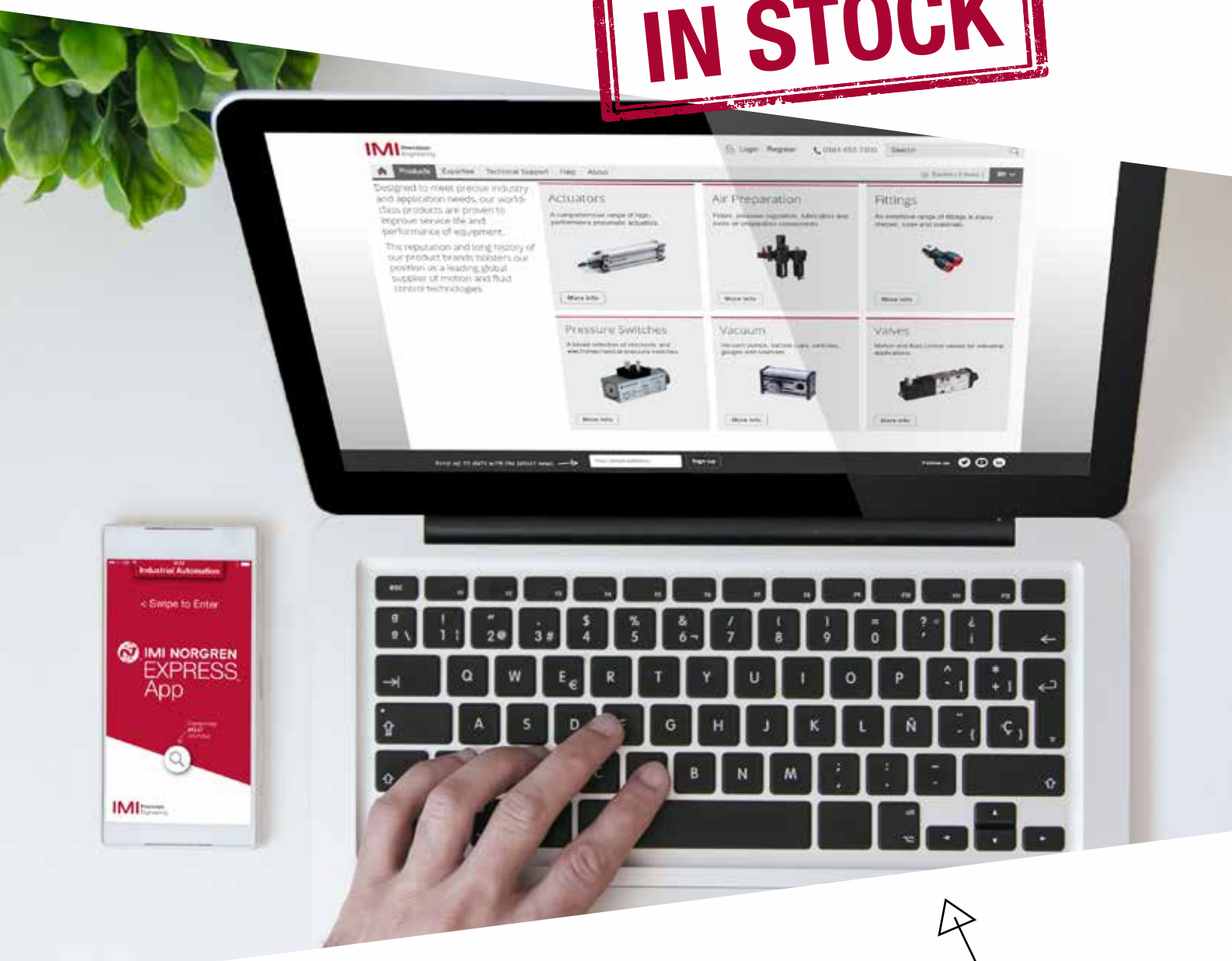


IN STOCK



Express Catalogue

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Engineering
GREAT Solutions

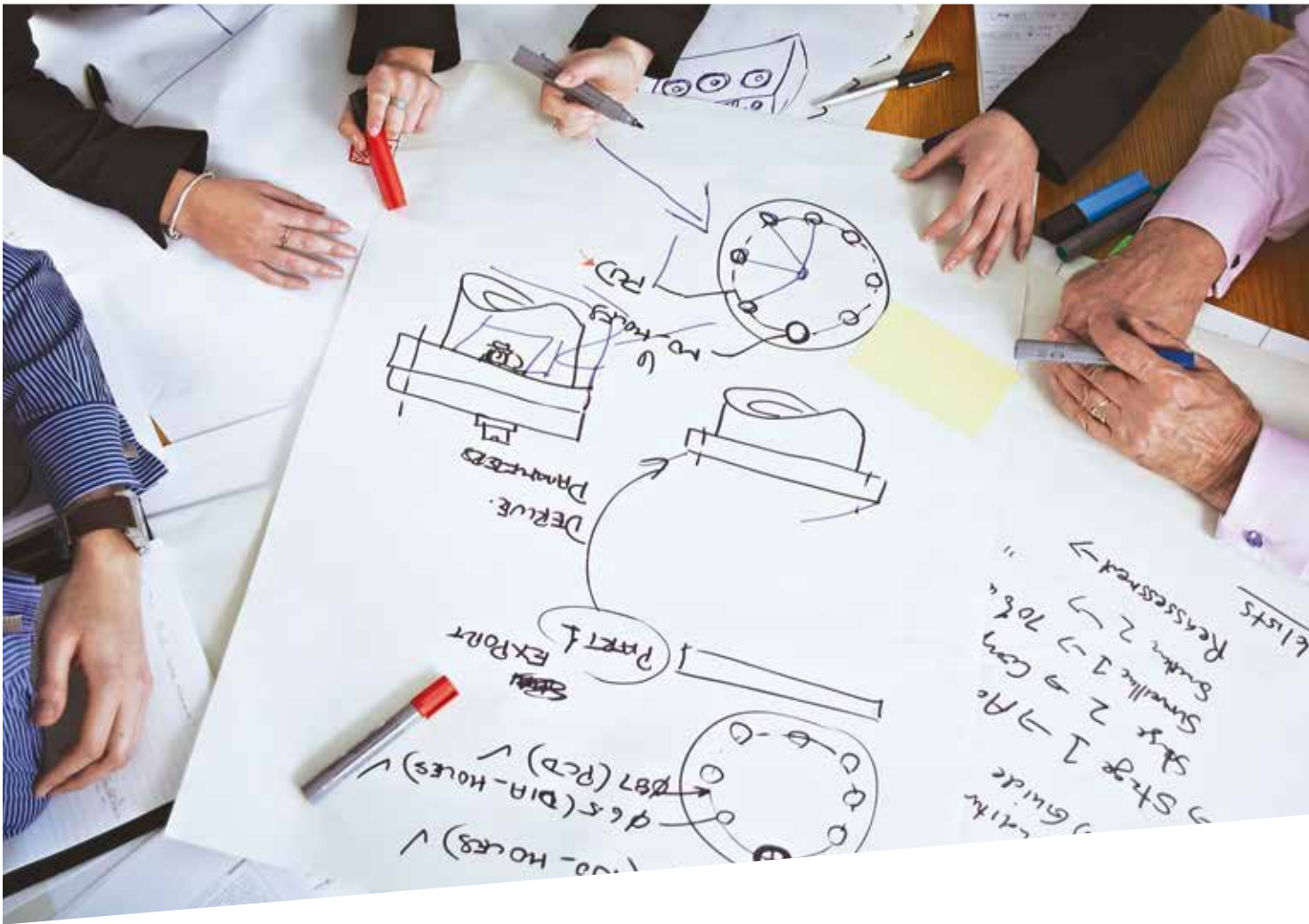
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All of our products are backed with an industry leading 2-year warranty. Our dedicated team of experts is on hand with technical advice, support and recommendations to help you get the most effective products, in the shortest timescales, and with the best possible service. In the unlikely event of an item being out of stock, we will ship your item as a priority.

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Engineering GREAT solutions

We deliver GREAT solutions for our customers tackling the world's most demanding engineering challenges

IMI Precision Engineering is a world leader in motion and fluid control technologies. Wherever precision, speed and engineering reliability are essential, we deliver exceptional solutions which improve the productivity and efficiency of our customers' equipment.

Part of IMI plc, we have a sales and service network in 75 countries, as well as manufacturing capability in the USA, Germany, China, UK, Switzerland, Czech Republic, Mexico and Brazil. We support this with our global centres of technical excellence, and facilities for CFD design and R&D testing. We employ a dedicated team of field engineers, sector specialists and key account managers – all committed to providing excellent service to our customers.

As a business, we aim to **UNDERSTAND** our customers' challenges. We then **CONNECT** our products, people and expertise in order to **DELIVER** exceptional service and solutions. These **IMPROVE** the performance of our customers' machinery.

We call this Engineering GREAT, and we deliver it to customers through a world-class portfolio of high performance products, through close partnerships and problem-solving, and through a global network of support which ensures reliable local delivery, all over the world.



How Express delivers value to our customers

Our Express service is designed with the specific purpose of making our expertise and products, easily and readily accessible online or on the telephone.

The Express Range

All of the products within this catalogue are Express items, meaning they are available from stock and ready for immediate dispatch.

These standard products are ideal for your new industrial automation project and for replacing broken or worn out parts in your existing applications.

Convenience, speed & availability

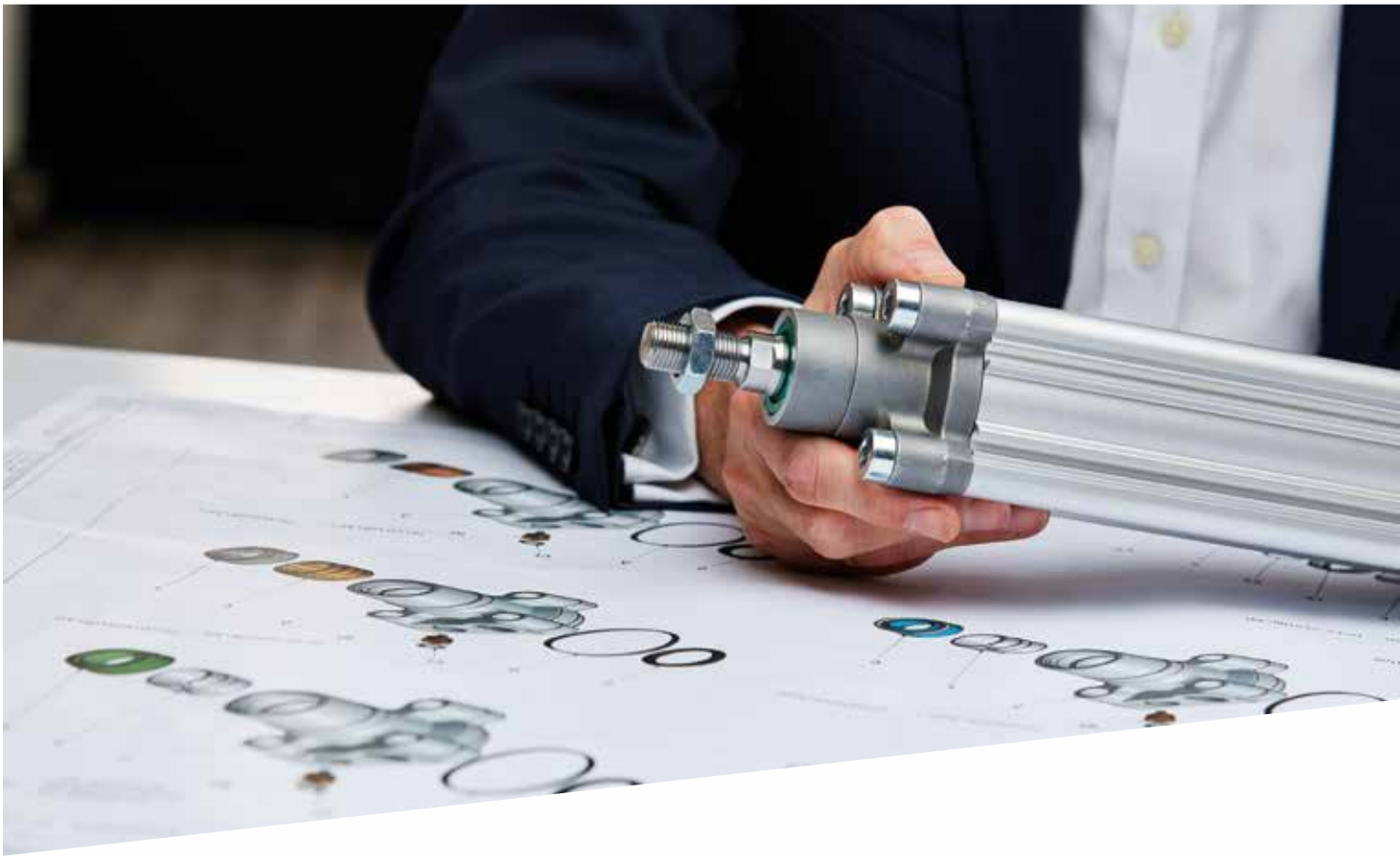
Giving customers access to IMI Precision Engineering's products quickly and easily by phone, catalogue or online, we offer a convenient and high quality 'one-stop shop' for all MRO needs.

Quality and choice

Rapid access to thousands of proven, high quality products which deliver superior performance, reduced maintenance and long-term cost benefit.

Technical advice & support

We offer 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.



Our market leading product brands

The combination of our IMI Precision Engineering product brands' trusted reputation and long history underpins our position as a leading global supplier of motion and fluid control technologies.



IMI NORGREN®

With over 80 years industry experience, the IMI Norgren brand includes a wide range of high quality pneumatic and fluid control products such as actuators, air preparation products, pressure switches, fittings and valves.



IMI BUSCHJOST®

Successful in the market for over 60 years, IMI Buschjost has a market leading range of process and multimedia solenoid valve technology and system solutions.



IMI HERION®

For over 50 years the IMI Herion brand has specialised in solenoid valves, NAMUR valves and hydraulic solutions for mechanical and pneumatic press and press safety technology.



Selecting the model you need couldn't be simpler

Our high performance products improve performance and productivity in Industrial Automation. This catalogue includes a number of features designed to help you select and order the best parts, quickly and efficiently.

Part numbers & technical information

Each product page includes part numbers, a photo and technical information – everything you need to order the right model.

Speed of delivery

The products listed in this catalogue are available from stock, and we operate a truly global sales and service network, helping keep your equipment running – wherever you are.

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.

Fast-track actuators

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

Call or email us for more information.

Responsible Business

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



Product Links & Product Plus

To save you time, our Product Links box recommends products that support and complement the ones you're buying.

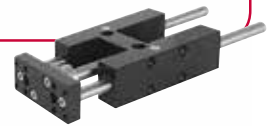
Product Plus also offers additional tips on product application and 'best practice'.



PRODUCT 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.



Our full Express product range is available in each country





New online services

To improve your experience, we have introduced a range of web services, including a dedicated and intuitive competitor conversion tool, a new mobile website, and we have also introduced a new product configurator with improved CAD capabilities. We're engineering GREAT access to our products and services to help you save time and work more efficiently.

Part Converter

Looking for an IMI Precision Engineering alternative to competitor parts?

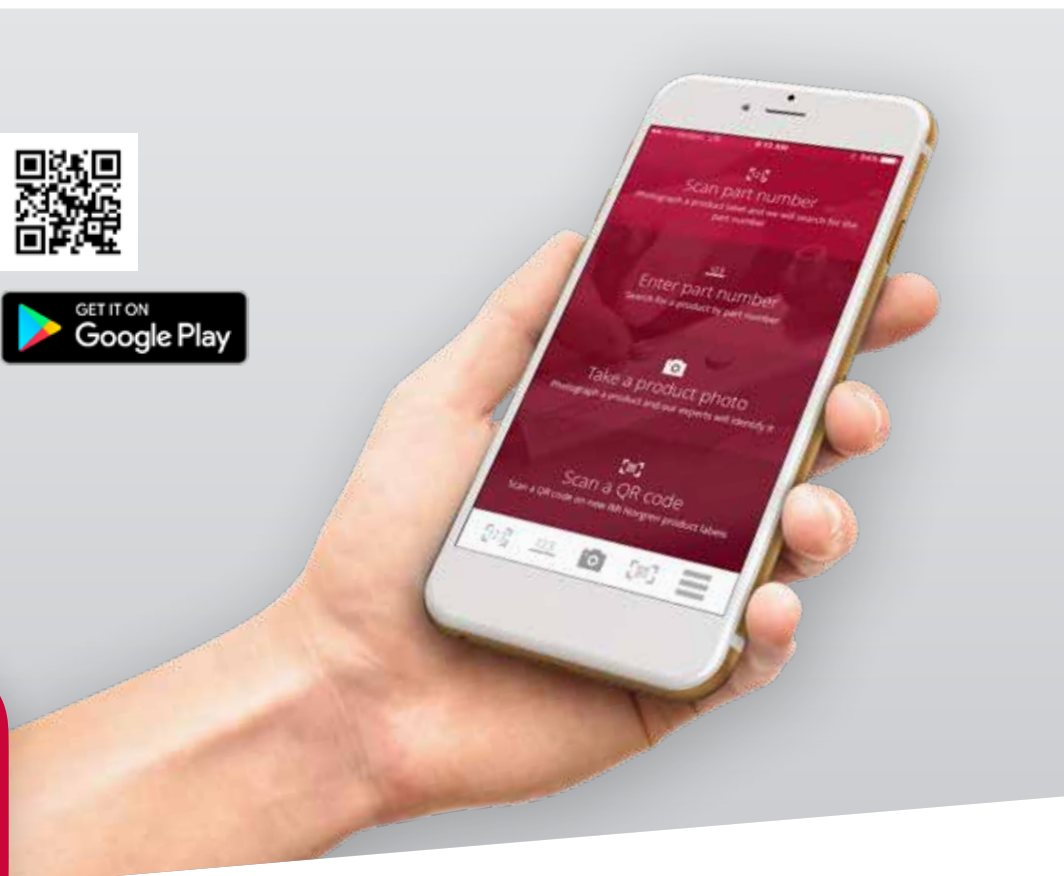
Try our new Part Converter. All you need is a full or partial part number to find the IMI Precision Engineering alternative. It tells you everything you need to know, including technical details and whether it's an exact or partial match. To make things even easier, you can link straight through to the recommended alternative, review the technical detail and buy it there and then.

Configuration and CAD

Quickly and easily configure pneumatic cylinders, including the addition of mountings and accessories. It provides price and availability throughout the configuration process and the option to download a CAD file or purchase the completed configuration.



Fully Compatible



Find parts faster! Introducing the new IMI Norgren Express App

A powerful product finder in your pocket

Our new mobile website lets you purchase products straight from your mobile phone or tablet, wherever you are!

Complete with images and technical information, our new mobile website gives you all the product details you will need to purchase, even out on the factory floor.

- > A powerful product finder in your pocket
- > Scan, snap, send and search, quickly and easily
- > Convert competitor components to an IMI Norgren equivalent
- > Buy online or pinpoint your nearest distributor with stock available



Try it now and find parts faster.

Download from the App Store or Google Play today.



Purchase online securely and quickly

With our online website, the entire search, order and delivery process allows you to buy online with confidence:

Selection

Find the product you need in seconds, from over 10,000 catalogue products. All it takes is part or all of the part number. Or alternatively, search the detailed product information pages.

Support

Select precisely the right product based on detailed technical information, datasheets, CAD drawings, price and availability – all easily accessible online.

Ordering

If you know the products you want to add quickly to your basket, our quick basket allows you to enter the product number and quantity, with the help of predictive search functions. Alternatively, copy large lists of items from your purchasing system, spreadsheet, email or word processing document directly into the paste basket and order securely online, 24/7.

Tracking

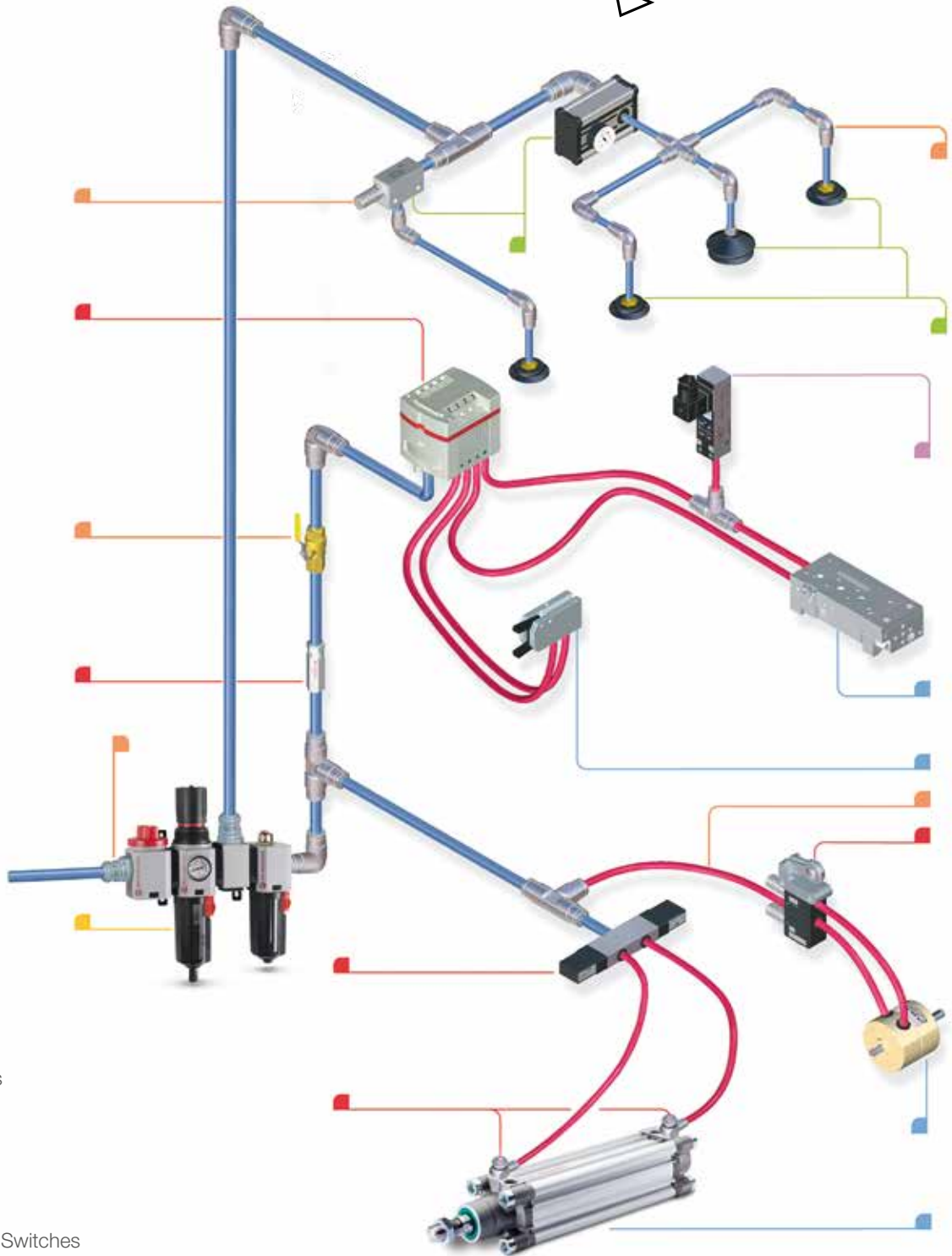
Track your order using the tracking link. We'll also notify you by email when the items are shipped and out for delivery.



← Purchase products straight from your mobile phone or tablet

Product sections

Engineering
GREAT
Solutions



- Actuators
- Vacuum
- Valves
- Pressure Switches
- Air Preparation
- Fittings

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 more traditional actuator ranges. In this 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 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.



Industry standard or something different?



Compact or ultra compact?



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 please contact us.

- Single Acting
- Double Acting

● Roundline Cylinders

<p>RM/8000/M ■ ISO 6432 Ø 10 ... 25 mm</p>  <p>Page 16</p>	<p>RT/57200/M ■ Ø 10 ... 63 mm</p>  <p>Page 19</p>
--	--

● Compact Cylinders

<p>RA/192000/MX ■ ISO 21287 Ø 20 ... 50 mm</p>  <p>Page 23</p>	<p>RM/92000/M ■ Ø 12 ... 100 mm</p>  <p>Page 26</p>
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● Profile Cylinders

<p>PRA/802000/M, RA/802000/M, RA/8000/M ■ ISO 15552 Ø 32 ... 320 mm</p>  <p>Page 30</p>	<p>PRA/882000/M IVAC Clean Line ■ Ø 32 ... 63 mm</p>  <p>Page 36</p>
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● Air Bellows

<p>M/31000 ■ Ø 6 ... 16"</p>  <p>Page 39</p>	<p>PM/31000 ■ Ø 2 3/4 ... 12"</p>  <p>Page 40</p>
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● Switches

M/50 (Reed and solid state)



Page 42

● Mountings

Series		Page
Roundline cylinders	RM/8000/M (ISO/VDMA cylinders)	16
	RT/57200/M	19
Compact cylinders	RA/192000/MX (ISO cylinders)	23
	RM/92000/M	26
Profile cylinders	PRA/802000/M, RA/802000/M, RA/8000/M	33
	PRA/882000/M (IVAC cylinder)	36



Introducing IMI Norgren ELION E/809000 Rod-Style Electric Actuator Range

Electric Actuators offer the perfect solution when precise control, accurate positioning (often to multiple locations) and repeatability is essential

Designed to meet our Customers requirements, our flagship range of high performance ISO standard rod-style electromechanical linear actuators are suitable for a variety of demanding industrial applications.

Further, we offer a one-stop shop for your needs. Partnering with Control Techniques, a world-leading servo motor and drives manufacturer, we are able to offer you a complete electric actuator solution to suit your application.

- > **Accurate and Repeatable:** Ball screw and servo motor provides accurate and repeatable positioning
- > **Long Life:** Ball screw and bearing mechanisms enables high cycle life
- > **Ease of Installation:** Based on ISO 15552 standard with universal mounting options
- > **Performance Monitoring:** Integral sensors and external switches monitor actuator performance and enable planned maintenance
- > **Energy Saving:** Electromechanical components efficiently convert electricity to mechanical power, only energised when movement is required, reducing energy consumption and the cost of ownership
- > **Safety in Service:** Servo motor with optional integrated holding brake enables actuators to self-lock when the power is isolated
- > **Industries:** Carefully selected materials and product specifications suitable for a variety of applications
- > **Smart Configurations:** Our online configurator enables quick and easy product selection based on Customer application input
- > **One-Stop Shop:** Motors, drives and accessories are available

*Engineering
GREAT Solutions*



Find out more
www.imi-precision.com

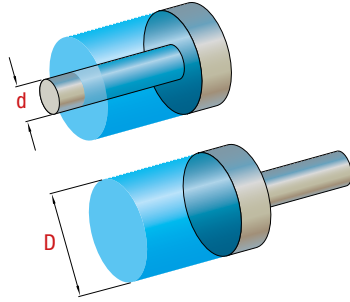


CYLINDER SIZING AND SPEED CONTROL

Cylinder sizing for thrust

The theoretical thrust (outstroke) or pull (instroke) of a cylinder is calculated by multiplying the effective area of the piston by the working pressure. The effective area for thrust is the full area of the cylinder bore. The effective area for pull is reduced by the cross section area of the piston rod.

Current practice specifies bore (D) and piston rod diameter (d) in millimetres and working pressure (P) in bar gauge. In the formula, P is divided by 10 to express pressure in Newtons (N).



The theoretical force (F) is given by

$$\text{Thrust } F = \frac{\pi D^2 P}{40} = N$$

$$\text{Pull } F = \frac{\pi(D^2 - d^2)P}{40} = N$$

Where

D = Cylinder bore in millimetres

d = Piston rod diameter in millimetres

P = Pressure in bar

F = Thrust or Pull in Newtons

Example: Find the theoretical thrust and pull of a 50 mm bore cylinder supplied with a pressure of 8 bar

$$\text{Thrust } F = \frac{\pi 50^2 \cdot 8}{40} = 1571 \text{ N}$$

$$\text{Pull } F = \frac{\pi(50^2 - 20^2) \cdot 8}{40} = 1319 \text{ N}$$

Table of thrust and pulls, double acting cylinders

Cylinder bore mm (inches)	Piston rod diameter mm (inches)	Thrust N at 6 bar	Pull N at 6 bar
8	3	30	25
10	4	47	39
12	6	67	50
16	6	120	103
20	8	188	158
25	10	294	246
32	12	482	414
40	16	753	633
44,45 (1,75)	16	931	810
50	20	1178	989
63	20	1870	1681
76,2 (3)	25	2736	2441
80	25	3015	2721
100	25	4712	4418
125	32	7363	6881
152,4 (6)	(1,5)	10944	10260
160	40	12063	11309
200	40	18849	18095
250	50	29452	28274
304,8 (12)	(2,25)	43779	42240
320	63	48254	46384
355,6 (14)	(2,25)	59588	58049

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 (kg x 9,81 = N). Note the difference in thrust and pull figures on double acting rodded 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 consumption

Bore mm	Rod mm	Push stroke consumption dm ³ /mm of stroke at 6 bar	Pull stroke consumption dm ³ /mm of stroke at 6 bar	Combined consumption dm ³ /mm of stroke/cycle
10	4	0,00054	0,00046	0,00100
12	6	0,00079	0,00065	0,00144
16	6	0,00141	0,00121	0,00262
20	8	0,00220	0,00185	0,00405
25	10	0,00344	0,00289	0,00633
32	12	0,00563	0,00484	0,01047
40	16	0,00880	0,00739	0,01619
50	20	0,01374	0,01155	0,02529
63	20	0,02182	0,01962	0,04144
80	25	0,03519	0,03175	0,06694
100	25	0,05498	0,05154	0,10652
125	32	0,08590	0,08027	0,16617
160	40	0,14074	0,13195	0,27269
200	40	0,21991	0,21112	0,43103
250	50	0,34361	0,32987	0,67348

Table of thrust and pulls, single acting cylinders

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

What if the
air fails?



