, visit store.norgren.com
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see the option you require contact your Express Team.

PRESSURE ACTUATED ANGLE SEAT VALVES

IMI Buschjost 84500 and 84520 Series

2/2 N/C, G1/2....G2

Easy conversion to N/O or double acting without tools

Visual positioner indicator as standard

Damped closing and back pressure tight

Suitable for contaminated fluids

Pilot signal could be liquid fluids

TECHNICAL DATA

Medium:

Neutral gases and liquids (84500)

Aggressive gases and liquids (84520)

Flow direction:

Fixed

Operating pressure:

0 ... 16 bar

Temperature:

-10°C ... +180°C max. (fluid)

-10°C ... +60°C max. (ambient)

MATERIALS

Body:

Brass (84500) Stainless steel (84520)

Seat seal:

PTFE

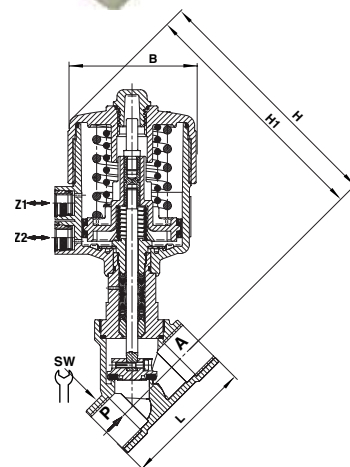
Internal parts:

Brass, Stainless steel

Pilot fluid should be neutral gases or liquid

Dimensions

Ports	B	H	H1	L	SW
G1/2	89,5	177,5	164,0	65	27
G3/4	89,5	184,0	168,0	75	32
G1	89,5	194,5	174,0	90	41
G1 1/4	89,5	209,5	184,5	110	50
G1 1/2	89,5	208,5	186,0	120	55
G2	89,5	229,5	194,5	150	70



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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY SIMILAR TO:

- Asco 290 series
- GSR 63 series
- Burkert 2000 series
- M & M BCG 205 - 210 series

Models

BRASS – FOR NEUTRAL GASES AND LIQUIDS					
Model	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8450200.0000.00000	15	G1/2	4,8	0...16	1256694.0000.00000
8450300.0000.00000	20	G3/4	10	0...10	1256695.0000.00000
8450400.0000.00000	25	G1	14	0...10	1256696.0000.00000
8450500.0000.00000	32	G1 1/4	23	0...7	1256697.0000.00000
8450600.0000.00000	40	G1 1/2	30	0...4,5	1256698.0000.00000
8450700.0000.00000	50	G2	37	0...3	1256699.0000.00000
STAINLESS STEEL – FOR AGGRESSIVE GASES AND LIQUIDS					
Model	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8452200.0000.00000	15	G1/2	4,8	0...16	1256700.0000.00000
8452300.0000.00000	20	G3/4	10	0...10	1256701.0000.00000
8452400.0000.00000	25	G1	14	0...10	1256702.0000.00000

Other models available, please call the express team

For further details please refer to technical data sheet.

For suitable pilot operator, see 84660 series on page 147

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PRESSURE ACTUATED ANGLE SEAT PILOT VALVE

IMI Buschjost 84720 and 84740 Series

2/2 N/C, G1/2...G1

Easy conversion to N/O or double acting without tools
 Visual positioner indicator as standard
 Damped closing and back pressure tight
 Suitable for contaminated fluids
 Pilot signal could be liquid fluids

TECHNICAL DATA

Medium:

Neutral gases and liquids (84720)
 Aggressive gases and liquids (84740)

Flow direction:

Fixed

Operating pressure:

0 ... 16 bar

Temperature:

-10°C ... +180°C max. (fluid)
 -10°C ... +60°C max. (ambient)

MATERIALS

Body:

Brass (84720) Stainless steel (84740)

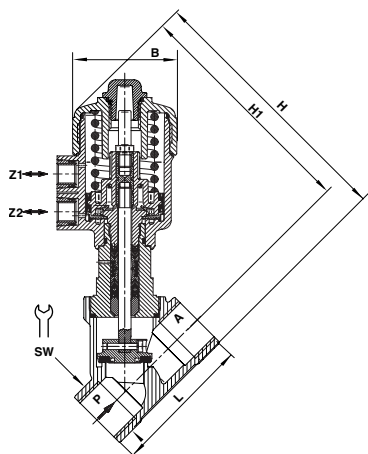
Seat seal:

PTFE

Internal parts:

Brass, Stainless steel

Pilot fluid should be neutral gases or liquid



Dimensions

Ports	B	H	H1	L	SW
G1/2	66	154	140,5	65	27
G3/4	66	160	144,5	75	32
G1	66	171	150,5	90	41

EXPRESS LINKS

Recommended 3/2 pilot valve...

There are a number of options for operating angle seat pilot valves:

- Purpose made 84660 series pilot valve
See page 147
- Via valve with NAMUR interface
See page 150
- On multiple valve applications, why not consider a valve island from the VM or VS range ?
See pages 92, 93 and 94



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THIS RANGE OF PROCESS VALVES IS FUNCTIONALLY SIMILAR TO:

- Asco 290 series
- GSR 63 series
- Burkert 2000 series
- M & M BCG/CG 205 - 207 series

Models

BRASS - FOR NEUTRAL GASES AND LIQUIDS					
Model	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8472200.0000.00000	15	G1/2	4,8	0...16	1260318.0000.00000
8472300.0000.00000	20	G3/4	10	0...8	1260566.0000.00000
8472400.0000.00000	25	G1	14	0...5	1260568.0000.00000
STAINLESS STEEL - FOR AGGRESSIVE GASES AND LIQUIDS					
Model	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8474200.0000.00000	15	G1/2	4,8	0...16	1260581.0000.00000
8474300.0000.00000	20	G3/4	10	0...8	1260583.0000.00000
8474400.0000.00000	25	G1	14	0...5	1268585.0000.00000

Other models available, please call the express team
 For further details please refer to technical data sheet.
 For suitable pilot operator, see 84660 series on page 147

For further information, visit store.norgren.com
 and use the new improved search function. If you cannot
 see the option you require contact your Express Team.

PRESSURE ACTUATED ANGLE SEAT PILOT VALVE

IMI Buschjost 82180 and 82280 Series

2/2 N/C, G1/2....G2

Damped closing and back pressure tight

Suitable for contaminated fluids

Pilot signal could be liquid fluids

TECHNICAL DATA

Medium:

Neutral gases & liquids

Flow direction:

Fixed

Operational pressure:

0 ... 16 bar

Temperature:

-10°C...+180°C max (fluid)

-10°C...+60°C max (ambient)

MATERIALS

Body:

Brass

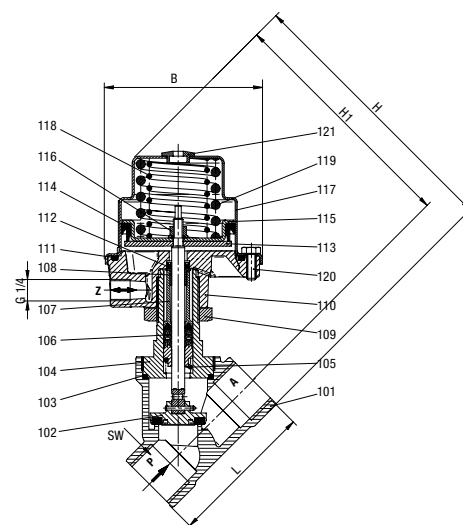
Seat seal:

PTFE

Internal parts:

Brass, Stainless steel

Pilot fluid should be neutral gases



Dimensions

Ports	L	B*	H	H1	SW
G1/2	65	89,5	154	140,5	27
G3/4	75	89,5	160	144,0	32
G1	90	89,5	171	150,5	41
G1 1/4	110	89,5	186	161,0	50
G1 1/2	120	89,5	190	162,5	55
G2	150	89,5	206	171,0	70
G1 1/4	110	163,0	250	225,0	50
G1 1/2	120	163,0	255	227,5	55
G2	150	163,0	270	235,0	70

* B = Maximum width

Models

Model	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8218200.0000.00000	15	G1/2	4,8	0...16	1248931.0000.00000
8218300.0000.00000	20	G3/4	10	0...10	1249643.0000.00000
8218400.0000.00000	25	G1	14	0...10	1248994.0000.00000
8218500.0000.00000	32	G1 1/4	23	0...7	1249645.0000.00000
8218600.0000.00000	40	G1 1/2	30	0...4,5	1249646.0000.00000
8218700.0000.00000	50	G2	37	0...3	1249647.0000.00000
8228500.0000.00000	32	G1 1/4	27	0...16	1249648.0000.00000
8228600.0000.00000	40	G1 1/2	37	0...10	1249649.0000.00000
8228700.0000.00000	50	G2	53	0...10	1249650.0000.00000

Other models available, please call the express team

For further details please refer to technical data sheet.

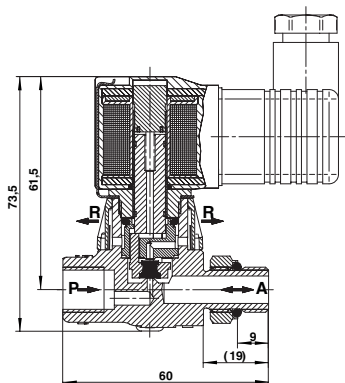
For suitable pilot operator, see 84660 series on page 147

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PILOT VALVE FOR USE WITH ANGLE SEAT VALVES

IMI Buschjost 84660 Series

3/2 N/C, G1/4



- Compact design
- Complete with connector and gasket
- Silenced exhaust
- Solenoid interchangeable without tools (Click-on®)

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non lubricated or neutral fluids

Flow direction:

Fixed

Operational pressure:

1 ... 10 bar

Temperature:

-10°C...+60°C max (fluid)

-10°C...+60°C max (ambient)

MATERIALS

Body:

Brass

Seat seal:

TPU

Internal parts:

Stainless steel, brass

Models

Model (24 V d.c.)	Model (230 V a.c.)	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8466000.9101.02400	8466000.9101.23050	1,6	G1/4	1,2	1...10	1260613.0000.00000

Solenoid details

Type	Power consumption		Protection class	Electrical connection	Wireable plug
	24 V d.c. (W)	230 V a.c. (VA)			
9101	8	15/12	IP65	DIN EN175301-803	Included

Other models and voltages available, please call the express team
For further details please refer to technical data sheet.

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

PNEUMATICALLY ACTUATED DIAPHRAGM VALVE FOR DUST FILTER SYSTEMS

IMI Buschjost 82900 Series

2/2 N/C, G3/4....G1 1/2

High flow rate

Simple construction for ease of maintenance

One piece diaphragm for longer life

Control via separate pilot valve or control unit

TECHNICAL DATA

Medium:

Compressed air, filtered and non lubricated

Flow direction:

Fixed

Operational pressure:

0,4 ... 8 bar

Temperature:

-40°C...+85°C max (fluid)

-20°C....+85°C max (ambient)

MATERIALS

Body:

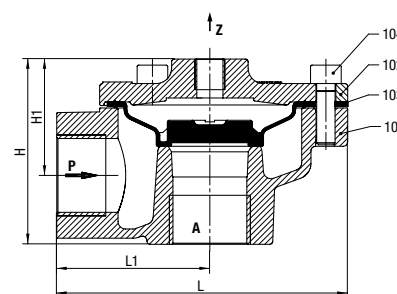
Aluminium

Seat seal:

TPE

Internal parts:

Aluminium



Dimensions

Ports	H	H1	L	L1
G3/4	61,5	39	95	50
G1	61,5	39	95	50
G1 1/2	122,0	91	135	70

Models

Model	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8290300.0000.00000	20	G3/4	18	0,4....8	1261253.0000.00000
8290400.0000.00000	25	G1	22	0,4....8	1261253.0000.00000
8290600.0000.00000	40	G1 1/2	59	0,4....8	1261402.0000.00000

Other models available, please call the express team

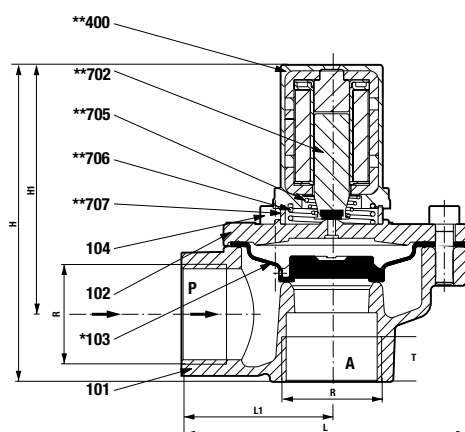
For further details please refer to technical data sheet.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATED DIAPHRAGM VALVE FOR DUST FILTER SYSTEMS

IMI Buschjost 82960 Series

2/2 N/C, G3/4....G1 1/2



Dimensions

Ports	H	H1	L	L1
G3/4	105,5	83	95	50
G1	105,5	83	95	50
G1 1/2	166,0	136	135	70

High flow rate

Simple construction for ease of maintenance

One piece diaphragm for longer life

Control via separate pilot valve or control unit

Solenoid interchangeable without tools, all internal components captive

TECHNICAL DATA

Medium:

Compressed air, filtered and non lubricated

Flow direction:

Fixed

Operational pressure:

0,4 ... 8 bar

Temperature:

-40°C...+85°C max (fluid)

-20°C...+85°C max (ambient)

MATERIALS

Body:

Aluminium

Seat seal:

TPE

Internal parts:

Aluminium

Models

Model (24 V d.c.)	Model (230 V a.c.)	Orifice (mm)	Port size	Kv value (m³/h)	Operating pressure (bar)	Service kit
8296300.8171.02400	8296300.8171.23050	20	G3/4	18	0,4...8	1261253.0000.00000
8296400.8171.02400	8296400.8171.23050	25	G1	22	0,4...8	1261253.0000.00000
8296600.8171.02400	8296600.8171.23050	40	G1 1/2	59	0,4...8	1261402.0000.00000

Other models and voltages available, please call the express team

For further details please refer to technical data sheet.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATED NAMUR VALVE

IMI Herion 97100 Series

6 mm orifice (ND) – 3/2, 5/2, 5/3 APB, G1/4

3/2 or 5/2 way function via adapter plates

Rest position in the event of power failure
(monostable design)

Manual override with detent

TECHNICAL DATA

Medium:

Compressed air filtered, lubricated or non-lubricated.

Operating pressure:

2 ... 8 bar

Flow direction:

Fixed

Mounting position:

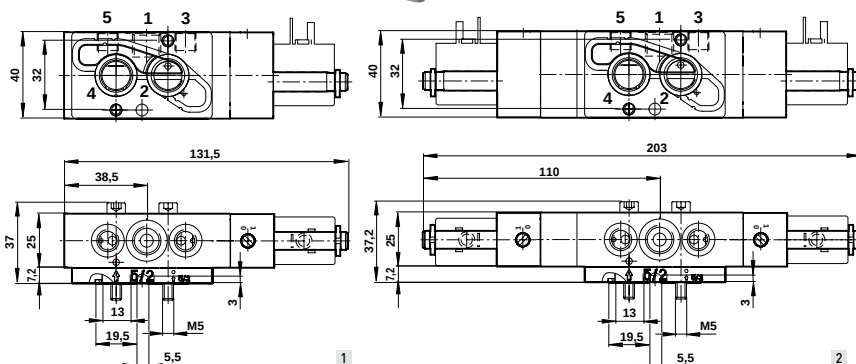
Optional

Ambient temperature:

Valve: -25°C ... +50°C

Solenoid: See solenoid table

With minus temperatures, use conditioned dry air. If installed in the open protect all connections against the penetration of moisture. Consult our Technical Service for use below +2°C



Models

3/2, 5/2 AND 5/3 VALVES			Actuation			Port size			Function	Flow (l/min)	Drawing No.
Model	Model					1	3 (5)	2, 4			
24 V d.c.	230 V a.c.										
9710000303602400	9710000303623050		Solenoid/Spring			G1/4	G 1/8	Flange	5/2	750	1
9711000303602400	9711000303623050		Solenoid/Solenoid			G1/4	G 1/8	Flange	5/2	750	2
9712000303602400	9712000303623050		Solenoid/Solenoid			G1/4	G 1/8	Flange	5/3 APB	500	2

APB = All Ports Blocked Exterior free of non-ferrous metals. For models without coil, replace the last nine digits of the part number with 000000000

Solenoid details

3/2, 5/2 AND 5/3 VALVES			Voltage	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
Power Consumption	24 V d.c.	230 V a.c.					
(W)	(W)	(VA)	24 V d.c.				
1,6	3,5		30	IP 65 (with connector)	-15 ... +50	DIN EN 175301-803 Form A 6)	3036

Standard voltages 24 V d.c., 230 V a.c. Other voltages on request. Design acc. to VDE 0580, EN 50014/50028. 100% duty cycle.

6) Connector not supplied; required connector for d.c.: part no. 0570275 Form A, see 'Accessories' table.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

INDIRECT SOLENOID ACTUATED NAMUR VALVE IMI Herion 97100 series

6 mm orifice (ND) – 3/2, 5/2, 5/3 APB, G1/4

Models

3/2, 5/2 AND 5/3 VALVES FOR MINIMAL ELECTRICAL POWER				Port size	Function	Flow (l/min)	Drawing No.
Model 24 V d.c.	Model 230 V a.c.	Actuation					
				1 3 (5) 2, 4			

9710002305002400	–	Solenoid/Spring	G1/4	G 1/8	Flange	5/2	750	1
9710002303402400	9710002303420600	Solenoid/Spring	G1/4	G 1/8	Flange	5/2	750	1

9712002305002400	–	Solenoid/Solenoid	G1/4	G 1/8	Flange	5/3 APB	500	2
9712002303402400	9712002303420600	Solenoid/Solenoid	G1/4	G 1/8	Flange	5/3 APB	500	2

APB = All Ports Blocked. Exterior free of non-ferrous metals. For models without coil, replace the last nine digits of the part number with 000000000

Solenoid details

3/2, 5/2 AND 5/3 VALVES FOR MINIMAL ELECTRICAL POWER				Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
Power Consumption 24 V d.c. 230 V a.c. (W) (VA)	Rated current 24 V d.c. 230 V a.c. (mA) (mA)						



1,7	–	70	–	IP 65 (with connector)	-40 ... +50	DIN EN 175301-803 Form B ⁶⁾	3050



0,7	2	29	–	IP 65 (with connector) ²⁾	-40 ... +50	DIN EN 175301-803 Form A ⁶⁾	3034

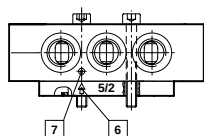
Standard voltages 24 V d.c., 230 V a.c. Other voltages on request. Design acc. to VDE 0580, EN 50014/50028. 100% duty cycle.

2) Valves can be operated with d.c. only. For 230 V a.c. application please use 206 V d.c. coil together with rectifier plug 0663303

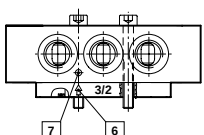
6) Connector not supplied; required connector for d.c.: part no. 0680003 Form B and 0570275 Form A, see 'Accessories' table.

CONVERSION INSTRUCTIONS

5/2 way function (original mode of supply)



3/2 way function



3/2 resp. 5/2 way function can be achieved just by swapping enclosed adaptor plates. Make sure Marker and Arrow do match as shown on drawing at left. Original mode of supply: 5/2 function.

6 Arrow

7 Marker

Accessories

Silencer	Connectors



0014500000000000 (G1/8)* 0570275000000000 Form A
0663303000000000 Form A with rectifier
0680003000000000 Form B

* For indoor use

EXPRESS LINKS

Exhaust air...

Can be noisy and dangerous to ears, always fit a silencer.

See page 309



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATED NAMUR VALVE

IMI Herion 97300

3/2 and 5/2 , G1/4

For single and double acting actuators

3/2 or 5/2 way function in one valve

Manual override with detent

Compact design

Options are available for the protection class EEx m and EEx ia, for zones 1, 2 (gases) ATEX cat.II 2 G, EEx nA, for zones 2 (gases), 22 (dust) ATEX cat.II 3 GD ask your Express team for more details

TECHNICAL DATA

Medium:

Compressed air filtered, lubricated or non-lubricated.

Operating pressure:

2...8 bar

Flow direction:

Fixed

Mounting position:

Optional

Temperature:

-15°C ... +50°C

Please consult our technical service for use below +2°C

MATERIALS

Housing:

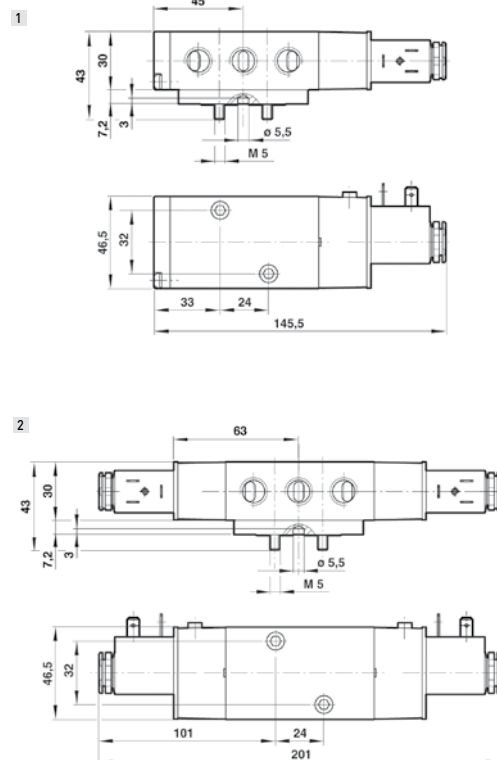
Aluminium anodised

Pilot flange:

Plastic (PBT)

Seals:

NBR



Models

Model 24 V d.c.	Model 230 V a.c.	Port size 1, 3, 5	2, 4	Function	Flow (l/min)	Drawing No.	Electrical connection
9730000305002400	9730000305023050	G1/4	Flange	5/2, 3/2 Sol/Spring	1300	1	DIN EN 175301-803 Form B
9730000303602400	9730000303623050	G1/4	Flange	5/2, 3/2 Sol/Spring	1300	1	DIN EN 175301-803 Form A
9731000305002400	9731000305023050	G1/4	Flange	5/2, 3/2 Sol/Sol	1300	2	DIN EN 175301-803 Form B
9731000303602400	9731000303623050	G1/4	Flange	5/2, 3/2 Sol/Sol	1300	2	DIN EN 175301-803 Form A

For valves without coils, substitute the last nine digits of the part number for 000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

INDIRECT SOLENOID ACTUATED NAMUR VALVE IMI Herion 97300

3/2 and 5/2, G1/4

Solenoid details

	Power Consumption		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	24 V d.c. (W)	230 V a.c. (VA)					
	1,7	4,3	–	IP 65 (with connector)	–15 ... +50	DIN EN 175301-803 Form B ¹	3050
	1,6	3,5	–	IP 65 (with connector)	–15 ... +50	DIN EN 175301-803 Form A ¹	3036

Standard voltages 24 V d.c., 230 V a.c. Other voltages on request.

*1) Connector is not included in delivery; Required connectors 068003 form B or 0570275 form A

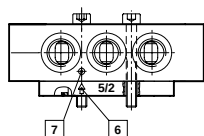
Accessories

Silencer	Connectors	Flange plate	Yoke
			
0014600000000000 (G1/4)*	0570275000000000 Form A 0663303000000000 Form A with rectifier 0680003000000000 Form B	0612790000000000 Single connection plate 0612791000000000 NAMUR-slot use in combination with 0612790 (Alu)	0540593000000000

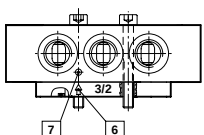
* For indoor use

CONVERSION INSTRUCTIONS

5/2 way function (original mode of supply)



3/2 way function



3/2 resp. 5/2 way function can be achieved just by swapping enclosed adaptor plates. Make sure Marker and Arrow do match as shown on drawing at left. Original mode of supply: 5/2 function.

6 Arrow

7 Marker

EXPRESS LINKS

Connectors and cables

For a full selection of 22mm and 30mm DIN EN175301-803 plugs and cables please see page 171



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

DIRECT SOLENOID ACTUATED POPPET VALVES IMI Herion 24011 series

5 mm orifice (ND) 3/2, Universal, G1/4, 1/4 NPT, flange with NAMUR interface

Main application: single operated process actuators

TÜV-approval based on IEC 61 508, DIN V 19 251.

Approvals: DIN EN 161/3394 DVGW, group Rm and EN 13611

Valves for safety systems to SIL 4 or AK 7

Standard NAMUR type manifold system for easy assembly

Redundancy: 1 of 2, 2 of 3

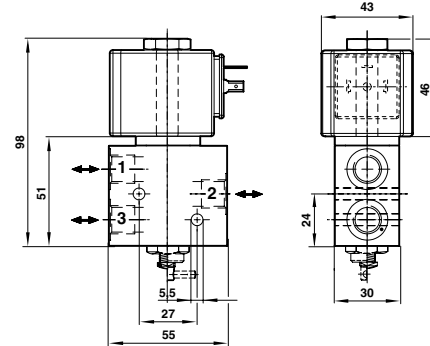
Rest position in the event of power failure provided by mechanical return spring

Solenoids include ATEX versions

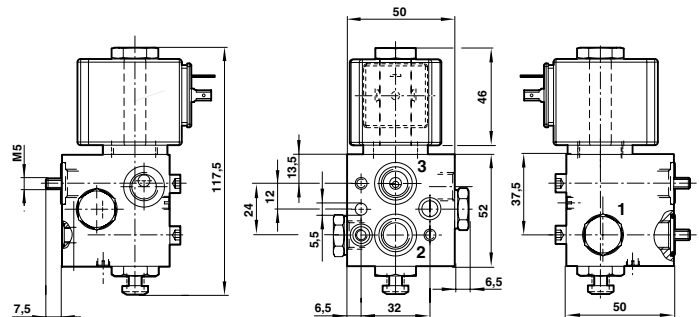
Suitable for outdoor use under critical environment conditions (see solenoid list)



1



2



TECHNICAL DATA

Medium:

Neutral or aggressive gaseous or liquid fluids

Fluid viscosity up to 40 centistokes

Operating pressure:

0 ... 10 bar

Flow:

340 l/min

Flow direction:

Optional

Mounting position:

Optional, preferably vertical

Fluid temperature:

-25°C ... +80°C NBR, -10°C ... +120°C FPM,

water up to +95°C, -40°C to +60°C VMQ

For temperatures below 0°C use conditioned dry air. If installed outdoors protect all connections against the penetration of moisture. Consult our Technical Service for use below +2°C

Models

VALVES WITH THREADED CONNECTION – BRASS VALVES

Model 24 V d.c.	Model 230 V a.c.	Port size	Operating pressure (bar)	Materials seat seal	Manual override	Solenoid group	Drawing No.	Test certificate IEC 61 508
2401103080002400	2401103380323050	G1/4	0 ... 10	NBR	–	A	1	•
2401103426002400	2401103426123050	G1/4	0 ... 10	NBR	–	B	1	•
2401103466002400	–	G1/4	0 ... 10	NBR	–	B	1	•
2401126080002400	2401126380323050	G1/4	0 ... 10	FPM	–	A	1	•
2401126426002400	–	G1/4	0 ... 10	FPM	–	B	1	•
2401138080002400	2401138380323050	1/4 NPT	0 ... 10	NBR	–	A	1	•
2401138426002400	2401138426123050	1/4 NPT	0 ... 10	NBR	–	B	1	•
2401138466002400	–	1/4 NPT	0 ... 10	NBR	–	B	1	•

VALVES WITH THREADED CONNECTION – STAINLESS STEEL VALVES (1,4404/316L) FOR AGGRESSIVE ENVIRONMENT

2401147080002400	2401147380323050	1/4 NPT	0 ... 10	FKM	–	A	1	

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

DIRECT SOLENOID ACTUATED POPPET VALVES IMI Herion 24011 series

5 mm orifice (ND) 3/2, Universal, G1/4, 1/4 NPT, flange with NAMUR interface

Models

VALVES WITH NAMUR INTERFACE – ALUMINIUM VALVES ANODIZED								
Model 24 V d.c.	Model 230 V a.c.	Port size	Operating pressure (bar)	Materials seat seal	Manual override	Solenoid group	Drawing No.	Test certificate IEC 61 508**
2401109080002400	2401109380323050	G1/4	0 ... 10	NBR	Add-on	A	2	•
2401109426002400	2401109426123050	G1/4	0 ... 10	NBR	Add-on	B	2	•

** Certificate not included with valve and should be ordered separately- part number 0695241000000000

Approval S 137/01, SIL 4 for low demand mode, SIL 3 for high demand mode, Approval S 83/96, AK 7 (request from manufacturer)

Particular for valves with TÜV approval and installation in plants, based on safety standards DIN V 19250, IEC 61511, taking into account Maintenance instruction document 7503444. The responsibility for the maintenance and repair of the solenoid valves lies with the users or the supervisory authority for these process systems.

Group A solenoid details

Power Consumption 24 V d.c. 230 V a.c. (W) (VA)		Voltage 24 V d.c. 230 V a.c. (mA) (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
								
16,9	–	703	–	–	IP00 without plug ⁵⁾ IP65 with plug ⁵⁾	-25 ... +60	DIN EN175301-803 Form A ⁴⁾	0800 ⁷⁾
–	18	–	185	–	IP00 without plug ⁵⁾ IP65 with plug ⁵⁾	-25 ... +60	DIN EN175301-803 Form A ⁴⁾	3803 ⁷⁾

Group B solenoid details

Power Consumption 24 V d.c. 230 V a.c. (W) (VA)		Voltage 24 V d.c. 230 V a.c. (mA) (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
								
4	–	162	–	II2G	Ex e mb IIC T4/T6 Gb Ex tb IIIC T 130°C Db IP66 ^{*2), *10)}	-40 ... +80/+55	M20 x 1,5 ⁴⁾	4260 ⁸⁾
–	5,3	–	23	II2G	Ex e mb IIC T4/T6 Gb Ex tb IIIC T 130°C Db IP66 ^{*2), *10)}	-40 ... +80/+55	M20 x 1,5 ⁴⁾	4261 ⁸⁾
4	–	162	–	II2G	Ex d mb IIC T4/T6 Gb Ex e mb IIC T4/T6 Gb Ex tb IIIC T130°C Db ^{*3)}	-40 ... +80/+55	1/2 NPT ⁴⁾	4660 ⁸⁾

Standard voltages 24 V d.c., 230 V a.c. Other voltages on request.
Design acc. to VDE 0580, EN 50014/50028. 100% duty cycle.

2) Category II 2 GD, EC-Type Examination Certificate KEMA 98 ATEX 4452 X

3) Category II 2 GD, EC-Type Examination Certificate PTB 02 ATEX 2085 X

5) Required connector for d.c. type 0570275. Connector with rectifier for a.c. or universal current: type 0663303

6) Connector/cable gland not supplied, see 'Accessories' table

7) Suitable for outdoor installation only if equipped with a special protection (e.g. cubicle installation)

8) This solenoid has a fuse with an appropriate rating.

10) IEC Ex Certificate of Conformity IEC Ex KEM 09.0068

Accessories

Cable glands Protection class EEx e, EEx d (ATEX), Ms nickel plated brass	Connectors d.c.	Connectors a.c.
		
EEx e 0588819000000000 (for solenoid 42xx / 46xx M20 x 1,5) EEx e 0588925000000000 (for solenoid 42xx / 46xx 1/2" NPT)	0570275000000000	0663303000000000 with rectifier

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

DIRECT SOLENOID ACTUATED POPPET VALVES

IMI Herion 95000 Series 1,5 ... 6 mm orifice (ND) 2/2, NC/NO, G1/4

Direct acting solenoid – operation down to zero bar pressure

Short switching times

Assembled oil and grease-free

For a.c. solenoid systems with integrated rectifier (40 ... 60 Hz)

Includes solenoids for ATEX, FM, CSA and XP approvals

TECHNICAL DATA

Medium:

Neutral gaseous and liquid fluids

Operating pressure:

0 ... 40 bar

Flow direction:

Fixed

Mounting position:

Optional, preferably with solenoid on top

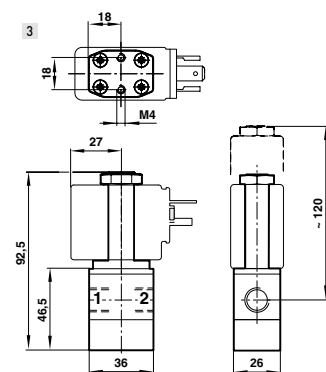
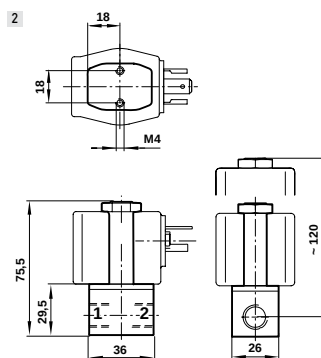
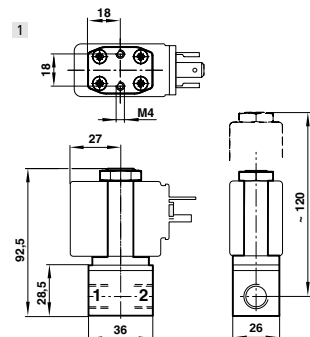
Fluid temperature:

-25 ... +80°C NBR

Ambient temperature:

Depending on solenoid system -25 ... +80°C

Consult our Technical Service for use below +2°C
For contaminated fluids installation of an upstream filter is recommended



Models

Model	Function	Port size	Orifice (mm)	Operating pressure (bar)	Flow l/min	Solenoid group	Drawing No.
9500100xxx*****	2/2 NC	G1/4	1,5	0 ... 40	70	13B	1
9500200xxx*****	2/2 NC	G1/4	2	0 ... 35	120	13B	1
9500300xxx*****	2/2 NC	G1/4	3	0 ... 10	200	13C	1
9500400xxx*****	2/2 NC	G1/4	4	0 ... 12	350	13D	1
9501400xxx*****	2/2 NC	G1/4	4	0 ... 14	350	16D	2
9501500xxx*****	2/2 NC	G1/4	5	0 ... 5	450	16D	2
9501600xxx*****	2/2 NC	G1/4	6	0 ... 5	550	16D	2
9502210xxx*****	2/2 NO	G1/4	1,5	0 ... 40	70	13B	3
9502310xxx*****	2/2 NO	G1/4	3	0 ... 10	160	13B	3

xxxx Insert solenoid code according to solenoid group from tables on page 158. ***** Insert voltage code from table below

Voltage codes

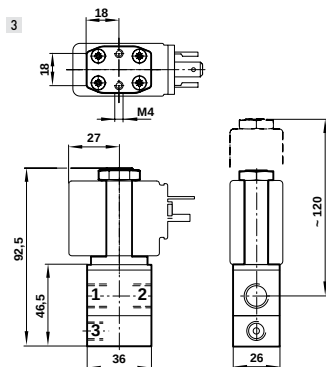
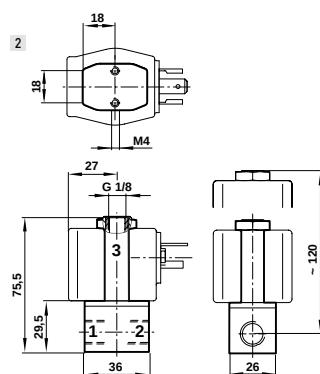
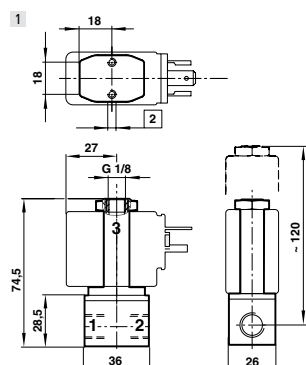
24 V d.c.	02400
230 V a.c.	23050

Other voltages available, please call your Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

DIRECT SOLENOID ACTUATED POPPET VALVES

IMI Herion 96000 series 2 ... 5 mm orifice (ND) 3/2, NC/N0, G1/4



Direct acting solenoid – operation down to zero bar pressure

Short switching times

Assembled oil and grease-free

For a.c. solenoid systems with integrated rectifier (40 ... 60 Hz)

Includes solenoids for ATEX, FM, CSA and XP approvals

TECHNICAL DATA

Medium:

Neutral gaseous and liquid fluids

Operating pressure:

0 ... 18 bar

Flow direction:

Fixed

Mounting position:

Optional, preferably with solenoid on top

Fluid temperature:

-25°C ... +80°C NBR

Ambient temperature:

Depending on solenoid system -25 ... +80°C

Consult our Technical Service for use below +2°C
For contaminated fluids installation of an upstream filter is recommended

Models

Model	Function	Port size	Orifice (mm)	Operating pressure (bar)	Flow l/min	Solenoid group	Drawing No.
9600210xxxx*****	3/2 NC	G1/4	2	0 ... 10	120	13B	1
9600240xxxx*****	3/2 NC	G1/4	2	0 ... 18	120	13D	1
9600320xxxx*****	3/2 NC	G1/4	3	0 ... 6	200	13C	1
9600340xxxx*****	3/2 NC	G1/4	3	0 ... 14	200	13D	1
9601430xxxx*****	3/2 NC	G1/4	4	0 ... 8	350	16C	2
9601440xxxx*****	3/2 NC	G1/4	4	0 ... 10	350	16D	1
9601540xxxx*****	3/2 NC	G1/4	5	0 ... 7	450	16D	2
9602210xxxx*****	3/2 NO	G1/4	2	0 ... 9	100	13B	3
9602340xxxx*****	3/2 NO	G1/4	3	0 ... 9	160	13D	3
9602440xxxx*****	3/2 NO	G1/4	4	0 ... 6	300	16D	3

xxxx Insert solenoid code according to solenoid group from tables on page 158. ***** Insert voltage codes from table below

Voltage codes

24 V d.c.	02400
230 V a.c.	23050

Other voltages available, please call your Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SOLENOID ACTUATORS For 95000 & 96000 series

GROUP 13B	Power consumption 24 V d.c. (W) 230 V a.c. (VA)		Voltage 24 V d.c. (mA) 230 V a.c. (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	8,0	–	331	–	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	0246 ⁷⁾
	–	9,2	–	40	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	3206 ⁷⁾

GROUP 13C	Power consumption 24 V d.c. (W) 230 V a.c. (VA)		Voltage 24 V d.c. (mA) 230 V a.c. (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	12,1	–	504	–	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	0200 ⁷⁾
	–	11,3	–	49	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	3204 ⁷⁾
	8,9	–	369	–	II2G ²⁾ II2D	Ex e mb IIC T4/T5 Gb Ex tb IIIC T 130 °C Db IP66 ^{2) 10)}	T5: –40 ... +55 T4: –40 ... +65	M20 x 1,5 ⁴⁾	4220 ⁸⁾

GROUP 13D	Power consumption 24 V d.c. (W) 230 V a.c. (VA)		Voltage 24 V d.c. (mA) 230 V a.c. (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	16,9	–	703	–	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	0700 ⁷⁾
	–	17,3	–	75	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	3703 ⁷⁾
	11,4	–	475	–	II2G II2D	Ex e mb IIC T4/T5 Gb ^{2) 10)} Ex tb IIIC T 130 °C Db IP66	T5: –40 ... +40 T4: –40 ... +50	M20 x 1,5 ⁴⁾	4230 ⁸⁾

GROUP 16C	Power consumption 24 V d.c. (W) 230 V a.c. (VA)		Voltage 24 V d.c. (mA) 230 V a.c. (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	6,8	–	284	–	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	0827 ⁷⁾
	–	10,6	–	46	–	IP 65 (with connector) ⁵⁾	–25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁴⁾	3805 ⁷⁾

GROUP 16D	Power consumption 24 V d.c. (W) 230 V a.c. (VA)		Voltage 24 V d.c. (mA) 230 V a.c. (mA)		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	16,9	–	703	–	–	IP00 without plug ⁵⁾ IP65 with plug ⁵⁾	–25 ... +60	DIN EN175301-803 Form A ⁴⁾	0800 ⁷⁾
	–	17,3	–	75	–	IP00 without plug ⁵⁾ IP65 with plug ⁵⁾	–25 ... +60	DIN EN175301-803 Form A ⁴⁾	3803 ⁷⁾

Standard voltages 24 V d.c., 230 V a.c. Other voltages on request.

Design acc. to VDE 0580, EN 50014/50028. 100% duty cycle.

2) Category II 2 GD, EC-Type Examination Certificate KEMA 98 ATEX 4452 X

5) Required connector type 0570275.

6) Connector/cable gland not supplied, see 'Accessories' table.

7) Suitable for outdoor installation only if equipped with a special protection (e.g. cubicle installation).

8) This solenoid has a fuse with an appropriate rating.

10) IEC Ex Certificate of Conformity IEC Ex KEM 09.0068

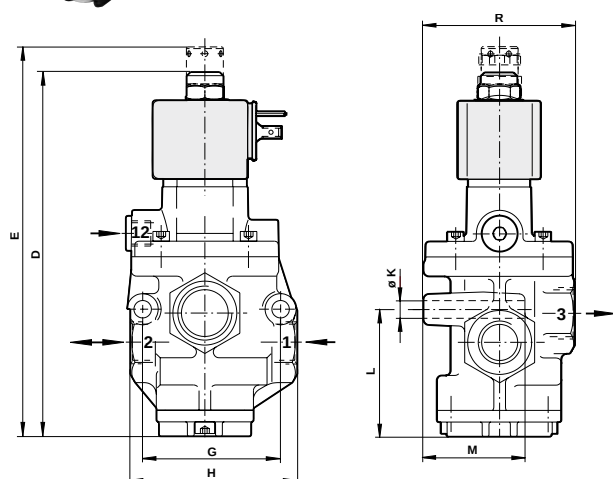
Accessories

Cable glands Protection class EEx e, EEx d (ATEX), Ms nickel plated brass	Connectors
	
EEx e 0588819000000000 (for solenoid 42xx /46xx M20 x 1,5)	0570275000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

INDIRECT SOLENOID ACTUATED POPPET VALVES

IMI Herion 80200 Series



Dimensions

Model	D	E	G	H	ØK	L	M	R
802657	187,5	–	71	86	9	65,5	52	78
802667	197,5	–	82,5	112	9	74,5	54	92
802677	197,5	–	82,5	112	9	74,5	54	92
802857	–	200,5	71	86	9	65,5	52	78

Models

Model 24 V d.c.	Model 24 V a.c.	Port size 1 2 3	Orifice (mm)	Type	Operating pressure (bar)*	Control pressure (bar)*	Switching time (ms)
8026570080002400	8026570080002450	G1/2 G1/2 G3/4	15	NC	2 ... 10	–	10
8026670080002400	8026670080002450	G3/4 G3/4 G1	20	NC	2 ... 10	–	10
8026770080002400	8026770080002450	G1 G1 G1	25	NC	2 ... 10	–	10
8026572080002400#	8026572080002450#	G1/2 G1/2 G3/4	15	NC	-0,9 ... 6	4 ... 10	20

* Required pilot pressure $\geq$ operating pressure, min. 2 bar; with vacuum operating pressure + 1 bar, min. 4 bar.

Valve for vacuum

High flow rate

Optionally pilot-operated by external pilot source

High repeatability of switching time

Easily interchangeable solenoid system

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated

Mounting position:

Optional, preferably vertical with strong vibration
vertical to axis of vibration

Operating pressure:

10 bar maximum

Flow:

(at 6 bar Δp 1 bar)

Orifice Ø l/min

G1/2 5000

G3/4 8000

G1 12000, 18000*

*For 8026870 valves only

Ambient temperature:

-10°C ... +60°C

Consult our Technical Service for use below +2°C

MATERIALS

Housing:

Aluminium

Seat seal:

AU (polyurethane)

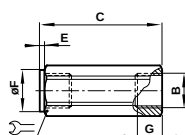
Inner parts:

POM

IN-LINE EXCESS FLOW SHUT-OFF VALVES

T60 air fuses

1/4 ... 1 1/2" BSPP



MATERIALS

Body: aluminium

Internal parts: brass

Spring: stainless steel

Assists in complying with safety regulations

Tamper proof

Compact and safe design

Low pressure drop

Automatically resets after failure correction

High corrosion resistance

High air pressure rating

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated and inert gases

Operating pressure:

Maximum 16 bar, minimum according to hose length

Ambient temperature:

-20°C to +80°C

Consult our Technical Service for use below +2°C.

Dimensions

Model	B	C	E	Ø F	G	H
T60C2890	G1/4	51	3	21	11	21
T60C2891	G1/4	51	3	21	11	21
T60C3890	G3/8	62	5	24	14	24
T60C3891	G3/8	62	5	24	14	24
T60C4890	G1/2	78	5	32	15	32
T60C4891	G1/2	78	5	32	15	32
T60C6890	G3/4	90	5	32	19	32
T60C6891	G3/4	90	5	32	19	32
T60C8890	G1	118	5	50	19	50
T60C8891	G1	118	5	50	19	50
T60CB890	G1 1/2	145	5	64	25,5	64
T60CB891	G1 1/2	145	5	64	25,5	64

Models

Model	Port size BSPP	Drop pressure at shut off flow (bar)	Shut off flow rate at 7 bar (dm³/s) ±10%	Flow at 7 bar Δ P 0,07 bar (dm³/s)
T60C2890	1/4	0,14	8,3	6,5
T60C2891	1/4	0,3	14	6,5
T60C3890	3/8	0,14	19,4	13,5
T60C3891	3/8	0,3	32,2	13,5
T60C4890	1/2	0,14	32,2	23,2
T60C4891	1/2	0,3	48,3	23,2
T60C6890	3/4	0,14	48,3	43
T60C6891	3/4	0,3	80	43
T60C8890	1	0,14	92	68
T60C8891	1	0,3	128	68
T60CB890	1 1/2	0,14	186	145
T60CB891	1 1/2	0,3	268	145

Flow and pressure test conducted according to ISO 6358 test circuit. Mean measured flow values are provided at standard reference conditions.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

NON-RETURN VALVES T55 series

In-line M5...G1/2

Permit free flow of air in one direction only

Simple, reliable design

Silicone free

Low cracking pressure

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

0,1 ... 10 bar

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C.



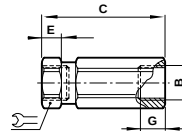
MATERIALS

Body: aluminium

O-ring: nitrile rubber

Valve: POM

Spring: stainless steel



Dimensions

Model	B	C	E	G	⌀
T55M0500	M5	27,5	4	5	11
T55C1800	G1/8	42,5	7	7	14
T55C2800	G1/4	54	8	10,5	17
T55C3800	G3/8	63	9	12	24
T55C4800	G1/2	77	12	15	27

Models

METRIC Model	BSPP	Port size	Flow factor C*	CV	Cracking pressure (bar)
T55M0500	–	M5	0,8	0,19	0,05
–	T55C1800	1/8	2,4	0,59	0,05
–	T55C2800	1/4	5,5	1,35	0,05
–	T55C3800	3/8	9,0	2,20	0,05
–	T55C4800	1/2	15,0	3,70	0,05

*C: measured in dm³/(s.bar)

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

NON-RETURN VALVE

C00GL, C01G2, C02G2, C01G3, C02G3

Ø 4 ... 12, M5, 1/8" ... 1/2"



High flow performance

Nickel plated brass components provide corrosion and contamination resistance and an extended life (C01G2, C02G2, C01G3, C02G3)

Pre applied thread sealant on all taper threads and recessed captive O-ring on parallel threads provides optimum rapid sealing (C01G2, C02G2, C01G3, C02G3)

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

10 bar max.

Operating temperature:

0°C ... +60°C

Consult our Technical Service for use below +2°C.

Tube sizes:

4 ... 12 mm

Thread options (C01G2, C02G2, C01G3, C02G3):

M5, 1/8, 1/4, 3/8 and 1/2

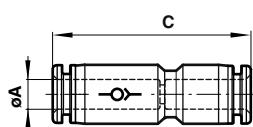
ISO G and ISO R

Tubing types:

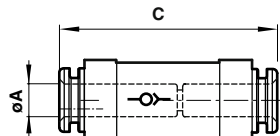
Nylon 11 or 12

Polyurethane 85, 95 or 98 durometer

Ø 4 ... 6



Ø 10 and 12



Models

Model	Model	ØA	C
			
C00GL0400	-	4	42
C00GL0600	-	6	47,5
C00GL0800	-	8	55,5
-	C00GL1000	10	65
-	C00GL1200	12	73

Models

Model taper thread (in)	Model taper thread (out)	ØA	B	C	G	
						
C01G20418	C01G30418	4	R1/8	27,5	8	10
C01G20618	C01G30618	6	R1/8	32,5	8	12
C01G20828	C01G30828	8	R1/4	27,5	10	14

Models

Model ISO G thread (in)	Model ISO G thread (out)	ØA	B	C	G	
						
C02G20405	C02G30405	4	M5	31,5	3,5	10
C02G20418	C02G30418	4	G1/8	27,5	6	10
C02G20618	C02G30618	6	G1/8	32,5	6	12
C02G20828	C02G30828	8	G1/4	37	7	15
C02G21038	C02G31038	10	G3/8	54	8	22
C02G21248	C02G31248	12	G1/2	60,5	9	24

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

IN-LINE FLOW REGULATORS (BLOCK FORM) UNI-DIRECTIONAL C00GE and C00GP

Ø 4 ... 12

High flow performance

In-line or panel mounting

Adjustment can be locked

Captive regulator needle will not blow out
when unscrewed

Nickel plated brass components provide corrosion
and contamination resistance and an extended life

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

10 bar max.

Operating temperature:

0°C ... +60°C

Consult our Technical Service for use below +2°C.

Tube sizes:

4 ... 12 mm

Tubing types:

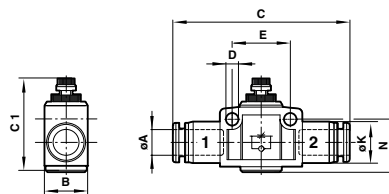
Nylon 11 or 12

Polyurethane 85, 95 or 98 durometer



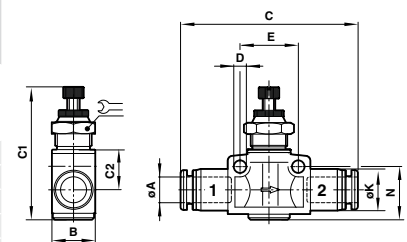
Models – In-line flow control

Model	ØA	B	C	C1 min.	max.	D	E	ØK	N
 C00GE0400	4	12	45	30	33	3,3	15	11	13,5
 C00GE0600	6	16	50	35	39,5	4,4	20,5	13	17,5
 C00GE0800	8	19	55,5	37,5	42	4,4	23	15	20
 C00GE1000	10	23	61	44	49	4,4	28	17,5	23
 C00GE1200	12	26,5	70	47,5	53,5	4,4	32	20,5	25,5



Models – In-line and panel mounting flow control

Model	ØA	B	C	C1		C2	D	E	ØK	N		Panel hole	Panel thickness
				min.	max.								
													
C00GP0400 	4	12	42	35,5	38	5,5	3,2	15,5	11	13,5	12	11	5
C00GP0600 	6	16	49,5	43	48,5	8	4,3	20,5	13	17,5	17	16	6
C00GP0800 	8	19	56,5	47,5	53	8,5	4,3	23	15	20	19	17	6
C00GP1000 	10	23	63	53,5	61,5	10,5	4,3	27,5	17,5	23	22	17	7
C00GP1200 	12	26,5	73,5	57,5	64,5	12	4,4	32,5	20,5	25,5	24	21	7



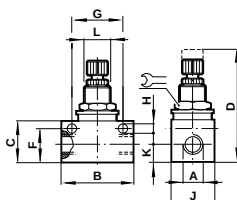
For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

BLOCK FORM FLOW REGULATORS

T1000 and T1100 series

Uni-directional (T1000) – M5, G1/8 ... G1/2

Bi-directional (T1100) – G1/8 and G1/4



Dimensions

Model	A	B	C	D	F	G	ØH	J	K	L	
T1000M0500	M5	25	15	45	12	18	4,5	12	5,5	M10 x 0,75	12
T1000C1800	G1/8	34	20	51	16,5	24	4,5	16	8	M12 x 1	14
T1000C2800	G1/4	45	25,5	61,5	21	32	4,5	19	9,5	M14 x 1	17
T1000C3800	G3/8	58	32,5	78,5	27	43	4,5	28	13	M20 x 1	24
T1000C4800	G1/2	65	36	82	30,5	50	4,5	30	15	M20 x 1	24
T1100C1800	G1/8	34	20	51	16,5	24	4,5	16	8	M12 x 1	14
T1100C2800	G1/4	45	25,4	61,5	20,8	32	4,5	19	9,5	M12 x 1	17

Compact size/low weight/ in-line units

High flow performance

Suitable for panel and wall mounting

Two way flow control (T1100 series)

Adjustment can be locked

Captive regulator needle will not blow out when unscrewed

Adjusting knob position line

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated or non-lubricated, inert gases

Operating pressure:

1 ... 10 bar (T1000 series G1/8 ... G1/2)

0,3 ... 10 bar (T1000 series M5)

0 ... 10 bar (T1100 series)

Ambient temperature:

–20°C ... +80°C

Consult our Technical Service for use below +2°C

MATERIALS

Body:

Aluminium alloy

Seals:

Nitrile

Needle and internal parts:

Brass

External parts:

Aluminium alloy

Models

Model	Port size	Max. regulated flow factor		Free flow factor		Opening pressure (bar)	Minimum operating pressure (bar)
		C*	CV	C*	CV		
T1000M0500	M5	0,28	0,07	0,28	0,07	0,3	0,3
T1000C1800	G1/8	0,57	0,14	1,50	0,37	<0,1	1
T1000C2800	G1/4	1,30	0,32	2,80	0,69	<0,1	1
T1000C3800	G3/8	4,80	1,17	6,70	1,64	<0,1	1
T1000C4800	G1/2	7,50	1,84	8,30	2,00	<0,1	1
T1100C1800	G1/8	0,57	0,14	–	–	–	0
T1100C2800	G1/4	1,30	0,32	–	–	–	0

*C: measured in dm³/(s.bar)

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

BLOCKING, PRESSURE REDUCING & PNEUMATIC SENSOR FITTINGS

4 ... 12 mm O/D metric tube – G1/8 ... G1/2



Very compact units

Easy tube insertion for rapid assembly of pneumatic circuits

Positive tube anchorage

Simpler pneumatic systems

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

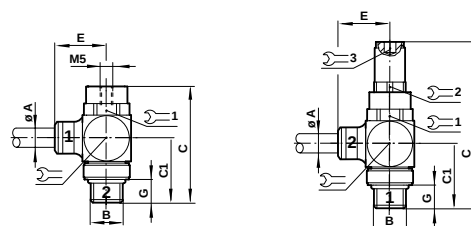
Operating pressure:

- Blocking fitting:
Supply pressure 1 ... 10 bar
Pilot pressure – see table
- Pressure reducing fitting:
Primary pressure 1 ... 10 bar max.
Secondary pressure 1 ... 8 bar max.
- Pneumatic sensor fitting:
Cylinder pressure (Pc) 10 bar max.
Sensor supply pressure 3 ... 10 bar
Sensor switch pressure 0,6 bar typ.

Ambient temperature:

–20°C ... +80°C

Consult our Technical Service for use below +2°C.



Dimensions

Model	Ø A	B	C	C1	E	G	1	2
102GA0418	4	G1/8	41	20	22	6	13	16
102GA0618	6	G1/8	41	20	23	6	13	16
102GA0628	6	G1/4	48	26	25	10,5	17	20
102GA0828	8	G1/4	48	26	26	10,5	17	20
102GA0838	8	G3/8	55	29	28	10,8	22	24
102GA1038	10	G3/8	55	29	32,5	10,8	22	24
102GA1248	12	G1/2	65,5	36	39,5	12,8	27	30

MATERIALS

Nickel plated brass or plastic body

Nickel plated brass collet

Plastic sealing washer

Nitrile and polyurethane elastomeric parts

Zinc plated brass banjo bolts

Model	Ø A	B	C	C1	E	G	1	2
102GB0418	4	G1/8	73	20	22	6	13 / 16	11/5
102GB0628	6	G1/4	81	26	25	10,5	17 / 20	13/5
102GB0828	8	G1/4	81	26	26	10,5	17 / 20	13/5
102GB0838	8	G3/8	86	29	28	10,8	22 / 24	17/6
102GB1038	10	G3/8	86	29	32,5	10,8	22 / 24	17/6

Models

BLOCKING FITTING

Model O/D tube Male thread Pilot pressure (bar)



102GA0418	●	4	G1/8	2,5
102GA0618	●	6	G1/8	2,5
102GA0628	●	6	G1/4	2,5
102GA0828	●	8	G1/4	2,5
102GA0838	●	8	G3/8	3
102GA1038	●	10	G3/8	3
102GA1248	●	12	G1/2	2,5

PRESSURE REDUCING FITTING

Model O/D tube Male thread



102GB0418	●	4	G1/8
102GB0628	●	6	G1/4
102GB0828	●	8	G1/4
102GB0838	●	8	G3/8
102GB1038	●	10	G3/8

PNEUMATIC SENSOR FITTING

Model O/D tube Male thread



102GD0418	●	4	G1/8
102GD0428	●	4	G1/4

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

HEAVY DUTY FLOW REGULATORS, UNI-DIRECTIONAL M/800 series

In-line – G1/8 ... G1



- Line mounted general purpose regulators
- Captive regulating needle will not blow out when unscrewed
- Calibrated adjusting knob, can be locked
- Suitable for wall mounting
- High operating pressure

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

0,3 ... 16 bar

Ambient temperature:

–20°C ... +80°C (Alternative models to 150°C)

Consult our Technical Service for use below +2°C

MATERIALS

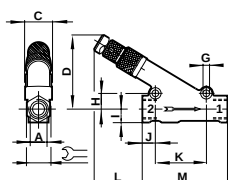
S/836, M/837, M/839

Body, adjusting knob and locking ring: brass

M/840, M/855

Body, adjusting knob and locking ring: aluminium

Seals: nitrile rubber.



Dimensions

Model	A	D max.	Ø G	H	I	J	K	L	M	≡
S/836	G1/8	38	5,1	8,5	8	5	24,5	27,5 max.	46	13
M/837	G1/4	37,5	5,2	11	9,5	6	41	25 max.	60	17
M/839	G1/2	80	8,3	17	16	13	57	53 max.	95	28
M/840	G3/4	104	8,3	21,5	17,5	20,5	76	66 max.	118	32
M/855	G1	147	13	26	24	23	90	107 max.	150	48

Models

BSPP Model	Port size	Max. regulated flow factor		Free flow factor	
		C**	CV	C**	CV
					
S/836 	G1/8	0,7	0,17	2,1	0,6
M/837 	G1/4	2	0,49	4,3	1
M/839 	G1/2	12	2,9	17	4,1
M/840 	G3/4	18	4,4	38	9,3
M/855 	G1	36	8.8	45	11

** C measured in dm³/(s.bar)

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXHAUST FLOW REGULATOR/SILENCERS

T20 series

M5, G1/8 ... G1/2

Compact, integral flow regulator and silencer units

Captive regulating needle will not blow out when unscrewed

Reduced dimensions



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated, inert gases

Operating pressure:

0 ... 10 bar

Ambient temperature:

-20°C ... +80°C

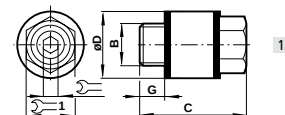
Consult our Technical Service for use below +2°C.