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 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

Find out more

www.imi-precision.com

Load too
heavy?



- > The standard actuator is fully non-corrodible in standard applications. For more arduous environments, you can choose a stainless version
- > 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

Anything more
compact?



Engineering
GREAT Solutions



 IMI NORGREN®

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 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

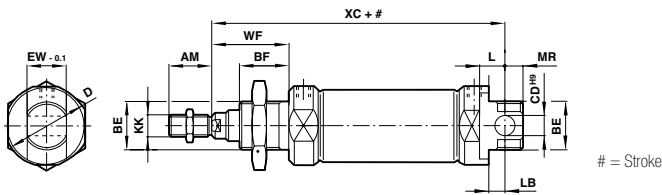
Operation:
Double acting, magnetic piston with buffer cushioning

Operating pressure:
1 ... 10 bar

Ambient temperature:
-10°C ... +80°C max.
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Dimensions



Dia. Ø	AM	BE	BF	Ø CD _{H9}	ØD	EW _{0.1}	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



PRODUCT 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 79 for more information for the simplest solution, or speak to your Express team if you have more complex requirements



PRODUCT 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!









ISO ROUNDLINE CYLINDERS

RM/8000/M Double acting, ISO 6432 – Ø 10 ... 25 mm

Models

Accessories

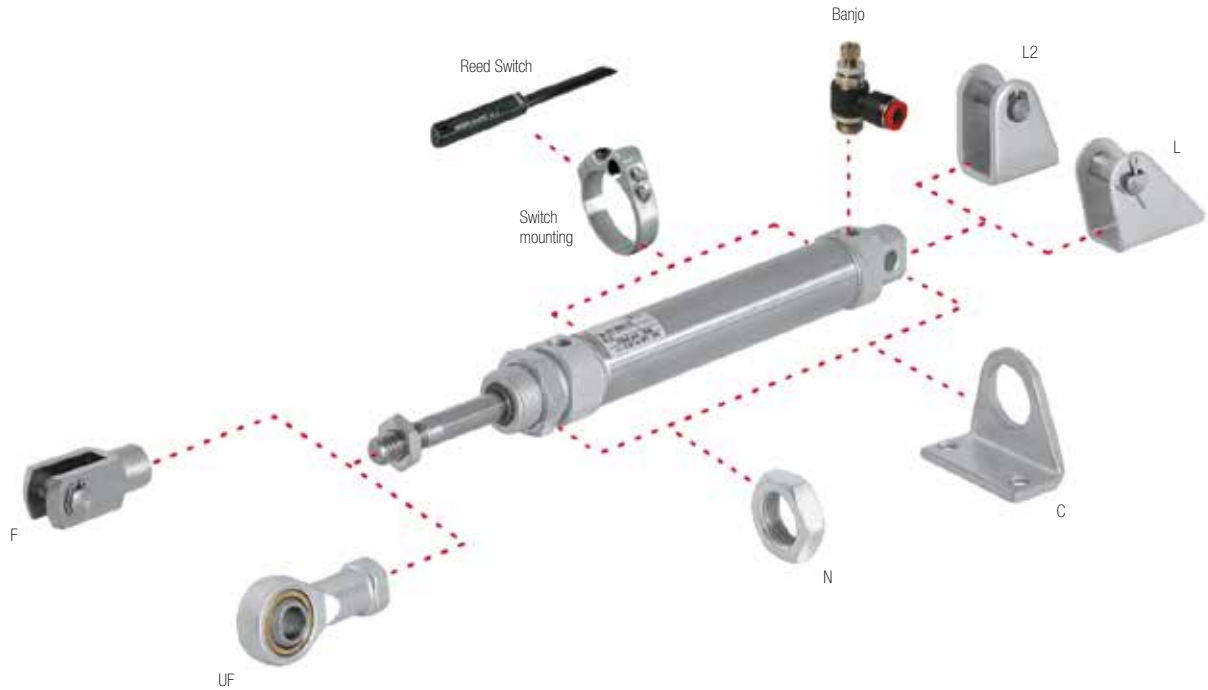
Buffer Cushioning Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting ≥15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
									
RM/8010/M/10	10	10	M5	4	M/50/LSU/5V	–	C0K510405	C02250405	C02470405
RM/8010/M/25	10	25	M5	4	M/50/LSU/5V	QM/33/010/22	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	–	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
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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
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RM/8016/M/25	16	25	M5	6	M/50/LSU/5V	QM/33/016/22	C0K510405	C02250405	C02470405
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RM/8016/M/50	16	50	M5	6	M/50/LSU/5V	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/80	16	80	M5	6	M/50/LSU/5V	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/100	16	100	M5	6	M/50/LSU/5V	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/125	16	125	M5	6	M/50/LSU/5V	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/M/160	16	160	M5	6	M/50/LSU/5V	QM/33/016/22	C0K510405	C02250405	C02470405
RM/8016/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	–	C0K510618	C02250618	C02470618
RM/8020/M/25	20	25	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/40	20	40	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/50	20	50	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/80	20	80	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/100	20	100	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/125	20	125	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/160	20	160	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/M/200	20	200	G1/8	8	M/50/LSU/5V	QM/33/020/22	C0K510618	C02250618	C02470618
RM/8020/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	–	C0K510618	C02250618	C02470618
RM/8025/M/25	25	25	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/40	25	40	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/50	25	50	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/80	25	80	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/100	25	100	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/125	25	125	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/160	25	160	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/200	25	200	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618
RM/8025/M/250	25	250	G1/8	10	M/50/LSU/5V	QM/33/025/22	C0K510618	C02250618	C02470618

Other stroke lengths available up to 500 mm maximum, please contact us.
Service kits are not available for this range of cylinders.
For information on alternative magnetic switches, please contact us.

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

MOUNTINGS FOR ISO ROUNDLINE CYLINDERS

RM/8000/M Double acting



Dia. Ø	C	F	L	L2	N	UF
10	M/P19369	QM/8010/25	QM/947	QM/8010/44	M/P1501/90	QM/8010/32
12	M/P19389	QM/8012/25	QM/8012/24	QM/8012/44	M/P13834	QM/8012/32
16	M/P19389	QM/8012/25	QM/8012/24	QM/8012/44	M/P13834	QM/8012/32
20	M/P19406	QM/8020/25	QM/8020/24	QM/8020/44	M/P13615	QM/8020/32
25	M/P19406	QM/8025/25	QM/8020/24	QM/8020/44	M/P13615	QM/8025/32

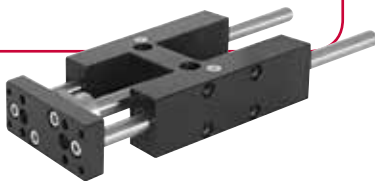
Note: This actuator is supplied with one nose nut, an additional lock nut style 'N' is required when ordering mountings 'C' to connect to the rear end cap.



PRODUCT 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.



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

Mounting:
Side port, integral eye mounting (Ø 10 ... 40 mm), fixing holes in the end cover (Ø 50 and 63 mm)

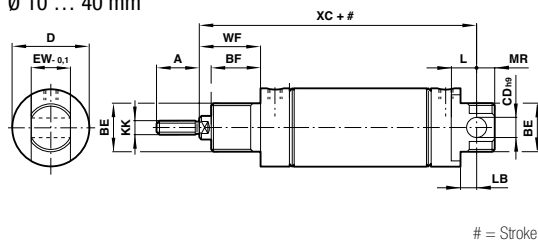
Operating pressure:
1 ... 10 bar

Ambient temperature:
-10°C ... +80°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

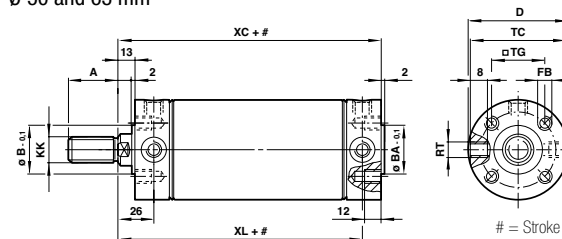


Dimensions

Ø 10 ... 40 mm



Ø 50 and 63 mm



Ø 10 ... 40 mm

Dia. Ø	A	BE	BF	Ø CD _H	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

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



PRODUCT LINKS

Additional ranges...

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



PRODUCT PLUS

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 79 for more information for the simplest solution, or speak to your Express team if you have more complex requirements



ROUNDLINE CYLINDERS

RT/57200/M Double acting – \varnothing 10 ... 63 mm

● **Models**

Accessories

Model	Dia. \varnothing	Stroke length	Port size	Piston rod \varnothing	Reed switch with integral 5 m cable	Switch mounting ≥ 15 mm stroke	Banjo flow control	Straight fitting	Elbow fitting
RT/57210/M/10	10	10	M5	4	M/50/LSU/5V	-	COK510405	C02250405	C02470405
RT/57210/M/25	10	25	M5	4	M/50/LSU/5V	QM/33/010/22	COK510405	C02250405	C02470405
RT/57210/M/40	10	40	M5	4	M/50/LSU/5V	QM/33/010/22	COK510405	C02250405	C02470405
RT/57210/M/50	10	50	M5	4	M/50/LSU/5V	QM/33/010/22	COK510405	C02250405	C02470405
RT/57212/M/10	12	10	M5	4	M/50/LSU/5V	-	COK510405	C02250405	C02470405
RT/57212/M/25	12	25	M5	4	M/50/LSU/5V	QM/33/012/22	COK510405	C02250405	C02470405
RT/57212/M/40	12	40	M5	4	M/50/LSU/5V	QM/33/012/22	COK510405	C02250405	C02470405
RT/57212/M/50	12	50	M5	4	M/50/LSU/5V	QM/33/012/22	COK510405	C02250405	C02470405
RT/57216/M/10	16	10	M5	6	M/50/LSU/5V	-	COK510405	C02250405	C02470405
RT/57216/M/25	16	25	M5	6	M/50/LSU/5V	QM/33/016/22	COK510405	C02250405	C02470405
RT/57216/M/40	16	40	M5	6	M/50/LSU/5V	QM/33/016/22	COK510405	C02250405	C02470405
RT/57216/M/50	16	50	M5	6	M/50/LSU/5V	QM/33/016/22	COK510405	C02250405	C02470405
RT/57216/M/80	16	80	M5	6	M/50/LSU/5V	QM/33/016/22	COK510405	C02250405	C02470405
RT/57220/M/10	20	10	Rc 1/8	8	M/50/LSU/5V	-	COTA00618	C01250618	C01470618
RT/57220/M/25	20	25	Rc 1/8	8	M/50/LSU/5V	QM/33/020/22	COTA00618	C01250618	C01470618
RT/57220/M/40	20	40	Rc 1/8	8	M/50/LSU/5V	QM/33/020/22	COTA00618	C01250618	C01470618
RT/57220/M/50	20	50	Rc 1/8	8	M/50/LSU/5V	QM/33/020/22	COTA00618	C01250618	C01470618
RT/57220/M/80	20	80	Rc 1/8	8	M/50/LSU/5V	QM/33/020/22	COTA00618	C01250618	C01470618
RT/57220/M/100	20	100	Rc 1/8	8	M/50/LSU/5V	QM/33/020/22	COTA00618	C01250618	C01470618
RT/57225/M/10	25	10	Rc 1/8	10	M/50/LSU/5V	-	COTA00618	C01250618	C01470618
RT/57225/M/25	25	25	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/40	25	40	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/50	25	50	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/80	25	80	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/100	25	100	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/125	25	125	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/160	25	160	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57225/M/200	25	200	Rc 1/8	10	M/50/LSU/5V	QM/33/025/22	COTA00618	C01250618	C01470618
RT/57232/M/10	32	10	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/25	32	25	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/40	32	40	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/50	32	50	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/80	32	80	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/100	32	100	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/125	32	125	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/160	32	160	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/200	32	200	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57232/M/250	32	250	Rc 1/8	12	M/50/LSU/5V	QM/33/032/22	COTA00618	C01250618	C01470618
RT/57240/M/25	40	25	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/40	40	40	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/50	40	50	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/80	40	80	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/100	40	100	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/125	40	125	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/160	40	160	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/200	40	200	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57240/M/320	40	320	Rc 1/8	14	M/50/LSU/5V	QM/33/040/22	COTA00618	C01250618	C01470618
RT/57250/M/50	50	50	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57250/M/80	50	80	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57250/M/100	50	100	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57250/M/125	50	125	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57250/M/160	50	160	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57250/M/200	50	200	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57250/M/250	50	250	Rc 1/4	16	M/50/LSU/5V	QM/33/050/22	COTA00828	C01250828	C01470828
RT/57263/M/50	63	50	Rc 1/4	20	M/50/LSU/5V	QM/33/063/22	COTA00828	C01250828	C01470828
RT/57263/M/80	63	80	Rc 1/4	20	M/50/LSU/5V	QM/33/063/22	COTA00828	C01250828	C01470828
RT/57263/M/100	63	100	Rc 1/4	20	M/50/LSU/5V	QM/33/063/22	COTA00828	C01250828	C01470828
RT/57263/M/125	63	125	Rc 1/4	20	M/50/LSU/5V	QM/33/063/22	COTA00828	C01250828	C01470828
RT/57263/M/160	63	160	Rc 1/4	20	M/50/LSU/5V	QM/33/063/22	COTA00828	C01250828	C01470828

Other bore sizes and stroke lengths available up to 500 mm maximum, please contact us.
 Service kits are not available for this range of cylinders.
 For information on alternative magnetic switches, please contact us.

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



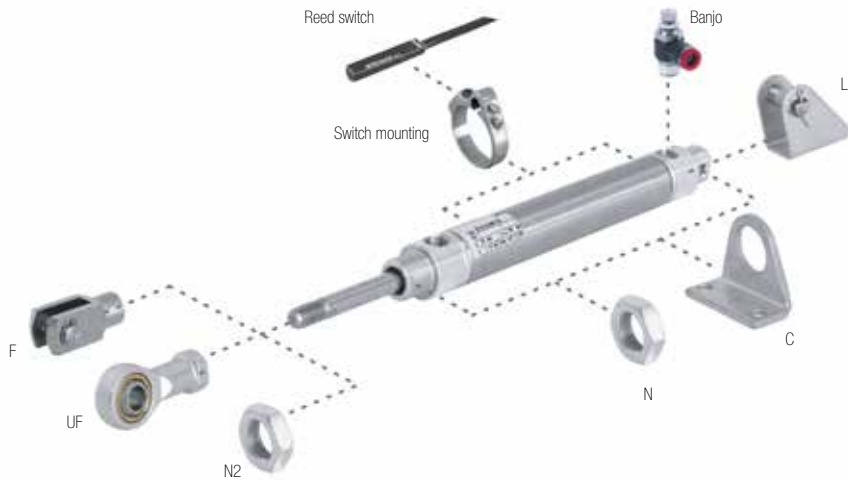
For further information, visit www.imi-precision.com and use the new improved search function. If you cannot see the option you require please contact us.



MOUNTINGS FOR ROUNDLINE CYLINDERS

RT/57200/M Double acting

Ø 10 ... 40 mm



Ø 50 ... 63 mm



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

Simple to complex applications covered in one range



Integral switch Grooves



ISO Compact cylinders

ISO 21287 is the most recently-added actuator 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
- > 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
- > 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

Multi-position And tandem versions



Guided

Engineering GREAT Solutions

Find out more

www.imi-precision.com



ISO COMPACT CYLINDERS

RA/192000/MX Double acting, ISO 21287 – Ø 20 ... 50 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/MX
Double acting, magnetic piston, female
piston rod thread, buffer cushioning

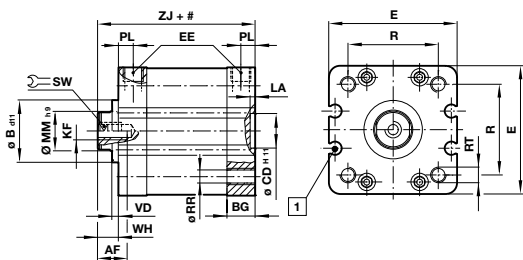
Operating pressure:
1 ... 10 bar

Ambient temperature:
-5°C ... +80°C max.
Air supply must be dry enough to avoid ice
formation at temperatures below +2°C



Dimensions

RA/192000/MX Standard cylinder
With female piston rod thread



Stroke

□ M/50 switches can be mounted flush with the profile


Model	Ø	AF	Ø B d11	BG	Ø CD H11	□ E	EE	KF	LA	Ø MM h9
RA/192020/MX	20	10	–	12	10	37	M 5	M6	2,5	10
RA/192025/MX	25	10	–	13	10	41	M 5	M6	2,5	10
RA/192032/MX	32	12	–	14,5	14	48	G1/8	M8	2,5	12
RA/192040/MX	40	12	–	14,5	14	54,5	G1/8	M8	2,5	16
RA/192050/MX	50	16	–	14	18	66	G1/8	M10	2,5	20
Ø	PL	□ R	Ø RR	RT	SW	WH	ZJ	kg at 0 mm	kg per 5 mm	
20	7	22	4,3	M5	8	6	43	0,12	0,01	
25	7	26	4,3	M5	8	6	45	0,15	0,01	
32	7,5	32,5	5,3	M6	10	7	51	0,23	0,02	
40	7,5	38	5,3	M6	13	7	52	0,30	0,02	
50	7,5	46,5	6,8	M8	17	8	53	0,46	0,03	

ISO COMPACT CYLINDERS

RA/192000/MX Double acting, ISO 21287 – Ø 20 ... 50 mm

● Models

Accessories

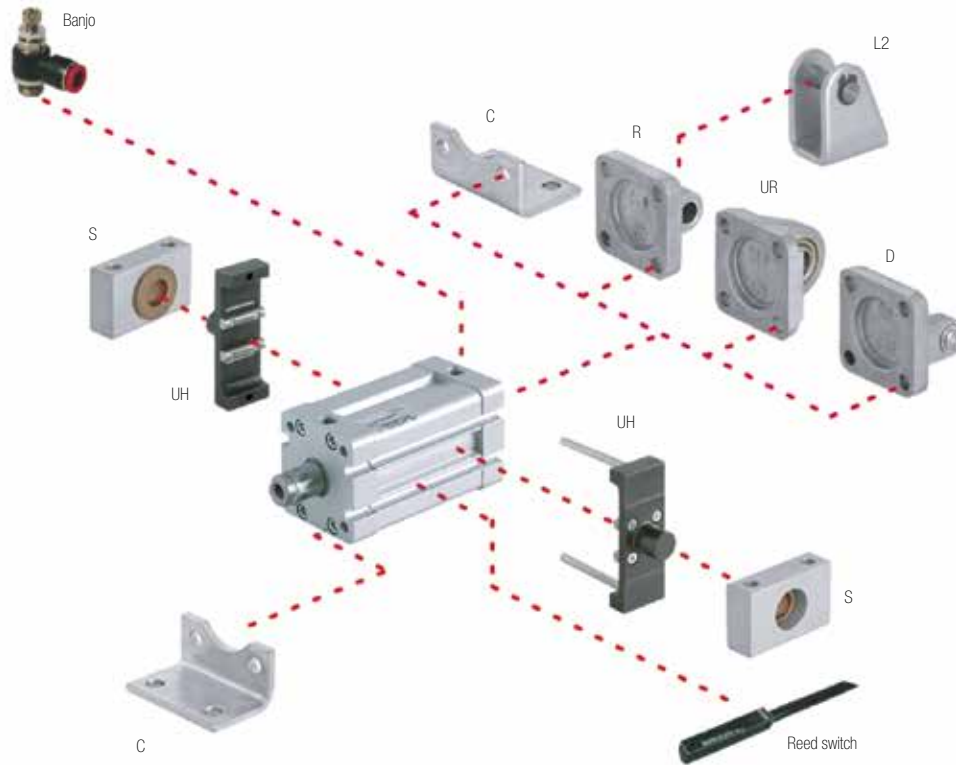
Female thread	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Banjo flow control	Straight fitting	Elbow fitting	Service Kit
									
RA/192020/MX/10	20	10	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/15	20	15	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/20	20	20	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/25	20	25	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/30	20	30	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/40	20	40	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192020/MX/50	20	50	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192020/00
RA/192025/MX/10	25	10	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/15	25	15	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/20	25	20	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/25	25	25	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/30	25	30	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/40	25	40	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192025/MX/50	25	50	M5	10	M/50/LSU/5V	COK510405	C02250405	C02470405	QM/192025/00
RA/192032/MX/10	32	10	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/15	32	15	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/20	32	20	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/25	32	25	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/30	32	30	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/40	32	40	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/50	32	50	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/60	32	60	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/80	32	80	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192032/MX/100	32	100	G1/8	12	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192032/00
RA/192040/MX/10	40	10	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/15	40	15	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/20	40	20	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/25	40	25	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/30	40	30	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/40	40	40	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/50	40	50	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/60	40	60	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/80	40	80	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192040/MX/100	40	100	G1/8	16	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192040/00
RA/192050/MX/10	50	10	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/15	50	15	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/20	50	20	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/25	50	25	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/30	50	30	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/40	50	40	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/50	50	50	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/60	50	60	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/80	50	80	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00
RA/192050/MX/100	50	100	G1/8	20	M/50/LSU/5V	COK510618	C02250618	C02470618	QM/192050/00

Other stroke lengths available up to 500 mm maximum, depending upon bore size, please contact us.
For information on alternative magnetic switches, please contact us.

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

MOUNTINGS FOR ISO COMPACT CYLINDERS

RA/192000/MX Double acting



Dia. Ø	B, G	C	D	L2	R	S	UH	UR
20	QA/192020/22	QM/192020/21	-	QM/8020/44	QM/192020/27	-	-	-
25	QA/192025/22	QM/192025/21	-	QM/8020/44	QM/192025/27	-	-	-
32	QA/8032/22	QA/192032/21	QA/8032/23	-	QA/8032/27	QA/8032/41	PQA/182032/40	QA/8032/33
40	QA/8040/22	QA/192040/21	QA/8040/23	-	QA/8040/27	QA/8040/41	PQA/182040/40	QA/8040/33
50	QA/8050/22	QA/192050/21	QA/8050/23	-	QA/8050/27	QA/8040/41	PQA/182050/40	QA/8050/33



PRODUCT 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 79 for more information for the simplest solution, or speak to your Express team if you have more complex requirements



PRODUCT PLUS

Need a non-rotating piston rod?

We have three versions available including an externally mounted precision slide unit.

Please call 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

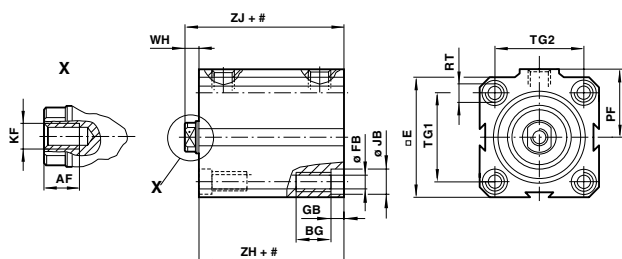
Operation:
Double acting, magnetic piston non-cushioned

Operating pressure:
1 ... 10 bar

Ambient temperature:
-5°C ... +80°C
Air supply must be dry enough to avoid ice formation at temperatures 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
	12	10	M5	6	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92012/M/15	12	15	M5	6	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92012/M/20	12	20	M5	6	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92012/M/25	12	25	M5	6	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92016/M/10	16	10	M5	8	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92016/M/15	16	15	M5	8	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92016/M/20	16	20	M5	8	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92016/M/25	16	25	M5	8	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92016/M/30	16	30	M5	8	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92020/M/10	20	10	M5	10	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92020/M/15	20	15	M5	10	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92020/M/20	20	20	M5	10	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–
RM/92020/M/25	20	25	M5	10	M/50/LSU/5V	M/P72487B	COK510405	C02250405	C02470405	–

COMPACT CYLINDERS

RM/92000/M Double acting – Ø 12 ... 100 mm

Models

Accessories

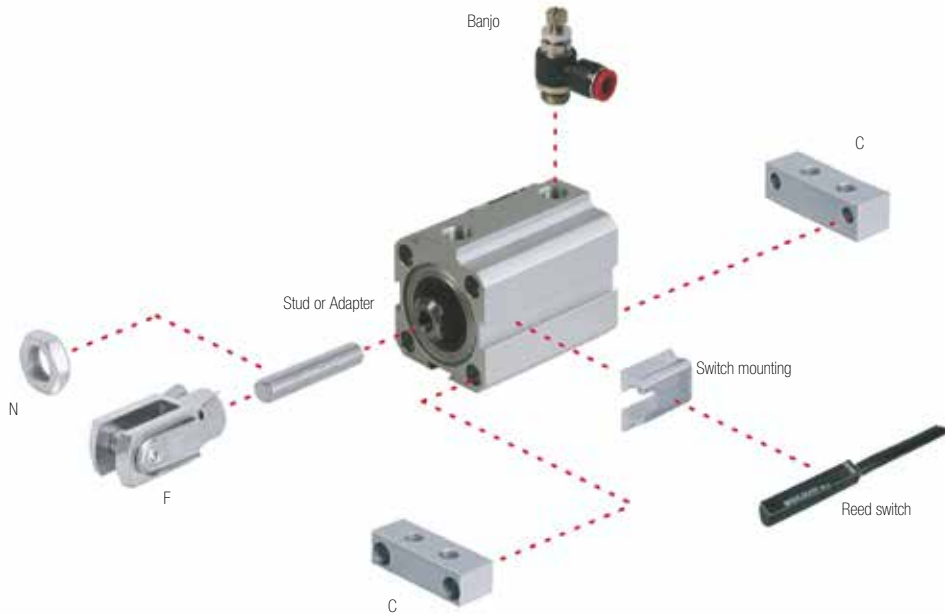
Model	Dia. Ø	Stroke length	Port size	Piston rod Ø	Reed switch with integral 5 m cable	Switch mounting	Banjo flow control	Straight fitting	Elbow fitting	Service kit
RM/92020/M/30	20	30	M5	10	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92020/M/40	20	40	M5	10	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92020/M/50	20	50	M5	10	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/10	25	10	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/15	25	15	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/20	25	20	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/25	25	25	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/30	25	30	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/40	25	40	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92025/M/50	25	50	M5	12	M/50/LSU/5V	MP72487B	COK510405	C02250405	C02470405	–
RM/92032/M/10	32	10	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/15	32	15	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/20	32	20	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/25	32	25	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/30	32	30	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/40	32	40	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/50	32	50	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92032/M/80	32	80	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/10	40	10	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/15	40	15	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/20	40	20	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/25	40	25	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/30	40	30	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/40	40	40	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/50	40	50	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92040/M/80	40	80	G1/8	16	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	–
RM/92050/M/10	50	10	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/15	50	15	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/20	50	20	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/25	50	25	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/30	50	30	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/40	50	40	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/50	50	50	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/80	50	80	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92050/M/100	50	100	G1/8	20	M/50/LSU/5V	MP72487B	COK510618	C02250618	C02470618	QM/92050/00
RM/92063/M/10	63	10	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92063/M/25	63	25	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92063/M/30	63	30	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92063/M/40	63	40	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92063/M/50	63	50	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92063/M/80	63	80	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92063/M/100	63	100	G1/4	20	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92063/00
RM/92080/M/25	80	25	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92080/00
RM/92080/M/30	80	30	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92080/00
RM/92080/M/40	80	40	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92080/00
RM/92080/M/50	80	50	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92080/00
RM/92080/M/80	80	80	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92080/00
RM/92080/M/100	80	100	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92080/00
RM/92100/M/25	100	25	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92100/00
RM/92100/M/30	100	30	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92100/00
RM/92100/M/40	100	40	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92100/00
RM/92100/M/50	100	50	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92100/00
RM/92100/M/80	100	80	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92100/00
RM/92100/M/100	100	100	G1/4	25	M/50/LSU/5V	MP72487B	COK510628	C02250628	C02470628	QM/92100/00

Other stroke lengths available up to 300 mm maximum, please contact us.
For information on additional magnetic switches, please contact us.

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

MOUNTINGS FOR COMPACT CYLINDERS

RM/92000/M Double acting



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

* For attaching F mounting to female piston rod thread.



PRODUCT 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 79 for more information for the simplest solution, or speak to your Express team if you have more complex requirements



PRODUCT PLUS

Need a non-rotating piston rod?

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



From one supplier you have total availability of both standard and more specialised products meeting most industrial requirements



ISO/VDMA range

Not all 'ISO/VDMA' actuators look alike and perform to a similar standard.

The range covers standard and specific use products, up to 320 mm bore and 2800 mm stroke length and up to 125 mm bore features our new ACS - Adaptive Cushioning System.