MATERIALS

Body and washer: nylon

Silencer: porous polyethylene

Adjusting screw: high tensile zinc electroplated steel



Dimensions

Model	B	C	G	Ø D		 1	Drawing No.
T20M0500	M5	16	5	-	1,5	8	1
T20C1800	G1/8	20,5	6	15	2,5	13	1
T20C2800	G1/4	29	7	18	4	15	1
T20C3800	G3/8	38	8	24	6	20	1
T20C4800	G1/2	50	10	30	8	25	1

Models

Model	Thread	Port size	Max. regulated flow factor C**	
			CV	



T20M0500	●	Metric	M5	0,3	0,07
T20C1800	●	BSPP	1/8	1,6	0,4
T20C2800	●	BSPP	1/4	3,2	0,8
T20C3800	●	BSPP	3/8	6,9	1,7
T20C4800	●	BSPP	1/2	10	2,4

** C measured in dm³/(s.bar)

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

QUICK EXHAUST VALVES T70, S/511, S/513, S/514 series

G1/8 ... G1/2



Enables air to be exhausted quickly from air reservoirs and cylinders

Allows higher cylinder speeds to be achieved

Simple, compact design and construction

Very reliable in operation

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

0,5 ... 10 bar (T70)

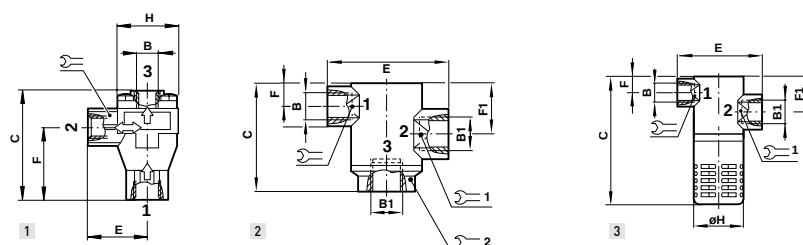
0,7 ... 10 bar (S/511)

0,7 ... 7 bar (S/513, S/514)

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C



Dimensions

Model	B	C	E	F	Symbol	Drawing No.
T70C1800	G1/8	53	28	35,5	19	1
T70C2800	G1/4	53	28	35,5	19	1
T70C3800	G3/8	73,5	40	48	30	1
T70C4800	G1/2	73,5	40	48	30	1

Model	B/B1	C	E	F/F1	Symbol	Symbol 1	Symbol 2	Drawing No.
S/511	G1/2 / G3/4	86	100	17/48	30	36	32	2

Model	B/B1	C	E	F/F1	Ø H	Symbol 1	Drawing No.
S/513	G1/4 / G3/8	86,5	58	10 / 23	34	21 / 23	3
S/514	G1/2 / G3/4	134	100	17 / 48	47,5	30 / 36	3

MATERIALS

Body & cover: zinc alloy (T70*1800 & T70*2800, S/513), aluminium alloy (T70*3800 & T70*4800, S/511, S/514)

Seals: nitrile (T70), polyurethane (S/51*)

O-ring: nitrile

Element: porous plastic (S/513, S/514)

Models

Model	Port size BSPP	Flow (1 ... 2)** C*	Cv	Flow (2 ... 3)** C*	Cv



T70C1800	●	G1/8	3,8	0,9	7,3	1,8
T70C2800	●	G1/4	7,7	1,9	10	2,5
T70C3800	●	G3/8	15,5	3,8	22,5	5,5
T70C4800	●	G1/2	21,5	5,3	24	5,9
S/511	●	G1/2	5,7	1,9	44	10,8
S/513	●	G1/4	3,9	0,8	11	2,7
S/514	●	G1/2	5,7	1,9	32	7,8

* C = dm³/(s.bar) ** Flow factor measured at 6 bar inlet pressure

EXPRESS PLUS

**S/513 & S/514
Quick Exhaust Valves**
Come complete with
integral silencer.



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ADDITIONAL RANGES

T50 PIF NON-RETURN VALVES

- Allow free flow in one direction only
- Simple reliable design
- Low weight
- Low cracking pressure
- High operating pressure



Models

Model		O/D tube
T50P0004	●	4
T50P0006	●	6
T50P0008	●	8
T50P0010	●	10
T50P0012	●	12

SHUTTLE VALVES

- Allow two independent signal sources to be connected to a common pilot line
- Can be used to perform an 'OR' logic function
- Can be combined to operate from three or more sources
- Valves can be ganged together



Models

Model		Port size
T65C1800	●	G1/8
T65C2800	●	G1/4

S/520 HEAVY DUTY NON-RETURN VALVES

- Allows free flow in one direction only
- Simple reliable design
- High operating pressure and temperature
- Spares kit available



Models

Model		Port size BSPP
S/520	●	G1/8
S/521	●	G1/4
S/532	●	G3/8
S/522	●	G1/2

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

15mm Plugs according to DIN EN175301-803 Form C

Valve	Connector	Model	Connector type	Cable length	Voltage a.c.	d.c.	Features	Suppression	Protection class	Gland size	Power consumption
V50, V40/V41, V44/V45	Plug with moulded cable	V10013-D01	● DIN EN175301-803	1000 mm	-	-	-	-	IP 65	Pg 7	-
		V10013-D03	● DIN EN175301-803	3000 mm	-	-	-	-	IP 65	Pg 7	-
	Plug with cable gland	V10027-D00	● DIN EN175301-803	-	-	-	-	-	IP 65	Pg 7	-
		0588666000000000	● DIN EN175301-803	-	-	-	-	-	IP 65	Pg 7	-
	Indicator plug	V10012-D13	● DIN EN175301-803	-	12 ... 24 V	12 ... 24 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10012-D18	● DIN EN175301-803	-	110 V	110 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10012-D19	● DIN EN175301-803	-	220 V	220 V	LED,VDR	•	IP 65	Pg 7	0,25W
	Indicator plug with moulded cable	V10014-D01	● DIN EN175301-803	1000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10014-D03	● DIN EN175301-803	3000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10015-D01	● DIN EN175301-803	1000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10015-D03	● DIN EN175301-803	3000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10016-D01	● DIN EN175301-803	1000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 7	0,25W
		V10016-D03	● DIN EN175301-803	3000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 7	0,25W
	Light emitting gasket	V10037-E13	● DIN EN175301-803	-	12 ... 24 V	12 ... 24 V	Green LED	•	IP 65	-	0,25W
		V10037-E18	● DIN EN175301-803	-	110 ... 120 V	110 ... 120 V	Green LED	•	IP 65	-	1W
		V10037-E19	● DIN EN175301-803	-	220 ... 240 V	220 ... 240 V	Green LED	•	IP 65	-	1W

22mm Plugs according to Industrial Standard or DIN EN175301-803 Form B

Valve	Connector	Model	Connector type	Cable length	Voltage a.c.	d.c.	Features	Suppression	Protection class	Gland size	Power consumption
97300, V51/V53, Excel 22, V60/V63, ISO★STAR, UM/22000, 97100	Plug with moulded cable	M/P43313/1	● 22mm Industrial std.	1000 mm	-	-	-	-	IP 65	Pg 9	-
		M/P43313/3	● 22mm Industrial std.	3000 mm	-	-	-	-	IP 65	Pg 9	-
	Plug with cable gland	M/P19063	● 22mm Industrial std.	-	-	-	-	-	IP 65	Pg 9	-
	Indicator plug	M/P24121/1	● 22mm Industrial std.	-	12 ... 24 V	12 ... 24 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P24121/2	● 22mm Industrial std.	-	110 V	110 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P24121/3	● 22mm Industrial std.	-	220 V	220 V	LED,VDR	•	IP 65	Pg 9	0,25W
	Indicator plug with moulded cable	M/P43314/11	● 22mm Industrial std.	1000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P43314/13	● 22mm Industrial std.	3000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P43314/21	● 22mm Industrial std.	1000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P43314/23	● 22mm Industrial std.	3000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P43314/31	● 22mm Industrial std.	1000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 9	0,25W
		M/P43314/33	● 22mm Industrial std.	3000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 9	0,25W
	Light emitting gasket	M/P40859	● 22mm Industrial std.	-	12 ... 24 V	12 ... 24 V	Green LED	•	IP 65	-	0,25W
		M/P40886	● 22mm Industrial std.	-	110 ... 120 V	110 ... 120 V	Green LED	•	IP 65	-	1W
		M/P40860	● 22mm Industrial std.	-	220 ... 240 V	220 ... 240 V	Green LED	•	IP 65	-	1W
	Plug with cable gland	0680003000000000	● DIN EN175301-803	-	12 ... 250 V	12 ... 250 V	-	•	IP 65	Pg 9	0,25W
		0664811000000000	● DIN EN175301-803	-	-	24 V	Green LED	•	IP 65	Pg 9	1W
		0664812000000000	● DIN EN175301-803	-	250 V	-	Green LED	•	IP 65	Pg 9	1W

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

30mm Plugs according to DIN EN175301-803 Form A

Valve	Connector	Model	Connector type	Cable length	Voltage a.c.	d.c.	Features	Suppression	Protection class	Gland size	Power consumption
ISO★STAR, 97300, 24011, V04, V05, Excelon 32, 80200, XSz,	Plug with moulded cable	M/P43315/1	● DIN EN175301-803	1000 mm	–	–	–	–	IP 65	Pg 11	–
		M/P43315/3	● DIN EN175301-803	3000 mm	–	–	–	–	IP 65	Pg 11	–
VP10, 18D, 95000, 96000, 97100	Plug with cable gland	M/P15737	● DIN EN175301-803	–	250 V	300 V	–	–	IP 65	Pg 11	–
		M/P19117	● DIN EN175301-803	–	–	240 V	–	–	IP 65	Pg 11	–
		0570275000000000	● DIN EN175301-803	–	250 V	300 V	–	–	IP 65	Pg 11	–
		0663303000000000	● DIN EN175301-803	–	12 ... 250 V	12 ... 250 V	–	–	IP 65	Pg 11	–
		0570110000000000	● DIN EN175301-803	–	12 ... 240 V	12 ... 240 V	–	–	IP 65	Pg 11	–
Indicator plug		M/P24120/1	● DIN EN175301-803	–	10 ... 50 V	10 ... 50 V	LED,VDR	•	IP 65	Pg 11	0,25W
		M/P24120/2	● DIN EN175301-803	–	70 ... 115 V	70 ... 115 V	LED,VDR	•	IP 65	Pg 11	0,25W
		M/P24120/3	● DIN EN175301-803	–	150 ... 240 V	150 ... 240 V	LED,VDR	•	IP 65	Pg 11	0,25W
Indicator plug with moulded cable		M/P43316/11	● DIN EN175301-803	1000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 11	0,25W
		M/P43316/13	● DIN EN175301-803	3000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 11	0,25W
		M/P43316/23	● DIN EN175301-803	3000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 11	0,25W
		M/P43316/31	● DIN EN175301-803	1000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 11	0,25W
		M/P43316/33	● DIN EN175301-803	3000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 11	0,25W
Light emitting gasket		M/P40861	● DIN EN175301-803	–	12 ... 24 V	12 ... 24 V	Green LED	•	IP 65	–	0,25W
		M/P40880	● DIN EN175301-803	–	110 ... 120 V	110 ... 120 V	Green LED	•	IP 65	–	0,25W
		M/P40862	● DIN EN175301-803	–	220 ... 240 V	220 ... 240 V	Green LED	•	IP 65	–	0,25W

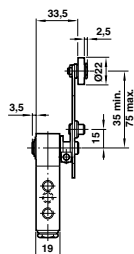
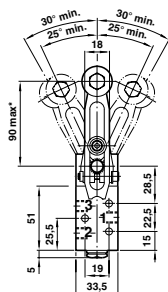
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CLASSIC RANGE

3/2 POPPET VALVE MANUAL/MECHANICAL

Martonair S/666

G1/8



Long established and well-proven valves
Compact size
Normally closed and normally open models
May also be used as 2/2 valves

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valves, directly actuated

Mounting:

Through-holes in valve body

Port Size:

G1/8

Operating Pressure:

2 ... 10 bar

Flow (to CETOP RP50P):

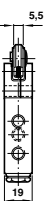
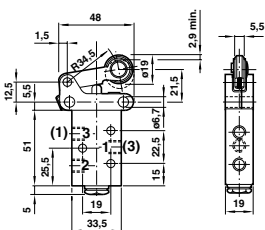
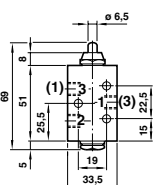
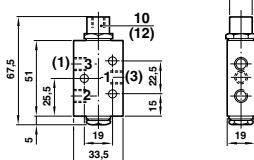
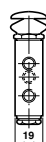
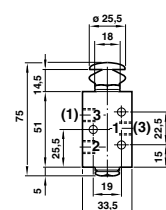
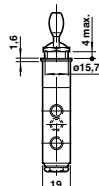
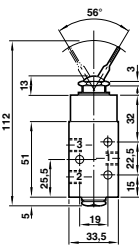
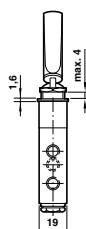
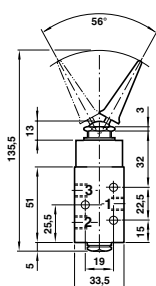
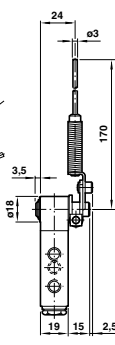
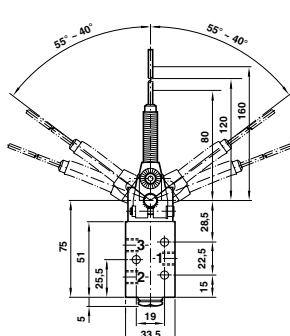
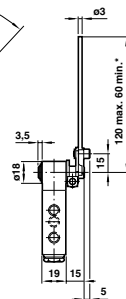
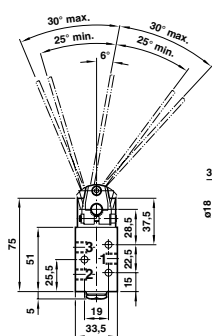
666 range - CV = 0,2

667 range - CV = 0,18

Operating Temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C



Models

PILOT Model	Function	Actuation	Drawing No.
S/666/40	3/2 NC	Pilot/Spring	7
S/667/40	3/2 NO	Pilot/Spring	7
MECHANICAL Model	Function	Actuation	Drawing No.
S/666/14	3/2 NC	Plunger/Spring	8
S/666/8	3/2 NC	Roller/Spring	9
S/667/8	3/2 NO	Roller/Spring	9
S/666/108	3/2 NC	Variable Roller/Spring	1
S/666/106	3/2 NC	Variable Rod/Spring	2
S/666/116	3/2 NC	Antenna Spring/Spring	3
MANUAL Model	Function	Actuation	Drawing No.
S/666/1	3/2 NC	Button/Spring	6
S/666/7	3/2 NC	Lever/Lever (Panel mounting)	5
S/666/117	3/2 NC	Lever (long)/Lever (panel mounting)	4

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

3/2 POPPET VALVE MANUAL/MECHANICAL

Martonair S/1340

G1/4

Very rugged, heavy duty valves

Corrosion resistant

Adjustable lever operators, may be rotated at 90° intervals

Integral alternative ports

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valves, directly actuated

Mounting:

Through-holes in valve body

Port Size:

G1/4

Operating Pressure:

0,7 ... 10 bar

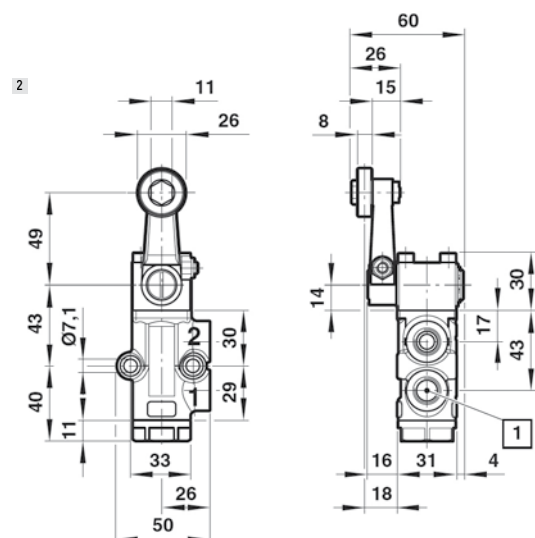
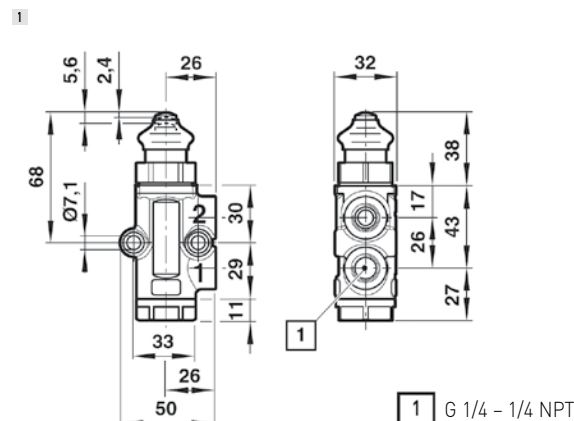
Flow:

1300 l/min

Operating Temperature:

-5°C ... +75°C

Consult our Technical Service for use below +2°C



Models

Model	Actuation	Drawing No.
S/1340/14 	Plunger/Spring	1
S/1340/8 	Roller/Spring	2

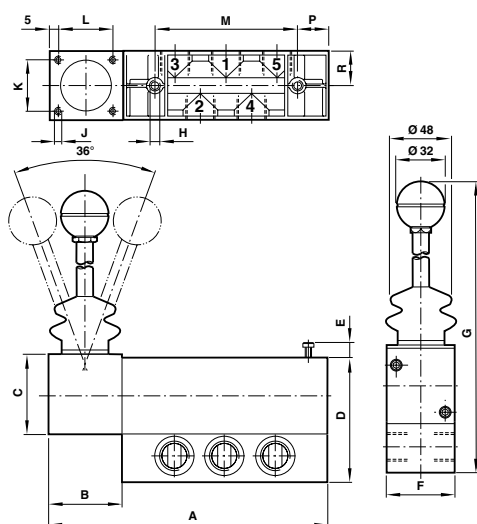
For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

5/2, 5/3 MANUAL IN-LINE VALVE

Martonair M/1700

G1/4, G1/2



Dimensions

Model	A	B	C	D	E	F	G	H	J	K	L	M	P	R
M/1702	143,5	42	41,5	65	0,5	35	200,5	M6	M4	27	32	67,5	17	17,5
M/17*4	197	49	56,5	89,5	9,5	35	222,5	M8	M5	35,5	35,5	101,5	23	24

Models

Model	Size	Function	Actuation	Mid position
M/1702/177	G1/4	5/2	Lever/Lever	–
M/1702/87	G1/4	5/3	Lever/Lever/Lever	APB
M/1704/177	G1/2	5/2	Lever/Spring	–
M/1704/87	G1/2	5/3	Lever/Lever/Lever	APB
M/1704/687	G1/2	5/3	Lever/Spring/Lever	APB
M/1714/687	G1/2	5/3	Lever/Spring/Lever	COE

Compact, well proven range – perfectly suited to many applications

Air assisted detent ensures positive valve location

Simple servicing and sub-base mounting for reduced down-time

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

2 ... 10 bar

Flow:

Size l/min

G1/4 1290

G1/2 3200

Ambient temperature:

–20°C ... +80°C

Consult our Technical Service for use below +2°C

MATERIALS

Body and sub-base:

Pressure die-cast zinc alloy

Spool:

Aluminium

Seals:

Nitrile

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

3/2 POPPET VALVE MANUAL/MECHANICAL**Martonair M/21**

G1/8

Light, compact body

Very low pilot pressure

Air bleed principle

Exhaust port protected by filter disc

Low operating force – highly sensitive

TECHNICAL DATA**Medium:**

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valve, bleed actuated

Mounting:

Through-holes in valve body

Port Size:

G1/8

Operating Pressure:

4 ... 10 bar

Flow:

158 l/min

Operating Temperature:

+5°C ... +80°C

MATERIALS**Body:**

Die-cast zinc alloy

Piston:

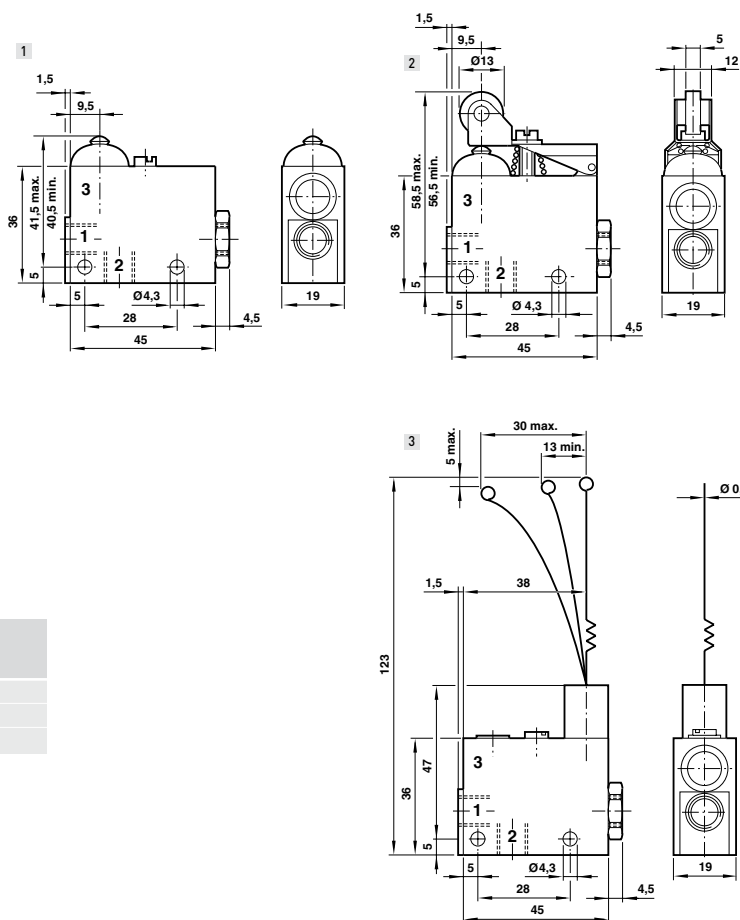
Steel

Seals:

Nitrile

Models

Model	Function	Actuation	Drawing No.
M/21/41	●	3/2 Plunger (internal supply)/Air	1
M/21/11	●	3/2 Roller (internal supply)/Air	2
M/21/70	●	3/2 Antenna (internal supply)/Air	3



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

M5

TECHNICAL DATA

Consult our Technical Service for use below +2°C

MATERIALS

Nitrile



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

3/2, 5/2 IN-LINE VALVE

Enots Super X

G1/8, G1/4

High performance from proven design
Internal pilot feed on solenoid operated valves
Manual override as standard on solenoid operators



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

2 ... 10 bar, 930 mbar vacuum – 10 bar (pilot models)

Flow:

Size l/min

G1/8 335

G1/4 965

Ambient temperature:

0°C ... +70°C (pilot models)

0°C ... +50°C (solenoid models)

Consult our Technical Service for use below +2°C

MATERIALS

Body:

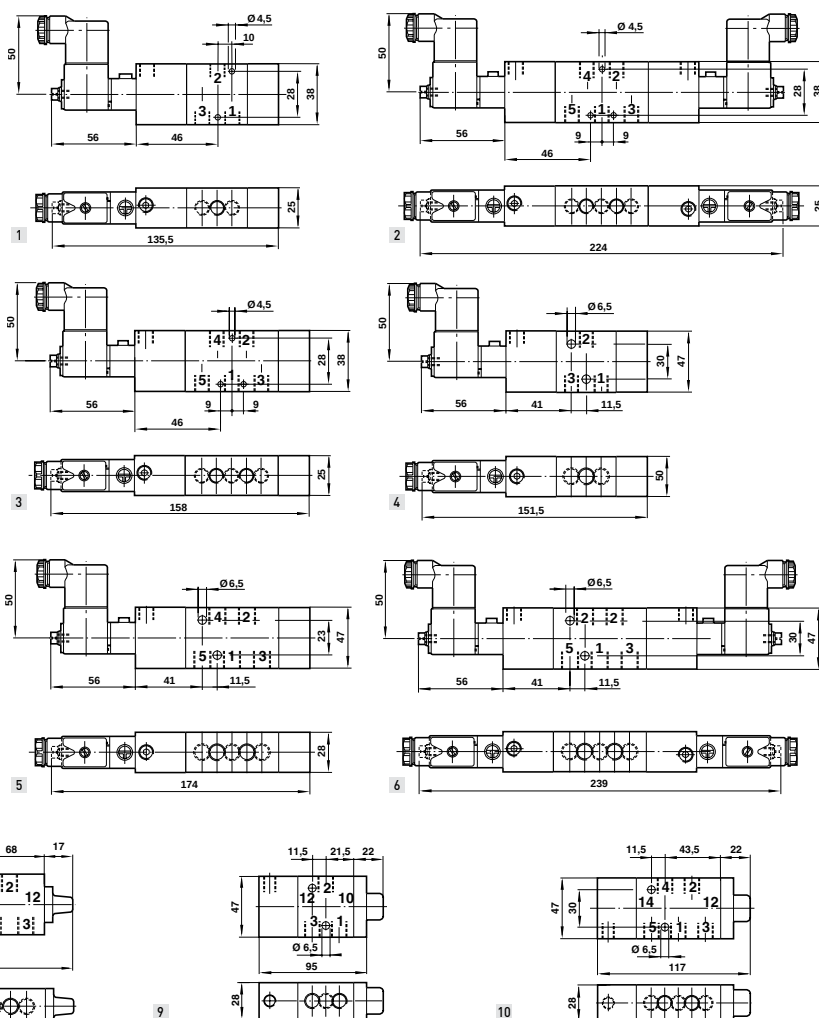
Die-cast zinc alloy

End cover:

Aluminium or glass filled nylon

Seals:

Nitrile



Models

SOLENOID ACTUATED 24 V d.c.				
Model	Port	Function	Actuation	Drawing No.
1418350G024	G1/8	3/2 NC	Sol/Spring	1
X418550G024	G1/8	5/2	Sol/Spring	3
X418580G024	G1/8	5/2	Sol/Sol	2
1428350G024	G1/4	3/2 NC	Sol/Spring	4
X428550G024	G1/4	5/2	Sol/Spring	5
X428580G024	G1/4	5/2	Sol/Sol	6

PILOT ACTUATED					Pilot pressure (bar)	Drawing No.
Model	Port	Function	Actuation			
03040102	G1/8	3/2 NC	Pilot/Spring	4-10		7
03041302	G1/8	3/2 NC	Pilot/Spring	2-10		7
X3044102	G1/8	5/2	Pilot/Spring	3-10		8
03060102	G1/4	3/2 NC	Pilot/Spring	2-10		9
03061302	G1/4	3/2 NC	Pilot/Spring	4-10		9
X3064102	G1/4	5/2	Pilot/Spring	3-10		10

Other options available please call your Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

3/2, 5/2 & 5/3 IN-LINE VALVE

Martonair M/20000

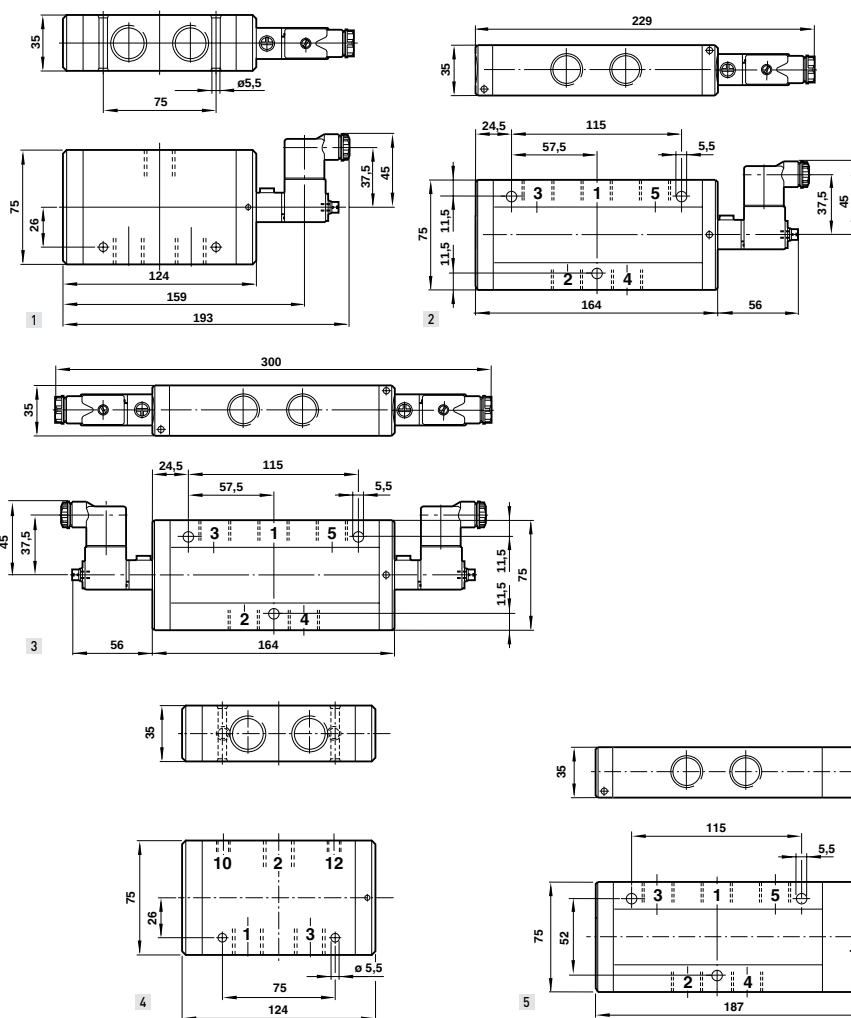
G1/2



Steel reinforced spool seals – for stability and reliability

In-line ports – allows pipework to be kept neat and tidy

Manual override fitted as standard



TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Flow:

3450 l/min

Ambient temperature:

-20°C ... +80°C (pilot)

0°C ... +50°C (solenoid)

Consult our Technical Service for use below +2°C

Operating pressure:

10 bar maximum

MATERIALS

Body and spool:

Aluminium

Seals:

Nitrile

Models

SOLENOID ACTUATED 24 V d.c.				
Model	Function	Actuation	Operating pressure (bar)	Drawing No.
M/20134/122/MDZ83J	3/2 NC	Sol/Spring	2,5-10	1
M/20154/172/MDZ83J	5/2	Sol/Spring	2,5-10	2
M/20154/6123/MDZ83J	5/3 APB	Sol/Spring/Sol	2,8-10	3

Other options available please call your Express Team.

OP = Operating pressure

PILOT ACTUATED						
Model		Function	Actuation	Operating pressure (bar)	Pilot pressure (bar)	Drawing No.
M/20134/40	●	3/2 NC	Pilot/Spring	2-10	2+ [0,1xOP]*	4
M/20134/3	●	3/2 NC	Pilot/Pilot	1,3-10	1,3+ [0,1xOP]*	4
M/20154/40	●	5/2	Pilot/Spring	2-10	2+ [0,1xOP]*	5
M/20154/3	●	5/2	Pilot/Pilot	1,7-10	1,7+ [0,2xOP]*	6
M/20154/63	●	5/3 APB	Pilot/Spring/Pilot	2,8-10	2,8+ [0,1xOP]*	6

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

IN-LINE SOLENOID VALVE

IMI Herion 26360, 80207

3/2, 5/2, G1/4

For double-acting actuators

Crossover-free switching

Safety function in the event of power failure provided by mechanical return spring

Suitable for use in exposed locations with severe environmental conditions



TECHNICAL DATA

Medium:

Solenoid valve for filtered, lubricated or oil-free compressed air, instrument air, nitrogen and other neutral fluids

Operating pressure:

1 ... 10 bar

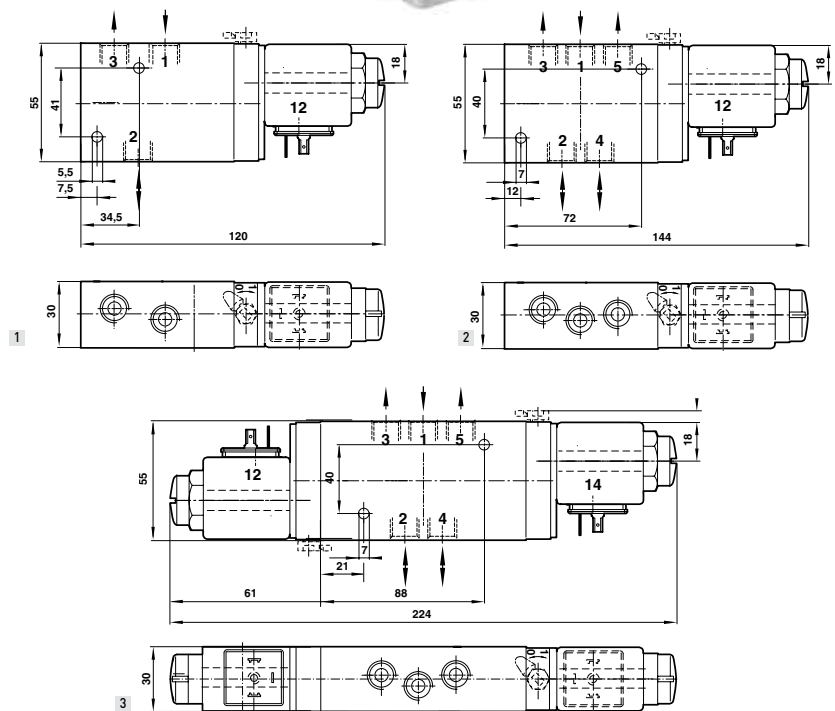
Flow:

1200 l/min

Temperatures:

Valve: -20 °C ... +60 °C

With minus temperatures, use conditioned dry air.
If installed in the open protect all connections against the penetration of moisture



Models

Model 24 V d.c.	Model 230 V a.c.	Port size	Function	Actuation	Flow (l/min)	Operating pressure (bar)	Drawing No.
8020765024202400	8020765024523050	G1/4	3/2	Sol/Air spring	1200	1...10	1
8020765421002400	8020765421123050	G1/4	3/2	Sol/Air spring	1200	1...10	1
2636065024202400	2636065024523050	G1/4	5/2	Sol/Air spring	1200	1...10	2
2636065421002400	2636065421123050	G1/4	5/2	Sol/Air spring	1200	1...10	2
2636265024202400	2636265024523050	G1/4	5/2	Sol/Sol	1200	1...10	3
2636265421002400	2636265421123050	G1/4	5/2	Sol/Sol	1200	1...10	3

For valves without coil replace last 9 digits with 000000000 Other options available please call your Express Team.

Solenoid details

Type	Power consumption 24 V d.c. (W)	230 V a.c. (VA)	Current 24 V d.c. (mA)	230 V a.c. (mA)	Protection class	Temperatures ambient/fluid °C	Electrical connection
0242	2,7	-	113	-	IP65 (with plug)	-25...+60, Fluid: max. 80	DIN EN 175301-803, Form A
0245	-	4,2	-	-	IP65 (with plug)	-25...+60, Fluid: max. 80	DIN EN 175301-803, Form A
4210	3,9	-	162	-	EEx me II T4, IP66 T110°C	-40...+55 (T6), -40...+80 (T4)	M20 x 1,5
4211	-	5,3	-	23	EEx me II T6/T4, IP66 T130°C	-40...+55 (T6), -40...+80 (T4)	M20 x 1,5

Other options available please call your Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE IN-LINE SOLENOID VALVE

IMI Herion 26230

5/2, 5/3, G1/4, G1/2



- Standard manual override with detent
- Compact design
- High flow rate
- Simple design of soft spool seal system
- Maintenance-free
- Easily interchangeable solenoid system

TECHNICAL DATA

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operating pressure:

1 ... 10 bar

Flow:

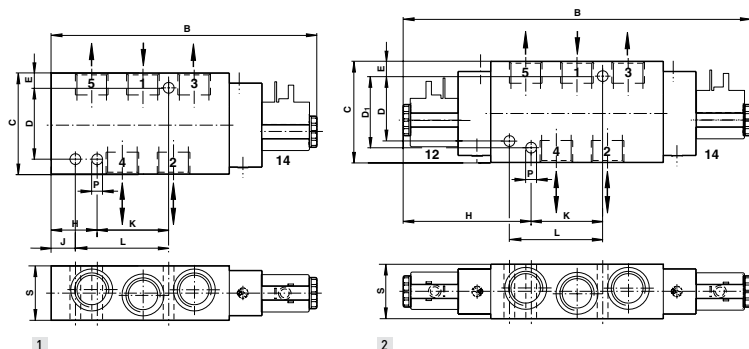
1200 ... 3000 l/min

Ambient temperature:

-10°C ... 50°C

For temperatures below 0°C use conditioned dry air. If installed outdoors protect all connections against the penetration of moisture

Consult our Technical Service for use below +2°C



Dimensions

Type	Drawing No.	B	C	D	E	H	J	K	L	ØP	S
5/2, G1/4	1	139,5	55	40	7,5	-	5	-	67	7	30
5/2, G1/2	1	171,5	65	46	9,5	30	16	46	60	7	35

Type	Drawing No.	B	C	D	D1	E	H	K	L	ØP	S
5/2, G1/4	2	214,5	55	40	40	7,5	77,5	67	-	7	30
5/2, G1/2	2	223,5	65	46	46	9,5	82,5	46	60	7	35
5/3, G1/4	2	232,5	55	40	40	7,5	88	67	-	7	30
5/3, G1/2	2	289	70	46	50	10	-	50	60	7	40

Models

Model	24 V d.c.	230 V a.c.	Port size	Actuation	Flow (l/min)	Operating pressure (bar)	Electrical connection	Drawing No.
2623000305202400	●	-	G1/4	5/2 Sol/Spring	1200	1...10	DIN EN 175301-803 Form B	1
-	-	2623000303023050	●	G1/4	5/2 Sol/Spring	1200	DIN EN 175301-803 Form A	1
2623500305202400	●	-	G1/2	5/2 Sol/Spring	3000	2...10	DIN EN 175301-803 Form B	1
-	-	2623500303023050	●	G1/2	5/2 Sol/Spring	3000	DIN EN 175301-803 Form A	1
2623100305202400	●	-	G1/4	5/2 Sol/Sol	1200	1...10	DIN EN 175301-803 Form B	2
-	-	2623100303023050	●	G1/4	5/2 Sol/Sol	1200	DIN EN 175301-803 Form A	2
-	-	2623600303023050	●	G1/2	5/2 Sol/Sol	3000	DIN EN 175301-803 Form A	2
2623300305202400	●	-	G1/4	5/3 APB	900	3... 10	DIN EN 175301-803 Form B	2
-	-	2623300303023050	●	G1/4	5/3 APB	900	DIN EN 175301-803 Form A	2
-	-	2623800303023050	●	G1/2	5/3 APB	2200	DIN EN 175301-803 Form A	2
-	-	2623200303023050	●	G1/4	5/3 COE	900	DIN EN 175301-803 Form A	2
-	-	2623700303023050	●	G1/2	5/3 COE	2200	DIN EN 175301-803 Form A	2
-	-	2623400303023050	●	G1/4	5/3 COP	900	DIN EN 175301-803 Form A	2

For valves without coil replace last 9 digits with 000000000

Other options available please call your Express Team.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

IN-LINE SOLENOID VALVE

IMI Herion 26220

4/2, G1/8, G1/4

LABS-free

Standard manual override with detent

Compact design

High flow rate

Maintenance-free

TECHNICAL DATA

Medium:

Solenoid valve for filtered, lubricated *1)
or non-lubricated air

Operating pressure:

Maximum 10 bar

Flow:

700 ... 1400 l/min

Temperature range:

-10* ... +60 °C

* With minus temperatures, use conditioned dry air.

If installed in the open protect all connections against the penetration of moisture!

*1) Oil recommendation: Shell Hydrol DO 32, Esso Febis (as of July 1992) or comparable oils with DVI values <8 (DIN 53521) and ISO viscosity class 32-46 (DIN 51519).

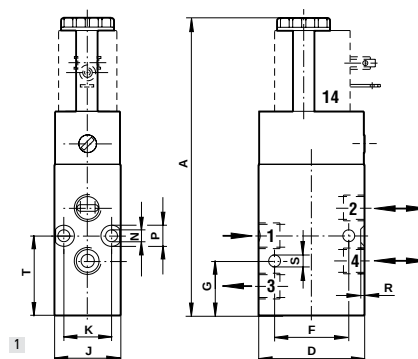
MATERIALS

Body:

Aluminium

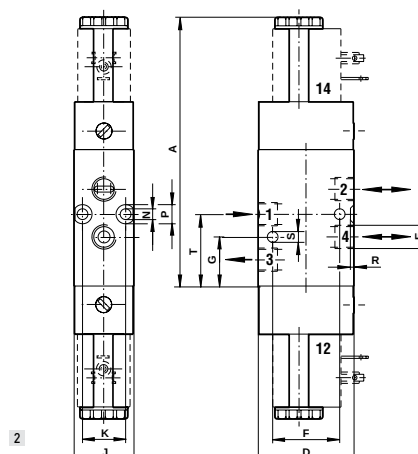
Seals:

NBR



Dimensions

Type	A	D	F	G	J	K	ØN	ØP	R	ØS	T
26220**	112,5	40	28	20,5	25	18	4,5	8	2	4,5	30
26222**	127,5	55	32	28,5	30	23	4,5	-	-	5,5	40,5



Dimensions

Type	A	D	F	G	J	K	ØN	ØP	R	ØS	T
26221**	172	40	28	25	25	18	4,5	8	2	4,5	34,5
26223**	191	55	32	36	30	23	4,5	-	-	5,5	48

Models

SOLENOID ACTUATED 24 V d.c.											
Model 24 V d.c.	Port size	Function	Actuation	Flow (l/min)	Operating pressure (bar)	Power consumption (W)	Electrical connection	Drawing No.			
2622000305202400	● G1/8	4/2	Sol/Spring	700	1,5... 10	4,8	DIN EN 175301-803 Form B	1			
2622200305202400	● G1/4	4/2	Sol/Spring	1400	1,5... 10	4,8	DIN EN 175301-803 Form B	1			
2622100305202400	● G1/8	4/2	Sol/Sol	700	1,5... 10	4,8	DIN EN 175301-803 Form B	2			
2622300305202400	● G1/4	4/2	Sol/Sol	1400	1,5... 10	4,8	DIN EN 175301-803 Form B	2			
2622001305002400	● G1/8	4/2	Sol/Spring	700	2... 8	1,7	DIN EN 175301-803 Form B	1			
2622201305002400	● G1/4	4/2	Sol/Spring	1400	2... 8	1,7	DIN EN 175301-803 Form B	1			
2622101305002400	● G1/8	4/2	Sol/Sol	700	2... 8	1,7	DIN EN 175301-803 Form B	2			
2622301305002400	● G1/4	4/2	Sol/Sol	1400	2... 8	1,7	DIN EN 175301-803 Form B	2			

For valves without coil replace last 9 digits with 000000000

Other options available please call your Express Team.

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

PRESSURE SWITCHES

A comprehensive range of Pressure Switches, providing a range of different options for converting pressure changes into an electrical signal. The range includes electromechanical and electronic switches suitable for pneumatic and all fluid applications.

The Norgren Express range contains both newer products and also examples from our classic ranges including IMI Herion, Enots and Martonair. Each catalogue page shows comprehensive detail and pdf datasheets are available online via the Express store.



Fast Find Guide

Please note: These products represent only part of the Norgren pressure switch range. If you can't see the option you require contact your Express team.

ELECTRO-MECHANICAL PRESSURE SWITCHES

18D Pneumatic

-1 ... 30 bar



Page 185

18D Hydraulic

5 ... 420 bar



Page 186

20D

Low pressure, Allfluid and ATEX
-0,025 ... 100 bar



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ELECTRONIC PRESSURE SWITCHES

50D Pneumatic

-1 ... 10 bar



Page 188

33D

Pneumatic/Allfluid

-1 ... 400 bar



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CLASSIC PRODUCTS

8D Pneumatic & Hydraulic



Page 190

Martonair M/1339 Pneumatic



Page 190

Enots 04015600 Pneumatic



Page 190

ELECTRO-MECHANICAL PRESSURE SWITCH

18D Pneumatic

-1 ... 30 bar



- Gold-plated contacts
- High cycle life
- Vibration resistant to 15 g
- Microswitch approved by UL and CSA
- Intrinsically safe operation

TECHNICAL DATA

Medium:

Neutral, gaseous and liquid fluids

Operation:

Diaphragm

Ambient temperature:

-10°C ... +80°C

Consult our Technical Service for use below +2°C.

Repeatability:

±3%, of full scale

1st choice

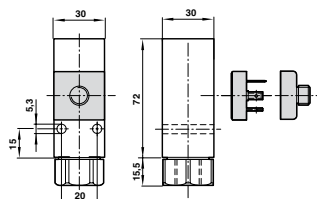
FOR HIGHER PERFORMANCE AND RELIABILITY, CHOOSE NORGREN.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

USE THIS RANGE OF SWITCHES TO REPLACE:

- Bosch Rexroth PM1 range
- Festo PEV range



Models

STANDARD Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference (bar)	Max. over pressure (bar)	Plug	Electrical connector M12 x 1 Straight x 2 m long 90° x 2 m long



0880100000000000	● -1 ... 0	G1/4	DIN EN 175301-803 Form A	0,15 ... 0,18	80	-	-	-
0880110000000000	● -1 ... 1	G1/4	DIN EN 175301-803 Form A	0,25 ... 0,35	80	-	-	-
0880200000000000	● 0,2 ... 2	G1/4	DIN EN 175301-803 Form A	0,20 ... 0,35	80	-	-	-
0880300000000000	● 0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
0880400000000000	● 1 ... 16	G1/4	DIN EN 175301-803 Form A	0,40 ... 1,20	80	-	-	-
0880600000000000	● 1 ... 30	G1/4	DIN EN 175301-803 Form A	1,00 ... 5,00	80	-	-	-
0880620000000000	● 1 ... 30	1/4 NPT	DIN EN 175301-803 Form A	1,00 ... 5,00	80	-	-	-
0880226000000000*	● 0,2 ... 4	G1/4	DIN EN 175301-803 Form A	0,20 ... 0,35	80	0570110000000000	-	-
0880326000000000*	● 0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	0570110000000000	-	-
0880426000000000*	● 1 ... 16	G1/4	DIN EN 175301-803 Form A	0,40 ... 1,20	80	0570110000000000	-	-
0881100000000000	● -1 ... 0	Flange	DIN EN 175301-803 Form A	0,15 ... 0,18	80	-	-	-
0881200000000000	● 0,2 ... 2	Flange	DIN EN 175301-803 Form A	0,20 ... 0,35	80	-	-	-
0881300000000000	● 0,5 ... 8	Flange	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
0881400000000000	● 1 ... 16	Flange	DIN EN 175301-803 Form A	0,40 ... 1,20	80	-	-	-
0880160000000000	● -1 ... 0	G1/4	M12 x 1	0,15 ... 0,18	80	-	0523057000000000	0523058000000000
0880260000000000	● 0,2 ... 2	G1/4	M12 x 1	0,20 ... 0,35	80	-	0523057000000000	0523058000000000
0880360000000000	● 0,5 ... 8	G1/4	M12 x 1	0,35 ... 0,85	80	-	0523057000000000	0523058000000000
0880460000000000	● 1 ... 16	G1/4	M12 x 1	0,40 ... 1,20	80	-	0523057000000000	0523058000000000

MODELS FOR WATER APPLICATIONS

0880323000000000	● 0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-

MODELS CONFORMING TO ATEX – ZONE 2 AND 22 [Ex II 3G/D]

0880280000000000	● 0,2 ... 2	G1/4	DIN EN 175301-803 Form A	0,20 ... 0,35	80	-	-	-
0880380000000000	● 0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
0880480000000000	● 1 ... 16	G1/4	DIN EN 175301-803 Form A	0,40 ... 1,20	80	-	-	-

* Switch is LABS free, plug needs to be ordered separately, all other DIN connector versions include standard connector plug

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ELECTRO-MECHANICAL PRESSURE SWITCH

18D Hydraulic

5 ... 420 bar

Microswitch with gold plated contacts

High number of switching cycles

Vibration resistant to 15 g

Microswitch approved by UL and CSA

Intrinsically safe operation

TECHNICAL DATA

Medium:

For neutral, self lubricating fluids, e.g. hydraulic oil, lube oil, light fuel oil

Operation:

Piston type sensor system

Temperature:

Fluid/Ambient -10°C ... +80°C

Consult our Technical Service for use below +2°C.

Operating viscosity:

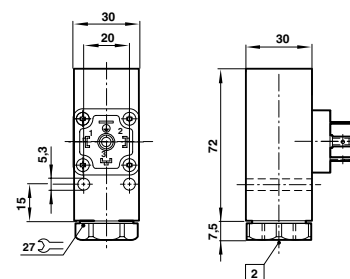
Up to 1000 mm²/s

Repeatability:

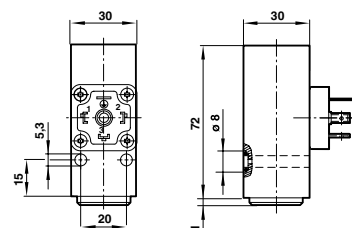
±3%, of full scale



G1/4



Flange



FOR HIGHER PERFORMANCE AND RELIABILITY, CHOOSE NORGREN.

Thousands of products and accessories available for immediate despatch.

- Always in stock
- Rapid delivery
- Free 2-year warranty

USE THIS RANGE OF SWITCHES TO REPLACE:

- Bosch Rexroth PM1 range
- Festo PEV range

Models

Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference (bar)	Max. over pressure (bar)
0882100000000000	5 ... 70	G1/4	DIN EN 175301-803 Form A	10,5 ... 15	400
0882200000000000	10 ... 160	G1/4	DIN EN 175301-803 Form A	11 ... 17	400
0882300000000000	25 ... 250	G1/4	DIN EN 175301-803 Form A	11 ... 17	400
0882400000000000	40 ... 420	G1/4	DIN EN 175301-803 Form A	17 ... 38	400
0883100000000000	5 ... 70	Flange	DIN EN 175301-803 Form A	10,5 ... 15	400
0883200000000000	10 ... 160	Flange	DIN EN 175301-803 Form A	11 ... 17	400
0883300000000000	25 ... 250	Flange	DIN EN 175301-803 Form A	11 ... 17	400
0883400000000000	40 ... 420	Flange	DIN EN 175301-803 Form A	17 ... 38	600

All versions include standard connector plug

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ELECTRO-MECHANICAL PRESSURE SWITCH

20D Series

20D ATEX



20D Allfluid



Allfluid: 0,5 ... 16 bar

ATEX Allfluid: 0,5 ... 10 bar

Low Pressure: -0,025 ... 1,6 bar

High accuracy

Robust metal housing (Standard and Low pressure)

Robust metal housing in weather-resisting version (ATEX)

TECHNICAL DATA

Medium:

For neutral, aggressive (Standard only), non-flammable gases and fluids

Operating pressure:

Allfluid: 0,5 ... 16 bar

ATEX Allfluid: 0,5 ... 10 bar

Low Pressure: -0,025 ... 1,6 bar

Other ranges available, contact Express team

Temperature:

Fluid Ambient

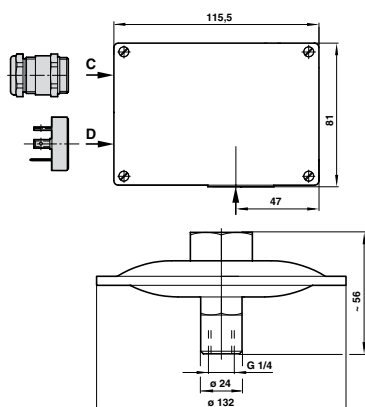
-10 ... +100°C -25 ... +80°C (Standard and Low pressure)

-10 ... +75°C -10 ... +75°C (ATEX)

Repeatability:

±1% of final value

20D Low pressure



Models

ALLFLUID Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference	Range - Switching pressure difference (bar)				Max. over pressure (bar)	Plug	Bracket - Steel
					Lower	Upper & min.	Upper max.				
1801505000000000	0,5 ... 6	G1/2	Gland Pg 13,5	Adjustable	0,80	0,90	5,00	20	-	-	0574772000000000
1801605000000000	0,5 ... 10	G1/2	Gland Pg 13,5	Adjustable	0,90	1,90	8,00	20	-	-	0574772000000000
1801615000000000	0,5 ... 10	G1/2	M20 x 1,5	Adjustable	0,90	1,90	8,00	20	-	-	0574772000000000
1801715000000000	1 ... 16	G1/2	M20 x 1,5	Adjustable	1,70	2,00	12,00	50	-	-	0574772000000000
1811505000000000	0,5 ... 6	G1/2	Gland Pg 13,5	Fixed	0,30	0,35	-	20	-	-	0574772000000000
1811605000000000	0,5 ... 10	G1/2	Gland Pg 13,5	Fixed	0,30	0,40	-	20	-	-	0574772000000000
1811615000000000	0,5 ... 10	G1/2	M20 x 1,5	Fixed	0,30	0,40	-	20	-	-	0574772000000000
1811715000000000	1 ... 16	G1/2	M20 x 1,5	Fixed	0,70	0,80	-	50	-	-	0574772000000000
ATEX ALLFLUID											
1841615000000000	0,5 ... 10	G1/2	M20 x 1,5	Fixed	0,70	0,90	-	20	-	-	0574772000000000
1851615000000000	0,5 ... 10	G1/2	M20 x 1,5	Adjustable	0,70	0,90	8,00	20	-	-	0574772000000000
LOW PRESSURE											
1812500000000000	0 ... 0,025	G1/4	DIN EN 175301-803 Form A	Fixed	0,003	0,004	-	0,5	0570110000000000	0574772000000000	
1812600000000000	0 ... 0,06	G1/4	DIN EN 175301-803 Form A	Fixed	0,004	0,006	-	0,5	0570110000000000	0574772000000000	
1812700000000000	0,004 ... 0,16	G1/4	DIN EN 175301-803 Form A	Fixed	0,004	0,008	-	0,5	0570110000000000	0574772000000000	
1812800000000000	0 ... 0,25	G1/4	DIN EN 175301-803 Form A	Fixed	0,004	0,009	-	0,5	0570110000000000	0574772000000000	

Note: Other pressure ranges available. Contact your Express Team.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

ELECTRONIC PRESSURE SWITCH

50D Pneumatic

-1 ... 10 bar

Fast error detection through changing colour displays

Easy to use pressure switch with clear display and intuitive programming

Flexible assembly with DIN panel or wall mounting

User selected connection; rear or base

LABS free materials



TECHNICAL DATA

Medium:

Compressed air, filtered (40 µm),
lubricated and non-lubricated

Temperature:

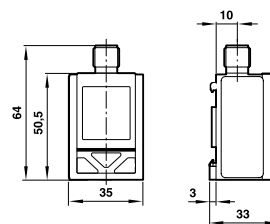
Fluid 0°C ... +60°C

Ambient 0°C ... +60°C

Please consult our technical service for use below +2°C

Display:

Pressure units bar, psi, kPa, InHg Vacuum

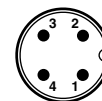


Electrical parameters

Electrical connection:	M12 x 1
Power supply:	UB = 24 V d.c. (17 ... 30 V d.c.)

Electrical connection M12 x 1

PIN-No.	Signal	Cable colour
1	Supply voltage	Brown
2	Out 2 (PNP; NPN; analogue)	White
3	0 V	Blue
4	Out 1 (PNP; NPN)	Black



Models

Model	Pressure range (bar)	Over pressure (bar)	Fluid connection	Output signal

Accessories

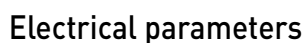
Wall mounting clip	Electrical Connector M12 x1 Straight x 2 m long	x 5 m long	90° x 2 m long	Front Frame	Front Frame with Keyboard Cover



DS-E1V10F4B2PR00	● -1 ... 0	5	G1/4	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1V10P4B2PR00	● -1 ... 0	5	4 mm Dia. PIF	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1V11F4B2PR00	● -1 ... +1	5	G1/4	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1V11P4B2PR00	● -1 ... +1	5	4 mm Dia. PIF	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P06F4B2PR00	● 0 ... 6	15	G1/4	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P06P4B2PR00	● 0 ... 6	15	4 mm Dia. PIF	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P06F4BPAR00	● 0 ... 6	15	G1/4	1 x PNP + 1 x analogue	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P06P4BPAR00	● 0 ... 6	15	4 mm Dia. PIF	1 x PNP + 1 x analogue	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P10F4B2PR00	● 0 ... 10	15	G1/4	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P10P4B2PR00	● 0 ... 10	15	4 mm Dia. PIF	2 x PNP	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P10F4BPAR00	● 0 ... 10	15	G1/4	1 x PNP + 1 x analogue	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000
DS-E1P10P4BPAR00	● 0 ... 10	15	4 mm Dia. PIF	1 x PNP + 1 x analogue	0523962000000000 0523057000000000 0523052000000000 0523058000000000 0524038000000000 0524036000000000

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

-1 ... 400 bar



Electrical connection M12 x 1

Models

Model	Pressure range (bar)	Over pressure (bar)	Fluid connection	Output signal



0863012000000000	●	-1 ... 1	10	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863022000000000	●	-1 ... 1	10	G1/4	2 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863042000000000	●	-1 ... 1	10	G1/4	1 x PNP / analogue 4 ... 20 mA	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863016000000000	●	-1 ... 1	10	Flange	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863112000000000	●	0 ... 10	40	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863122000000000	●	0 ... 10	40	G1/4	2 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863212000000000	●	0 ... 16	30	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863222000000000	●	0 ... 16	30	G1/4	2 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863242000000000	●	0 ... 16	30	G1/4	1 x PNP / analogue 4 ... 20 mA	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863216000000000	●	0 ... 16	30	Flange	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863312000000000	●	0 ... 40	100	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863322000000000	●	0 ... 40	100	G1/4	2 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863342000000000	●	0 ... 40	100	G1/4	1 x PNP / analogue 4 ... 20 mA	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863412000000000	●	0 ... 100	200	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863422000000000	●	0 ... 100	200	G1/4	2 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863512000000000	●	0 ... 160	300	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863612000000000	●	0 ... 250	500	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863622000000000	●	0 ... 250	500	G1/4	2 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000
0863712000000000	●	0 ... 400	750	G1/4	1 x PNP	0523057000000000	0523052000000000	0523058000000000	0523053000000000

Accessories

Electrical Connector M12 x 1		90°	
Straight			
x 2 m long	x 5 m long	x 2 m long	x 5 m long



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

ELECTRO-MECHANICAL PRESSURE SWITCH**IMI Herion 8D Series – pneumatic and hydraulic**

Pneumatic

Diaphragm actuated

Switching pressure range 0,02 ... 30 bar

Hydraulic

Piston actuated

Switching pressure range 5 ... 250 bar

**Models**

PNEUMATIC SWITCHES							Plug
Model	Pressure range	Fluid connection	Electrical connection	Adjustment method	Switching pressure difference (bar)	Max. over pressure (bar)	
0820150000000000	0,2 ... 12	G1/4	Gland pg 13,5	Allen screw – cover	0,9 ... 1,4	50	–
0820155000000000	0,2 ... 12	G1/4	DIN EN 175301-803 Form A	Allen screw – cover	0,9 ... 1,4	50	0570110000000000
0820160000000000	0,2 ... 12	G1/4	Gland pg 13,5	Rotary knob	0,9 ... 1,4	50	–
0820750000000000	0,5 ... 30	G1/4	Gland pg 13,5	Allen screw – cover	1,0 ... 2,0	50	–
0820850000000000	0,5 ... 30	Flange	Gland pg 13,5	Allen screw – cover	1,0 ... 2,0	50	–
0820760000000000	0,5 ... 30	G1/4	Gland pg 13,5	Rotary knob	1,0 ... 2,0	50	–

HYDRAULIC SWITCHES							Plug
Model	Pressure range	Fluid connection	Electrical connection	Adjustment method	Switching pressure difference (bar)	Max. over pressure (bar)	
0821051000000000	5 ... 70	G1/4	Gland pg 13,5	Hex. screw & cover	7 ... 12	250	–
0821055000000000	5 ... 70	G1/4	DIN EN 175301-803 Form A	Hex. screw & cover	7 ... 12	250	0570110000000000
0821050000000000	10 ... 160	G1/4	Gland pg 13,5	Hex. screw & cover	9 ... 18	250	–
0821150000000000	10 ... 160	Flange	Gland pg 13,5	Hex. screw & cover	9 ... 18	250	–
0821060000000000	10 ... 160	G1/4	Scaled rotary knob	Rotary knob	9 ... 18	250	–
0821097000000000	50 ... 250	G1/4	Gland pg 13,5	Hex. screw & cover	12 ... 16	340	–

Accessories**ELECTRO-MECHANICAL PRESSURE SWITCH****Martonair M/1339**

Pneumatic

Non adjustable

N/O or N/C operation

**Models**

Model	Pressure range	Fluid connection	Switching pressure
M/1339	0 ... 10 bar	G1/8	2 bar +/- 0,5 bar

ELECTRO-MECHANICAL PRESSURE SWITCH**Enots 04015600**

Pneumatic

Wide adjustment range

N/O or N/C operation

**Models**

Model	Pressure range	Fluid connection	Pressure differential
04015600	1 ... 10 bar	G1/8	0,2 ... 0,7 bar

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

AIR PREPARATION (FRL)

Going right back to 1927 when Carl Norgren first sketched out the design for the original FRL, IMI Precision Engineering have been at the forefront of air preparation products.

In this section you will find a whole family of air preparation products. Tried and tested Olympian Plus and Excelon ranges, miniature and large capacity units and the innovative Excelon Pro series. We list units for general purpose use and more specialised applications - precision regulators, stainless steel units, valves for safety critical situations, etc.

Use the fast find guide to speed you to the right product to get the job done, pdf datasheets are available online via the Express store or call the team for rapid quotation and delivery.



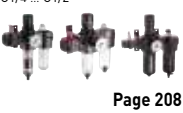
Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering air preparation range. If you can't see the option you require contact your Express team.

OLYMPIAN PLUS – PLUG-IN, QUICK CHANGE SYSTEM

Filter/regulators and lubricators BL64, 68 G1/2 & G1  Page 195	General purpose filters F64G, F68G G1/4 ... G 1 1/2  Page 196	High efficiency oil removal filters F64C/H, F68C/H G1/4 ... G1  Page 197	High efficiency oil/oil vapour removal filters F64B/L, FFV68 G1/4 ... G1  Page 198	Breathing air sets FFB64 G1/4 ... G3/8  Page 199	Pressure regulators R64G, R68G G1/4 ... G1 1/2  Page 200
Filter/regulators B64G, B68G G1/4 ... G1 1/2  Page 201	Lubricators L64, L68 G1/4 ... G1 1/2  Page 202	Soft start/dump valves P64F, P68F G1/4 ... G3/4  Page 203	Monitored soft start/dump valve P64S G1/2  Page 204	Pressure relief valves V64H, V68H G1/4 ... G1  Page 205	Accessories  Page 206

EXCELON® – MODULAR SYSTEM

Filter/regulators and lubricators BL72, 73, 74 G1/4 ... G1/2  Page 208	General purpose filters F72G, F73G, F74G G1/4 ... G3/4  Page 209	High efficiency Oil removal filters F72C, F73C, F74C, F74H G1/4 ... G3/4  Page 210	High efficiency Oil vapour removal filters F72V, F74V G1/4 ... G3/4  Page 211	Pressure regulators R72G, R73G, R74G G1/4 ... G3/4  Page 212	Manifold regulator R72M, R74M G1/4, G3/8, G1/2, G3/4  Page 213
Filter/regulators B72G, B73G, B74G G1/4 ... G3/4  Page 214	Lubricators L72, L73, L74 G1/4 ... G3/4  Page 215	Pressure relief valves V72G, V74G G1/4 ... G3/4  Page 216	Soft start/dump valves P72F, P74F G1/4 ... G3/4  Page 217	Monitored soft start/dump valves P74S G1/2  Page 218	Accessories  Page 219

MINIATURE SERIES, GENERAL PURPOSE

Filter/regulators and lubricators P1H G1/8, G1/4  Page 220	General purpose filter F07 G1/8, G1/4  Page 221	Pressure regulators R07  Page 222	Filter/regulator B07 G1/8, G1/4  Page 223	Lubricators L07 G1/8, G1/4  Page 224	Pressure relief valve – diaphragm type V07 G1/8, G1/4  Page 225

*New to this catalogue

Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering air preparation range. If you can't see the option you require contact your Express team.

LARGE CAPACITY SERIES UNITS

Pilot operated regulators
R18, 11-808,
11-400/11-204
1 1/2 & 2"



Page 226

General purpose filters
F18
G 1 1/2 & 2"



Page 228

EXCELON® PRO

Filter/regulator and lubricator
BL92
Ø 8 mm, G1/4



Page 229

General purpose filter
F92G
Ø 8 mm, G1/4



Page 230

High efficiency oil removal filter
F92C
Ø 8 mm, G1/4



Page 230

Regulator
R92G
Ø 8 mm, G1/4



Page 231

Filter/regulator
B92G
Ø 8 mm, G1/4



Page 231

Lubricator (oil-fog)
L92C
Ø 8 mm, G1/4



Page 232

Soft start valves
P92E
Ø 8 mm, G1/4



Page 232

Control valves
P92C
Ø 8 mm, G1/4



Page 233

Accessories



Page 234

SPECIAL PURPOSE

Pre-set regulator
R16



Page 235

Fast response pressure regulators
20AG
G1/2 ... G1



Page 236

'Micro Trol' special purpose pressure regulators
R24
G1/4 ... G1 1/4



Page 237

Precision and instrument regulator
11-818, R27



Page 238

Gauges



Page 239

Auto drain, Drip leg drain



Page 239

ACCESSORIES

STAINLESS STEEL – GENERAL PURPOSE AND PRECISION

Filters, pressure regulators, lubricators
F22, R22, L22
1/2" NPTF



Page 240

General purpose filter/regulator
B38



Page 242

Precision regulator
R38
G 1/4"



Page 243

Precision filter regulator
B38
G 1/4"



Page 243

General purpose regulators & filter regulator
R05, B05
1/4" PTF



Page 244

**New to this catalogue*

AIR PREPARATION BOX SETS

WHEN CONSIDERING 'BEST' AIR PREPARATION, ESSENTIAL FOR OPTIMUM PERFORMANCE, THERE ARE THREE INDIVIDUAL ELEMENTS TO CONSIDER: FILTER, REGULATOR AND LUBRICATOR. TRADITIONALLY, THESE ELEMENTS CAN BE PURCHASED INDIVIDUALLY, AND IT IS NOT UNUSUAL TO FIND ONE MISSING, OR INCORRECTLY FITTED.

The IMI Norgren 'box set' concept takes away that potential by giving you one product, one part number, at one price - a total package. The unit is pre-assembled before despatch and also includes a strong mounting bracket, pressure gauge and an exhausting shut-off valve for isolation of the upstream supply. Choose either a larger Olympian Plus unit, or the smaller Excelon unit, each with their own special features to suit the application.

→ Olympian has a unique plug-in yoke system, with ¼ turn release mechanism for units each having a built-in safety feature to prevent incorrect installation and potential unsafe removal, saving time and money with shortest downtime and lowest stocking cost of replacement parts

- Excelon has a modular 'Quikclamp' system allowing units to be quickly and easily removed without disturbing pipework – smaller units benefit from shorter downtime on replacement, approaching similar service times to Olympian units
- Metal bowls on Olympian unit offers greatest protection against contamination and contains an automatic drain valve for safe removal of contaminant (filter only) – lowest risk of external damage or internal decay, plus the ability to comply with local environmental rules
- Units are supplied pre-assembled and ready to install – reducing costly stock-handling, installation times and labour cost



READY TO USE

PRE-ASSEMBLED



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

OLYMPIAN PLUS PLUG-IN SYSTEM

Combination filter/regulators and lubricator

BL64, 68 – G1/2 & G1



Shut off valve for safe isolation of supply

General purpose filter removing condensate and particle contamination

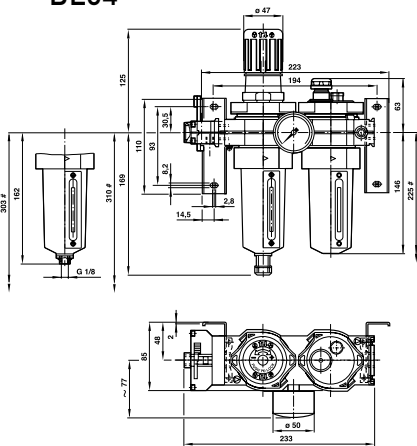
Regulator ensuring optimum working pressure for economy and safety

Lubricator to deliver a correct level of oil lubrication into the downstream system optimising life expectancy of other products

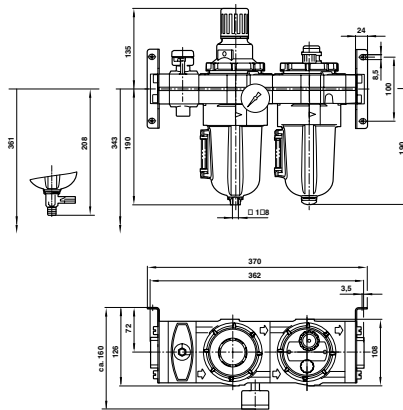
Sturdy bracket for correct mounting

Pressure gauge for constant monitoring of output pressure

BL64



BL68



Minimum clearance required to remove bowl

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C

Pressure range:

BL64: 0,3...10 bar

BL68: 0,4...8 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Gauge ports:

Rc1/8

Models

BOXED SETS BL64 AND BL68 WITH SHUT-OFF VALVE
AUTO DRAIN MANUAL DRAIN Port size
Model Model


BL64-401	BL64-421	G1/2
BL68-801	BL68-821	G1

Accessories

Tamper resistant kit Quick fill nipple Service kits Auto drain Manual drain



4355-51	18-011-024	B64G-KITA40R & L64M-KIT	B64G-KITM40R & L64M-KIT
4355-51	18-011-021	B68G-KITA40R & L68M-KIT	B64G-KITM40R & L64M-KIT

BOXED SETS BL64 AND BL68 WITHOUT SHUT-OFF VALVE
AUTO DRAIN MANUAL DRAIN Port size
Model Model


BL64-405	BL64-425	G1/2
BL68-805	BL68-825	G1

Tamper resistant kit Quick fill nipple Service kits Auto drain Manual drain



4355-51	18-011-024	B64G-KITA40R & L64M-KIT	B64G-KITM40R & L64M-KIT
4355-51	18-011-021	B68G-KITA40R & L68M-KIT	B64G-KITM40R & L64M-KIT

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

General purpose filters

F64G, F68G – G1/4 ... G 1 1/2

Effective liquid removal and positive solid filtration

Large filter element area for minimum pressure drop

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

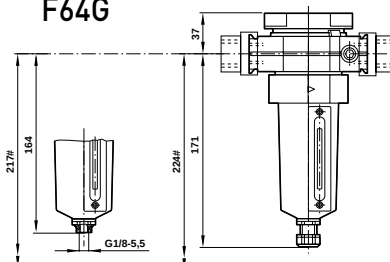
Ambient temperature:

-20°C ... +80°C

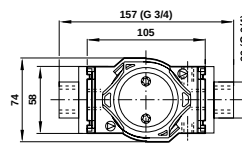
Consult our Technical Service for use below +2°C



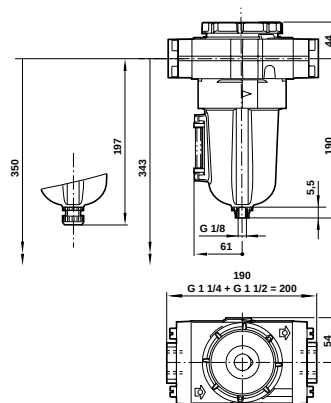
F64G



Minimum clearance required to remove bowl



F68G



Models

F64G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)
			
F64G-2GN-AD3	F64G-2GN-MD3	G1/4	33
F64G-3GN-AD3	F64G-3GN-MD3	G3/8	66
F64G-4GN-AD3	F64G-4GN-MD3	G1/2	75
F64G-6GN-AD3	F64G-6GN-MD3	G3/4	75

Accessories

Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)
		
74504-50	T64T-2GB-P1N	T40B1800
74504-50	T64T-3GB-P1N	T40B1800
74504-50	T64T-4GB-P1N	T40B1800
74504-50	T64T-6GB-P1N	T40B1800

Service Kit

Auto drain	Manual drain
	
F64G-KITA40	F64G-KITM40
F64G-KITA40	F64G-KITM40
F64G-KITA40	F64G-KITM40
F64G-KITA40	F64G-KITM40

F68G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)
			
F68G-6GN-AR3	F68G-6GN-MR3	G3/4	160
F68G-8GN-AR3	F68G-8GN-MR3	G1	190
F68G-AGN-AR3	F68G-AGN-MR3	G1 1/4	200
F68G-BGN-AR3	F68G-BGN-MR3	G1 1/2	200

Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)
		
18-001-979	T68H-6GB-B2N	T40B2800
18-001-979	T68H-8GB-B2N	T40B2800
18-001-978	T68H-AGB-B2N	T40B2800
-	T68H-BGB-B2N	T40B2800

Auto drain	Manual drain
	
F68G-KITA40	F68G-KITM40
F68G-KITA40	F68G-KITM40
F68G-KITA40	F68G-KITM40
F68G-KITA40	F68G-KITM40

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop **Threaded exhaust port

For replacement filter (without yoke) substitute 'N' at the 5th and 6th digits eg: F68G-NNN-AR3 (F68)

For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

'Puraire'® high efficiency oil removal filters

F64C/H, F68C/H – G1/4 ... G1



High efficiency coalescing filters

Coalescing element removes sub-micron particles and converts oil and water mist to liquid form to drain away

Service indicator standard

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Remaining oil content:

0,01 mg/m³ max at 21° C

Particle removal:

To 0,01 µm

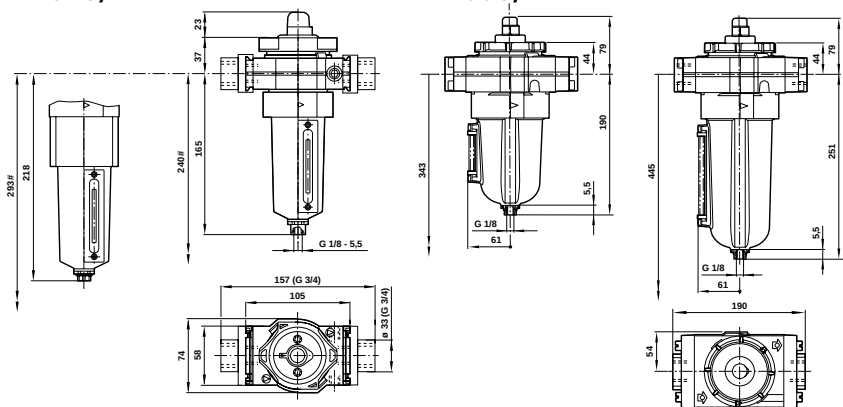
Ambient temperature:

-20°C ... +65°C

Consult our Technical Service for use below +2°C

F64C/H

F68C/H



Minimum clearance required to remove bowl

Models

F64C/H SERIES AUTO DRAIN Model

Port size

Flow*
(dm³/s)

F64C-2GD-AD0	G1/4	16
F64H-3GD-AD0	G3/8	28
F64H-4GD-AD0	G1/2	28
F64H-6GD-AD0	G3/4	28

Accessories

Wall mounting
bracket3/2 Shut-off
valve**Silencer
(shut-off valve)

Service Kit

Auto
drain

74504-50	T64T-2GB-P1N	T40B1800	F64C-KITA0C
74504-50	T64T-3GB-P1N	T40B1800	F64H-KITA0C
74504-50	T64T-4GB-P1N	T40B1800	F64H-KITA0C
74504-50	T64T-6GB-P1N	T40B1800	F64H-KITA0C

F68C/H SERIES AUTO DRAIN Model

Port size

Flow*
(dm³/s)

F68C-4GD-AR0	G1/2	35
F68H-6GD-AU0	G3/4	35
F68H-8GD-AU0	G1	60

Wall mounting
bracket3/2 Shut-off
valve**Silencer
(shut-off valve)Auto
drain

18-001-979	T68H-4GB-B2N	T40B2800	F68C-KITA0C
18-001-979	T68H-6GB-B2N	T40B2800	F68H-KITA0C
18-001-979	T68H-8GB-B2N	T40B2800	F68H-KITA0C

* To maintain stated oil content at 6,3 inlet pressure **Threaded exhaust port
For replacement filter (without yoke) substitute 'N' at the 5th and 6th digits eg: F68H-NND-AU0
For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

'Ultraire'® high efficiency oil/oil vapour removal filters

F64B/L, FFV68 – G1/4 ... G1

F64B/F64L are 'dual function' products incorporating an oil removal element (bottom) and an oil vapour removal element (top)

FFV68 are two separate coupled filters (F68C/H and F68V/Y)

Ultra high efficiency coalescing filters with active carbon pack

Carbon pack assists in the removal of hydro-carbon gases and odours

High intensity blue colour change indication (64 Series)



TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Remaining oil content:

0,003 mg/m³ (at 21° C)

Particle removal:

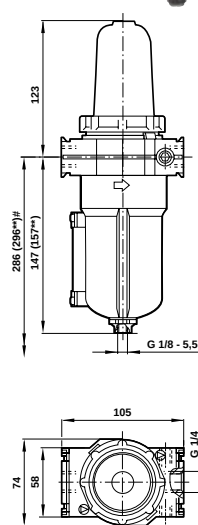
To 0,01 µm

Ambient temperature:

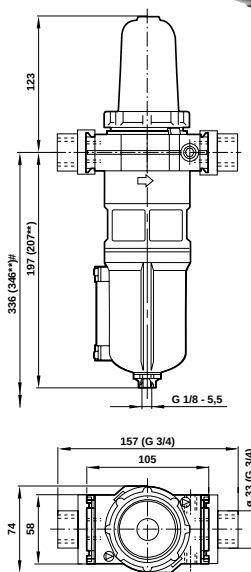
-20°C ... +65°C

Consult our Technical Service for use below +2°C

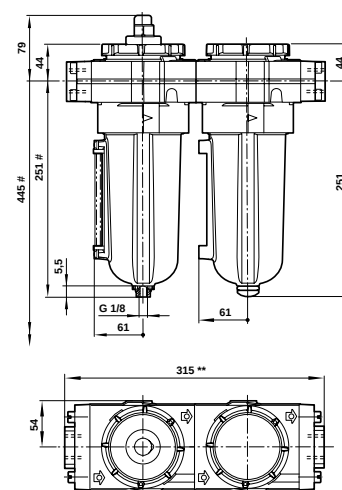
F64B



F64L



FFV68



**Manual drain. # Minimum clearance required to remove bowl

Models

F64B/L SERIES AUTO DRAIN Model	Port size	Flow* (dm ³ /s)



F64B-26N-AR0	G1/4	7
F64L-36N-AR0	G3/8	11
F64L-46N-AR0	G1/2	11

Accessories

Wall mounting bracket	3/2 Shut-off valve	Silencer (shut-off valve)



74504-50	T64T-2GB-P1N	T40B1800
74504-50	T64T-3GB-P1N	T40B1800
74504-50	T64T-4GB-P1N	T40B1800

Service Kit

Auto drain



F64B-KITA0V
F64L-KITA0V
F64L-KITA0V

FFV68 SERIES AUTO DRAIN Model	Port size	Flow* (dm ³ /s)



FFV68-408	G1/2	25
FFV68-608	G3/4	35
FFV68-808	G1	60

Wall mounting bracket	3/2 Shut-off valve	Silencer (shut-off valve)



18-001-979	T68H-4GB-B2N	T40B2800
18-001-979	T68H-6GB-B2N	T40B2800
18-001-979	T68H-8GB-B2N	T40B2800



F68C-KITA0C, F68V-KIT00V
F68H-KITA0C, F68V-KIT00V
F68H-KITA0C, F68V-KIT00V

* To maintain stated oil at 6,3 bar inlet pressure

For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Breathing air sets

FFB64 – G1/4 ... G3/8



Pre-assembled combinations include a general purpose pre-filter and 'Ultraire®' oil/oil vapour removal filter

Activated carbon pack assists in the removal of hydro-carbon gases and odours

Pre filter extends life of oil removal filter

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Remaining oil content:

0,003 mg/m³ (at 21°C)

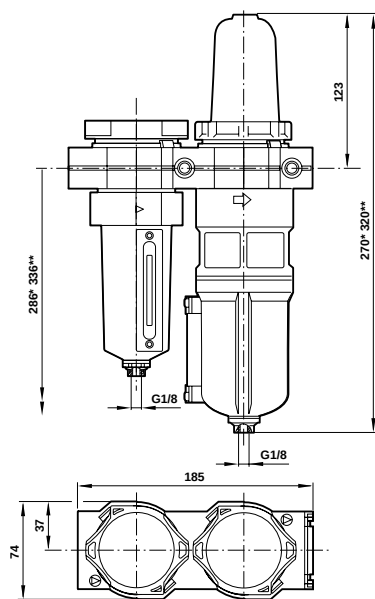
Particle removal:

To 0,01 µm

Ambient temperature:

-20°C ... +65°C

Consult our Technical Service for use below +2°C



* 1 mask model **2 mask model

Models

FFB64 series Auto drain Model	Port size	Flow (dm ³ /s)	Number of masks	Primary pre-filter (µm)
 FFB64-208	G1/4	7	1	5
 FFB64-308	G3/8	11	2	5

For service kit numbers refer to individual units

Accessories

Wall mounting bracket	3/2 Shut-off valve	Silencer (shut-off valve)	Service kits
			
74504-50	T64T-2GB-P1N	T40B1800	F64G-KITA05 & F64B-KITA0V
74504-50	T64T-3GB-P1N	T40B1800	F64G-KITA05 & F64L-KITA0V

For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Pressure regulators

R64G, R68G – G1/4 ... G1 1/2

Diaphragm and balanced valve design ensure good regulation characteristics

Non-rising adjusting knob has snap-action lock

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar (R64G)

20 bar (R68G)

Gauge ports:

Rc1/8

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C

Pressure range:

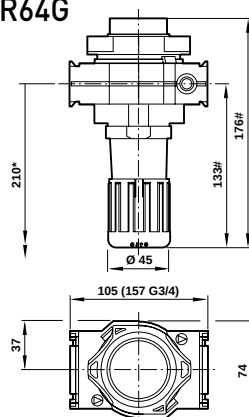
R64G: 0,3...10 bar

R68G: 0,4...8 bar

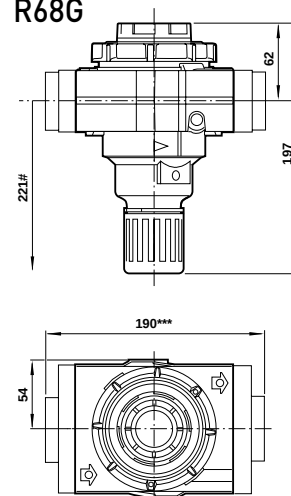
Note: Outlet pressure can be adjusted in excess of and also less than those listed



R64G



R68G



*Minimum clearance required to remove unit from yoke

***For 1 1/4 and 1 1/2 ported yokes add 10 mm

Reduces by 4 mm with knob in locked position

Models

R64G SERIES Model	Port size	Flow* (dm³/s)



R64G-2GK-RMN	G1/4	35
R64G-3GK-RMN	G3/8	80
R64G-4GK-RMN	G1/2	120
R64G-6GK-RMN	G3/4	120

Accessories

Wall mounting bracket	Gauge 0 ... 10 bar	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit



Service Kit



R68G SERIES Model	Port size	Flow* (dm³/s)



R68G-6GK-RLN	G3/4	150
R68G-8GK-RLN	G1	180
R68G-AGK-RLN	G1 1/4	180
R68G-BGK-RLN	G1 1/2	180

Wall mounting bracket	Gauge 0 ... 10 bar	3/2 Shut-off valve	Silencer (shut-off valve)	Tamper resistant kit



* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar

For replacement regulator (without yoke) substitute 'N' at the 5th and 6th digits eg: R68G-NNK-RLN

For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Filter/regulators

B64G, B68G – G1/4 ... G1 1/2

- High efficiency water removal
- Good regulation characteristics
- Non-rising adjusting knob has snap-action lock

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Gauge ports:

Rc1/8

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C

Pressure range:

B64G: 0,3...10 bar

B68G: 0,4...8 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed



Minimum clearance required to remove bowl. ## Reduces by 4 mm with knob in locked position

** Knob in locked position

Models

B64G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)
		G1/4	30
		G3/8	76
		G1/2	106
		G3/4	106

Accessories

Wall mounting bracket	Gauge 0...10 bar	3/2 Shut-off valve	Silencer (shut-off valve)	Tamper resistant kit
				
74504-50	18-013-013	T64T-2GB-P1N	T40B1800	4355-51
74504-50	18-013-013	T64T-3GB-P1N	T40B1800	4355-51
74504-50	18-013-013	T64T-4GB-P1N	T40B1800	4355-51
74504-50	18-013-013	T64T-6GB-P1N	T40B1800	4355-51

Service Kit

Auto drain	Manual drain
	
B64G-KITA40R	B64G-KITM40R
B64G-KITA40R	B64G-KITM40R
B64G-KITA40R	B64G-KITM40R
B64G-KITA40R	B64G-KITM40R

B68G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)
		G3/4	240
		G1	240
		G1 1/4	240
		G1 1/2	240

Wall mounting bracket	Gauge 0...10 bar	3/2 Shut-off valve	Silencer (shut-off valve)	Tamper resistant kit
				
18-001-979	18-013-013	T68H-6GB-B2N	T40B2800	4355-51
18-001-979	18-013-013	T68H-8GB-B2N	T40B2800	4355-51
18-001-978	18-013-013	T68H-AGB-B2N	T40B2800	4355-51
-	18-013-013	T68H-BGB-B2N	T40B2800	4355-51

Auto drain	Manual drain
	
B68G-KITA40R	B68G-KITM40R
B68G-KITA40R	B68G-KITM40R
B68G-KITA40R	B68G-KITM40R
B68G-KITA40R	B68G-KITM40R

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar

For replacement filter/regulator (without yoke) substitute "N" at the 5th and 6th digits eg. B68G-NNK-AR3-RLN

For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Lubricators

L64, L68 – G1/4 ... G1 1/2

Micro-fog plug-in lubricators for best lubrication in general purpose pneumatic applications

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Start point:

L64: 1,5 dm³/s

L68: 6 dm³/s

Bowl Capacity (litre):

L64: 0,2

L68: 0,5

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C

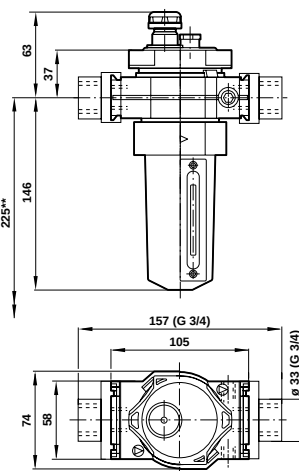
EXPRESS PLUS

Have you thought about...

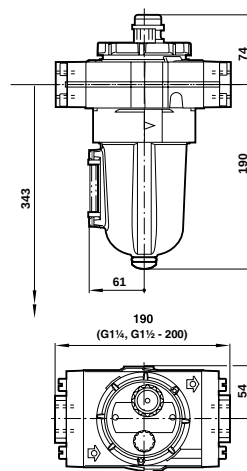
Whilst non lubricated systems are best from an environmental point of view, the operating life of virtually all products can be extended up to 400% by using a correctly sized and adjusted lubricator



L64



L68



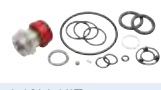
** Minimum clearance required to remove bowl

Models

L64 SERIES Model	Port size	Flow* (dm ³ /s)
 L64M-26P-EDN	G1/4	25
 L64M-36P-EDN	G3/8	62
 L64M-46P-EDN	G1/2	72
 L64M-66P-EDN	G3/4	72

L68 SERIES Model	Port size	Flow* (dm ³ /s)
 L68M-66P-ERN	G3/4	200
 L68M-86P-ERN	G1	200
 L68M-AGP-ERN	G1 1/4	200
 L68M-BGP-ERN	G1 1/2	200

Accessories

Wall mounting bracket	3/2 Shut-off valve	Silencer (shut-off valve)	Service Kit
			
74504-50	T64T-2GB-P1N	T40B1800	L64M-KIT
74504-50	T64T-3GB-P1N	T40B1800	L64M-KIT
74504-50	T64T-4GB-P1N	T40B1800	L64M-KIT
74504-50	T64T-6GB-P1N	T40B1800	L64M-KIT
			
18-001-979	T68H-6GB-B2N	T40B2800	L68M-KIT
18-001-979	T68H-8GB-B2N	T40B2800	L68M-KIT
18-001-978	T68H-AGB-B2N	T40B2800	L68M-KIT
-	T68H-BGB-B2N	T40B2800	L68M-KIT

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop

To order a basic unit without yoke substitute 'N' at the 5th and 6th letters respectively e.g. L68M-NNP-EDN

Models listed are Micro-fog. For Oil-fog models, including kits, replace 'M' at the 4th digit by 'C' e.g. L68C-4GP-EDN

For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Soft start monitored dump valve

P64F & P68F – G1/4 ... G 1 1/2



Assists machine designers in complying with the European Machinery Directive

Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations)

Controlled increase of downstream pressure on start up

Solenoid, air pilot or manual operator

High forward flow capacity

High flow dump facility

TECHNICAL DATA

Medium:

Compressed air only

Maximum operating pressure:

For solenoid operated versions: 10 bar

For pilot operated versions: 17 bar

Minimum operating pressure:

3 bar

Ambient temperature:

-20°C ... +80°C (solenoid version up to +50°C)

Consult our Technical Service for use below +2°C

Air pilot port:

P64F: Rc1/4

P68F: G1/4

Exhaust port:

P64F: G1/2

P68F: G1

Maximum flow:

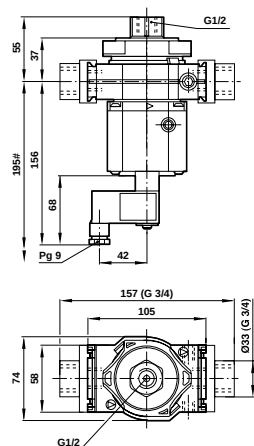
P64F: 57dm³/s P68F: 147dm³/s

Note: Maximum flow with 6,3 bar inlet pressure and pressure drop of 0,5 bar

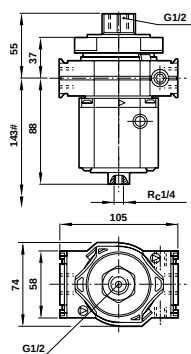
Snap pressure:

Full flow when downstream pressure reaches 50-80% of inlet pressure

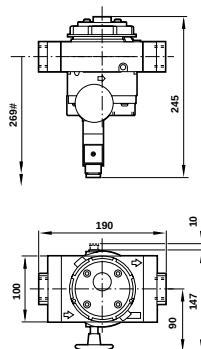
P64F
Solenoid



P64F
Air Pilot



P68F



Minimum clearance required to remove unit

Models

P64F & P68F SERIES – 24V d.c.
SOLENOID PILOT OPERATED
Model

AIR PILOT OPERATED
Model

Port
size



Accessories

Wall
mounting
bracket

Silencer
(dump
valve)

3/2 Shut-off
valve

Silencer
(shut-off
valve)

Basic solenoid plug



P64F-2GC-PFN	●	P64F-2GA-NNN	●	G1/4	74504-50	MB004B	T64T-2GB-P1N	T40B1800	0657868000000000
P64F-3GC-PFN	●	P64F-3GA-NNN	●	G3/8	74504-50	MB004B	T64T-3GB-P1N	T40B1800	0657868000000000
P64F-4GC-PFN	●	P64F-4GA-NNN	●	G1/2	74504-50	MB004B	T64T-4GB-P1N	T40B1800	0657868000000000
P64F-6GC-PFN	●	P64F-6GA-NNN	●	G3/4	74504-50	MB004B	T64T-6GB-P1N	T40B1800	0657868000000000
P68F-6GH-NPN	●	P68F-6GB-NNN	●	G3/4	18-001-979	MB008B	T68H-6GB-B2N	T40B2800	M/P15737
P68F-8GH-NPN	●	P68F-8GB-NNN	●	G1	18-001-979	MB008B	T68H-8GB-B2N	T40B2800	M/P15737
P68F-AGH-NPN	●	P68F-AGB-NNN	●	G1 1/4	18-001-978	MB008B	T68H-AGB-B2N	T40B2800	M/P15737
P68F-BGH-NPN	●	P68F-BGB-NNN	●	G1 1/2	-	MB008B	T68H-BGB-B2N	T40B2800	M/P15737

To order a basic unit without yoke substitute 'N' at the 5th and 6th letters respectively e.g. P64F-NNC-PFN
For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Soft start monitored dump valve

P64S – G1/2

Controlled increase of downstream pressure on start up

Monitored dump function

High forward flow capacity

High flow dump facility

Soft start valves allow a controlled increase of pressure onto downstream cylinders/machines offering protection to personnel equipment

The positively driven micro switch ensures a monitored dump function

Note: Turn on system air supply prior to applying signal to operator.
Failure to do so may cause valve to continuously exhaust



TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

16 bar

Minimum operating pressure:

3 bar

Operating temperature:

-20°C ... 50°C

[Solenoid rating max is 50°C whilst unit max is 80°C. Consult our technical service below +2°C]

Gauge ports:

Rc1/8

Exhaust ports:

ISO G1/2

Snap pressure:

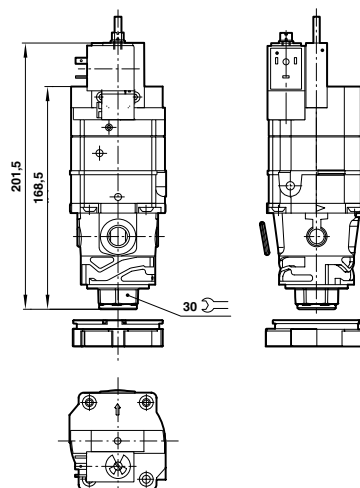
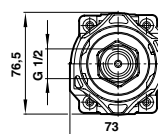
Full flow when downstream pressure reaches 35% - 60% of inlet pressure

Charge time:

For 2 litre downstream volume and inlet pressure of 6,3 bar, 0,2s minimum, 75 secs. maximum

Solenoid operator:

22 mm, 24V DC, 2W only (no manual override)



Models

Model	Port size	Wall mounting bracket	Gauge 0 ... 10 bar	3/2 Shut-off valve	Silencer	Silencer (shut-off valve)	Basic solenoid plug
P64S-4GC-N1N	G1/2	74504-50	18-013-013	T64T-4GB-P1N	MB004B (R1/2)	T40B1800	0657868000000000

To order a basic unit without yoke, substitute "N" at the 5th and 6th letters respectively e.g. P64S-NNC-N1N"

"For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

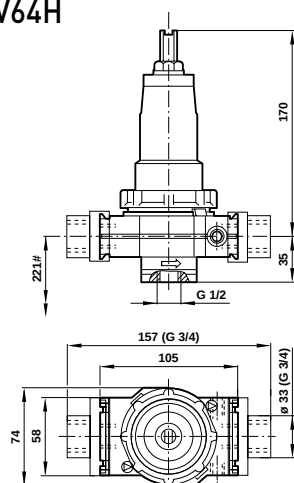
OLYMPIAN PLUS PLUG-IN SYSTEM

Pressure relief valves

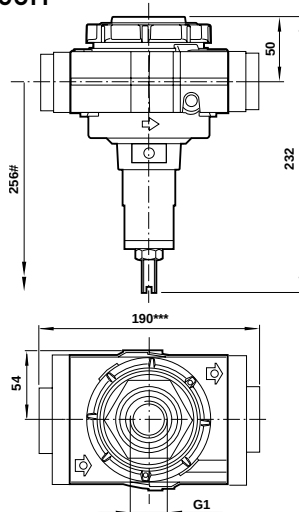
V64H, V68H – G1/4 ... G1



V64H



V68H



*** For 1 1/4 and 1 1/2 ported yokes add 10 mm
Minimum clearance required to remove unit from yoke

Olympian relief valves protect compressed air systems from over-pressurisation

High relief capacity, sensitive and accurate

Threaded relief port for silencer or piped exhaust

IMI Precision Engineering pressure relief valves comply with category O(S.E.P.) and category 1 of the Pressure Equipment Directive 97/23/EC.

TECHNICAL DATA

Medium:

Compressed air only

Gauge ports:

Rc1/8

Relief port:

G1/2 (V64H), G1 (V68H)

Ambient temperature:

-20°C ... +80°C

Consult our Technical Service for use below +2°C

Relief pressure adjustment range:

1 ... 10 bar

Models

Accessories

Service Kit

V64H SERIES								Service Kit
Model	Port size	Wall mounting bracket	Gauge 0 ... 10 bar	Silencer (relief valve)	3/2 Shut-off valve	Silencer (shut-off valve)	Tamper resistant kit	
								
V64H-2GD-RMN	G1/4	74504-50	18-013-013	MB004B	T64T-2GB-P1N	T40B1800	1581-90	V64H-KIT
V64H-3GD-RMN	G3/8	74504-50	18-013-013	MB004B	T64T-3GB-P1N	T40B1800	1581-90	V64H-KIT
V64H-4GD-RMN	G1/2	74504-50	18-013-013	MB004B	T64T-4GB-P1N	T40B1800	1581-90	V64H-KIT
V64H-6GD-RMN	G3/4	74504-50	18-013-013	MB004B	T64T-6GB-P1N	T40B1800	1581-90	V64H-KIT
V68H SERIES								Service Kit
Model	Port size	Wall mounting bracket	Gauge 0 ... 10 bar	Silencer (relief valve)	3/2 Shut-off valve	Silencer (shut-off valve)	Tamper resistant kit	
								
V68H-6GD-RMN	G3/4	18-001-979	18-013-013	MB008B	T68H-6GB-B2N	T40B2800	1581-90	V68H-KIT
V68H-8GD-RMN	G1	18-001-979	18-013-013	MB008B	T68H-8GB-B2N	T40B2800	1581-90	V68H-KIT

To order a basic unit without yoke substitute 'N' at the 5th and 6th letters respectively e.g. P64F-NNC-PFN
For other styles of mounting bracket and accessories, please refer to page 206

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

OLYMPIAN PLUS PLUG-IN SYSTEM

Accessories

YOKES

When installed, enables Olympian basic units to be 'plugged in' or removed without disturbing connecting pipework



Models

Single Unit		Double Unit			
Model		Model	Series	Port size	
Y64A-2GA-N1N	●	Y64A-2GA-N2N	64	G1/4	
Y64A-3GA-N1N	●	Y64A-3GA-N2N	64	G3/8	
Y64A-4GA-N1N	●	Y64A-4GA-N2N	64	G1/2	
Y64A-6GA-N1N	●	Y64A-6GA-N2N	64	G3/4	
Y68A-6GN-N1N	●	Y68A-6GN-N2N	68	G3/4	
Y68A-8GN-N1N	●	Y68A-8GN-N2N	68	G1	
Y68A-AGN-N1N	●	Y68A-AGN-N2N	68	G1 1/4	
Y68A-BGN-N1N	●	Y68A-BGN-N2N	68	G1 1/2	

Yokes may be installed in a pipe system in advance of the selection or fitment of the basic units.

YOKE CONNECTOR KIT

Allows quick and easy connection of one Olympian Plus product/ accessory to another



Models

Model	Series
74503-51	64
18-026-987	68

END CONNECTOR

Provides a threaded end to an assembly



Models

Model	Series	Port size
74505-50	64	G1/2
74505-53	64	G3/4

For use with end mounted porting block or for G1/2 or G3/4 over porting.

SHUT-OFF VALVE

3 port/2 position.
Easy to operate
Lockable in the 'closed' position



Models

Model	Series	Port size
T64T-2GB-P1N	64	G1/4
T64T-3GB-P1N	64	G3/8
T64T-4GB-P1N	64	G1/2
T64T-6GB-P1N	64	G3/4
T68H-6GB-B2N	68	G3/4
T68H-8GB-B2N	68	G1
T68H-AGB-B2N	68	G1 1/4
T68H-BGB-B2N	68	G1 1/2

Lockout facility. G1/8 exhaust port on 64 series, use silencer, ref. T40B1800.

PORTING BLOCKS

Provides 3 auxiliary air outlets
Can be installed in a combination to branch off to smaller sub-systems

Type 74507-53 is often installed between a filter-regulator and lubricator. Its integral nonreturn valve prevents any reverse flow of lubricant contaminating the upstream air



Models

Model	Series
74507-50	64
74507-53	64 with integral non-return valve

2 G1/4 outlets. 1 G3/8 outlet.

Model	Series	Top port	Side port
18-026-986	68	G1/2	G1/4

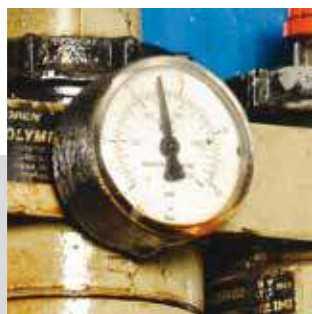
Porting blocks may be used as spacers, gauge ports or as auxiliary air outlets. They may be fitted to end connectors, rear entry manifolds, shut-off valves and rear entry shut-off valves.

Use the correct length screws (supplied) when fitting porting blocks.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.



13 SERIES CEASED MANUFACTURE IN 1994



“IF YOUR FRL LOOKS LIKE THIS...”

...IT'S WASTING ENERGY AND MONEY, IT'S UNSAFE AND ENVIRONMENTALLY UNFRIENDLY.

And the chances are it will fail the Health and Safety at Work regulations and it's unlikely to comply with Environmental rules for safe disposal of contaminants.

- 1 Polycarbonate bowl needs replacing to comply with BS 6005:1997
- 2 Auto drain will not dispose of contaminants safely
- 3 Filter elements could be blocked
- 4 Regulator will not be maintaining optimum pressure
- 5 Lubricator is neither effective or efficient
- 6 Replacement is both time consuming and costly

IT'S TIME TO UPGRADE

TO THE OLYMPIAN 64 SERIES, A BETTER OVERALL SOLUTION BECAUSE:

- It is completely interchangeable
- It can be replaced in seconds without disturbing pipe work
- It is fully serviceable and there are comprehensive service kits available to ensure it is efficient and cost effective, complies with Health & Safety regulations and is environmentally friendly

OLYMPIAN 64
SERIES FRL



EXCELON MODULAR SYSTEM

Combination filter/regulators and lubricators

BL72, 73, 74 – G1/4 ... G1/2

Shut off valve for safe isolation of supply

General purpose filter removing condensate and particle contamination

Regulator ensuring optimum working pressure for economy and safety

Lubricator to deliver a correct level of oil lubrication into the downstream system optimising life expectancy of other products

Sturdy bracket for correct mounting

Pressure gauge for constant monitoring of output pressure



TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Gauge ports:

Rc 1/8

Ambient temperature:

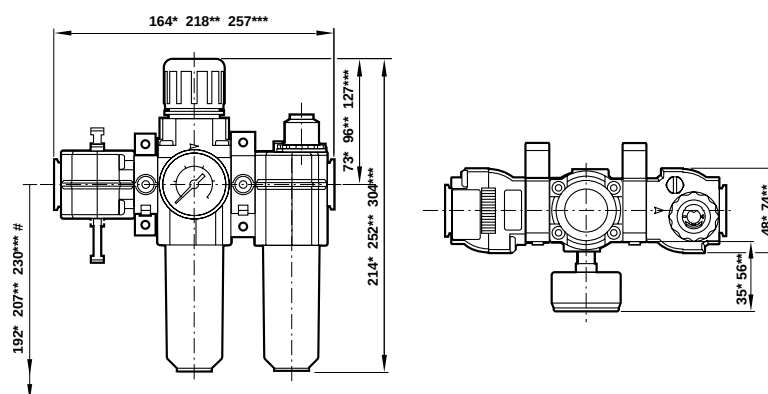
-20°C ... +50°C

Consult our Technical Service for use below +2°C

Pressure range:

0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed



*BL72, **BL73, ***BL74

Minimum clearance required to remove bowl

Models

BOXED SETS BL72, BL73 AND BL74 WITH SHUT-OFF VALVE

AUTO DRAIN Model	MANUAL DRAIN Model	Port Size	Bowl



BL72-201GA	BL72-221G	G1/4	T
BL73-301G	BL73-321G	G3/8	T
BL74-401G	BL74-421G	G1/2	GT

Accessories

Tamper resistant kit



Quick fill nipple



Service kits Auto drain



Manual drain



4255-51	-	B72G-KITA40R & L72M-KIT	B72G-KITM40R & L72M-KIT
4455-51	18-011-024	B73G-KITA40R & L73M-KIT	B73G-KITM40R & L73M-KIT
4355-51	18-011-024	B74G-KITA40R & L74M-KIT	B74G-KITM40R & L74M-KIT

BOXED SETS BL72, BL73 AND BL74 WITHOUT SHUT-OFF VALVE

AUTO DRAIN Model	MANUAL DRAIN Model	Port Size	Bowl



BL72-205GA	BL72-225G	G1/4	T
BL73-305G	BL73-325G	G3/8	T
BL74-405G	BL74-425G	G1/2	GT

Tamper resistant kit



Quick fill nipple



Service kits Auto drain



Manual drain



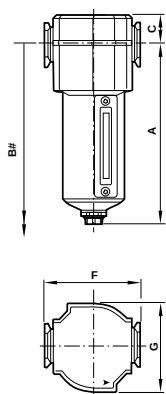
4255-51	-	B72G-KITA40R & L72M-KIT	B72G-KITM40R & L72M-KIT
4455-51	18-011-024	B73G-KITA40R & L73M-KIT	B73G-KITM40R & L73M-KIT
4355-51	18-011-024	B74G-KITA40R & L74M-KIT	B74G-KITM40R & L74M-KIT

GT= Guarded transparent bowl T=Transparent bowl

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM General purpose filters

F72G, F73G, F74G – G1/4 ... G3/4



Minimum clearance required to remove bowl



Excelon design allows in-line installation or modular installation with other Excelon products

Quick release bayonet bowl

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Ambient temperature:

–34°C ... +50°C

Consult our Technical Service for use below +2°C

Dimensions

Series	Drain	A	B	C	F	G
72	Auto	141	192	19	50	48
	Manual	134	185	19	50	48
73	Auto	147	207	25	68	62
	Manual	156	216	25	68	62
74	Auto	161	230	25	80	74
	Manual	177	246	25	80	740

Models

F72G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)	Bowl



F72G-26N-AL3	F72G-26N-QT3	G1/4	30	T
F72G-36N-AL3	F72G-36N-QT3	G3/8	30	T

Accessories

Wall mounting
bracket



4424-50

Service Kit

Auto
drain



F72G-KITA40

Manual
drain



F72G-KITM40

F73G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)	Bowl



F73G-26N-AT3	F73G-26N-QT3	G1/4	29	T
F73G-36N-AT3	F73G-36N-QT3	G3/8	35	T
F73G-46N-AT3	F73G-46N-QT3	G1/2	38	T

Wall mounting
bracket



4424-50

Auto
drain



F73G-KITA40

Manual
drain



F73G-KITM40

F74G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)	Bowl



F74G-36N-AP3	F74G-36N-QP3	G3/8	66	GT
F74G-46N-AP3	F74G-46N-QP3	G1/2	83	GT
F74G-66N-AP3	F74G-66N-QP3	G3/4	83	GT

Wall mounting
bracket



4324-50

Auto
drain



F74G-KITA40

Manual
drain



F74G-KITM40

GT= Guarded transparent bowl. T=Transparent bowl *Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop
For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM

'Puraire'® high efficiency oil removal filters

F72C, F73C, F74C, F74H – G1/4 ... G3/4

Excelon design allows in-line installation or modular installation with other Excelon products

High efficiency oil and particle removal

Quick release bayonet bowl

Service indicator standard

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar transparent bowl or guarded

8 bar transparent bowl F72C with auto drain

Remaining oil content:

0,01 mg/m³ at +21°C

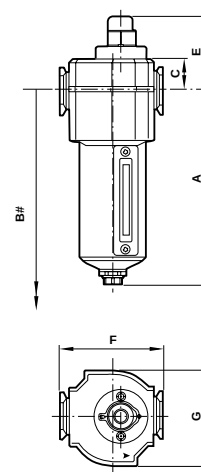
Particle removal:

To 0,01 µm

Ambient temperature:

-34°C ... +50°C

Consult our Technical Service for use below +2°C



Minimum clearance required to remove bowl

Dimensions

Series	Drain	A	B	C	E	F	G
F72C	Auto	141	192	19	53	50	48
F73C	Auto	147	207	25	60	68	62
F74C	Auto	161	230	25	60	80	74

Models

AUTO DRAIN Model	Port size	Flow* (dm ³ /s)	Bowl	Accessories Wall mounting bracket	Service Kit
					
F72C-2GD-AL0	G1/4	4,5	T	4224-50	F72C-KITA0C
F72C-3GD-AL0	G3/8	4,5	T	4224-50	F72C-KITA0C
F73C-2GD-AT0	G1/4	10	T	4424-50	F73C-KITA0C
F73C-3GD-AT0	G3/8	10	T	4424-50	F73C-KITA0C
F73C-4GD-AT0	G1/2	10	T	4424-50	F73C-KITA0C
F74C-3GD-AP0	G3/8	16	GT	4324-50	F74C-KITA0C
F74C-4GD-AP0	G1/2	16	GT	4324-50	F74C-KITA0C
F74H-4GD-AP0	G1/2	28	GT	4324-50	F74H-KITA0C
F74H-6GD-AP0	G3/4	28	GT	4324-50	F74H-KITA0C

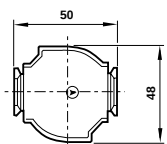
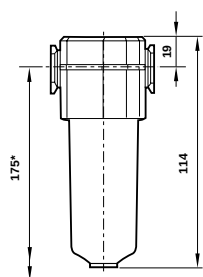
GT= Guarded transparent bowl. T=Transparent bowl. *To maintain stated oil content at 6,3 bar inlet pressure
For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

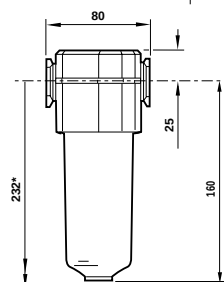
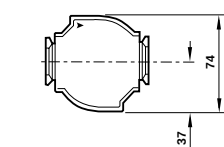
EXCELON MODULAR SYSTEM

'Ultraire'® high efficiency oil vapour removal filters

F72V, F74V – G1/4 ... G3/4



* Minimum clearance required to remove bowl



* Minimum clearance required to remove bowl



Excelon design allows in-line or modular installation with other Excelon products

Adsorbing type activated carbon element removes oil vapours and most hydrocarbon odours

Quick release bayonet bowl

High intensity blue colour change indication (F72V)

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar (F72V)

17 bar (F74V)

Remaining oil content:

0,003 mg/m³ max. at +21°C.

Ambient temperature:

Transparent bowl: -34°C ... +50°C (F72V)

Metal bowl: -34°C ... +65°C (F74V)

Consult our Technical Service for use below +2°C

Models

F72V SERIES Model	Port size	Flow* (dm ³ /s)	Bowl



F72V-2GN-ETC	G1/4	1,6	T
F72V-3GN-ETC	G3/8	1,6	T

Accessories

Wall mounting bracket



4224-50
4224-50

Service Kit



F72V-KITA0V
F72V-KITA0V

F74V SERIES Model	Port size	Flow* (dm ³ /s)	Bowl



F74V-3GN-EMA	G3/8	13	M
F74V-4GN-EMA	G1/2	13	M
F74V-6GN-EMA	G3/4	13	M

Wall mounting bracket



4324-50
4324-50
4324-50

Service Kit



F74V-KITA0V
F74V-KITA0V
F74V-KITA0V

M= Metal bowl. T=Transparent bowl * To maintain stated oil content at 6,3 bar inlet pressure
For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM Pressure regulators

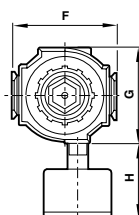
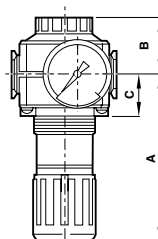
R72G, R73G, R74G – G1/4 ... G3/4

Excelon® design allows in-line or modular installation

Balanced valve design for optimum pressure control

Standard relieving models allow reduction of downstream pressure when the system is dead-ended

Push to lock adjusting knob with tamper resistant accessory



TECHNICAL DATA

Medium: Compressed air only

Maximum inlet pressure: 20 bar

Gauge ports: Rc1/8

Ambient temperature: -34°C ... +65°C (R72G)

-34°C ... +80°C (R73G & R74G)

Consult our Technical Service for use below +2°C

Pressure range: 0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Dimensions

Series	A	B	C	F	G	H	Panel Ø	Panel depth
72	73	33	26	50	48	35	40	0 ... 4
73	96	39	31	68	62	56	48	2 ... 6
74	127	43	31	80	74	56	52	2 ... 6

Models

R72G SERIES			Accessories				Service Kit	
Model	Port size	Flow* (dm³/s)	Wall mounting bracket	Neck mounting bracket	Gauge 0 ... 10 bar	Tamper resistant kit		
								
R72G-26K-RMN ●	G1/4	33	4224-50	74316-50	18-013-989	4255-51	R72G-KITR	
R72G-36K-RMN ●	G3/8	33	4224-50	74316-50	18-013-989	4255-51	R72G-KITR	
R73G SERIES			Accessories				Service Kit	
Model	Port size	Flow* (dm³/s)	Wall mounting bracket	Neck mounting bracket	Gauge 0 ... 10 bar	Tamper resistant kit		
								
R73G-26K-RMN ●	G1/4	50	4424-50	4461-50	18-013-013	4455-51	R73G-KITR	
R73G-36K-RMN ●	G3/8	60	4424-50	4461-50	18-013-013	4455-51	R73G-KITR	
R73G-46K-RMN ●	G1/2	60	4424-50	4461-50	18-013-013	4455-51	R73G-KITR	
R74G SERIES			Accessories				Service Kit	
Model	Port size	Flow* (dm³/s)	Wall mounting bracket	Neck mounting bracket	Gauge 0 ... 10 bar	Tamper resistant kit		
								
R74G-36K-RMN ●	G3/8	98	4324-50	4368-51	18-013-013	4355-51	R74G-KITR	
R74G-46K-RMN ●	G1/2	105	4324-50	4368-51	18-013-013	4355-51	R74G-KITR	
R74G-66K-RMN ●	G3/4	105	4324-50	4368-51	18-013-013	4355-51	R74G-KITR	

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar
For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON® MODULAR SYSTEM Manifold regulator

R72M, R74M – G1/4, G3/8, G1/2, G3/4

Excelon® design allows in-line or modular installation

Manifold typically up to six regulators without booster signal

TECHNICAL DATA

Medium:

Compressed air only

Maximum Inlet pressure:

20 bar

Operating temperature:

R72M: -34°C ... 65°C (-30°F ... 150°F)

R74M: -34°C ... 80°C

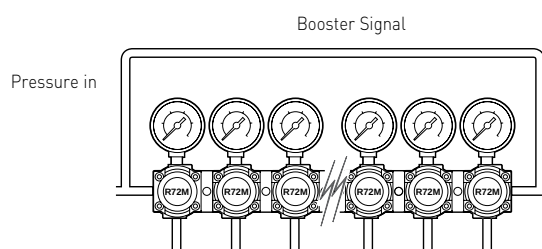
Consult our Technical Service for use below +2°C



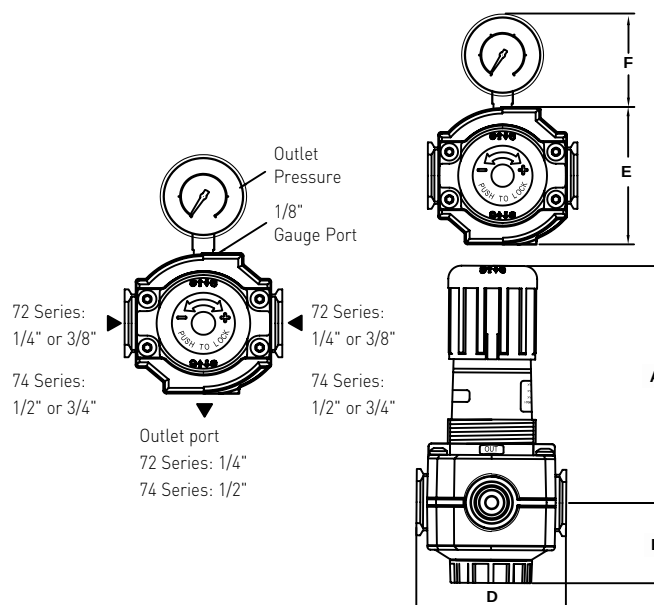
Dimensions

Series	A	B	C	D	E	F	G	Panel Ø	Panel depth
72	73	33	26	50	48	48	102/108	39	0 ... 4
74	127	43	31	80	74	69	149	52	1,8 ... 6

Typical manifold regulator application (R72M shown)



Note: Part number shown refers to regulator units only. Order Quikclamps as shown to assemble as required



Models

Model	Flow* (dm³/s)
R72M-2GK-RMN	39
R72M-3GK-RMN	39
R74M-4GK-RMN	105
R74M-6GK-RMN	105

Accessories

Quikclamp	Quikclamp and quikclamp wall bracket	Gauge 0 ... 10 bar	Tamper resistant kit	Service kit
4214-51	4214-52	18-013-027	4255-51	4381-500
4214-51	4214-52	18-013-027	4255-51	4381-500
4314-51	4314-52	18-013-027	4355-51	4381-700
4314-51	4314-52	18-013-027	4355-51	4381-700

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar
For other styles of mounting bracket and accessories, please refer to page 219

Service Kit

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM Filter/regulators

B72G, B73G, B74G – G1/4 ... G3/4

Excelon design allows in-line installation or modular installation with other Excelon products

High efficiency water and particle removal

Quick release bayonet bowl

Push to lock adjusting knob with tamper resistant accessory

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Pressure range:

0,3 ... 10 bar

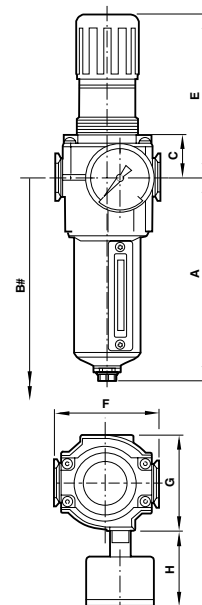
Gauge ports:

Rc1/8

Ambient temperature:

-34°C ... +50°C

Consult our Technical Service for use below +2°C



Minimum clearance required to remove bowl

Dimensions

Series	Drain	A	B	C	E	F	G	H	Panel Ø
72	Auto	141	192	26	73	50	48	35	40
	Manual	134	185	26	73	50	48	35	40
73	Auto	147	207	31	96	68	62	56	48
	Manual	156	216	31	96	68	62	56	48
74	Auto	161	230	31	127	80	74	56	52
	Manual	177	246	31	127	80	74	56	52

Models

B72G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)	Bowl



B72G-2GK-AL3-RMN	B72G-2GK-QT3-RMN	G1/4	38	T
B72G-3GK-AL3-RMN	B72G-3GK-QT3-RMN	G3/8	38	T

B73G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)	Bowl



B73G-2GK-AT3-RMN	B73G-2GK-QT3-RMN	G1/4	49	T
B73G-3GK-AT3-RMN	B73G-3GK-QT3-RMN	G3/8	50	T
B73G-4GK-AT3-RMN	B73G-4GK-QT3-RMN	G1/2	50	T

B74G SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)	Bowl



B74G-3GK-AP3-RMN	B74G-3GK-QP3-RMN	G3/8	77	GT
B74G-4GK-AP3-RMN	B74G-4GK-QP3-RMN	G1/2	100	GT
B74G-6GK-AP3-RMN	B74G-6GK-QP3-RMN	G3/4	100	GT

Accessories

Wall mounting bracket	Neck mounting bracket	Gauge 0...10 bar	Tamper resistant kit



4224-50	74316-50	18-013-989	4255-51
4224-50	74316-50	18-013-989	4255-51

Wall mounting bracket	Neck mounting bracket	Gauge 0...10 bar	Tamper resistant kit



4424-50	4461-50	18-013-013	4455-51
4424-50	4461-50	18-013-013	4455-51
4424-50	4461-50	18-013-013	4455-51

Wall mounting bracket	Neck mounting bracket	Gauge 0...10 bar	Tamper resistant kit



4324-50	4368-51	18-013-013	4355-51
4324-50	4368-51	18-013-013	4355-51
4324-50	4368-51	18-013-013	4355-51

Service Kit

Auto drain	Manual drain



B72G-KITA40R	B72G-KITM40R
B72G-KITA40R	B72G-KITM40R

Auto drain	Manual drain



B73G-KITA40R	B73G-KITM40R
B73G-KITA40R	B73G-KITM40R
B73G-KITA40R	B73G-KITM40R

Auto drain	Manual drain



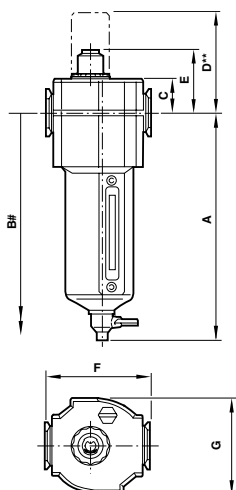
B74G-KITA40R	B74G-KITM40R
B74G-KITA40R	B74G-KITM40R
B74G-KITA40R	B74G-KITM40R

GT= Guarded transparent bowl. T=Transparent bowl *Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar
For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM Lubricators

L72, L73, L74 – G1/4 ... G3/4



**Optional Pyrex sight-feed dome
Minimum clearance required to remove bowl



Excelon® design allows in-line or modular installation
Flow sensor provides a constant density of oil delivery over a wide range of flows

All round (360°) visibility of sight-feed dome for ease of drip rate setting

Micro-fog lubricators for best lubrication in general purpose pneumatic applications

TECHNICAL DATA

Medium: Compressed air only

Maximum inlet pressure: 10 bar

Start point: L72M 0,94 dm³/s, L73M 0,71 dm³/s, L74M 0,94 dm³/s

Minimum flow required for lubricator operation at 6,3 bar inlet pressure

Bowl capacity: L72 0,05 l, L73 0,10 l, L74 0,20 l

Ambient temperature: -20°C ... +50°C

Consult our Technical Service for use below +2°C

EXPRESS PLUS

Have you thought about...

Whilst non lubricated systems are best from an environmental point of view, the operating life of virtually all products can be extended up to 400% by using a correctly sized and adjusted lubricator

Dimensions

Series	A	B	C	D	E	F	G
72	110	191	19	64	41	50	48
73	156	255	25	70	47	68	62
74	177	276	25	68	47	80	74

Models

L72 SERIES Model	Port size	Flow* (dm³/s)	Bowl	Wall mounting bracket	Service Kit
					
L72M-26P-ETN	G1/4	24	T	4224-50	L72M-KIT
L72M-36P-ETN	G3/8	24	T	4224-50	L72M-KIT
L73 SERIES Model	Port size	Flow* (dm³/s)	Bowl	Wall mounting bracket	Service Kit
					
L73M-26P-ETN	G1/4	50	T	4424-50	L73M-KIT
L73M-36P-ETN	G3/8	64	T	4424-50	L73M-KIT
L73M-46P-ETN	G1/2	64	T	4424-50	L73M-KIT
L74 SERIES Model	Port size	Flow* (dm³/s)	Bowl	Wall mounting bracket	Service Kit
					
L74M-36P-QPN	G3/8	50	GT	4324-50	L74M-KIT
L74M-46P-QPN	G1/2	70	GT	4324-50	L74M-KIT
L74M-66P-QPN	G3/4	70	GT	4324-50	L74M-KIT

GT= Guarded transparent bowl T=Transparent bowl * Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop
For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com
and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM Pressure relief valves

V72G, V74G – G1/4to G 3/4

Excelon design allows in-line installation or modular installation with other Excelon products (V72G only)

Push to lock adjusting knob with tamper resistant accessory

Helps protect air operated equipment from over pressurisation

IMI Precision Engineering pressure relief valves comply with category O(S.E.P.) and category 1 of the Pressure Equipment Directive 97/23/EC.

TECHNICAL DATA

Medium:

Compressed air only

Gauge ports:

Rc1/8

Relief port:

G1/4 (V72G), G1/2 (V74G)

Ambient temperature:

–34°C ... +65°C (V72G)

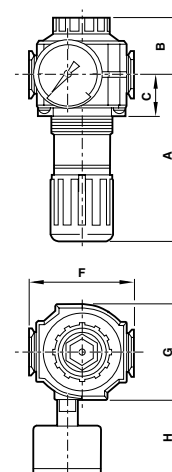
–34°C ... +80°C (V74G)

Consult our Technical Service for use below +2°C

Relief pressure adjustment range:

0,3 ... 10 bar

Note: Relief pressure can be adjusted in excess of and also less than those listed



Dimensions

Series	A	B	C	F	G	H	Panel Ø	Panel depth
72	73	25	26	50	48	35	40	0 ... 4
74	127	43	31	80	74	56	52	2 ... 6

Models

V72G SERIES Model	Port size	Wall mounting bracket	Neck mounting bracket	Gauge 0 ... 10 bar	Tamper resistant kit	Silencer	Service Kit
							
V72G-26K-NMN ●	G1/4	4224-50	74316-50	18-013-989	4255-51	MB002B	V72G-KIT
V72G-36K-NMN ●	G3/8	4224-50	74316-50	18-013-989	4255-51	MB002B	V72G-KIT

V74G SERIES Model	Port size	Wall mounting bracket	Neck mounting bracket	Gauge 0 ... 10 bar	Tamper resistant kit	Silencer	Service Kit
							
V74G-36K-NMN ●	G3/8	4324-50	4368-51	18-013-013	4355-51	MB004B	V74G-KIT
V74G-46K-NMN ●	G1/2	4324-50	4368-51	18-013-013	4355-51	MB004B	V74G-KIT
V74G-66K-NMN ●	G3/4	4324-50	4368-51	18-013-013	4355-51	MB004B	V74G-KIT

For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM Soft start/dump valves

P72F, P74F – G1/4 ... G3/4



Assists machine designers in complying with the European Machinery Directive

Can help existing machinery to comply with PUWER (Provision and Use of Work Equipment Regulations)

Controlled increase of downstream pressure on start up

High forward flow capacity

High flow dump facility

TECHNICAL DATA

Medium: Compressed air only

Maximum operating pressure:

10 bar (solenoid pilot operated),
17 bar (air pilot operated)

Minimum operating pressure: 3 bar

Ambient temperature:

–20°C ... +65°C P72F, –20°C ... +80°C P74F

Consult our Technical Service for use below +2°C

Air pilot port: P72F M5, P74F Rc1/4

Exhaust port: P72F Rc1/4, P74F G1/2

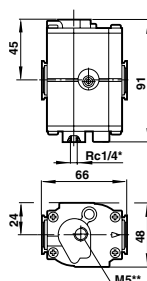
Maximum flow: P72F 21 dm³/s, P74F 57 dm³/s

Note: Maximum flow with 6,3 bar inlet pressure and pressure drop of 0,5 bar

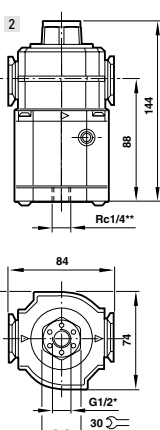
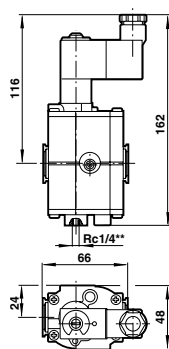
Snap pressure:

Full flow when downstream pressure reaches 50-80% of inlet pressure

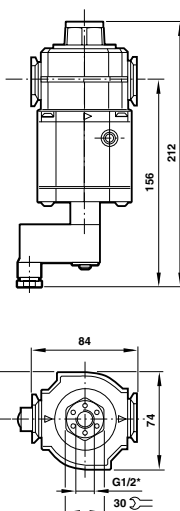
1 P72F



*Exhaust port
**Pilot port



P74F



Models

P72F SERIES - 24V d.c.
SOLENOID PILOT OPERATED
Model

AIR PILOT OPERATED
Model

Port
size

Drawing
No.



P72F-26C-PFN ●
P72F-36C-PFN ●

P72F-2GA-NNN ●
-

G1/4 1
G3/8 1

Accessories

Silencer

Basic solenoid plug



MB002B
MB002B

0657868000000000
0657868000000000

P74F SERIES - 24V d.c.
SOLENOID PILOT OPERATED
Model

AIR PILOT OPERATED
Model

Port
size

Drawing
No.



P74F-46C-PFN ●
P74F-66C-PFN ●

P74F-4GA-NNN ●
-

G1/2 2
G3/4 2

Silencer

Basic solenoid plug



MB004B
MB004B

0657868000000000
0657868000000000

For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON® MODULAR SYSTEM

Soft start monitored dump valve

P74S – G1/2

Controlled increase of downstream pressure on start up

Monitored dump function

High forward flow capacity

High flow dump facility

Soft start valves allow a controlled increase of pressure onto downstream cylinders/machines offering protection to personnel equipment

The positively driven micro switch ensures a monitored dump function

Note: Turn on system air supply prior to applying signal to operator.
Failure to do so may cause valve to continuously exhaust



TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

16 bar

Minimum operating pressure:

3 bar

Operating temperature:

-20°C ... 50°C

[Solenoid rating max is 50°C whilst unit max is 80°C. Consult our technical service below +2°C]

Gauge ports:

Rc1/8

Exhaust ports:

ISO G1/2

Snap pressure:

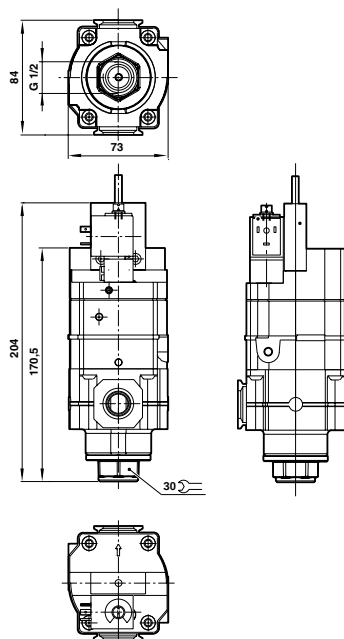
Full flow when downstream pressure reaches 35% - 60% of inlet pressure

Charge time:

For 2 litre downstream volume and inlet pressure of 6,3 bar, 0,2s minimum, 75 secs. maximum

Solenoid operator:

22 mm, 24V DC, 2W only (no manual override)



Models

Model	Port size	Wall mounting bracket	Gauge 0 ... 10 bar	Silencer	Basic solenoid plug
P74S-46C-N1N	G1/2	4324-50	18-013-013	MB004B (R1/2)	0657868000000000

For other styles of mounting bracket and accessories, please refer to page 219

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON MODULAR SYSTEM

Accessories



SHUT-OFF VALVES

Ideal for isolating sub-systems not in use
Easy to operate – low stiction
Lockable in the 'closed' position



WALL MOUNTING BRACKET

Provides secure wall mounting for individual Excelon products*

*Except P72, P74, T73 and T74 units.



QUIKCLAMP

Allows easy connection of one Excelon unit to another
One piece – no loose parts
Uniquely, connected products can be rotated in 90° increments



QUIKCLAMPS AND WALL BRACKETS

Allows easy connection of one Excelon unit to another
One piece – no loose parts
Uniquely, connected products can be rotated in 90° increments
Secure mounting to a wall, panel or machine surface



MANIFOLD BLOCK

Provides a manifolding capability for up to 3 products, e.g. 3 pressure regulators can be mounted on one block to provide 3 different secondary pressures from a common primary pressure
Ideal for right-angled piping



PORTING BLOCK

Provides 3 G1/4 auxiliary air outlets
Ideal for branching off to smaller sub-systems
When placed between a filter-regulator and lubricator allows branching off to systems requiring a non-lubricated supply



QUIKMOUNT PIPE ADAPTORS

Use with Quikclamps to provide threaded connections to system piping
Can be used on products with unthreaded ports

Models

Series	Port size	3/2 Shut-off valve	Wall mounting bracket	Quikclamp	Quikclamps and wall brackets	Manifold block	Porting block	Quikmount pipe adaptors
72	G1/4	T72T-2GA-P1N	4224-50	4214-51	4214-52	4228-03	4216-52	4215-08
72	G3/8	T72T-3GA-P1N	4224-50	4214-51	4214-52	4228-03	4216-52	4215-09
73	G1/4	T73T-2GA-P1N	4424-50	4314-51	4314-52	4328-53	4316-51	–
73	G3/8	T73T-3GA-P1N	4424-50	4314-51	4314-52	4328-53	4316-51	–
73	G1/2	T73T-4GA-P1N	4424-50	4314-51	4314-52	4328-53	4316-51	–
74	G3/8	T74T-3GA-P1N	4324-50	4314-51	4314-52	4328-53	4316-51	4315-10
74	G1/2	T74T-4GA-P1N	4324-50	4314-51	4314-52	4328-53	4316-51	4315-11
74	G3/4	T74T-6GA-P1N	4324-50	4314-51	4314-52	4328-53	4316-51	4315-12

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE UNITS, GENERAL PURPOSE

Combination filter/regulators and lubricators

P1H – G1/8, G1/4

Combinations of filter-regulators and lubricators can be ordered as pre-assembled units

Complete control of filtration, regulation and lubrication at a single point

Micro-fog versions for most general purpose pneumatic applications

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Ambient temperature:

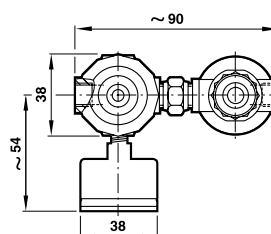
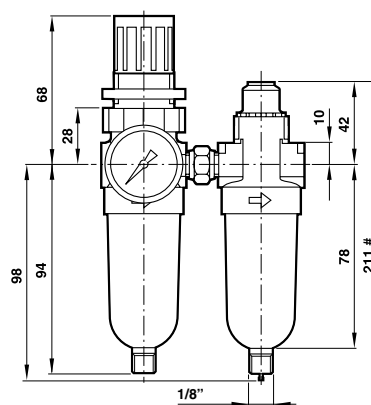
-20°C ... +50°C

Consult our Technical Service for use below +2°C

Pressure range:

0,3 ... 7 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed



Minimum clearance required to remove bowl

EXPRESS LINKS

Have you thought about...