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 3 mm/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
- > 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

IVAC - Integrated valve and actuator combined



Engineering GREAT Solutions

Find out more

www.imi-precision.com



ISOLINE™ CYLINDER

PRA/802000/M, RA/802000/M, RA/8000/M Double acting - Ø 32 ... 320 mm

- Cylinder conforms to ISO 15552
- High performance adaptive cushioning system "ACS"
- 16 bar version available
- Flush mounted switch system with profile barrel

Technical Data

Medium:
Compressed air, filtered, lubricated or non-lubricated

Standard:
ISO 15552

Operation:
Double acting, magnetic piston with Ø 32 ... 125 mm ACS
Cushioning system, Ø 160 ... 320 mm with adjustable cushioning

Operating pressure:
Ø 32 ... 125 mm (Profile barrel)
1 ... 12 bar
Ø 32 ... 200 mm (Round barrel)
1 ... 16 bar
Ø 250 & 320 mm (Round barrel)
1 ... 10 bar

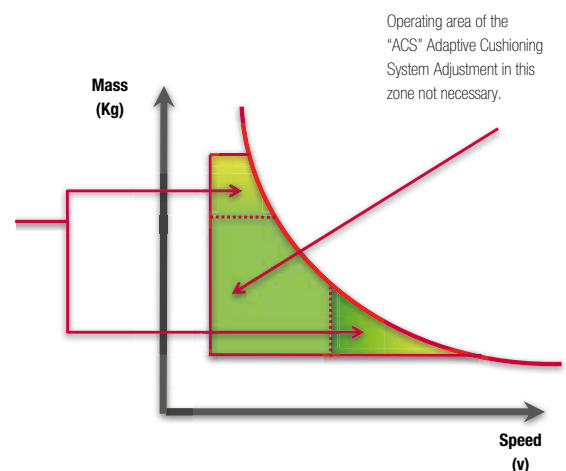
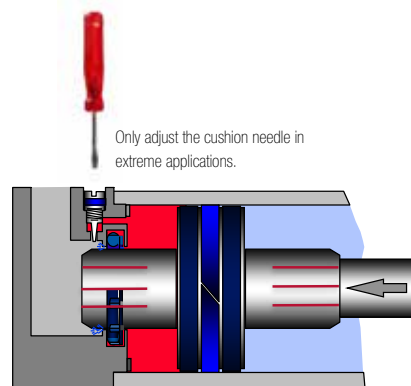
Ambient temperature:
Ø 32 ... 125 mm
"Standard version"
-20°C ... +80°C max.
Ø 160 ... 320 mm
"Standard version"
-10°C ... +80°C max.
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Cylinder Ø (mm)	32	40	50	63	80	100	125	160	200	250	320
Profile barrel	•	•	•	•	•	•	•				
Round barrel								•	•	•	•
Port size	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2	G3/4	G3/4	G1	G1
Piston rod Ø (mm)	12	16	20	20	25	25	32	40	40	50	63
Piston rod thread	M10 x 1,25	M12 x 1,25	M16 x 1,5	M16 x 1,5	M20 x 1,5	M20 x 1,5	M27 x 2	M36 x 2	M36 x 2	M42 x 2	M48 x 2
Cushioning: Adaptive cushioning systems "ACS"	•	•	•	•	•	•	•				
Cushioning: Adjustable cushioning								•	•	•	•

The function

The new "ACS" Adaptive Cushioning System provides a high performance pneumatic damping function. The system will automatically cushion for a wide range of general applications as delivered. Manual adjustment is still possible for extreme applications









ISOLINE™ CYLINDER

PRA/802000/M, RA/802000/M, RA/8000/M Double acting - Ø 32 ... 320 mm

● Models

Accessories

Model Profile barrel	Model Round barrel	Dia. Ø	Port size	Banjo flow control	Straight fitting	Elbow fitting	Reed switch with integral 5 m cable	Switch mounting*	Service Kit
									
PRA/802032/M*	RA/802032/M*	32	G1/8	C0K510618	C02250618	C02470618	M/50/LSU/5V	QM/27/2/1	QA/8032/00
PRA/802040/M*	RA/802040/M*	40	G1/4	C0K510628	C02250628	C02470628	M/50/LSU/5V	QM/27/2/1	QA/8040/00
PRA/802050/M*	RA/802050/M*	50	G1/4	C0K510828	C02250828	C02470828	M/50/LSU/5V	QM/27/2/1	QA/8050/00
PRA/802063/M*	RA/802063/M*	63	G3/8	C0K510838	C02250838	C02470838	M/50/LSU/5V	QM/27/2/1	QA/8063/00
PRA/802080/M*	RA/802080/M*	80	G3/8	C0K511038	C02251038	C02471038	M/50/LSU/5V	QM/27/2/1	QA/8080/00
PRA/802100/M*	RA/802100/M*	100	G1/2	C0K511248	C02251248	C02471248	M/50/LSU/5V	QM/27/2/1	QA/8100/00
PRA/802125/M*	RA/802125/M*	125	G1/2	C0K511248	C02251248	C02471248	M/50/LSU/5V	QM/27/2/1	QA/8125C/00
-	RA/8160/M*	160	G3/4	M840 (Inline)	-	-	M/50/LSU/5V	QM/27/2/1	QA/8160D/00
-	RA/8200/M*	200	G3/4	M840 (Inline)	-	-	M/50/LSU/5V	QM/27/2/1	QA/8200B/00
-	RA/8250/M*	250	G1	M855 (Inline)	-	-	M/50/LSU/5V	QM/27/2/1	QA/8250/00
-	RA/8320/M*	320	G1	M855 (Inline)	-	-	M/50/LSU/5V	QM/27/2/1	QA/8320/00

For alternative fitting types please contact the technical service.

* For use with round barrel

● Standard strokes

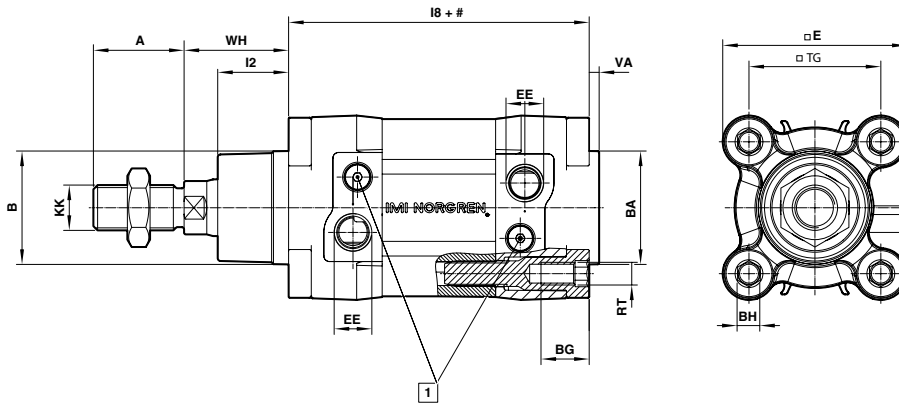
Cylinder Ø (mm)	Stroke length (mm)										
	25	50	80	100	125	160	200	250	320	400	500
32	•	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•
125	•	•	•	•	•	•	•	•	•	•	•
160	•	•	•	•	•	•	•	•	•	•	•
200	•	•	•	•	•	•	•	•	•	•	•
250	•	•	•	•	•	•	•	•	•	•	•
320	•	•	•	•	•	•	•	•	•	•	•

ISOLINE™ CYLINDER

PRA/802000/M, RA/802000/M, RA/8000/M Double acting - Ø 32 ... 320 mm

● Dimensions

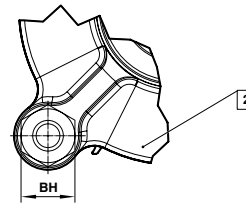
PRA/802000/M, RA/802000/M, RA/8000/M



Stroke

- 1 Cushion screw
- 2 Ø 80 ... 320 mm
- 3 M/50 switches can be mounted flush with the profile

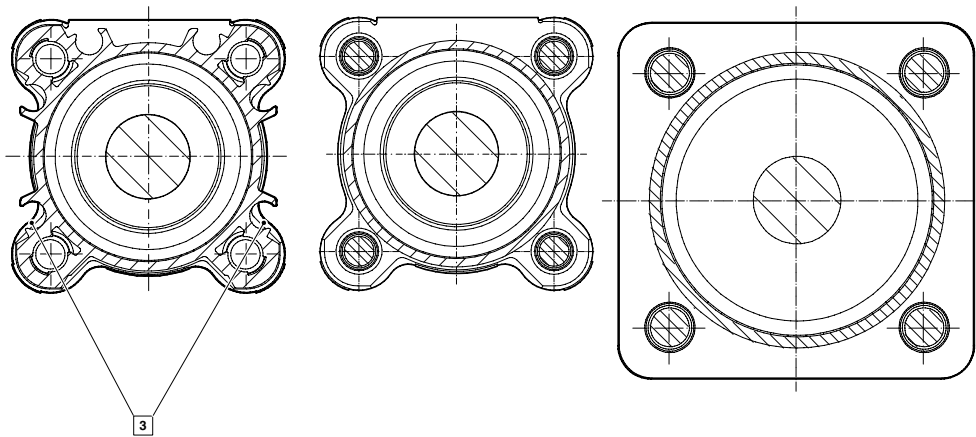
For additional information please contact the technical service or <http://www.imi-precision.com>



Model Profile barrel
Ø 32 ... 125 mm

Model Round barrel
Ø 32 ... 125 mm

Model Round barrel
Ø 160 ... 320 mm



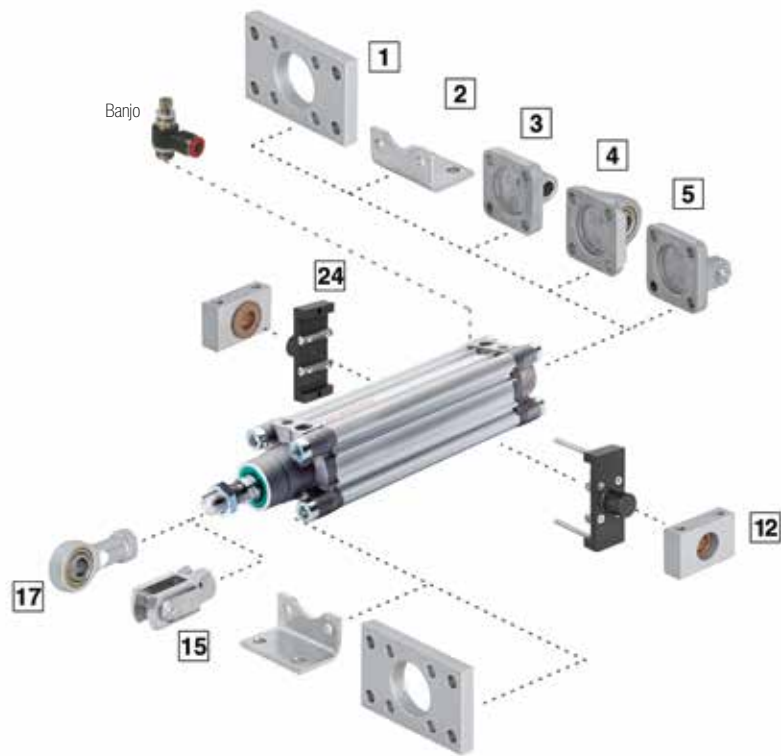
Ø	A -0,5	Ø B d11	Ø BA d11	BG min	BH	E	EE	KK	L2	L8	TG	RT	VA	WH
32	22	30	30	16	6	47	G1/8	M10 x 1,25	19,5	94	32,5	M 6	3,5	26
40	24	35	35	16	6	53	G1/4	M12 x 1,25	22	105	38	M 6	3,5	30
50	32	40	40	16	8	65	G1/4	M16 x 1,5	25	106	46,5	M 8	3,5	37
63	32	45	45	16	8	75	G3/8	M16 x 1,5	25	121	56,5	M 8	3,5	37
80	40	45	45	17	19	95	G3/8	M20 x 1,5	33	128	72	M 10	3,5	46
100	40	55	55	17	19	113	G1/2	M20 x 1,5	35	138	89	M 10	3,5	51
125	54	60	60	20	24	140	G1/2	M27 x 2	44	160	110	M 12	5,5	65
160	72	65	65	28,5	32	183,5	G3/4	M36 x 2	58	180	140	M 16	4	80
200	72	75	75	28,5	32	224	G3/4	M36 x 2	67	180	175	M 16	5	95
250	84	90	90	35	36	280	G1	M42 x 2	80	200	220	M 20	7	105
320	96	110	110	30	46	350	G1	M48 x 2	90	220	270	M 24	7	120






ISOLINE™ CYLINDER

PRA/802000/M, RA/802000/M, RA/8000/M Double acting - Ø 32 ... 320 mm

● Mountings

Cylinder with Profile barrel Ø 32 ... 125 mm

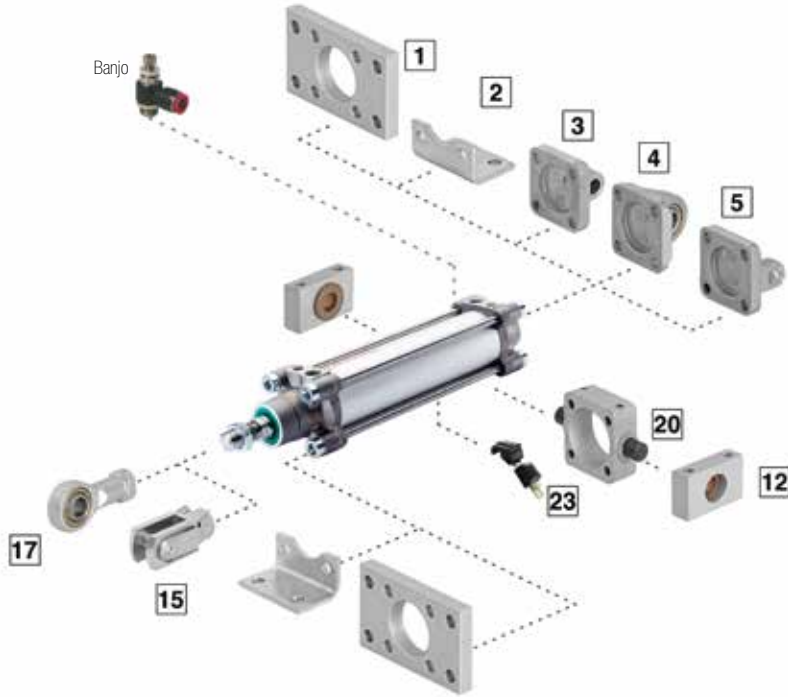


Ø	B, G	C	D	F	UH
	1	2	5	15	24
					
32	QA/8032/22	QA/8032/21	QA/8032/23	QM/8025/25	PQA/802032/40
40	QA/8040/22	QA/8040/21	QA/8040/23	QM/8040/25	PQA/802040/40
50	QA/8050/22	QA/8050/21	QA/8050/23	QM/8050/25	PQA/802050/40
63	QA/8063/22	QA/8063/21	QA/8063/23	QM/8050/25	PQA/802063/40
80	QA/8080/22	QA/8080/21	QA/8080/23	QM/8080/25	PQA/802080/40
100	QA/8100/22	QA/8100/21	QA/8100/23	QM/8080/25	PQA/802100/40
125	QM/8125/22	QM/8125/21	QM/8125/23	QM/8125/25	PQA/802125/40
160	QM/8160/22	QM/8160/21	QM/8160/23	QM/8160/25	-
200	QM/8200/22	QM/8200/21	QM/8200/23	QM/8160/25	-
250	QM/8250/22	QM/8250/21	QM/8250/23	QM/8250/25	-
320	QM/8320/22	QM/8320/21	QM/8320/23	QM/8320/25	-

ISOLINE™ CYLINDER

PRA/802000/M, RA/802000/M, RA/8000/M Double acting - Ø 32 ... 320 mm

Cylinder with Round barrel Ø 32 ... 320 mm



Ø	UH 20	S 12	UF 17	UR 4	R 3	23
32	QA/8032/40	QA/8032/41	QM/8025/32	QA/8032/33	QA/8032/27	QM/27/2/1
40	QA/8040/40	QA/8040/41	QM/8040/32	QA/8040/33	QA/8040/27	QM/27/2/1
50	QA/8050/40	QA/8040/41	QM/8050/32	QA/8050/33	QA/8050/27	QM/27/2/1
63	QA/8063/40	QA/8063/41	QM/8050/32	QA/8063/33	QA/8063/27	QM/27/2/1
80	QA/8080/40	QA/8063/41	QM/8080/32	QA/8080/33	QA/8080/27	QM/27/2/1
100	QA/8100/40	QA/8100/41	QM/8080/32	QA/8100/33	QA/8100/27	QM/27/2/1
125	QA/8125/40	QA/8100/41	QM/8125/32	QM/8125/33	QM/8125/27	QM/27/2/1
160	QA/8160/40	QA/8160/41	QM/8160/32	QM/8160/33	QM/8160/27	QM/27/2/1
200	QA/8200/40	QA/8160/41	QM/8160/32	QM/8200/33	QM/8200/27	QM/27/2/1
250	-	-	QM/8250/32	QM/8250/33	-	QM/27/2/1
320	-	-	QM/8320/32	QM/8320/33	-	QM/27/2/1



IVAC

Integrated Valve and Actuator Control

PRA/882000 Series

32 to 100 mm bore – up to 1,000 mm 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 Precision Engineering 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:

- > Faster response times
- > Fully modular design
- > Integrated sensor adjustment
- > Life expectancy of over 200 million cycles
- > Cleanline body offers simple washdown when used in critical applications
- > Integrated pressure protection

*Engineering
GREAT Solutions*

Find out more

www.imi-precision.com



IVAC CLEAN LINE CYLINDER

PRA/882000/M Double acting – Ø 32 ... 63 mm

- Complete functional unit with LED display
- Central electrical connector, polarity-safe
- Integrated 5/2 or 5/3 valve
- Additional output ports (2 & 4)
- Integrated flow regulator for speed control
- Integrated reed or solid state switches
- Protection class IP67, suitable for food and beverage sector
- Energy efficient

Technical Data

Medium:
Compressed air, filtered, lubricated or non-lubricated
Particles size: Class 7, ISO 8573 – 1 (dated 2001)
Humidity and water content: Air supply must be dry. Corresponding of the application and working conditions the air must be dry enough to avoid condensate. The pressure dewpoint must be minimum 15° under the application and working conditions.
Oil: Class 4, ISO 8573 – 1 (dated 2001)

Standard:
Based on ISO 15552 (length, mounting pitch and thread dimensions according to ISO 15552. Some outside dimensions different to ISO 15552)

Operation:
Double acting, magnetic piston, adjustable cushioning

Operating pressure:
2 ... 8 bar

Ambient temperature:
-2°C ... +70°C max.
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Supply voltage:
24 V d.c.

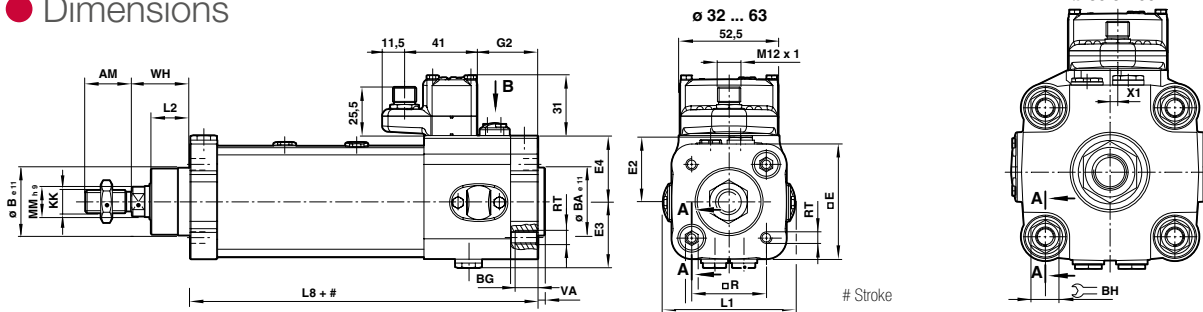
Multipole connection:
M12 x 1 male, 8 pin

Power consumption:
1 W max

Rating:
100% E.D



Dimensions



Dia. Ø	AM	Ø B _{eff}	Ø BA _{eff}	BG	BH	□ E	E2	E3	E4	G2	KK	L1	L2	L8	□ R	RT	VA	WH	X1
32	22	30	30	16	6	53	31	30,5	32	30,5	M10x1,25	68,5	20	94	32,5	M 6	3	26	0
40	24	35	35	16	6	60	34,5	34	34	30,5	M12x1,25	68,5	21	105	38	M 6	3,5	30	0
50	32	40	40	16	8	71,5	40	39	39	34,5	M16x1,5	92,5	28	106	46,5	M 8	3,5	37	1,5
63	32	45	45	16	8	82	46	45,5	45,5	38	M16x1,5	91,5	28	121	56,5	M 8	4	37	0

Models - With glandless spool

Accessories

Model	Dia. Ø	Port size	Piston rod Ø	Stroke length (mm)	Valve function	Actuation	Cylinder function	Plug with 5m moulded cable	Elbow fitting	Silencer
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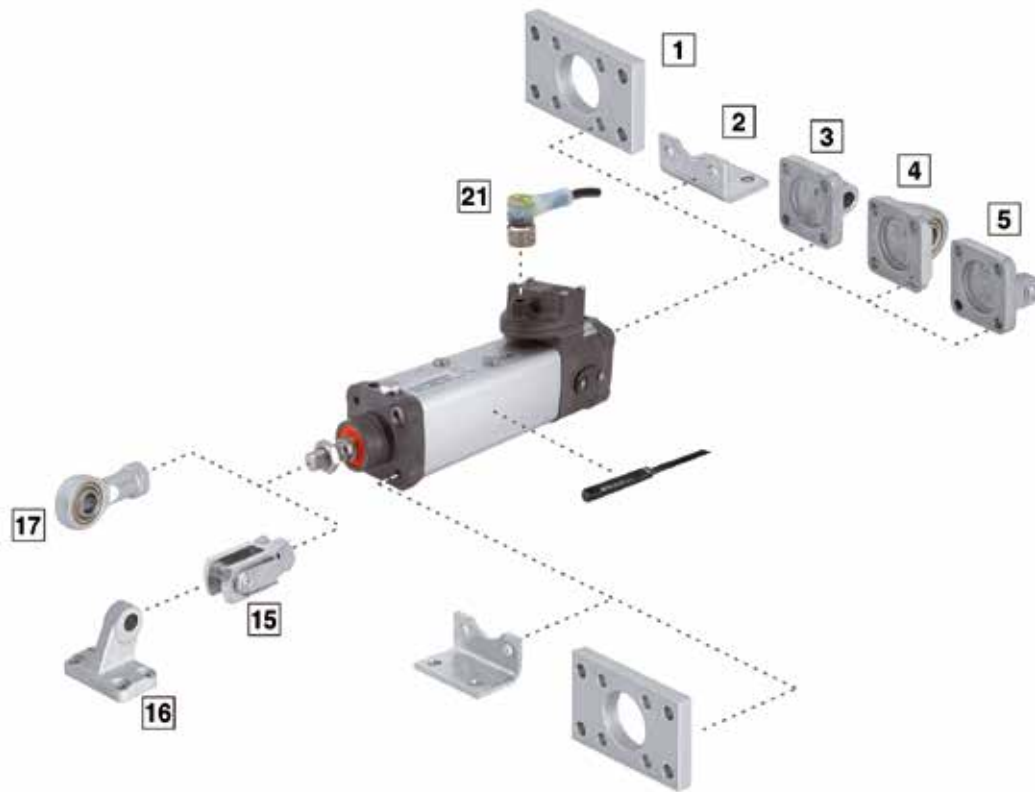
PRA/882032/MIB/M4/50	32	G1/8	12	50	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882032/MIB/M4/80	32	G1/8	12	80	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882032/MIB/M4/100	32	G1/8	12	10	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882032/MIB/M4/160	32	G1/8	12	160	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882040/MIB/M4/50	40	G1/8	16	50	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882040/MIB/M4/80	40	G1/8	16	80	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882040/MIB/M4/100	40	G1/8	16	100	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882040/MIB/M4/200	40	G1/8	16	200	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882050/MIB/M4/50	50	G1/8	20	50	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882050/MIB/M4/80	50	G1/8	20	80	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882050/MIB/M4/100	50	G1/8	20	100	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882050/MIB/M4/200	50	G1/8	20	200	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470618	M/S1
PRA/882063/MIB/M4/100	63	G1/4	20	100	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470828	M/S2
PRA/882063/MIB/M4/160	63	G1/4	20	160	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470828	M/S2
PRA/882063/MIB/M4/200	63	G1/4	20	200	5/2 bistable	Sol/Sol	not defin	MP74582/5	C02470828	M/S2

Other stroke length available up to 1000 mm maximum, other variants available, please call our Technical Service.

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

MOUNTINGS FOR IVAC CLEAN LINE CYLINDER

PRA/882000/M Double acting



Cyl. Ø	B, G 1	C 2	D 5	F 15	R 3	UF 17	UR 4
32	QA/8032/22	QA/8032/21	QA/8032/23	QM/8025/25	QA/8032/27	QM/8025/32	QA/8032/33
40	QA/8040/22	QA/8040/21	QA/8040/23	QM/8040/25	QA/8040/27	QM/8040/32	QA/8040/33
50	QA/8050/22	QA/8050/21	QA/8050/23	QM/8050/25	QA/8050/27	QM/8050/32	QA/8050/33
63	QA/8063/22	QA/8063/21	QA/8063/23	QM/8050/25	QA/8063/27	QM/8050/32	QA/8063/33
80	QA/8080/22	QA/8080/21	QA/8080/23	QM/8080/25	QA/8080/27	QM/8080/32	QA/8080/33
100	QA/8100/22	QA/8100/21	QA/8100/23	QM/8080/25	QA/8100/27	QM/8080/32	QA/8100/33



Lintra® Plus Range

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



PRODUCT PLUS

IMI Precision Engineering offers rodless actuator in a whole series of bore and stroke combinations. Please, contact our Technical Service.

Find out more

www.imi-precision.com

● Models

Internal guide	Piston Ø	Stroke length	Port size
M/146016/M/****	16	made to order	M5
M/146020/M/****	20	made to order	G1/8
M/146025/M/****	25	made to order	G1/8
M/146032/M/****	32	made to order	G1/4
M/146040/M/****	40	made to order	G1/4
M/146050/M/****	50	made to order	G3/8
M/146063/M/****	63	made to order	G1/2
M/146080/M/****	80	made to order	G1/2
External guide	Piston Ø	Stroke length	Port size
M/146116/M/****	16	made to order	M5
M/146120/M/****	20	made to order	G1/8
M/146125/M/****	25	made to order	G1/8
M/146132/M/****	32	made to order	G1/4
M/146140/M/****	40	made to order	G1/4
M/146150/M/****	50	made to order	G3/8
M/146163/M/****	63	made to order	G1/2
M/146180/M/****	80	made to order	G1/2
Precision roller guide	Piston Ø	Stroke length	Port size
M/146225/M/****	25	made to order	G1/8
M/146232/M/****	32	made to order	G1/4
M/146240/M/****	40	made to order	G1/4
M/146250/M/****	50	made to order	G3/8
M/146263/M/****	63	made to order	G1/2

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

Engineering
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 IMI NORGREN

AIR BELLOWS

M/31000 Single acting – Ø 6 ... 16"

- Frictionless operation
- No maintenance or lubrication
- High vibration isolation level
- Simple to install

Technical Data

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

Operating pressure:
5,5 bar recommended dynamic pressure 8 bar max.

Ambient temperature:
-40°C ... +70°C "Static"
-30°C ... +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.

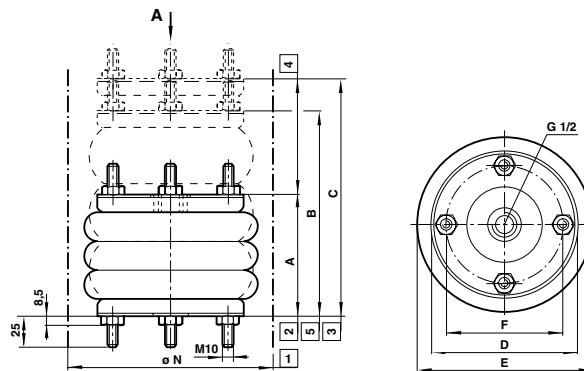
- The full surface of the metal parts is to be used to bear the forces.
- Air bellows must be equipped with lateral guides.
- Deflate the air bellows fully before removing.
- Ensure that the bellows are not constantly in contact with hydraulic oil, lubricants, solvents, metal cuttings and welding sparks.
- 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

M/31061 ... M/31163



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

Models	Normal Ø (inch) x convolutions	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	95	55	50	105	25	175	154	127	190	2,2
M/31062	6 x 2	170	115	75	190	25	175	154	127	190	2,7
M/31081	8 x 1	115	75	50	130	25	230	184	155	245	3
M/31082	8 x 2	220	175	75	250	25	230	184	155	245	3,7
M/31102	10 x 2	245	225	75	300	25	270	210	181	300	4,7
M/31103	10 x 3	350	330	100	430	25	270	210	181	300	5,2
M/31121	12 x 1	135	100	50	150	25	330	260	232	350	5,4
M/31122	12 x 2	245	225	75	300	25	330	260	232	350	6,2
M/31123	12 x 3	350	330	100	430	25	330	260	232	350	6,9
M/31141	14 1/2 x 1	150	100	50	150	25	400	310	282	425	7,1
M/31142	14 1/2 x 2	290	265	75	340	25	400	310	282	425	8,3
M/31143	14 1/2 x 3	420	380	100	480	25	400	310	282	425	9,6
M/31162	16 x 2	350	350	75	390	25	435	310	282	460	7,6
M/31163	16 x 3	475	430	120	550	25	435	310	282	460	10,4

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)

Operating pressure:
5,5 bar recommended dynamic pressure 8 bar max.

Ambient temperature:
-40°C ... +70°C "Static"
-30°C ... +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.

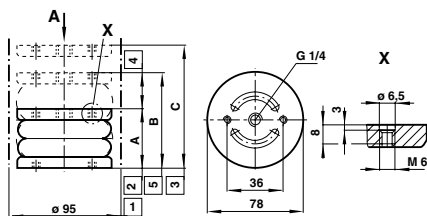
- The full surface of the metal parts is to be used to bear the forces.
- Air bellows must be equipped with lateral guides.
- Deflate the air bellows fully before removing
- Ensure that the bellows are not constantly in contact with hydraulic oil, lubricants, solvents, metal cuttings and welding sparks.
- 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.

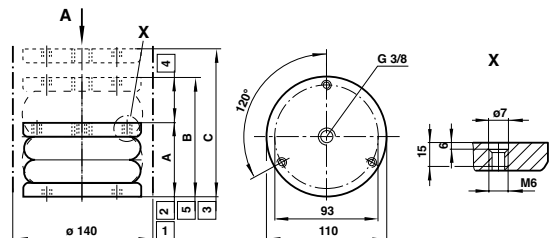
● Dimensions

PM/31021, PM/31022, PM/31023



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

PM/31041, PM/31042, PM/31043

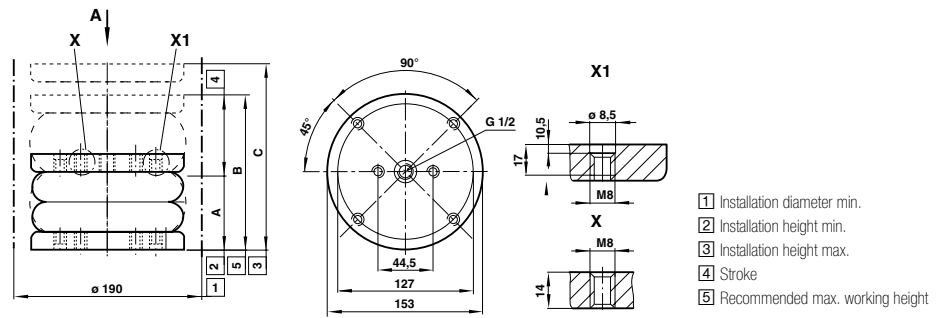


Models	Nominal Ø (inch) x convolutions	Recommended max. working height B (mm)	Stroke (mm)	Installation height A min. (mm)	Installation height C max. (mm)	Max. torque for mounting studs (Nm)	Weight (kg)
PM/31021	2 3/4 x 1	65	20	50	70	5	0,35
PM/31022	2 3/4 x 2	105	45	65	110	5	0,4
PM/31023	2 3/4 x 3	130	60	80	140	5	0,5
PM/31041	4 1/2 x 1	80	40	50	90	5	0,75
PM/31042	4 1/2 x 2	135	85	65	150	5	0,95

COMPACT AIR BELLOWS

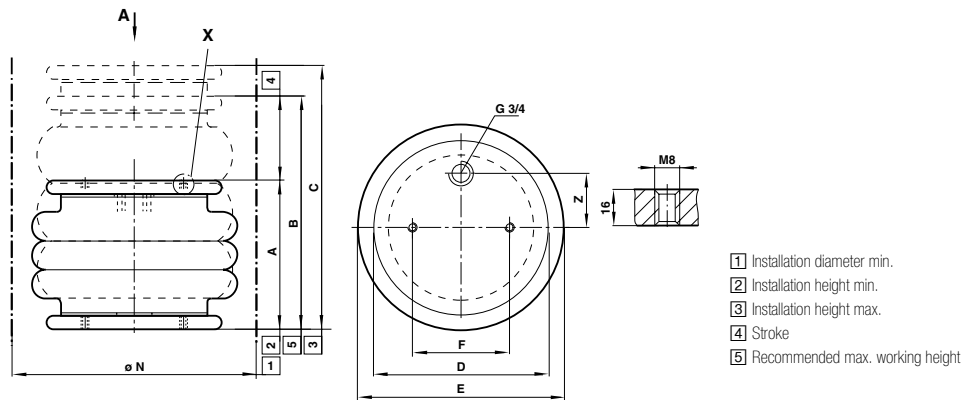
PM/31000 Single acting – Ø 2 3/4 ... 12"

PM/31061 to PM/31063



Models	Normal Ø (inch) x convolutions	Recommended max. working height B (mm)	Stroke (mm)	Installation height A min. (mm)	Installation height C max. (mm)	Max. torque for mounting studs (Nm)	Weight (kg)
PM/31061	6 x 1	100	55	55	110	12	2
PM/31062	6 x 2	170	115	80	190	12	2,7

PM/31081 to PM/31123



Models	Normal Ø (inch) x convolutions	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	Z	Weight (kg)
PM/31081	8 x 1	140	95	55	140	12	225	133	70	240	–	1,8
PM/31082	8 x 2	250	185	80	250	12	220	133	70	240	–	2,3
PM/31091	9 1/4 x 1	150	105	55	150	12	255	155	89	275	38	2,3
PM/31092	9 1/4 x 2	295	230	80	310	12	255	155	89	275	38	3,1
PM/31121	12 x 1	151	129	51	180	25	343	228	157	360	73	4,3
PM/31122	12 x 2	265	230	75	305	25	325	228	157	340	73	4,8

MAGNETICALLY OPERATED SWITCHES

M/50 Reed and Solid State

- 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
- Easy IO link versions available
- CE certified
- UL certified
- IO-Link Easy Function:
 - Visual installation aid
 - Counter
 - Temperature diagnostic
 - Power LED

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



● Technical data - Solid state

Symbol	Voltage (V d.c.)	Current maximum (mA)	Function	IO-Link *2)	Operating temperature (°C)	LED	Protection class	Plug	Cable length (m)	Cable type	Weight (g)	Model
	10 ... 30	100	PNP		-40 ... +80	•	IP67	—	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAP*/V
	10 ... 30	100	PNP	•	-40 ... +80	•	IP67	—	5	PVC 3 x 0,12	37	M/50/10P/5V
	10 ... 30	100	PNP		-40 ... +80	•	IP68	—	5	PUR 3 x 0,14	37	M/50/EAP/5U
	10 ... 30	100	PNP		-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CP *1)
	10 ... 30	100	PNP	•	-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/10P/CP *1)
	10 ... 30	100	PNP		-40 ... +80	•	IP67	M12 x 1	0,3	PVC 3 x 0,14	16	M/50/EAP/CC *1)
	10 ... 30	100	NPN		-40 ... +80	•	IP67	—	2, 5 or 10	PVC 3 x 0,12	37	M/50/EAN*/V
	10 ... 30	100	NPN		-40 ... +80	•	IP67	M8 x 1	0,3	PVC 3 x 0,14	16	M/50/EAN/CP *1)

* Insert cable length; *1) Plug-in connector below; Color code: BK = black, BN = brown, BU = blue

● Models - Reed and ATEX approved switches

Accessories

Model	LED (Yellow)	Cable length / plug	Temperature range	Cable material	Features	Extension cable 5 m (PVC)	Extension cable 10 m (PVC)
M/50/LSU/2V	•	2 m	-25 ... +80°C	PVC	Protection IP66	—	—
M/50/LSU/5V	•	5 m	-25 ... +80°C	PVC	Protection IP66	—	—
M/50/LSU/10V	•	10 m	-25 ... +80°C	PVC	Protection IP66	—	—
M/50/LSU/CP	•	0,3 m with M8 Plug	-25 ... +80°C	PVC	Protection IP66	M/P73001/5	M/P73001/10

● Models - Solid State and ATEX approved switches

Accessories

Model	LED (Yellow)	Cable length / plug	Switching function	IO-Link	Temp range	Cable material	Ex-Identification	Extension cable 5 m (PVC)	Extension cable 10 m (PVC)
M/50/EAP/2V	•	2 m	PNP	—	-40 ... +80°C	PVC	—	—	—
M/50/EAP/5V	•	5 m	PNP	—	-40 ... +80°C	PVC	—	—	—
M/50/EAP/10V	•	10 m	PNP	—	-40 ... +80°C	PVC	—	—	—
M/50/EAP/CP	•	0,3 m with M8 Plug	PNP	—	-40 ... +80°C	PVC	—	M/P73001/5	M/P73001/10
M/50/EAP/CC	•	0,3 m with M12 Plug	PNP	—	-40 ... +80°C	PVC	—	M/P34692/5	—
M/50/10P/5V	•	5 m	PNP	•	-40 ... +80°C	PVC	—	—	—
M/50/10P/CP	•	0,3 m with M8 Plug	PNP	•	-40 ... +80°C	PVC	—	M/P73001/5	M/P73001/10

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.

Vacuum

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 us today.

Cups for most applications



Energy efficient

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 please contact us.

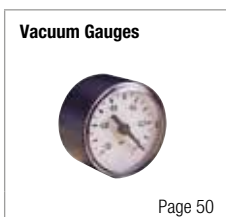
● Vacuum Pumps



● Vacuum Cups & Bellows



● Accessories



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

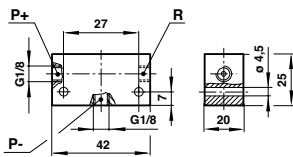
Ambient temperature:
-20°C ... +150°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

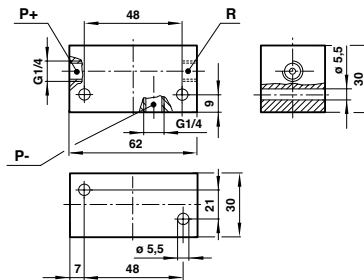
Vacuum:
-0,85 bar maximum (M/58112/09)
-0,90 bar maximum (M/58112/11)



M/58112/09



M/58112/11



PRODUCT LINK

Tubing and fitting for vacuum applications ...

See Fittings, Tubing and Accessories section.



● Induced air (NI/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

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

Ambient temperature:
M/58102/10 ... M/58102/30:
-20°C ... +80°C
M/58102/60 ... M/58102/120:
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Vacuum:
-0,87 bar maximum



Models

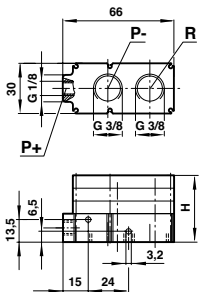
Model	Type	Silencer*	Induced air (NI/min)**	Air consumption (NI/min)**	kg
M/58102/10	Standard	Ported	80	49	0,080
M/58102/20	Standard	Ported	160	98	0,095
M/58102/30	Standard	Ported	240	144	0,110
M/58102/60	Standard	Integral	480	285	0,855
M/58102/90	Standard	Integral	708	471	1,105
M/58102/120	Standard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

* For models with ported silencer, use silencer number M/58019.

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

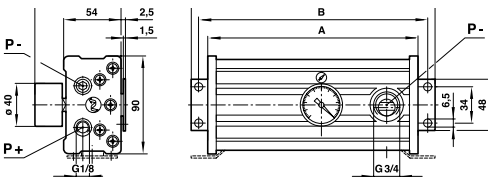
Dimensions

M/58102/10; .../20; .../30



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

M/58102/60; .../90; .../120



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.

Vacuum flow performance

Model	Induced air (nl/min), free air								
	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	-



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- > Specialist high pressure equipment including dome and spring loaded regulators

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*Engineering
GREAT Solutions*



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

Ambient temperature:
-10°C ... +70°C for NBR
-30°C ... +200°C for VMQ cups
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

M/58*/01:**
Cups: NBR
Connection fittings: aluminium



Material characteristics

	NBR
Wear resistance	Good
Oil resistance	Excellent
Weather resistance	Good
Ozone resistance	Fair

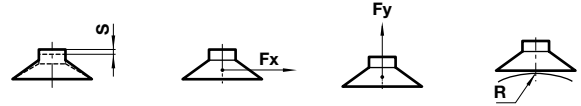
Models

$$F_x = \mu \times F_y$$

Where μ is the frictional coefficient of the material being handled.

An approximate guide:

Plastic: $\mu = 0,4 \dots 0,5$ Steel, oiled: $\mu = 0,1 \dots 0,3$ Glass: $\mu = 0,3 \dots 0,5$



Flat Cups Model NBR	Dia. Ø (mm)	Fy -0,2 bar (N)	Fy -0,6 bar (N)	Fy -0,9 bar (N)	Minimum radius of work surface 'R' (mm)	Maximum movement 'S' (mm)	Volume cm ³
M/58301/01	6	0,5	1,5	2,3	5	1,5	0,017
M/58302/01	8	1	2,5	3,5	7	1,5	0,041
M/58303/01	10	1,5	4	6	9	2	0,065
M/58304/01	15	2,7	8	12	12	4	0,330
M/58305/01	20	5	15,5	23	13	2	0,500
M/58306/01	25	9	26,5	40	17,5	2,5	0,750
M/58307/01	30	11	34	51	26	2,5	1,3
M/58308/01	40	19	57,5	86	37	3,5	3
M/58309/01	50	30	91	135	41	4	4,2
M/58310/01	80	86	260	390	100	6	21
M/58311/01	120	180	540	810	365	6	82
M/58312/01	150	280	842	1250	380	9	177

Bellow Cups Model NBR	Dia. Ø (mm)	Fy -0,2 bar (N)	Fy -0,6 bar (N)	Fy -0,9 bar (N)	Minimum radius of work surface 'R' (mm)	Maximum movement 'S' (mm)	Volume cm ³
M/58403/01	10	1,5	3,5	5	3	4	0,225
M/58404/01	15	3	6	8	5	6	0,75
M/58405/01	20	6	10	14	8	5	1,4
M/58407/01	30	12	22	28	15	12	4,75
M/58408/01	40	22	40	50	30	10	9,25
M/58409/01	50	34	66	84	40	15	26,25
M/58410/01	75	75	170	230	70	14	76
M/58411/01	110	140	350	460	85	36	111

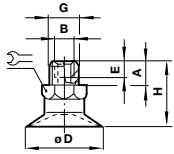
Note: Theoretical values are given in this table. Always allow a safety factor of >2.

VACUUM CUPS & BELLOWS

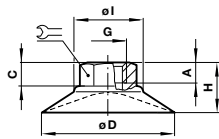
M/58300, M/58400 Ø 6 ... 150 mm

● Dimensions

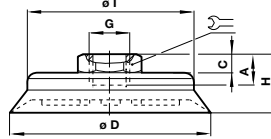
Flat cups
Ø 6 ... 30



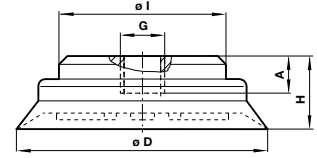
Ø 40 & 50



Ø 80

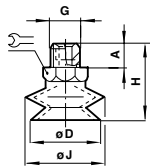


Ø 120 & 150

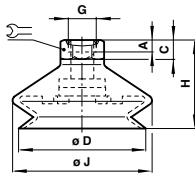


Model	Ø D	A	C	G	H	Ø I	⌘
M/58301/01	6	4,5	–	M 5	15	–	8
M/58302/01	8	4,5	–	M 5	16	–	8
M/58303/01	10	4,5	–	M 5	20	–	8
M/58304/01	15	4,5	–	M 5	21	–	8
M/58305/01	20	8	–	G1/8 A	19,5	–	14
M/58306/01	25	8	–	G1/8 A	20	–	14
M/58307/01	30	8	–	G1/8 A	20,5	–	14
M/58308/01	40	6	9	G1/8	23	24	14
M/58309/01	50	6	11	G1/8	26	26	14
M/58310/01	80	13	3,5	G1/8	21,5	53	19
M/58311/01	120	9,5	–	G1/2	34,5	65	–
M/58312/01	150	9,5	–	G1/2	41,5	65	–

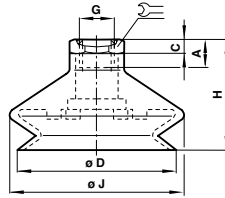
Bellows cups
Ø 10 ... 30



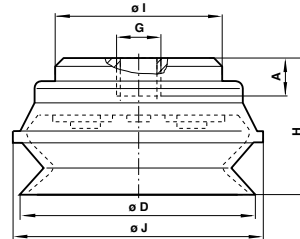
Ø 40 & 50



Ø 75



Ø 110 & 150



Model	Ø	A	C	Ø D	G	H	Ø I	Ø J	⌘
M/58403/01	10	5	–	11	M 5	26	–	12	7
M/58404/01	15	5	–	16	M 5	29	–	17	7
M/58405/01	20	7,5	–	22	G1/8 A	30,5	–	24	14
M/58407/01	30	7,5	–	33	G1/8 A	39	–	36	17
M/58408/01	40	6	9	43	G1/8	37	–	46	17
M/58409/01	50	6	9	53	G1/8	43	–	59	17
M/58410/01	75	12	4	78	G1/8	50	–	83	21
M/58411/01	110	9,5	–	110	G1/2	66,5	65	122	–
M/58412/01	150	9,5	–	150	G1/2	85,5	65	167	–

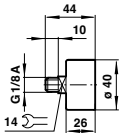
ACCESSORIES

Vacuum gauges

- 0 ... -1 bar calibration
- Accurate vacuum level indication



● Dimensions



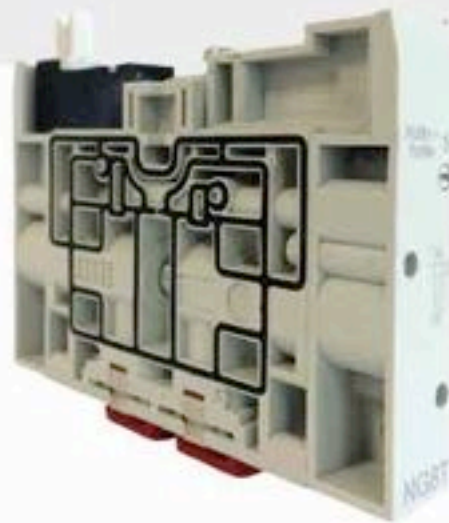
● Models

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

Valves

IMI Precision Engineering 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.

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 please contact us.



Simple to complex



Over 20,000 combinations



Rugged and Reliable

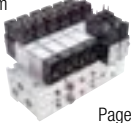



Fast Find Guide

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




● Valve Islands

<p>VM10 2 x 3/2, 5/2 & 5/3 10 mm</p>  <p>Page 57</p>	<p>VM15 2 x 3/2, 5/2 & 5/3 15 mm</p>  <p>Page 58</p>	<p>VS18 2 x 3/2, 5/2 & 5/3 ISO 15407-2 18 mm</p>  <p>Page 59</p>	<p>VS26 2 x 3/2, 5/2 & 5/3 ISO 15407-2 26 mm</p>  <p>Page 60</p>
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● Sub-base Valves

<p>V40/V41 2 x 3/2, 5/2 & 5/3 Valve ISO 15407-1/VDMA 24 563 18 mm</p>  <p>Page 62</p>	<p>V44/V45 2 x 3/2, 5/2 & 5/3 Valve ISO 15407-1/VDMA 24 563 26 mm</p>  <p>Page 67</p>	<p>ISO★STAR 5/2 & 5/3 ISO #1 ... ISO #3</p>  <p>Page 73</p>	<p>UM/22000 5/2 & 5/3 ISO #4</p>  <p>Page 76</p>
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● In-line and Manifold Valves

<p>V60 ... 63 3/2, 2x3/2, 5/2 & 5/3 G1/8 ... G1/2</p>  <p>Page 79</p>	<p>V50 ... 53 3/2, 5/2 & 5/3 G1/8 ... G1/2</p>  <p>Page 90</p>	<p>EXCEL 22, M/49 3/2 G1/8</p>  <p>Page 94</p>
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● Special Purpose Valves

<p>Two-hand control unit XSHC04 4 mm PIF</p>  <p>Page 95</p>	<p>Safety valves SCVA 3/2 G1/4, G3/4, G1</p>  <p>Page 96</p>	<p>Safety valves SCVA10 3/2 G1/2</p>  <p>Page 98</p>	<p>Safety valves SCSQ 3/2 G1/2</p>  <p>Page 100</p>	<p>Solenoid actuated press safety valves XSz 3/2 G1/4 ... G2</p>  <p>Page 102</p>
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● Manual/Mechanical Valves

<p>Super X 3/2, 5/2 & 5/3 G1/8, G1/4</p>  <p>Page 106</p>	<p>VHLA 4/2, 4/3 APB G1/4 ... G1/2</p>  <p>Page 116</p>	<p>M/1700 5/2, 5/3 G1/4, G1/2</p>  <p>Page 117</p>	<p>S/666 3/2 G1/8</p>  <p>Page 118</p>
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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 please contact us.

● Proportional Valves

<p>VP50S G1/4</p>  <p>Page 120</p>	<p>VP51 G1/4</p>  <p>Page 121</p>
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● Process Industry

<p>82510 2/2 G1/4 ... G3/8</p>  <p>Page 123</p>	<p>82400 2/2 G1/4 ... G2</p>  <p>Page 124</p>	<p>84500 2/2 G1/2 ... G2</p>  <p>Page 125</p>	<p>95000 2/2 G1/4</p>  <p>Page 127</p>	<p>96000 3/2 G1/4</p>  <p>Page 128</p>
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● Flow Control Valves

<p>C00GE, C00GP Ø 4 ... 12 mm</p>  <p>Page 130</p>	<p>T1000 Uni-directional M5, G1/8 ... G1/2</p>  <p>Page 209</p>	<p>T1100 Bi-directional G1/8 ... G1/2</p>  <p>Page 209</p>	<p>T20 M5, G1/8 ... G1/2</p>  <p>Page 210</p>	<p>C0T, C0K, C0S, C0L BANJO FLOW REGULATORS (COMPOSITE BODY)</p>  <p>Page 196</p>	<p>10K51, BANJO FLOW REGULATORS (METAL BODY)</p>  <p>Page 196</p>
<p>16K51, BANJO FLOW REGULATORS (METAL BODY)</p>  <p>Page 201</p>					

● Other Valves and Accessories

<p>T55 Non-return valves M5, G1/8 ... G1/2</p>  <p>Page 131</p>	<p>C00GL Non-return valves Ø 4 ... 12 mm</p>  <p>Page 211</p>	<p>T65 Shuttle valves G1/8 & G1/4</p>  <p>Page 131</p>	<p>T70 Quick exhaust valves G1/8 ... G1/2</p>  <p>Page 212</p>	<p>Solenoid plugs and cables 15 mm, 22 mm & 30 mm</p>  <p>Page 132</p>
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DESIGN & SIZING IN PNEUMATICS

Golden Rules

Design and sizing in pneumatics is often based upon experience coupled with an element of fear of under specifying crucial equipment. In an attempt to ensure enough power, engineers may select over sized cylinders and then select oversized valves to supply them with enough air. The same uncertainty can also lead to over sized specification of air line equipment, fittings and tubing. The outcome is components larger than necessary that use too much compressed air and waste energy and money. However when following some well proven golden rules and a few laws of pneumatics it is easy to achieve correctly sized pneumatic installations.

BASICS TO CONSIDER:

The cylinder: The force required, the pressure available, the speed of movement and air consumption. ISO and VDMA standard or compact style as well as cushioning and sensors.

The valve: Flow to achieve the time for the cylinder movement. Solenoid, air pilot, manual or mechanical operator. In line, manifold or sub-base mounting or tailor made valve island. Solenoid individually wired or with multipole, fieldbus or industrial ethernet.

Air preparation: Flow rating and micrometre size of the filter element. Automatic or manual drain, piping away the condensate. Source pressure and optimal working pressure. Pressure regulator for standard or precision regulation. Lubrication, Oil-fog or Micro-fog.

Fittings and tubing: Compression, push-on or push-in fittings. Metal, nylon or soft polyurethane tubing. Correct sizing of fittings and tubing combination according to flow requirements.

General: Temperature and environmental conditions.

GOLDEN RULES:

The cylinder:

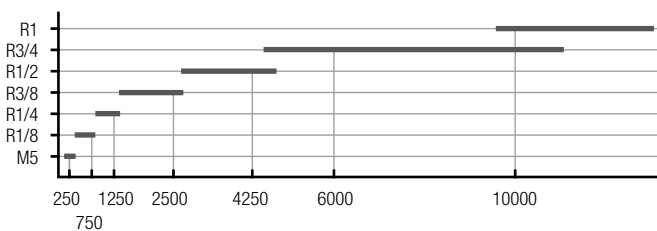
The Correct sizing is based upon the required force and applied pressure. Go to page 14 for more information on cylinder sizing and air consumption.

Golden rule: The theoretical force of the cylinder should be 25% extra for high speed, 50% extra for low speed and 100% extra for ultra low speed (positioning) applications.

The Valve:

Developments in valve technology have given higher flow in smaller valve envelope sizes - eg. the flow from a traditional 42 mm wide ISO #1 valve is about 1250 l/min, a modern valve that can deliver the same flow is only 20 mm wide. The old rule of selecting a control valve with the same port size as the cylinder has a number of drawbacks. Firstly the cylinder port may not have a full through bore and secondly the cylinder may not be required for anything near it's maximum potential speed. Far better is to match valve flow to the flow requirement of the cylinder for a particular application.

The graph gives a guide to the typical flow ranges appropriate to different nominal valve sizes. The flow values indicated by the vertical lines are at 6 bar, with 1bar pressure drop.



Golden rule: Calculate the greatest instantaneous flow required by the cylinder. This is the flow rate required during the fastest stroke. Do not use l/min average values.

Filtration & Lubrication:

In general, pneumatics are designed for working in a wide temperature range from -20°C up to +80°C. Electrical parts like solenoids are limited to +50°C, but specific figures can be found in the catalogue.

For filtration and dew point the following apply: 5°C to 50°C ambient temperature, 40 micron filtration and a dew point of 10°C lower than the ambient temperature is recommended.

Below 5°C and above 50°C, 25 or 5 micron filtration is recommended and below 5°C a dew point 5°C lower than the ambient temperature is recommended.

Valves and cylinders are greased on assembly and operate under normal conditions without additional lubrication. However using a lubricator will extend the life of these products.

Golden rule: Always lubricate when:

- Valve frequency is >3 Hz
- Cylinder speed is high
- Ambient temperature is below freezing point or above 50°C
- There is a combination of the conditions above

If possible always lubricate and if you start to lubricate then continue to do so.

Use micro-fog lubricators for cylinders and oil-fog lubricators for air tools.

Fittings & Tubing:

Golden rule: Rule number one is use as few fittings as possible. Tubing should be as short as practical and be related to port thread sizes - e.g. Ø 8/6 mm for G1/4. Banjo type fittings and quick connection couplings can be restrictive to flow. Minimise the use of elbows, Y's and tee connectors. For use below freezing or when exposed to sunlight use black plastic tubing.

If you do not want to calculate use the golden rule table:

Valve size	Flow l/min	Tube Ø mm	Cylinder max. Ø mm
M5	250	6/4	40
1/8"	750	8/6	63
1/4"	1250	10/7	80
3/8"	2500	12/8,5	125
1/2"	4250	16/12	160
3/4"	6000	22/17	250
1"	10000	26/18	320

Based on cylinder speed of 500 mm/sec, 50% loaded, cylinder pressure 5 bar, 1 metre tube length and two fittings per tube.

DESIGN & SIZING IN PNEUMATICS

Golden Rules

BEST PRACTISE

Compressed air is not free and must be used with consideration. Compression from 7 - 10 bar has the same cost as compression from 0 - 7 bar, this means that pressure should be as low as possible. Use pressure regulators where possible. Cylinders and valves should be correctly sized. Tubing that is unnecessarily long or large in diameter will waste energy and adversely influence response times. Locally placed valve islands will use shorter tube lengths than valves in centrally placed control cabinets. If you are in doubt or just need good advice contact us. We will always be pleased to help you. We have decades of experience in pneumatic control, design and sizing.

Frequently asked questions in pneumatics typically concern: air quality, cylinder forces, loading and bending, air consumption plus valve flow and lubrication. The tables on this page can be used in combination with the guidance and golden rules stated on the previous page. For sizing cylinders and air consumption go to page 14.

AIR QUALITY

ISO 8573-1 specifies quality classes for compressed air. A class number is made up from the individual maximum allowable contents of solid particles, water and oil in air and can be used to specify air quality for use with valves and other pneumatic applications.

Class	Solids particle size max μm	concentration maximum mg/m^3	Water Max. Pressure Dew Point $^{\circ}\text{C}$	Oil concentration mg/m^3
1	0,1	0,1	-70	0,01
2	1	1	-40	0,1
3	5	5	-20	1
4	15	8	+3	5
5	40	10	+7	25
6	-	-	+10	-

For general applications where ambient temperature is between +5 and +35 $^{\circ}\text{C}$, air quality to ISO8573-1 class 5.6.4 is normally sufficient. This is 40 μm filtration, +10 $^{\circ}\text{C}$ maximum pressure dew point and 5 mg/m^3 maximum oil content. Pressure dew point is the temperature to which compressed air must be cooled before water vapour in the air starts to condense into water particles.

VALVE FLOW

There are a variety of standards and methods for the measurement and display of valve flow performance. These can give rise to confusion and difficulty when comparing the published performance of different valves. The table below provides conversion factors as a guide to expressing valve performance in different units.

FLOW FACTOR CONVERSION TABLE

	Factors Cv	Kv	C	Flow * m^3/h	l/min	Orifice Size A	S
Cv	1	0,869	4,08	59,1	985	16,3	21,5
Kv	1,15	1	4,69	67,9	1132	18,7	24,7
C	0,245	0,213	1	14,5	241	4,11	5,27
m^3/h	0,017	0,015	0,069	1	16,67	0,276	0,364
l/min	0,001	0,0088	0,0041	0,06	1	0,016	0,022
A	0,061	0,053	0,243	3,62	60,4	1	1,31
S	0,046	0,04	0,189	2,75	45,8	0,761	1

* Flow parameters are 6 bar inlet and 5 bar outlet at 20 $^{\circ}\text{C}$, 1013 mbar and 65% humidity.

HOW TO USE

There Select the unit of measurement that is known in the left hand column and multiply by the factor given in the column of the required unit of measurement.

'Cv' is specified by ANSI/NFPA

'Kv' used in Germany and based on water flow.

'C' sonic conductance in $\text{dm}^3/\text{s}/\text{bar}$ specified by ISO 6358

'A' effective area in mm^2 specified by ISO 6358

'S' effective area in mm^2 according to the Japanese standard JIS B 8375

A further measurement is the NW value. This gives the equivalent diameter in mm^2 of the smallest path through a valve. This is non-comparable and not in the table.

LUBRICANTS

When to lubricate, via an oil-fog or micro-fog lubricator, is generally explained in this catalogue. However the oil recommended is very much dependant on the local conditions and not least availability of various brands and labels. In each country IMI Precision Engineering can recommend equivalent products, based on the information from the suppliers.



Engineered polymer - VM series



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 (VS18/VS26). Electrical connection is via individual wires, multipole, fieldbus or industrial ethernet.