See our 60 series ball valves on page 312 or our Pneufit C versions complete with push in fittings on page 249



Models

P1H SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Neck mounting bracket and nut	Gauge 0 ... 10 bar	Auto drain	Manual drain
						
P1H-100-A3QG	P1H-100-M3QG	G1/8	18-025-003	18-013-989	B07-KITA40R & L07-KIT	B07-KITM40R & L07-KIT
P1H-200-A3QG	P1H-200-M3QG	G1/4	18-025-003	18-013-989	B07-KITA40R & L07-KIT	B07-KITM40R & L07-KIT

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE UNITS, GENERAL PURPOSE

Filter

F07 – G1/8, G1/4



Direct ported filters with high water removal efficiency

Automatic drains supplied as standard

High flow miniature unit

Transparent bowl for 360° visibility

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

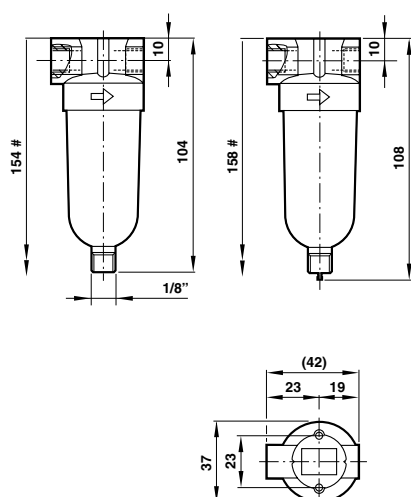
Ambient temperature:

-34°C ... +50°C

Consult our Technical Service for use below +2°C

Auto drain

Manual drain



Minimum clearance required to remove bowl

Models

F07 SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* [dm³/s]
			
F07-100-A3TG	F07-100-M3TG	G1/8	9
F07-200-A3TG	F07-200-M3TG	G1/4	11,5

Accessories

Wall mounting bracket	Auto drain	Manual drain
		
5939-06	F07-KITA40	F07-KITM40
5939-06	F07-KITA40	F07-KITM40

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE UNITS, GENERAL PURPOSE

Pressure regulator

R07 – G1/8, G1/4

Ported regulators for general purpose pneumatic applications

Relieving operation as standard

Non-rising adjusting knob with snap-action lock

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

20 bar

Gauge ports:

Rc1/8

Ambient temperature:

-34°C ... +65°C

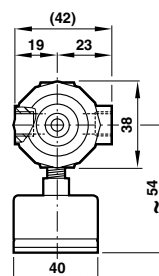
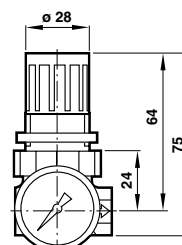
Consult our Technical Service for use below +2°C

Pressure range:

0,3 ... 7 bar

0,5 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed



Models

R07 SERIES			
Model	Port size	Outlet pressure range	Flow* (dm³/s)
	G1/8	0,3 ... 7 bar	6,5
	G1/4	0,3 ... 7 bar	6,5
	G1/8	0,5 ... 10 bar	7
	G1/4	0,5 ... 10 bar	7

Accessories

Neck mounting bracket (incl. nut)	Mounting nut only plastic	Mounting nut only metal	Gauge 0 ... 10 bar
			
18-025-003	2962-89	2962-04	18-013-989
18-025-003	2962-89	2962-04	18-013-989
18-025-003	2962-89	2962-04	18-013-989
18-025-003	2962-89	2962-04	18-013-989

Service Kit



* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar

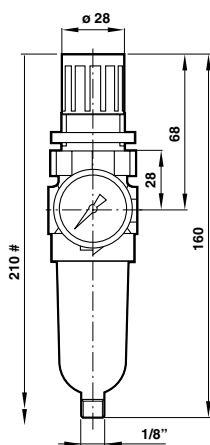
For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE UNITS, GENERAL PURPOSE

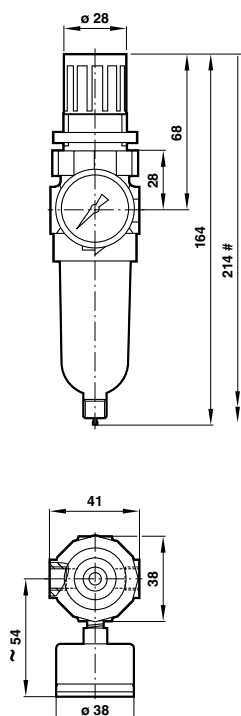
Filter regulator

B07 – G1/8, G1/4

Auto drain



Manual drain



Minimum clearance required to remove bowl



Filter-regulators for all general purpose pneumatic applications

High performance design provides high flow with minimum pressure drop

Non-rising adjusting knob has snap-action lock

Transparent bowl for 360° visibility

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Gauge ports:

Rc1/8

Pressure range:

0,3...7 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Ambient temperature:

-34°C ... +50°C

Consult our Technical Service for use below +2°C

Models

B07 SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm³/s)
			
B07-101-A3KG	B07-101-M3KG	G 1/8	6,2
B07-201-A3KG	B07-201-M3KG	G 1/4	6,5

Accessories

Neck mounting bracket (incl. nut)	Mounting nut only plastic	Mounting nut only metal	Gauge 0 ... 10 bar	Auto drain	Manual drain
					
18-025-003	2962-89	2962-04	18-013-989	B07-KITA40R	B07-KITM40R
18-025-003	2962-89	2962-04	18-013-989	B07-KITA40R	B07-KITM40R

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE UNITS, GENERAL PURPOSE

Lubricators

L07 – G1/8, G1/4

Micro-fog lubricators provide a fine mist for most general purpose pneumatic applications

Transparent bowl for 360° visibility

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Start point:

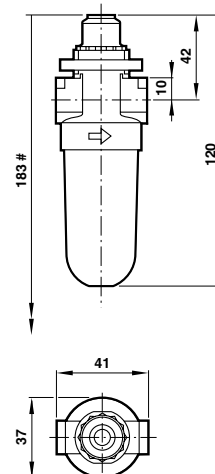
0,24 dm³/s

Minimum flow required for lubricator operation at 6,3 bar inlet pressure

Ambient temperature:

-20°C ... +50°C

Consult our Technical Service for use below +2°C



Minimum clearance required to remove bowl

Models

L07 SERIES			Accessories	Service Kit
Model	Port size	Flow* (dm ³ /s)	Neck mounting bracket and nut	
				
L07-100-MPQG	G1/8	5	18-025-003	L07-KIT
L07-200-MPQG	G1/4	6,7	18-025-003	L07-KIT

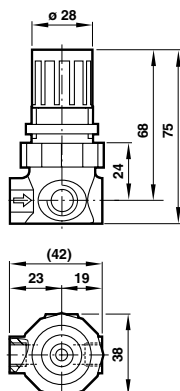
* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE UNITS, GENERAL PURPOSE

Pressure relief valve – Diaphragm type

V07 – G1/8, G1/4



Protect compressed air systems from over-pressurisation

IMI Precision Engineering pressure relief valves comply with category 0(S.E.P.) and category 1 of the Pressure Equipment Directive 97/23/EC.

TECHNICAL DATA

Medium:

Compressed air only

Gauge ports:

Rc1/8

Relief port:

As inlet port

Pressure range:

0,3...9bar

Ambient temperature:

-34°C to +65°C

Consult our Technical Service for use below +2°C

Relief pressure adjustment range:

0,3 ... 9 bar

Models

V07 SERIES

Model

Port
size

Accessories

Neck
mounting
bracket and nut

Gauge
0 ... 10 bar

Service Kit



V07-100-NNLG	●	G1/8	18-025-003	18-013-989	V07-KIT
V07-200-NNLG	●	G1/4	18-025-003	18-013-989	V07-KIT

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

LARGE CAPACITY PILOT OPERATED REGULATORS

11-808, R18, 11-400/11-204

Can be installed at any point in the compressed air system without regard to accessibility – pilot regulator can be installed in the most convenient location

Can be used with conventional or feedback pilot regulator

Feedback pilot regulator senses downstream pressure and automatically adjusts pilot operated regulator outlet pressure

TECHNICAL DATA

Medium:

Compressed air only

Maximum Inlet pressure:

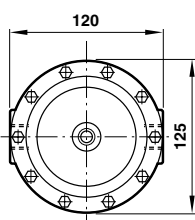
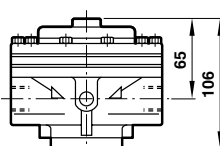
20 bar (11-808, 11-204), 25 bar (11-400), 31 bar (R18)

Ambient temperature:

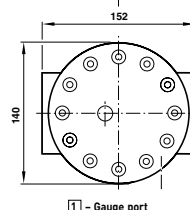
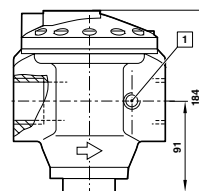
-20° ... +80°C

Consult our Technical Service for use below +2°C

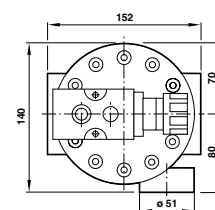
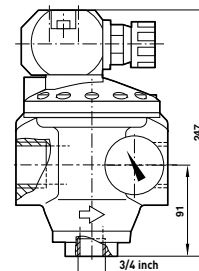
11-808



R18



R18 integral pilot



Models

R18 REMOTE PILOT						Accessories			Service Kit
Model	Port size	Flow* (dm³/s)	Pressure range	Operation	Adjustment method	Exhaust silencer	Gauge adaptor	Gauge** 0 ... 25 bar	
	G1 1/2	950 dm³/s	0,16 ... 17	Relieving	Remote pilot	MB006B	150232818	18-013-014	R18-100R
	G2	950 dm³/s	0,16 ... 17	Relieving	Remote pilot	MB006B	150232818	18-013-014	R18-100R

R18 INTEGRAL PILOT						Accessories			Service Kit
Model	Port size	Flow* (dm³/s)	Pressure range	Operation	Adjustment method	Exhaust silencer	Gauge adaptor	Gauge** 0 ... 10 bar	
	G1 1/2	950 dm³/s	0,3 ... 8,5	Relieving	Integral pilot	MB006B	150232818	18-013-013	R18-100R & 5945-41
	G2	950 dm³/s	0,3 ... 8,5	Relieving	Integral pilot	MB006B	150232818	18-013-013	R18-100R & 5945-41

* Max. flow with 7 bar inlet pressure, 6,3 bar outlet pressure and a droop of 1 bar from set
Alternative models available – contact IMI Precision Engineering technical service

11-808 SERIES						Wall mounting bracket	Gauge** 0 ... 25 bar	
Model	Port size	Flow*	Pressure range	Operation	Adjustment method			
								
11-808-960 	G3/4	180 dm³/s	20 bar Max.	Relieving	Remote pilot	18-001-027	18-013-014	11-908-100
11-808-980 	G1	180 dm³/s	20 bar Max.	Relieving	Remote pilot	18-001-027	18-013-014	11-908-100

* Max. flow with 8 bar inlet pressure, 6,3 bar outlet pressure and a droop of 1 bar from set

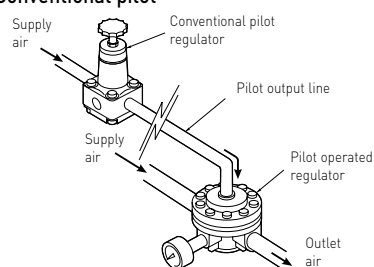
** Alternative gauges available see page 239

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

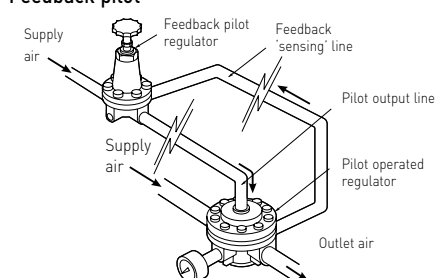
Pilot operated regulators

11-808, R18, 11-400/11-204

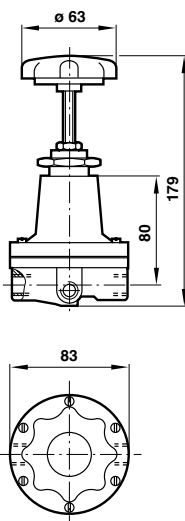
Conventional pilot



Feedback pilot



Feedback pilot regulators give more sensitive control and quicker reaction to downstream pressure changes. Feedback 'sensing' line to be kept to minimum length (<200mm).



Model – Conventional Pilot Regulators

11-400, 20AL SERIES						Bracket		Gauge		
Model	Port size	Pressure range	Operation	Mounting						
										
11400-2G-PC100	 G1/4	0,06 ... 2	Relieving	Bracket	18-001-005		18-013-010			11400-100
11400-2G-PC103	 G1/4	0,06 ... 2	Relieving	Panel	–		18-013-010			11400-100
11400-2G-PE100	 G1/4	0,06 ... 4	Relieving	Bracket	18-001-005		18-013-011			11400-100
11400-2G-PE103	 G1/4	0,06 ... 4	Relieving	Panel	–		18-013-011			11400-100
11400-2G-PG100	 G1/4	0,16 ... 7	Relieving	Bracket	18-001-005		18-013-012			11400-100
11400-2G-PG103	 G1/4	0,16 ... 7	Relieving	Panel	–		18-013-012			11400-100
20AL-X2G-PK100	 G1/4	7 ... 20	Relieving	Bracket	18-001-005		18-013-014			11400-100

Model – Feedback Pilot Regulators

11-204 SERIES					Bracket		Gauge	
Model	Port size	Pressure range	Operation	Mounting				
								
11-204-004 	G1/4	0,16 ... 7	Relieving	Panel/Bracket	18-001-005	18-013-012		11-204-100
11-204-006 	G1/4	4 ... 17	Relieving	Panel/Bracket	18-001-005	18-013-014		11-204-100

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

LARGE CAPACITY GENERAL PURPOSE UNITS

General purpose filters

F18 – G1/2 and 2

Direct ported filter with high water removal efficiency

High flow with minimal pressure drop

Highly visible prismatic liquid level indicator lens

Two gauge ports on top of the body for installation of pressure gauges

Can be disassembled without removal from the air preparation



TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

17 bar

Operating temperature:

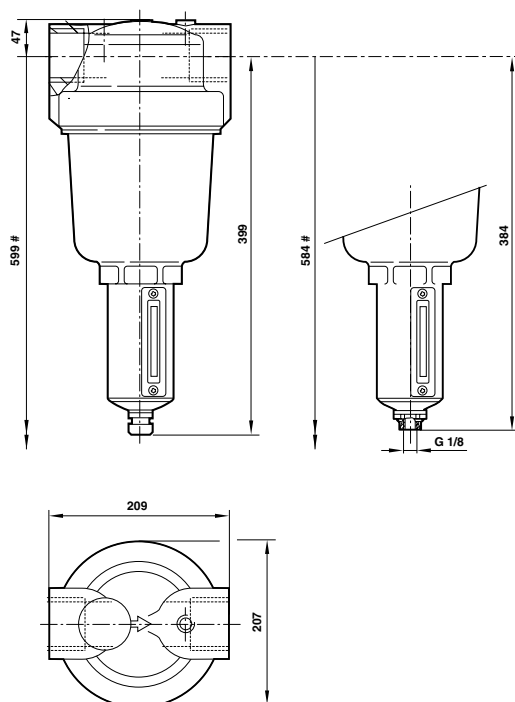
-20° ... +80°C

Particle removal:

5 or 40 µm

Manual drain

Auto drain



Minimum clearance required to remove bowl

Models

F18					
Model	Port size	Flow* (dm³/s)	Element Size	Drain	Bowl
					
F18-B00-A1DG	● G1 1/2	765	5 µm	Auto	Metal
F18-B00-A3DG	● G1 1/2	765	40 µm	Auto	Metal
F18-C00-A1DG	● G2	765	5 µm	Auto	Metal
F18-C00-A3DG	● G2	765	40 µm	Auto	Metal

Service Kit



F18-100A
F18-100A
F18-100A
F18-100A

*Typical flow with a 40 µm element at 6,3 bar inlet pressure and 0,5 bar pressure drop

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON® PRO SERIES

Combination shut off valve, filter/regulator and lubricator

BL92 - Ø 8 mm, G1/4



Configuration flexibility

Excellent value

No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

Manual drain: 12 bar max.

Auto drain: 10 bar

Ambient temperature:

-20°C ... +52°C

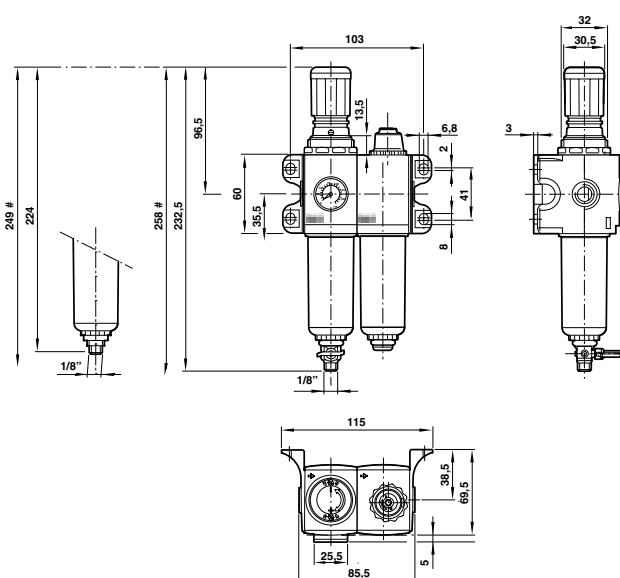
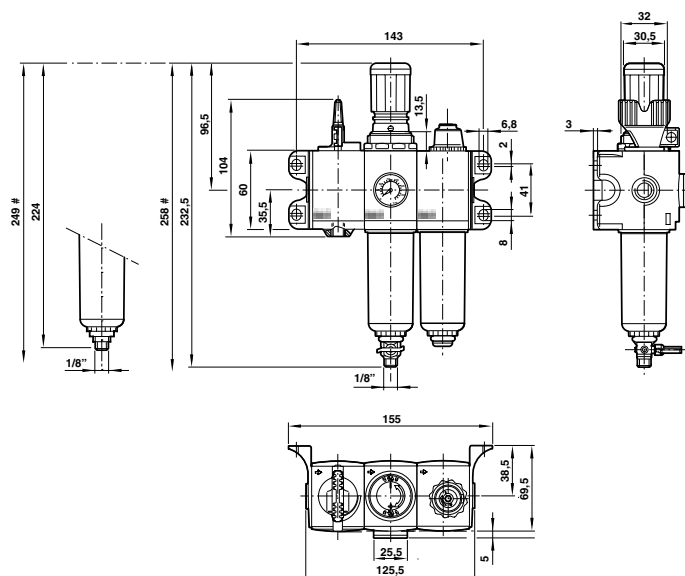
Consult our Technical Service for use below +2°C

Element:

5 µm

Pressure range:

0,3 ... 10 bar



Models

Combination unit including filter/regulator and lubricator with shut off valve

AUTO DRAIN Model	MANUAL DRAIN Model	Port Size
BL92-F11D	BL92-F31D	8 mm
BL92-211G	BL92-231G	G1/4



BL92-F11D	BL92-F31D	8 mm
BL92-211G	BL92-231G	G1/4

For service kits see individual units

Combination unit including filter/regulator and lubricator without shut off valve

AUTO DRAIN Model	MANUAL DRAIN Model	Port Size
BL92-F15D	BL92-F35D	8 mm
BL92-215G	BL92-235G	G1/4



BL92-F15D	BL92-F35D	8 mm
BL92-215G	BL92-235G	G1/4

For service kits see individual units

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON® PRO SERIES General purpose filter

F92G – Ø 8 mm, G1/4

Configuration flexibility

Excellent value

No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

Manual drain: 12 bar max.

Automatic drain: 10 bar max.

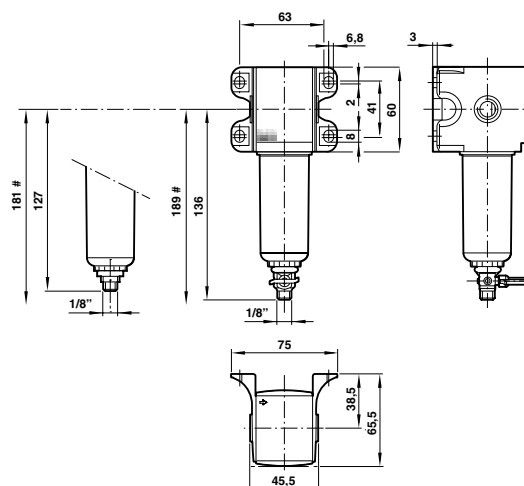
Ambient temperature:

-20°C ... +52°C

Consult our Technical Service for use below +2°C

Element:

5 µm



Models

F92G AUTO DRAIN Model		MANUAL DRAIN Model		Port size	Flow*
F92G-8DN-AT1	●	F92G-8DN-QT1	●	Ø 8 mm	19 dm³/s
F92G-2GN-AT1	●	F92G-2GN-QT1	●	G1/4	19 dm³/s

*Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop
For shut off valve and other accessories, refer to page 234

Accessories

Service kit	Auto drain
F92G-KIT	4000-50R
F92G-KIT	4000-50R

EXCELON® PRO SERIES Oil Removal filter

F92C – Ø 8 mm, G1/4

Configuration flexibility

Excellent value

No tools required for assembly

Automatic drain and service life indicator as standard

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

8 bar max.

Ambient temperature:

-20°C ... +52°C

Consult our Technical Service for use below +2°C

Element:

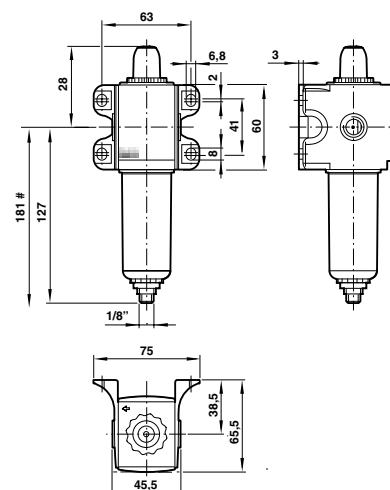
0,01 µm

Remaining oil content:

0,01 mg/m³ at +21°C

Note:

Install with a 5 µm Pre-Filter upstream



Models

F92C AUTO DRAIN Model		Port size	Flow*
F92C-8DD-AT0	●	Ø 8 mm	4,6 dm³/s
F92C-2GD-AT0	●	G1/4	4,6 dm³/s

* Maximum flow at 6,3 bar to maintain stated oil removal performance. (saturated element)
For shut off valve and other accessories, refer to page 234

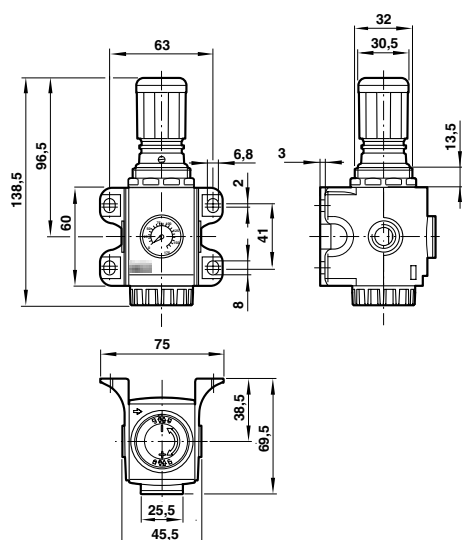
Accessories

Service kit	Auto drain
F92C-KIT	4000-50R
F92C-KIT	4000-50R

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON® PRO SERIES Regulator

R92G – Ø 8 mm, G1/4



Configuration flexibility

Excellent value

No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

12 bar max.

Ambient temperature:

–20°C ... +60°C

Consult our Technical Service for use below +2°C

Pressure range:

0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Models

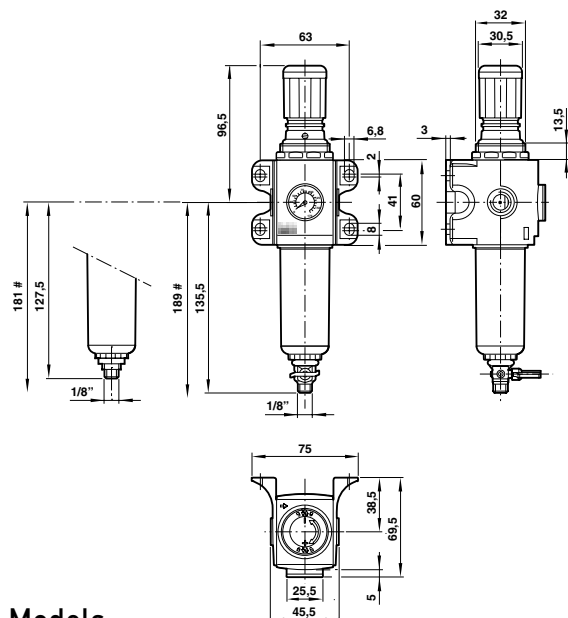
R92G			
Model	Port size	Flow*	Service kit
R92G-8DK-RMG	Ø 8 mm	22 dm³/s	R92G-KITR
R92G-2GK-RMG	G1/4	22 dm³/s	R92G-KITR

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar
For shut off valve and other accessories, refer to page 234

Accessories

EXCELON® PRO SERIES Filter/regulator

B92G – Ø 8 mm, G1/4



Configuration flexibility

Excellent value

No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

Manual drain: 12 bar max.

Automatic drain: 10 bar max.

Ambient temperature:

–20°C ... +52°C

Consult our Technical Service for use below +2°C

Element:

5 µm

Pressure range:

0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Models

B92G					
AUTO DRAIN	MANUAL DRAIN			Service	Auto
Model	Model	Port size	Flow*	kit	drain
B92G-8DK-AT1-RMG	B92G-8DK-QT1-RMG	Ø 8 mm	16 dm³/s	B92G-KITR	4000-50R
B92G-2GK-AT1-RMG	B92G-2GK-QT1-RMG	G1/4	16 dm³/s	B92G-KITR	4000-50R

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar
For shut off valve and other accessories, refer to page 234

Accessories

For further information, visit store.norgren.com
and use the new improved search function. If you cannot
see the option you require contact your Express Team.

EXCELON® PRO SERIES Lubricator (oil-fog)

L92C – Ø 8 mm, G1/4

Configuration flexibility

Excellent value

No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

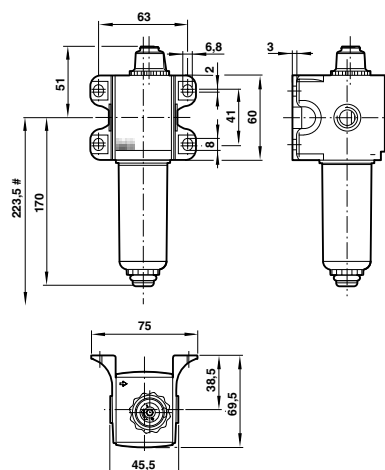
Maximum pressure:

12 bar max.

Ambient temperature:

–20°C ... +52°C

Consult our Technical Service for use below +2°C



EXPRESS PLUS

Have you thought about...

Whilst non lubricated systems are best from an environmental point of view, the operating life of virtually all products can be extended up to 400% by using a correctly sized and adjusted lubricator

Models

L92C			
Model	Port size	Flow*	Service Kit
L92C-8DP-ETN	Ø 8 mm	24 dm³/s	L92C-KIT
L92C-2GP-ETN	G1/4	24 dm³/s	L92C-KIT

*Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop
For shut off valve and other accessories, refer to page 234

Service Kit

EXCELON® PRO SERIES Soft start valve

P92E – Ø 8 mm, G1/4

Controlled increase of downstream pressure onstart up

Configuration flexibility

Excellent value

No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

3 ... 12 bar

Snap pressure:

Full flow when downstream pressure reaches 50-80% of inlet pressure

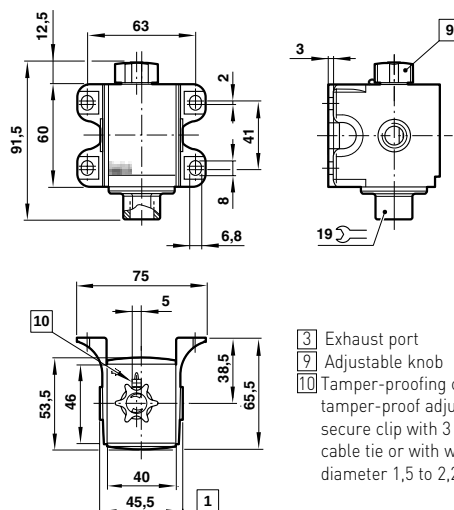
Charge time:

For 2 litre downstream volume and 6,3 bar inlet pressure: 2,5 sec. minimum 300 sec. maximum

Fluid/Ambient temperature:

–20 ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C.



- 3 Exhaust port
9 Adjustable knob
10 Tamper-proofing clip; To tamper-proof adjusting knob secure clip with 3 mm wide cable tie or with wire of diameter 1,5 to 2,2 mm.

Models

Model	Port size	Operation
P92E-8DN-NNN	8 mm	Soft start
P92E-2GN-NNN	G1/4	Soft start

For shut off valve and other accessories, refer to page 234

Note: Soft start valves never shut off completely, and must be installed downstream of a 3/2 directional control valve such as a P92C, or T92 shut off valve.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

EXCELON® PRO SERIES

3/2 Solenoid and air pilot operated control valve

P92C - Ø 8 mm, G1/4



High flow
Configuration flexibility
Excellent value
No tools required for assembly

TECHNICAL DATA

Medium:

Compressed air only

Maximum pressure:

1,7 ... 10 bar

Connector type:

Pneumatic: Ø 4 mm PIF

Electric: 15 mm DIN EN 175301-801 (DIN 43650), Form C

Exhaust port:

G 1/4

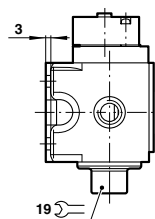
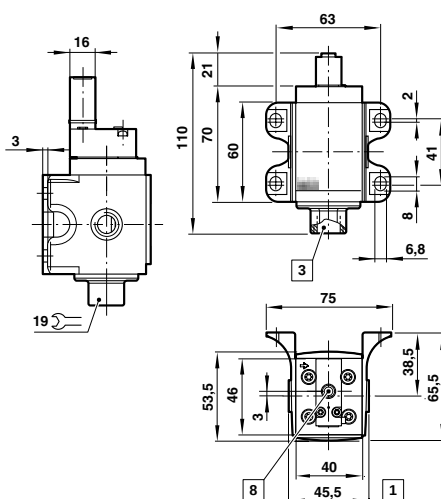
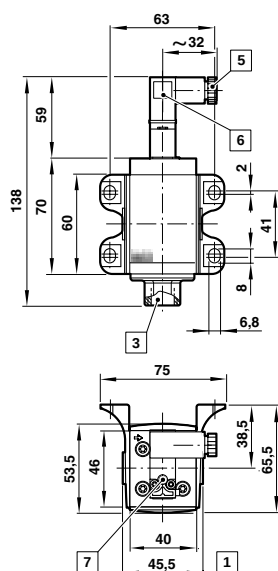
Fluid/Ambient temperature:

-20 ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C.

Solenoid

Air Pilot



- [3] G 1/4 exhaust port
- [5] Gland size Pg 7
- [6] Connector plug 3 x 90° working positions (ordered separately)
- [7] Manual override, push only
- [8] Ø 4 mm pilot port

Models

Model	Port size	Operation	Operator	Silencer	Basic solenoid plug
P92C-8DT-PFN	8 mm	3/2 N/C	24 V d.c. Solenoid	T40C2800	V10027-D00
P92C-2GT-PFN	G1/4	3/2 N/C	24 V d.c. Solenoid	T40C2800	V10027-D00
P92C-8DA-NNN	8 mm	3/2 N/C	Air Pilot	T40C2800	-
P92C-2GA-NNN	G1/4	3/2 N/C	Air Pilot	T40C2800	-

For shut off valve and other accessories, refer to page 234

Accessories

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

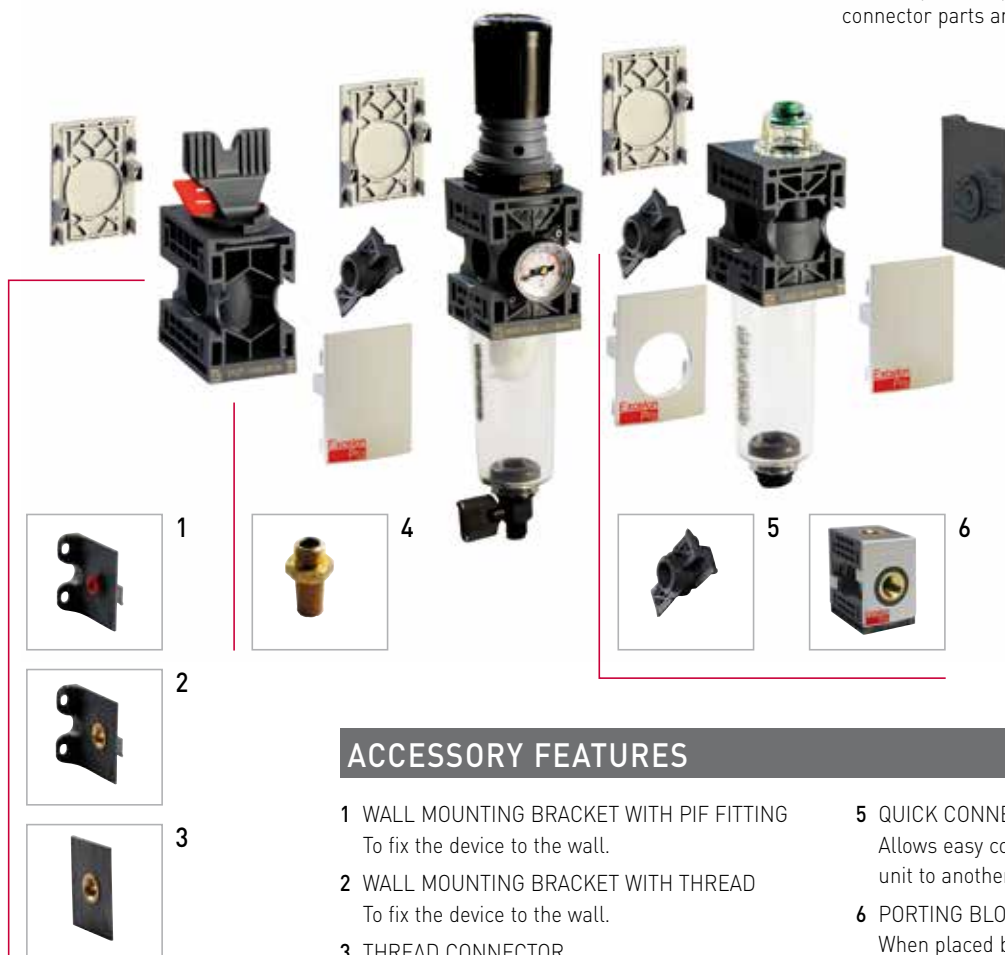
EXCELON® PRO SERIES

Patented Connection System

PATENTED CONNECTION SYSTEM

EASE OF INSTALLATION

Units are purchased separately, but can be combined into complete air preparation systems by using the connector parts and accessories listed here.



ACCESSORY FEATURES

1 WALL MOUNTING BRACKET WITH PIF FITTING

To fix the device to the wall.

2 WALL MOUNTING BRACKET WITH THREAD

To fix the device to the wall.

3 THREAD CONNECTOR

To connect the device directly.

4 SILENCER (SHUT-OFF VALVE)

For noise reduction when exhausting air to atmosphere.

5 QUICK CONNECTOR

Allows easy connection of one Excelon® PRO unit to another.

6 PORTING BLOCK

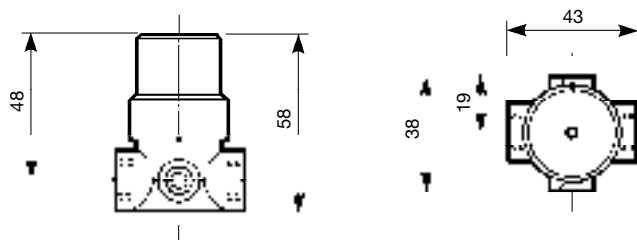
When placed between a filter-regulator and lubricator allows branching off to systems requiring a non-lubricated supply. The locking plates are included in scope of supply (plugs not included)

Connection size	Push-in fitting connector with mounting bracket	Threaded connector with mounting bracket	Threaded connector without mounting bracket	Quick connector	Shut off valve	Porting block	Silencer
							
-	-	-	-	9210-50 ●	T92T-NNN-B1N ●	9216-51 ●	T40M0500 ●
G 1/8	-	9212KIT-1G ●	-	-	-	-	-
G 1/4	-	9212KIT-2G ●	9211KIT-2V ●	-	-	-	-
G 3/8	-	9212KIT-3G ●	-	-	-	-	-
Ø 6 mm	9213KIT-6D ●	-	-	-	-	-	-
Ø 8 mm	9213KIT-8D ●	-	-	-	-	-	-
Ø 10 mm	9213KIT-AD ●	-	-	-	-	-	-
Ø 12 mm	9213KIT-BD ●	-	-	-	-	-	-

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

MINIATURE PRE-SET REGULATOR

R16



Factory pre-set and sealed to give a regulated pressure of 2 bar

Tamper resistant

Compact

TECHNICAL DATA

Medium:

Compressed air only

Maximum Inlet Pressure:

28 bar

Operating temperature:

-20°C* ... +80°C

*Consult our Technical Service for use below +2°C

Pre-set Pressure Range:

0,5 - 6,3 bar[†]

[†]Please specify Pre-set Regulated Pressure required when ordering. Units are pre-set with 7 bar inlet pressure unless otherwise specified.

Typical Setting Accuracy of Regulator with 7 bar inlet pressure and zero flow:

2 bar (+0,07 bar, - 0,2 bar)

Gauge ports:

Rc 1/8

Models

Model	Port size	Pre-set pressure
R16-200-R30G 	G1/4	2 bar

MATERIALS

Body:

Zinc alloy

Bonnet:

Aluminium alloy

EXPRESS LINKS

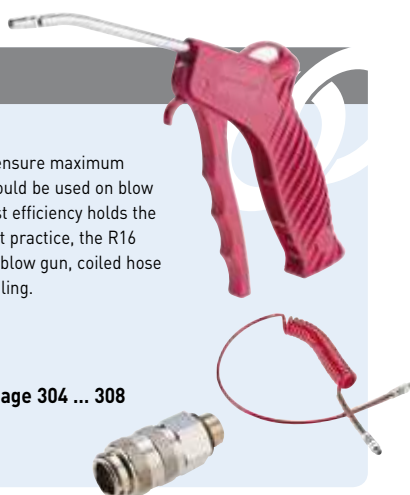
Perfect partners...

To fully comply with legislation and ensure maximum safety of operators this regulator should be used on blow gun installations, and for greater cost efficiency holds the maximum pressure at 2 bar. For best practice, the R16 should also be coupled with a safety blow gun, coiled hose assemblies and a quick release coupling.

Blow guns – see page 314

Coiled hose – see page 303

Quick release couplings – see page 304 ... 308



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SPECIAL PURPOSE

Fast response pressure regulator

20AG – G1/2, G1

Ported regulators for general purpose pneumatic applications

Relieving operation as standard, optional non-relieving

Options include non-relieving models and alternative spring ranges

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

28 bar max.

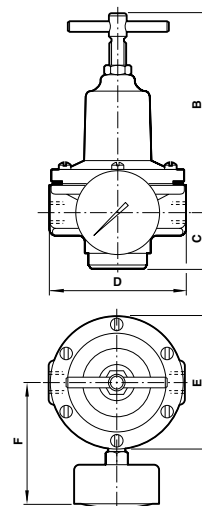
Gauge ports:

G1/8

Ambient temperature:

–20°C ... +80°C

Consult our Technical Service for use below +2°C



Dimensions

Series	B (max.)	C	D	E	F
20AG-X4G	125	35	85	85	125
20AG-X6G	185	40	115	125	160
20AG-X8G	185	40	115	125	160

Models

20AG SERIES Model	Port size	Pressure range	Flow* (dm³/s)	Operation	Adjustment	Mounting

Accessories

Bracket	Gauge	Service Kit



20AG-X4G-PD100	● G 1/2	0,1 ... 3,5 bar	60	Relieving	T Bar	Bracket	18-001-005	18-013-011	20AG-X4-100
20AG-X4G-PH100	● G 1/2	0,2 ... 8,0 bar	60	Relieving	T Bar	Bracket	18-001-005	18-013-013	20AG-X4-100
20AG-X4G-PH102	● G 1/2	0,2 ... 8,0 bar	60	Relieving	Plastic Knob	Bracket	18-001-005	18-013-013	20AG-X4-100
20AG-X4G-PH103	● G 1/2	0,2 ... 8,0 bar	60	Relieving	T Bar	Panel Mounting	–	18-013-013	20AG-X4-100
20AG-X4G-PJ100	● G 1/2	7 ... 16 bar	60	Relieving	T Bar	Bracket	18-001-005	18-013-014	20AG-X4-100
20AG-X4G-PJ103	● G 1/2	7 ... 16 bar	60	Relieving	T Bar	Panel Mounting	–	18-013-014	20AG-X4-100
20AG-4G-PD100	● G 1/2	0,1 ... 3,5 bar	60	Non-relieving	T Bar	Bracket	18-001-005	18-013-011	20AG-4-100
20AG-4G-PH100	● G 1/2	0,2 ... 8,0 bar	60	Non-relieving	T Bar	Bracket	18-001-005	18-013-013	20AG-4-100
20AG-4G-PJ100	● G 1/2	7 ... 16 bar	60	Non-relieving	T Bar	Bracket	18-001-005	18-013-014	20AG-4-100
20AG-X6G-PD100	● G 3/4	0,1 ... 3,5 bar	80	Relieving	T Bar	Bracket	18-001-029	18-013-011	20AG-X8-100
20AG-X6G-PH100	● G 3/4	0,2 ... 8,0 bar	80	Relieving	T Bar	Bracket	18-001-029	18-013-013	20AG-X8-100
20AG-6G-PH100	● G 3/4	0,2 ... 8,0 bar	80	Non-relieving	T Bar	Bracket	18-001-029	18-013-013	20AG-8-100
20AG-X8G-PD100	● G 1	0,1 ... 3,5 bar	100	Relieving	T Bar	Bracket	18-001-029	18-013-011	20AG-X8-100
20AG-X8G-PH100	● G 1	0,2 ... 8,0 bar	100	Relieving	T Bar	Bracket	18-001-029	18-013-013	20AG-X8-100
20AG-X8G-PH102	● G 1	0,2 ... 8,0 bar	100	Relieving	Plastic Knob	Bracket	18-001-029	18-013-013	20AG-X8-100
20AG-8G-PH100	● G 1	0,2 ... 8,0 bar	100	Non-relieving	T Bar	Bracket	18-001-029	18-013-013	20AG-8-100

* Typical flow with 7 bar inlet pressure and 1 bar droop from set pressure of 4 bar

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SPECIAL PURPOSE 'MICRO TROL'

High flow, high relief pressure regulator

R24 - G1/4 ... G1 1/4



Exceptionally high flow and relief flow characteristics

Easy to adjust even at high output pressures

Balanced valve minimises effect of variations in inlet pressure on outlet pressure

Panel mounted facility

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

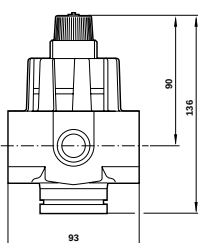
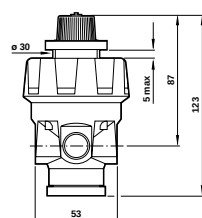
20 bar max.

Ambient temperature:

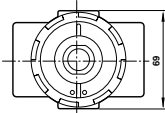
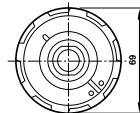
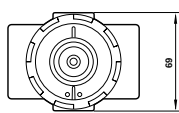
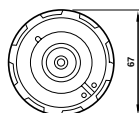
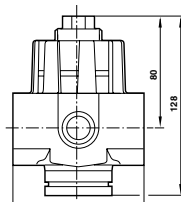
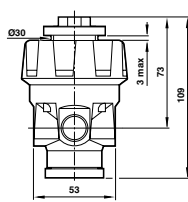
0°C ... +80°C

Consult our Technical Service for use below +2°C

Manual



Air Pilot



Models

Accessories

Service Kit

R24 SERIES Model	Port size	Pressure range	Operation	Adjustment method	Neck mounting bracket	*Gauge adaptor	Gauge	
								
R24-200-RNCG	G1/4	0,3 ... 2 bar	Relieving	Manual - Knob	18-999-412	150232818	18-013-010	5292-52
R24-200-RNFG	G1/4	0,3 ... 4 bar	Relieving	Manual - Knob	18-999-412	150232818	18-013-012	5292-52
R24-200-RNLG	G1/4	0,7 ... 8 bar	Relieving	Manual - Knob	18-999-412	150232818	18-013-013	5292-52
R24-200-RNSG	G1/4	0,7 ... 17 bar	Relieving	Manual - Knob	18-999-412	150232818	18-013-014	5292-52
R24-300-RNLG	G3/8	0,7 ... 8 bar	Relieving	Manual - Knob	18-999-412	150233818	18-013-013	5292-52
R24-300-RNSG	G3/8	0,7 ... 17 bar	Relieving	Manual - Knob	18-999-412	150233818	18-013-014	5292-52
R24-400-RNCG	G1/2	0,3 ... 2 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-010	5292-52
R24-400-RNFG	G1/2	0,3 ... 4 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-012	5292-52
R24-400-RNLG	G1/2	0,7 ... 8 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-013	5292-52
R24-400-RNSG	G1/2	0,7 ... 17 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-014	5292-52
R24-401-RNXG	G1/2	0,3 ... 17 bar	Relieving	Air Pilot	18-999-412	150234818	18-013-014	5292-54
R24-600-RNLG	G3/4	0,7 ... 8 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-013	5292-53
R24-601-RNXG	G3/4	0,3 ... 17 bar	Relieving	Air Pilot	18-999-412	150234818	18-013-014	5292-55
R24-800-RNLG	G1	0,7 ... 8 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-013	5292-53
R24-801-RNXG	G1	0,3 ... 17 bar	Relieving	Air Pilot	18-999-412	150234818	18-013-014	5292-55
R24-A00-RNLG	G1 1/4	0,7 ... 8 bar	Relieving	Manual - Knob	18-999-412	150234818	18-013-013	5292-53
R24-A01-RNXG	G1 1/4	0,3 ... 17 bar	Relieving	Air Pilot	18-999-412	150234818	18-013-014	5292-55

*Adaptor required to connect standard pressure gauge to respective unit

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PRECISION & INSTRUMENT REGULATOR

Pressure regulator

11-818, R27

11-818

Precision instruments with integral pilot to ensure very close pressure control in a compact form

Unit double filters air before reaching pilot valve to help prevent leakage and malfunction

Panel mounting facility

* Not recommended for dead-end applications

R27

High precision regulator using a control chamber instead of a spring, so increasing its sensitivity to any variations and eliminating any spring hysteresis

Perfect for dead-end applications

Excellent long term stability



11-818



R27

TECHNICAL DATA

Medium:

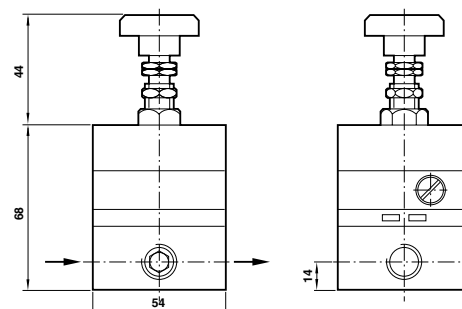
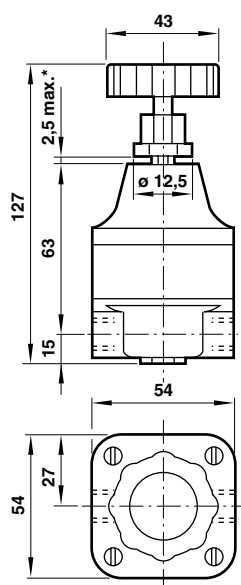
11-818 - Compressed air only,
R27 - Dry, oil free air filter to 25µm

Maximum inlet pressure:

11-818 Low pressure: 8 bar
11-818 Standard pressure: 10 bar
11-818 High pressure: 14 bar
R27: 10 bar (minimum 0,2 above output)

Ambient temperature:

11-818: 0 ... +70°C
R27: -20 ... +70°C



Models

11-818 Series	Port size	Pressure range (bar)	Flow* (dm³/s)	Accuracy # (bar)	Operation	Gauge Ports	Tamper proof adjusting screw	Panel mounting nut	
11-818-999	● G1/4	0,02 ... 0,50 (low)		0,01	Relieving	-	-	3081-01	2787-96
11-818-998	● G1/4	0,02 ... 0,50 (low)		0,01	Relieving	-	Tamper proof	3081-01	2787-96
11-818-100	● G1/4	0,07 ... 4 (Standard)	8,0	0,03	Relieving	-	-	3081-01	2787-98
11-818-101	● G1/4	0,07 ... 4 (Standard)	8,0	0,03	Relieving	-	Tamper proof	3081-01	2787-98
11-818-110	● G1/4	0,4 ... 10 (high)		0,05	Relieving	-	-	3081-01	2787-97
11-818-987	● G1/4	0,02 ... 0,50 (low)		0,01	Relieving	R1/4	-	3081-01	2787-96
11-818-993	● G1/4	0,07 ... 4 (Standard)	8,0	0,03	Relieving	R1/4	-	3081-01	2787-98
11-818-991	● G1/4	0,4 ... 10 (high)		0,05	Relieving	G1/4	-	3081-01	2787-97

* Typical flow with 8 bar inlet pressure and 0,005 bar droop from set pressure of 4 bar # Typical mid range variance from set pressure with 7 bar inlet at 2 dm³/s flow

Note: 11-818 is not a constant bleed device, when being used under flow conditions no air is consumed. Air bleed is only effective under zero flow conditions as in a dead end application.

R27 Series	Port size	Pressure range (bar)	Flow* (dm³/s)	Hysteresis/ repeatability#	Sensitivity	Operation	Gauge Ports
R27-200-RNCG	● G1/4	0,14 ... 2,0 bar	8,0	< 0,05%	> 0,3 mbar	Relieving	G1/4
R27-200-RNFG	● G1/4	0,14 ... 4,0 bar	8,0	< 0,05%	> 0,3 mbar	Relieving	G1/4
R27-200-RNLG	● G1/4	0,14 ... 8,0 bar	8,0	< 0,05%	> 0,3 mbar	Relieving	G1/4

* Maximum flow achieved under ideal conditions # Typical values at mid range

Note - R27 regulators are designed as constant bleed devices and consume air, typically less than 0,016dm³/s

Accessories Service Kit

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

AIR PREPARATION ACCESSORIES

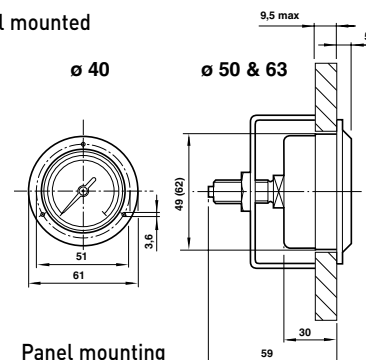
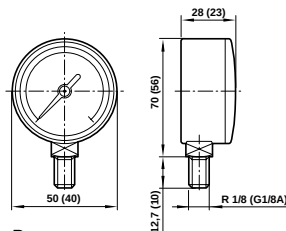
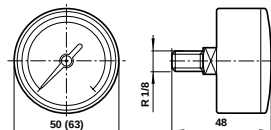
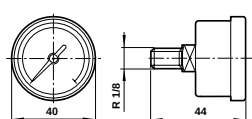
Gauges, Auto-drain, Drip leg drain

GAUGES

Monitor pressures in a compressed air system for optimum efficiency

Choice of pressure ranges

Direct or panel mounted



Centre back

Bottom

Panel mounting

Standard Steel and plastic	Pressure range (bar)	Nominal diameter (mm)	Connection type / mounting	Port connection
18-013-887	0 ... 1	40	Centre Back	R1/8
18-013-991	0 ... 1,6	40	Centre Back	R1/8
18-013-886	0 ... 2,5	40	Centre Back	R1/8
18-013-990	0 ... 4	40	Centre Back	R1/8
18-013-885	0 ... 6	40	Centre Back	R1/8
18-013-989	0 ... 10	40	Centre Back	R1/8
18-013-884	0 ... 16	40	Centre Back	R1/8
18-013-908	0 ... 25	40	Centre Back	R1/8
18-013-010	0 ... 1,6	50	Centre Back	R1/8
18-013-011	0 ... 4	50	Centre Back	R1/8
18-013-012	0 ... 6	50	Centre Back	R1/8
18-013-013	0 ... 10	50	Centre Back	R1/8
18-013-014	0 ... 25	50	Centre Back	R1/8
18-013-893	0 ... 1	63	Centre Back	R1/8
18-013-892	0 ... 2,5	63	Centre Back	R1/8
18-013-891	0 ... 6	63	Centre Back	R1/8
18-013-856	0 ... 10	63	Centre Back	R1/8
18-013-855	0 ... 16	63	Centre Back	R1/8
18-013-888	0 ... 25	63	Centre Back	R1/8

Standard Steel and plastic	Pressure range (bar)	Nominal diameter (mm)	Connection type / mounting	Port connection
18-013-879	0 ... 1,6	40	Panel Mounted	G1/8A
18-013-878	0 ... 6	40	Panel Mounted	G1/8A
18-013-877	0 ... 10	40	Panel Mounted	G1/8A
18-013-858	0 ... 6	50	Panel Mounted	G1/8A
18-013-857	0 ... 10	50	Panel Mounted	G1/8A
18-013-883	0 ... 1,6	63	Panel Mounted	G1/4A
18-013-882	0 ... 6	63	Panel Mounted	G1/4A
18-013-852	0 ... 10	63	Panel Mounted	G1/4A
18-013-851	0 ... 16	63	Panel Mounted	G1/4A
18-013-024	0 ... 1,6	50	Bottom	R1/8
18-013-025	0 ... 4	50	Bottom	R1/8
18-013-026	0 ... 6	50	Bottom	R1/8
18-013-027	0 ... 10	50	Bottom	R1/8
18-013-028	0 ... 25	50	Bottom	R1/8
18-013-854	0 ... 10	63	Bottom	G1/4A
18-013-853	0 ... 25	63	Bottom	G1/4A

Stainless Steel	Pressure range (bar)	Nominal diameter (mm)	Connection type / mounting	Port connection
18-013-844	0 ... 10	40	Centre Back	1/8 NPT
18-013-913	0 ... 6	40	Centre Back	1/4 NPT
18-013-909	0 ... 10	40	Centre Back	1/4 NPT
18-013-905	0 ... 25	40	Centre Back	1/4 NPT

DRIP LEG DRAIN

Fully automatic unit that can drain liquid from low points in compressed air systems



Model	Port size	Bowl
17-816-998	G1/2	Metal
17-816-999	G1/2	Transparent

AUTO-DRAIN

Spare parts for filters and filter/regulators



Model	Series
4000-50R	Excelon 72, Excelon Pro
4000-51R	Excelon 73
3000-97	Excelon 74
6000-50	Olympian 64, 68

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

STAINLESS STEEL GENERAL PURPOSE

Filters, pressure regulators, lubricators

F22, R22, L22 – 1/2" NPTF

Lloyds Register Type Approved

Materials meet NACE* recommendations (MR-0175, 2002 revision)

25 µm filter element as standard

Orientable metal bowls with sightglasses

* National Association of Corrosion Engineers – recognised oil-field recommendation for resistance to sulphide stress cracking common in well-head and other corrosive environments

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar (F22, L22)

20 bar (R22)

Gauge ports:

1/4 PTF (R22)

Pressure range:

R22: 0,4...10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Operation:

R22: Relieving

L22: Oil-fog

Start Point:

L22: 1,7 dm³/sat 6,3 bar

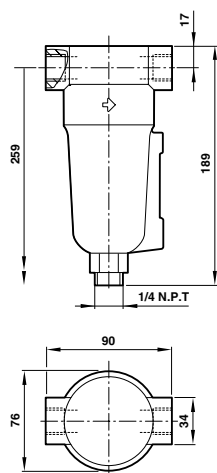
Ambient temperature:

-20°C ... +80°C

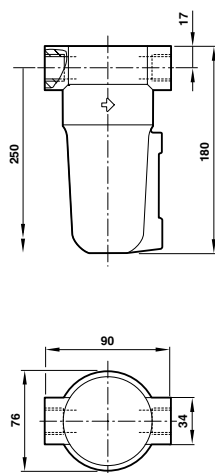
Consult our Technical Service for use below +2°C



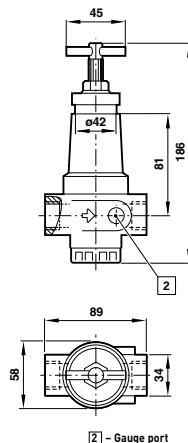
F22 Auto drain



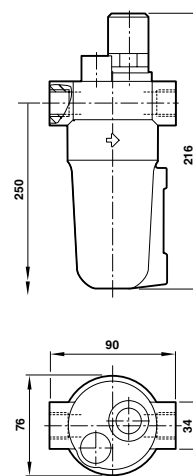
F22 Manual drain



R22



L22



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

STAINLESS STEEL GENERAL PURPOSE Filters, pressure regulators, lubricators

F22, R22, L22 – 1/2" NPTF

Models

F22 SERIES AUTO DRAIN Model	MANUAL DRAIN Model	Port size	Flow* (dm ³ /s)	Wall mounting bracket	Auto drain	Manual drain
						
F22-400-A7DA 	F22-400-M7DA 	1/2 PTF	57	18-001-962	F22-KITA25	F22-KITM25

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop

R22 SERIES Model	Port size	Flow* (dm ³ /s)	Wall mounting bracket	Neck mounting bracket	Gauge**	Service kit
						
R22-401-RNMA 	1/2 PTF	50	18-001-962	18-001-959	18-013-909	R22-KITR

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar **Not to NACE standard

L22 SERIES Model	Port size	Flow* (dm ³ /s)	Wall mounting bracket	Service kit
				
L22-400-OP8A 	1/2 PTF	48	18-001-962	L22-KIT

* Typical flow with 10 bar inlet pressure and 0,5 bar pressure drop

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

STAINLESS STEEL GENERAL PURPOSE Filter/regulator

B38 – 1/2 NPTF

Designed for use in corrosive environments

Metallic parts meet NACE Standard MR-01-75*

Lloyd's register type approval

Applications include marine environments, oil and gas production, chemical and food processing, medical analysis

Relieving or non relieving models. Relieving models allow reduction of outlet pressure even when the system is dead-ended

* National Association of Corrosion Engineers – recognised oil-field recommendation for resistance to sulphide stress cracking common in well-head and other corrosive environments

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar (autodrain)

31 bar (manual drain)

Flow:

50 dm³/s

Typical flow with 12 bar inlet pressure, 8 bar set pressure and 1 bar droop from set

Gauge ports:

1/4" PTF

Relief port:

1/8" PTF

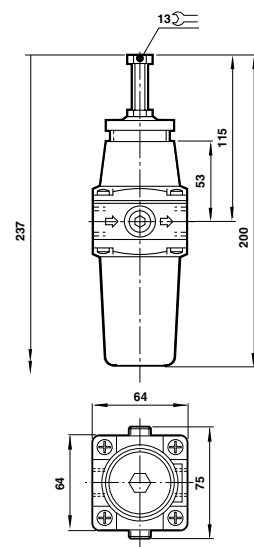
Ambient temperature:

–40°C ... +80°C

Consult our Technical Service for use below +2°C

Particle removal:

5 µm or 25 µm filter element



Models

B38 SERIES Model	Port size	Pressure range	Flow* (dm ³ /s)	Operation	Drain	Element	Neck mounting bracket & nut	Gauge	Plastic adjusting knob
	1/2 PTF	0,3 ... 9 bar	50	Relieving	Manual	5 µm	18-001-973	18-013-909	74630-04
	1/2 PTF	0,3 ... 9 bar	50	Relieving	Manual	25 µm	18-001-973	18-013-909	74630-04
	1/2 PTF	0,3 ... 9 bar	50	Relieving	Automatic	5 µm	18-001-973	18-013-909	74630-04
	1/2 PTF	0,3 ... 9 bar	50	Relieving	Automatic	25 µm	18-001-973	18-013-909	74630-04

* Typical flow with 12 bar inlet pressure and 1 bar droop from set pressure of 8 bar
Units supplied complete with panel mounting ring

Accessories

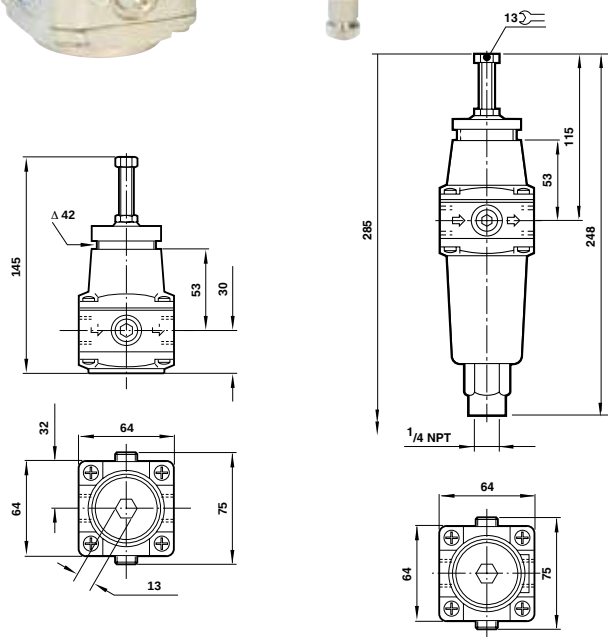


For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

STAINLESS STEEL INSTRUMENT

Regulators and Filter/regulators

R38, B38 – 1/4 NPTF



- Exceptionally high flow and relief flow characteristics
- Easy to adjust even at high output pressures
- Balanced valve minimises effect of variations in inlet pressure on outlet pressure
- Relieving feature allows outlet pressure reduction even when the system is dead ended
- Full flow gauge ports
- Panel mounting facility

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

20 bar

Gauge ports:

1/4" NPTF

Pressure range:

0,7...8 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

Ambient temperature:

-40°C ... +80°C

Consult our Technical Service for use below +2°C

Models

R38 SERIES PRECISION PRESSURE REGULATOR				
Model	Port size	Pressure range	Flow* (dm³/s)	Operation
 R38-240-RNCA	1/4 PTF	0,04 ... 2 bar	8	Relieving
 R38-240-RNFA	1/4 PTF	0,07 ... 4 bar	8	Relieving
 R38-240-RNMA	1/4 PTF	0,50 ... 10 bar	8	Relieving

B38 SERIES PRECISION FILTER/REGULATOR						
Model	Port size	Pressure range	Flow* (dm³/s)	Operation	Drain	Element
 B38-244-B1KA	1/4 PTF	0,25 ... 7 bar	8	Relieving	Manual	5 µm
 B38-244-B2KA	1/4 PTF	0,25 ... 7 bar	8	Relieving	Manual	25 µm
 B38-244-A1KA	1/4 PTF	0,25 ... 7 bar	8	Relieving	Automatic	5 µm
 B38-244-A2KA	1/4 PTF	0,25 ... 7 bar	8	Relieving	Automatic	25 µm
 B38-244-B1MA	1/4 PTF	0,5 ... 10 bar	8	Relieving	Manual	5 µm
 B38-244-B2MA	1/4 PTF	0,5 ... 10 bar	8	Relieving	Manual	25 µm
 B38-244-A1MA	1/4 PTF	0,5 ... 10 bar	8	Relieving	Automatic	5 µm
 B38-244-A2MA	1/4 PTF	0,5 ... 10 bar	8	Relieving	Automatic	25 µm

* Typical flow with 7 bar inlet pressure and 0,05 bar droop from set pressure of 1 bar

Accessories

Neck mounting bracket & nut	Gauge	Plastic adjusting knob
		
18-001-973	18-013-913	74630-04
18-001-973	18-013-913	74630-04
18-001-973	18-013-909	74630-04

Neck mounting bracket & nut	Gauge	Plastic adjusting knob
		
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04
18-001-973	18-013-909	74630-04

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

GENERAL PURPOSE STAINLESS STEEL

Regulators and filter-regulator

R05, B05 – 1/4" PTF

Metallic parts meet NACE* recommendations

Miniature high corrosion resistant design

Adjusting knob has snap-action lock

Particularly suitable for marine, petro-chemical, food processing, medical, dental and similar applications

Panel mounting facility

* National Association of Corrosion Engineers - recognised oil-field recommendation for resistance to sulphide stress cracking common in well-head and other corrosive environments.

TECHNICAL DATA

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Gauge ports:

1/8" PTF

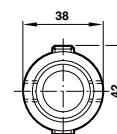
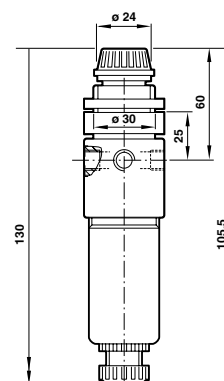
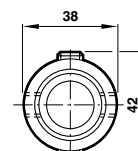
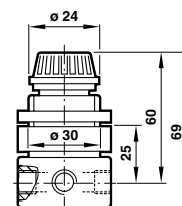
Pressure range:

0,3...8,6 bar

Ambient temperature:

-34°C ... +66°C

Consult our Technical Service for use below +2°C



Models

Accessories

Service Kit

B05 SERIES			Accessories		Service Kit
Model	Port size	Flow* (dm³/s)	Gauge**	Mounting nut	
					
B05-233-M1LA	1/4 PTF	5	18-013-844	2962-89	B05-KITM05R
R05 SERIES			Accessories		Service Kit
Model	Port size	Flow* (dm³/s)	Gauge**	Mounting nut	
					
R05-200-RNLA	1/4 PTF	3	18-013-844	2962-89	R05-KITR

* Typical flow with 10 bar inlet pressure and 1 bar drop from set pressure of 6,3 bar ** Not NACE standard

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

FITTINGS, TUBING & ACCESSORIES

The product group most associated with the 'Enots' brand, fittings are of vital importance, since they are used to connect all other products and make them operate. The Norgren Express range includes labour saving push in types in composite, brass and stainless steel for all manner of applications.