Find out more
www.imi-precision.com

- > 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
- > Choice of valve spool types (VS only), soft seal or glandless for higher flow or extended life in excess of 200 million cycles
- > Diagnostics as standard on all electrical connections, and full traceability of island throughout its life supported by the IMI Precision Engineering production system
- > All our Valve islands can be configured on our new easier to use Valve Island Configurator
- > Industry standard protocols now include Profinet IRT and Ethernet/IP

Conforms to ISO15407-2 - VS series



EtherNet/IP™

PROFINET®

Engineering GREAT Solutions



 IMI NORGREN®

VALVE ISLANDS

VM10 2 x 3/2, 5/2 or 5/3 – 10 mm

- Valve slices 2 x 3/2, 5/2 and 5/3 with integral push-in fittings Ø 6 mm
- Compact and lightweight
- High flow from 10 mm valve width
- To configure and order a Valve Island visit www.imi-precision.com
- Multipole or individually wired
- Fieldbus or industrial ethernet

Technical Data

Medium:
Compressed air, filtered, lubricated and non-lubricated

Operation:
Spool valve indirectly actuated

Port sizes:
Ports 1,3 & 5: Ø 8 & 10 mm
Ports 2 & 4: Ø 3, 4 & 6 mm
Ports 12/14 & 82/84: Ø 4 & 6 mm

Flow:
Function l/min
5/2 ports
1 » 2 & 4 430
5/2 ports
2 » 3 & 4 » 5 400
3/2 and 5/3 350

Ambient temperature:
-5°C ... +50°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Protection classification

UL/CSA approval Recognized to UL 429 - 5th edition & CSA 22.2 No.139 - 1982 for Electrically Operated Valves.

● Models - 2 x 3/2 Double solenoid actuated valves

Model	Function	Actuation	Pilot supply	Manual override	Operating pressure (bar)	Pilot pressure (bar)
VM106A11AB313B	2 x 3/2 NC	Solenoid/Spring	Internal	Push only	3 ... 8	–
VM106B11AB313B	2 x 3/2 NO	Solenoid/Spring	Internal	Push only	3 ... 8	–
VM106C11AB313B	2 x 3/2 NO/NC	Solenoid/Spring	Internal	Push only	3 ... 8	–

● Models - 5/2 Single and double solenoid actuated valves

Model	Function	Actuation	Pilot supply	Manual override	Operating pressure (bar)	Pilot pressure (bar)
VM106517AB313B	5/2	Solenoid/Spring	Internal	Push only	3 ... 8	–
VM106511AB313B	5/2	Solenoid/Solenoid	Internal	Push only	2 ... 8	–

● Models - 5/3 Double solenoid actuated valves

Model	Function	Actuation	Pilot supply	Manual override	Operating pressure (bar)	Pilot pressure (bar)
VM106611AB313B	5/3 APB	Solenoid/Solenoid	Internal	Push only	3 ... 8	–

Note: For 5/3 COE please use 2 x 3/2 NC. For 5/3 COP please use 2 x 3/2 NO.
APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure.



PRODUCT PLUS

The perfect solution...

Offering flow rates up to 430 l/m, 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

VALVE ISLANDS

VM15 2 x 3/2, 5/2 or 5/3 – 15 mm

- Valve slices 2 x 3/2, 5/2 and 5/3 with integral push-in fittings Ø 8 mm
- Compact and lightweight, integral push in fittings
- High flow from 15 mm valve width
- To configure and order a Valve Island visit: www.imi-precision.com
- Electrical connection via multipole or individually wired

Technical Data

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Spool valve indirectly actuated

Port sizes:

Ports 1,3 & 5: Ø 10 & 12 mm
Ports 2 & 4: Ø 6, 8 & 10 mm
Ports 12/14 & 82/84: Ø 6 mm

Flow:

Function	l/min
5/2	1000
2x3/2	965
5/3	900

Ambient temperature:

-5°C ... +50°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



PRODUCT PLUS

To configure your own valve island please visit https://www.imi-precision.com/en/en/VIC_landing.aspx



● Models - 2 x 3/2 Double solenoid actuated valves

Model	Function	Actuation	Pilot supply	Manual override	Operating pressure (bar)	Pilot pressure (bar)
VM158A11AB313B	2 x 3/2 NC	Solenoid/spring	Internal	Push only	3 ... 8	–

● Models - 5/2 Single and double solenoid actuated valves

Model	Function	Actuation	Pilot supply	Manual override	Operating pressure (bar)	Pilot pressure (bar)
VM158517AB313B	5/2	Solenoid/spring	Internal	Push only	3 ... 8	–
VM158511AB313B	5/2	Solenoid/solenoid	Internal	Push only	3 ... 8	–

PLUG-IN MINI ISO VALVE ISLANDS

VS18 2 x 3/2, 5/2 or 5/3, size 18 mm

- Modular, easy to expand
- 24V d.c. or 115V a.c.
Multipole or single ad-on station
- Integrated fieldbus and industrial ethernet protocols
- To configure and order a Valve Island visit www.imi-precision.com
- Conforms to ISO 15407-2 Size 18mm
- Two spool technologies with unique advantages
 - glandless spool valves for long life cycles
 - softseal spool valves for high flow

Technical Data

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

Flow:
Softseal
Function l/min
2x3/2 600
5/2; 5/3 650

Mounting:
Sub-base

Operating pressure:
Maximum pressure
10 bar VS18S and VS18G models
with internal pilot supply
16 bar VS18G with external pilot supply
(VS18S softseal spool valves VS18G
glandless spool valves)

Ambient/Media temperature:
Ambient: -15°C ... +50°C
Media: -5°C ... +50°C
Air supply must be dry enough to avoid ice
formation at temperatures below +2°C

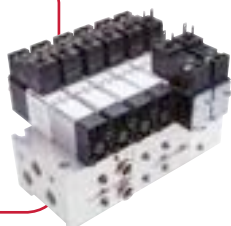


PRODUCT LINKS

If you require...

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

See page 62 and 67



● Models - 2 x 3/2 Double solenoid actuated softseal valves (flow 600 l/min)

Model	Function 2x2/2	Actuation/return	Pilot supply	Pilot pressure (bar)	Operating pressure (bar)	Manual override	Voltage	Short code
VS18SA11DF313A	NC	Sol/Spring	Internal	-	2,5 ... 10	Push only	24 V d.c. 1,2 W	SAU
VS18SB11DF313A	NO	Sol/Spring	Internal	-	2,5 ... 10	Push only	24 V d.c. 1,2 W	SBU
VS18SC11DF313A	NO/NC	Sol/Spring	Internal	-	2,5 ... 10	Push only	24 V d.c. 1,2 W	SCU

NO = Normally open, NC = Normally closed.

● Models - 5/2 Single and double solenoid actuated softseal valves (flow 650 l/min)

Model	Actuation/return	Pilot supply	Pilot pressure (bar)	Operating pressure (bar)	Manual override	Voltage	Short code
VS18S511DF313A	Sol/Sol	Internal	-	2 ... 10	Push only	24 V d.c. 1,2 W	SJU
VS18S517DF313A	Sol/Spring	Internal	-	2 ... 10	Push only	24 V d.c. 1,2 W	SGU

● Models - 5/3 Double solenoid actuated softseal valves (flow 650 l/min)

Model	Function 2x2/2	Actuation/return	Pilot supply	Pilot pressure (bar)	Operating pressure (bar)	Manual override	Voltage	Short code
VS18S611DF313A	APB	Sol/Sol	Internal	-	2 ... 10	Push only	24 V d.c. 1,2 W	SLU
VS18S711DF313A	COE	Sol/Sol	Internal	-	2,5 ... 10	Push only	24 V d.c. 1,2 W	SQU

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

● Electrical details for solenoid operators

Voltage tolerances	(24 V d.c.) +/- 10%
Rating	100% Continuous duty
Inlet orifice	0,8 mm
Indication	LED green
Surge suppression	Transil diode
Materials	PPS (body), FKM and NBR (seal)

Note: For alternative voltage and voltage tolerances please contact us.

Protection classification (IP Code): All VS18 valve islands fulfill IP65 and NEMA4 ratings.

Power supply and precautions: All VS18 24 V d.c. products are designed to be used with a protective extra low voltage (PELV) power supply. All VS18 115 V a.c. products correspond to the protection class I. Connection of the protective earth (PE) ground is required.

UL approval: Recognized to UL 429 for Electrically Operated Valves (not applicable for Industrial Ethernet and Fieldbus options).

ATEX: The 24 V d.c. valve islands fulfils the requirement of the standard 2014/34/EU for intended use in hazardous locations.



Multipole and Industrial Ethernet versions:
II 3G Ex nA IIC T4 Gc
II 3D Ex tc IIIC T135°C Dc

Fieldbus versions:
II 3G Ex nA IIC T4 Gc
II 3D Ex tc IIIB T135°C Dc

Equipment group, category, type of protection: The Declaration of Conformity of the valve islands was conducted by IMI Precision Engineering Norgren GmbH, D-70731 Fellbach. Please review all ATEX data and notes in the maintenance and instruction booklet to eliminate any risks, allowing for safe function of the valve islands.

Note: Please refer to the corresponding ATEX installation instructions and the maximum permissible operating conditions for valve islands in the ATEX zone. The maximum allowed power consumption for ATEX is 20W. This corresponds to 16 simultaneously energized pilot valves. If a configuration consists of more than 16 pilot valves the user must undertake external actions (e.g. power-limited power supplies) to make sure that the power consumption of 20W is not exceeded.

PLUG-IN MINI ISO VALVE ISLANDS

VS26 2 x 3/2, 5/2 or 5/3, size 26 mm

- Modular, easy to expand
- 24V d.c. or 115V a.c.
Multipole or single ad-on station
- UL
- To configure and order a Valve Island visit www.imi-precision.com
- Conforms to ISO 15407-2 Size 26 mm
- Two spool technologies with unique advantages
 - glandless spool valves for long life cycles
 - softseal spool valves for high flow

Technical Data

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

Flow:
Softseal
Function l/min
2x3/2 1250
5/2; 5/3 1350

Mounting:
Sub-base

Operating pressure:
Maximum pressure
10 bar VS26S and VS26G models with internal pilot supply
16 bar VS26G with external pilot supply (VS26S softseal spool valves VS26G glandless spool valves)

Ambient/Media temperature:
Ambient: -15°C ... +50°C
Media: -5°C ... +50°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Models - 2x3/2 Double solenoid actuated softseal valves (flow 1250 l/min)

Model	Function 2 x 3/2	Actuation	Pilot supply	Pilot pressure (bar)	Operating pressure (bar)	Manual override	Voltage	Short code
VS26SA11DF313A	NC	Sol/Spring	Internal	-	3 ... 10	Push only	24 V d.c. 1,2 W	SAU
VS26SB11DF313A	NO	Sol/Spring	Internal	-	3 ... 10	Push only	24 V d.c. 1,2 W	SBU
VS26SC11DF313A	NO/NC	Sol/Spring	Internal	-	3 ... 10	Push only	24 V d.c. 1,2 W	SCU

NO = Normally open, NC = Normally closed.

● Models - 5/2 Single and double solenoid actuated softseal valves (flow 1350 l/min)

Model	Actuation	Pilot supply	Pilot pressure (bar)	Operating pressure (bar)	Manual override	Voltage	Short code
VS26S511DF313A	Sol/Sol	Internal	-	2 ... 10	Push only	24 V d.c. 1,2 W	SJU
VS26S517DF313A	Sol/Spring	Internal	-	2 ... 10	Push only	24 V d.c. 1,2 W	SGU

● Models - 5/3 Double solenoid actuated softseal valves (flow 1350 l/min)

Model	Function 2x2/2	Actuation/return	Pilot supply	Pilot pressure (bar)	Operating pressure (bar)	Manual override	Voltage	Short code
VS26S611DF313A	APB	Sol/Sol	Internal	-	2,5 ... 10	Push only	24 V d.c. 1,2 W	SLU
VS26S711DF313A	COE	Sol/Sol	Internal	-	2,5 ... 10	Push only	24 V d.c. 1,2 W	SQU

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

● Electrical details for solenoid operators

Voltage tolerances	(24 V d.c.) +/- 10%
Rating	100% Continuous duty
Inlet orifice	0,8 mm
Indication	LED green
Surge suppression	Transil diode
Materials	PPS (body), FKM and NBR (seal)

Note: For alternative voltage and voltage tolerances please contact us.

Protection classification (IP Code): All VS18 valve islands fulfill IP65 and NEMA4 ratings.

Power supply and precautions: All VS18 24 V d.c products are designed to be used with a protective extra low voltage (PELV) power supply. All VS18 115 V a.c products correspond to the protection class I. Connection of the protective earth (PE) ground is required.

UL approval: Recognized to UL 429 for Electrically Operated Valves (not applicable for Industrial Ethernet and Fieldbus options).

ATEX: The 24 V d.c valve islands fulfils the requirement of the standard 2014/34/EU for intended use in hazardous locations.



Multipole and Industrial Ethernet versions:
II 3G Ex nA IIC T4 Gc
II 3D Ex tc IIIC T135°C Dc

Fieldbus versions:
II 3G Ex nA IIC T4 Gc
II 3D Ex tc IIIB T135°C Dc

Equipment group, category, type of protection: The Declaration of Conformity of the valve islands was conducted by IMI Precision Engineering Norgren GmbH, D-70731 Fellbach. Please review all ATEX data and notes in the maintenance and instruction booklet to eliminate any risks, allowing for safe function of the valve islands.

Note: Please refer to the corresponding ATEX installation instructions and the maximum permissible operating conditions for valve islands in the ATEX zone. The maximum allowed power consumption for ATEX is 20W. This corresponds to 16 simultaneously energized pilot valves. If a configuration consists of more than 16 pilot valves the user must undertake external actions (e.g. power-limited power supplies) to make sure that the power consumption of 20W is not exceeded.

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Introducing a powerful 'plug and play' upgrade to our world-class valve islands – the new VM and VS Series with PROFINET IRT and EtherNet/IP with cycle times under 1 m/s. Offering unrivalled flow rates, almost unlimited configurations and a choice of connectivity. Designed to keep your machines moving marvellously, they're backed up with expert technical support for extra peace of mind.

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MINI ISO VALVES

V40/V41 2 x 3/2, 5/2 and 5/3, Solenoid and pilot actuated, ISO 15407-1/DMA 24 563, Size 18 mm

- 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)

Technical Data

Medium:

Compressed air, filtered to 40 µm, 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

Flow:

V41 Softseal	
Function	l/min
2x3/2	610
5/2	650
5/3	680
V40 Glandless	
5/2	570
5/3	610

Mounting:

Sub-base

Ports 2+4:

Operating pressure:

Maximum pressure
10 bar V41 models and V40 solenoid pilot actuated valves with internal pilot supply
16 bar V40 solenoid pilot actuated valves w. ext. pilot supply and V40 air pilot actuated valves

Details of minimum and maximum pilot pressure see overleaf

Ambient temperature:

-15°C ... +50°C
V40/V41 solenoid and V41 air pilot models
-15°C ... +80°C
V40 air pilot models
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Models - 2 x 3/2 Solenoid pilot actuated softseal valves

Model	Function 2 x 3/2	Actuation/return	Pilot supply	Pilot exhaust	Operating pressure (bar)	Pilot pressure (bar)	Flow (l/min)
V415A11D-C313A	NC	Solenoid/Spring	Internal	Collected #	2,5 ... 10	–	610

● Models - 5/2 Solenoid pilot actuated glandless and softseal valves

Model	Pilot supply	Pilot exhaust	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V405513D-C313A	Internal	Collected #	Solenoid	Air spring	1 ... 10	–	Glandless	570
V415513D-C313A	Internal	Collected #	Solenoid	Air spring	1 ... 10	–	Soft seal	650
V405516D-C313A	Internal	Collected #	Solenoid	Spring	1,6 ... 10	–	Glandless	570
V415517D-C313A	Internal	Collected #	Solenoid	Spring	2 ... 10	–	Soft seal	650
V405511D-C313A	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Glandless	570

● Models - 5/3 Solenoid pilot actuated glandless and softseal valves

Model	Function	Pilot supply	Pilot exhaust	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V405611D-C313A	APB	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Glandless	610
V415611D-C313A	APB	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Soft seal	680
V405711D-C313A	COE	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Glandless	610
V415711D-C313A	COE	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Soft seal	680

Pilot exhaust collected and exhausted via port 14.

APB = All Ports Blocked, COE = Centre Open Exhaust, NC = Normally closed.

Voltage codes

Voltage	Coil code	Current
24 V d.c.	C313A	1,2 W

Other voltages available on request. Spare pilot valves are delivered with mounting screws.

● Electrical details for solenoid operators

Voltage tolerances	-10%/+15%
Rating	100% Continuous duty
Inlet orifice	0,8 mm
Electrical connection	15 mm DIN EN 175301-803 (DIN 43 650) Table C
Manual override	Shrouded push button, spring return Convertible into lockable type with set-up kit, part no. V70532-K00
Protection class	IP 65 with sealed plug (ISO 6952) NEMA 4
Materials	PPS (body), FPM and NBR (seal)

Intrinsically safe version available on request.

MINI ISO VALVES

V40/V41 2 x 3/2, 5/2 and 5/3, Solenoid and pilot actuated, ISO 15407-1/DMA 24 563, Size 18 mm

● Models - 5/2 Air pilot actuated glandless and softseal valves

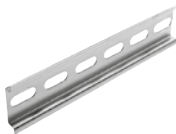




Model	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V405537A-X0090	Air	Spring	-0,9 ... 16	1,6 ... 16	Glandless	570
V415537A-X0090	Air	Spring	-0,9 ... 10	2 ... 10	Soft seal	610
V405533A-X0020	Air	Air	-0,9 ... 16	2 ... 16	Glandless	570

● Models - 5/3 Air pilot actuated glandless and softseal valves


Model	Function	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V415633A-X0020	APB	Air	Air	-0,9 ... 10	2 ... 10	Soft seal	680

APB = All Ports Blocked

● Accessories

DIN EN 50 022 rail (1 m)	DIN-rail mounting kit	Blanking disc to modular sub-base	Manual override set-up kit	Blanking plate for unused station
				
V10009-C00 (35 x 7,5 mm)	V70531-KA0	V70422-K50 (Ports 1,3,5)	V70532-K00	V70400-K50

● Sandwich plates

Double pressure regulator plate

V70427-K54 (Ports 2+4 reg.)



PRODUCT 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.



PRODUCT LINKS

Connectors and cables

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


See page 132

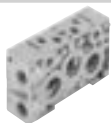





MINI ISO VALVES





V40/V41 2 x 3/2, 5/2 and 5/3, Solenoid and pilot actuated, ISO 15407-1/VDMA 24 563, Size 18 mm

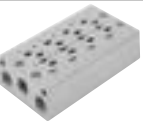



● Bases

Single station		Accessories		
Model	Description	Straight fitting	Elbow fitting	Silencer
				
V70401-A5B	Single station side ported with pilot ports – G1/8	C02250618	C02470618	T40C1800

Modular sub-bases and end plates		Accessories		
Model	Description	Straight fitting	Elbow fitting	Silencer
				
V70425-x5F	Modular sub-base side ported without pilot ports (Port 2+4). See table below	C02250618	C02470618	–
V70426-x5F	Modular sub-base side ported with pilot ports (Port 2+4). See table below	C02250618	C02470618	–
V70425-A5E	Modular sub-base bottom ported without pilot ports (Port 2+4) – G1/8	C02250618	C02470618	–
V70426-A5E	Modular sub-base bottom ported with side pilot ports (Port 2+4) – 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 (Ports 2 & 4) C02250828 (Ports 1, 3 & 5)	C02470618 (Ports 2 & 4) C02470828 (Ports 1, 3 & 5)	T40C2800 –

				
V70402-A50	2 Station fixed length manifold. Bottom ported	C02250618 (Ports 2 & 4)	C02470618 (Ports 2 & 4)	T40C2800
V70404-A50	4 Station fixed length manifold. Bottom ported	C02250828 (Ports 1, 3 & 5)	C02470828 (Ports 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	–	–

Code x	Code y	Ports 2 & 4	Ports
A	A	G1/8	M5
6	–	Ø 6 mm PIF	M5

* Pilot ports 12+14 on side.

● Connector plug - Ordered separately

115 mm DIN EN 175301-803 (DIN 43 650) Table C



V10027-D00
250 V a.c./300 Vd.c.

MINI ISO VALVES

V40/V41 2 x 3/2, 5/2 and 5/3, Solenoid and pilot actuated, ISO 15407-1/DMA 24 563, Size 18 mm

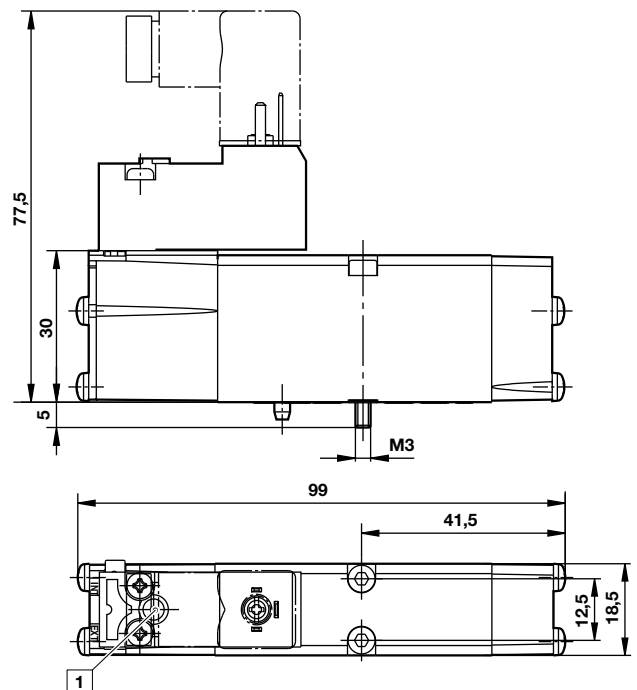
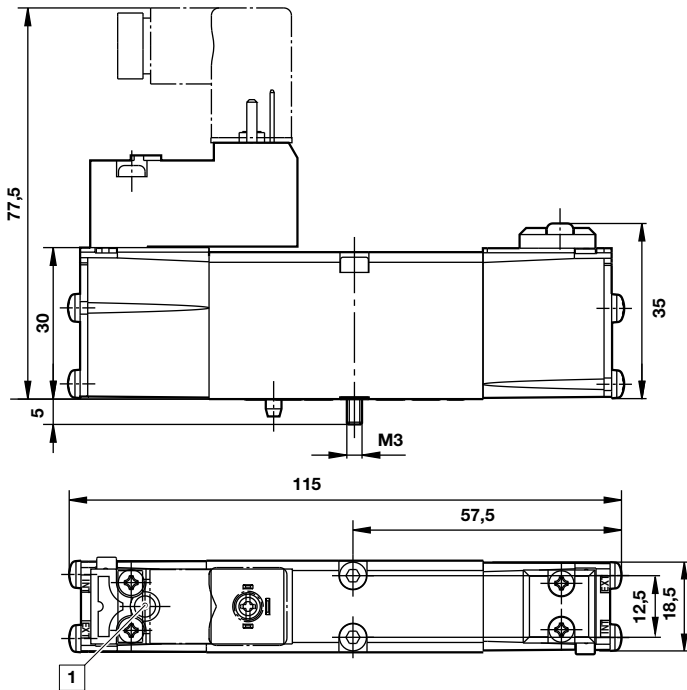
● Dimensions

V4155*3D-C3***

5/2 Single solenoid pilot valve
Air spring return

V4055**D-C3***

5/2 Single solenoid pilot valve
Mechanical (& air) spring valve



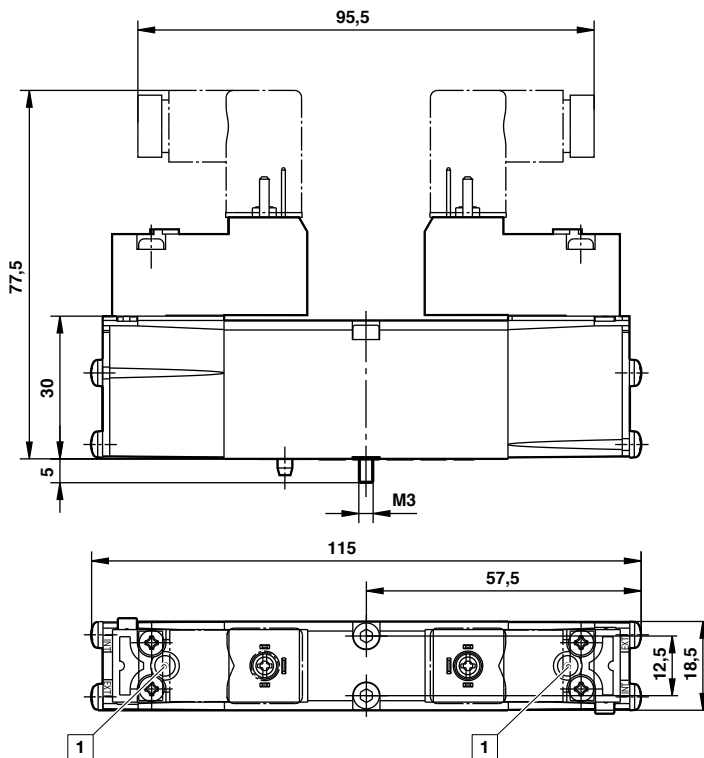
V4055**D-C3*** & V4155**D-C3***

5/2 Double solenoid pilot valve

V405***D-C3*** & V415***D-C3***

2x3/2 + 5/3 Double solenoid pilot valve

1 Manual override

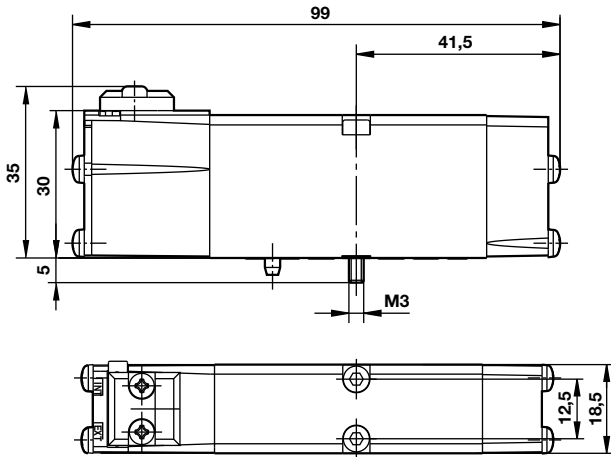


MINI ISO VALVES

V40/V41 2 x 3/2, 5/2 and 5/3, Solenoid and pilot actuated, ISO 15407-1/DMA 24 563, Size 18 mm

V415537A-X0090

5/2 Single air pilot valve

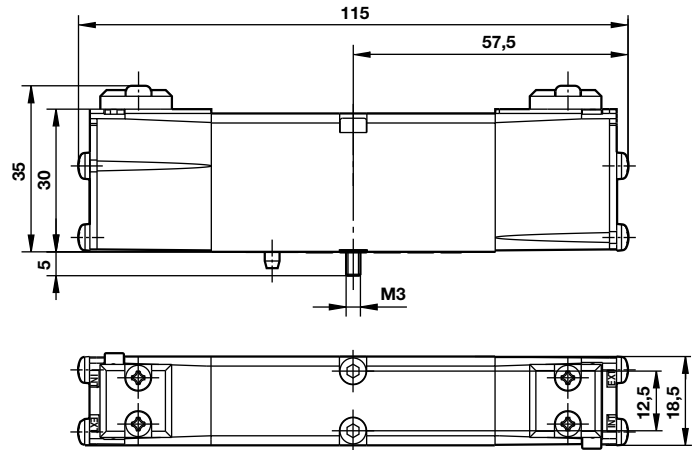


V405537A-X0090

5/2 Single air pilot valve

V405*33A-X00*0 & V415*33A-X00*0

2x3/2, 5/2 + 5/3 Double air pilot valve



PRODUCT LINKS

Tubing...

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

See page 202

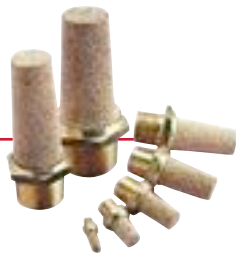


PRODUCT LINKS

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 204



MINI ISO VALVES

V44/V45 Solenoid and pilot actuated, ISO 15407-1/VDMA 24 563, Size 26 mm

- 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, filtered to 40 µm, 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

Flow:

Function	l/min
Softseal	
2x3/2 NC	1100
5/2	1200
5/3	1150

Glandless

5/2	900
5/3	900

Mounting:

Sub-base

Operating pressure:

See tables for individual details

Ambient temperature:

-15°C ... +50°C
V44/V45 solenoid and V45 air pilot models
-15°C ... +80°C
V44 air pilot models
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Models - 2 x 3/2 Solenoid pilot actuated softseal valves

Model	Function 2 x 3/2	Actuation/Return	Pilot supply	Pilot exhaust	Operating pressure (bar)	Pilot pressure (bar)	Flow (l/min)
V45AA11D-C313A	NC	Solenoid/Spring	Internal	Collected #	3 ... 10	–	1000

Pilot exhaust collected and exhausted via port 14.
NC = Normally closed.

● Models - 5/2 Solenoid pilot actuated glandless and softseal valves

Model	Pilot supply	Pilot exhaust	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V44A513D-C313A	Internal	Collected #	Solenoid	Air spring	1 ... 10	–	Glandless	900
V44A517D-C313A	Internal	Collected #	Solenoid	Spring	1,6 ... 10	–	Glandless	900
V45A517D-C313A	Internal	Collected #	Solenoid	Spring	2 ... 10	–	Soft	1200
V44A511D-C313A	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Glandless	900
V45A511D-C313A	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Soft	1200

Pilot exhaust collected and exhausted via port 14.