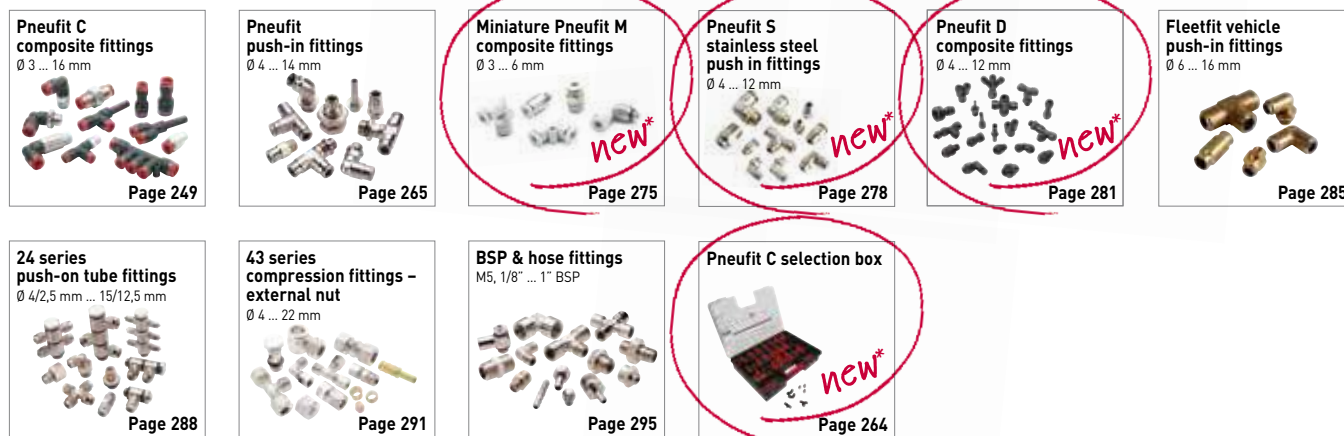
We then have compression fittings ranges suitable for heavier industry and even a push in fitting suitable for vehicle braking systems. Add to this a whole selection of BSP connectors, flow regulators, non return valves, air fuses, blow guns, flexible hoses and quick release connectors and you have one of the industries' largest accessory ranges around.



Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering fittings range. If you can't see the option you require contact your Express team.

FITTINGS



TUBING & HOSES



*New to this catalogue

Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering fittings range. If you can't see the option you require contact your Express team.

ACCESSORIES

233 series

Single and double shut off quick release couplings



Page 304

238 series

Single shut off quick release couplings



Page 306

234 series

Double shut off quick release couplings



Page 307

237 series

Single shut off quick release couplings



Page 308

M/S, T45 series

porous plastic silencers



Page 309

T40 series

sintered bronze silencers



Page 309

MA, MB series

Silencers



Page 310

Exhaust filters



Page 309

Coalescing silencers



Page 311

60, 61 series

Ball valves
1/8" ... 4" BSP



Page 312

3/2 Shut off valves

G1/8 ... G1/2



Page 314

BG Series

Blow guns



Page 314

CLASSIC PRODUCTS

Slow rotating joints



Page 315

Fast rotating joints



Page 315

IMI Herion silencer



Page 315

Enots compression fittings

34 and 36 series



Page 316



PNEUFIT C RANGE

WHEN IT COMES TO PNEUMATIC FITTINGS, MOST USERS GIVE LITTLE REAL THOUGHT TO THIS PRODUCT, OFTEN SEEN AS SIMPLY A COMMODITY. HOWEVER, FITTINGS CONNECT ALL OTHER COMPONENTS TOGETHER, SO IT IS VITAL TO MAKE THE RIGHT CHOICE.

The Pneufit C range is probably one of the largest and most user-friendly push-in fitting ranges on the market, from basic shapes and sizes to function fittings, manifolds, flow regulators and isolating valves. For more specialist applications, consider the miniature Pneufit M range, the stainless steel Pneufit S or the fully composite Pneufit D.

→ Extensive range of shapes and sizes capable of suiting virtually every industrial application – allowing customers to focus on one supplier for all requirements

→ Dry coating applied to taper threads, and captive O ring seal on parallel versions – ready for use from the pack with no additional pre-assembly creating a leak and trouble free sealing joint

→ Straight adaptors also include an internal hexagon to assist installation – reducing the overall size of the fitting to the minimum when working in confined spaces

→ Stainless steel grab ring ensures positive retention of tubing under load conditions – safe, secure operation in all applications

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

FOOD AND BEVERAGE



MORE COMPACT

FULLY STAINLESS STEEL



For further information, scan this QR code or visit store.norgren.com and use the new improved search function

PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



Norgren Express Pneufit C push in fittings represent one of the industries largest ranges of industrial fittings, with in excess of 1,000 shapes and sizes

Assembly times can be reduced to the minimum by using the parallel threaded versions, or choose taper to ensure perfect sealing under less than ideal port conditions

Body material is either PBT or nickel plated brass offering good resistance to corrosion or contamination, and all components are retained within the body to make a perfect seal every time

In addition to standard shapes, the range also includes manifolds, banjo flow regulators isolating valves and other items to offer maximum benefit from using standard widely available parts

MATERIALS

Body: PBT

Seals: NBR (silicone free) u-packing and O-rings

Threaded bodies: Nickel plated brass

Release sleeve and backing ring: POM

Grab-ring: Stainless steel

Collar: Nickel plated brass

Thread sealant: Threebond 2350B

TECHNICAL DATA

Medium:

Compressed air

Operating pressure:

750 mm Hg vacuum, up to 10 bar

Ambient temperature:

0°C ... 60°C

Consult our Technical Service for use below +2°C

Tube sizes:

Standard sizes: 3, 4, 6, 8, 10, 12, 16 mm

WARNING: The push-in tube fittings in this section must not be used in vehicle air braking and ancillary systems. For push-in fittings suitable for these applications please refer to Fleetfit fittings on page 285.

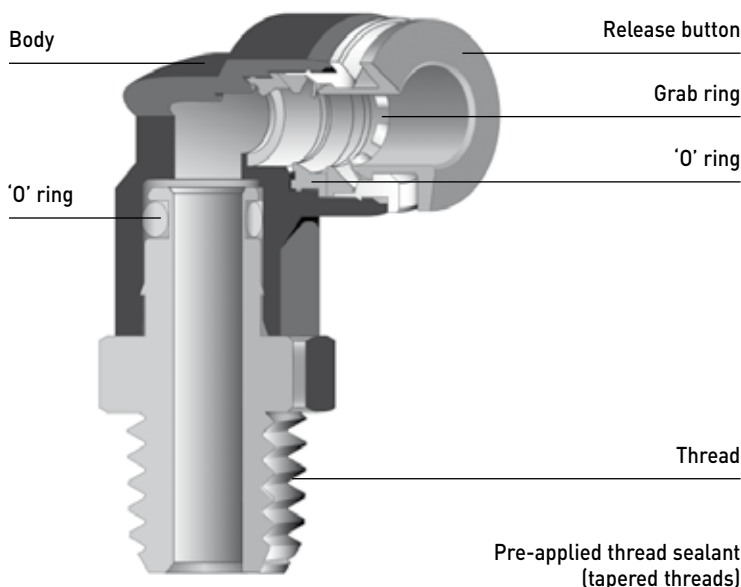
Thread sizes:

Standard sizes: M5, M6, 1/8", 1/4", 3/8" and 1/2" ISO G and ISO Rc

Tubing:

Nylon 11 or 12

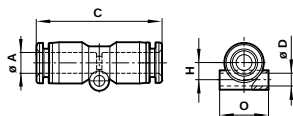
Polyurethane 85 to 98 Shore A hardness
(33 to 52 Shore D)



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

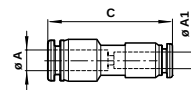
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



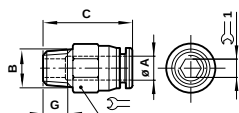
Straight Union

Model	O/D Tube (Ø A)	C	ØD	H	Ø
C00200400	4	34,5	3,3	4,5	10,5
C00200600	6	37	3,3	5,5	12,5
C00200800	8	39,5	4,3	7	14,5
C00201000	10	43	4,3	8	17,5
C00201200	12	48	4,3	9,5	20,5
C00201600	16	51	-	-	-



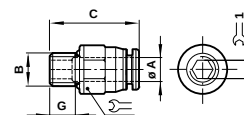
Straight Union (unequal)

Model	O/D Tube (Ø A)	O/D Tube (Ø A1)	C
C00200604	6	4	36,5
C00200804	8	4	38,5
C00200806	8	6	37,5
C00201006	10	6	40
C00201008	10	8	41
C00201208	12	8	46
C00201210	12	10	44
C00201612	16	12	49,5



Straight Adaptor (external + internal hex)

Model	O/D Tube (Ø A)	BSPT Thread (B)	C	G	1	1
C01250418	4	R1/8	21,5	8	10	3
C01250428	4	R1/4	20,5	10	14	3
C01250438	4	R3/8	22	11	17	3
C01250618	6	R1/8	22	8	12	4
C01250628	6	R1/4	21	10	14	5
C01250638	6	R3/8	22	11	17	5
C01250648	6	R1/2	29,5	14	19	5
C01250818	8	R1/8	27,5	8	14	5
C01250828	8	R1/4	25,5	10	14	6
C01250838	8	R3/8	23	11	17	6
C01250848	8	R1/2	29,5	14	19	6
C01251018	10	R1/8	28,5	8	17	5
C01251028	10	R1/4	30,5	10	17	6
C01251038	10	R3/8	24,5	11	17	8
C01251048	10	R1/2	29,5	14	19	8
C01251218	12	R1/8	31,5	8	19	5
C01251228	12	R1/4	33	10	19	6
C01251238	12	R3/8	30	11	19	8
C01251248	12	R1/2	30	14	19	8
C01251638	16	R3/8	37,5	11	24	10
C01251648	16	R1/2	40,5	14	24	10



Straight Adaptor (external + internal hex)

Model	O/D Tube (Ø A)	Metric & BSPP Thread (B)	C	G	1	1
C02250405	4	M5	22	4	10	-
C02250406	4	M6	22	8	10	-
C02250418	4	G1/8	21,5	6	13	3
C02250428	4	G1/4	23,5	8	15	3
C02250438	4	G3/8	22	8	17	-
C02250605	6	M5	23,5	5	12	-
C02250606	6	M6	23	4	12	4
C02250618	6	G1/8	26,5	6	13	5
C02250628	6	G1/4	24,5	8	15	5
C02250638	6	G3/8	25,5	8	17	5
C02250818	8	G1/8	26,5	6	15	5
C02250828	8	G1/4	26,5	8	15	6
C02250838	8	G3/8	25	8	17	6
C02250848	8	G1/2	26	9	21	6
C02251018	10	G1/8	29,5	6	17	5
C02251028	10	G1/4	30	8	17	6
C02251038	10	G3/8	27	8	17	8
C02251048	10	G1/2	28,5	9	21	8
C02251228	12	G1/4	32	8	19	6
C02251238	12	G3/8	31,5	8	19	8
C02251248	12	G1/2	31,5	9	21	8
C02251638	16	G3/8	36,5	8	24	10
C02251648	16	G1/2	36,5	9	24	10

EXPRESS PLUS

Fittings Wall Chart

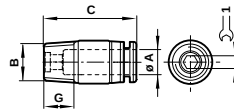
Contact IMI Precision Engineering for a FREE Fittings Wall Chart.



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

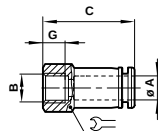
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



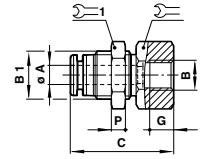
Straight Adaptor (internal hex only)

Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	G	1
C022A0405	4	M5	22	4,5	2
C022A0406	4	M6	22	4	3
C012A0418	4	R1/8	20,5	8	3
C012A0428	4	R1/4	20,5	10	3
C012A0438	4	R3/8	20,5	11	3
C022A0605	6	M5	22,5	5	2
C022A0606	6	M6	22,5	4	3
C012A0618	6	R1/8	22	8	4
C012A0628	6	R1/4	22,5	10	4
C012A0638	6	R3/8	22,5	11	4
C012A0818	8	R1/8	27	8	5
C012A0828	8	R1/4	25	10	6
C012A0838	8	R3/8	25	11	6
C012A0848	8	R1/2	25	14	6
C012A1018	10	R1/8	28	8	5
C012A1028	10	R1/4	29	10	6
C012A1038	10	R3/8	29	11	8
C012A1048	10	R1/2	29	14	8
C012A1218	12	R1/8	35	8	5
C012A1228	12	R1/4	32,5	10	6
C012A1238	12	R3/8	32,5	11	8
C012A1248	12	R1/2	32,5	14	8



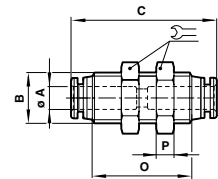
Female Adaptor

Model	O/D Tube (ØA)	Female BSPP (B)	C	G	1
C02260405	4	M5	26	7	12
C02260418	4	G1/8	26,5	9	14
C02260428	4	G1/4	28,5	11	17
C02260438	4	G3/8	30	12	22
C02260618	6	G1/8	27,5	9	14
C02260628	6	G1/4	29,5	11	17
C02260638	6	G3/8	30	12	22
C02260818	8	G1/8	28,5	9	14
C02260828	8	G1/4	30,5	11	17
C02260838	8	G3/8	31,5	12	22
C02260848	8	G1/2	34,5	14	24
C02261018	10	G1/8	31,5	9	17
C02261028	10	G1/4	31,5	11	17
C02261038	10	G3/8	32,5	12	22
C02261048	10	G1/2	34,5	14	24
C02261228	12	G1/4	34,5	11	22
C02261238	12	G3/8	34,5	12	22
C02261248	12	G1/2	36,5	14	24



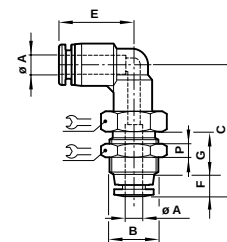
Straight Adaptor (female bulkhead)

Model	O/D Tube (ØA)	BSPP Thread (B)	B1	C	G	P	1	1
C02320418	4	G1/8	M12x1	26,5	9	4	14	14
C02320428	4	G1/4	M12x1	29	11	4	14	17
C02320438	4	G3/8	M12x1	30	12	4	14	22
C02320618	6	G1/8	M14x1	28,5	9	4	17	17
C02320628	6	G1/4	M14x1	30,5	11	4	17	17
C02320638	6	G3/8	M14x1	31,5	12	4	17	22
C02320818	8	G1/8	M16x1	29,5	9	5	19	19
C02320828	8	G1/4	M16x1	31,5	11	5	19	19
C02320838	8	G3/8	M16x1	32,5	12	5	19	22
C02321028	10	G1/4	M20x1	32,5	11	5	24	24
C02321038	10	G3/8	M20x1	33,5	12	5	24	24
C02321048	10	G1/2	M20x1	36	14	5	24	24
C02321228	12	G1/4	M22x1	38	11	5	28	24
C02321238	12	G3/8	M22x1	38	12	5	24	26
C02321248	12	G1/2	M22x1	40	14	5	24	26



Bulkhead Union

Model	O/D Tube (ØA)	B	C	O	P	1
C00290400	4	M12x1	35,5	24,5	4	14
C00290600	6	M14x1	40	27,5	4	17
C00290800	8	M16x1	42	29,5	5	19
C00291000	10	M20x1	45	31,5	5	24
C00291200	12	M22x1	50,5	36	5	26



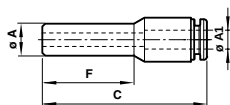
Bulkhead Union Elbow

Model	O/D Tube (ØA)	B	C	E	F	G	P	1
C00490400	4	M12x1	32,5	18,5	5,5	9	4	14
C00490600	6	M14x1	38	20,5	6	11	4	17
C00490800	8	M16x1	40,5	23	6,5	11,5	5	19
C00491000	10	M20x1	42,5	23,5	7	12	5	24
C00491200	12	M22x1	48	27,5	7,5	15	5	26

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

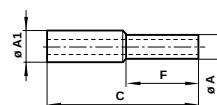
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



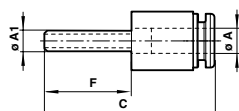
Stem Reducer

Model	O/D Stem (ØA)	O/D Tube (ØA1)	C	F
C00230604	6	4	41	21,5
C00230804	8	4	42	22,5
C00230806	8	6	44,5	23,5
C00231006	10	6	47,5	26,5
C00231008	10	8	49,5	27,5
C00231206	12	6	52	29,5
C00231208	12	8	52,5	30,5
C00231210	12	10	56,5	31
C00231612	16	12	57,5	33



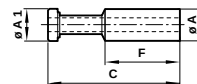
Stem Union (unequal)

Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	F
C00220604	4	6	38	18
C00220806	6	8	41,5	20,5
C00221008	8	10	43,5	21,5
C00221210	10	12	46,5	22,5
C00221612	12	16	52	25



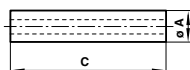
Stem Expander (stem/tube)

Model	O/D Stem (ØA1)	O/D Tube (ØA)	C	F
C00230406	4	6	41	24
C00230608	6	8	44	26,5



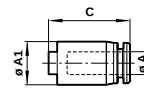
Plug

Model	O/D Tube (ØA)	ØA1	C	F
C00040400	4	4	30	17,5
C00040600	6	6	34	18,5
C00040800	8	8	38	21
C00041000	10	10	42	24
C00041200	12	12	46	29,5
C00041600	16	16	50	30



Stem Union

Model	O/D Stem (ØA)	C
C00220400	4	37
C00220600	6	38
C00220800	8	41
C00221000	10	44
C00221200	12	49
C00221600	16	53



Cap (female plug)

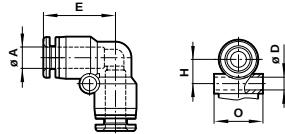
Model	O/D Tube (ØA)	ØA1	C
C00120400	4	10,5	18
C00120600	6	12,5	19
C00120800	8	14,5	21
C00121000	10	17,5	23
C00121200	12	19,5	25
C00121600	16	24	25

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PNEUFIT C COMPOSITE FITTINGS

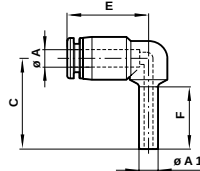
Metric Ø 4 ... 16 mm O/D tube

FITTINGS, TUBING & ACCESSORIES



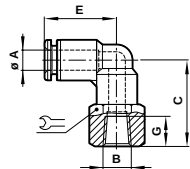
Union Elbow

Model	O/D Tube (ØA)	ØD	E	H	O
C00400400	4	3,3	19	8,5	10,5
C00400600	6	3,3	21	7,5	12,5
C00400800	8	4,3	22,5	9	14,5
C00401000	10	4,3	26	12	18
C00401200	12	4,3	30	13,5	21
C00401600	16	4,3	34	16	25,5



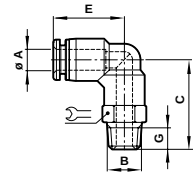
Stem Elbow

Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	F
C00430400	4	4	28,5	19	22
C00430600	6	6	31,5	20,5	24
C00430800	8	8	34,5	23	26
C00431000	10	10	38	24	28
C00431200	12	12	41	28	30
C00431600	16	16	48,5	32	35



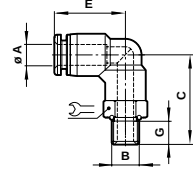
90° Swivel Elbow Adaptor (female)

Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	E	G	
C02480405	4	M5	21,5	18,5	4,5	10
C02480406	4	M6	21,5	18,5	4,5	10
C01480418	4	Rc1/8	22,5	18,5	9	14
C01480428	4	Rc1/4	24,5	18,5	11	17
C02480605	6	M5	23,5	20,5	4,5	12
C02480606	6	M6	23,5	20,5	4,5	12
C01480618	6	Rc1/8	24,5	20,5	9	14
C01480628	6	Rc1/4	26,5	20,5	11	17
C01480638	6	Rc3/8	27,5	20,5	12	22
C01480818	8	Rc1/8	26	23	9	14
C01480828	8	Rc1/4	28	23	11	17
C01480838	8	Rc3/8	29	23	12	22
C01481028	10	Rc1/4	28,5	23,5	11	17
C01481038	10	Rc3/8	29,5	23,5	12	22
C01481048	10	Rc1/2	31,5	23,5	14	24
C01481228	12	Rc1/4	31,5	27,5	11	19
C01481238	12	Rc3/8	32,5	27,5	12	22
C01481248	12	Rc1/2	34,5	27,5	14	24



90° Swivel Elbow Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	
C01470418	4	R1/8	24,5	18,5	8	10
C01470428	4	R1/4	26,5	18,5	10	14
C01470438	4	R3/8	27,5	18,5	11	17
C01470618	6	R1/8	26,5	20,5	8	12
C01470628	6	R1/4	29,5	20,5	10	14
C01470638	6	R3/8	30,5	20,5	11	17
C01470648	6	R1/2	33,5	20,5	14	21
C01470818	8	R1/8	28	23	8	14
C01470828	8	R1/4	31	23	10	14
C01470838	8	R3/8	32	23	11	17
C01470848	8	R1/2	35	23	14	21
C01471018	10	R1/8	28,5	23,5	8	17
C01471028	10	R1/4	31,5	23,5	10	17
C01471038	10	R3/8	32,5	23,5	11	17
C01471048	10	R1/2	35,5	23,5	14	21
C01471218	12	R1/8	32,5	27,5	8	19
C01471228	12	R1/4	34,5	27,5	10	19
C01471238	12	R3/8	35,5	27,5	11	19
C01471248	12	R1/2	38,5	27,5	14	21
C01471638	16	R3/8	43	32,5	11	24
C01471648	16	R1/2	46	32,5	14	24



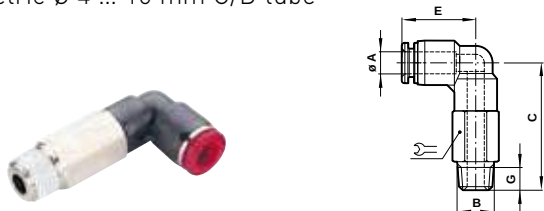
90° Swivel Elbow Adaptor

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	E	G	
C02470405	4	M5	22	18,5	4,5	10
C02470406	4	M6	22	18,5	4,5	10
C02470418	4	G1/8	22,5	18,5	6	14
C02470428	4	G1/4	24,5	18,5	8	17
C02470438	4	G3/8	24,5	18,5	8	20
C02470605	6	M5	24	20,5	4,5	12
C02470606	6	M6	24	20,5	4,5	12
C02470618	6	G1/8	24,5	20,5	6	14
C02470628	6	G1/4	26,5	20,5	8	17
C02470638	6	G3/8	26,5	20,5	9	20
C02470818	8	G1/8	26	23	8	14
C02470828	8	G1/4	28	23	8	17
C02470838	8	G3/8	28	23	9	20
C02470848	8	G1/2	29	23	10	24
C02471018	10	G1/8	26,5	23,5	6	17
C02471028	10	G1/4	28,5	23,5	8	17
C02471038	10	G3/8	28,5	23,5	9	20
C02471048	10	G1/2	29,5	23,5	10	24
C02471228	12	G1/4	32,5	27,5	8	19
C02471238	12	G3/8	32,5	27,5	9	20
C02471248	12	G1/2	32,5	27,5	10	24
C02471638	16	G3/8	41	32,5	9	24
C02471648	16	G1/2	42	32,5	10	24

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PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



90° Swivel Elbow Adaptor (extended)

Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	E	G	
C02540405	4	M5	33,5	18,5	4,6	10
C02540406	4	M6	33	18,5	4,6	10
C01540418	4	R1/8	35,5	18,5	8	10
C01540428	4	R1/4	37,5	18,5	10	14
C01540438	4	R3/8	38,5	18,5	11	17
C02540605	6	M5	38	20,5	4,5	12
C02540606	6	M6	37,5	20,5	4,5	12
C01540618	6	R1/8	40	20,5	8	12
C01540628	6	R1/4	42	20,5	10	14
C01540638	6	R3/8	43	20,5	11	17
C01540648	6	R1/2	46	20,5	14	21
C01540818	8	R1/8	44	23	8	14
C01540828	8	R1/4	46	23	10	14
C01540838	8	R3/8	47	23	11	17
C01540848	8	R1/2	50	23	14	21
C01541018	10	R1/8	47,5	23,5	8	17
C01541028	10	R1/4	49,5	23,5	10	17
C01541038	10	R3/8	50,5	23,5	11	17
C01541048	10	R1/2	53,5	23,5	14	21
C01541218	12	R1/8	54	27,5	8	19
C01541228	12	R1/4	56	27,5	10	19
C01541238	12	R3/8	57	27,5	11	19
C01541248	12	R1/2	60	27,5	14	21
C01541638	16	R3/8	69	32,5	11	24
C01541648	16	R1/2	72	32,5	14	24



Banjo

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	C1	E	G	
C0A510405	4	M5	25	18	10	3,5	8
C0A510418	4	G1/8	30,5	25	14,5	11	8
C0A510428	4	G1/4	34,5	29	16,5	10	12
C0A510605	6	M5	18	28	11	3,5	8
C0A510618	6	G1/8	31	25	14,5	8	8
C0A510628	6	G1/4	35	29	16,5	10	12
C0A510638	6	G3/8	38,5	32,5	20,5	11	14
C0A510818	8	G1/8	33	25	13,5	8	8
C0A510828	8	G1/4	37	29	16	10	12
C0A510838	8	G3/8	40	32,5	20,5	11	14
C0A510848	8	G1/2	46	39,5	23	14	17
C0A511028	10	G1/4	39	29	15,5	10	12
C0A511038	10	G3/8	42	32,5	19,5	11	14
C0A511048	10	G1/2	47,5	39,5	23	14	17
C0A511238	12	G3/8	46	32,5	18,5	11	14
C0A511248	12	G1/2	50	39,5	21,5	14	17



Banjo Flow Control (regulating out)

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1 min.	C1 max.	E	G	
C0TA00418	4	R1/8	30,5	35	40	14,5	8	11
C0TA00428	4	R1/4	34,5	40	45,5	18	10	15
C0TA00618	6	R1/8	31	35	31	14,5	8	11
C0TA00628	6	R1/4	35	40	45,5	18	10	15
C0TA00638	6	R3/8	38,5	46,5	55	21	11	19
C0TA00818	8	R1/8	33	35	40	15,5	8	11
C0TA00828	8	R1/4	37	40	45,5	19	10	15
C0TA00838	8	R3/8	40	46,5	55	21	11	19
C0TA00848	8	R1/2	46	53	60	25	14	24
C0TA01028	10	R1/4	39	40	45,5	20	10	15
C0TA01038	10	R3/8	42	46,5	55	22,5	11	19
C0TA01048	10	R1/2	47,5	53	60	25	14	24
C0TA01228	12	R1/4	41	40	45,5	22	10	15
C0TA01238	12	R3/8	46	46,5	55	23	11	19
C0TA01248	12	R1/2	50	53	60	27	14	24



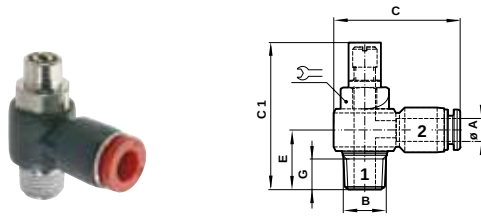
Banjo Flow Control (regulating out)

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	C1 min.	C1 max.	E	G	
C0K510305	3	M5	21,5	27	30	9,5	3,5	8
C0K510405	4	M5	25	27	30	10	3,5	8
C0K510418	4	G1/8	30,5	35	40	15	6	8
C0K510428	4	G1/4	34,5	40	45,5	17	8	12
C0K510605	6	M5	28	27	30	11	3,5	8
C0K510618	6	G1/8	31	35	40	15	6	8
C0K510628	6	G1/4	35	40	45,5	17	8	12
C0K510638	6	G3/8	38,5	46,5	55	21	8	14
C0K510818	8	G1/8	33	35	40	14	6	8
C0K510828	8	G1/4	37	40	45,5	16	8	12
C0K510838	8	G3/8	40	46,5	55	21	8	14
C0K510848	8	G1/2	46	53	60	22,5	9	17
C0K511028	10	G1/4	39	40	45,5	18	8	12
C0K511038	10	G3/8	42	46,5	55	19,5	8	14
C0K511048	10	G1/2	47,5	53	60	22,5	9	17
C0K511228	12	G1/4	41	40	45,5	20	8	12
C0K511238	12	G3/8	46	46,5	55	19	8	14
C0K511248	12	G1/2	50	53	60	21	9	17

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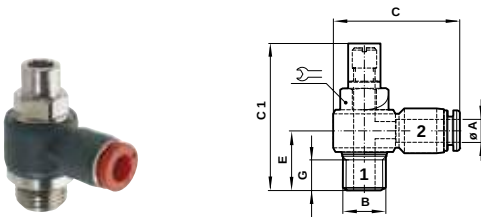
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



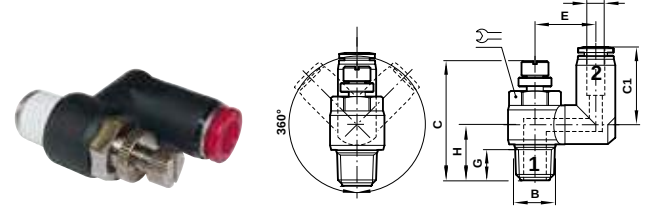
Shrouded Banjo (regulating out)

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1	E	G	
COTB00418	4	R1/8	30,5	31,5	15	8	11
COTB00428	4	R1/4	34,5	37	18,5	10	15
COTB00618	6	R1/8	31	31,5	15	8	11
COTB00628	6	R1/4	35	37	18,5	10	15
COTB00638	6	R3/8	38,5	43,5	22	11	19
COTB00818	8	R1/8	33	31,5	16,5	8	11
COTB00828	8	R1/4	37	37	19,5	10	15
COTB00838	8	R3/8	40	43,5	22	11	19
COTB00848	8	R1/2	46	50	26,5	14	24
COTB01028	10	R1/4	39	37	21	10	15
COTB01038	10	R3/8	42	43,5	23,5	11	19
COTB01048	10	R1/2	47,5	50	26,5	14	24
COTB01228	12	R1/4	41	37	22,5	10	15
COTB01238	12	R3/8	46	43,5	24	11	19
COTB01248	12	R1/2	50	50	28	14	24



Shrouded Banjo (regulating out)

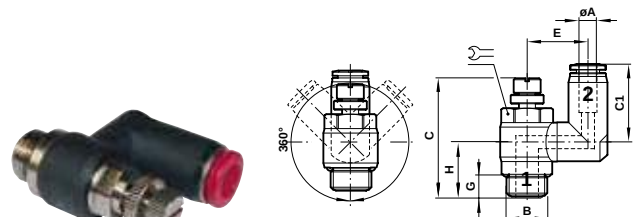
Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	C1	E	G	
COKB00405	4	M5	25	23	10,5	3,5	8
COKB00418	4	G1/8	30,5	31,5	15	6	8
COKB00428	4	G1/4	34,5	37	17,5	8	12
COKB00605	6	M5	28	23	11,5	3,5	8
COKB00618	6	G1/8	31	31,5	15	6	8
COKB00628	6	G1/4	35	37	17,5	8	12
COKB00638	6	G3/8	38,5	43,5	21	8	14
COKB00818	8	G1/8	33	31,5	14	6	8
COKB00828	8	G1/4	37	37	17	8	12
COKB00838	8	G3/8	40	43,5	21	8	14
COKB00848	8	G1/2	46	50	23	9	17
COKB01028	10	G1/4	39	37	19	8	12
COKB01038	10	G3/8	42	43,5	20	8	14
COKB01048	10	G1/2	47,5	50	23	9	17
COKB01228	12	G1/4	41	37	20,5	8	12
COKB01238	12	G3/8	46	43,5	19	8	14
COKB01248	12	G1/2	50	50	21,5	9	17



Swivel Banjo Flow Control (regulating out)

Model	O/D Tube (ØA)	BSPT Thread (B)	C *1)	C1	E	G	H	
COT560418	4	R1/8	35/40	20,5	14,5	8	15	11
COT560428	4	R1/4	40/45,5	20,5	18	10	18,5	15
COT560618	6	R1/8	35/40	24	15,5	8	15	11
COT560628	6	R1/4	40/45,5	26	20,5	10	18,5	15
COT560638	6	R3/8	47/55	26	23,5	11	21,5	19
COT560818	8	R1/8	35/40	25,5	16	8	15,5	11
COT560828	8	R1/4	40/45,5	29	19,5	10	18,5	15
COT560838	8	R3/8	47/55	30	24,5	11	22	19
COT561028	8	R1/2	53/60	30	26,5	14	26	24
COT561038	10	R1/4	40/45,5	31	20,5	10	18,5	15
COT561048	10	R3/8	47/55	32	24,5	11	22	19
COT561048	10	R1/2	53/60	33	26,5	14	26,5	24
COT561228	12	R1/4	40/45,5	33,5	22	10	18,5	15
COT561238	12	R3/8	47/55	34,5	24,5	11	22	19
COT561248	12	R1/2	53/60	36	26,5	14	26,5	24

*1) min/max



Swivel Banjo Flow Control (regulating out)

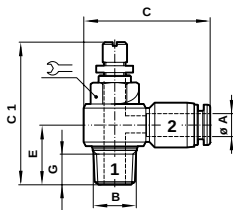
Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C *1)	C1	E	G	H	
COK560405	4	M5	27/30	20,5	12,5	3,6	9,5	8
COK560418	4	G1/8	35/40	20,5	14,5	8	15,5	8
COK560428	4	G1/4	40/45,5	20,5	18	12	17,5	12
COK560605	6	M5	27/30	22,5	13,5	3,6	9,5	8
COK560618	6	G1/8	35/40	24	15,5	8	15,5	8
COK560628	6	G1/4	40/45,5	26	20,5	12	17,5	12
COK560638	6	G3/8	47/55	26	23,5	14	21,5	14
COK560818	8	G1/8	35/40	25,5	16	8	14,5	8
COK560828	8	G1/4	40/45,5	28,8	19,5	12	17,5	12
COK560838	8	G3/8	47/55	30	24,5	14	21	14
COK561028	8	G1/2	53/60	30	26,5	17	23	17
COK561038	10	G1/4	40/45,5	31	20,5	12	17,5	12
COK561048	10	G3/8	47/55	32	24,5	14	21	14
COK561048	10	G1/2	53/60	33	26,5	17	23	17
COK561228	12	G1/4	40/45,5	33,5	22	12	17,5	12
COK561238	12	G3/8	47/55	34,5	24,5	14	21	14
COK561248	12	G1/2	53/60	36	26,5	17	23	17

*1) min/max

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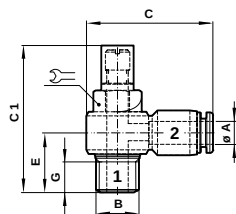
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



Banjo Flow Control (regulating in)

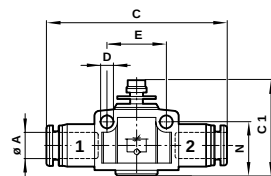
Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1 min.	max.	E	G	
C0SA00418	4	R1/8	30,5	35	40	14,5	8	11
C0SA00428	4	R1/4	34,5	40	45,5	18	10	15
C0SA00618	6	R1/8	31	35	40	14,5	8	11
C0SA00628	6	R1/4	35	40	45,5	18	10	15
C0SA00638	6	R3/8	39	46,5	55	21	11	19
C0SA00818	8	R1/8	33	35	40	15,5	8	11
C0SA00828	8	R1/4	37	40	45,5	19	10	15
C0SA00838	8	R3/8	40	46,5	55	21	11	19
C0SA00848	8	R1/2	46	53	60	25	14	24
C0SA01028	10	R1/4	39	40	45,5	20	10	15
C0SA01038	10	R3/8	42	46,5	55	22,5	11	19
C0SA01048	10	R1/2	47,5	53	60	25	14	24
C0SA01228	12	R1/4	41	40	45,5	22	10	15
C0SA01238	12	R3/8	46	46,5	55	23	11	19
C0SA01248	12	R1/2	50	53	60	27	14	24



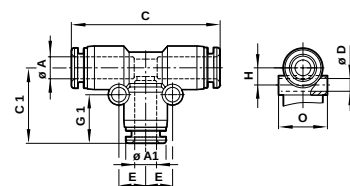
Banjo Flow Control (regulating in)

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	C1 min.	max.	E	G	
COL510305	3	M5	21,5	27	30	9,5	3,5	8
COL510405	4	M5	25	27	30	10	3,5	8
COL510418	4	G1/8	30,5	35	40	15	6	8
COL510428	4	G1/4	34,5	40	45,5	17	8	12
COL510605	6	M5	28	27	30	11	3,5	8
COL510618	6	G1/8	31	35	40	15	6	8
COL510628	6	G1/4	35	40	45,5	17	8	12
COL510638	6	G3/8	39	46,5	55	21	8	14
COL510818	8	G1/8	33	35	40	14	6	8
COL510828	8	G1/4	37	40	45,5	16	8	12
COL510838	8	G3/8	40	46,5	55	21	8	14
COL510848	8	G1/2	46	53	60	22,5	9	17
COL511028	10	G1/4	39	40	45,5	18	8	12
COL511038	10	G3/8	42	46,5	55	19,5	8	14
COL511048	10	G1/2	47,5	53	60	22,5	9	17
COL511228	12	G1/4	41	40	45,5	20	8	12
COL511238	12	G3/8	46	46,5	55	19	8	14
COL511248	12	G1/2	50	53	60	21	9	17

In-Line Flow Control

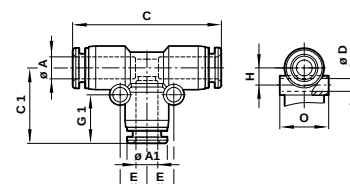


Model	O/D Tube (ØA)	C	C1 min.	max.	D	E	N
C00GE0400	4	45	30	33	3,3	15	13,5
C00GE0600	6	50	35	39,5	4,4	20,5	17,5
C00GE0800	8	55,5	37,5	42	4,4	23	20
C00GE1000	10	61	44	49	4,4	28	23
C00GE1200	12	70	47,5	53,5	4,4	32	25,5



Union Tee

Model	O/D Tube (ØA)	ØA1	C	C1	ØD	E	G1	H	O
C00600400	4	4	36,5	19	3,3	6,5	12,5	8,5	10,5
C00600600	6	6	42	21,5	3,3	7,5	13,5	7,5	12,5
C00600800	8	8	45	23,5	4,3	9	15	9	14,5
C00601000	10	10	48	25,5	4,3	10	15,5	11	17,5
C00601200	12	12	57	29,5	4,3	13	16,5	12,5	20,5
C00601600	16	16	68	34,5	4,3	16	18	16	25,5



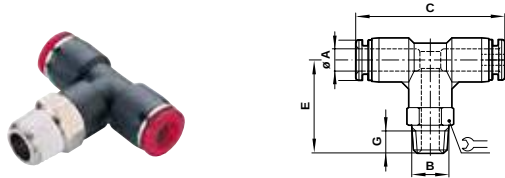
Union Tee (unequal)

Model	O/D Tube (ØA)	ØA1	C	C1	ØD	E	G1	H	O
C006A0604	6	4	41,5	19	3,3	7	12,5	8	12,5
C006A0806	8	6	45	22	4,3	8,5	13,5	9,5	15
C006A1006	10	6	49	23	4,3	8,5	13,5	11	17,5
C006A1008	10	8	49	25	4,3	9,5	15	11	17,5
C006A1208	12	8	56	25,5	4,3	9,5	15	12,5	20,5
C006A1210	12	10	56	27,5	4,3	11	15,5	12,5	20,5
C006A1610	16	10	61	30,5	4,3	11,5	15,5	16	25,5
C006A1612	16	12	63,5	33	4,3	13	16,5	16	25,5

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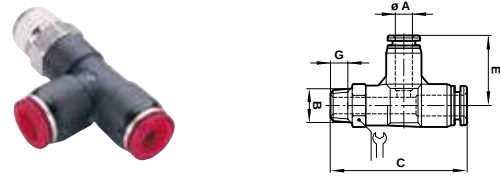
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



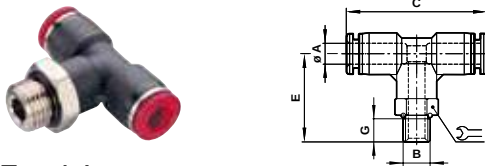
Swivel Tee Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	
C01670418	4	R1/8	37,5	24,5	8	10
C01670428	4	R1/4	37,5	26,5	10	14
C01670438	4	R3/8	37,5	27,5	11	17
C01670618	6	R1/8	41	26,5	8	12
C01670628	6	R1/4	41	29,5	10	14
C01670638	6	R3/8	41	30,5	11	17
C01670648	6	R1/2	41	33,5	14	21
C01670818	8	R1/8	44	28	8	14
C01670828	8	R1/4	44	31	10	14
C01670838	8	R3/8	44	32	11	17
C01670848	8	R1/2	44	35	14	21
C01671018	10	R1/8	47	28,5	8	17
C01671028	10	R1/4	47	32	10	17
C01671038	10	R3/8	47	32,5	11	17
C01671048	10	R1/2	47	35,5	14	21
C01671218	12	R1/8	55	32,5	8	19
C01671228	12	R1/4	55	34,5	10	19
C01671238	12	R3/8	55	35,5	11	19
C01671248	12	R1/2	55	38,5	14	21
C01671638	16	R3/8	64,5	43	11	24
C01671648	16	R1/2	64,5	46	14	24



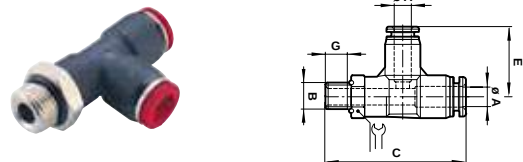
Swivel Side Tee Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	
C01680418	4	R1/8	45	20	8	10
C01680428	4	R1/4	48	20	10	14
C01680438	4	R3/8	49	20	11	17
C01680618	6	R1/8	48,5	21,5	8	12
C01680628	6	R1/4	51	21,5	10	14
C01680638	6	R3/8	52	21,5	11	17
C01680648	6	R1/2	55	21,5	14	21
C01680818	8	R1/8	52	23,5	8	14
C01680828	8	R1/4	55	23,5	10	14
C01680838	8	R3/8	56	23,5	11	17
C01680848	8	R1/2	59	23,5	14	21
C01681018	10	R1/8	55,5	25,5	8	17
C01681028	10	R1/4	58,5	25,5	10	17
C01681038	10	R3/8	59,5	25,5	11	17
C01681048	10	R1/2	62,5	25,5	14	21
C01681218	12	R1/8	63	30	8	19
C01681228	12	R1/4	65	30	10	19
C01681238	12	R3/8	66	30	11	19
C01681248	12	R1/2	69	30	14	21



Swivel Tee Adaptor

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	E	G	
C02670405	4	M5	37,5	22	4,5	10
C02670406	4	M6	37,5	22	4,5	10
C02670418	4	G1/8	37,5	22	6	14
C02670428	4	G1/4	37,5	24	8	17
C02670438	4	G3/8	37,5	24	8	20
C02670605	6	M5	41	24	4,5	12
C02670606	6	M6	41	24	4,5	12
C02670618	6	G1/8	41	24,5	6	14
C02670628	6	G1/4	41	26,5	8	17
C02670638	6	G3/8	41	27,5	9	20
C02670648	6	G1/2	41	28,5	9	24
C02670818	8	G1/8	44,5	26	6	14
C02670828	8	G1/4	44,5	28	8	17
C02670838	8	G3/8	44,5	29	9	20
C02670848	8	G1/2	44,5	30	10	24
C02671018	10	G1/8	47	26,5	6	17
C02671028	10	G1/4	47	28,5	8	17
C02671038	10	G3/8	47	29,5	9	20
C02671048	10	G1/2	47	30,5	10	24
C02671228	12	G1/4	55	31,5	8	19
C02671238	12	G3/8	55	32,5	9	20
C02671248	12	G1/2	55	33,5	10	24
C02671638	16	G3/8	64,5	40	9	24
C02671648	16	G1/2	64,5	41	10	24



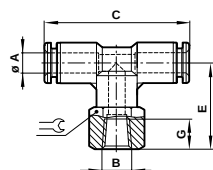
Swivel Side Tee Adaptor

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	E	G	
C02680405	4	M5	42	20	4,5	10
C02680406	4	M6	42	20	4,5	10
C02680418	4	G1/8	43	20	6	14
C02680428	4	G1/4	45	20	8	17
C02680438	4	G3/8	45	20	8	20
C02680605	6	M5	46	21,5	4,5	12
C02680606	6	M6	46	21,5	4,5	12
C02680618	6	G1/8	47	21,5	6	14
C02680628	6	G1/4	49	21,5	8	17
C02680638	6	G3/8	50	21,5	9	20
C02680818	8	G1/8	50	23,5	6	14
C02680828	8	G1/4	52	23,5	8	17
C02680838	8	G3/8	56	23,5	9	20
C02680848	8	G1/2	54	23,5	10	24
C02681018	10	G1/8	54	25,5	6	17
C02681028	10	G1/4	56	25,5	8	17
C02681038	10	G3/8	57	25,5	9	20
C02681048	10	G1/2	58	25,5	10	24
C02681228	12	G1/4	62	30	8	19
C02681238	12	G3/8	63	30	9	20
C02681248	12	G1/2	64	30	10	24

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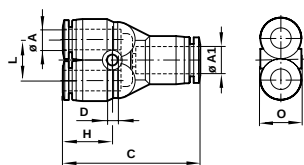
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



Swivel Tee Adaptor (female)

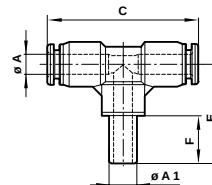
Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	E	G	
C026C0405	4	M5	37,5	17	8	10
C026C0406	4	M6	37,5	17	8	10
C016C0418	4	Rc1/8	38	17	9	14
C016C0428	4	Rc1/4	38	17	11	17
C026C0605	6	M5	41	17,5	8	12
C026C0606	6	M6	41	17,5	8	12
C016C0618	6	Rc1/8	41	17,5	9	14
C016C0628	6	Rc1/4	41	17,5	11	17
C016C0638	6	Rc3/8	41	17,5	12	22
C016C0818	8	Rc1/8	44,5	18,5	9	14
C016C0828	8	Rc1/4	44,5	18,5	11	17
C016C0838	8	Rc3/8	44,5	18,5	12	22
C016C0848	8	Rc1/2	44,5	18,5	14	24
C016C1018	10	Rc1/8	47	19,5	9	17
C016C1028	10	Rc1/4	47	19,5	11	17
C016C1038	10	Rc3/8	47	19,5	12	22
C016C1048	10	Rc1/2	47	19,5	14	24
C016C1228	12	Rc1/4	55	22	11	19
C016C1238	12	Rc3/8	55	22	12	22
C016C1248	12	Rc1/2	55	22	14	24



Union Y

EQUAL							
Model	O/D Tube (ØA)	ØA1	C	ØD	H	L	Ø
C00820400	4	4	37	3,3	14,5	10,5	10,5
C00820600	6	6	40	3,3	16,5	12,5	12,5
C00820800	8	8	43	4,3	18,5	14,5	14,5
C00821000	10	10	47,5	4,3	19	17,5	17,5
C00821200	12	12	53	4,3	22	20,5	20,5

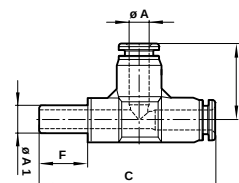
UNEQUAL							
Model	O/D Tube (ØA)	O/D Tube (ØA1)	C	ØD	H	L	Ø
C00820604	4	6	38	3,3	15	10,5	10,5
C00820804	4	8	39,5	3,3	15	10,5	15
C00821006	6	10	43	3,3	16,5	13	17,5
C00821008	8	10	43	4,3	17	14,5	15
C00821208	8	12	48	3,3	17,5	15	21
C00821210	10	12	46,5	4,3	18,5	17,5	18



Stem Tee

EQUAL					
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	F
C00630400	4	4	37,5	32,5	24
C00630600	6	6	41	34,5	25
C00630800	8	8	44,5	36	26
C00631000	10	10	47	37,5	28
C00631200	12	12	55	39	30

UNEQUAL					
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	F
C00630604	4	6	37,5	33,5	25
C00630806	6	8	41	35,5	28
C00631008	8	10	44,5	38,5	28
C00631210	10	12	47	39,5	30



Stem Side Tee

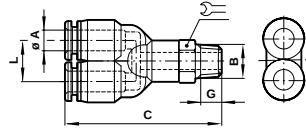
EQUAL					
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	F
C00640400	4	4	58	20,5	17
C00640600	6	6	52,5	21,5	17,5
C00640800	8	8	67	23,5	18,5
C00641000	10	10	73	25,5	19,5
C00641200	12	12	82	30	22

UNEQUAL					
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	F
C00640604	4	6	59	20	17
C00640806	6	8	63,5	21,5	17,5
C00641008	8	10	69,5	23,5	18,5
C00641210	10	12	75	25,5	19,5

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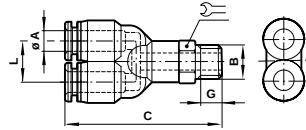
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



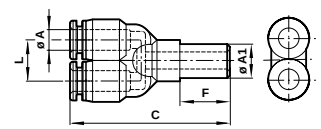
Swivel Y Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	G	L	
C01880418	4	R1/8	41,5	8	10,5	10
C01880428	4	R1/4	42,5	10	10,5	14
C01880438	4	R3/8	43,5	11	10,5	17
C01880618	6	R1/8	44	8	12,5	12
C01880628	6	R1/4	47	10	12,5	14
C01880638	6	R3/8	48	11	12,5	17
C01880648	6	R1/2	51	14	12,5	21
C01880818	8	R1/8	45,5	8	14,5	14
C01880828	8	R1/4	48,5	10	14,5	14
C01880838	8	R3/8	48,5	11	14,5	17
C01880848	8	R1/2	52,5	14	14,5	21
C01881018	10	R1/8	49	8	17,5	17
C01881028	10	R1/4	52	10	17,5	17
C01881038	10	R3/8	53	11	17,5	17
C01881048	10	R1/2	56,2	14	17,5	21
C01881218	12	R1/8	52,5	3	20,5	19
C01881228	12	R1/4	54,5	8	20,5	19
C01881238	12	R3/8	55,5	11	20,5	19
C01881248	12	R1/2	58,5	14	20,5	21



Swivel Y Adaptor

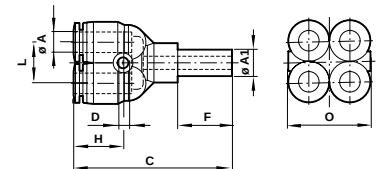
Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	G	L	
C02880405	4	M5	35	4,5	10,5	10
C02880406	4	M6	35	4,5	10,5	10
C02880418	4	G1/8	41	6	10,5	14
C02880428	4	G1/4	43	8	10,5	17
C02880438	4	G3/8	43	8	10,5	20
C02880605	6	M5	41,5	4,5	12,5	12
C02880606	6	M6	41,5	4,5	12,5	12
C02880618	6	G1/8	42,5	6	12,5	14
C02880628	6	G1/4	44,5	8	12,5	17
C02880638	6	G3/8	45,5	9	12,5	20
C02880648	6	G1/2	46,5	10	12,5	24
C02880818	8	G1/8	43,5	6	14,5	14
C02880828	8	G1/4	45,5	8	14,5	17
C02880838	8	G3/8	46,5	9	14,5	20
C02880848	8	G1/2	47,5	10	14,5	24
C02881018	10	G1/8	49,5	6	17,5	17
C02881028	10	G1/4	51,5	8	17,5	17
C02881038	10	G3/8	52,5	9	17,5	20
C02881048	10	G1/2	53,5	10	17,5	24
C02881228	12	G1/4	55	8	20,5	19
C02881238	12	G3/8	56	9	20,5	20
C02881248	12	G1/2	57	10	20,5	24



Stem Y

Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	F	L
C00840400	4	4	49,5	22	10,5
C00840600	6	6	54,5	24	12,5
C00840800	8	8	60	26	14,5
C00841000	10	10	66	28	17,5
C00841200	12	12	71,5	30	20,5

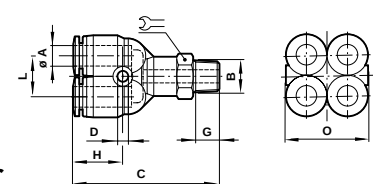
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	F	L
C00840604	4	6	51,5	24	10,5
C00840806	6	8	56,5	26	12,5
C00841008	8	10	62	28	14,5
C00841210	10	12	68	30	17,5



Quadruple Reducer

Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	ØD	F	H	L	Ø
C00970604	4	6	43,5	3,3	17	14	12,5	21
C00970806	6	8	48	3,3	19	15,5	14,5	25,5

Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	ØD	H	L	Ø
C00960604	4	6	37	3,3	14	10,5	21
C00960806	6	8	40,5	3,3	15,5	12,5	25,5



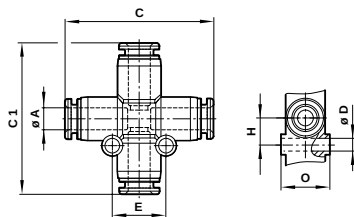
Quadruple Y Adaptor

Model	O/D Tube (ØA)	Metric, BSPP & BSPT Thread (B)	C	ØD	G	H	L	Ø	
C01950418	4	R1/8	44	3,3	8	14	10,5	21	12
C01950428	4	R1/4	48	3,3	10	14	10,5	21	14
C01950618	6	R1/8	48	3,3	8	15,5	12,5	25,5	14
C01950628	6	R1/4	51	3,3	10	15,5	12,5	25,5	14
C02950418	4	G1/8	46	3,3	5	14	10,5	21	14
C02950428	4	G1/4	49	3,3	6,5	14	10,5	21	17
C02950618	6	G1/8	49	3,3	6,5	15,5	12,5	25,5	14
C02950628	6	G1/4	52	3,3	8	15,5	12,5	25,5	17

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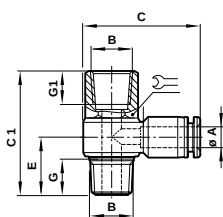
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



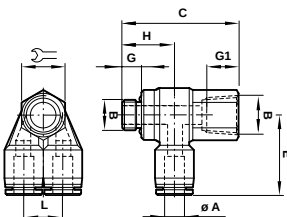
Union Cross

Model	O/D Tube (ØA)	C	C1	ØD	E	H	O
C00900400	4	36,5	38	3,3	13	6,5	10,5
C00900600	6	42	42,5	4,3	15	7,5	12,5
C00900800	8	45	47	4,3	18	9	14,5
C00901000	10	48	50,5	4,3	20	10	17,5
C00901200	12	55	57	4,3	24	12	20,5



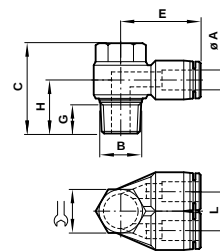
Banjo with Top Port

Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	C1	E	G	G1
C0D510405	4	M5	25	20	10	3,5	6
C0E510418	4	R1/8	30,5	30	14,5	9	8
C0F510428	4	R1/4	34,5	35,5	18	11	10
C0D510605	6	M5	28	20	11	3,5	6
C0E510618	6	R1/8	31	30	14,5	9	8
C0F510628	6	R1/4	35	35,5	18	11	10
C0G510638	6	R3/8	38,5	41	21	12	11
C0E510818	8	R1/8	33	30	15,5	9	8
C0F510828	8	R1/4	38	35,5	19	11	10
C0G510838	8	R3/8	40	41	21	12	11
C0F511028	10	R1/4	39	35,5	20	11	10
C0G511038	10	R3/8	42	41	22,5	12	11
C0G511238	12	R3/8	46	41	23	12	11



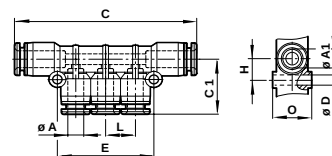
Twin Banjo with Top Port

Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	E	G	G1	H	L
C0D7K0405	4	M5	20	19,5	3,5	7	10	10,5
C0E7K0618	6	G1/8	30	23	8	8	14	12,5
C0F7K0828	8	G1/4	35,5	27	10	10	17,5	14,5
C0F7K1028	10	G1/4	35,5	28	10	10	17,5	17,5
C0G7K1038	10	G3/8	41	30	11	11	17,5	21
C0G7K1238	12	G3/8	41	33	11	11	17,5	20,5
C0H7K1248	12	G1/2	50	35	14	14	20	20,5
C0E7J0618	6	R1/8	30	23	8	8	14,5	12,5
C0F7J0828	8	R1/4	35,5	28,5	10	10	18,5	15
C0F7J1028	10	R1/4	35,5	31	10	10	19,5	17,5
C0G7J1038	10	R3/8	41	31	11	11	20,5	17,5
C0G7J1238	12	R3/8	41	36	11	11	22	20,5
C0H7J1248	12	R1/2	50	36,5	14	14	25,5	20,5



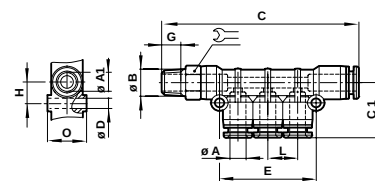
Twin Banjo

Model	O/D Tube (ØA)	Metric & BSPT Thread (B)	C	E	G	H	L
C0N700618	6	R1/8	25	23	8	14,5	12,5
C0N700828	8	R1/4	29	28,5	10	18,5	15
C0N701028	10	R1/4	29	31	10	19,5	17,5
C0N701038	10	R3/8	32,5	31	11	20,5	17,5
C0N701238	12	R3/8	32,5	36	11	22	20,5
C0N701248	12	R1/2	39,5	36,5	14	25,5	20,5
C0A700405	4	M5	18	19,5	3,6	10	10,5
C0A700618	6	G1/8	23,5	23	4,5	14	12,5
C0A700828	8	G1/4	28	28,5	6	17,5	15
C0A701028	10	G1/4	28	31	6	19	17,5
C0A701038	10	G3/8	32,5	31	6	21	17,5
C0A701238	12	G3/8	32,5	36	6	22,5	20,5
C0A701248	12	G1/2	34	36,5	7,5	23	20,5



Manifold Union

Model	O/D Tube Outlet (ØA)	O/D Tube Inlet (ØA1)	C	C1	D	E	H	L	O
C00D30604	4	6	63,5	18	3,3	34	7,5	10,5	12,5
C00D30804	4	8	65,5	21,5	4,3	35	9	10,5	14,5
C00D30806	6	8	71,5	22,5	4,3	41	9,5	12,5	14,5
C00D31006	6	10	78	23,5	4,3	42	9,5	12,5	17,5
C00D31008	8	10	83,5	26	4,3	47	9,5	14,5	17,5



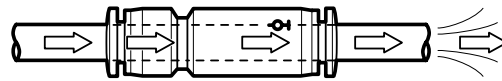
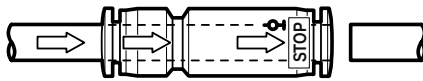
Adaptor Manifold

Model	O/D Tube (ØA)	O/D Tube (ØA1)	BSPT Thread (B)	C	C1	ØD	E	G	H	L	O
C01D30418	4	6	R1/8	72	24	3,3	34	8	7,5	10,5	12,5
C01D30428	4	8	R1/8	74	28,5	4,3	35	8	9	10,5	14,5
C01D30628	6	8	R1/4	82,5	34	4,3	41	10	9,5	12,5	14,5
C01D30838	8	10	R3/8	95	34,5	4,3	47	10	9,5	14,5	17,5

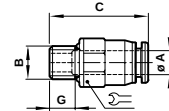
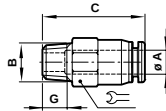
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PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



No air flow when tubing is removed -
air flow is restored when tubing is inserted

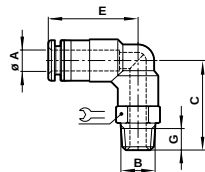


Straight Self-Seal

Model	O/D Tube (ØA)	BSPT Thread (B)	C	G	
C01240418	4	R1/8	26	8	10
C01240618	6	R1/8	29	8	12
C01240628	6	R1/4	29	10	14
C01240828	8	R1/4	33,5	10	14
C01240838	8	R3/8	33,5	11	17
C01241028	10	R1/4	35,5	10	17
C01241038	10	R3/8	35,5	11	17
C01241048	10	R1/2	35,5	14	21
C01241228	12	R1/4	42	10	19
C01241238	12	R3/8	42	11	19
C01241248	12	R1/2	42	14	21

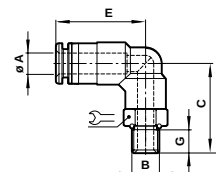
Straight Self-Seal

Model	O/D Tube (ØA)	BSPP Thread (B)	C	G	
C02240418	4	G1/8	25,5	5	12
C02240618	6	G1/8	28	5	12
C02240628	6	G1/4	27	6,5	15
C02240828	8	G1/4	32	6,5	15
C02240838	8	G3/8	32	6,5	17
C02241028	10	G1/4	35	6,5	17
C02241038	10	G3/8	36,5	6,5	17
C02241048	10	G1/2	37,5	8	21
C02241228	12	G1/4	43,5	6,5	19
C02241238	12	G3/8	43,5	6,5	21
C02241248	12	G1/2	44	8	21



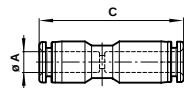
Elbow Self-Seal

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	
C014J0418	4	R1/8	27	27,5	5	10
C014J0618	6	R1/8	30	32	5	12
C014J0628	6	R1/4	32	30,5	6,5	14
C014J0818	8	R1/8	34,5	41,5	6,5	14
C014J0828	8	R1/4	34	40	6,5	17
C014J1028	10	R1/4	32	26,5	6,5	17
C014J1038	10	R3/8	36	45	6,5	17
C014J1048	10	R1/2	37,5	43	8	21
C014J1238	12	R3/8	40	53,5	6,5	19
C014J1248	12	R1/2	41,5	51,5	8	21



Elbow Self-Seal

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	E	G	
C024J0405	4	M5	20,5	29,5	4	10
C024J0418	4	G1/8	27	27,5	5	14
C024J0605	6	M5	22,5	33	4	12
C024J0618	6	G1/8	30	32	5	14
C024J0628	8	G1/4	32	30,5	6,5	14
C024J0828	8	G1/4	34,5	41,5	6,5	17
C024J0838	8	G3/8	34	40	6,5	20
C024J1028	10	G1/4	32	26,5	6,5	17
C024J1038	10	G3/8	36	45	6,5	20
C024J1048	10	G1/2	37,5	43	8	24
C024J1238	12	G3/8	40	53,5	6,5	20
C024J1248	12	G1/2	41,5	51,5	8	24



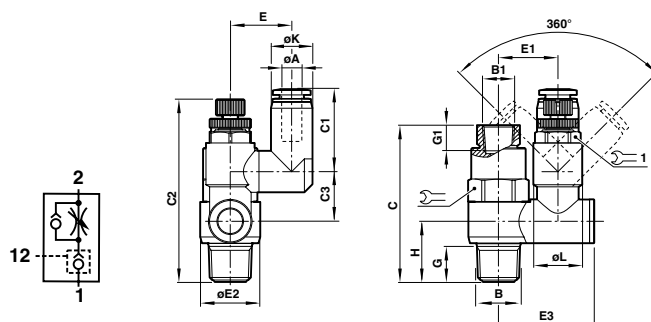
Union Straight Self-Seal

Model	O/D Tube (ØA)	C
C002J0400	4	42
C002J0600	6	46
C002J0800	8	53,5
C002J1000	10	58
C002J1200	12	67

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PNEUFIT C COMPOSITE FITTINGS

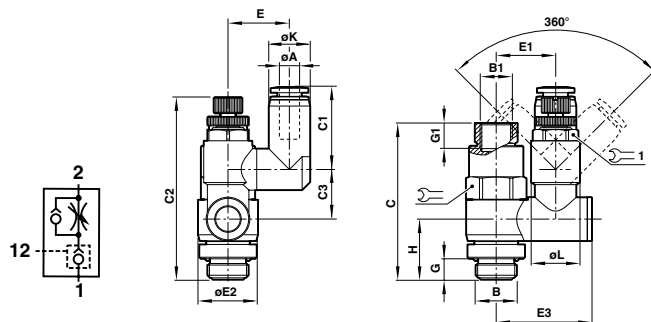
Metric Ø 4 ... 16 mm O/D tube



Flow Control + Pilot Check

Model	Ø A	B	B1	C	C1	C2*	C3	E	E1	Ø E2	E3	G	G1	H	Ø K	Ø L	1	1	Weight (g)
C01GN0618	6	R1/8	M5	41	24	50,5/55,5	13	14	14,5	15	24	16	8,5	16	12,5	12	12	10	40
C01GN0628	6	R1/4	R1/8	49	26	57/62	15,5	19,5	18,5	19	30	11	10	19	13	15,5	17	13	72
C01GN0818	8	R1/8	M5	41	25	50,5/55,5	12,5	15,5	14,5	15	24	8,5	8,5	16	15	12	12	10	42
C01GN0828	8	R1/4	R1/8	49	28,5	57/62	16	18,5	18,5	19	30	11	10	19	15	15,5	17	13	77
C01GN0838	8	R3/8	R1/8	57	29,5	67/72	19	23,5	23	23	37	12	10	22,5	15	20	19	17	129
C01GN1038	10	R3/8	R1/8	57	31,5	67/72	19	23,5	23	23	37	12	10	22,5	17,5	20	19	17	131
C01GN1048	10	R1/2	R1/4	71	33	81,5/87	25,5	26,5	29	28,5	47,5	15	13,5	28	17,5	27	24	23	245
C01GN1238	12	R3/8	R1/8	57	34,5	67/72	19	23,5	23	23	37	12	10	22,5	20,5	20	19	17	139
C01GN1248	12	R1/2	R1/4	71	36	81,5/87	25,5	26,5	29	28,5	47,5	15	13,5	28	20,5	27	24	23	235

* min/max



Flow Control + Pilot Check

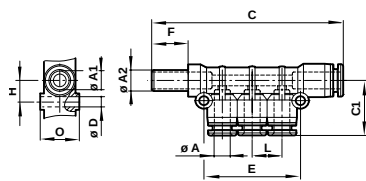
Model	Ø A	B	B1	C	C1	C2*	C3	E	E1	Ø E2	E3	G	G1	H	Ø K	Ø L	1	1	Weight (g)
C02GN0618	6	G1/8	M5	41	24	50,6/55,4	13	14	14,5	15	24	5	8,5	16	12,5	12	12	10	45
C02GN0628	6	G1/4	G1/8	49	26	57,1/61,9	15,5	19,5	18,5	19	30	6,5	9,5	19	13	15,5	17	13	80
C02GN0818	8	G1/8	M5	41	25	50,6/55,4	12,5	15,5	14,5	15	24	5	8,5	16	14,5	12	12	10	43
C02GN0828	8	G1/4	G1/8	49	28,5	57,1/61,9	16	18,5	18,5	19	30	6,5	9,5	19	14,5	15,5	17	13	81
C02GN0838	8	G3/8	G1/8	57	29,5	67,2/72,2	19	23,5	23	23	37	7	9,5	22,5	15	20	19	17	125
C02GN1038	10	G3/8	G1/8	57	31,5	67,2/72,2	19	23,5	23	23	37	7	9,5	22,5	17,5	20	19	17	138
C02GN1048	10	G1/2	G1/4	71	33	81,3/78,5	25,5	26,5	29	28,5	47,5	8,5	13	28	17,5	27	24	23	253
C02GN1238	12	G3/8	G1/8	57	34,5	67,2/72,2	19	23,5	22,5	23	37	7	9,5	22,5	20,5	20	19	17	146
C02GN1248	12	G1/2	G1/4	71	36	81,3/78,5	25,5	26,5	29	28,5	47,5	8,5	13	28	20,5	27	24	23	239

* min/max

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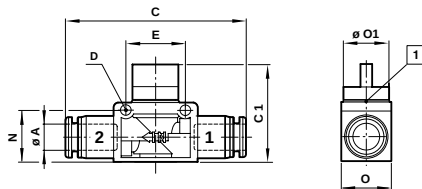
PNEUFIT C COMPOSITE FITTINGS

Metric Ø 4 ... 16 mm O/D tube



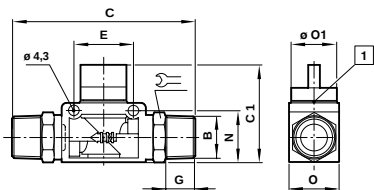
Stem Manifold

Model	O/D Tube (ØA)	O/D Tube (ØA1)	O/D Stem (ØA2)	C	C1	ØD	E	F	H	L	O
C00J30604	4	6	6	84,5	24	3,3	34	25	7,5	10,5	12,5
C00J30804	4	8	8	89,5	28,5	4,3	35	28,5	9	10,5	14,5
C00J30806	6	8	8	95,5	34	4,3	41	28,5	9,5	12,5	14,5
C00J31008	8	10	10	109,5	34,5	4,3	47	31	9,5	14,5	17,5



3/2 shut off valves (tube/tube)

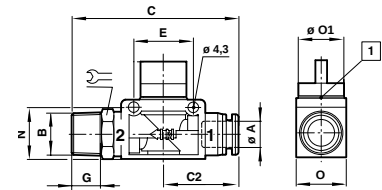
Model	O/D Tube (ØA)	C	C1	ØD	E	N	O	ØO1
C00GF0600	6	52,5	40,5	4,3	19	18,5	18	16,5
C00GF0800	8	53	40,5	4,3	19	18,5	18	16,5
C00GF1000	10	62	41	4,3	24	21,5	21	19,5
C00GF1200	12	68,5	41	4,3	24	21,5	21	19,5



3/2 shut off valves (BSPT male)

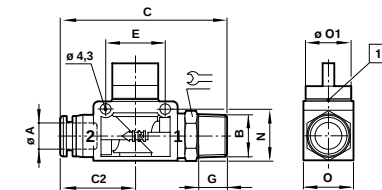
Model	BSPT Thread (B)	C	C1	E	G	N	O	O1
C01GG1818	R1/8	71	40,5	19	8	18,5	18	16,5
C01GG2828	R1/4	77	40,5	19	10	18,5	18	16,5
C01GG3838	R3/8	81	41	24	11	21,5	21	19,5
C01GG4848	R1/2	90	41	24	14	21,5	21	19,5

1 Untapped exhaust



3/2 shut off valves (tube/BSPT male)

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1	C2	E	G	N	O	O1
C01GH0618	6	R1/8	62	40,5	26	19	8	18,5	18	16,5
C01GH0628	6	R1/4	65	40,5	26	19	10	18,5	18	16,5
C01GH0638	6	R3/8	66	40,5	26	19	11	18,5	18	16,5
C01GH0818	8	R1/8	63	40,5	27,5	19	8	18,5	18	16,5
C01GH0828	8	R1/4	66	40,5	27,5	19	10	18,5	18	16,5
C01GH0838	8	R3/8	67	40,5	27,5	19	11	18,5	18	16,5
C01GH1028	10	R1/4	67	41	31	24	10	21,5	21	19,5
C01GH1038	10	R3/8	71,5	41	31	24	11	21,5	21	19,5
C01GH1048	10	R1/2	74,5	41	31	24	14	21,5	21	19,5
C01GH1228	12	R1/4	75,5	41	34	24	10	21,5	21	19,5
C01GH1238	12	R3/8	76,5	41	34	24	11	21,5	21	19,5
C01GH1248	12	R1/2	79,5	41	34	24	14	21,5	21	19,5



3/2 shut off valves (BSPT male/tube)

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1	C2	E	G	N	O	O1
C01GJ0618	6	R1/8	62	40,5	26	19	8	18,5	18	16,5
C01GJ0628	6	R1/4	65	40,5	26	19	10	18,5	18	16,5
C01GJ0638	6	R3/8	66	40,5	26	19	11	18,5	18	16,5
C01GJ0818	8	R1/8	65	40,5	27,5	19	8	18,5	18	16,5
C01GJ0828	8	R1/4	66	40,5	27,5	19	10	18,5	18	16,5
C01GJ0838	8	R3/8	67	40,5	27,5	19	11	18,5	18	16,5
C01GJ1028	10	R1/4	70,5	41	31	24	10	21,5	21	19,5
C01GJ1038	10	R3/8	71,5	41	31	24	11	21,5	21	19,5
C01GJ1048	10	R1/2	74,5	41	31	24	14	21,5	21	19,5
C01GJ1228	12	R1/4	75,5	41	34	24	10	21,5	21	19,5
C01GJ1238	12	R3/8	76,5	41	34	24	11	21,5	21	19,5
C01GJ1248	12	R1/2	79,5	41	34	24	14	21,5	21	19,5

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PNEUFIT C SELECTION BOX

We know that many of our customers use a wide range of fittings, and if they have an emergency, valuable time is wasted looking for a replacement. Solve this problem by ordering our selection boxes for immediate use when required.

Four kits available covering popular tube sizes

Up to 360 items in each kit – straight connectors, elbows, tees, tube connectors, plugs

Includes handy tube cutter ensuring perfect joint

Strong moulded carry case

Contents identified for easy re-ordering

Pneufit C Selection Box

Model	Type
NE/11152	4 & 6mm fittings kit
NE/11154	6 & 8mm fittings kit
NE/11433	8 & 10mm fittings kit
NE/11376	10 & 12mm fittings kit

NE/11152, Size 4/6

Model	Description	Quantity
C00040400	PLUG 4 PNEUFIT C	35
C00040600	PLUG 6 PNEUFIT C	35
C00200400	G-VB 4 PNEUFIT C	10
C00200600	G-VB 6 PNEUFIT C	15
C00200604	RED-VB 6-4 PNEUFIT C	15
C00400400	W-VB 4 PNEUFIT C	10
C00400600	W-VB 6 PNEUFIT C	15
C00600400	T-VB 4 PNEUFIT C	5
C00600600	T-VB 6 PNEUFIT C	10
C02250418	GE-VS 4-G1/8 PNEUFIT C	20
C02250428	GE-VS 4-G1/4 PNEUFIT C	35
C02250618	GE-VS 6-G1/8 PNEUFIT C	20
C02250628	GE-VS 6-G1/4 PNEUFIT C	35
C02470418	DB WE-VS 4-G1/8 PNEUFIT C	20
C02470428	DB WE-VS 4-G1/4 PNEUFIT C	20
C02470618	DB WE-VS 6-G1/8 PNEUFIT C	20
C02470628	DB WE-VS 6-G1/4 PNEUFIT C	20
C02670418	DB TE-VS 4-G1/8 PNEUFIT C	5
C02670428	DB TE-VS 4-G1/4 PNEUFIT C	5
C02670618	DB TE-VS 6-G1/8 PNEUFIT C	5
C02670628	DB TE-VS 6-G1/4 PNEUFIT C	5
M/3314	TUBE CUTTER	1

NE/11433, Size 8/10

Model	Description	Quantity
C00040800	PLUG 8 PNEUFIT C	30
C00041000	PLUG 10 PNEUFIT C	30
C00200800	G-VB 8 PNEUFIT C	10
C00201000	G-VB 10 PNEUFIT C	10
C00201008	RED-VB 10-8 PNEUFIT C	10
C00400800	W-VB 8 PNEUFIT C	10
C00401000	W-VB 10 PNEUFIT C	10
C00600800	T-VB 8 PNEUFIT C	10
C00601000	T-VB 10 PNEUFIT C	10
C02250818	GE-VS 8-G1/8 PNEUFIT C	20
C02250828	GE-VS 8-G1/4 PNEUFIT C	30
C02251028	GE-VS 10-G1/4 PNEUFIT C	20
C02251038	GE-VS 10-G3/8 PNEUFIT C	20
C02470818	DB WE-VS 8-G1/8 PNEUFIT C	20
C02470828	DB WE-VS 8-G1/4 PNEUFIT C	20
C02471028	DB WE-VS 10-G1/4 PNEUFIT C	10
C02471038	DB WE-VS 10-G3/8 PNEUFIT C	10
C02670818	DB TE-VS 8-G1/8 PNEUFIT C	5
C02670828	DB TE-VS 8-G1/4 PNEUFIT C	5
C02671028	DB TE-VS 10-G1/4 PNEUFIT C	5
C02671038	DB TE-VS 10-G3/8 PNEUFIT C	5
M/3314	TUBE CUTTER	1

NE/11154, Size 6/8

Model	Description	Quantity
C00040600	PLUG 6 PNEUFIT C	30
C00040800	PLUG 8 PNEUFIT C	30
C00200600	G-VB 6 PNEUFIT C	15
C00200800	G-VB 8 PNEUFIT C	10
C00200806	RED-VB 8-6 PNEUFIT C	15
C00400600	W-VB 6 PNEUFIT C	15
C00400800	W-VB 8 PNEUFIT C	10
C00600600	T-VB 6 PNEUFIT C	10
C00600800	T-VB 8 PNEUFIT C	10
C02250618	GE-VS 6-G1/8 PNEUFIT C	20
C02250628	GE-VS 6-G1/4 PNEUFIT C	30
C02250818	GE-VS 8-G1/8 PNEUFIT C	20
C02250828	GE-VS 8-G1/4 PNEUFIT C	30
C02470618	DB WE-VS 6-G1/8 PNEUFIT C	20
C02470628	DB WE-VS 6-G1/4 PNEUFIT C	20
C02470818	DB WE-VS 8-G1/8 PNEUFIT C	20
C02470828	DB WE-VS 8-G1/4 PNEUFIT C	20
C02670618	DB TE-VS 6-G1/8 PNEUFIT C	5
C02670628	DB TE-VS 6-G1/4 PNEUFIT C	5
C02670818	DB TE-VS 8-G1/8 PNEUFIT C	5
C02670828	DB TE-VS 8-G1/4 PNEUFIT C	5
M/3314	TUBE CUTTER	1

NE/11376, Size 10/12

Model	Description	Quantity
C00041000	PLUG 10 PNEUFIT C	30
C00041200	PLUG 12 PNEUFIT C	30
C00201000	G-VB 10 PNEUFIT C	10
C00201200	G-VB 12 PNEUFIT C	5
C00201210	G-VB 12 PNEUFIT C	5
C00401000	W-VB 10 PNEUFIT C	10
C00401200	W-VB 12 PNEUFIT C	5
C00601000	T-VB 10 PNEUFIT C	10
C00601200	T-VB 12 PNEUFIT C	5
C02251028	GE-VS 10-G1/4 PNEUFIT C	20
C02251038	GE-VS 10-G3/8 PNEUFIT C	20
C02251238	GE-VS 12-G3/8 PNEUFIT C	15
C02251248	GE-VS 12-G1/2 PNEUFIT C	15
C02471028	DB WE-VS 10-G1/4 PNEUFIT C	10
C02471038	DB WE-VS 10-G3/8 PNEUFIT C	10
C02471238	DB WE-VS 12-G3/8 PNEUFIT C	10
C02471248	DB WE-VS 12-G1/2 PNEUFIT C	10
C02671028	DB TE-VS 10-G1/4 PNEUFIT C	5
C02671038	DB TE-VS 10-G3/8 PNEUFIT C	5
C02671238	DB TE-VS 12-G3/8 PNEUFIT C	5
C02671248	DB TE-VS 12-G1/2 PNEUFIT C	5
M/3314	TUBE CUTTER	1

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.



PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



Compact units featuring retained collets and positive tube anchorage

Silicone free O-ring seals

Non-PTFE based thread sealant on all BSP taper threads

Easy tube insertion for rapid assembly

Internal hexagon on straight adaptors allows assembly in confined spaces

Wide range of types available

Reliable and corrosion resistant

MATERIALS

Body: Nickel plated brass or glass filled nylon

Collet: Nickel plated brass

'O' ring: Silicone free nitrile rubber

Sealing washer (parallel threads): Nitrile 'O'-ring

Thread sealant: Non-PTFE

TECHNICAL DATA

Medium:

Compressed air

Operating pressure:

Vacuum – 18 bar unless otherwise stated (dependant on tubing specification)

Ambient temperature:

–20°C ... +80°C

Consult our Technical Service for use below +2°C

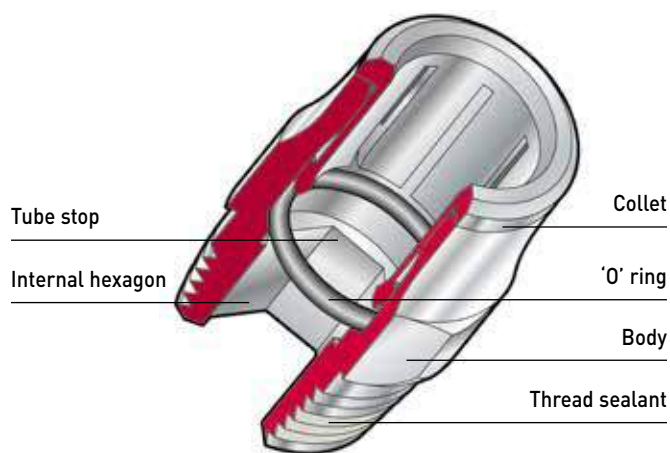
Tube sizes:

4, 5, 6, 8, 10, 12, 14 mm O/D

WARNING: The push-in tube fittings in this section must not be used in vehicle air braking and ancillary systems. For push-in fittings suitable for these applications please refer to Fleetfit fittings on page 285.

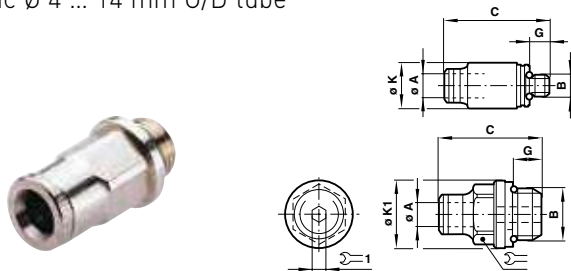
Tubing:

Nylon 11 or 12, polyurethane 85 to 98 Shore A hardness (33 to 52 Shore D)



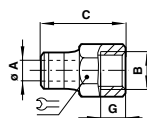
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



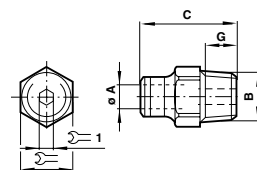
Straight Adaptor

Model		O/D Tube (ØA)	Metric & BSPP Thread (B)	C	G	ØK	ØK1		1
102250403	●	4	M3	21,0	2,5	9	-	-	1,5
102250405	●	4	M5	21,5	3,5	9	-	-	2,5
102250418	●	4	G1/8	19,0	5,0	-	14,0	10	3
102250428	●	4	G1/4	21,5	7,5	-	18,0	10	3
102250505	●	5	M5	23,0	3,5	10	-	-	2,5
102250518	●	5	G1/8	23,5	5,0	-	14,0	10	4
102250528	●	5	G1/4	22,0	7,5	-	18,0	12	4
102250605	●	6	M5	24,0	3,5	11	-	-	2,5
102250618	●	6	G1/8	25,0	5,0	-	14,0	11	4
102250628	●	6	G1/4	23,5	7,5	-	18,0	13	4
102250818	●	8	G1/8	26,5	5,0	-	14,0	13	5
102250828	●	8	G1/4	28,0	7,5	-	18,0	14	6
102250838	●	8	G3/8	26,0	9,0	-	12,0	17	6
102250848	●	8	G1/2	31,5	12,0	-	26,0	17	6
102251018	●	10	G1/8	32,0	5,0	-	14,0	17	5
102251028	●	10	G1/4	33,5	7,5	-	18,0	17	7
102251038	●	10	G3/8	32,0	9,0	-	22,0	19	8
102251048	●	10	G1/2	32,0	12,0	-	26,0	19	8
102251228	●	12	G1/4	37,5	7,5	-	18,0	22	7
102251238	●	12	G3/8	38,0	9,0	-	22,0	22	10
102251248	●	12	G1/2	37,0	12,0	-	26,0	22	10
102251438	●	14	G3/8	38,0	9,0	-	22,0	22	10
102251448	●	14	G1/2	37,0	12,0	-	26,0	22	10



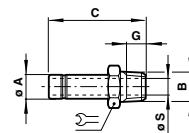
Straight Adaptor

Model		O/D Tube (ØA)	Metric & BSPP Female (B)	C	G	
102260405	●	4	M5	22,5	5,0	10
102260418	●	4	G1/8	24,5	7,5	13
102260428	●	4	G1/4	29,0	5,0	17
102260505	●	5	M5	23,5	7,5	10
102260518	●	5	G1/8	25,5	7,5	13
102260528	●	5	G1/4	29,5	7,5	17
102260618	●	6	G1/8	26,0	11,0	13
102260628	●	6	G1/4	30,5	11,0	17
102260818	●	8	G1/8	27,0	11,0	13
102260828	●	8	G1/4	31,5	11,0	17
102261028	●	10	G1/4	36,5	11,0	17
102261038	●	10	G3/8	39,0	11,5	19
102261238	●	12	G3/8	41,0	11,5	19
102261248	●	12	G1/2	44,5	15,0	24



Straight Adaptor

Model		O/D Tube (ØA)	BSPT Thread (B)	C	G		1
101250418	●	4	R1/8	20,5	10	10	3
101250428	●	4	R1/4	23,0	11,0	14	3
101250518	●	5	R1/8	22,5	7,5	10	4
101250528	●	5	R1/4	23,0	11,0	14	4
101250618	●	6	R1/8	23,0	7,5	11	4
101250628	●	6	R1/4	25,0	11,0	14	4
101250818	●	8	R1/8	26,5	7,5	13	5
101250828	●	8	R1/4	28,0	11,0	14	6
101250838	●	8	R3/8	27,0	12,5	17	6
101250848	●	8	R1/2	29,0	16,0	22	6
101251018	●	10	R1/8	31,5	7,5	17	5
101251028	●	10	R1/4	34,0	11,0	17	7
101251038	●	10	R3/8	34,0	12,5	17	8
101251048	●	10	R1/2	33,5	16,0	22	8
101251228	●	12	R1/4	39,0	11,0	22	7
101251238	●	12	R3/8	39,0	12,5	22	10
101251248	●	12	R1/2	40,0	16,0	22	10
101251438	●	14	R3/8	39,5	12,5	22	10
101251448	●	14	R1/2	40,0	16,0	22	10



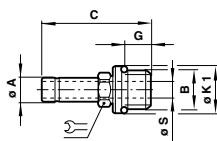
Straight Stem Adaptor

Model		O/D Stem (ØA)	BSPT Thread (B)	C	G	ØS	
101150418	●	4	R1/8	30,0	7,5	2,1	10
101150428	●	4	R1/4	33,5	11,0	2,1	14
101150518	●	5	R1/8	31,0	7,5	3,2	11
101150528	●	5	R1/4	35,0	11,0	3,2	14
101150618	●	6	R1/8	32,0	7,5	4,1	12
101150628	●	6	R1/4	35,0	11,0	4,1	14
101150818	●	8	R1/8	33,0	7,5	7,1	14
101150828	●	8	R1/4	36,5	11,0	5,1	14
101150838	●	8	R3/8	40,0	12,5	5,1	19
101151028	●	10	R1/4	40,0	11,0	7,7	15
101151038	●	10	R3/8	45,0	12,5	7,7	19
101151048	●	10	R1/2	48,0	16,0	8,1	22
101151238	●	12	R3/8	48,0	12,5	9,1	19
101151248	●	12	R1/2	51,5	16,0	9,1	22
101151448	●	14	R1/2	51,4	16,0	11,2	22

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

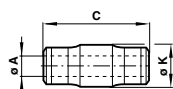
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



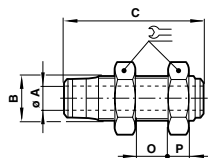
Straight Stem Adaptor

Model		O/D Stem (ØA)	BSPP Thread (B)	C	G	ØK1	ØS	
102150418	●	4	G1/8	29,0	5,0	13,5	2,1	8
102150428	●	4	G1/4	33,0	7,5	17,5	2,1	10
102150518	●	5	G1/8	30,5	5,0	13,5	3,3	8
102150528	●	5	G1/4	34,0	7,5	17,5	3,3	10
102150618	●	6	G1/8	31,0	5,0	13,5	4,0	8
102150628	●	6	G1/4	34,5	7,5	17,5	4,0	10
102150818	●	8	G1/8	32,5	5,0	13,5	5,0	10
102150828	●	8	G1/4	35,5	7,5	17,5	6,0	10
102150838	●	8	G3/8	39,0	9,0	21,5	6,0	13
102151028	●	10	G1/4	41,5	7,5	17,5	6,5	13
102151038	●	10	G3/8	43,5	9,0	21,5	8,0	13
102151048	●	10	G1/2	49,0	12,0	25,5	8,0	17
102151238	●	12	G3/8	48,5	9,0	21,5	10,0	17
102151248	●	12	G1/2	52,5	12,0	25,5	10,0	17
102151438	●	14	G3/8	48,5	9,0	21,5	10,0	17
102151448	●	14	G1/2	52,5	12,0	25,5	11,5	17



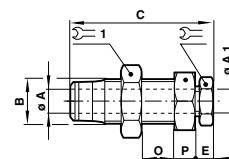
Straight Connector

Model		O/D Tube (ØA)	C	ØK
100200400	●	4	30,0	10,0
100200500	●	5	32,0	11,0
100200600	●	6	33,5	12,0
100200800	●	8	35,5	14,0
100201000	●	10	44,5	17,0
100201200	●	12	51,5	20,5
100201400	●	14	52,5	21,0



Bulkhead Connector

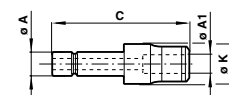
Model		O/D Tube (ØA)	B	C	Ø	P	
100290400	●	4	M10x1,0	30,0	12	9	14
100290500	●	5	M12x1,0	32,0	14	9	17
100290600	●	6	M14x1,5	35,5	15	10	19
100290800	●	8	M16x1,5	36,5	16	10	22
100291000	●	10	M20x1,5	43,5	14	11	27
100291200	●	12	M24x1,5	50,5	15	11	30
100291400	●	14	M24x1,5	50,5	15	11	30



Mixed Bulkhead Connector

PIF TO COMPRESSION FITTING										
Model		O/D Tube (ØA)	ØA1	B	C	E	Ø	P		1
100310404	●	4	4	M12x1,0	27,0	6,0	9,5	9	8	17
100310606	●	6	6	M15x1,0	29,5	7,0	9,5	10	13	22
100310808	●	8	8	M18x1,5	33,5	8,0	11,2	10	13	24
100311010	●	10	10	M20x1,5	40,0	8,0	14,3	11	17	27
100311212	●	12	12	M24x1,5	44,0	9,0	17,5	11	19	30

Supplied complete with tubing nut and sleeve.



Unequal Stem

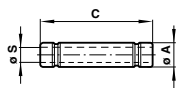
Model		Reducing O/D Stem (ØA)	O/D Tube (ØA1)	C	ØK
100230504	●	5	4	33,5	10,0
100230604	●	6	4	34,0	10,0
100230605	●	6	5	35,0	11,0
100230804	●	8	4	31,0	10,0
100230805	●	8	5	33,0	11,0
100230806	●	8	6	36,5	12,0
100231004	●	10	4	31,0	12,0
100231005	●	10	5	36,5	12,0
100231006	●	10	6	37,5	12,0
100231008	●	10	8	38,0	14,0
100231204	●	12	4	35,0	14,0
100231205	●	12	5	35,0	14,0
100231206	●	12	6	35,0	14,0
100231208	●	12	8	42,0	14,0
100231210	●	12	10	50,0	17,0
100231406	●	14	6	36,5	16,0
100231408	●	14	8	37,5	16,0
100231410	●	14	10	46,5	17,0
100231412	●	14	12	53,5	20,5

EXPANDING				
Model		Reducing O/D Stem (ØA)	O/D Tube (ØA1)	ØK
100230406	●	4	6	35,0
100230608	●	6	8	37,5

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

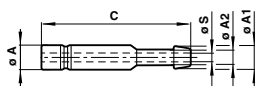
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



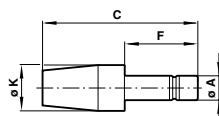
Stem Straight Connector

Model	O/D Stem (ØA)	C	ØS
100220400	4	30,0	2,6
100220500	5	33,0	3,4
100220600	6	34,0	4,0
100220800	8	36,0	6,0
100221000	10	45,0	7,6
100221200	12	52,0	9,6
100221400	14	52,0	11,5



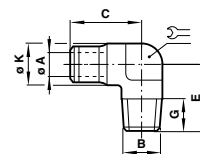
Stem Tailpiece Adaptor

Model	O/D Stem (ØA)	Hose Bore (ØA1)	ØA2	C	ØS
100190505	5	6,5	5	35,5	2,8
100190605	6	6,5	5	36,0	2,8
100190606	6	8,0	6,3	36,0	4,0
100190806	8	8,0	6,3	37,0	4,3
100190808	8	9,6	8	38,5	5,5
100191010	10	12,0	10	44,0	7,3
100191210	12	12,0	10	46,5	7,3
100191212	12	15,0	12,5	47,5	9,7



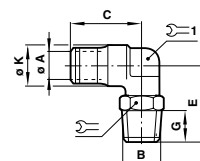
Stem Silencer

Model	O/D Stem (ØA)	C	F	ØK
100110400	4	31,5	16,5	11,0
100110600	6	33,5	18,5	11,0
100110800	8	40,5	19,5	13,0
100111000	10	53,5	24,0	19,0
100111200	12	57,0	27,5	19,0



Fixed Elbow Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	ØK	
101450418	4	R1/8	15,0	17,0	7,5	10,0	7
101450428	4	R1/4	20,0	18,0	11,0	10,0	11
101450518	5	R1/8	15,5	18,5	7,5	11,0	7
101450528	5	R1/4	20,0	20,0	11,0	11,0	11
101450618	6	R1/8	16,0	19,5	7,5	12,0	8
101450628	6	R1/4	20,0	20,0	11,0	12,0	11
101450818	8	R1/8	17,0	21,5	7,5	14,5	11
101450828	8	R1/4	20,0	21,5	11,0	14,5	11
101450838	8	R3/8	23,0	22,0	12,5	14,5	13
101450848	8	R1/2	29,0	24,0	16,0	14,5	17
101451018	10	R1/8	18,5	26,5	7,5	17,0	13
101451028	10	R1/4	21,5	26,5	11,0	17,0	13
101451038	10	R3/8	23,0	26,5	12,5	17,0	13
101451048	10	R1/2	29,0	28,5	16,0	17,0	17
101451228	12	R1/4	23,3	31,5	11,0	20,5	16
101451238	12	R3/8	25,0	31,5	12,5	20,5	16
101451248	12	R1/2	28,8	32,0	16,0	20,5	17



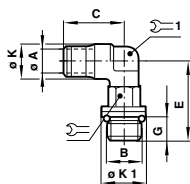
90° Swivel Elbow Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	ØK		1
101470418	4	R1/8	17,0	20,5	7,5	10,0	10	7
101470428	4	R1/4	17,0	24,10	11,0	10,0	14	7
101470518	5	R1/8	18,5	21,0	7,5	11,0	11	9
101470528	5	R1/4	18,5	24,5	11,0	11,0	14	9
101470618	6	R1/8	19,5	21,5	7,5	12,0	11	9
101470628	6	R1/4	19,5	25,0	11,0	12,0	14	9
101470638	6	R3/8	20,0	27,5	12,5	12,0	17	8
101470818	8	R1/8	21,5	23,0	7,5	14,5	14	11
101470828	8	R1/4	21,5	26,0	11,0	14,5	14	11
101470838	8	R3/8	22,0	30,5	12,5	14,5	17	13
101470848	8	R1/2	22,0	34,5	16,0	14,5	22	13
101471018	10	R1/8	26,5	25,5	7,5	17,0	14	13
101471028	10	R1/4	26,5	29,0	11,0	17,0	17	13
101471038	10	R3/8	26,5	30,5	12,5	17,0	17	13
101471048	10	R1/2	26,5	34,5	16,0	17,0	22	13
101471228	12	R1/4	31,5	32,0	11,0	20,5	19	16
101471238	12	R3/8	31,5	34,0	12,5	20,5	22	16
101471248	12	R1/2	31,5	38,0	16,0	20,5	22	16
101471438	14	R3/8	30,5	33,0	12,5	21,5	22	17
101471448	14	R1/2	31,5	37,0	16,0	21,5	22	17

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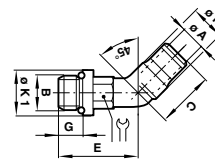
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



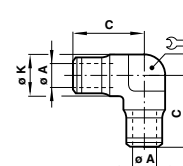
90° Swivel Elbow Adaptor

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	E	G	ØK	ØK1	1
102470403	4	M3	17,0	16,0	3,5	10,0	-	7
102470405	4	M5	17,0	19,0	4,2	10,0	8	7
102470418	4	G1/8	17,0	22,0	5,5	10,0	14,0	7
102470428	4	G1/4	17,0	25,5	8,0	10,0	18,0	7
102470505	5	M5	18,5	20,0	4,2	11,0	8	9
102470518	5	G1/8	18,5	22,5	5,5	11,0	14,0	9
102470528	5	G1/4	18,5	26,0	8,0	11,0	18,0	9
102470605	6	M5	19,5	20,5	4,2	12,0	8	9
102470618	6	G1/8	19,5	23,0	5,5	12,0	14,0	9
102470628	6	G1/4	19,5	26,5	8,0	12,0	18,0	9
102470818	8	G1/8	21,5	24,0	5,5	14,5	14,0	11
102470828	8	G1/4	21,5	29,0	8,0	14,5	18,0	11
102470838	8	G3/8	22,0	33,5	9,0	14,5	22,0	13,3
102470848	8	G1/2	22,0	39,5	11,0	14,5	26,0	13,3
102471018	10	G1/8	26,5	26,5	5,5	17,0	14,0	17
102471028	10	G1/4	26,5	31,5	8,0	17,0	18,0	17
102471038	10	G3/8	26,5	33,5	9,0	17,0	22,0	19
102471048	10	G1/2	26,5	39,5	11,0	17,0	26,0	19
102471228	12	G1/4	31,5	35,5	8,0	20,5	18,0	19
102471238	12	G3/8	31,5	37,0	9,0	20,5	22,0	19
102471248	12	G1/2	31,5	43,0	11,0	20,5	26,0	19
102471438	14	G3/8	30,5	36,0	9,0	22,5	22,0	17
102471448	14	G1/2	31,5	39,0	11,0	22,5	26,0	17



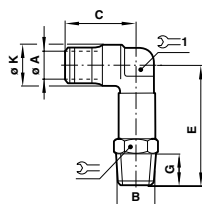
45° Swivel Adaptor

Model	O/D Tube (ØA)	BSPP Thread (B)	C	E	G	ØK	ØK1	1
102570618	6	G1/8	17,5	19,5	5,0	12,0	14,0	11
102570628	6	G1/4	17,5	23,0	7,5	12,0	18,0	11
102570818	8	G1/8	19,5	20,5	5,0	14,5	14,0	11
102570828	8	G1/4	19,5	26,0	7,5	14,5	18,0	17



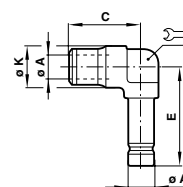
Equal Elbow Connector

Model	O/D Tube (ØA)	C	ØK	1
100400400	4	17,0	10,0	7
100400500	5	18,5	11,0	7
100400600	6	19,5	12,0	8
100400800	8	21,5	14,5	11
100401000	10	26,5	17,0	14
100401200	12	31,5	20,5	16
100401400	14	33,0	21,5	17



Extended Swivel Elbow Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G	1
101540418	4	R1/8	17,0	34,0	7,5	7
101540428	4	R1/4	17,0	40,0	11,0	7
101540618	6	R1/8	19,5	36,5	7,5	9
101540628	6	R1/4	19,5	41,0	11,0	9
101540818	8	R1/8	21,5	40,5	7,5	11
101540828	8	R1/4	21,5	44,5	11,0	11
101540838	8	R3/8	22,0	51,5	12,5	13
101541038	10	R3/8	26,5	51,5	12,5	13



Stem Elbow Connector

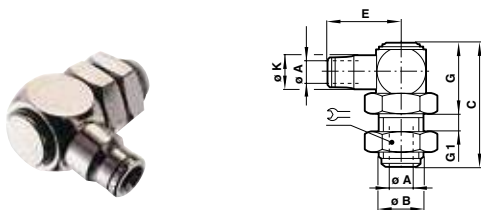
EQUAL						
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	ØK	1
100430400	4	4	9,5	25,0	10	7
100430600	6	6	19,0	27,5	12	9
100430800	8	8	21,0	29,5	14	-
100430805	8	5	19,5	30,0	14	-

EXTENDED						
Model	O/D Tube (ØA)	O/D Stem (ØA1)	C	E	ØK	1
100440600	6	6	19	39	12	9

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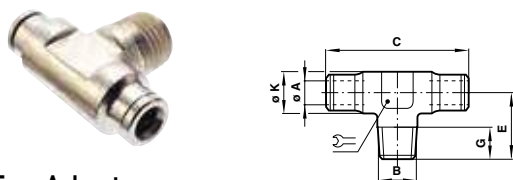
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



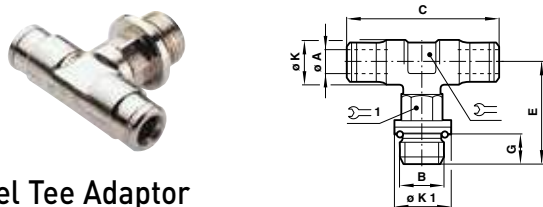
Bulkhead Swivel Elbow Connector

Model		O/D Tube (ØA)	B	C	E	G1	G	ØK	
100490400	●	4	M12x1,0	35,5	20,5	7	21,5	10,0	17
100490500	●	5	M12x1,0	35,5	21,5	7	21,5	11,0	17
100490600	●	6	M14x1,5	40,0	24,0	7	24,5	12,0	19
100490800	●	8	M16x1,5	45,0	26,5	7	30,0	14,5	22
100491000	●	10	M22x1,5	49,0	31,5	9	31,0	17,0	27
100491200	●	12	M24x1,5	54,0	38,0	12	32,5	20,5	30



Fixed Tee Adaptor

Model		O/D Tube (ØA)	BSPT Thread (B)	C	E	G	ØK	
101650418	●	4	R1/8	34,0	15,0	7,5	10,0	7
101650518	●	5	R1/8	37,0	15,5	7,5	11,0	7
101650618	●	6	R1/8	39,0	16,0	7,5	12,0	8
101650628	●	6	R1/4	40,0	20,0	11,0	12,0	11
101650818	●	8	R1/8	42,5	17,0	7,5	14,5	11
101650828	●	8	R1/4	42,5	20,0	11,0	14,5	11
101651028	●	10	R1/4	53,5	21,5	11,0	17,0	13
101651228	●	12	R1/4	63,5	23,5	11,0	20,5	16



Swivel Tee Adaptor

Model		O/D Tube (ØA)	Metric & BSPP Thread (B)	C	E	G	ØK	ØK1		
102670405	●	4	M5	34,0	19,5	4,0	10,0	8,0	7	8
102670418	●	4	G1/8	34,0	22,0	5,5	10,0	14,0	7	11
102670505	●	5	M5	37,0	20,0	4,0	11,0	8,0	9	8
102670518	●	5	G1/8	37,0	22	5,5	11,0	14,0	9	11
102670528	●	5	G1/4	37,0	26,0	8,0	11,0	18,0	9	11
102670605	●	6	M5	39,0	20,5	4,0	12,0	8,0	9	8
102670618	●	6	G1/8	39,0	23,0	5,5	12,0	14,0	9	11
102670628	●	6	G1/4	39,0	26,5	8,0	12,0	18,0	9	11
102670818	●	8	G1/8	42,5	23,5	5,5	14,0	14,0	11	13
102670828	●	8	G1/4	42,5	29,0	8,0	14,0	18,0	11	17
102670838	●	8	G3/8	43,5	22,0	9,0	14,0	22,0	13	19
102671028	●	10	G1/4	53,5	31,5	8,0	17,0	18,0	13	17
102671038	●	10	G3/8	53,5	33,5	9,0	17,0	22,0	13	19
102671228	●	12	G1/4	63,5	35,5	8,0	20,5	18,0	16	19
102671238	●	12	G3/8	63,5	37,0	9,0	20,5	22,0	16	19
102671438	●	14	G3/8	61,5	36,0	9,0	21,5	22,0	17	19
102671448	●	14	G1/2	63,5	39,0	11,0	21,5	26,0	17	24



Swivel Tee Adaptor

Model		O/D Tube (ØA)	BSPT Thread (B)	C	E	G	ØK		
101670418	●	4	R1/8	34,0	21,5	7,5	10,0	10	7,0
101670428	●	4	R1/4	34,0	24,0	11,0	10,0	14	7,0
101670518	●	5	R1/8	37,0	22,0	7,5	11,0	11	9,0
101670618	●	6	R1/8	39,0	22,5	7,5	12,0	11	9,0
101670628	●	6	R1/4	39,0	25,0	11,0	12,0	14	9,0
101670818	●	8	R1/8	42,5	24,0	7,5	14,5	14	11,0
101670828	●	8	R1/4	42,5	26,0	11,0	14,5	14	11,0
101670838	●	8	R3/8	43,5	30,5	12,5	14,5	17	13,3
101671028	●	10	R1/4	53,5	29,0	11,0	17,0	17	13,3
101671038	●	10	R3/8	53,5	30,5	12,5	17,0	17	13,3
101671048	●	10	R1/2	53,5	34,5	16,0	17,0	22	13,3
101671228	●	12	R1/4	63,5	32,0	11,0	20,5	19	16,0
101671238	●	12	R3/8	63,5	34,0	12,5	20,5	22	16,0
101671248	●	12	R1/2	63,5	38,0	16,0	20,5	22	16,0
101671438	●	14	R3/8	61,5	33,0	12,5	22,5	22	17,0
101671448	●	14	R1/2	63,5	37,0	16,0	22,5	22	17,0



Equal Tee Connector

Model		O/D Tube (ØA)	C	E	ØK	
100600400	●	4	34,0	17,0	10,0	7
100600500	●	5	37,0	18,5	11,0	7
100600600	●	6	39,0	19,5	12,0	8
100600800	●	8	42,5	21,5	14,5	11
100601000	●	10	53,5	26,5	17,0	13
100601200	●	12	63,5	31,5	20,5	16
100601400	●	14	66,5	33,0	21,5	17



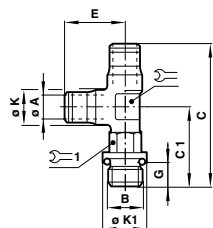
Fixed Side Tee Adaptor

Model		O/D Tube (ØA)	BSPT Thread (B)	C	C1	E	G	ØK	
101750618	●	6	R1/8	35,5	16,0	19,5	7,5	12,0	8
101750818	●	8	R1/8	38,0	17,0	21,5	7,5	14,5	11
101750828	●	8	R1/4	41,5	20,0	21,5	11,0	14,5	11

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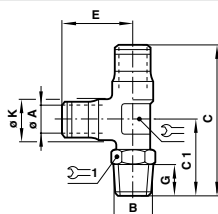
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



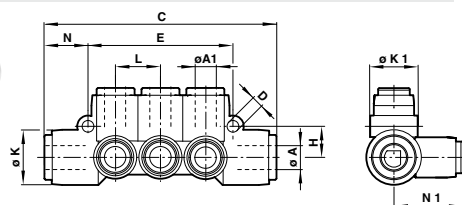
Swivel Side Tee Adaptor

Model	O/D Tube (ØA)	Metric & BSPP Thread (B)	C	C1	E	G	ØK	ØK1	1
102680405	4	M5	36,5	19,5	17,0	4,0	10,0	8,0	7
102680418	4	G1/8	38,5	22,0	17,0	5,5	10,0	14,0	7
102680618	6	G1/8	42,5	23,0	19,5	5,5	12,0	14,0	9
102680628	6	G1/4	46,0	26,5	19,5	8,0	12,0	18,0	9
102680818	8	G1/8	45,0	24,0	21,5	5,5	14,0	14,0	11
102680828	8	G1/4	50,5	29,0	21,5	8,0	14,0	18,0	11
102680838	8	G3/8	55,0	33,0	21,5	9,0	14,0	22,0	13
102681028	10	G1/4	58,3	31,5	26,5	8,0	17,0	18,0	13
102681038	10	G3/8	60,0	33,5	26,5	9,0	17,0	22,0	13
102681228	12	G1/4	67,0	35,5	31,5	8,0	20,5	18,0	16
102681238	12	G3/8	68,5	37,0	31,5	9,0	20,5	22,0	16
102681438	14	G3/8	69,0	36,0	33,0	9,0	21,5	22,0	17
102681448	14	G1/2	72,5	39,0	33,0	11,0	21,5	26,0	17



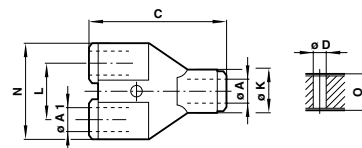
Swivel Side Tee Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1	E	G	ØK	1
101680418	4	R1/8	38,5	20,5	17,0	7,5	10,0	7
101680428	4	R1/4	41,0	24,0	17,0	11,0	10,0	7
101680518	5	R1/8	40,5	22,0	18,5	7,5	11,0	9
101680618	6	R1/8	42,0	22,5	19,5	7,5	12,0	9
101680628	6	R1/4	44,5	25,0	19,5	11,0	12,0	9
101680818	8	R1/8	45,0	24,0	21,5	7,5	14,0	11
101680828	8	R1/4	47,5	26,0	21,5	11,0	14,0	11
101680838	8	R3/8	52,5	30,5	22,0	12,5	14,0	13
101681028	10	R1/4	55,5	29,0	26,5	11,0	17,0	13
101681038	10	R3/8	57,0	30,5	26,5	12,5	17,0	13
101681228	12	R1/4	63,5	32,0	31,5	11,0	20,5	16
101681238	12	R3/8	66,0	34,0	31,5	12,5	20,5	16
101681248	12	R1/2	70,0	38,0	31,5	16,0	20,5	16
101681438	14	R3/8	66,5	33,0	33,0	12,5	21,5	17
101681448	14	R1/2	70,0	37,0	33,0	16,0	21,5	17



Manifold

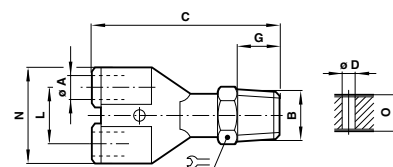
Model	O/D Tube Inlet (ØA)	O/D Tube Outlet (x6) (ØA1)	C	ØD	E	H	L	N	N1	ØK	ØK1
100D60804	8	4	68	3,5	42,0	9,0	13,0	12,5	20,0	16,0	14,0
100D60806	8	6	68	3,5	42,0	9,0	13,0	12,5	20,2	16,0	14,0
100D61006	10	6	83	3,5	48,0	10,5	15,0	17,0	22,7	20,0	16,0
100D61008	10	8	83	3,5	48,0	10,5	15,0	17,0	22,7	20,0	16,0



Parallel Y Connector

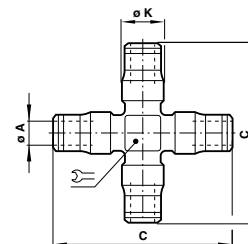
EQUAL	O/D Tube (ØA)	O/D Tube (ØA1)	C	ØD	L	N	ØK	O
100820400	4	4	34,0	3,0	11,0	22,0	11	10,5
100820600	6	6	38,5	3,0	14,0	27,0	13	12,5
100820800	8	8	40,5	3,0	16,0	31,0	15	13,5
100821000	10	10	49,5	4,0	20,5	42,0	20,0	15,0

UNEQUAL	O/D Tube (ØA)	O/D Tube (ØA1)	C	ØD	L	N	ØK	O
100820604	6	4	38,0	3,0	14,0	27,0	13	12,5
100820806	8	6	40,5	3,0	16,0	31,0	15	13,5
100821008	10	8	49,5	4,0	20,5	42,0	20,0	15,0



Parallel Y Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	ØD	G	L	N	O	1
101880418	4	R1/8	43,5	3,0	7,5	11,0	22,5	10,5	10
101880618	6	R1/8	48,0	3,0	7,5	14,0	28,0	12,5	11
101880818	8	R1/8	51,0	3,0	7,5	16,0	32,0	13,5	14
101880828	8	R1/4	54,5	3,0	11,0	16,0	32,0	13,5	11
101881038	10	R3/8	67,0	4,0	12,5	22,0	42,5	15,0	19
101881048	10	R1/2	70,0	4,0	16,0	22,0	42,5	15,0	22



4 Way Cross Connector

Model	O/D Tube (ØA)	C	ØK	1
100900400	4	42,0	10,5	10
100900600	6	47,5	12,0	10
100900800	8	57,5	14,5	13
100901000	10	68,5	17,0	13

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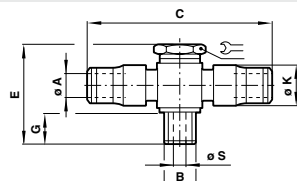
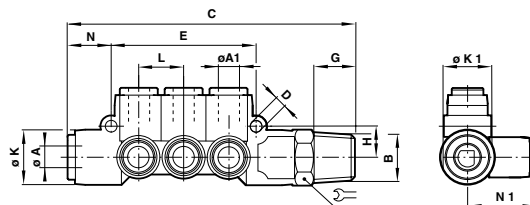
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



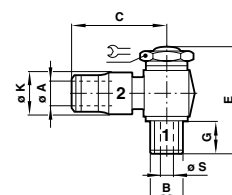
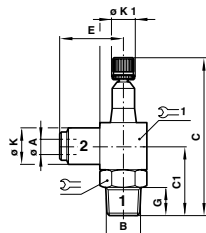
Manifold

Model	O/D Tube Inlet (ØA)	O/D Tube Outlet (x6) (ØA1)	BSPT Thread (B)	C	ØD	E	G	H	L	N	N1	ØK	ØK1	
101D60628	8	6	R1/4	83	3,4	42,0	11,0	9,0	13,0	12,5	20,0	16,0	14,0	17
101D60638	8	6	R3/8	85	3,4	42,0	12,5	9,0	13,0	12,5	20,0	16,0	14,0	19
101D60848	10	8	R1/2	104	3,4	48,0	16,0	10,5	15,0	17,0	22,5	20,0	16,0	22



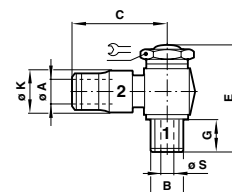
Tee Banjo Assembly Non-Regulating Bolt

Model	O/D Tube (A)	Metric & BSPP Thread (B)	C	E	G	ØK	ØS	
10A710405	4	M5	37,5	22	4,0	9,5	2,5	8
10A710418	4	G1/8	41,0	30	6,0	11,0	5,0	14
10A710618	6	G1/8	47,5	30	6,0	12,5	5,0	14
10A710628	6	G1/4	48,5	34	7,5	13,0	8,5	17
10A710818	8	G1/8	47,5	30	6,0	14,0	5,0	14
10A710828	8	G1/4	49,5	34	7,5	14,0	8,5	17



Elbow Banjo Assembly Non-Regulating Bolt

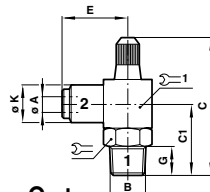
Model	O/D Tube (A)	Metric & BSPP Thread (B)	C	E	G	ØK	ØS	
10A510405	4	M5	18,5	22	4,0	9,5	2,5	8
10A510418	4	G1/8A	20,5	30	6,0	11,0	5,0	14
10A510505	5	M5	20,0	22	4,0	11,0	2,5	8
10A510605	6	M5	22,0	22	4,0	12,5	2,5	8
10A510618	6	G1/8A	23,5	30	6,0	12,5	5,0	14
10A510628	6	G1/4A	24,0	34	7,4	13,0	8,5	17
10A510818	8	G1/8A	23,5	30	6,0	14,0	5,0	14
10A510828	8	G1/4A	24,5	34	7,5	14,0	8,5	17
10A510838	8	G3/8A	26,5	41	9,0	16,5	10,0	22
10A511028	10	G1/4A	30,0	34	7,5	16,0	8,5	17
10A511038	10	G3/8A	31,0	41	9,0	17,0	10,0	22



Elbow Banjo Assembly Regulating Out

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1	E	G	ØK	ØK1	1	1
10TA00418	4	R1/8	53,0	22,5	22,0	9,5	11,5	9,0	14	16
10TA00618	6	R1/8	53,0	22,5	23,0	9,5	13,0	9,0	14	16
10TA00628	6	R1/4	67,0	29,5	25,5	13,5	13,5	11,0	17	20
10TA00828	8	R1/4	67,0	29,5	27,0	14,5	15,5	11,0	17	20
10TA00838	8	R3/8	78,0	33,0	28,0	14,5	15,5	13,0	19	22
10TA01028	10	R1/4	67,0	29,5	31,5	13,5	19,5	11,0	17	20
10TA01038	10	R3/8	78,0	33,0	32,5	14,5	19,5	13,0	19	22
10TA01248	12	R1/2	90,0	41,5	38,0	16,0	24,0	17,0	22	28

Pressure rating on this item 10 bar.



Elbow Banjo Assembly Regulating Out

Model	O/D Tube (ØA)	BSPT Thread (B)	C	C1	E	G	ØK	1	1
10T000618	6	R1/8	42,0	22,5	23,0	9,5	13,0	14	16

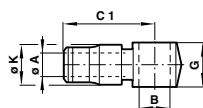
Pressure rating on this item 10 bar.

Elbow Banjo Assembly Regulating Out

Model	O/D Tube (A)	Metric & BSPP Thread (B)	C	E	G	ØK	ØS	
10K510405	4	M5	18,5	27,0	4,5	9,5	2,5	8
10K510418	4	G1/8	20,5	34,0	6,0	11,0	5,0	14
10K510505	5	M5	20,0	27,0	4,5	11,0	2,5	8
10K510518	5	G1/8	21,5	34,0	6,0	11,5	5,0	14
10K510605	6	M5	22,0	27,0	4,5	12,5	2,5	8
10K510618	6	G1/8	23,5	34,0	6,0	12,5	5,0	14
10K510628	6	G1/4	24,0	36,5	6,0	13,0	8,5	17
10K510818	8	G1/8	23,5	34,0	6,0	13,5	5,0	14
10K510828	8	G1/4	24,5	36,5	6,0	14,0	8,5	17
10K510838	8	G3/8	26,5	51,5	10,0	16,5	10,0	22
10K511028	10	G1/4	30,0	36,5	6,0	15,7	8,5	17
10K511038	10	G3/8	31,0	51,5	10,0x	17,0	10,0	22
10K511238	12	G3/8	33,0	51,5	10,0	17,5	10,0	22
10K511248	12	G1/2	38,0	57,5	10,0	17,5	10,0	27

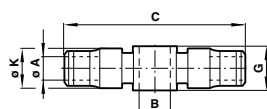
Pressure rating on this item 10 bar.

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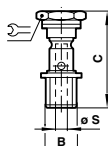
Elbow Banjo Body

Model		O/D Tube (ØA)	Bolt Thread (B)	C1	G	ØK
100510405	●	4	M5	18,5	12,5	9,5
100510418	●	4	G1/8	20,5	14,0	11,0
100510505	●	5	M5	20,0	12,5	11,0
100510605	●	6	M5	22,0	12,6	12,5
100510618	●	6	G1/8	23,5	14,0	12,5
100510628	●	6	G1/4	24,0	16,0	13,0
100510818	●	8	G1/8	23,5	14,0	14,0
100510828	●	8	G1/4	24,5	16,0	14,0
100510838	●	8	G3/8	26,5	20,5	16,5
100511028	●	10	G1/4	30,0	16,0	16,0
100511038	●	10	G3/8	31,0	20,5	17,0
100511238	●	12	G3/8	33,0	20,5	17,5
100511248	●	12	G1/2	38,0	22,0	17,5



Tee Banjo Body

Model		O/D Tube (ØA)	Bolt Thread (B)	C	G	ØK
100710405	●	4	M5	37,5	12,5	9,5
100710418	●	4	G1/8	41,0	14	11,0
100710605	●	6	M5	41,5	12,5	11,5
100710618	●	6	G1/8	47,5	14	12,5
100710628	●	6	G1/4	48,5	16	13,0
100710818	●	8	G1/8	47,5	14	14,0
100710828	●	8	G1/4	49,5	16	14,0

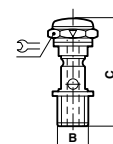


Banjo Bolt Non-Regulating Single Stacking

Model		Metric & BSPP Thread (B)	C	ØS	
20A000005	●	M5	22	2,5	8
20A000018	●	G1/8	29	5,0	14
20A000028	●	G1/4	33	8,5	17
20A000038	●	G3/8	41	10,0	22
20A000048	●	G1/2	49	11,5	27

PNEUFIT PUSH-IN FITTINGS

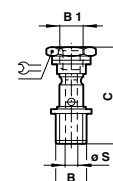
Metric Ø 4 ... 14 mm O/D tube



Regulating Out Banjo Bolts Single Stacking

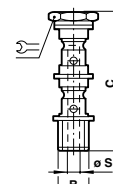
(SCREWDRIVER ADJUSTABLE)					
		Metric & BSPP			
Model		Flow	Thread (B)	C	
20K000018		Reg out	G1/8A	34,0	14
20K000028		"	G1/4A	36,5	17
20L000005		Reg in	M5	27,5	8
20L000018		"	G1/8A	34,0	14
20L000028		"	G1/4A	36,5	17
20L000038		"	G3/8A	51,5	22
20M000018		Bi direc	G1/8A	34,0	14
20M000028		"	G1/4A	36,5	17
20M000048		"	G1/2A	57,0	27

Pressure rating on this item 10 bar.



Banjo Bolt Non-Regulating Single Stacking

WITH TOP PORT (BSP PARALLEL)						
Model		Port Thread (B)	Bolt Thread (B1)	C	ØS	
20E001818		G1/8	G1/8	36,0	5,0	14
20F002828		G1/4	G1/4	45,0	8,5	17
20G003838		G3/8	G3/8	52,0	10,0	22



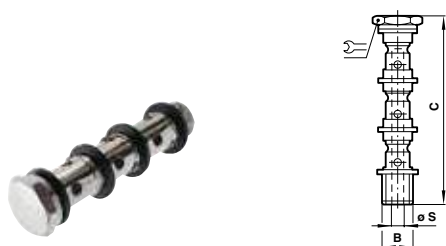
Banjo Bolt Non-Regulating Double Stacking

Model		Metric & BSPP Thread (B)	C	ØS	
20B000005	●	M5	34,5	2,5	8
20B000018	●	G1/8	46,5	5,0	14
20B000028	●	G1/4	52,5	8,5	17
20B000038	●	G3/8	64,0	10,0	22
20B000048	●	G1/2	72,5	11,5	27

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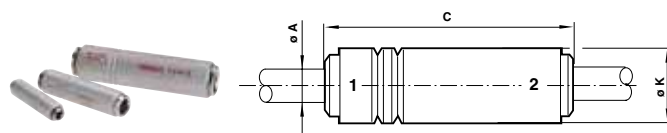
PNEUFIT PUSH-IN FITTINGS

Metric Ø 4 ... 14 mm O/D tube



Banjo Bolt Non-Regulating Triple Stacking

Model		BSPP Thread (B)	C	ØS	
20C000018	●	G1/8	63,0	5,0	14
20C000028	●	G1/4	71,5	8,5	17
20C000038	●	G3/8	87,0	10,0	22



PIF Non-Return Valve

Model		O/D Tube ØA	C	ØK
T50P0004	●	4	49	11
T50P0006	●	6	56,5	13
T50P0008	●	8	61	15
T50P0010	●	10	77,5	20
T50P0012	●	12	88,5	22

EXPRESS LINKS

Pilot operated
check valves...