● Models - 5/3 Solenoid pilot actuated glandless and softseal valves

Model	Function	Pilot supply	Pilot exhaust	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V44A611D-C313A	APB	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Glandless	900
V45A611D-C313A	APB	Internal	Collected #	Solenoid	Solenoid	2,5 ... 10	–	Soft	1150
V44A711D-C313A	COE	Internal	Collected #	Solenoid	Solenoid	2 ... 10	–	Glandless	900
V45A711D-C313A	COE	Internal	Collected#	Solenoid	Solenoid	2,5 ... 10	–	Soft	1150

Pilot exhaust collected and exhausted via port 14.
APB = All Ports Blocked, COE = Centre Open Exhaust

Voltage codes

Voltage	Coil code	Current
24 V d.c.	C313A	1,2 W

Other voltages available on request. Spare pilot valves are delivered with mounting screws.

● Electrical details for solenoid operators

Voltage tolerances	-10%/+15%
Rating	100% Continuous duty
Inlet orifice	0,8 mm
Electrical connection	15 mm DIN EN 175301-803 (DIN 43 650) Table C
Manual override	Shrouded push button, spring return Convertible into lockable type with set-up kit, part no. V70532-K00
Protection class	IP 65 with sealed plug (ISO 6952) NEMA 4
Materials	PPS (body), FPM and NBR (seal)

MINI ISO VALVES

V44/V45 Solenoid and pilot actuated, ISO 15407-1/VDMA 24 563, Size 26 mm

● Models - 5/2 Air pilot actuated glandless and softseal valves

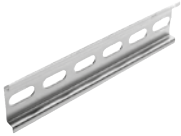




Model	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V44A537A-X0090	Air	Spring	-0,9 ... 16	1,6 ... 16	Glandless	900
V45A537A-X0090	Air	Spring	-0,9 ... 10	2 ... 10	Soft	1200
V44A533A-X0020	Air	Air	-0,9 ... 16	2 ... 16	Glandless	900
V45A533A-X0020	Air	Air	-0,9 ... 10	2 ... 10	Soft	1200

● Models - 5/3 Air pilot actuated glandless and softseal valves



Model	Function	Operator 14	Operator 12	Operating pressure (bar)	Pilot pressure (bar)	Sealing system	Flow (l/min)
V45A633A-X0020	APB	Air	Air	-0,9 ... 10	2,5 ... 10	Soft	1150

APB = All Ports Blocked

● Accessories

DIN EN 50 022 rail (1 m)	DIN-rail mounting kit	Blanking disc to modular sub-base	Manual override set-up kit	Blanking plate for unused station
				
V10009-C00 (35 x 7,5 mm)	V70531-KA0	V70522-K00 (Ports 1,3,5)	V70532-K00	V70500-KA0

● Sandwich plates

Single pressure regulator plate	Double pressure regulator plate
	
V70527-KA1 (Port 1 reg.)	V70527-KA4 (Ports 2+4 reg.)



PRODUCT 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.



PRODUCT LINKS

Connectors and cables

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

See page 132



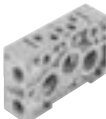



MINI ISO VALVES





V44/V45 Solenoid and pilot actuated, ISO 15407-1/VDMA 24 563, Size 26 mm

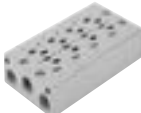



● Bases

Accessories

Single station		Straight fitting	Elbow fitting	Silencer
Model	Description			
				
V70501-BAB	Single station side ported with pilot ports – G1/4	C02250828	C02470828	T40C2800

Modular sub-bases and end plates		Straight fitting	Elbow fitting	Silencer
Model	Description			
				
V70525-xAF	Modular sub-base side ported without pilot ports (Ports 2+4) – G1/4. See table below	C02250828	C02470828	–
V70526-xAF	Modular sub-base side ported with pilot ports (Ports 2+4) – G1/4*. See table below	C02250828	C02470828	–
V70525-BAE	Modular sub-base bottom ported without pilot ports (Ports 2+4) – G1/4	C02250828	C02470828	–
V70526-BAE	Modular sub-base bottom ported with side pilot ports (Ports 2+4) – 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 (Ports 2 & 4)	C02470828 (Ports 2 & 4)	T40C3800
V70504-BA0	4 Station fixed length manifold. Bottom ported	C02251038 (Ports 1, 3 & 5)	C02471038 (Ports 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	–	–

Code x	Ports 2 & 4	Ports 12/14
B	G1/4	M5
8	Ø 8 mm PIF	M5

* Pilot ports 12+14 on side.

x = Insert port type from table.

● Connector plug - Ordered separately

115 mm DIN EN 175301-803 (DIN 43 650) Table C



V10027-D00
250 V a.c./300 Vd.c.

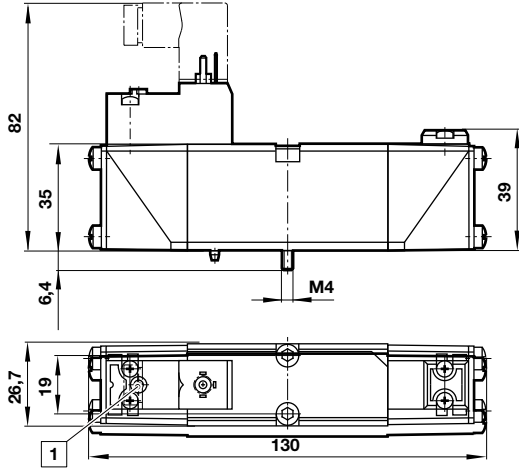
MINI ISO VALVES

V44/V45 Solenoid and pilot actuated, ISO 15407-1/VDMA 24 563, Size 26 mm

● Dimensions

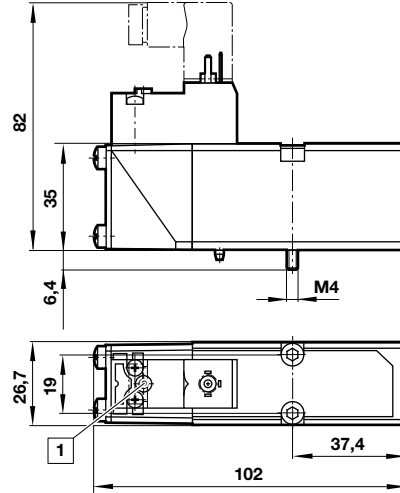
V44A5*3D-C3***

5/2 Single solenoid pilot valve
Air spring return



V44A5*7D-C3*** & V45A5*7D-C3***

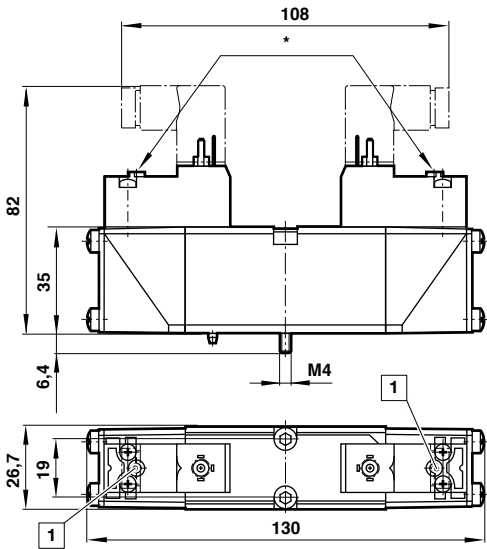
5/2 Single solenoid pilot valve
Mechanical spring return



1 Manual override

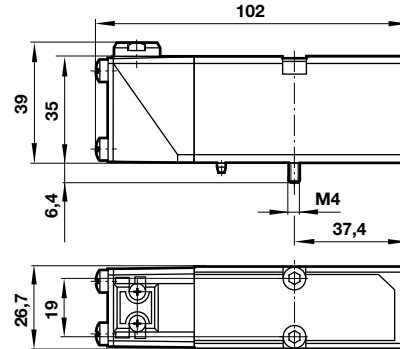
V44A5**D-C3*** & V45A5**D-C3***

5/2 Double solenoid pilot valve
V44A***D-C3*** & V45A***D-C3***
2x3/2 + 5/3 Double solenoid pilot valve



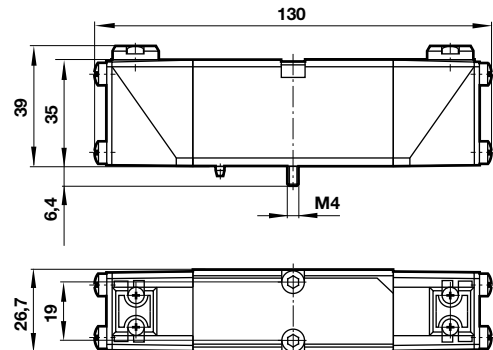
V44A537A-X00*0 & V45A537A-X00*0

5/2 Single air pilot valve



V44A*33A-X00*0 & V45A*33A-X00*0


2 x 3/2, 5/2 + 5/3 Double air pilot valve

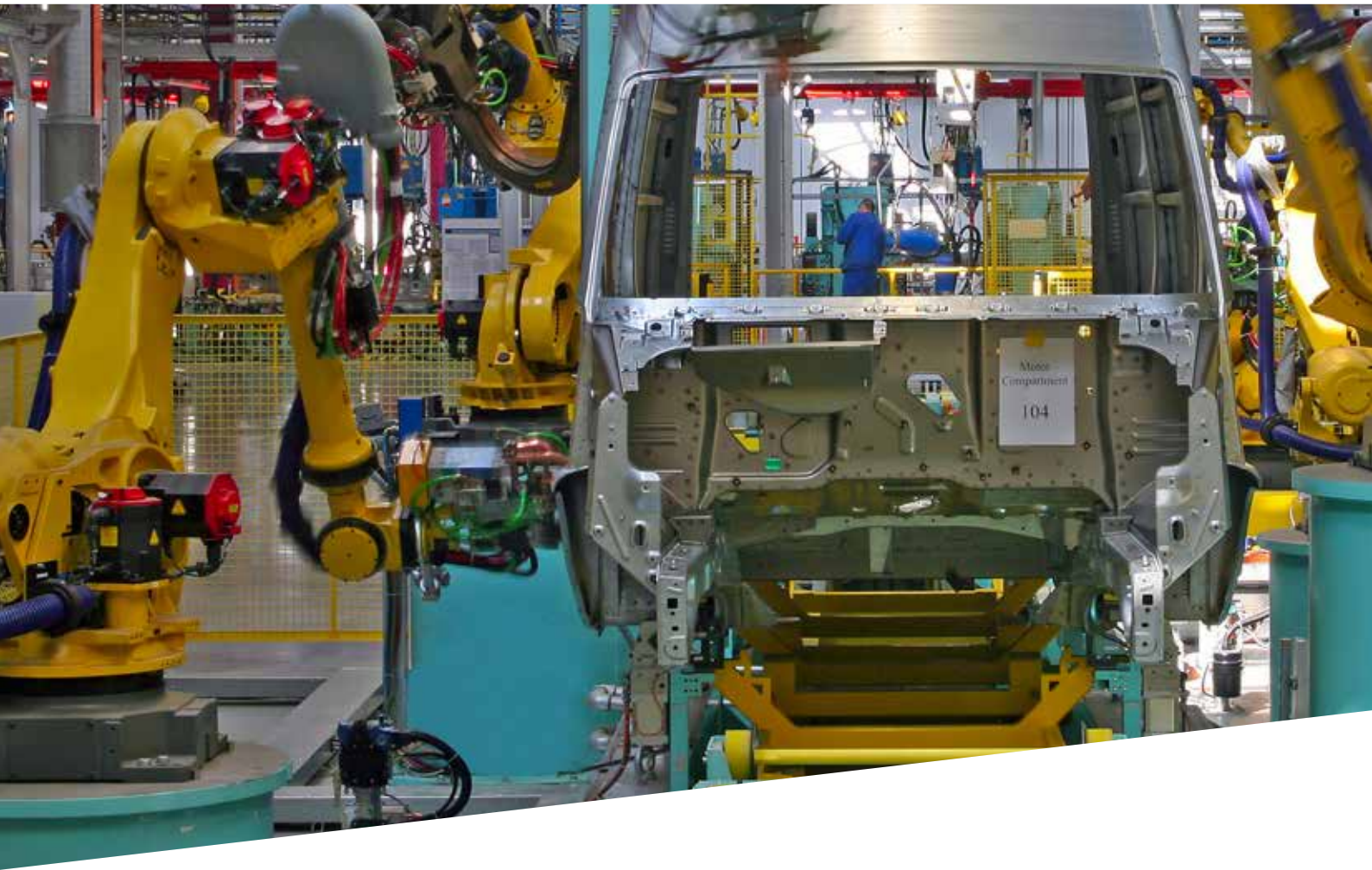


PRODUCT LINKS

Tubing...

For our comprehensive range of nylon, polyurethane and other tubing. See page 202





Solutions for Safety Technology

- > Over 50 years experience in safety applications
- > Safety applications DIN EN ISO 13849
- > Competent and professional consulting and system design of safety controls
- > Very high B10 Values
- > DGUV certified self-monitored safety valves
- > Important safety features such as:
 - > Safe exhaust
 - > Safe position
 - > Safe stop
 - > Reliable reversing
 - > Safely limited speed and more



Engineering
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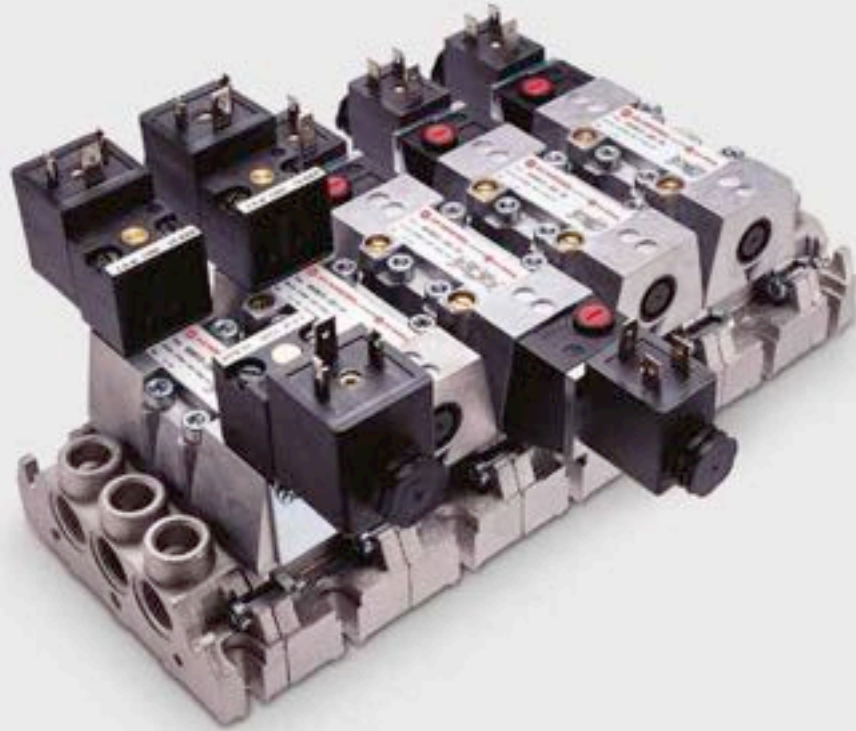
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IMI Precision
Engineering



ISO★STAR

Glandless valves

SXE series and SXP series

The ISO★STAR 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
- > 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
- > Fast switching times coupled with low power solenoids, perfect in high cycling applications

Integral flow regulators



Trouble free life!



Engineering GREAT Solutions



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SOLENOID & PILOT ACTUATED SPOOL VALVES

ISO★STAR Sub-base, 5/2 & 5/3, ISO #1 to ISO #3

- Specially coated glandless spool and sleeve for long trouble-free life
- Integral flow regulators available on ISO #1 and #2 sizes
- Low power solenoids feature manual override as standard
- Wide range of sub-bases and accessories
- Conforms to ISO 5599-1

Technical Data

Medium:

Compressed air, filtered, lubricated, non lubricated

Operating pressure:

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
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Models - Solenoid pilot actuated valves (without solenoid coils)

End solenoid models		CNOMO solenoid models		Size	Function	Mid position	Actuation	Flow regulator
Model	Operating pressure (bar)	Model	Operating pressure (bar)					
SXE 9573-A81-00K	1,8 ... 10	-	-	ISO #1	5/2	-	Sol/Spring	Built-in
-	-	SXE 0573-Z50-81K	2 ... 16	ISO #1	5/2	-	Sol/Sol	-
SXE 0573-A60-00K	2 ... 10	-	-	ISO #1	5/2	-	Sol/Sol	Built-in
SXE 9673-A60-00K	2 ... 10	-	-	ISO #1	5/3	APB	Sol/Sol	Built-in
SXE 9773-A60-00K	2 ... 10	-	-	ISO #1	5/3	COE	Sol/Sol	Built-in
SXE 9873-A60-00K	2 ... 10	-	-	ISO #1	5/3	COP	Sol/Sol	Built-in
SXE 9574-A81-00K	1,8 ... 10	-	-	ISO #2	5/2	-	Sol/Spring	Built-in
-	-	SXE 0574-Z50-81K	2 ... 16	ISO #2	5/2	-	Sol/Sol	-
SXE 0574-A60-00K	2 ... 10	-	-	ISO #2	5/2	-	Sol/Sol	Built-in
SXE 9674-A60-00K	2 ... 10	-	-	ISO #2	5/3	APB	Sol/Sol	Built-in
SXE 9774-A60-00K	2 ... 10	-	-	ISO #2	5/3	COE	Sol/Sol	Built-in
SXE 9874-A60-00K	2 ... 10	-	-	ISO #2	5/3	COP	Sol/Sol	Built-in
SXE 9575-A71-00K	1,8 ... 10	-	-	ISO #3	5/2	-	Sol/Spring	-
SXE 0575-A50-00K	2 ... 10	SXE 0575-Z50-81K	2 ... 16	ISO #3	5/2	-	Sol/Sol	-
SXE 9675-A50-00K	2 ... 10	-	-	ISO #3	5/3	APB	Sol/Sol	-
SXE 9775-A50-00K	2 ... 10	-	-	ISO #3	5/3	COE	Sol/Sol	-
SXE 9875-A50-00K	2 ... 10	-	-	ISO #3	5/3	COP	Sol/Sol	-

APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure. Service kits not available for these valves.

Manual override on end solenoid models: Push to operate spring return, lockable.

Manual override on CNOMO solenoid models (-81/***) : Push to operate spring return.

For Valve complete with solenoid coil remove K and replace with '*****' where *** is taken from the correct coil table below

Voltage Codes and spare coils

Standard Coils

22 mm Coil with connector interface acc. to Industrial Standard		
Model	Code	Power inrush/hold
QM/48/13J/21	13J	2 W
QM/48/18J/21	18J	4/2,5 VA
QM/48/19J/21	19J	6/5 VA

22 mm Coil with connector interface acc. to DIN 43650 table B		
Model	Code	Power inrush/hold
V10626-A13L	13L	2 W
V10626-A18L	18L	4/2,5 VA
V10626-A19L	19L	6/5 VA

CNOMO Coils

30 mm Coil with connector interface acc. to DIN 43650 table A - 10 bar option			
Model	Code	Power inrush/hold	Voltage
V10633-A33N	33N	4 W	24 V d.c.
V10633-A88N	88N	8 VA	110/120 V a.c.
V10633-A89N	89N	8 VA	230 V a.c.

30 mm Coil with connector interface acc. to DIN 43650 table A - 16 bar option			
Model	Code	Power inrush/hold	Voltage
V10633-A23N	23N	1,5 W	24 V d.c.
V10633-A28N	28N	2 VA	110/120 V 50/60 Hz
V10633-A29N	29N	3 VA	220/240 V 50/60 Hz

Connector plugs - ordered separately

Industrial standard	22 mm, EN 175301-803 (DIN 43650 B) Form B	30 mm, EN 175301-803 (DIN 43650 B) Form A
22 mm	2-pole + PE	2-pole + PE



Electrical details for end & CNOMO solenoid operators

Voltage tolerance	±10%
Rating	100% E.D.
Inlet orifice	1,0 mm
Electrical connection	Corresponding to chosen coil. See voltage code tables
Solenoid coil	May be rotated at 90° intervals
Protection class	IP 65 with sealed plug (ISO 6952)

SOLENOID & PILOT ACTUATED SPOOL VALVES

ISO★STAR Sub-base, 5/2 & 5/3, ISO #1 to ISO #3





















● Models - Air pilot actuated valves

Model	Size	Function	Mid position	Actuation	Flow regulator	Operating pressure (bar)	kg
SXP 9573-170-00	ISO #1	5/2	–	Pilot/Spring	–	-0,9 ... 16	0,21
SXP 0573-170-00	ISO #1	5/2	–	Pilot/Pilot	–	-0,9 ... 16	0,30
SXP 9673-180-00	ISO #1	5/3	APB	Pilot/Pilot	Built-in	-0,9 ... 16	0,25
SXP 9574-170-00	ISO #2	5/2	–	Pilot/Spring	–	-0,9 ... 16	0,45
SXP 0574-170-00	ISO #2	5/2	–	Pilot/Pilot	–	-0,9 ... 16	0,50
SXP 9674-180-00	ISO #2	5/3	APB	Pilot/Pilot	Built-in	-0,9 ... 16	0,58
SXP 9575-170-00	ISO #3	5/2	–	Pilot/Spring	–	-0,9 ... 16	0,72
SXP 0575-170-00	ISO #3	5/2	–	Pilot/Pilot	–	-0,9 ... 16	0,72
SXP 9675-170-00	ISO #3	5/3	APB	Pilot/Pilot	–	-0,9 ... 16	0,80

APB = All Ports Blocked

● Bases

Accessories

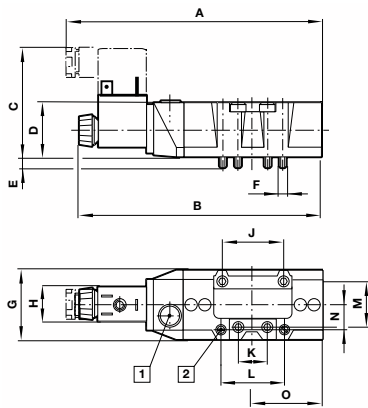
VDMA 24345 sub-bases					
Model	Description	Size	Straight fitting	Elbow fitting	Silencer
					
M/P19126 (G1/4)	Form A - Side ported	ISO 1	C02250828	C02470828	T40C2800
M/P19132 (G3/8)	Form A - Side ported	ISO 2	C02251038	C02471038	T40C3800
M/P19138 (G1/2)	Form A - Side ported	ISO 3	C02251248	C02471248	T40C4800
					
CQM/22152/3/21	Form C - Manifold	ISO 1	C02250828	C02470828	–
CQM/22253/3/21	Form C - Manifold	ISO 2	C02251038	C02471038	–
CQM/22354/3/21	Form C - Manifold	ISO 3	C02251248	C02471248	–
					
CQM/22152/3/22	Form D - End plates	ISO 1	C02251038	C02471038	T40C3800
CQM/22253/3/22	Form D - End plates	ISO 2	C02251248	C02471248	T40C4800
CQM/22354/3/22	Form D - End plates	ISO 3	–	–	T40C8800
Universal base options					
Model	Description	Size	Straight fitting	Elbow fitting	Silencer
					
CQM/22152/3/27 (G1/4)	Modular base	ISO 1	C02250828	C02470828	–
CQM/22253/3/27 (G3/8)	Modular base	ISO 2	C02251038	C02471038	–
					
CQM/22152/3/31 (G3/8)	End plate, side ports open	ISO 1	C02251038	C02471038	T40C3800
CQM/22253/3/31 (G1/2)	End plate, side ports open	ISO 2	C02251248	C02471248	T40C4800

SOLENOID & PILOT ACTUATED POOL VALVES

ISO★STAR Sub-base, 5/2 & 5/3, ISO #1 to ISO #3

● Dimensions

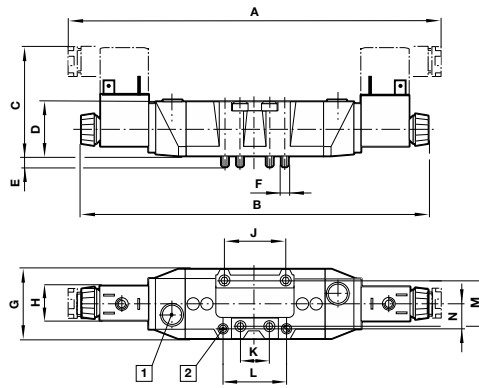
Single end solenoid models



- 1 Manual override
- 2 Flow regulators

	ISO 1	ISO 2	ISO 3
A	154	181	207,5
B	146	173	197
C	66	71	72
D	33	42	43
E	7,5	8	11,5
F	M5	M6	M8
G	42	55	62,5
H	22/30	22/30	22/30
J	36	48	64
K	18	24	32
L	38	48	-
M	28	38	48
N	15	20	-
O	42	53	65,4

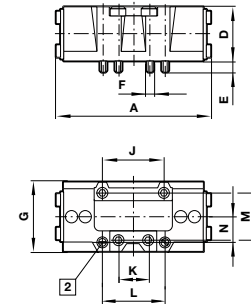
Double end solenoid models



- 1 Manual override
- 2 Flow regulators

	ISO 1	ISO 2	ISO 3
A	222	255	284
B	204	239	263
C	65	71	72
D	33	42	43
E	7,5	8	11,5
F	M5	M6	M8
G	42	55	62,5
H	22/30	22/30	22/30
J	36	48	64
K	18	24	32
L	38	48	-
M	28	38	48
N	15	20	-

Single and double pilot models

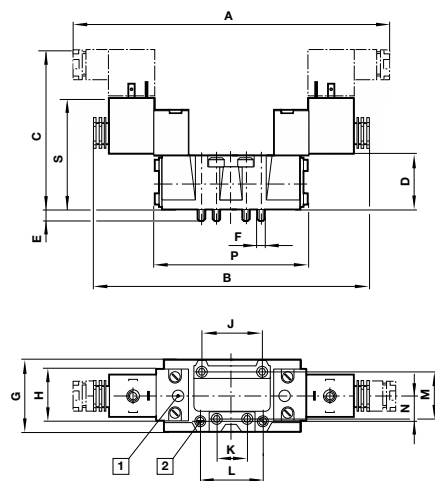


- 2 Flow regulators

	ISO 1		ISO 2		ISO 3	
	Single	Double	Single	Double	Single	Double
A	88	92,5	112	119	135,5	140 (142)
D	33	33	42	42	43	43
E	7,5	7,5	8	8	11,5	11,5
F	M5	M5	M6	M6	M8	M8
G	42	42	55	55	62,5	62,5
J	36	36	48	48	64	64
K	18	18	24	24	32	32
L	38	38	48	48	-	-
M	28	28	38	38	48	48
N	15	15	20	20	-	-
O	42		53		65,5	

() for 5/3 way valves.

Double CNOMO solenoid valves



- 1 Manual override
- 2 Flow regulators

	ISO 1	ISO 2	ISO 3
A	191	208	231
B	171	189	212
C	89	107	108
D	33	42	43
E	7,5	8	11,5
F	M5	M6	M8
G	42	55	62,5
H	32	32	32
J	36	48	64
K	18	24	32
L	38	48	-
M	28	38	48
N*	15	20	-
P	92,5	119	140 (142)
S	62	71	78,5

() for 5/3 way valves.

SOLENOID & PILOT ACTUATED SPOOL VALVES

UM/22000 Sub-base 5/2 and 5/3, ISO #4

- Sub-base mounted, ISO 5599-1
- Steel reinforced main seals
- 16 bar and 10 bar CNOMO solenoid pilots with locking or non-locking manual override
- Low power coils (1,5W)
- Wide range of sub-bases and accessories

Technical Data

Medium:

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

Operating pressure:

Solenoid pilot actuated valves: 10 bar
Air pilot actuated valves and solenoid pilot actuated valves: 16 bar

Flow:

5660 l/min

Ambient temperature:

-15°C ... +50°C solenoid models

-15°C ... +80°C pilot models

Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Models - 5/2 Solenoid pilot actuated valves – 10 bar models

Model 22 mm industrial 24vDC coil	ISO size	Operator/return	Pilot supply	Flow (l/min)	Operating pressure (bar)	Pilot pressure (bar)
UM/22456/172/61/13J	4	Solenoid/spring and air	Internal	5660	2,5 ... 10	–
UM/22456/123/61/13J	4	Solenoid/ solenoid	Internal	5660	2 ... 10	–

● Models - 5/3 Solenoid pilot actuated valves – 10 bar models

Model 22 mm industrial 24vDC coil	ISO size	Function	Operator/return	Pilot supply	Flow (l/min)	Operating pressure (bar)
UM/22456/6123/61/13J	4	APB	Solenoid/ solenoid	Internal	5490	2,8 ... 10

Function: APB = All Ports Blocked

Voltage codes and spare coils for 10 bar solenoid models

22 mm Coil with connector interface acc. to Industrial Standard			22 mm Coil with connector interface acc. to EN 175 301-803, form B		
Model	Code	Power inrush/hold	Model	Code	Power inrush/hold
QM/48/13J/21	13J	2 W	V10626-A13L	13L	2 W
QM/48/18J/21	18J	4/2,5 VA	V10626-A18L	18L	4/2,5 VA
QM/48/19J/21	19J	6/5 VA	V10626-A19L	19L	6/5 VA

● Electrical details for solenoid operators

Voltage tolerance	±10%
Rating	100% E.D.
Inlet orifice	1,0 mm
Electrical connection	Corresponding to chosen coil: EN 175301-803 - Form A, 30 mm EN 175301-803 - Form B, 22 mm Industrial Standard, 22 mm
Solenoid coil	May be rotated at 90° intervals
Protection class	IP 65 with sealed plug

SOLENOID & PILOT ACTUATED SPOOL VALVES

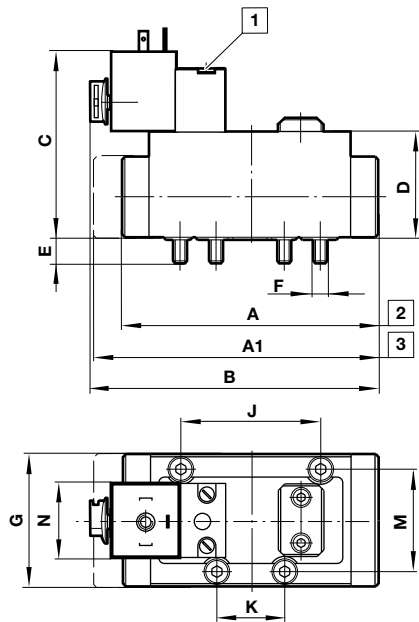
UM/22000 Sub-base 5/2 and 5/3, ISO #4

● Bases - VDMA 24 345 sub-bases

	Form A Side ported	Form C Manifold	Form D End Plates
ISO#4	M/P19144 (G3/4)	CQM/22456/3/21	CQM/22456/3/22

● Dimensions

5/2 Single solenoid valve

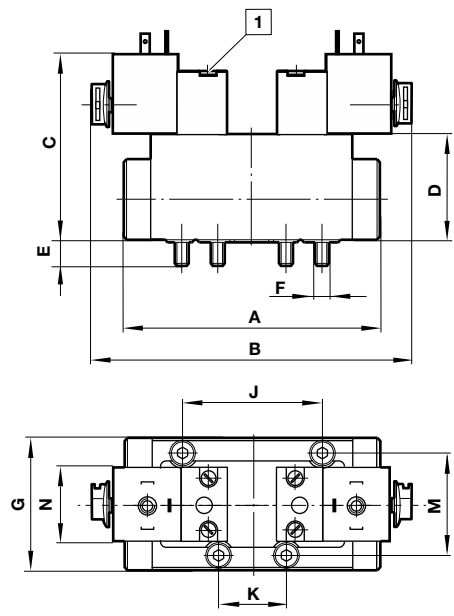


- 1 Manual override
- 2 Model .../172
- 3 Model .../22, .../122

	A	A1	B	C	D	E	F	G	J	K	M	N*
ISO#4	177	187	152	83	45	14	M8	75	80	40	58	22 or 30

* Illustrated with 30 mm coil.