See page 116



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MINIATURE PNEUFIT M COMPOSITE FITTINGS

Metric 3, 4, 6mm O/D tube



IMI Norgren Pneufit® M fittings are ready to use, offering fast assembly with no need for tools and providing optimum flow

Releasable stainless-steel grab ring to grip nylon or polyurethane tube (85 or 95 durometer)

Nickel plated brass components provide corrosion and contamination resistance and an extended life

Pre applied thread sealant on all taper threads and recessed captive O-ring on parallel threads provides optimum rapid sealing

Immediate quality sealing using silicone free U-packing

Miniature Pneufit® M is an ultra compact alternative where space is at a premium

MATERIALS

Body: PBT

Seals: NBR (silicone free)

Threaded bodies: nickel plated brass

Release sleeve and backing ring: POM

Grab ring: stainless steel

Collar: nickel plated brass

Thread sealant: Threebond 2350B

TECHNICAL DATA

Medium:

Compressed air

Operating pressure:

750 mm Hg vacuum, up to 10 bar

Ambient temperature:

0°C ... 60°C

Consult our Technical Service for use below +2°C

Thread sizes:

M3, M5 and 1/8" ISORc

Tubing:

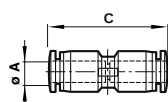
Nylon 11 or 12

Polyurethane 85 to 98 Shore A hardness

(33 to 52 Shore D)

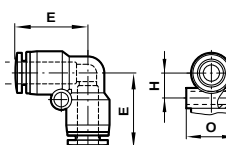
Tube sizes:

3, 4, and 6 mm



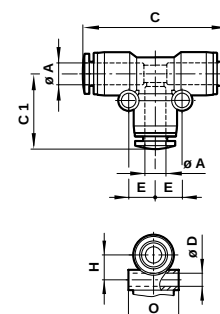
Straight union

Model		O/D Tube ØA	C
M00200300	●	3	23,5
M00200400	●	4	26
M00200600	●	6	26,5



Union elbow

Model		O/D Tube ØA	ØD	E	H	O
M00400300	●	3	3,2	13,5	5,5	7,5
M00400400	●	4	3,2	14,5	6	8,5
M00400600	●	6	3,2	16,5	7	10,5



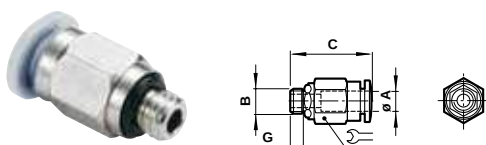
Union tee

Model		O/D Tube ØA	C	C1	ØD	E	H	O
M00600300	●	3	26,5	13,5	3,2	5,5	5,5	7,5
M00600400	●	4	28,5	14,5	3,2	6	6	8,5
M00600600	●	6	33,0	16,5	3,2	7	7	10,5

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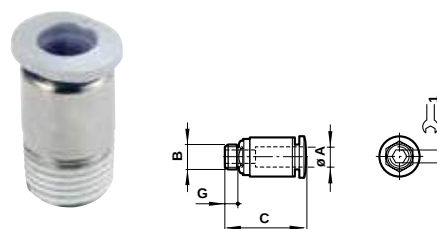
MINIATURE PNEUFIT M COMPOSITE FITTINGS

Metric Ø 3 ... 6 mm O/D tube



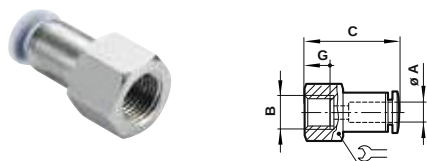
**Straight Adaptor
(external + internal hex)**

Model	O/D Tube ØA	Metric & BSPT Thread B	C	G	
M02250303	3	M3	17	4	7
M02250305	3	M5	17,5	4,5	8
M02250306	3	M6	18	5	8
M02250403	4	M3	17,5	4	8
M02250405	4	M5	18	4,5	8
M02250406	4	M6	19	5	8
M01250418	4	R1/8	19	6	12
M02250605	6	M5	19,5	4,5	10
M02250606	6	M6	20	5	10
M01250618	6	R1/8	19,5	8	12



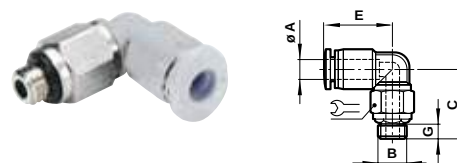
**Straight adaptor
(internal hex only)**

Model	O/D Tube ØA	Metric & BSPT Thread B	C	G	
M022A0303	3	M3	17	4	1,5
M022A0305	3	M5	17,5	4,5	2
M022A0306	3	M6	18	5	2
M022A0403	4	M3	17,5	4	1,5
M022A0405	4	M5	19	4,5	2,5
M022A0406	4	M6	19	5	3
M012A0418	4	R1/8	17,5	8	3
M022A0605	6	M5	19,5	4,5	2,5
M022A0606	6	M6	20	5	3
M012A0618	6	R1/8	19,5	8	2,5



**Straight adaptor
(female thread)**

Model	O/D Tube ØA	Metric & BSPT Thread B	C	G	
M02260303	3	M3	17,5	4	8
M02260305	3	M5	19	6	8
M02260306	3	M6	19	6	8
M02260403	4	M3	18	4	8
M02260405	4	M5	19,5	6	8
M02260406	4	M6	19,5	6	8
M01260418	4	Rc1/8	23	8,5	12
M02260605	6	M5	21,5	6	10
M02260606	6	M6	21,5	6	10
M01260618	6	Rc1/8	25,5	8,5	12



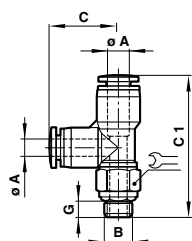
90° Swivel elbow adaptor

Model	O/D Tube ØA	Metric & BSPT Thread B	C	E	G	
M02470303	3	M3	16	13,5	3	8
M02470305	3	M5	17	13,5	4	8
M02470306	3	M6	17	13,5	4	8
M02470403	4	M3	16	14,5	3	8
M02470405	4	M5	17	14,5	4	8
M02470406	4	M6	17	14,5	4	8
M01470418	4	R1/8	18	14,5	6	14
M02470605	6	M5	17	15,5	3,5	8
M02470606	6	M6	17	15,5	4	8
M01470618	6	R1/8	18	15,5	5	14

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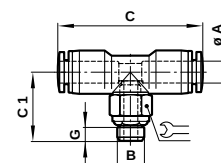
MINIATURE PNEUFIT M COMPOSITE FITTINGS

Metric Ø 3 ... 6 mm O/D tube



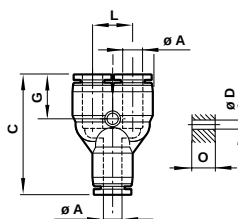
Swivel side tee adaptor

Model	O/D Tube ØA	Metric & BSPT Thread B	C	C1	G	
M02680303	3	M3	13,5	29,5	3	8
M02680305	3	M5	13,5	30	4	8
M02680306	3	M6	13,5	30,5	4	8
M02680403	4	M3	14	30,5	3	8
M02680405	4	M5	14	31	3,5	8
M02680406	4	M6	14	31,5	4	8
M01680418	4	R1/8	14	31,5	6	14
M02680605	6	M5	16,5	33,5	3,5	8
M02680606	6	M6	16,5	34	4	8
M01680618	6	R1/8	16,5	33,5	6	14



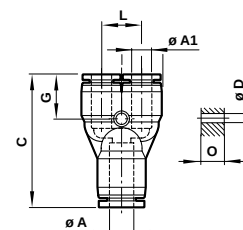
Swivel tee adaptor

Model	O/D Tube ØA	Metric & BSPT Thread B	C	E	G	
M02670303	3	M3	25,5	16	3	8
M02670305	3	M5	29	17	4	8
M02670306	3	M6	27	17	4	8
M02670403	4	M3	28,5	16	3	8
M02670405	4	M5	28,5	17	3,5	8
M02670406	4	M6	29	17	4	8
M01670418	4	R1/8	29	18	6	14
M02670605	6	M5	31	17	3,5	8
M02670606	6	M6	31	17	4	8
M01670618	6	R1/8	31	18	6	14



Union Y (equal)

Model	O/D Tube ØA	C	ØD	G	L	O
M00820300	3	27	3,2	11	8	7,5
M00820400	4	28	3,2	11,5	9,5	8,5
M00820600	6	31	3,2	12	11,5	11



Union Y (unequal)

Model	O/D Tube ØA	O/D Tube ØA1	C	ØD	G	L	O
M00820403	4	3	27,5	3,2	11	8	8,5
M00820603	6	3	28,5	3,2	11	8	11
M00820604	6	4	29	3,2	11,5	9	11

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PNEUFIT S STAINLESS STEEL PUSH IN FITTINGS

Ø 4mm ... 12mm O/D tube

Resistant to aggressive environments

Suitable for food and beverage applications

Very compact units

Easy tube insertion and removal for rapid assembly of pneumatic circuits

Positive tube anchorage

Straight adaptors feature internal hexagon for allen key

Swivel function on all elbows and tees



TECHNICAL DATA

Medium:

Compressed air

For other media please consult Technical Department

Operating pressure:

Vacuum ... 15 bar

(dependent upon operating specification of tubing)

Vacuum:

-750mm of Hg i.e. 99%

Operating temperature:

-15°C ... 225°C

Tube sizes:

4, 6, 8, 10, 12 mm O/D

Thread sizes:

BSPT, BSPP, Metric M5

Tubing types:

Nylon 6, 11 or 12, Polyurethane 85 to 98 Shore A hardness (33 to 52 Shore D) and PTFE tubing

MATERIALS

Body, release sleeve and grab ring:

Aisi 316L (1.4404) stainless steel

'O' ring and thread seal (BSPP):

FKM

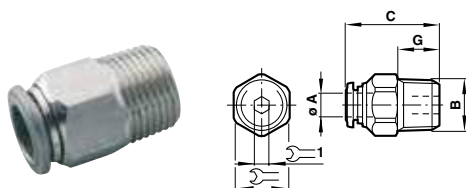
Lubricants:

FDA approved

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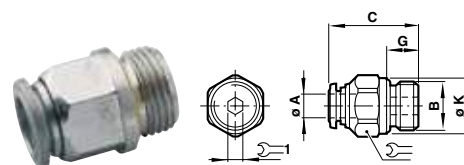
PNEUFIT S STAINLESS STEEL PUSH IN FITTINGS

Ø 4 ... 12 mm O/D tube



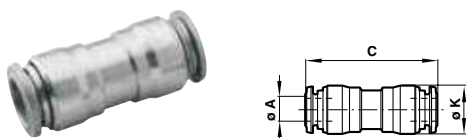
Straight adaptor, BSP taper

Model		ØA	B	C	G		 1
S01250418		4	R1/8	19	7,5	10	3
S01250428		4	R1/4	23	11	14	3
S01250618		6	R1/8	22,5	7,5	13	4
S01250628		6	R1/4	24,5	11	14	4
S01250818		8	R1/8	25,5	7,5	14	5
S01250828		8	R1/4	25	11	14	6
S01251028		10	R1/4	30,5	11	17	7
S01251038		10	R3/8	28	11,5	17	8
S01251238		12	R3/8	33,5	11,5	21	9
S01251248		12	R1/2	32	14	22	10



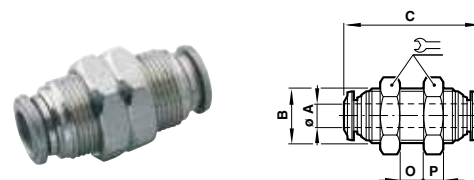
Straight adaptor, BSP parallel

Model	ØA	B	C	G	ØK		 1
S02250405 	4	M5	20	4	8	10	2
S02250418 	4	G1/8	19,5	6	13	10	3
S02250428 	4	G1/4	19,5	8	15	15	3
S02250618 	6	G1/8	23,5	6	13	13	4
S02250628 	6	G1/4	23,5	8	15	15	4
S02250818 	8	G1/8	25,5	6	13	14	5
S02250828 	8	G1/4	23,5	8	15	15	6
S02251028 	10	G1/4	30	8	16	17	8
S02251038 	10	G3/8	27	9	20	17	8
S02251238 	12	G3/8	24	9	21	21	8
S02251248 	12	G1/2	31	10	25	22	10



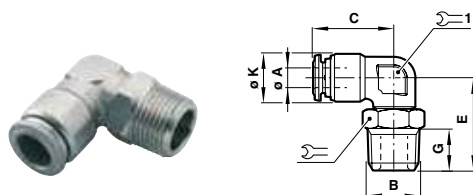
Straight connector, tube to tube

Model	ØA	C	ØK
S00200400	4	31,0	10,5
S00200600	6	35,0	12,5
S00200800	8	36,5	14,5
S00201000	10	42,0	17,5
S00201200	12	48,0	20,5



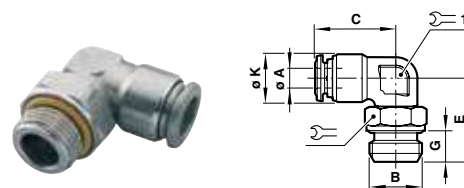
Bulkhead connector, tube to tube

Model	ØA	B	C	O max.	P	1
S00290400	4	M12 x 1	31	7,0	4,5	17
S00290600	6	M14 x 1	35	9,5	5,0	17
S00290800	8	M16 x 1	37	10,5	5,5	19
S00291000	10	M20 x 1	42	12,5	6,0	24
S00291200	12	M22 x 1	48	16,5	6,0	26



90° Swivel elbow adaptor, BSP taper

Model		ØA	B	C	E	G	ØK		 1
S01470418		4	R1/8	18	17,5	7,5	10	11	9
S01470428		4	R1/4	18	21,5	11	10	14	9
S01470618		6	R1/8	21	19,5	7,5	12,5	11	11
S01470628		6	R1/4	21	23,5	11	12,5	14	11
S01470818		8	R1/8	22,5	20	7,5	14,5	11	12
S01470828		8	R1/4	22,5	24	11	14,5	14	12
S01471028		10	R1/4	26	25,5	11	17,5	17	16
S01471038		10	R3/8	26	27	11,5	17,5	17	16
S01471048		10	R1/2	26	30,5	14	17,5	22	16
S01471238		12	R3/8	30,5	30,5	11,5	20,5	18	19
S01471248		12	R1/2	30,5	33	14	20,5	22	19



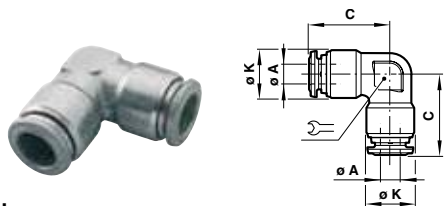
90° Swivel elbow adaptor, BSP parallel

Model	ØA	B	C	E	G	ØK		 1
S02470405 	4	M5	18	15	4	10	8	9
S02470418 	4	G1/8	18	17	6	10	13	9
S02470428 	4	G1/4	18	19,5	8	10	15	9
S02470618 	6	G1/8	21	19	6	12,5	13	11
S02470628 	6	G1/4	21	21,5	8	12,5	15	11
S02470818 	8	G1/8	22,5	19,5	6	14,5	13	12
S02470828 	8	G1/4	22,5	21,5	8	14,5	15	12
S02471028 	10	G1/4	26	23	8	17,5	15	16
S02471038 	10	G3/8	26	26,5	9	17,5	21	16
S02471048 	10	G1/2	26	29	10	17,5	22	16
S02471238 	12	G3/8	30,5	29	9	20,5	21	19
S02471248 	12	G1/2	30,5	31,5	10	20,5	22	19

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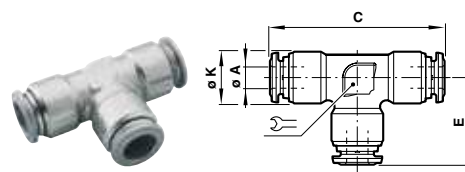
PNEUFIT S STAINLESS STEEL PUSH IN FITTINGS

Ø 4 ... 12 mm O/D tube



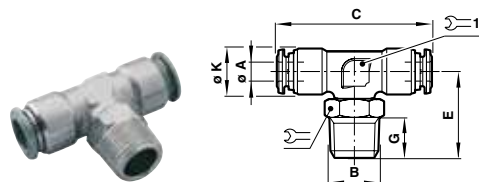
Elbow connector

Model		ØA	C	ØK	
S00400400	●	4	18	10	9
S00400600	●	6	21	12,5	11
S00400800	●	8	22,5	14,5	12
S00401000	●	10	26	17,5	16
S00401200	●	12	30,5	20,5	19



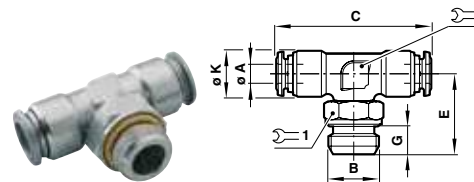
Tee connector, tube x 3

Model		ØA	C	E	ØK	
S00600400	●	4	36	18	10	9
S00600600	●	6	42	21	12,5	11
S00600800	●	8	45	22,5	14,5	12
S00601000	●	10	52	26	17,5	16
S00601200	●	12	61	30,5	20,5	19



Swivel tee adaptor, BSP taper

Model		ØA	B	C	E	G	ØK		1
S01670418	●	4	R1/8	36	18,5	7,5	10	9	11
S01670428	●	4	R1/4	36	22,5	11	10	9	14
S01670618	●	6	R1/8	42	19,5	7,5	12,5	11	11
S01670628	●	6	R1/4	42	23,5	11	12,5	11	14
S01670818	●	8	R1/8	45	20,5	7,5	14,5	12	11
S01670828	●	8	R1/4	45	24,5	11	14,5	12	14
S01671028	●	10	R1/4	52	26	11	17,5	16	17
S01671038	●	10	R3/8	52	27,5	11,5	17,5	16	17
S01671048	●	10	R1/2	52	31	14	17,5	16	22
S01671238	●	12	R3/8	61	30,5	11,5	20,5	19	18
S01671248	●	12	R1/2	61	33	14	20,5	19	22



Swivel tee adaptor, BSP parallel

Model		ØA	B	C	E	G	ØK		1
S02670405	●	4	M5	36	15	4	10	9	8
S02670418	●	4	G1/8	36	18	6	10	9	13
S02670428	●	4	G1/4	36	20,5	8	10	9	15
S02670618	●	6	G1/8	42	19	6	12,5	11	13
S02670628	●	6	G1/4	42	21,5	8	12,5	11	15
S02670818	●	8	G1/8	45	20	6	14,5	12	13
S02670828	●	8	G1/4	45	22	8	14,5	12	15
S02671028	●	10	G1/4	52	23,5	8	17,5	16	15
S02671038	●	10	G3/8	52	27	9	17,5	16	21
S02671048	●	10	G1/2	52	29,5	10	17,5	16	22
S02671238	●	12	G3/8	61	29	9	20,5	19	21
S02671248	●	12	G1/2	61	19	10	20,5	19	22

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PNEUFIT D COMPOSITE FITTINGS

Metric 4mm ... 12mm O/D tube



Pneufit® D offers a broad range of fittings to compliment the popular Pneufit C, Pneufit M and Pneufit Metal ranges

Pneufit® D fittings are manufactured from FDA approved acetal material, and are certified by NSF (51 & 61), WRAS and SKZert for use with water and food

IMI Norgren Pneufit® D fittings are ready to use, offering fast assembly with no need for tools providing optimum flow

Releasable stainless-steel grab-ring to grip nylon or polyurethane tube

Appropriate for inert gas and industrial air applications

Suited for use in medical and analytical equipment for fluid and gas control

Other shapes available, contact your Express Team for details

MATERIALS

Body:

Acetal

Seals:

NBR

Release sleeve:

Acetal

Grab ring:

Stainless steel

TECHNICAL DATA

Medium:

Air and liquids

Operating pressure:

749,3 mmHg vacuum up to:

4 mm ... 8 mm, -20°C ... +20°C ; 15 bar

10 mm ... 12 mm, -20°C ... +20°C ; 12 bar

4 mm ... 8 mm, +20°C ... +65°C ; 10 bar

10 mm ... 12 mm, +20°C ... +65°C ; 7 bar

Temperature:

-20°C ... 65°C

Tube sizes:

4, 5, 6, 8, 10, 12 mm

Thread sizes:

1/8, 1/4, 3/8, 1/2 inch

BSPT, BSPP, UNF and UNS types

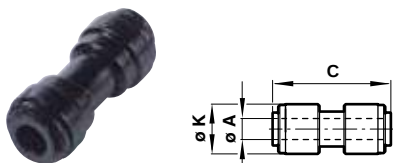
Tube types:

Nylon, Polyurethane 85 to 98 Shore A hardness (33 to 52 Shore D), Polyethylene

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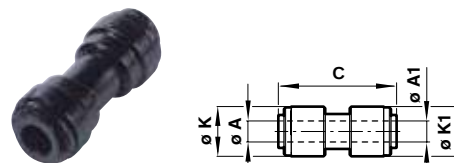
PNEUFIT D COMPOSITE FITTINGS

Ø 4 ... 12 mm O/D tube



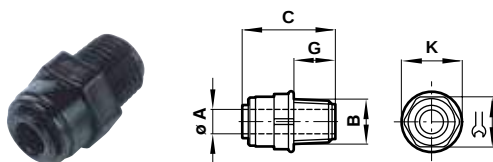
Straight union

Model	ØA	C	ØK
D00200400	4	34,5	13,0
D00200600	6	35,5	15,0
D00200800	8	41,0	17,5
D00201000	10	41,5	20,0
D00201200	12	50,0	23,0



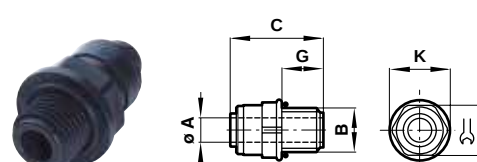
Straight union (unequal)

Model	ØA	ØA1	C	ØK	ØK1
D00200604	6	4	34,5	15,0	15,0
D00200804	8	4	42,0	17,5	13,0
D00200806	8	6	41,0	17,5	17,5
D00201004	10	4	37,5	20,0	13,0
D00201006	10	6	41,0	20,0	20,0
D00201008	10	8	41,0	20,0	20,0
D00201208	12	8	49,0	23,0	23,0
D00201210	12	10	49,5	23,0	23,0



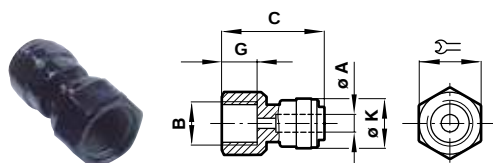
Straight adaptor (taper)

Model	ØA	B	C	G	ØK	
D01250418	4	R1/8	23,5	9,5	14,0	9/16
D01250618	6	R1/8	26,0	9,5	15,0	11/16
D01250628	6	R1/4	28,0	13,5	15,0	11/16
D01250828	8	R1/4	26,5	13,5	17,5	13/16
D01250838	8	R3/8	28,5	13,5	17,5	13/16
D01251038	10	R3/8	33,0	13,5	20,0	13/16
D01251048	10	R1/2	36,5	17,5	20,0	1
D01251238	12	R3/8	34,5	14,0	23,0	1
D01251248	12	R1/2	34,5	17,5	23,0	1



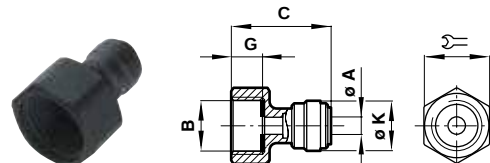
Straight adaptor (parallel)

Model	ØA	B	C	G	ØK	
D02250418	4	G1/8	23,5	6,5	14,0	9/16
D02250618	6	G1/8	26,0	6,5	17,0	9/16
D02250628	6	G1/4	28,0	8,0	16,5	11/16
D02250828	8	G1/4	26,5	8,0	20,0	1
D02250838	8	G3/8	28,5	10,0	20,0	13/16
D02251038	10	G3/8	29,0	10,0	24,5	13/16
D02251048	10	G1/2	33,5	13,5	24,5	1
D02251238	12	G3/8	34,5	13,5	24,5	13/16
D02251248	12	G1/2	34,5	13,5	24,5	1



Female adaptor (taper)

Model	ØA	B	C	G	ØK	
D012C0618	6	Rc1/8	31,0	11,5	15,0	3/4
D012C0628	6	Rc1/4	31,0	11,5	15,0	3/4
D012C0828	8	Rc1/4	33,0	11,5	17,5	3/4
D012C1028	10	Rc1/4	35,5	11,5	20,0	3/4



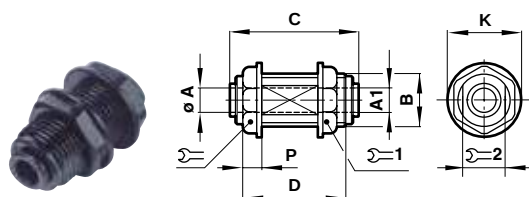
Female adaptor (flat type)

Model	ØA	B	C	G	ØK	
D022C1048	10	G1/2	41,0	10,5	20,0	1
D022C1238	12	G3/8	41,5	10,5	23,0	1
D022C1248	12	G1/2	41,5	10,5	23,0	1

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PNEUFIT D COMPOSITE FITTINGS

Ø 4 ... 12 mm O/D tube



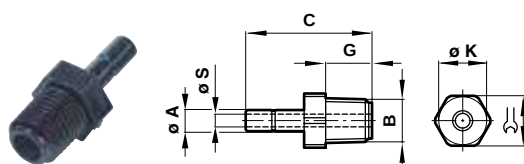
Bulkhead union

Model	ØA	ØA1	B	C	D	ØK	P		 1	 2
D00290400	 4	4	M16 X 1	33,0	30,5	22,5	5,5	3/4	13/16	14,5
D00290600	 6	6	M16 x 1	35,0	32,0	22,5	5,5	3/4	13/16	14,5
D00290800	 8	8	M20 x 1,5	40,0	37,0	26,5	6,5	7/8	1	19,5
D00291000	 10	10	M20 x 1,5	40,5	37,5	26,5	6,5	7/8	1	19,5
D00291200	 12	12	M27 x 1,5	49,5	45,0	14,0	8,0	11/8	15/16	14,5



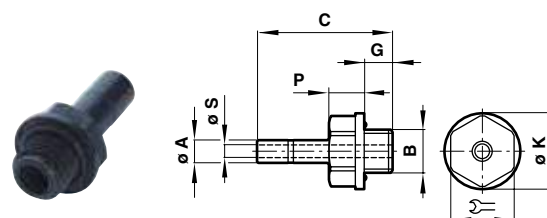
Stem reducer (stem/tube)

Model	ØA	ØA1	C	F	G	ØK1
D00230604	6	4	33,5	18,0	11,5	13,5
D00230804	8	4	34,5	18,5	11,5	13,5
D00230806	8	6	37,0	19,0	13,5	15,0
D00231006	10	6	40,5	27,0	13,5	15,0
D00231008	10	8	41,0	22,5	13,5	18,0
D00231208	12	8	40,0	25,5	13,5	18,0
D00231210	12	10	48,0	25,5	15,5	20,0



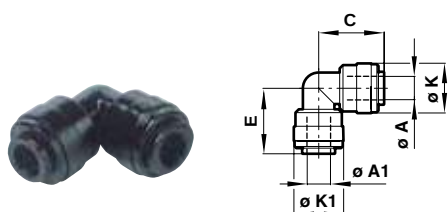
Stem adaptor (stem/tube)

Model	ØA	B	C	G	K	ØS	1
D01150418	4	R1/8	33,0	10,0	15,0	2,5	9/16
D01150618	6	R1/8	34,0	10,0	15,0	4,3	9/16
D01150628	6	R1/4	38,0	14,0	18,0	4,3	11/16
D01150828	8	R1/4	39,5	14,0	18,0	4,8	11/16
D01150838	8	R3/8	39,5	14,0	22,0	4,8	13/16
D01151038	10	R3/8	43,0	14,0	22,0	6,5	13/16
D01151048	10	R1/2	46,0	17,5	27,0	6,7	1
D01151248	12	R1/2	51,0	19,0	28,0	6,7	1



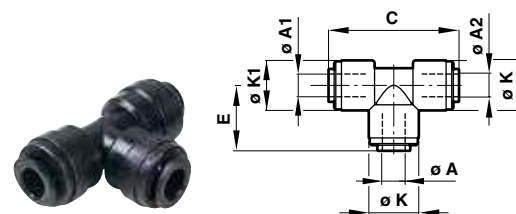
Stem adaptor (BSPP)

Model	ØA	B	C	G	K	P	ØS	1
D02150418	4	G1/8	30,5	6,5	17,0	8,0	2,5	9/16
D02150618	6	G1/8	32,0	6,5	17,0	8,0	4,3	9/16
D02150628	6	G1/4	35,5	10,0	20,5	8,0	4,3	11/16
D02150828	8	G1/4	36,5	10,0	20,5	8,0	4,8	1
D02150838	8	G3/8	37,0	10,0	26,5	8,0	4,8	13/16
D02151038	10	G3/8	39,5	9,0	26,5	8,0	6,5	13/16
D02151048	10	G1/2	44,0	13,5	29,0	8,1	6,7	1
D02151248	12	G1/2	47,0	13,5	29,0	8,1	9,5	1



Union elbow

Model	ØA	ØA1	C	E	ØK	ØK1
D00400400	4	4	17,5	17,5	13,0	13,0
D00400600	6	6	20,0	20,0	15,0	15,0
D00400800	8	8	21,0	21,0	17,5	17,5
D00401000	10	10	25,5	25,5	19,5	19,5
D00401200	12	12	31,0	31,0	22,5	22,5



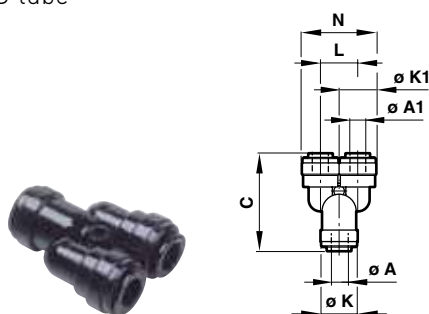
Union tee

Model	ØA	ØA1	ØA2	C	E	ØK	ØK1
D00600400	4	4	4	35,0	17,5	13,0	13,0
D00600600	6	6	6	39,0	19,5	15,0	15,0
D00600800	8	8	8	42,0	21,0	17,5	17,5
D00601000	10	10	10	50,0	25,0	19,5	19,5
D00601200	12	12	12	60,0	30,0	23,0	23,0

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PNEUFIT D COMPOSITE FITTINGS

Ø 4 ... 12 mm O/D tube



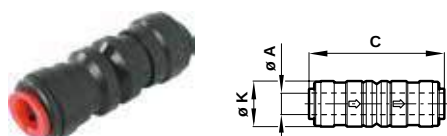
Union Y (equal)

Model	ØA	ØA1	C	ØK	ØK1	L	N
D00820400	4	4	39,0	13,0	13,0	12,5	30,0
D00820600	6	6	39,0	15,0	15,0	15,0	30,0
D00820800	8	8	43,5	17,5	17,5	17,0	34,5
D00821008	10	8	48,5	20,0	17,5	17,0	39,5
D00821000	10	10	48,5	20,0	20,0	20,0	39,5
D00821210	12	10	56,5	20,0	23,0	23,0	46,0
D00821200	12	12	56,5	23,0	23,0	23,0	46,0



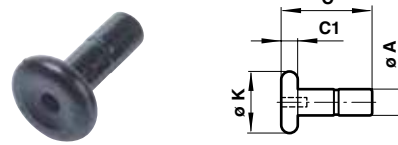
3 way splitter

Model	ØA	ØA1	C	C1	C2	D	E	ØK	ØK1	O
D00911006	10	6	58,5	51,5	38,5	4,3	10,0	20,0	15,0	0,85
D00911210	12	10	71,5	67,0	48,0	4,3	14,0	23,0	19,9	0,85



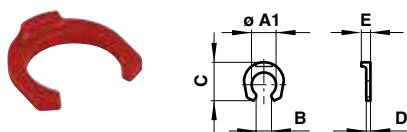
Check valve

Model	ØA	C	ØK
D00GL0600	6	45,5	15,0
D00GL0800	8	47,5	17,5
D00GL1000	10	53,0	20,0
D00GL1200	12	60,5	23,0



Plug

Model	ØA	C	C1	ØK
D00040400	4	19,5	3,0	12,5
D00040600	6	22,0	4,0	15,0
D00040800	8	23,0	4,0	17,0
D00041000	10	26,5	4,0	19,0
D00041200	12	30,0	4,0	21,0



Locking clip

Model	ØA	ØA1	B	C	D	E
D0LC0600	6	8,2	5,1	15,0	1,4	3,0
D0LC1200	12	14,5	11,1	21,0	2,6	4,5

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

FLEETFIT VEHICLE PUSH-IN FITTINGS

Metric 6mm ... 16mm O/D tube



Simple tube connection and disconnection – no tools required

Fewer component parts – Internally machined form in body to secure collet reduces number of potential leak paths

Corrosion resistant

Easy identification – All collets marked with tube size

Reduced assembly and maintenance times provide time/labour savings

Greater reliability and reduced testing

Ease of tube insertion in areas of restricted access

Comply with relevant standards and legislation

MATERIALS

Body (straights), tube support, collet:

Brass BS 2874 CZ 121

Body (elbows, tees):

Brass BS 2874 CZ 122

'O' Ring:

Buna N (low nitrile)

Thread sealant:

Precoat 5

TECHNICAL DATA

Operating Medium:

Compressed air

Maximum working pressure:

0 ... 10 bar

Working temperature:

–40°C ... 100°C

Tubing:

Tube should be to DIN 74324

STANDARDS & LEGISLATION

Fittings and tubing comply to department of transport
Federal motor vehicle safety standard,
(DOT FMVSS 106)

(Mandatory requirements for Inch tube fittings in U.S.A.)

Society for automotive engineers SAE J1131
(inch tube and fittings)

German TUV approval and DIN 74324
(metric tube and fittings)

APPLICATIONS

As a connector on all air brake systems at locations
other than between chassis frame and axle or between
towed and towing vehicle.

Also as a connector on all air operated systems
as applicable to suspension, steering, engine,
transmission and auxiliary mechanisms

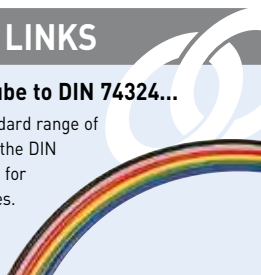
NOTE: This range of fittings has been designed to
meet the extreme demands of use on board vehicles
and as such has been validated by IMI Precision
Engineering to the standards listed above. If you have
concerns over your application or need advice on
the correct selection of product please consult
IMI Precision Engineering technical service.

EXPRESS LINKS

IMI Norgren tube to DIN 74324...

IMI Norgren's standard range of
tubing complies to the DIN
standards required for
commercial vehicles.

See page 301

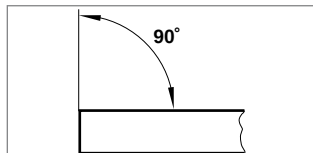


For further information, visit store.norgren.com
and use the new improved search function. If you cannot
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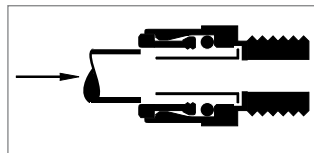
FLEETFIT Vehicle Push-In Fittings

Metric 6mm ... 16mm O/D tube

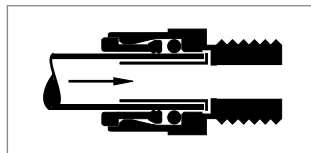
METHOD OF INSTALLATION – TECHNICAL TIP



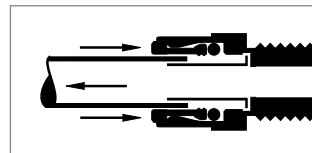
1 Ensure that the end of the tube is cut square and is free from burrs.



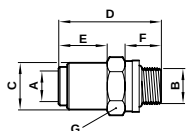
2 Push the tube through the collet into the fitting.



3 Continue pushing the tube through the 'O' ring until it bottoms on the tube stop. Then pull back on the tube to reinforce the collet teeth gripping action.

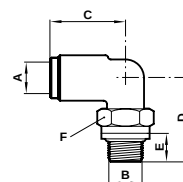


4 To disconnect – First ensure there is no air present. Push the tube into the fitting until it bottoms on the tube stop. Then hold down the collet and withdraw the tube.



Straight Adaptor

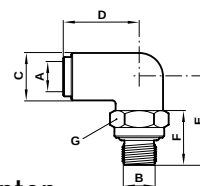
Model		O/D Tube ØA	Thread B	ØC	D	E	F	A/F G
97466631	●	6	M10x1,0	13,0	28,5	13,5	8,0	14
97466633	●	6	M12x1,5	13,0	30,5	11,5	10,0	17
97466635	●	6	M12x1,5	13,0	27,5	7,5	10,0	22
97466643	●	8	M12x1,5	15,0	31,5	12,5	10,0	17
97466644	●	8	M14x1,5	15,0	31,5	13,5	10,0	19
97466645	●	8	M16x1,5	15,0	31,5	11,5	10,0	22
97466648	●	8	M22x1,5	15,0	30,5	5,0	12,0	27
97466653	●	10	M12x1,5	16,8	35,0	16,0	10,0	17
97466655	●	10	M16x1,5	17,0	35,0	15,0	10,0	22
97466658	●	10	M22x1,5	17,0	31,0	5,5	12,0	27
97466663	●	12	M12x1,5	20,5	38,5	18,5	10,0	22
97466665	●	12	M16x1,5	20,5	39,0	19,0	10,0	22
97466668	●	12	M22x1,5	20,5	35,0	9,5	12,0	27
97466670	●	15	M22x1,5	26,0	45,0	19,5	12,0	27
97466675	●	16	M22x1,5	26,0	44,5	19,5	12,0	27
97466679	●	16	M16x1,5	26,0	42,5	19,5	10,0	27



Swivel Elbow Adaptor

Model		O/D Tube ØA	Thread B	C	D	E	A/F F
97452145	●	8	M16x1,5	12,6	25,8	12,6	25,8
97452153	●	10	M12x1,5	27,5	29,2	10,0	17
97452155	●	10	M16x1,5	27,5	29,9	10,0	22
97452165	●	12	M16x1,5	32,5	34,1	10,0	22

NOTE: These swivel fittings should be used for positioning purposes only and not be used as a rotating joint.



Universal Hobbs Elbow Adaptor

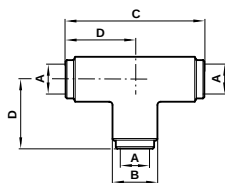
Model		O/D Tube ØA	Thread B	ØC	D	E	F	A/F G
97413833	●	6	M12x1,5	14,0	23,5	29,0	19,0	17
97413843	●	8	M12x1,5	17,5	25,5	31,5	19,0	17
97413845	●	8	M16x1,5	17,5	25,5	34,0	21,5	24
97413848	●	8	M22x1,5	26,0	28,5	41,5	25,0	30
97413853	●	10	M12x1,5	18,5	29,0	31,0	19,0	17
97413855	●	10	M16x1,5	18,5	29,0	33,5	21,5	24
97413858	●	10	M22x1,5	26,0	32,0	40,5	25,0	30
97413865	●	12	M16x1,5	22,0	32,0	35,5	21,5	24
97413868	●	12	M22x1,5	26,0	34,5	40,5	25,0	30
97413875	●	16	M22x1,5	26,0	38,0	40,5	25,0	30
97413879	●	16	M16x1,5	26,0	38,0	38,5	21,5	24

NOTE: These fittings can be positioned to suit the application and then locked in that position.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

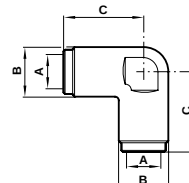
FLEETFIT Vehicle Push-In Fittings

Metric 6mm ... 16mm O/D tube



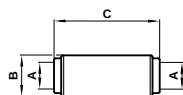
Equal Tee Connector

Model		O/D Tube ØA	ØB	C	D
97451404	●	6	13,0	42,0	21,0
97451405	●	8	15,0	45,6	22,8
97451413	●	9	14,0	54,2	27,1
97451406	●	10	17,0	54,2	27,1
97451436	●	11	1	59	29,5
97451407	●	12	20,5	64,2	32,1
97451415	●	15	27,0	77,0	38,5
97451408	●	16	27,0	78,0	39,0



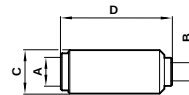
Equal Elbow Connector

Model		O/D Tube ØA	ØB	C
97451104	●	6	13,0	21,0
97451105	●	8	15,0	22,8
97451113	●	9	17,0	27,1
97451106	●	10	17,0	27,1
97451136	●	11	20,5	29,5
97451107	●	12	20,5	32,1
97451115	●	15	27,0	38,5
97451108	●	16	27,0	39,0



Equal Straight Connector

Model		O/D Tube ØA	ØB	C
97450304	●	6	13,0	35,6
97450305	●	8	15,0	37,6
97450313	●	9	17,0	44,1
97450306	●	10	17,0	44,1
97450336	●	11	19,0	46,1
97450307	●	12	20,5	51,1
97450392	●	14	22,0	50,2
97450315	●	15	25,4	61,5
97450308	●	16	25,4	61,5



Reducing Straight Connector

Model		O/D Tube ØA	O/D Tube ØB	C	D
97450447	●	8	6	15	38,5
97450448	●	10	6	17	43,5
97450456	●	10	8	17	43,5
97450464	●	12	10	20,5	49

EXPRESS PLUS

Additional ranges...

The selection of metric fittings listed in this catalogue form part of a wider range of vehicle push-in fittings for further details call the Express Team

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

PUSH-ON TUBE FITTING 24 Series

Metric $\varnothing$ 4/2,5 mm ... 15/12,5 mm OD/ID tube

Ideal for use on vacuum systems

For simple and quick connection of pneumatic circuits

Neat, compact design

Precision machined for complete reliability

Corrosion resistant

Unique barb shape ensures good grip on tube even if fitting is tightened by hand

Ideal for use in confined spaces where tight bend radii are required

Tubing nuts included



TECHNICAL DATA

Medium:

Compressed air.

Operating pressure:

Vacuum: -15 bar

(dependant on tube operating specification)

Ambient temperature:

-18°C ... +70°C

Tube sizes:

4/2,5 mm, 5/3 mm, 6/4 mm, 8/6 mm, 10/8 mm,
12/10 mm, 15/12,5 mm OD/ID

Tube types:

Nylon 11 and 12, polyurethane

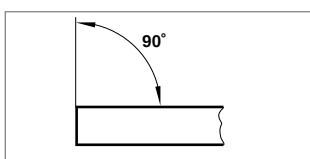
MATERIALS

Nut and body: Nickel plated brass to OT58 UNI 5705

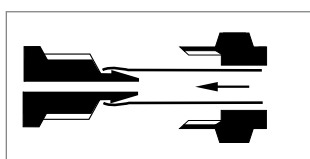
'O' ring: NBR 70

Sealing washer: Polyamide 66

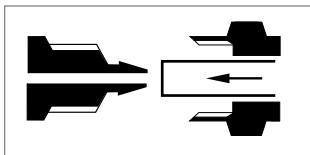
METHOD OF ASSEMBLY



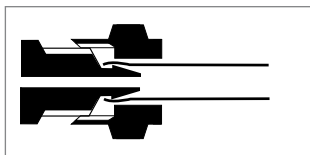
1 Ensure that the end of the tube is cut square and is free from burrs.



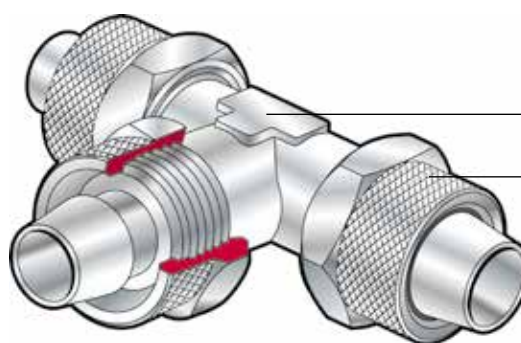
3 Push the tube over the barbed end of the fitting up to the tube stop.



2 Place the knurled nut over the tube.



4 Screw the knurled nut onto the fitting until finger tight. The hexagon on the nut is to aid release.



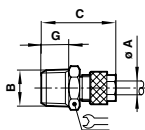
Body

Tubing nut

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

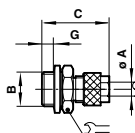
PUSH-ON TUBE FITTINGS 24 Series

Metric Ø 4/2,5 mm ... 15/12,5 mm OD/ID tube



Straight Male Adaptor

Model		O/D I/D Tube (ØA)	Male BSPT (B)	C	G	
241250418	●	4/2,5	R1/8	23	7,5	12
241250618	●	6/4	R1/8	25,5	7,5	12
241250628	●	6/4	R1/4	29,5	11	14
241250638	●	6/4	R3/8	30	11,5	17
241250818	●	8/6	R1/8	27	7,5	14
241250828	●	8/6	R1/4	31	11	14
241250838	●	8/6	R3/8	31,5	11,5	17
241250848	●	8/6	R1/2	34	14	22
241251018	●	10/8	R1/8	29	7,5	14
241251028	●	10/8	R1/4	33	11	14
241251038	●	10/8	R3/8	33,5	11,5	17
241251048	●	10/8	R1/2	36,5	14	22
241251238	●	12/10	R3/8	35	11,5	17
241251248	●	12/10	R1/2	38	14	22



Straight Male Adaptor

Model		O/D I/D Tube (ØA)	Male BSPP (B)	C	G	
242250405	●	4/2,5	M5	19,5	3	8
242250418	●	4/2,5	G1/8	21,5	4	13
242250605	●	6/4	M5	22	3	8
242250618	●	6/4	G1/8	24	4	13
242250638	●	6/4	G3/8	19	6	19
242250648	●	6/4	G1/2	24	7	24
242250818	●	8/6	G1/8	14	4	14
242250828	●	8/6	G1/4	17	5	17
242250838	●	8/6	G3/8	19	6	19
242250848	●	8/6	G1/2	24	7	24
242251018	●	10/8	G1/8	14	4	14
242251028	●	10/8	G1/4	17	5	17
242251038	●	10/8	G3/8	19	6	19
242251048	●	10/8	G1/2	24	7	24
242251238	●	12/10	G3/8	19	6	19
242251248	●	12/10	G1/2	24	7	24
242251548	●	15/12,5	G1/2	24	7	24

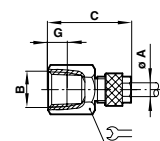
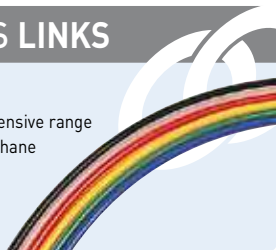
Supplied complete with sealing washer

EXPRESS LINKS

Tubing...

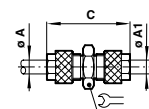
For our comprehensive range of nylon, polyurethane and weld tubing,

See page 301



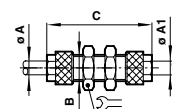
Straight Female Adaptor

Model		O/D I/D Tube (ØA)	Female BSPP (B)	C	G	
242260618	●	6/4	G1/8	23,5	7,5	14
242260628	●	6/4	G1/4	27	11	17
242260638	●	6/4	G3/8	28	11,5	22
242260818	●	8/6	G1/8	24,5	7,5	14
242260828	●	8/6	G1/4	28,5	11	17
242260838	●	8/6	G3/8	29	11,5	22
242260848	●	8/6	G1/2	33	15	24
242261028	●	10/8	G1/4	30,5	11	17
242261038	●	10/8	G3/8	33,5	11,5	22
242261048	●	10/8	G1/2	35,5	15	24



Straight Connector

Model		O/D I/D Tube (ØA)	O/D I/D Tube (ØA1)	C	
240200400	●	4/2,5	4/2,5	27,5	8
240200600	●	6/4	6/4	32	12
240200806	●	8/6	6/4	33,5	12
240200800	●	8/6	8/6	35	12
240201000	●	10/8	10/8	39	14
240201200	●	12/10	12/10	43	17



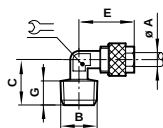
Bulkhead Connector

Model		O/D I/D Tube (ØA)	ØA1	B	C	
240290400	●	4/2,5	4/2,5	M6x0,5	39,5	9
240290600	●	6/4	6/4	M10x1	45,5	14
240290806	●	8/6	6/4	M12x1	47,5	17
240290800	●	8/6	8/6	M12x1	48,5	17
240291000	●	10/8	10/8	M14x1	54	17
240291200	●	12/10	12/10	M16x1	57	19

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

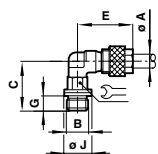
PUSH-ON TUBE FITTINGS 24 Series

Metric Ø 4/2,5 mm ... 15/12,5 mm OD/ID tube



Elbow Male Adaptor

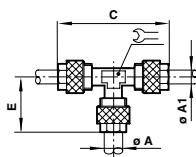
Model		O/D I/D Tube (ØA)	Male BSPT (B)	C	E	G	
241450418	●	4/2,5	R1/8	15	18,5	7,5	8
241450618	●	6/4	R1/8	15	18,5	7,5	8
241450628	●	6/4	R1/4	19	20,5	11	8
241450638	●	6/4	R3/8	20,5	21	11,5	9
241450818	●	8/6	R1/8	16,5	20	7,5	9
241450828	●	8/6	R1/4	19	22	11	9
241450838	●	8/6	R3/8	21	23,5	11,5	9
241450848	●	8/6	R1/2	28	23,5	14	16
241451018	●	10/8	R1/8	18	24	7,5	11
241451028	●	10/8	R1/4	22	24	11	11
241451038	●	10/8	R3/8	22	25,5	11,5	11
241451048	●	10/8	R1/2	16	28	25,5	11
241451238	●	12/10	R3/8	22,5	27	11,5	13
241451248	●	12/10	R1/2	28	27	14	16



Swivel Elbow Adaptor

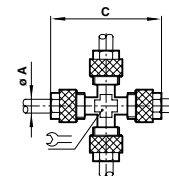
Model		O/D I/D Tube (ØA)	Male BSPP (B)	C	E	G	ØJ	
242470618	●	6/4	G1/8	20	20,5	4	14	14
242470628	●	6/4	G1/4	22	20,5	5	18	17
242470818	●	8/6	G1/8	20	21,5	4	14	14
242470828	●	8/6	G1/4	23	23	5	18	17
242471028	●	10/8	G1/4	24	24	5	18	17

Supplied complete with sealing washer



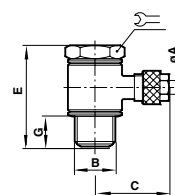
Tee Connector

Model		O/D I/D Tube (ØA)	(ØA1)	C	E	
240600400	●	4/2,5	4/2,5	38,5	19,5	8
240600600	●	6/4	6/4	41	20,5	8
240600806	●	8/6	6/4	44	20,5	9
240600800	●	8/6	8/6	44	22	9
240601006	●	10/8	6/4	51	20,5	11
240601008	●	10/8	8/6	51	22	11
240601000	●	10/8	10/8	51	25,5	11
240601200	●	12/10	12/10	54	28	13



Equal Cross Connector

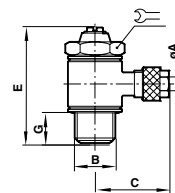
Model		O/D I/D Tube (ØA)	C	
240900600	●	6/4	41,5	8
240900800	●	8/6	44,5	9
240901000	●	10/8	51	11
240901200	●	12/10	58	13



Elbow Banjo Assembly Non-Regulating Bolt

Model		O/D I/D Tube (ØA)	Bolt Thread (B)	C	E	G	
24A510405	●	4/2,5	M5	16,5	18	4	8
24A510418	●	4/2,5	G1/8	23,5	27,5	6	14
24A510605	●	6/4	M5	16,5	18	4	8
24A510618	●	6/4	G1/8	23,5	27,5	6	14
24A510628	●	6/4	G1/4	25,5	30	8	17
24A510638	●	6/4	G3/8	27	30,5	9	19
24A510818	●	8/6	G1/8	24,5	27,5	6	14
24A510828	●	8/6	G1/4	27,5	30	8	17
24A510838	●	8/6	G3/8	27,5	30,5	9	19
24A511028	●	10/8	G1/4	29,5	30	8	17
24A511238	●	12/10	G3/8	31,5	30,5	9	19
24A511248	●	12/10	G1/2	35	31,5	10	24

Supplied complete with sealing washer



Banjo Flow Regulator Regulating Out

Model		O/D I/D Tube (ØA)	Bolt Thread (B)	C	E	G	
24K510405	●	4/2,5	M5	16,5	24	4	8
24K510418	●	4/2,5	G1/8	23,5	30,5	6	14
24K510605	●	6/4	M5	16,5	24	4	8
24K510618	●	6/4	G1/8	23,5	30,5	6	14
24K510628	●	6/4	G1/4	25,5	30,5	8	17
24K510818	●	8/6	G1/8	24,5	30,5	6	14
24K510828	●	8/6	G1/4	27,5	35,5	8	17
24K511028	●	10/8	G1/4	29,5	35,5	8	17

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

COMPRESSION FITTINGS EXTERNAL NUT 43 Series

Metric Ø 4 ... 22 mm O/D tube

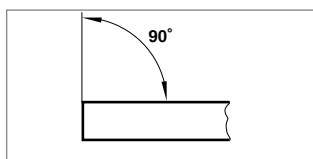


MATERIALS

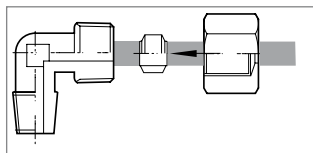
Brass to OT 58 UNI 5705 for all items, except sealing washers which are nylon

All brass items have a nickel plated finish unless otherwise stated

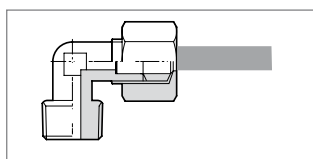
METHOD OF ASSEMBLY



- 1 Ensure that the tube is cut square and is free from fraze.



- 2 For larger sizes of metal tubes it is beneficial to lightly oil the tubing nut and sleeve before tightening the joint. Place the tubing nut and sleeve on the tube and push the tube into the fitting until it bottoms on the tube stop.



- 3 Holding the tube firmly in contact with the tube stop screw the tubing nut down finger tight and then tighten a further 11/4-11/2 full turns. Slacken off the assembly and ensure that the groove made by sleeve is even. Release nut and re-tighten nut an extra quarter turn.

Note

When fitting to curved tubes ensure that section entering the fitting is straight for a minimum of twice the nut height.

The method of preparation and assembly described will ensure leak-proof joints over a wide pressure range, depending upon the size and type of tubing being used. Failure to follow this guide, or over-tightening at any joint, may lead to damage of the fittings or an unsatisfactory seal.

Rugged and durable

Ideal for most industrial applications

Wide range of types and sizes

Thread sizes from 1/8" to 1" BSP

Supplied assembled with tubing sleeves, nuts and appropriate seals

TECHNICAL DATA

Medium:

These fittings are designed for use with compressed air, oils, water and other fluids used in pneumatic and low pressure hydraulic applications

Consult our Technical Service for details

Operating pressure:

The maximum working pressure is limited by the type of tubing being used

Ambient temperature:

The maximum working temperature is limited by the type of tubing being used

Tube sizes:

4, 6, 8, 10, 12, 14, 15, 16, 18, 22 mm O/D

Threads used on products conform to:

ISO 7,1 Taper BSP

ISO 228 Parallel BSP

ISO R/226 metric

Tube types:

Nylon 11 or 12 and other plasticised or unplasticised tubing and other soft plastic tubing

Copper, annealed and half-hard

Double wall brazed steel tube (Bundy)

EXPRESS LINKS

Tubing...

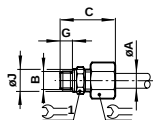
For our comprehensive range of nylon, polyurethane and weld tubing,

See page 301

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

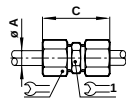
COMPRESSION FITTINGS EXTERNAL NUT 43 Series

Metric Ø 4 ... 22 mm O/D tube



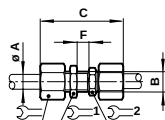
Straight Male Adaptor

Model		O/D Tube (ØA)	BSPP Thread (B)	C	G	ØJ	1	1
432250418	●	4	G1/8	26	7,5	14	10	13
432250618	●	6	G1/8	27	7,5	14	13	13
432250628	●	6	G1/4	30,5	9,5	18	13	17
432250818	●	8	G1/8	30	7,5	14	14	13
432250828	●	8	G1/4	32,5	9,5	18	14	17
432250838	●	8	G3/8	36,5	13	21	14	22
432251028	●	10	G1/4	35	9,5	18	19	17
432251038	●	10	G3/8	39	13	21	19	22
432251438	●	14	G3/8	39,5	13	21	24	22
432251448	●	14	G1/2	41,5	14,5	26	24	27
432252268	●	22	G3/4	48	15,5	33	36	32
432252288	●	22	G1	51	17,5	41	36	41



Straight Connector

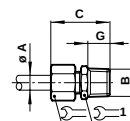
Model		O/D Tube (ØA)	C	1	1
430200400	●	4	33	10	10
430200600	●	6	36	13	11
430200800	●	8	40	14	13
430201000	●	10	45,5	19	16
430201200	●	12	46,5	22	18
430201400	●	14	47	24	21
430201500	●	15	51	24	21
430201600	●	16	52	27	22
430201800	●	18	54	30	26
430202200	●	22	57	36	30



Bulkhead Connector

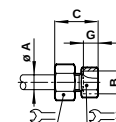
Model		O/D Tube (ØA)	B	C	F	1	1	2
430290400	●	4	M8x1,0	49	12	10	13	10
430290600	●	6	M10x1,0	53	12,5	13	14	13
430290800	●	8	M12x1,0	57	12,5	14	17	14
430291000	●	10	M16x1,5	64	13	19	22	19
430291200	●	12	M18x1,5	70	17	22	22	22
430291400	●	14	M20x1,5	72	19	24	24	24

Minimum bulkhead thickness 3,0 mm



Straight Male Adaptor

Model		O/D Tube (ØA)	BSPT Thread (B)	C	G	1	1
431250418	●	4	R1/8	26,5	7,5	10	10
431250428	●	4	R1/4	29,5	11	10	14
431250618	●	6	R1/8	28	7,5	13	11
431250628	●	6	R1/4	31,5	11	13	14
431250638	●	6	R3/8	32	11,5	13	17
431250818	●	8	R1/8	30	7,5	14	13
431250828	●	8	R1/4	33,5	11	14	14
431250838	●	8	R3/8	34	11,5	14	17
431251028	●	10	R1/4	36	11	19	16
431251038	●	10	R3/8	36,5	11,5	19	17
431251048	●	10	R1/2	38	13	19	21
431251228	●	12	R1/4	36,5	11	22	18
431251238	●	12	R3/8	37	11,5	22	18
431251248	●	12	R1/2	38,5	13	22	21
431251438	●	14	R3/8	38,5	11,5	24	20
431251448	●	14	R1/2	39,5	13	24	21
431251548	●	15	R1/2	39,5	13	24	21
431251648	●	16	R1/2	42	13	27	22
431251668	●	16	R3/4	43,5	14,5	27	27
431251848	●	18	R1/2	42,5	13	30	24
431251868	●	18	R3/4	44	14,5	30	27
431252248	●	22	R1/2	45	13	36	30
431252268	●	22	R3/4	46,5	14,5	36	30



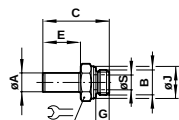
Straight Female Adaptor

Model		O/D Tube (ØA)	BSPP Thread (B)	C	G	1	1
432260418	●	4	G1/8	25	8,5	14	10
432260618	●	6	G1/8	26	8,5	14	13
432260628	●	6	G1/4	28,5	11	17	13
432260818	●	8	G1/8	28	8,5	14	14
432260828	●	8	G1/4	30,5	11	17	14
432260838	●	8	G3/8	31	11,5	20	14
432261028	●	10	G1/4	33	11	17	19
432261038	●	10	G3/8	33,5	11,5	20	19
432261048	●	10	G1/2	35,5	13,5	24	19
432261228	●	12	G1/4	33,5	11	18	22
432261238	●	12	G3/8	34	11,5	20	22
432261248	●	12	G1/2	36	13,5	24	22
432261438	●	14	G3/8	33,5	20	24	11,5
432261448	●	14	G1/2	36	24	24	13,5
432261548	●	15	G1/2	36,5	24	24	13,5
432261648	●	16	G1/2	38,5	24	27	13,5
432261668	●	16	G3/4	40	30	27	14,5
432261848	●	18	G1/2	39	24	30	13,5
432261868	●	18	G3/4	40,5	30	30	14,5
432262268	●	22	G3/4	41	30	36	14,5

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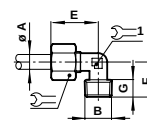
COMPRESSION FITTINGS EXTERNAL NUT 43 Series

Metric Ø 4 ... 22 mm O/D tube



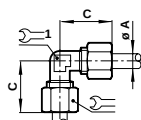
Straight Stem Adaptor

Model	O/D Stem (ØA)	BSPP Thread (B)	C	E	G	ØJ	ØS	
432150618	6	G1/8	27,5	16	6,5	14	4	10
432150628	6	G1/4	31	16	8	18	4	13
432150818	8	G1/8	31,5	19	6,5	14	5,5	14
432150828	8	G1/4	34	19	8	18	6	19
432150838	8	G3/8	38	19	11	21	6	22
432151028	10	G1/4	35	20	8	18	8	24
432151038	10	G3/8	39	20	11	21	8	24
432151438	14	G3/8	40	21	11	21	11	27
432151448	14	G1/2	42	21	12	26	12	30



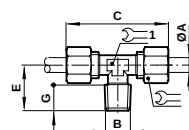
Male Elbow Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	E	F	G		1
431450418	4	R1/8	21,5	15	7,5	10	8
431450618	6	R1/8	26	18	7,5	13	9
431450628	6	R1/4	24	19	11	13	9
431450818	8	R1/8	30	18	7,5	14	11
431450828	8	R1/4	30	22	11	14	11
431450838	8	R3/8	30,5	24	11,5	14	13
431451028	10	R1/4	33	23,5	11	19	13
431451038	10	R3/8	33	24	11,5	19	13
431451048	10	R1/2	35	25	13	19	14
431451228	12	R1/4	35,5	24	11	22	14
431451238	12	R3/8	35,5	24,5	11,5	22	14
431451248	12	R1/2	35,5	25	13	22	14
431451438	14	R3/8	38,5	26	11,5	24	17
431451448	14	R1/2	38,5	28,5	13	24	17
431451548	15	R1/2	38,5	28,5	13	24	17
431451648	16	R1/2	39,5	28	13	27	17
431451848	18	R1/2	40,5	29,5	13	30	20
431451868	18	R3/4	40,5	32	11,5	30	20
431452268	22	R3/4	43	34	11,5	36	27



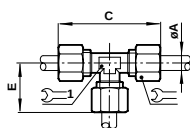
Elbow Connector

Model	O/D Tube (ØA)	C		1
430400400	4	21,5	10	8
430400600	6	26	13	9
430400800	8	30	14	11
430401000	10	33	19	13
430401200	12	35,5	22	14
430401400	14	36,5	24	17
430401500	15	37,5	24	17
430401600	16	39	27	17
430401800	18	40,5	30	20
430402200	22	43	36	27



Male Tee Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	C	E	G		1
431650418	4	R1/8	42	15	7,5	10	8
431650618	6	R1/8	48	16,5	7,5	13	9
431650628	6	R1/4	48	20,5	11	13	9
431650818	8	R1/8	56	16,5	7,5	14	12
431650828	8	R1/4	56	20,5	11	14	12
431650838	8	R3/8	60	23	11,5	14	13
431651028	10	R1/4	64	22,5	11	19	13
431651038	10	R3/8	64	23,5	11,5	19	13
431651048	10	R1/2	68	27	13	19	14
431651228	12	R1/4	68	24,5	11	22	14
431651238	12	R3/8	71	24,5	11,5	22	14
431651248	12	R1/2	71	25	13	22	14
431651438	14	R3/8	77	26	11,5	24	17
431651448	14	R1/2	77	28,5	13	24	17
431651548	15	R1/2	77	28,5	13	24	17
431651648	16	R1/2	79	28	13	27	17
431651848	18	R1/2	81	29,5	13	30	20
431651868	18	R3/4	81	32	14,5	30	20
431652268	22	R3/4	86	34	11,5	36	27



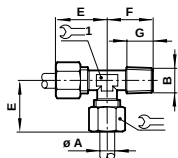
Tee Connector

Model	O/D Tube (ØA)	C	E		1
430600400	4	43	21,5	10	8
430600600	6	48	24	13	9
430600800	8	57	28,5	14	12
430601000	10	64	32	19	13
430601200	12	70	35	22	14
430601400	14	77	38,5	24	18
430601500	15	77	38,5	24	18
430601600	16	78	39	27	17
430601800	18	81	40,5	30	20
430602200	22	86	43	36	27

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

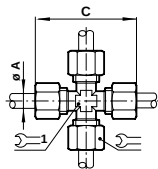
COMPRESSION FITTINGS EXTERNAL NUT 43 Series

Metric Ø 4 ... 22 mm O/D tube



Male Side Tee Adaptor

Model	O/D Tube (ØA)	BSPT Thread (B)	E	F	G	1	1
431750418	4	R1/8	15	21	7,5	10	8
431750618	6	R1/8	19	24	7,5	13	9
431750628	6	R1/4	20	26	11	13	9
431750818	8	R1/8	18	26	7,5	14	12
431750828	8	R1/4	20	26	11	14	12
431750838	8	R3/8	23	26	11,5	14	13



Four Way Connector

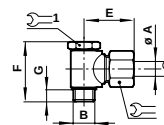
Model	O/D Tube (ØA)	C	1	1
430900400	4	46	10	8
430900600	6	48	13	8
430900800	8	58	14	11
430901000	10	66	19	13
430901200	12	74	22	17
430901400	14	74	24	17



Tube Support

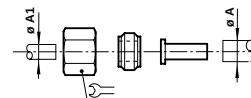
Model	O/D I/D Tube (ØA)	C	ØD
430330403	4/2,7	13,5	3,8
430330604	6/4	13,5	5
430330806	8/6	16,5	7
430331008	10/8	17,5	9
430331209	12/9	19,5	11
430331210	14/10	19	11
430331412	14/12	21,5	13,5
430331512	15/12,5	21,5	14
430331613	16/13	22,5	15
430331815	18/15	23,5	17,5
430331816	18/16	23,5	17,5
430332218	22/18	25	19

Natural brass finish. For use on plastic tubing.



Elbow Banjo Assembly

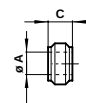
Model	O/D Tube (ØA)	BSPP Thread (B)	E	F	G	1	1
43A510418	4	G1/8	22,5	31	8	10	14
43A510618	6	G1/8	23,5	31	8	13	14
43A510628	6	G1/4	26,5	33,5	6	13	17
43A510818	8	G1/8	28,5	31	8	14	14
43A510828	8	G1/4	28,5	33,5	6	14	17
43A510838	8	G3/8	30	34,5	8	14	19
43A511028	10	G1/4	32,5	33,5	7	19	17
43A511038	10	G3/8	32,5	34,5	8	19	19
43A511428	14	G1/4	36,5	44	8	24	17
43A511438	14	G3/8	36,5	46	9	24	22
43A511448	14	G1/2	36,5	49	11	24	24
43A512268	22	G3/4	46	64	12	36	32



Reducing Connector

Model	O/D Tube (ØA)	O/D Tube (ØA1)	1
430280604	6	4	13
430280806	8	6	14
430281008	10	8	19
430281210	12	10	22
430281412	14	12	24

Natural brass finish for sleeve and reducer.



Universal Tubing Sleeve

Model	O/D Tube (ØA)	C
430020400	4	6
430020600	6	6,5
430020800	8	7
430021000	10	8
430021200	12	8,5
430021400	14	8,5
430021500	15	8,5
430021600	16	9
430021800	18	9,5
430022200	22	10

Natural brass finish.

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP



Bright nickel plated.
Corrosion resistant.
Compact design.
Washers included where necessary.

TECHNICAL DATA

Medium:

Compressed air or any fluids compatible with the materials listed opposite.

Operating pressure:

Generally limited by tubing specification, except non regulating banjo bolts (max 18 bar) and regulating banjo bolts (max 10 bar) due to sealing washer.

Ambient temperature:

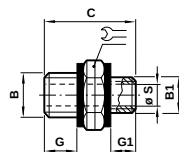
Generally limited by tubing specification except where plastic sealing washers are used (banjo bolts, and M5 units). In these cases temperature is limited to +70°C.

MATERIALS

Bar parts: Brass to BS 2874: 1986 (CZ 121), bright nickel plated

Stamped parts: Brass to BS 2872: 1969 (CZ 122), bright nickel plated

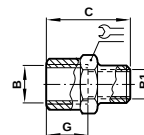
Sealing washers: Copper (Acetal for M5 items)



Nipple Adaptor (parallel threads)

Model	Metric & BSPP Thread (B)	Metric & BSPP Thread (B1)	C	G	G1	ØS	
160200505	M5	M5	11,5	4	4	2	8
160201805	G1/8	M5	14,5	6	4	2	14
160201818	G1/8	G1/8	16,5	6	6	5,5	14
160202818	G1/4	G1/8	19	8	6	5,5	17
160202828	G1/4	G1/4	21	8	8	8	17
160203828	G3/8	G1/4	22	9	8	8	19
160203838	G3/8	G3/8	23	9	9	11	19
160204828	G1/2	G1/4	23,5	10	8	8	24
160204838	G1/2	G3/8	24,5	10	9	11	24
160204848	G1/2	G1/2	25,5	10	10	15	24
160206848	G3/4	G1/2	27,5	12	10	15	30
160206868	G3/4	G3/4	53	14,5	14,5	18	32
160208868	G1	G3/4	58	17,5	14,5	18	41
160208888	G1	G1	61	17,5	17,5	25	41

Supplied with sealing washers.



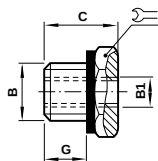
Sleeve Adaptor (parallel threads)

Model	Metric & BSPP Thread (B)	Metric & BSPP Thread (B1)	C	G	
160220505	M5	M5	11	11	8
160221805	G1/8	M5	13	7,5	14
160221818	G1/8	G1/8	15	15	14
160222818	G1/4	G1/8	19	9,5	17
160222828	G1/4	G1/4	22	22	17
160223818	G3/8	G1/8	20	10,5	22
160223828	G3/8	G1/4	23	10,5	22
160223838	G3/8	G3/8	24	24	22
160224818	G1/2	G1/8	24	13	24
160224828	G1/2	G1/4	25	13	24
160224838	G1/2	G3/8	27,5	13	24
160224848	G1/2	G1/2	30	30	26
160226848	G3/4	G1/2	30	14,5	30
160226868	G3/4	G3/4	31	31	32
160228868	G1	G3/4	39	17	40
160228888	G1	G1	45,5	46,5	41

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

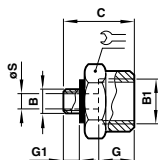
BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP



BSPP reducing connector

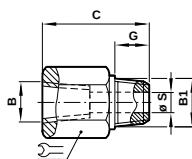
Model	Reducing Male BSPP (B)	Female and BSPP Thread (B1)	C	G	
160231805	G1/8	M5	10,5	6	14
160232818	G1/4	G1/8	13	8	17
160233818	G3/8	G1/8	14	9	19
160233828	G3/8	G1/4	14	9	19
160234818	G1/2	G1/8	15,5	10	24
160234828	G1/2	G1/4	15,5	10	24
160234838	G1/2	G3/8	15,5	10	24
160236828	G3/4	G1/4	23	14	32
160236838	G3/4	G3/8	17,5	12	30
160236848	G3/4	G1/2	17,5	12	30



BSPP expanding connector

Model	Metric & BSPP Thread (B)	Female BSPP (B1)	C	G	G1	ØS	
160230518	M5	G1/8	14,5	4	7,5	2	14
160231828	G1/8	G1/4	19,5	6	9,5	5,5	17
160231838	G1/8	G3/8	21	6	10,5	5,5	22
160232838	G1/4	G3/8	22,5	8	10,5	8	22
160232848	G1/4	G1/2	26	8	13	8	26
160233848	G3/8	G1/2	27	9	13	11	26
160234868	G1/2	G3/4	38	11,5	16,5	13,5	32

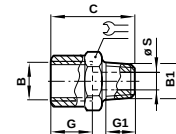
Supplied with sealing washer.



Adaptor

Model	Female NPTF (B)	Male BSPT (B1)	C	G	ØS	
154231818	1/8 NPT	R1/8	27,5	9,5	4,5	15
154232828	1/8 NPT	R1/4	36	11	7,5	19
154233838	3/8 NPT	R3/8	38	12,5	9,5	22
154234848	1/2 NPT	R1/2	47	16	13	27

Model	Female BSPP (B)	Male NPT (B1)	C	G	ØS	
172232828	G1/4	1/8 NPT	33,5	14,5	7,5	19
172233838	G3/8	3/8 NPT	33,5	14,5	9,5	24

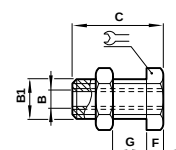


BSP Connector (BSPT male/BSPP female)

Model	Male BSPT (B)	Female BSPP (B1)	C	G	G1	ØS	
150231818	R1/8	G1/8	20	7,5	7,5	5,5	14
150232818	R1/4	G1/8	16	11	7,5	5,5	14
150232828	R1/4	G1/4	26	11	9,5	8	17
150233818	R3/8	G1/8	16,5	11,5	7,5	5,5	17
150233828	R3/8	G1/4	16,5	11,5	9,5	8	17
150233838	R3/8	G3/8	27,5	11,5	10,5	11	22
150234818	R1/2	G1/8	19,5	14	7,5	5,5	22
150234828	R1/2	G1/4	19,5	14	9,5	8	22
150234838	R1/2	G3/8	19,5	14	10,5	11	22
150234848	R1/2	G1/2	33	14	13	15	26
150236828	R3/4	G1/4	29,5	18,5	11	11,5	27
150236838	R3/4	G3/8	23,5	16,5	10,5	11	27
150236848	R3/4	G1/2	23,5	16,5	13	15	27
150238848	R1	G1/2	26,5	19	13	15	34
150238868	R1	G3/4	26,5	19	14,5	19	34

EXPANDING

Model	Male BSPT (B)	Female BSPP (B1)	C	G	G1	ØS	
150231828	R1/8	G1/4	22	7,5	9,5	5	17
150231838	R1/8	G3/8	22,5	7,5	10,5	5	22
150231848	R1/8	G1/2	31	8,5	15	5	27
150232838	R1/4	G3/8	27	11	10,5	8	22
150232848	R1/4	G1/2	30	11	13	8	26
150233848	R3/8	G1/2	30,5	11,5	13	11	26
150233868	R3/8	G3/4	38,5	12,5	16,5	11	32
150234868	R1/2	G3/4	35	14	14,5	15	32
150236888	R3/4	G1	45	19	19	18	41



Bulkhead Connector

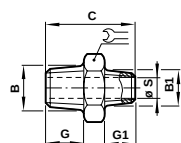
Model	Metric & BSPP Thread (B)	Male Metric Thread (B1)	C	F	G max.	
160290005	M5	M10X1,0	14	3,5	7	14
160290018	G1/8	M16X1,5	18	4	10	22
160290028	G1/4	M20X1,5	25	4	16	27
160290038	G3/8	M26X1,5	26	5	15	32
160290048	G1/2	M28X1,5	33	6	21	36
160290068	G3/4	M33X1,5	36,5	6	22,5	41
160290088	G1	M42X1,5	41,5	8	24,5	46
1602900A8	G1 1/4	M48X1,5	50	8	29,5	55

Supplied with locknut

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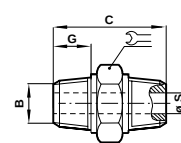
BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP



Nipple Adaptor (taper threads)

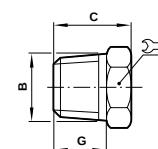
Model	BSPT Thread (B)	BSPT Thread (B1)	C	G	G1	ØS	
150201818	R1/8	R1/8	19,5	7,5	7,5	5,5	12
150202818	R1/4	R1/8	23,5	11	7,5	5,5	14
150202828	R1/4	R1/4	27	11	11	6,4	14
150203818	R3/8	R1/8	24	11,5	7,5	5,5	17
150203828	R3/8	R1/4	27,5	11,5	11	8	17
150203838	R3/8	R3/8	28	11,5	11,5	11	17
150204818	R1/2	R1/8	27	14	7,5	5,5	22
150204828	R1/2	R1/4	30,5	14	11	8	22
150204838	R1/2	R3/8	31	14	11,5	11	22
150204848	R1/2	R1/2	33,5	14	14	15	22
150206848	R3/4	R1/2	37,5	16	14	15	27
150206868	R3/4	R3/4	40	16,5	16,5	19	27
150208868	R1	R3/4	43	19	16,5	19	34
150208888	R1	R1	45,5	19	19	23	34



Nipple adaptor (BSPT/NPTF)

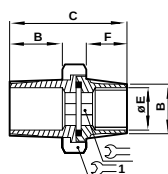
Model	Male BSPT (A)	Male NPTF (B)	C	ØD	G	G1	
154201818	R1/8	1/8 NPT	27	4,5	9,5	9,5	11
154202828	R1/4	1/8 NPT	3,5	7,5	11	14,5	14
154203838	R3/8	3/8 NPT	37	9,5	12,5	14,5	17
154204848	R1/2	1/2 NPT	46,5	12,5	16	19	22

Adaptor fittings – allow connection between components and system using BSP or NPT threads



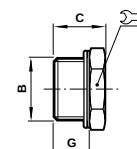
Plug

Model	BSPT Thread (B)	C	G	
150050028	R1/4	16,5	11	14
150050038	R3/8	19	12,5	17
150050048	R1/2	22,5	16	22
150050068	R3/4	27	19	27
150050088	R1	30	22	36



Flat Union

Model	Male BSPT (B)	C	ØE	F		1
150331818	R1/8	33,5	15	10	5	15
150332828	R1/4	42	18,5	13	8	24
150333838	R3/8	43	19	13	10	27
150334848	R1/2	52	23	17,5	14	30
150336868	R3/4	56,5	25	19	17	38
150338888	R1	68	29	23	19	46



Plug

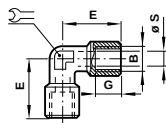
Model	Metric & BSPP Threads (B)	C	G	
160050005	M5	7,5	4	8
160050018	G1/8	10	6,5	14
160050028	G1/4	13	9	17
160050038	G3/8	13,5	9,5	19
160050048	G1/2	14,5	10	24
160050068	G3/4	16	11	30
160050088	G1	17	12	40

Supplied with sealing washer

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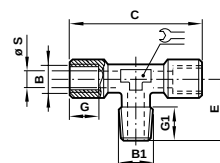
BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP



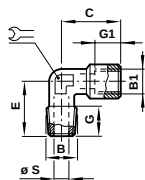
Elbow

Model	Female BSPP (B)	E	G	ØS	
160420018	● G1/8	21	7	5,5	12
160420028	● G1/4	25,5	9,5	8	13
160420038	● G3/8	28	11,5	11	16
160420048	● G1/2	32	15	15	20
160420068	● G3/4	36,5	14,5	19	27



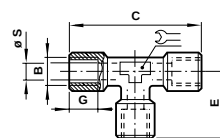
Tee

Model	Male BSPT (B1)	Female BSPP (B)	C	E	G	G1	ØS	
150690018	● R1/8	G1/8	39	17,5	8,5	8	6	12
150690028	● R1/4	G1/4	49	23	11	11	8	13
150690038	● R3/8	G3/8	54	25,5	12	11,5	11	16
150690048	● R1/2	G1/2	64	29	15	14	15	20



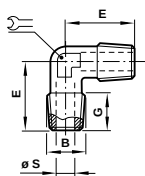
Elbow

Model	Male BSPT (B)	Female BSPP (B1)	C	E	G	G1	ØS	
150430018	● R1/8	G1/8	21	18,5	8	7	5,5	12
150430028	● R1/4	G1/4	25,5	24	11	9,5	8	13
150430038	● R3/8	G3/8	28	27	11,5	11,5	11	16
150430048	● R1/2	G1/2	32	29,5	14	13	15	20
150430068	● R3/4	G3/4	36,5	32	14,5	14,5	19	27



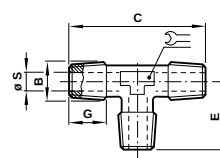
Tee

Model	Female BSPP (B)	C	E	G	ØS	
160620018	● G1/8	39	19,5	8,5	6	12
160620028	● G1/4	49	14,5	11	8	13
160620038	● G3/8	54	27	12	11	16
160620048	● G1/2	64	29	15	15	20
160620068	● G3/4	73	36,5	14,5	19	27



Elbow

Model	BSPT Thread (B)	E	G	ØS	
150400018	● R1/8	18,5	7,5	6	12
150400028	● R1/4	24	11	8	13
150400038	● R3/8	27	12	11	16
150400048	● R3/8	29,5	14	15	20



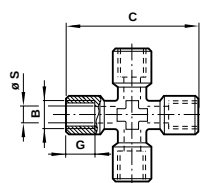
Tee

Model	BSPT Thread (B)	C	E	G	ØS	
150600028	● R1/4	46	23	11	8	13

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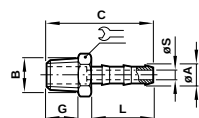
BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP



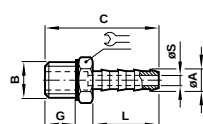
Cross

Model		Female BSPP (B)	C	G	ØS
160920018	●	G1/8	39	8,5	6
160920028	●	G1/4	50	11	8
160920038	●	G3/8	56	12	11
160920048	●	G1/2	64	15	15



Hose Adaptor

Model		Hose Bore mm (ØA)	BSPT Thread (B)	C	G	L	ØS min.	
291170418	●	4	R1/8	32	7,5	19,5	3,2	12
291170618	●	6	R1/8	32	7,5	19,5	3,2	12
291170628	●	6	R1/4	35,5	11	19,5	3,2	14
291170718	●	7	R1/8	32	7,5	19,5	5	12
291170728	●	7	R1/4	35,5	11	19,5	6	14
291170738	●	7	R3/8	36	11,5	19,5	6	17
291170828	●	8	R1/4	35,5	11	19,5	7,5	14
291170838	●	8	R3/8	36	11,5	19,5	7,5	17
291170918	●	9	R1/8	36	8,5	22,5	5	13
291170928	●	9	R1/4	41	12,5	22,5	7,6	14
291170938	●	9	R3/8	42,5	14	22,5	7,6	17
291170948	●	9	R1/2	45,5	17	22,5	7,6	22
291171018	●	10	R1/8	36	8,5	22,5	8,8	13
291171028	●	10	R1/4	35,5	11	19,5	7,5	14
291171038	●	10	R3/8	36	11,5	19,5	7,5	17
291171238	●	12	R3/8	36	11,5	19,5	9,5	17
291171638	●	16	R3/8	36	11,5	19,5	11	19
291171648	●	16	R1/2	39	14	19,5	12,5	22
291171668	●	16	R3/4	43,5	16,5	19,5	14,5	27
291172568	●	25	R3/4	63,5	18,5	38	18	27
291172588	●	25	R1	67,5	21,5	38	22	35
291173288	●	32	R1	72,5	21,5	43	24	35



Hose Adaptor

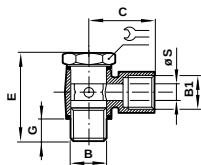
Model		Hose Bore mm (ØA)	BSPP Thread (B)	C	G	L	ØS min.	
292170305	●	3	M5	15,5	3,5	7,5	2	8
292170418	●	4	G1/8	36,5	7,5	22,5	3,3	14
292170618	●	6	G1/8	36,5	7,5	22,5	5	14
292170628	●	6	G1/4	40,5	10	22,5	5	19
292170918	●	9	G1/8	36,5	7,5	22,5	7,5	14
292170928	●	9	G1/4	40,5	10	22,5	7,5	19
292170938	●	9	G3/8	43	11,5	22,5	7,5	22
292170948	●	9	G1/2	47	15	22,5	7,5	27
292171968	●	19	G3/4	67,5	16,5	38	17,5	32

Supplied with sealing washer.

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BSP & HOSE FITTINGS

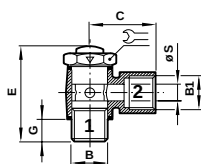
M5, 1/8" ... 1" BSP



Elbow Banjo Assembly Non-Regulating

Model	Male BSPP (B)	Female BSPP (B1)	C	E	G	ØS	
16A511818	● G1/8	G1/8	21	29	5	6	14
16A512828	● G1/4	G1/4	28	32	6	7,6	17
16A513838	● G3/8	G3/8	31	45	9,5	9,6	22
16A514848	● G1/2	G1/2	47	47	12	9,6	27

Female parallel BSP thread to male parallel BSP thread

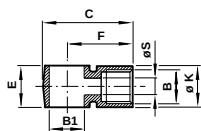


Elbow Banjo Assembly Regulating Out

Model	Male BSPP (B)	Female BSPP (B1)	C	E	G	ØS	
16K511818	● G1/8	G1/8	21	34	5	6	14
16K512828	● G1/4	G1/4	28	37	6	7,6	17
16K513838	● G3/8	G3/8	31	52	9,5	9,6	22
16K514848	● G1/2	G1/2	47	58	12	9,6	27

Arrow on bolt hexagon indicates free flow direction

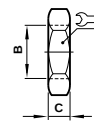
Pressure range 1 ... 10 bar



Elbow Banjo Body

Model	Female BSPP B	Bolt Thread B1	C	E	F	ØK	ØS
160511818	● G1/8	1/8"	28	14	21	13	6
160512828	● G1/4	1/4"	37	16	28	16	7,6
160513838	● G3/8	3/8"	42	20,5	31	20,5	9,6
160514848	● G1/2	1/2"	61	22	47	24,5	9,6

Female parallel BSP thread

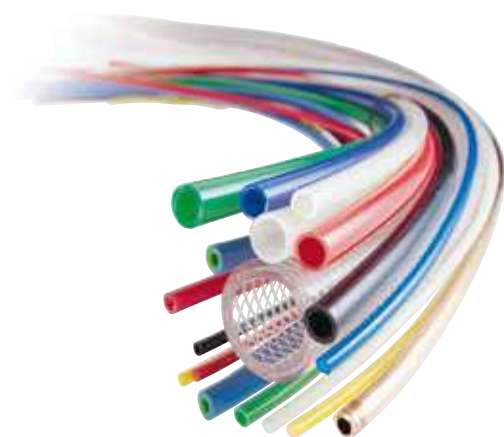


Locknut

Model	BSPP Thread B	C	
36054601	● G1/8	5	13
36054602	● G1/4	6,5	17
36054603	● G3/8	6,5	22
36054604	● G1/2	6,5	27
36054606	● G3/4	7	32

Natural brass finish

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.



TUBING & HOSES

Ø 3 ... 16 mm O/D

Available in a range of colours for ease of identification

In addition to general industrial applications Nylon is suitable for use on air braking systems of commercial vehicles and conforms to DIN 74324. (Applicable sizes; 6, 8, 10, 12, 16mm O/D)

25 metre lengths supplied in cartons providing good protection and easy storage

Polyurethane offers excellent mechanical properties and industry leading flexibility

MATERIALS

Nylon tube: Nylon (polyamide) type PA12 fully plasticised and light stabilised. Conforms to material standard of DIN 74324

Polyurethane tube: Is light stabilised and has a hardness of Shore D 52 (98 Shore A)

TECHNICAL DATA

Medium:

Compressed air. Consult our Technical Service for use with other fluids

Operating pressure:

See table below

Maximum operating pressures and bend radii

O/D mm		4	5	6	8	10	12	14	16
Max. pressure (bar)*	Nylon	31	33	27	19	19	19	16	19
at -40°C ... +20°C	Polyurethane	10	11	9	9	9	9	–	–
Min. bend radius mm	Nylon	25	25	30	40	60	60	80	95
	Polyurethane	6	7	9	16	17	25	–	–

Maximum continuous working temperature: nylon +80°C, polyurethane +60°C

* Multiply by factors in table below for use at higher temperatures

Operating pressure/temperature conversion factors

Working temperature	Factor (Nylon)	Factor (Polyurethane)
-40°C ... +20°C	1,00	1,00
+30°C	0,83	0,85
+40°C	0,75	0,70
+50°C	0,64	0,60
+60°C	0,57	0,50
+80°C	0,47	–

To calculate working pressures at various temperatures, multiply working pressure at -40° ... +20°C by factor given in table
Maximum continuous working temperature: Nylon +80° Polyurethane +60°C

Tube sizes (metric)

O/D mm	3	4	5	6	8	10	12	14	16
Nylon	–	•	•	•	•	•	•	•	•
Polyurethane	•	•	•	•	•	•	•	–	•

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

TUBING & HOSES

Ø 3 ... 16 mm O/D



NYLON TUBE										
Colour	Length (m)	O/D I/D tube 4/2,5*	5/3*	6/4	8/6	10/7,5	12/9	14/11*	16/12	
Natural	25	PA2-0004025C	PA2-0005025C	PA2-0006025C	PA2-0008025C	PA2-0010025C	PA2-0012025C	PA2-0014025C	PA2-0016025C	●
Natural	100	PA2-0004100	●	PA2-0006100	PA2-0008100	PA2-0010100	PA2-0012100	●		
Red	25	PA2-0104025C	PA2-0105025C	PA2-0106025C	PA2-0108025C	PA2-0110025C	PA2-0112025C	PA2-0114025C	PA2-0116025C	●
Red	100	PA2-0104100	●	PA2-0106100	PA2-0108100	PA2-0110100	PA2-0112100	●		
Green	25	PA2-0204025C	PA2-0205025C	PA2-0206025C	PA2-0208025C	PA2-0210025C	PA2-0212025C	PA2-0214025C	PA2-0216025C	●
Green	100	PA2-0204100	●	PA2-0206100	PA2-0208100	PA2-0210100	PA2-0212100	●		
Yellow	25	PA2-0304025C	PA2-0305025C	PA2-0306025C	PA2-0308025C	PA2-0310025C	PA2-0312025C	PA2-0314025C	PA2-0316025C	●
Yellow	100	PA2-0304100	●	PA2-0306100	PA2-0308100	PA2-0310100	PA2-0312100	●		
Blue	25	PA2-0504025C	PA2-0505025C	PA2-0506025C	PA2-0508025C	PA2-0510025C	PA2-0512025C	PA2-0514025C	PA2-0516025C	●
Blue	100	PA2-0504100	●	PA2-0506100	PA2-0508100	PA2-0510100	PA2-0512100	●		
Black	25	PA2-0704025C	PA2-0705025C	PA2-0706025C	PA2-0708025C	PA2-0710025C	PA2-0712025C	PA2-0714025C	PA2-0716025C	●
Black	100	PA2-0704100	●	PA2-0706100	PA2-0708100	PA2-0710100	PA2-0712100	●		
Silver	25	PA2-0904025C	PA2-0905025C	PA2-0906025C	PA2-0908025C	PA2-0910025C	PA2-0912025C	PA2-0914025C	PA2-0916025C	●
Silver	100	PA2-0904100	●	PA2-0906100	PA2-0908100	PA2-0910100	PA2-0912100	●		

Note: 'C' at last digit in part number indicates packed in a box/carton *Tube size does not conform to DIN 74324



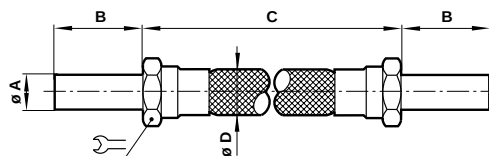
POLYURETHANE										
Colour	Length (m)	O/D I/D tube 3/2	4/2,5	5/3	6/4	8/5,5	10/7	12/8	16/11	
Natural	25	PU2-0003025C	PU2-0004025C	PU2-0005025C	PU2-0006025C	PU2-0008025C	PU2-0010025C	PU2-0012025C	PU2-0016025C	●
Natural	100		PU2-0004100	●	PU2-0006100	PU2-0008100	PU2-0010100	PU2-0012100	●	
Red	25		PU2-0104025C	PU2-0105025C	PU2-0106025C	PU2-0108025C	PU2-0110025C	PU2-0112025C	●	
Red	100		PU2-0104100	●	PU2-0106100	PU2-0108100	PU2-0110100	PU2-0112100	●	
Green	25		PU2-0204025C	PU2-0205025C	PU2-0206025C	PU2-0208025C	PU2-0210025C	PU2-0212025C	●	
Green	100		PU2-0204100	●	PU2-0206100	PU2-0208100	PU2-0210100	PU2-0212100	●	
Yellow	25		PU2-0304025C	PU2-0305025C	PU2-0306025C	PU2-0308025C	PU2-0310025C	PU2-0312025C	●	
Yellow	100		PU2-0304100	●	PU2-0306100	PU2-0308100	PU2-0310100	PU2-0312100	●	
Blue	25	PU2-0503025C	PU2-0504025C	PU2-0505025C	PU2-0506025C	PU2-0508025C	PU2-0510025C	PU2-0512025C	PU2-0516025C	●
Blue	100		PU2-0504100	●	PU2-0506100	PU2-0508100	PU2-0510100	PU2-0512100	●	
Black	25		PU2-0704025C	PU2-0705025C	PU2-0706025C	PU2-0708025C	PU2-0710025C	PU2-0712025C	●	
Black	100		PU2-0704100	●	PU2-0706100	PU2-0708100	PU2-0710100	PU2-0712100	●	
Silver	25		PU2-0904025C	●	PU2-0906025C	PU2-0908025C	PU2-0910025C	PU2-0912025C	●	
Silver	100		PU2-0904100	●	PU2-0906100	PU2-0908100	PU2-0910100	PU2-0912100	●	

Note: 'C' at last digit in part number indicates packed in a box/carton

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

TUBING & HOSES

Ø 3 ... 16 mm O/D



Metal braided rubber hose

Pressure (bar)*	O/D mm ØA	B	Length (mm) C							
			250	300	400	500	600	750	1000	
69	6	23	42004000250	42004000300	42004000400	42004000500	42004000600	42004000750	42004001000	
69	8	26	42005000250	42005000300	42005000400	42005000500	42005000600	42005000750	42005001000	
69	10	28	42006000250	42006000300	42006000400	42006000500	42006000600	42006000750	42006001000	
47	12	30	42007000250	42007000300	42007000400	42007000500	42007000600	42007000750	42007001000	

*Maximum working pressure at -20°C ... +100°C for fluids other than compressed air. Maximum with compressed air is 10 bar.

Installation notes:

1. Flexible hose is weakened when installed in a twisted position
2. Ample bend radius should be allowed to avoid collapsing the hose
3. When hose is installed in a flexing application remember that metal end fittings are not part of the flexible portion
4. Use elbows or adaptors to eliminate excess hose bends
5. Not suitable for use with push-in-fittings

EXPRESS LINKS

Perfect for use with
blow gun installations...

For blow gun range

See page 314

For preset regulator R16

See page 235



Pneuflex Tubing

Model	O/D Tube	Adaptor (thread)	Length of closed spiral	Working length (mm)	Operating pressure
PU310600218	6	R1/8	165	2000	10 bar
PU310800228	8	R1/4	180	2000	10 bar
PU310800428	8	R1/4	400	4000	10 bar



Tube Cutter

Model	Type
M/3314	Cutter
39012010	Replacement blade (pack of 10)

For use on nylon and polyurethane tubing 4 ... 16 mm



Weld Tubing

BLACK Model	BLUE Model	Diameter (mm)	Length (m)
NORWELD0706050	NORWELD0506050	6	50
NORWELD0708050	NORWELD0508050	8	50
NORWELD0710050	NORWELD0510050	10	50
NORWELD0712050	NORWELD0512050	12	50
NORWELD0714050	NORWELD0514050	14	50

Ideally suited for use with 10 series pneufit fittings in welding environment applications



Tubing Channels

Model	O/D Tube	No. of channels
100HA0600	6	10
100HA0800	8	10
100H61200	12	6



Tube Clips – single sided

Model	O/D
34021802	4
34021804	6
34021805	8
34021806	10
34021807	12
34021508	16

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

QUICK RELEASE COUPLINGS

SINGLE SHUT OFF QUICK RELEASE COUPLINGS 233 Series

Nominal diameter 5 = 20mm²

Single shut off: The hose connection (plug) has a through bore whilst the upstream coupling shuts off immediately when the connection is broken. The ideal solution for simple air tools or similar

Single handed operation

Compact robust construction

High flow, low pressure drop

TECHNICAL DATA

Operating pressure:

0 ... 35 bar

Working temperature:

-20°C ... +100°C

Air flow:

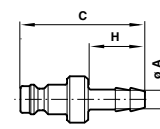
560 l/min (6 bar inlet, pressure drop 0,5 bar)



1st choice

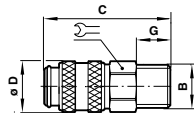
USE THIS RANGE OF COUPLINGS TO REPLACE:

- Rectus 21 and 90
- Camozzi
- Ewo
- Kani



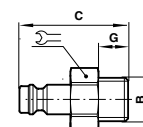
Plug with metric hose tail

Model	Hose Bore (ØA)	C	H
233130400	4,0 Tailpiece	32	17
233130600	6,0 Tailpiece	32	17
233130900	9,0 Tailpiece	33	17



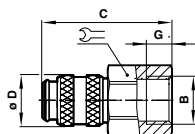
Coupling with BSPP male thread

Model	Thread (B)	C	ØD	G	
233210018	G1/8 Male	36	16,5	7	14
233210028	G1/4 Male	38	16,5	9	17



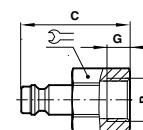
Plug with BSPP male thread

Model	Thread (B)	C	G	
233110018	G1/8 Male	25	7	14
233110028	G1/4 Male	27,5	9	17



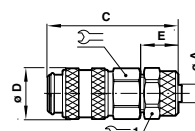
Coupling with BSPP female thread

Model	Thread (B)	C	ØD	G	
233220018	G1/8 Female	36	16,5	9	14
233220028	G1/4 Female	38	16,5	9	17



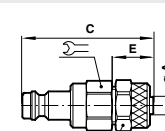
Plug with BSPP female thread

Model	Thread (B)	C	G	
233120018	G1/8 Female	24,5	8	14
233120028	G1/4 Female	25	9	17



Coupling with push on fitting

Model	O/D I/D (ØA)	C	ØD	E		1
233260400	6/4	42	16	11	14	12
233260600	8/6	42	16	11	14	14



Plug with push on fitting

Model	Tube O/D I/D (ØA)	C	E		1
233160400	6/4	31,5	11	14	12
233160600	8/6	31,5	11	14	14

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

QUICK RELEASE COUPLINGS

DOUBLE SHUT OFF QUICK RELEASE COUPLINGS 233 Series
Nominal diameter 5 = 20mm²

Double shut off: After disconnection the flow stops in both coupling and plug. The medium is retained in both connection lines and pressure is not released

Single handed operation

Compact robust construction

High flow, low pressure drop

Wide range of connections

TECHNICAL DATA

Operating pressure:

0 ... 35 bar

Working temperature:

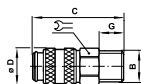
-20°C ... +100°C

Air flow:

310 l/min (6 bar inlet, pressure drop 0,5 bar)

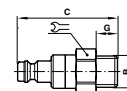
COMPATIBILITY

233 Double shut off are not compatible with 233 single shut off due to valve connection method



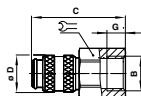
Coupling with BSPP male thread

Model	Type	B	C	ØD	G	
233410028	Socket – male thread	G1/4	38	16	9	17



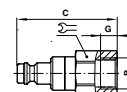
Plug with BSPP male thread

Model	Type	B	C	G	
233310028	Plug – male thread	G1/4	42	9	17



Coupling with BSPP female thread

Model	Type	B	C	ØD	G	
233420028	Socket – female thread	G1/4	38	16	9	17



Plug with BSPP female thread

Model	Type	B	C	G	
233320028	Plug – female thread	G1/4	42	7	17

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

QUICK RELEASE COUPLINGS

SINGLE SHUT OFF QUICK RELEASE COUPLINGS 238 Series

Nominal diameter 7,2 = 40mm²

Single shut off: The hose connection (plug) has a through bore whilst the upstream coupling shuts off immediately when the connection is broken. The ideal solution for simple air tools or similar

Single handed operation

European standard industrial coupling

High flow rate, low pressure drop

Industrial standard profile



TECHNICAL DATA

Operating pressure:

0 ... 35 bar

Working temperature:

-20°C ... +100°C

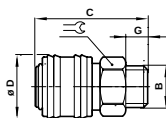
Air flow:

1000 l/min (input pressure 6 bar, pressure drop 0,5 bar)



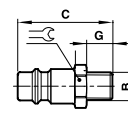
USE THIS RANGE OF COUPLINGS TO REPLACE:

- Rectus 25 and 26
- CEJN 310
- JWL 520 and 530



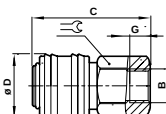
Coupling with BSPP male thread

Model	Type	B	C	ØD	G	
238210028	Male thread	G1/4	39	25	9	22
238210038	Male thread	G3/8	41	25	9	22
238210048	Male thread	G1/2	44	25	12	22



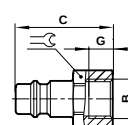
Plug with BSPP male thread

Model	Type	B	C	G	
238110028	Plug Male Thread	G1/4	33	9	17
238110038	Plug Male Thread	G3/8	33	9	19
238110048	Plug Male Thread	G1/2	38	12	24



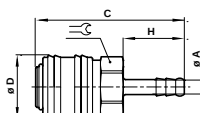
Coupling with BSPP female thread

Model	Type	B	C	ØD	G	
238220028	Female Thread	G1/4	41	25	9	22
238220048	Female Thread	G1/2	44	25	10	24



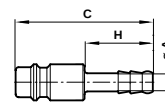
Plug with BSPP female thread

Model	Type	B	C	G	
238120028	Plug Female Thread	G1/4	33	10	17
238120038	Plug Female Thread	G3/8	33	10	19
238120048	Plug Female Thread	G1/2	35	12	24



Coupling with metric hose tail

Model	Type	Hose Bore ØA	C	ØD	H	
238230600	Hose Barb	6	58	25	25	21
238230900	Hose Barb	9	58	25	25	21
238231300	Hose Barb	13	58	25	25	21



Plug with metric hose tail

Model	Type	ØA	C	H
238130600	Plug Hose Barb	6	48	25
238130900	Plug Hose Barb	9	48	25
238131300	Plug Hose Barb	13	48	25

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

QUICK RELEASE COUPLINGS

SINGLE SHUT OFF QUICK RELEASE COUPLINGS 234 Series
Nominal diameter 7,8 = 48mm²

Single shut off: The hose connection (plug) has a through bore whilst the upstream coupling shuts off immediately when the connection is broken. The ideal solution for simple air tools or similar

Single handed operation

Low pressure drop

High flow rate

TECHNICAL DATA

Operating pressure:

0 ... 35 bar

Working temperature:

-20°C ... +100°C

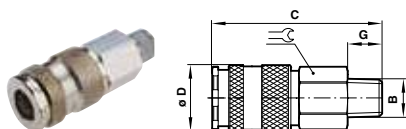
Air flow:

1800 l/min (input pressure 6 bar, pressure drop 0,5 bar)

1st choice

USE THIS RANGE OF COUPLINGS TO REPLACE:

- Rectus 25 and 26
- CEJN 310
- JWJ 520 and 530



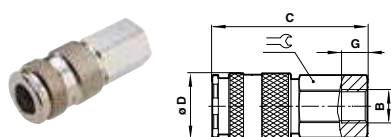
Coupling with BSPP male thread

Model	Type (B)	C	ØD	G	
234210028	● R1/4 Male	60	23	12	19
234210038	● R3/8 Male	60	23	12	19
234210048	● R1/2 Male	61	23	17	22



Plug with BSPP male thread

Model	Type (B)	C	G	
234110028	● R1/4 Male	37	12	14
234110038	● R3/8 Male	37	12	17
234110048	● R1/2 Male	43	17	22



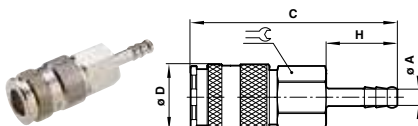
Coupling with BSPP female thread

Model	Type (B)	C	ØD	G	
234220028	● G1/4 Female	56	23	10	19
234220038	● G3/8 Female	55	23	9	19
234220048	● G1/2 Female	58	23	12	24



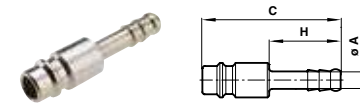
Plug with BSPP female thread

Model	Type (B)	C	G	
234120028	● G1/4 Female	33	9	17
234120038	● G3/8 Female	33	9	19
234120048	● G1/2 Female	36	12	24



Coupling with metric hose tail

Model	Type (ØA)	C	ØD	H	
234230600	● 6,0 Tailpiece	74	23	25	19
234230900	● 9,0 Tailpiece	74	23	25	19
234231300	● 13,0 Tailpiece	74	23	25	19



Plug with metric hose tail

Model	Hose Bore (ØA)	C	H
234130600	● 6,0 Tailpiece	48	25
234130900	● 9,0 Tailpiece	48	25
234131300	● 13,0 Tailpiece	48	25

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

QUICK RELEASE COUPLINGS

SINGLE SHUT OFF & SELF VENTING QUICK RELEASE COUPLINGS 237 Series

Nominal diameter 5,5 = 25mm²

Single shut off: The hose connection (plug) has a through bore whilst the upstream coupling shuts off immediately when the connection is broken. The ideal solution for simple air tools or similar

Self venting: The first stage closes the valve and allows the downstream pressure to vent whilst the coupling is still joined avoiding whiplash. Once the pressure is vented the second stage disconnection releases the plug from the socket



TECHNICAL DATA

Operating pressure:

0 ... 35 bar

Working temperature:

-20°C ... +100°C

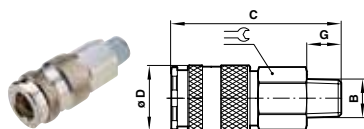
Air flow:

900 l/min (6 bar inlet pressure, pressure drop 0,5 bar)



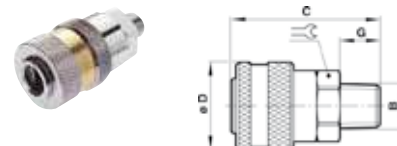
USE THIS RANGE OF COUPLINGS TO REPLACE:

- Industrial Interchange 1/4"
- US-MIL-SPEC-C-4109
- Rectus 23, 24, 1400/1423
- Parker 20 1/4", 30 1/4"
- ISO 6150 B
- Tema1400
- Hansen 3000
- JW 521, 531
- CEJN 310
- Gromelle 600



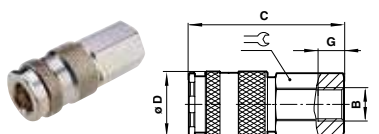
Coupling with BSPP male thread

Model	Type	(B)	C	ØD	G	
237210028	Male Thread	R1/4	59	23	12	19
237210038	Male Thread	R3/8	59	23	12	19



Coupling with BSPP male thread

Model	Type	(B)	C	ØD	G	
237610028	Self Vent Male	R1/4	65	30	12	24
237610038	Self Vent Male	R3/8	65	30	12	24



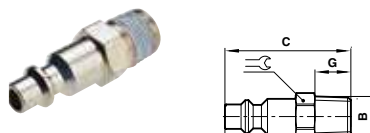
Coupling with BSPP female thread

Model	Type	(B)	C	ØD	G	
237220028	Female Thread	G1/4	55	23	10	19
237220038	Female Thread	G3/8	54	23	9	19



Plug with BSPP female thread

Model	Type (B)	C	G	
237120028	Female Thread G1/4	36	9	17
237120038	Female Thread G3/8	36	9	19



Plug with BSPP male thread

Model	Type	(B)	C	G	
237110028	Male Thread	R1/4	40	12	17
237110038	Male Thread	R3/8	40	12	17



Coupling with BSPP female thread

Model	Type	(B)	C	ØD	G	
237620028	Self Vent Female	G1/4	61	30	10	24
237620038	Self Vent Female	G3/8	58	30	9	24

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SILENCERS

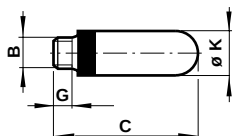
POROUS PLASTIC SILENCERS M/S & T45

Reduce the noise levels of pneumatic equipment

Compact, efficient and lightweight

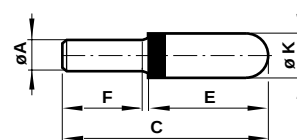
Operating pressure is -1 ... 10 bar

Operating temperature is -20°C ... +80°C

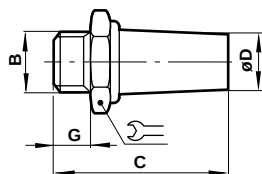


Models

Model		Metric & BSPP (B)	C	G	Ø K
M/S0	●	M5	23	4	6,5
M/S1	●	G1/8	34	6,5	12,5
M/S2	●	G1/4	42,5	8	15,5
M/S3	●	G3/8	67,5	11	18,5
M/S4	●	G1/2	77,5	11	23
M/S6	●	G3/4	131,5	15	38
M/S8	●	G1	162	20	49



Model		O/D Stem (ØA)	C	E	F	ØK
T45P0004	●	4	32	16	14	6,5
T45P0006	●	6	45	24,5	17	12,5
T45P0008	●	8	43,5	22	19	13,5
T45P0010	●	10	57,5	31	23	15,5
T45P0012	●	12	82	53	25	18,5



SINTERED BRONZE SILENCERS T40

Reduce the noise levels of pneumatic equipment

Compact and efficient

Operating pressure is 10 bar max.

Operating temperature is -20°C ... +80°C

Models

Model		Metric & BSPP (B)	C	ØD	G	⌀
T40M0500	●	M5	20	5	5	7
T40C1800	●	G1/8	24	9,5	6	13
T40C2800	●	G1/4	33	12	8	17
T40C3800	●	G3/8	44	17	10	22
T40C4800	●	G1/2	56	20	12	27
T40C6800	●	G3/4	80	26	14	32
T40C8800	●	G1	82	31	16	41

Model		BSPT (B)	C	ØD	G	⌀
T40B1800	●	R1/8	27,5	9,5	9,5	13
T40B2800	●	R1/4	36	12	11	17
T40B3800	●	R3/8	46,5	17	12,5	22
T40B4800	●	R1/2	60	20	16	27
T40B6800	●	R3/4	85	26	19	32
T40B8800	●	R1	88,5	31	22,5	41

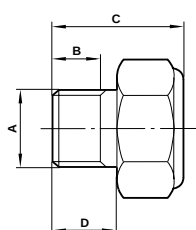
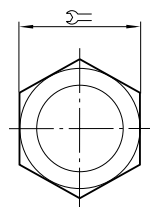
EXHAUST FILTERS M/1500 series

Prevent the ingress of dirt with minimal flow restriction

Robust and compact

Operating pressure is 0 ... 10 bar

Operating temperature is -20°C ... +80°C



Models

Model		BSPP (A)	B	C	D	⌀
M/1511	●	G1/8	6	16	8	15
M/1512	●	G1/4	8	22	10	23,5
M/1514	●	G1/2	10,5	25	13	30,5
M/1516	●	G3/4	14	31	16	42,5
M/1518	●	G1	15	35	19	47

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

SILENCERS

QUIETAIRE HEAVY DUTY SILENCERS MA & MB SERIES

Reduce the noise levels of pneumatic equipment

Prevent open line exhaust dangers

Corrosion resistant

High flow capacity with low back pressure

Brass mesh screen and aluminium construction provide improved flow, longer life and cleanable element

Prevent metal chips, abrasive grits, dust and other contaminants from entering open exhaust ports



TECHNICAL DATA

Medium

Compressed air, filtered, lubricated and non-lubricated, inert gases

Operating pressure

-1 ... 20 bar

Ambient temperature

-20°C ... +80°C

Operation

Exhaust silencer

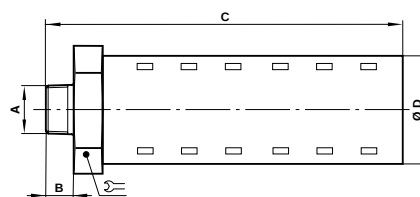
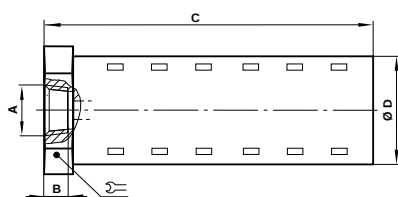
Mounting

Directly in the exhaust port



MATERIALS

Aluminium body and shell, brass mesh element



Models

FEMALE THREAD		Port Size (A)	B	C	ØD	
Model						
MA001B	●	Rc1/8	6	42	21	21
MA002B	●	Rc1/4	9	45	21	21
MA003B	●	Rc3/8	9	78	32	32
MA004B	●	Rc1/2	12	83	32	32
MA006B	●	Rc3/4	12	118	51	51
MA008B	●	Rc1	15	118	51	51
MA010C	●	G1 1/4	15	144	64	64
MA012C	●	G1 1/2	15	144	64	64
MA016C	●	G2	16	168	76	76

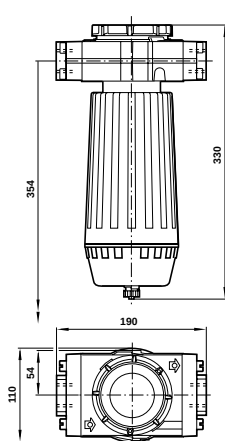
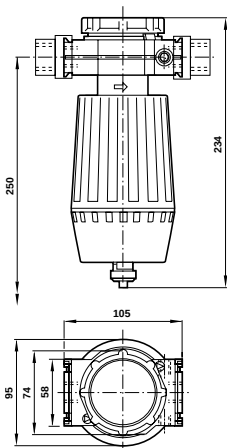
MALE THREAD		Port Size (A)	B	C	ØD	
Model	BSPT					
MB001B	●	R1/8	9	51	21	21
MB002B	●	R1/4	13	55	21	21
MBP03B	●	R3/8	13	55	21	21
MB003B	●	R3/8	13	88	32	32
MB004B	●	R1/2	17	92	32	32
MBP06B	●	R3/4	17	92	32	32
MB006B	●	R3/4	20	134	51	51
MB008B	●	R1	23	138	51	51
MBP10B	●	R1 1/4	26	140	51	51

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.



CS13

CS15



COALESCING EXHAUST SILENCERS

Easily replaceable cartridge element

Removal of oil mist from exhaust air provides cleaner work environment

Snap-on liquid sump with manual drain to collect coalesced oil

Assists in complying with Noise and COSHH regulations

Rugged, corrosion resistant construction

TECHNICAL DATA

Operating temperature:

CS13 and CS15 series: -20°C ... 50°C

MQ series: -20°C ... 100°C

Working pressure range:

0 ... 6 bar

Residual oil:

< 0,1 mg/m³ (1 bar 20°C)

Noise reduction:

As low as 69dBa (dependant on application)

Element replacement at:

2 bar pressure drop

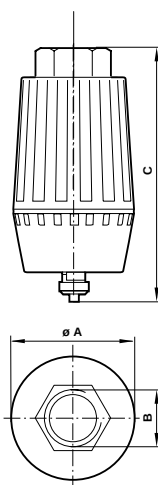
Models

CS Series	Port size	Mounting bracket	Service kit	Replacement element
CS13-464-10GG	G1/2	74504-52	CS13RK	3236-01
CS13-664-10GG	G3/4	74504-52	CS13RK	3236-01
CS13-000-0000	Without Yoke	-	CS13RK	3236-01
CS15-800-10DD	G1	18-001-979	CS15RK	3237-01
CS15-000-0000	Without Yoke	-	CS15RK	3237-01

Service kit includes bowl, drain plug and drain retainer

Accessories

MQ0 Serie



Models

MQ Series	Port size	Service kit	Replacement element
MQ004C	G1/2	CS13RK	3236-01
MQ006C	G3/4	CS13RK	3236-01
MQ008C	G1	CS15RK	3237-01

Service kit includes bowl, drain plug and drain retainer

Larger sizes of the MQ series are available - contact IMI Precision Engineering

Accessories

Dimensions

Model	ØA	B	C
MQ004C	90	G 1/2	181
MQ008C	110	G 1	254
MQ012C	110	G 1 1/2	312
MQ016C	110	G 2	312

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

BALL VALVES 60, 61 Series

Brass 1/8" ... 2" BSP

Precision engineered shut-off valves

Minimum resistance to fluid flow

Positive quick open/shut action

Flow in either direction (except exhaust type)

TECHNICAL DATA

Medium:

Compressed air, inert gases, water, oils and many hydrocarbon derivatives depending upon valve seat material

Operating pressure:

Refer to tables

Ambient temperature:

Refer to tables



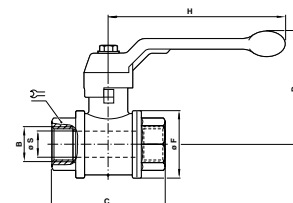
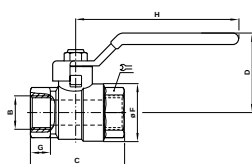
MATERIALS

60 Series:

Nickel plated brass to UNI-5705-65, chromium plated brass, zinc plated steel, PTFE seats and nitrile or FKM rubber seals

61 Series:

Stainless steel body, stem, ball nut and handle PTFE seats



Standard Full Bore

Model	Female (B)	Maximum pressure (bar)	C	D	ØF	G	H	⌘
602112128	G1/4	45	48	36	23	12	85	18
602112138	G3/8	40	49	36	24	12	85	21
602112148	G1/2	35	60	40	30	15	85	25
602112168	G3/4	30	69	47	38	16,5	105	31
602112188	G1	25	83	51	46	19	105	38
6021121A8	G1 1/4	20	96	63	58	21,5	130	47
6021121B8	G1 1/2	20	106	69	70	22	130	54
6021121C8	G2	16	129	83	86	25,5	165	66

PTFE seats, FKM seals Operating temperature: -20°C ... +150°C

Exhausting Full Bore

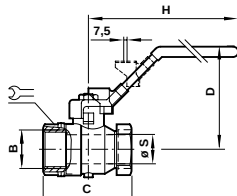
Model	Female (B)	Maximum pressure (bar)	C	D	ØF	H	ØS	⌘
602113128EX	G1/4	12	52	61	29	100	8	22
602113138EX	G3/8	12	54	61	29	100	10	22
602113148EX	G1/2	12	69	64	36	100	15	27
602113168EX	G3/4	12	77	76	45	120	30	33
602113188EX	G1	12	89	80	54	120	25	40
6021131A8EX	G1 1/4	12	103	98	65	150	32	50

PTFE seats, nitrile seals Operating temperature: 0°C ... +60°C

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

BALL VALVES 60, 61 Series

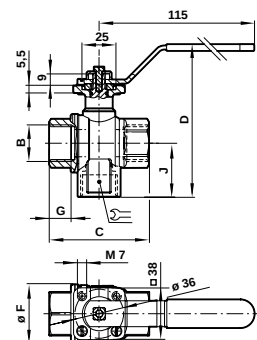
Brass 1/8" ... 4" BSP



Lockable Exhausting Full Bore

Model		Female (B)	Maximum pressure (bar)	C	D	H	ØS	
601812128	●	G1/4	13,6	44	45	93	8	20
601812138	●	G3/8	13,6	44	45	93	9	20
601812148	●	G1/2	13,6	58	50	93	14	24
601812168	●	G3/4	13,6	64	57	114	19	30
601812188	●	G1	13,6	81	61	114	24	40

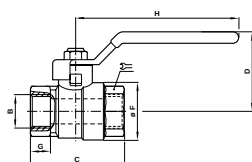
Note: lever lockable only in closed position Standard handle accepts Ø 7 mm shackle



Three Way Full Bore

Model		Female (B)	Maximum pressure (bar)	C	D	ØF	G	J	
602114428	●	G1/4	25	52	60	28	11	26	22
602114438	●	G3/8	25	52	60	28	11,5	26	22
602114448	●	G1/2	25	64	62	34,5	15	33,5	27
602114468	●	G3/4	16	74	43	43	16	39,5	32

PTFE seats, nitrile seals Operating temperature: -15°C ... +150°C

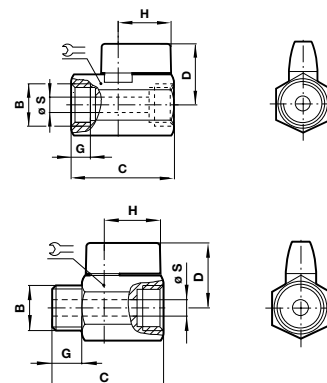


Stainless Steel Ball Valves

Model		Female (B)	Maximum pressure (bar)	C	D	ØS	ØF	H	
615112128	●	G1/4	100	50	45	8	29	100	22
615112138	●	G3/8	100	50	45	10	29	100	22
615112148	●	G1/2	100	60	53,5	15	34	110	27
615112168	●	G3/4	64	70	64	20	42,5	140	32
615112188	●	G1	64	85	68	25	50,5	140	40

Operating temperature: -20°C ... +150°C

* To order 'Tee' handled version change 4th character to 2



Mini Reduced Bore

Model		Female (B)	Maximum pressure (bar)	C	D	G	H	ØS	
601112118	●	G1/8	10	36	22	9	19	5,5	19
601112128	●	G1/4	10	36	22	9	19	5,5	19
601112138	●	G3/8	10	41	24	9	19	8	21
601112148	●	G1/2	10	48	30	10	22	10	25

Model		Female/ Male (B)	Maximum pressure (bar)	C	D	G	H	ØS	
601112218	●	G1/8	10	37	22	9	19	5,5	19
601112228	●	G1/4	10	37	22	9	19	5,5	19
601112238	●	G3/8	10	41	24	9	19	8	21
601112248	●	G1/2	10	48	30	10	22	10	25

PTFE seats, nitrile seals Operating temperature: -10°C ... +90°C

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

3/2 SHUT OFF VALVES

1/8" ... 1/2"

SLEEVE VALVES

1/8" ... 1/2" BSP

TECHNICAL DATA

Operating pressure:

0 ... 16 bar

Operating temperature:

-20 ... + 80°C

BLOW GUNS BG Series

BG4000:

Bright chrome finish

Cushioned corporate vinyl thumb grip

Exhausts air when nozzle is blocked

Complies with O.S.H.A.

BG5000:

One piece design in moulded high impact plastic

Exhausts air when nozzle is blocked

Complies with O.S.H.A.

TECHNICAL DATA

Medium:

Non-lubricated compressed air, filtered

Connection:

G1/4 (BG4000 and BG5000)

Operating pressure:

10 bar maximum line pressure

The USA O.S.H.A. recommendations state that nozzle pressures should not exceed 2 bar. This ensures that the blocked end condition pressure will not exceed the 0,4 bar that could penetrate human skin with possibly fatal consequences. Blow guns should always be supplied through a suitable pressure regulator to ensure safe operation

EXPRESS LINKS

Perfect partners...

To fully comply with legislation and ensure maximum safety of operators, blow guns should always be fed from a preset regulator and for best practice, always use coiled hose and quick release couplings.

R16 regulator – see page 235

Coiled hose – see page 303

Quick release couplings – see page 304 to 308

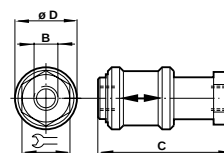


EXPRESS LINKS

Have you seen...

We also have 3/2 shut off valves complete with push in fittings and/or BSP threads.

See page 261



Sleeve Valves

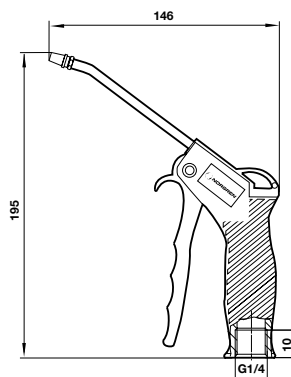
Model		Port Size (B)	ØD	C	
M/7318	●	G1/8	25	48	14
M/7328	●	G1/4	30	58	17
M/7338	●	G3/8	35	68	22
M/7348	●	G1/2	40	80	27



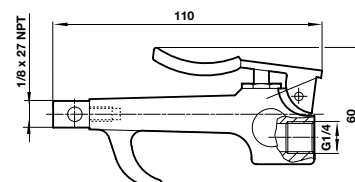
Models

Model		Port size	Description
BG4000	●	G1/4	Metal Blow Gun
BG5000	●	G1/4	Plastic Blow Gun

BG5000



BG4000



For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

SLOW ROTATING JOINTS

For use with a variety of fluids

7 bar maximum

50 r.p.m. maximum



Models

Model		Thread size
04017400	●	R1/8
04017500	●	R1/4
04017600	●	R3/8



Pressure:

6 bar (Dynamic Pressure)

Temperature:

-20°C ... +60°C

Materials:

Housing and cap – Polyamide

Filter – Felt insert



FAST ROTATING JOINTS

Pressure and vacuum models

For use with a variety of fluids

7 bar maximum

2000 r.p.m. maximum



Models

Model		Medium	Thread size
04016100	●	Pressure	R1/4
04016200	●	Vacuum	R1/4

IMI HERION Silencer

Plastic/Nylon and Sintered Metal Series

Pressure:

16 bar (Operating pressure)

5 bar (Dynamic Pressure)

Temperature:

-10°C ... +60°C

Materials:

Housing – Sintered metal,

Threaded base – Sintered metal



Models – Plastic/Nylon

Model		Thread size	Length C	Diameter B
0014500000000000	●	G1/8	41	16
0014600000000000	●	G1/4	51	21
0014700000000000	●	G3/8	60	25
0014800000000000	●	G1/2	72	30

Models – Sintered

Model		Thread size	Length C	Diameter B
0014510000000000	●	G1/8	28,5	8
0014610000000000	●	G1/4	34,5	12
0014710000000000	●	G3/8	36,5	15
0014810000000000	●	G1/2	45	19

For further information, visit store.norgren.com and use the new improved search function. If you cannot see the option you require contact your Express Team.

CLASSIC RANGE

ENOTS 34 & 36 Series brass compression fittings

Metric and inch

Ø 3/16" ... 3/4" O/D tube, Ø 4mm ... 28mm O/D tube

Wide range of types and sizes

Rugged and durable

Suitable for use under extreme conditions of temperature and pressure

Ideal for most general industrial applications



TECHNICAL DATA

Medium:

Compressed air or any fluids compatible with the materials/tubing listed

Operating pressure:

The maximum working pressure is limited by the type of tubing being used

Ambient temperature:

The maximum working temperature is generally limited by the type of tubing being used

Tube sizes

4, 6, 8, 10, 12, 15, 16, 18, 22, 28 mm O/D
3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O/D

Tube types

Nylon 11 or 12 and other plasticised or unplasticised tubing which conforms to the tolerances specified in BS5409: Part 1 1976. Copper, annealed and half-hard to BS2871: Part 2.

MATERIALS

Tubing nut, sleeve & body manufactured from bar:

Brass to BS 2874: 1986 [CZ 121]

Body manufactured from stamping:

Brass to BS 2872: 1969 [CZ 122]

Note: Many more shapes and styles available – please see data sheet for full details

METRIC 36 SERIES

Tubing Nut

Model	O/D Tube
36 0500 02	4
36 0500 04	6
36 0500 05	8
36 0500 06	10
36 0500 07	12
36 0500 08	16
36 0500 10	22
36 0500 12	28



IMPERIAL 34 SERIES

Tubing Nut

Model	O/D Tube
34 0279 03	3/16
34 0279 04	1/4
34 0279 05	5/16
34 0279 06	3/8
34 0279 07	1/2
34 0279 08	5/8
34 0279 09	3/4



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CLASSIC RANGE

ENOTS 34 & 36 Series brass compression fittings

Ø 3/16" ... 3/4" O/D tube, Ø 4 ... 28 mm O/D tube

METRIC 36 SERIES

Universal Tubing Sleeve
Metal and Nylon Tube

Model		O/D Tube
36 0501 02	●	4
36 0501 04	●	6
36 0501 05	●	8
36 0501 06	●	10
36 0501 07	●	12
36 0501 08	●	16
36 0501 10	●	22
36 0501 12	●	28



IMPERIAL 34 SERIES

Universal Tubing Sleeve
Metal and Nylon Tube

Model		O/D Tube
34 0278 03	●	3/16
34 0278 04	●	1/4
34 0278 05	●	5/16
34 0278 06	●	3/8
34 0278 07	●	1/2
34 0278 08	●	5/8
34 0278 09	●	3/4



Straight Male Adaptor

Model		O/D Tube	BSPT
36 0530 02	●	4	R1/8
36 0530 08	●	4	R1/4
36 0530 04	●	6	R1/8
36 0530 10	●	6	R1/4
36 0530 18	●	6	R3/8
36 0530 05	●	8	R1/8
36 0530 11	●	8	R1/4
36 0530 19	●	8	R3/8
36 0530 28	●	8	R1/2
36 0530 06	●	10	R1/8
36 0530 12	●	10	R1/4
36 0530 20	●	10	R3/8
36 0530 29	●	10	R1/2
36 0530 13	●	12	R1/4
36 0530 21	●	12	R3/8
36 0530 30	●	12	R1/2
36 0530 44	●	12	R3/4
36 0530 22	●	16	R3/8
36 0530 31	●	16	R1/2
36 0530 45	●	16	R3/4



Straight Male Adaptor

Model		O/D Tube	BSPT
34 0346 08	●	3/16	R1/8
34 0346 15	●	3/16	R1/4
34 0346 09	●	1/4	R1/8
34 0346 16	●	1/4	R1/4
34 0346 10	●	5/16	R1/8
34 0346 17	●	5/16	R1/4
34 0346 25	●	5/16	R3/8
34 0346 34	●	5/16	R1/2
34 0346 11	●	3/8	R1/8
34 0346 18	●	3/8	R1/4
34 0346 26	●	3/8	R3/8
34 0346 35	●	3/8	R1/2
34 0346 19	●	1/2	R1/4
34 0346 27	●	1/2	R3/8
34 0346 36	●	1/2	R1/2
34 0346 53	●	1/2	R3/4
34 0346 28	●	5/8	R3/8
34 0346 37	●	5/8	R1/2
34 0346 38	●	3/4	R1/2
34 0346 55	●	3/4	R3/4



Male Elbow Adaptor

Model		O/D Tube	BSPT
36 0005 02	●	4	R1/8
36 0005 08	●	4	R1/4
36 0005 04	●	6	R1/8
36 0005 10	●	6	R1/4
36 0005 18	●	6	R3/8
36 0005 05	●	8	R1/8
36 0005 11	●	8	R1/4
36 0005 19	●	8	R3/8
36 0005 28	●	8	R1/2
36 0005 12	●	10	R1/4
36 0005 20	●	10	R3/8
36 0005 29	●	10	R1/2
36 0005 13	●	12	R1/4
36 0005 21	●	12	R3/8
36 0005 30	●	12	R1/2
36 0005 31	●	16	R1/2
36 0005 45	●	16	R3/4



Male Elbow Adaptor

Model		O/D Tube	BSPT
34 0330 08	●	3/16	R1/8
34 0330 15	●	3/16	R1/4
34 0330 09	●	1/4	R1/8
34 0330 16	●	1/4	R1/4
34 0330 10	●	5/16	R1/8
34 0330 17	●	5/16	R1/4
34 0330 25	●	5/16	R3/8
34 0330 18	●	3/8	R1/4
34 0330 26	●	3/8	R3/8
34 0330 19	●	1/2	R1/4
34 0330 27	●	1/2	R3/8
34 0330 36	●	1/2	R1/2
34 0330 37	●	5/8	R1/2
34 0330 55	●	3/4	R3/4



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CLASSIC RANGE

ENOTS 34 & 36 Series brass compression fittings

Ø 3/16" ... 3/4" O/D tube, Ø 4 ... 28 mm O/D tube

METRIC 36 SERIES

Hobbs Elbow Adaptor

Model	O/D Tube	BSP
36 0541 02	4	G1/8
36 0541 04	6	G1/8
36 0541 10	6	G1/4
36 0541 05	8	G1/8
36 0541 11	8	G1/4
36 0541 19	8	G3/8
36 0541 28	8	G1/2
36 0541 12	10	G1/4
36 0541 20	10	G3/8
36 0541 13	12	G1/4
36 0541 21	12	G3/8
36 0541 22	16	G3/8
36 0541 31	16	G1/2
36 0541 47	22	G3/4



IMPERIAL 34 SERIES

Hobbs Elbow Adaptor

Model	O/D Tube	BSP
34 0338 08	3/16	G1/8
34 0338 09	1/4	G1/8
34 0338 16	1/4	G1/4
34 0338 10	5/16	G1/8
34 0338 17	5/16	G1/4
34 0338 25	5/16	G3/8
34 0338 18	3/8	G1/4
34 0338 26	3/8	G3/8
34 0338 19	1/2	G1/4
34 0338 27	1/2	G3/8
34 0338 36	1/2	G1/2



Hobbs Coned Locknut

Model	BSP
36 0540 01	G1/8
36 0540 02	G1/4
36 0540 03	G3/8
36 0540 04	G1/2
36 0540 06	G3/4



Hobbs Seal

Model	BSP
34 0156 01	G1/8
34 0156 02	G1/4
34 0156 03	G3/8
34 0156 04	G1/2
34 0156 06	G3/4
34 0156 08	G1



Elbow Connector

Model	O/D Tube
36 0511 02	4
36 0511 04	6
36 0511 05	8
36 0511 06	10
36 0511 07	12
36 0511 08	16
36 0511 10	22



Elbow Connector

Model	O/D Tube
34 0060 03	3/16
34 0060 04	1/4
34 0060 05	5/16
34 0060 06	3/8
34 0060 07	1/2
34 0060 08	5/8
34 0060 09	3/4



Stem Elbow Connector

Model	O/D Tube	O/D Stem
36 0551 04	6	6
36 0551 05	8	8
36 0551 06	10	10
36 0551 07	12	12
36 0551 08	16	16



Stem Elbow Connector

Model	O/D Tube	O/D Stem
34 0057 03	3/16	3/16
34 0057 04	1/4	1/4
34 0057 05	5/16	5/16
34 0057 06	3/8	3/8
34 0057 07	1/2	1/2
34 0057 08	5/8	5/8
34 0057 09	3/4	3/4



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CLASSIC RANGE

ENOTS 34 & 36 Series brass compression fittings

Ø 3/16" ... 3/4" O/D tube, Ø 4 ... 28 mm O/D tube

METRIC 36 SERIES

Tee Connector

Model		O/D Tube
36 0514 02	●	4
36 0514 04	●	6
36 0514 05	●	8
36 0514 06	●	10
36 0514 07	●	12
37 0514 08	●	16
36 0514 10	●	22
36 0514 12	●	28



Bulkhead Connector

Model		O/D Tube	External thread
36 0508 02	●	4	M12 x 1,0
36 0508 04	●	6	M15 x 1,0
36 0508 05	●	8	M18 x 1,5
36 0508 06	●	10	M20 x 1,5
36 0508 07	●	12	M24 x 1,5
36 0508 08	●	16	M30 x 1,5
36 0508 10	●	22	M38 x 1,5



Bulkhead Locknut

Model		Thread
36 0520 01	●	M12 x 1,0
36 0520 05	●	M18 x 1,5
36 0520 06	●	M20 x 1,5
36 0520 07	●	M24 x 1,5
36 0520 08	●	M30 x 1,5
36 0520 10	●	M38 x 1,5



Reducing Connector

Model		Female O/D Tube	Male O/D Tube
36 0517 27	●	4	6
36 0517 28	●	4	8
36 0517 47	●	6	8
36 0517 48	●	6	10
36 0517 49	●	6	12
36 0517 56	●	8	10
36 0517 57	●	8	12
36 0517 58	●	8	16
36 0517 64	●	10	12
36 0517 65	●	10	16
36 0517 71	●	12	16
36 0517 73	●	12	22
36 0517 87	●	22	28



IMPERIAL 34 SERIES

Tee Connector

Model		O/D Tube
34 0290 03	●	3/16
34 0290 04	●	1/4
34 0290 05	●	5/16
34 0290 06	●	3/8
34 0290 07	●	1/2
34 0290 08	●	5/8
34 0290 09	●	3/4



Bulkhead Adaptor

Model		O/D Tube	External BSP Thread
34 0021 03	●	3/16	G1/4
34 0021 04	●	1/4	G3/8
34 0021 05	●	5/16	G3/8
34 0021 06	●	3/8	G1/2
34 0021 07	●	1/2	G3/4
34 0021 08	●	5/8	G7/8
34 0021 09	●	3/4	G1



Bulkhead Locknut

Model		BSP Thread
34 0223 01	●	G1/8
34 0223 02	●	G1/4
34 0223 03	●	G3/8
34 0223 04	●	G1/2
34 0223 06	●	G3/4
34 0223 08	●	G1



Reducing Connector

Model		Male O/D Tube	Female O/D Tube
34 0352 31	●	1/4	3/16
34 0352 32	●	5/16	3/16
34 0352 39	●	5/16	1/4
34 0352 33	●	3/8	3/16
34 0352 40	●	3/8	1/4
34 0352 46	●	3/8	5/16
34 0352 34	●	1/2	3/16
34 0352 41	●	1/2	1/4
34 0352 47	●	1/2	5/16
34 0352 52	●	1/2	3/8
34 0352 53	●	5/8	3/8
34 0352 57	●	5/8	1/2
34 0352 58	●	3/4	1/2



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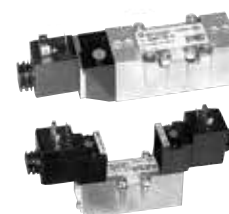
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