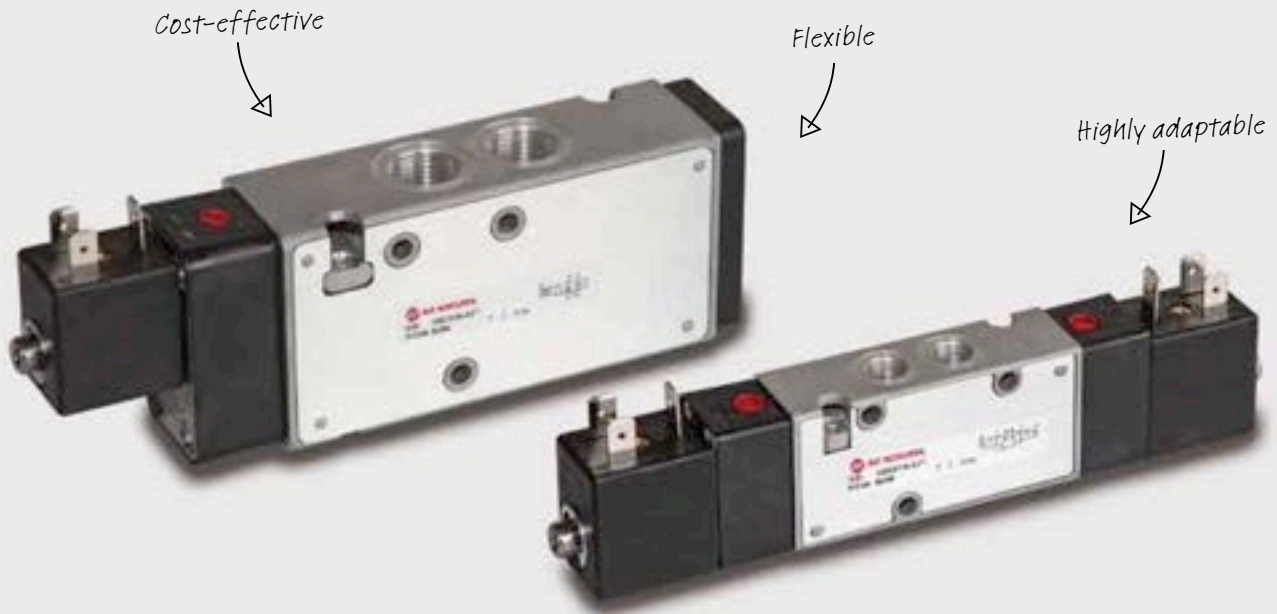
5/2 and 5/3 Double solenoid valves



- 1 Manual override

	A	B	C	D	E	F	G	J	K	M	N*
ISO#4	177	140	83	45	14	M8	75	80	40	58	22 or 30

* Illustrated with 30 mm coil.



V60 Series in-line valves

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.

- > Four sizes of valve, flowing 500 to 4,500 lit/min coupled with compact body size and a number of valve functions, to meet most requirements
- > Quickly replaceable solenoid coils, choice of manual override and option of collected exhaust
- > Manifold base system allows assembly of valves for more complex applications. Valve types can be mixed on one assembly and piped with multi-pressures

Pneumatic pilot options



*Engineering
GREAT Solutions*



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IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

- 3/2, 5/2, 5/3 and 2 x 3/2 solenoid actuated valves
- G1/8 ... G1/2
- Proven sealing system maintenance-free
- Different manual override options available
- Manifold system for easy assembly

Technical Data

Medium:

Compressed air, filtered, lubricated or non-lubricated

Ambient temperature:

-10°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Models - Solenoid actuated

Actuation	G1/8	Operating Pressure (bar)	G1/4	Operating Pressure (bar)	G3/8	Operating Pressure (bar)	G1/2	Operating Pressure (bar)
Flow (l/min)								
3/2 & 5/2	750	–	1300	–	2600	–	4500	–
2x3/2 & 5/3	500	–	950	–	1900	–	2200	–
3/2 Valves								
Sol/Air Spring NC	V60A413A-A2000	2 ... 10	V61B413A-A2000	2 ... 10	V62C413A-A2000	2 ... 10	V63D413A-A2000	3 ... 10
Sol / Spring NC	V60A417A-A2000	2 ... 10	V61B417A-A2000	2 ... 10	V62C417A-A2000	2 ... 10	V63D417A-A2000	2 ... 10
Sol/Sol	V60A411A-A3000	1,5 ... 10	V61B411A-A3000	1,5 ... 10	V62C411A-A3000	1,5 ... 10	V63D411A-A3000	2 ... 10
2 x 3/2 Valves								
Sol/Spring NC	V60AA11A-A2000	2 ... 10	V61BA11A-A2000	2 ... 10	V62CA11A-A2000	2 ... 10	–	–
5/2 Valves								
Sol/Air Spring	V60A513A-A2000	2 ... 10	V61B513A-A2000	2 ... 10	V62C513A-A2000	2 ... 10	V63D513A-A2000	3 ... 10
Sol / Spring	V60A517A-A2000	3 ... 10	V61B517A-A2000	3 ... 10	V62C517A-A2000	3 ... 10	V63D517A-A2000	3 ... 10
Sol/Sol	V60A511A-A3000	1,5 ... 10	V61B511A-A3000	1,5 ... 10	V62C511A-A3000	1,5 ... 10	V63D511A-A3000	2 ... 10
5/3 Valves								
Sol/Sol APB	V60A611A-A3000	3 ... 10	V61B611A-A3000	3 ... 10	V62C611A-A3000	3 ... 10	V63D611A-A3000	3 ... 10
Sol/Sol COE	V60A711A-A3000	3 ... 10	V61B711A-A3000	3 ... 10	V62C711A-A3000	3 ... 10	V63D711A-A3000	3 ... 10
Sol/Sol COP	V60A811A-A3000	3 ... 10	V61B811A-A3000	3 ... 10	V62C811A-A3000	3 ... 10		
Accessories								
Straight Fitting	C02250618	–	C02250828	–	C02251038	–	C02251248	–
Elbow Fitting	C02470618	–	C02470828	–	C02471038	–	C02471248	–
Silencer	T40C1800	–	T40C2800	–	T40C3800	–	T40C4800	–
Basic Plug	M/P19063	–	M/P19063	–	M/P19063	–	M/P19063	–

Note: For Manual Override Options - Digit 10 is : - 2 - Turn & Lock (Standard - Sol/Spring), 3 Push Only (Standard - Sol/Sol).

Note: The above are for valves without coils - for coils to be included remove 000 and replace with Coil Code from the tables below.

Note: APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure, NC = Normally Closed.



PRODUCT LINKS

Connectors and cables

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


See page 132



IN-LINE VALVES



V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

Voltage codes and spare coils

Model	Voltage	Coil code	Power inrush/hold
			
22 mm coil for connector interface acc. to industrial standard			
QM/48/13J/21	24 V d.c	13J	2 W
QM/48/18J/21	110/120V 50/60Hz	18J	4/2,5 VA
QM/48/19J/21	220/240 V 50/60 Hz	19J	6/5 VA
22 mm coil for connector interface acc. EN 175 301-803, form B			
V10626-A13L	24 V d.c	13L	2 W
V10626-A18L	110/120 V 50/60 Hz	18L	4/2,5 VA
V10626-A19L	220/240 V 50/60 Hz	19L	6/5 VA

Connector plugs must be ordered separately. Other voltages available, please contact us.

Connector plugs - ordered separately

Industrial standard 22 mm 2-pole + PE	22 mm, EN 175301-803 (DIN 43650 B) Form B 2-pole + PE
	
0657868000000000 12 ... 250 V a.c./d.c.	0680003000000000 12 ... 250 V a.c./d.c.
0680000000000000 15 ... 30 V DC; LED, surge suppression	0664811000000000 15 ... 30 V DC; LED, surge suppression
M/P24121/3 150 ... 250 V a.c.; glim lamp	0664812000000000 150 ... 250 V a.c.; glim lamp

Note: Light emitting gaskets can not be used.

Electrical details for solenoid operators

Voltage tolerance	± 10%
Rating	100% continuous duty
Inlet orifice	0,8 mm
Electrical connection (corresponding to chosen coil)	EN 175301-803 - Form B, 22 mm Industrial Standard, 22 mm
Solenoid	4 x 90° rotatable
Manual override	Without # = 1 Push and turn to lock # = 2 Push only (not lockable) # = 3
Protection class	IP 65 (with sealed plug)

Models - Pilot actuated

Actuation	G1/8	Operating pressure (bar)	Pilot pressure external (bar)	G1/4	Operating Pressure (bar)	Pilot pressure external (bar)	G3/8	Operating pressure (bar)	Pilot pressure external (bar)	G1/2	Operating pressure (bar)	Pilot pressure external (bar)
Flow (l/min)												
3/2 & 5/2	750	-	-	1300	-	-	2600	-	-	4500	-	-
3/2 Valves												
Air/Spring NC	V60A4D7A-XA090	-0,9 ... 10	2,5 ... 10	V61B4D7A-XA090	-0,9 ... 10	2,5 ... 10	V62C4D7A-XA090	-0,9 ... 10	2,5 ... 10	V63D4D7A-XA090	-0,9 ... 16	3 ... 16
Air/Air NC	V60A4DDA-XA020	-0,9 ... 10	1,5 ... 10	V61B4DDA-XA020	-0,9 ... 10	1,5 ... 10	V62C4DDA-XA020	-0,9 ... 10	1,5 ... 10	V63D4DDA-XA020	-0,9 ... 16	1,5 ... 16
5/2 Valves												
Air/Spring	V60A5D7A-XA090	-0,9 ... 10	2,5 ... 10	V61B5D7A-XA090	-0,9 ... 10	2,5 ... 10	V62C5D7A-XA090	-0,9 ... 10	2,5 ... 10	V63D5D7A-XA090	-0,9 ... 16	3 ... 16
Air/Air	V60A5DDA-XA020	-0,9 ... 10	1,5 ... 10	V61B5DDA-XA020	-0,9 ... 10	1,5 ... 10	V62C5DDA-XA020	-0,9 ... 10	1,5 ... 10	V63D5DDA-XA020	-0,9 ... 16	1,5 ... 16
Accessories												
Straight Fitting	C02250618	-	-	C02250828	-	-	C02251038	-	-	C02251248	-	-
Elbow Fitting	C02470618	-	-	C02470828	-	-	C02471038	-	-	C02471248	-	-
Silencer	T40C1800	-	-	T40C2800	-	-	T40C3800	-	-	T40C4800	-	-
Straight Fitting - Pilot Port	C02250618	-	-	C02250618	-	-	C02250618	-	-	C02250618	-	-
Elbow Fitting - Pilot Port	C02470618	-	-	C02470618	-	-	C02470618	-	-	C02470618	-	-

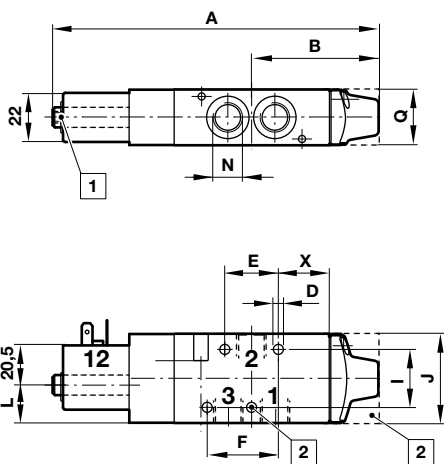
Note: NC = Normally Closed

IN-LINE VALVES

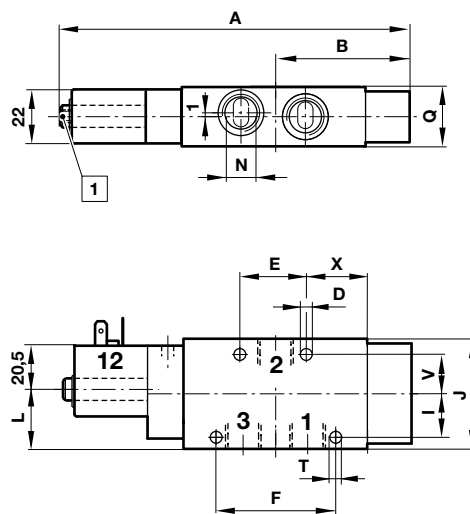
V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

● Dimensions

3/2 Sol/Spring V60-V62



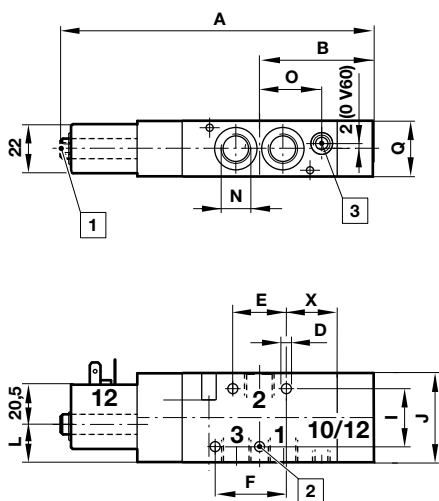
3/2 Sol/Spring V63



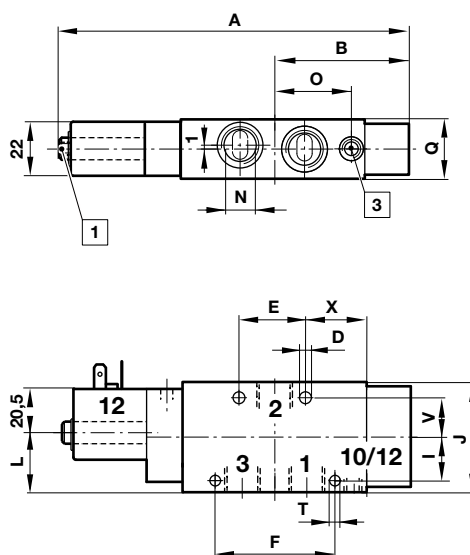
- 1 Collected pilot exhaust (M5)
- 2 V62: Central mounting hole (left hole is not applicable) and square end cover

Model	A	B	Ø D	E	F	I	J	L	N	O	Q	Ø T	V	X
V60	125	45	4,5	18	25	26	35	12	G1/8	-	22	-	-	19
V61	147	57,5	4,5	24	32	26	40	17	G1/4	-	25	-	-	23
V62	166,5	70	4,5	26	-	36	55	32	G3/8	-	34	-	23	30
V63	197	87,5	7	46	75	26	65	38	G1/2	-	35	5,5	-	36

3/2 Sol/Air Spring V60-V62



3/2 Sol/Air Spring V63



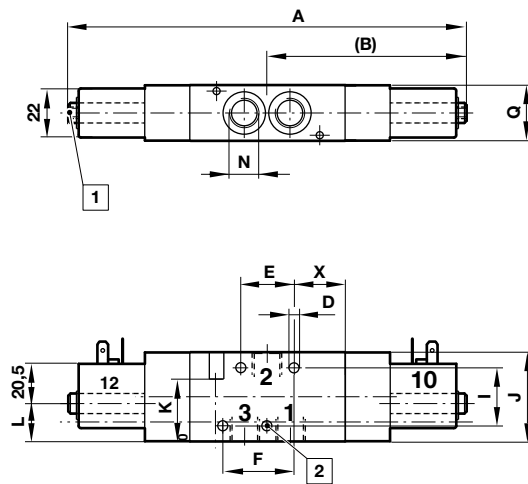
- 1 Collected pilot exhaust (M5)
- 2 V62: Central mounting hole (left hole is not applicable) and square end cover
- 3 External pilot port, M5 (V60 & V61), G1/8

Model	A	B	Ø D	E	F	I	J	L	N	O	Q	Ø T	V	X
V60	116,5	37	4,5	18	25	26	35	12	G1/8	-	22	-	-	19
V61	132,5	43	4,5	24	32	26	40	17	G1/4	-	25	-	-	23
V62	147	50,5	4,5	26	-	36	55	32	G3/8	-	34	-	-	30
V63	190	80	7	46	75	26	65	38	G1/2	-	35	5,5	23	36

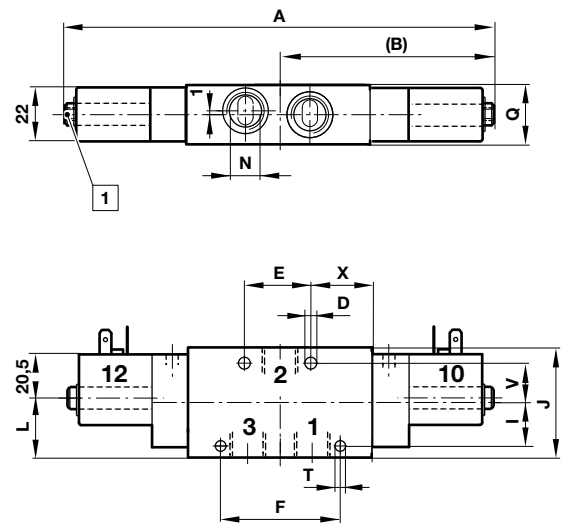
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

3/2 Sol/Sol V60-V62



3/2 Sol/Sol V63



1 Collected pilot exhaust (M5)

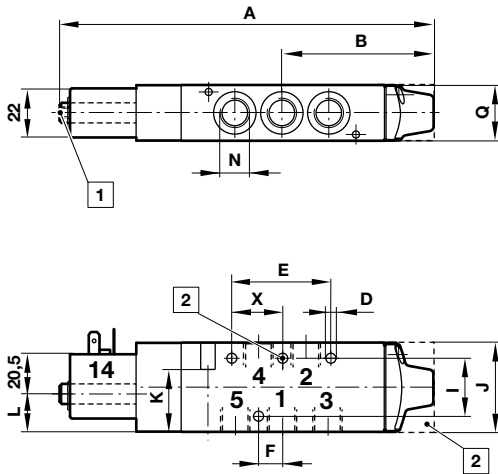
2 V62: Central mounting hole (left hole is not applicable) and square end cover

Model	A	B	Ø D	E	F	I	J	L	N	Q	Ø T	V	X
V60	116,5	37	4,5	18	25	26	35	12	G1/8	22	–	–	19
V61	132,5	43	4,5	24	32	26	40	17	G1/4	25	–	–	23
V62	147	50,5	4,5	26	–	36	55	32	G3/8	34	–	–	30
V63	190	80	7	46	75	26	65	38	G1/2	35	5,5	23	36

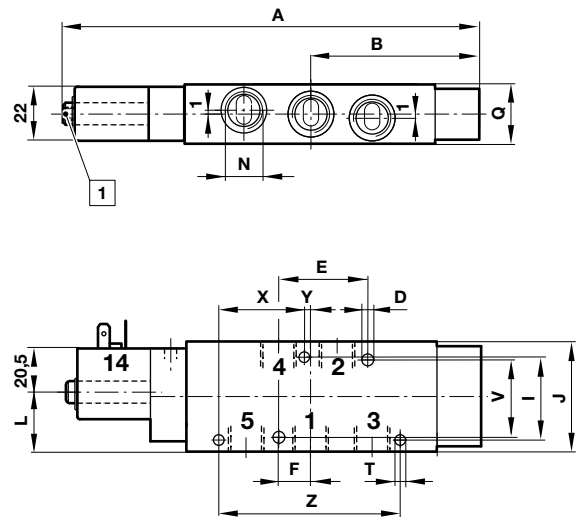
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

5/2 Sol/Spring V60-V62



5/2 Sol/Spring V63



1 Collected pilot exhaust (M5)

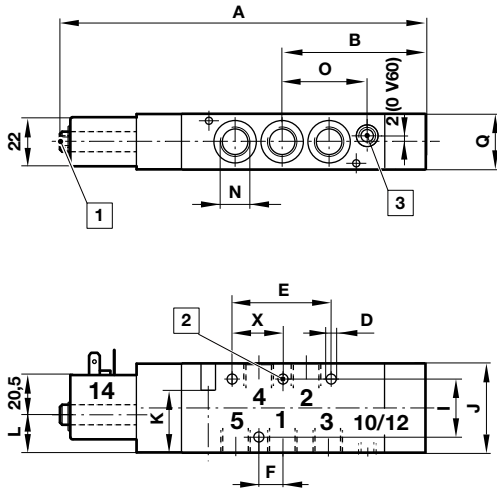
2 V62: Central mounting hole (left hole is not applicable) and square end cover

Model	A	B	Ø D	E	F	I	J	K	L	N	O	Q	Ø T	V	X	Y	Z
V60	140	52,5	4,5	33,5	8	26	35	28	12	G1/8	-	22	-	-	17	-	-
V61	167	67,5	4,5	44	10	26	40	28	17	G1/4	-	25	-	-	22	-	-
V62	191	82	4,5	-	12	36	55	44	32	G3/8	-	34	-	-	26	-	-
V63	235	106,5	7	60	19	52	65	-	38	G1/2	-	35	5,5	46	57,5	3	115

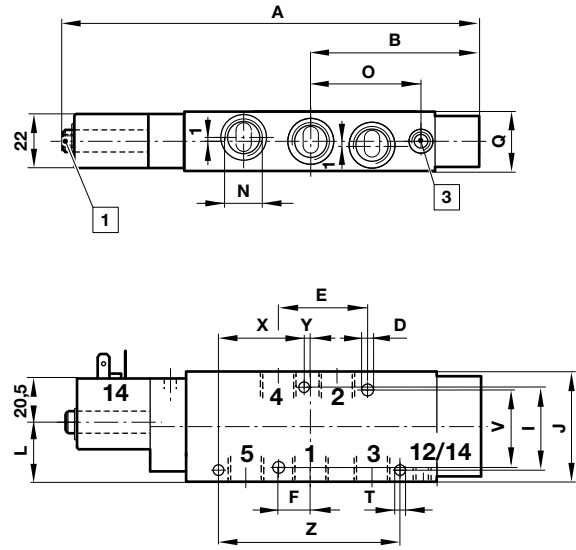
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

5/2 Sol/Air Spring V60-V62



5/2 Sol/Air Spring V63



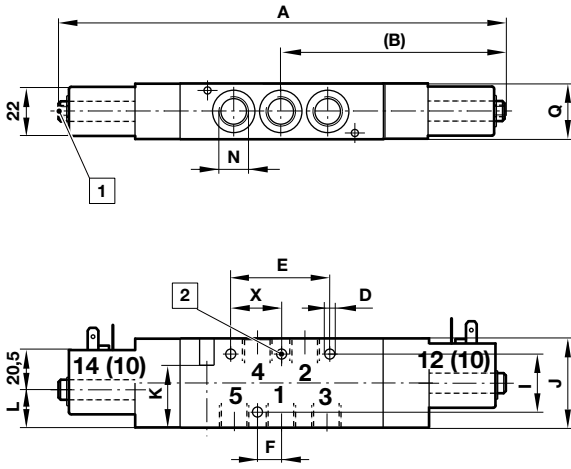
- 1 Collected pilot exhaust (M5)
- 2 V62: Central mounting hole (left hole is not applicable) and square end cover
- 3 External pilot port, M5 (V60 & V61), G1/8

Model	A	B	Ø D	E	F	I	J	K	L	N	O	Q	Ø T	V	X	Y	Z
V60	132	44,5	4,5	33,5	8	26	35	28	12	G1/8	-	22	-	-	17	-	-
V61	153	53	4,5	44	10	26	40	28	17	G1/4	-	25	-	-	22	-	-
V62	171,5	62,5	4,5	-	12	36	55	44	32	G3/8	-	34	-	-	26	-	-
V63	228	99	7	60	19	52	65	-	38	G1/2	-	35	5,5	46	57,5	3	115

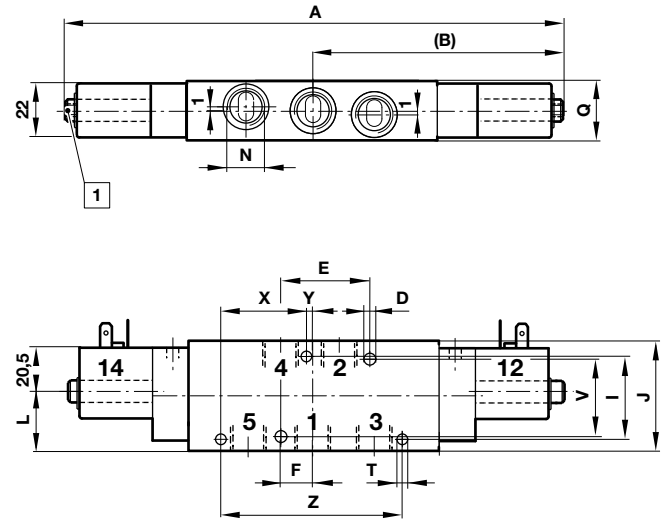
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

5/2 & 2x3/2 Sol/Sol V60-V62



5/2 Sol/Sol V63



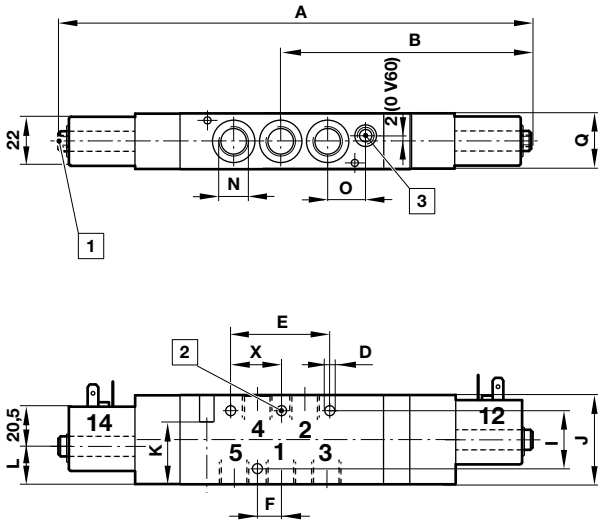
- 1 Collected pilot exhaust (M5)
- 2 V62: Central mounting hole (left hole is not applicable)

Model	A	B	Ø D	E	F	I	J	L	N	Q	Ø T	V	W	X	Y	Z
V60	174,5	87,5	4,5	33,5	8	26	35	12	G1/8	22	-	-	16	17	-	-
V61	199	99,5	4,5	44	10	26	40	17	G1/4	25	-	-	21	22	-	-
V62	218	109	4,5	-	12	36	55	32	G3/8	34	-	-	24,5	26	-	-
V63	257	128,5	7	60	19	52	65	38	G1/2	35	5,5	46	38	57,5	3	115

IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

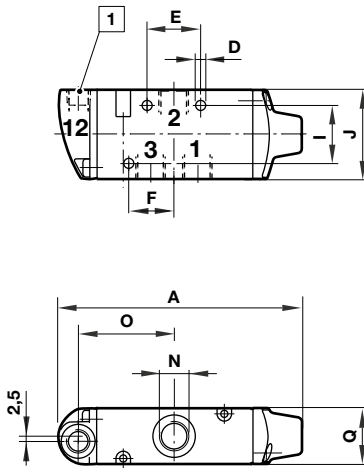
5/3 Sol/Sol V60-V62



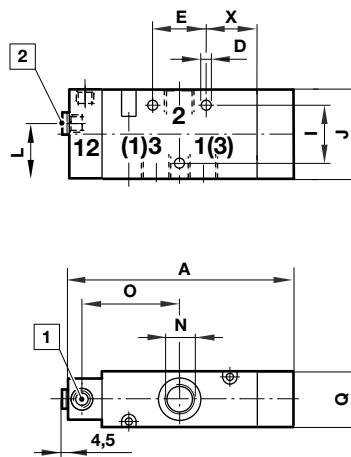
- 1 Collected pilot exhaust (M5)
- 2 V62: Central mounting hole (left hole is not applicable) and square end cover
- 3 External pilot port, M5 (V60 & V61), G1/8

Model	A	B	ØD	E	F	I	J	L	N	O	Q	X
V60	188,5	101,5	4,5	33,5	8	26	35	12	G1/8	13	22	17
V61	217	117,5	4,5	44	10	26	40	17	G1/4	18	25	22
V62	240,5	131,5	4,5	-	12	36	55	32	G3/8	23,5	34	26

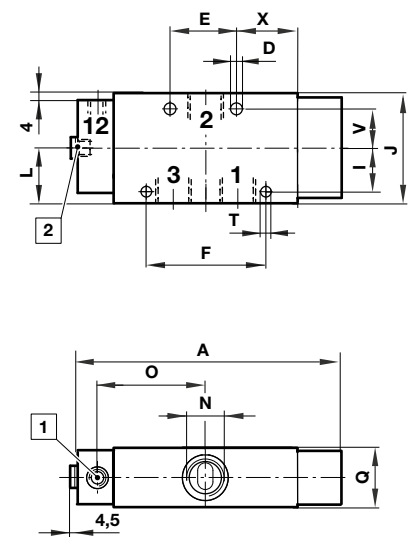
3/2NC Air/Spring V60-V61



3/2NC Air/Spring V62



3/2NC Air/Spring V63



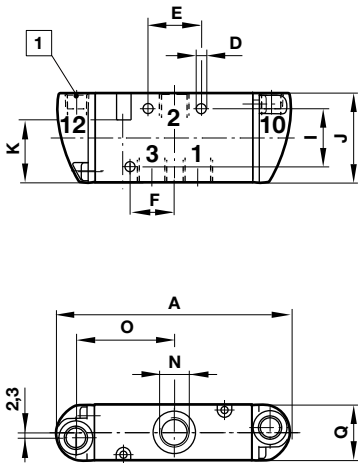
- 1 Pilot ports G1/8
- 2 Alternative pilot ports G1/8

Model	A	ØD	E	F	I	J	L	N	O	Q	ØT	V	X
V60	89,5	4,5	18	16	26	35	-	G1/8	36	22	-	-	-
V61	110	4,5	24	20	26	40	-	G1/4	43	25	-	-	-
V62	132	4,5	26	-	36	55	33,5	G3/8	52	34	-	-	-
V63	162	7	46	75	26	65	39,5	G1/2	64	35	5,5	23	36

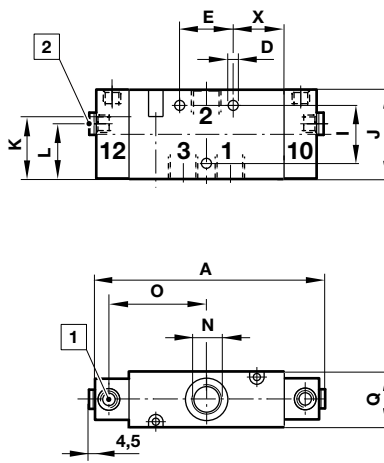
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

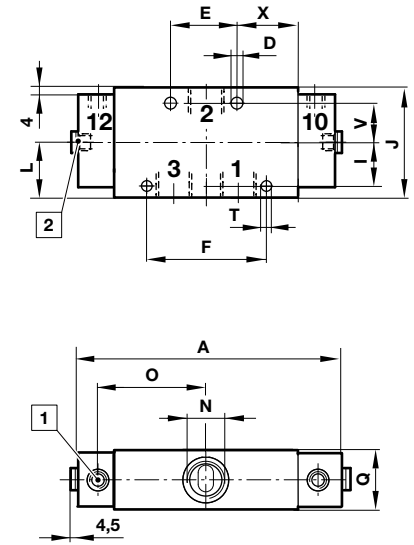
3/2NC Air/Air V60 & V61



3/2NC Air/Air V62



3/2NC Air/Air V63



1 Pilot ports G1/8

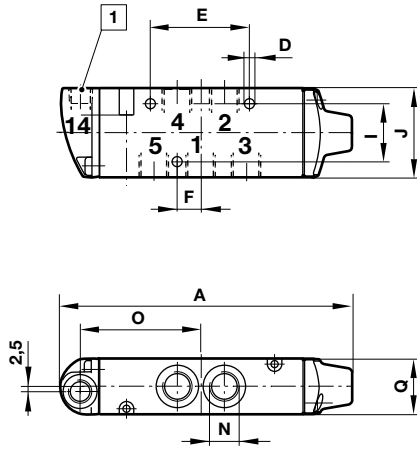
2 Alternative pilot ports G1/8

Model	A	D	E	F	I	J	L	N	O	Q	T	V	X
V60	89	4,5	18	16	26	35	-	G1/8	36	22	-	-	-
V61	104	4,5	24	20	26	40	-	G1/4	43	25	-	-	-
V62	124	4,5	26	-	36	55	33,5	G3/8	52	34	-	-	30
V63	148	7	46	75	26	65	39,5	G1/2	64	35	5,5	23	36

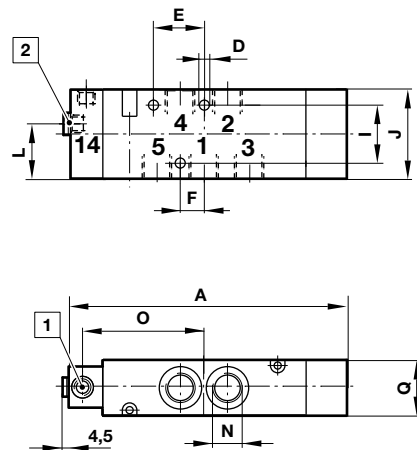
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

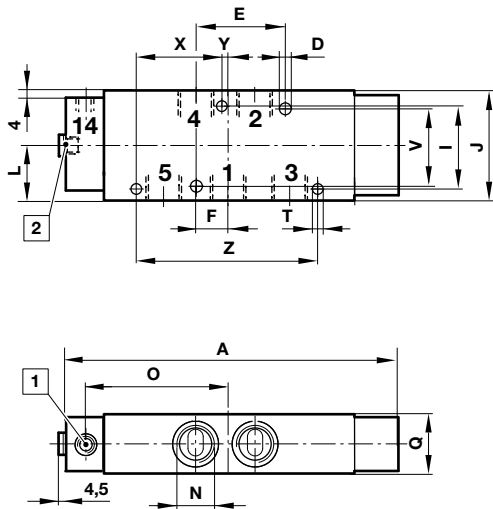
5/2 Air/Spring V60 & V61



5/2 Air/Spring V62



5/2 Air/Spring V63



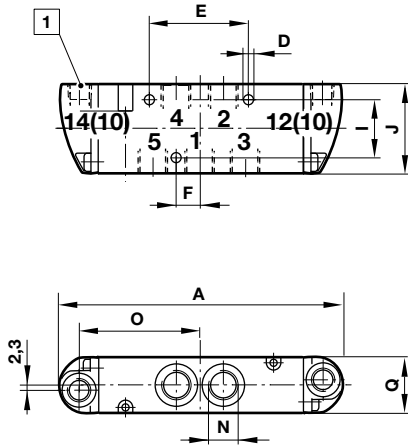
- 1 Pilot ports G1/8 or 1/8-27 NPT
- 2 Alternative pilot ports G1/8 or 1/8-27 NPT

Model	A	D	E	F	I	J	L	N	O	Q	T	V	X	Y	Z
V60	105	4,5	33,5	8	26	35	–	G1/8	43,5	22	–	–	–	–	–
V61	130	4,5	44	10	26	40	–	G1/4	53	25	–	–	–	–	–
V62	156	4,5	26	12	36	55	33,5	G3/8	64	34	–	–	–	–	–
V63	200	7	60	19	52	65	39,5	G1/2	83	35	5,5	46	57,5	3	115

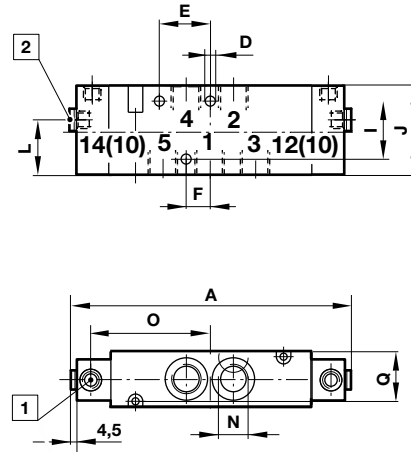
IN-LINE VALVES

V60 ... 63 3/2, 2x3/2, 5/2 & 5/3, G1/8 ... G1/2

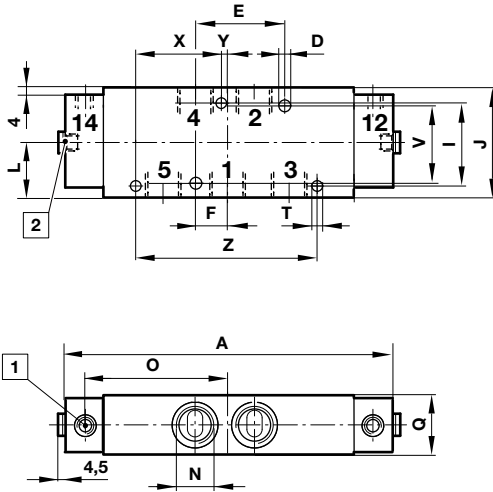
5/2 Air/Air V60 & V61



5/2 Air/Air V62



5/2 Air/Air V63



- 1 Pilot ports G1/8
- 2 Alternative pilot ports G1/8

Model	A	D	E	F	I	J	L	N	O	Q	T	V	X	Z
V60	104,5	4,5	33,5	8	26	35	-	G1/8	44	22	-	-	-	-
V61	124	4,5	44	10	26	40	-	G1/4	53	25	-	-	-	-
V62	148	4,5	26	12	36	55	33,5	G3/8	64	34	-	-	-	-
V63	186	7	60	19	52	65	39,5	G1/2	83	35	5,5	46	57,5	115

IN-LINE VALVES

V50 ... V53 3/2, 5/2 or 5/3, G1/8 ... G1/2

- Solenoid actuated and pilot operated spool valve
- High flow in-line valves
- Compact and robust design
- Low power energy efficient solenoids
- Flexible in-line and manifold mounting options

Technical Data

Medium:
Compressed air, filtered (40 µm)
lubricated or non lubricated

Mounting position:
In-line or sub-base

Ambient temperature:
Pilot models: -5°C ... +60°C
Solenoid models: -5°C ... +50°C
Air supply must be dry enough to avoid ice
formation at temperatures below +2°C




● Models - Solenoid actuated

	G1/8	Operating Pressure (bar)	G1/4	Operating Pressure (bar)	G3/8	Operating Pressure (bar)	G1/2	Operating Pressure (bar)
Flow (l/min)								
3/2 & 5/2	480	–	1020	–	1705	–	2480	–
5/3	270	–	755	–	1190	–	1910	–
Models - 3/2 Valves								
Actuation								
Sol/Air Spring	V50A413A-A213A	2 ... 8	–	–	–	–	–	–
Sol/Spring	–	–	V51B417A-A213J	2 ... 8	V52C417A-A213J	2 ... 8	V53D417A-A213J	2 ... 8
Models - 5/2 Valves								
Actuation								
Sol/Air Spring	V50A513A-A213A	2 ... 8	–	–	–	–	–	–
Sol / Spring	–	–	V51B517A-A213J	2 ... 8	V52C517A-A213J	2 ... 8	V53D517A-A213J	2 ... 8
Sol/Sol	V50A511A-A213A	2 ... 8	V51B511A-A213J	2 ... 8	V52C511A-A213J	2 ... 8	V53D511A-A213J	2 ... 8
Models - 5/3 Valves								
Actuation								
Sol/Sol APB	V50A611A-A213A	3 ... 8	V51B611A-A213J	3 ... 8	V52C611A-A213J	3 ... 8	V53D611A-A213J	3 ... 8
Sol/Sol COE	V50A711A-A213A	3 ... 8	V51B711A-A213J	3 ... 8	V52C711A-A213J	3 ... 8	V53D711A-A213J	3 ... 8
Accessories								
Straight Fitting	C02250618	–	C02250828	–	C02251038	–	C02251248	–
Elbow Fitting	C02470618	–	C02470828	–	C02471038	–	C02471248	–
Silencer	T40C1800	–	T40C2800	–	T40C3800	–	T40C4800	–


Note: APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure, NC = Normally closed.

Voltage codes and spare coils

V50 models only

15 mm coil for connector interface acc. EN 175 301-803, form C			
Model	Voltage	Power Inrush/Hold	Code
			
V12958-A13	24 V d.c.	2,9 W	13A

V51 ... V53 series

22 mm coil for connector interface acc. to industrial standard			
Model	Voltage	Power Inrush/Hold	Code
			
QM/48/13J/21	24 V d.c.	2 W	13J
QM/48/18J/21	110/120 V 50/60 Hz	4/2,5 VA	18J
QM/48/19J/21	220/240 V 50/60 Hz	6/5 VA	19J

● Electrical details for solenoid operators

Voltage tolerance	± 10%
Rating	100% continuous duty
Inlet orifice	0,6 mm; V50 0,8 mm; V51 ... V53
Electrical connection (corresponding to chosen coil)	EN 175301-803 - Form C; 15 mm; V50 Industrial Standard; 22 mm; V51 ... V53
Solenoid coil mounting	Four positions x 90°
Manual override	Push and turn to lock (plastic)
Protection class	IP 65 (with sealed plug)

● Connector plugs - included in delivery

15 mm, EN 175301-803 (DIN 43650 B) Form C 2-pole + PE	Industrial standard 22 mm 2-pole + PE
	
V10027-D00	0657868000000000

IN-LINE VALVES

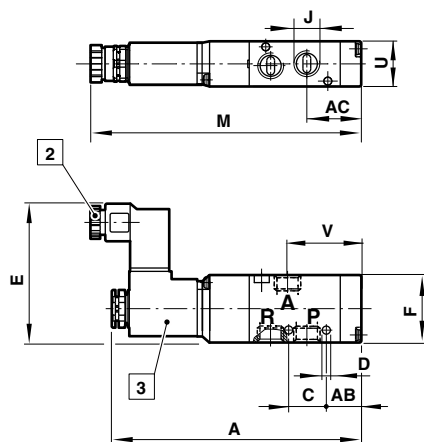
V50 ... V53 3/2, 5/2 or 5/3, G1/8 ... G1/2

● Dimensions

1

3/2 Single solenoid pilot valve, 1/8" port

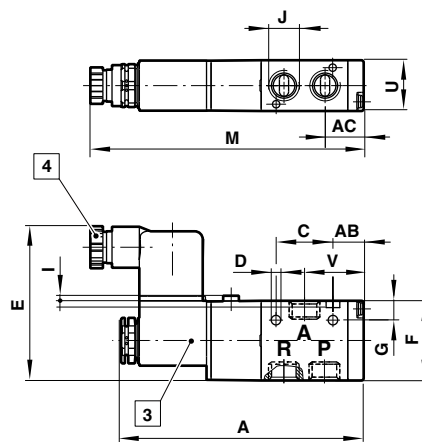
Air return



2

3/2 Single solenoid pilot valve, 1/4" ... 1/2" ports

Spring return



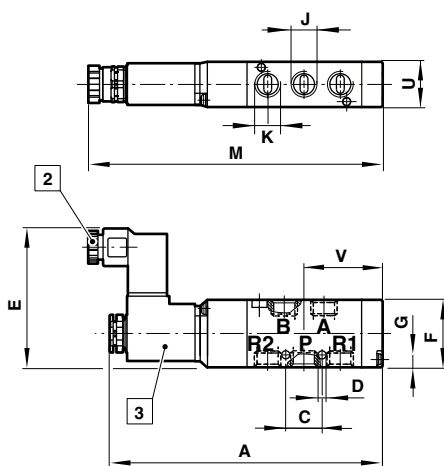
- 2 Gland size Pg 7
- 3 Solenoid rotates 2 x 180° (V50), 4 x 90° (V51 ... V53)
- 4 Gland size Pg 9

Series	Dimension No.	A	AB	AC	C	D	E	F	G	I	J	M	U	V
V50	1	99,5	13,5	21,5	15	3,2	55,5	27	5	–	1/8"	108	18	29,5
V51	2	106,5	13,5	17	25	4,2	67	35	8,5	3	1/4"	120	22,5	26
V52	2	126,5	13	26	26	4,5	73	46,5	39,5	3	3/8"	139,5	30	41
V53	2	133	12,5	27	29	4,5	73	46,5	39,5	3	1/2"	146	30	40,5

3

5/2 Single solenoid pilot valve, 1/8" port

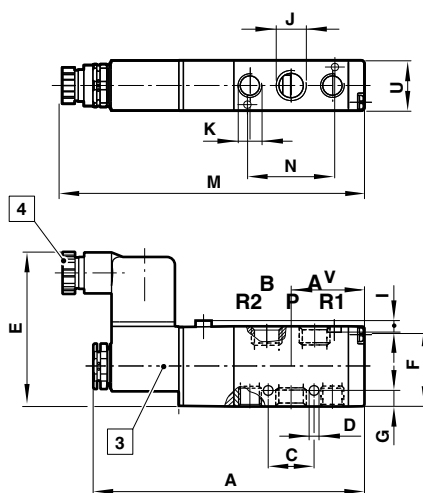
Air return



4

5/2 Single solenoid pilot valve, 1/4" ... 1/2" ports

Spring return



- 2 Gland size Pg 7
- 3 Solenoid rotates 2 x 180° (V50), 4 x 90° (V51 ... V53)
- 4 Gland size Pg 9

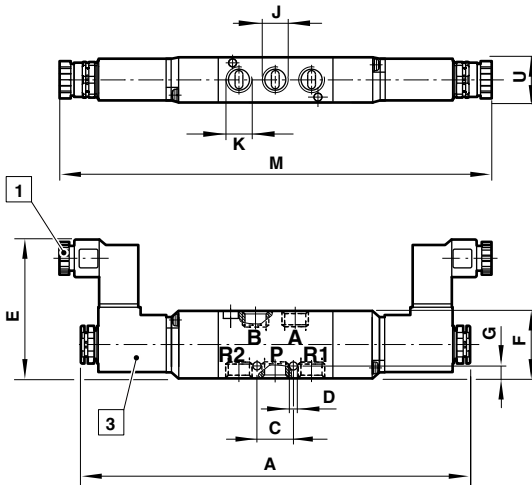
Series	Dimension No.	A	C	D	E	F	G	I	J	K	M	U	V
V50	3	110	14,5	3,2	54	27	5	–	1/8"	1/8"	118,5	18	32,5
V51	4	118,5	20	4,2	67	35	7	3	1/4"	1/8"	132	22,5	32
V52	4	145,5	26	5,5	73	46,5	4,5	3	3/8"	3/8"	158,5	30	45
V53	4	157	29	4,5	73	46,5	7	3	1/2"	1/2"	170	30	51

IN-LINE VALVES

V50 ... V53 3/2, 5/2 or 5/3, G1/8 ... G1/2

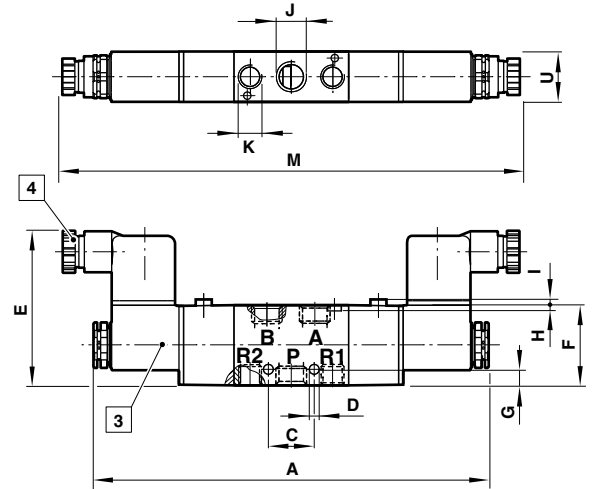
5

5/2 Double solenoid pilot valve, 1/8" port



6

5/2 Double solenoid pilot valve, 1/4" ... 1/2" ports



2 Gland size Pg 7

3 Solenoid rotates 2 x 180° (V50), 4 x 90° (V51 ... V53)

4 Gland size Pg 9

Series	Dimension No.	A	C	D	E	F	G	I	J	K	M	U
V50	5	155	14,5	3,2	55	27	5	-	1/8"	1/8"	172	18
V51	6	173	20	4,2	67	35	7	3	1/4"	1/8"	200	22,5
V52	6	201	26	5,5	73	46,5	4,5	3	3/8"	3/8"	228	30
V53	6	212	29	4,5	73	46,5	7	3	1/2"	1/2"	238	30



PRODUCT LINKS

V50...53 Valves

Are supplied with basic wireable connectors as standard.

For a further selection of cables and connectors please see page 132

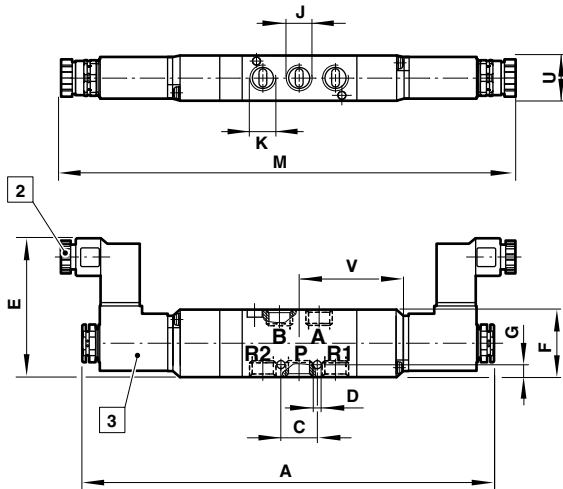


IN-LINE VALVES

V50 ... V53 3/2, 5/2 or 5/3, G1/8 ... G1/2

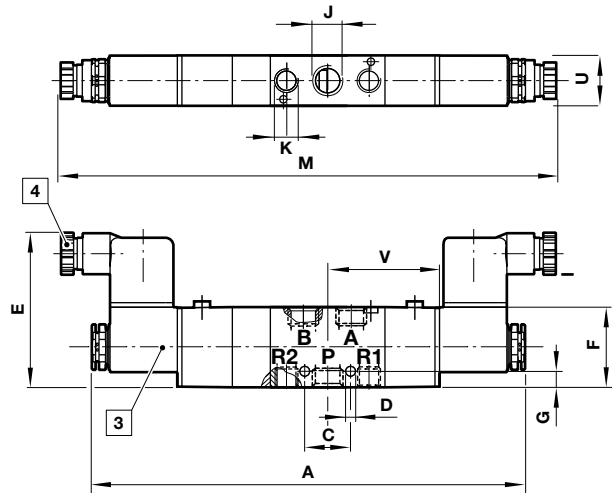
7

5/3 Double solenoid pilot valve, 1/8" port



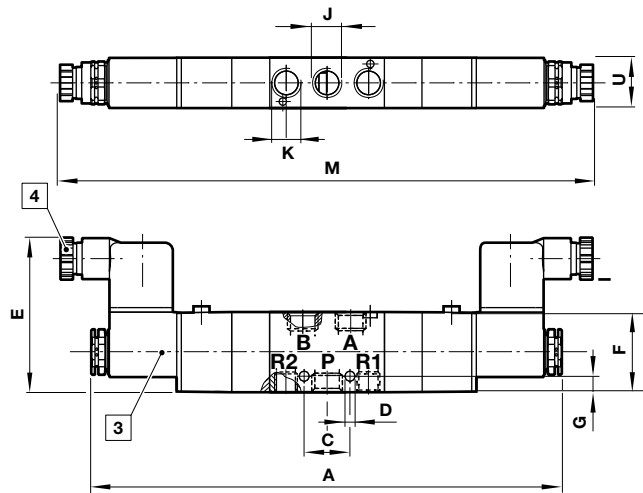
8

5/3 Double solenoid pilot valve, 1/4" port



9

5/3 Double solenoid pilot valve, 3/8" and 1/2" ports



- 2 Gland size Pg 7
- 3 Solenoid rotates 2 x 180° (V50), 4 x 90° (V51 ... V53)
- 4 Gland size Pg 9

Series	Dimension No.	A	C	D	E	F	G	I	J	K	M	U	V
V50	7	164	14,5	3,2	55	27	5	–	1/8"	1/8"	181	18	43,5
V51	8	194	20	4,2	67	35	7	3	1/4"	1/8"	221	22,5	48,5
V52	9	254,5	26	5,5	73	46,5	4,5	3	3/8"	3/8"	281,5	30	–
V53	9	265,5	29	4,5	73	46,5	7	3	1/2"	1/2"	291,5	30	–

SOLENOID ACTUATED 22 MM POPPET VALVES

Excel 22, M/49 3/2, NC, G1/8

- In-line and sub-base mounted
– compact and convenient
- Manual override as standard

Technical Data

Medium:
Compressed air, filtered,
lubricated or non-lubricated

Operating pressure:
0 ... 10 bar

Ambient temperature:
-20°C ... +50°C
Air supply must be dry enough to avoid ice
formation at temperatures below +2°C



Models

Model	Actuation	Orifice	Port size	Flow (l/min)	Operating pressure (bar)	Mounting	Straight fitting	Elbow fitting	Basic plug
M/49/MAZ***	3/2 NC	1 mm (low power)	G1/8	30	0 ... 10	Single	C02250618	C02470618	M/P19063
M/49/MDZ***	3/2 NC	1,6 mm	G1/8	77	0 ... 10	Single	C02250618	C02470618	M/P19063

*** Insert voltage codes from table below.
Order connector plugs separately.

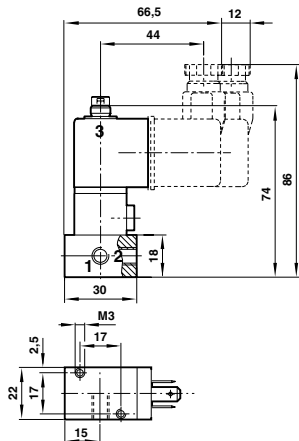
Accessories

Voltage codes and spare coils

Voltage	1,0 mm orifice (low power)		
	Code	Power	Coil
24 V d.c.	13J	2 W	QM/48/13J/21
110/120 V 50/60 Hz	18J	4/2,5 VA	QM/48/18J/21
220/240 V 50/60 Hz	19J	6/5 VA	QM/48/19J/21

Voltage	1,6 mm orifice		
	Code	Power	Coil
24 V d.c.	83J	6 W	QM/48/83J/21
110/120 V 50/60 Hz	88J	12/8 VA	QM/48/88J/21
220/240 V 50/60 Hz	89J	12/8 VA	QM/48/89J/21

Dimensions



PRODUCT LINKS

Connectors and cables

For a full selection of 22 mm Industrial Standard or DIN EN175301-803 Form B plugs and cables
See page 132



TWO-HAND CONTROL UNIT

XSHC04 PIF 4 mm

- Meets the requirements of EN574 Class IIIB ^{*)}
- Certificate of Conformity supplied with every unit
- 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 operation

Operating pressure:
3 ... 8 bar

Ambient temperature:
-5°C ... +40°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

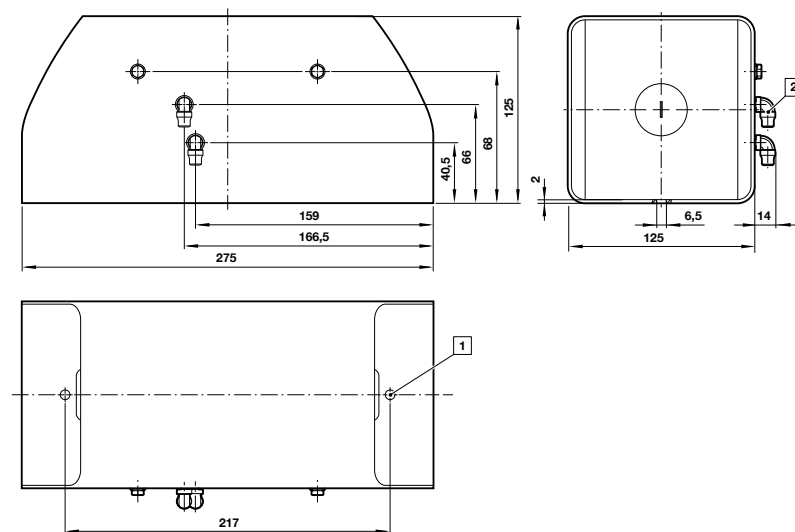
^{*)} The scope of the Machinery Directive encompasses safety components as well as machinery, and since two-hand control units are classed as safety components this requires the XSHC04 to satisfy the essential health and safety requirements of the Directive. One method of ensuring this is to conform with published European Norm (EN) Standards. In the case of the XSHC04 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.



Models

Model	O/D tube	Return	Operation
XSHC04	4 mm	0,6 s max.	Both buttons must be operated within 0,5 secs

Dimensions



1 Mounting hole

2 Pneumatic fitting turnable

SOLENOID ACTUATED SAFETY VALVES

SCVA08, SCVA20 & SCVA32 3/2 – G1/4, G3/4, G1

- Redundant valve assembly, pneumatic self-monitoring with integrated safety silencer
- Ensures safe loading and venting
- Requires no cyclical monitoring or evaluation system
- A complete range in sizes - DN 8, 20 and 32
- With the appropriate application, performance level "e" (cat. 4) of DIN EN ISO 13849-1 is achieved for the safety function "Pressure building up from '1' to '2' and pressure dropping from '2' to '3' "- DGUV approval

Technical Data

Medium:
Compressed air, filtered $\leq 50 \mu\text{m}$, lubricated or non-lubricated

Operating Pressure:
See table below

Mounting:
Preferably upright with solenoids on top

Press control:
Valves are not approved for press clutch and brake applications

Ambient temperature:
-10°C ... +60°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Models

Accessories

Model	Port size	Orifice (mm)	Power at 24 V d.c. (W)	Pressure range (bar)	Flow		Port sizes			Plug	Pressure switch - flange/face mounted direct onto valve *2)
					1 → 2 (l/min)	2 → 3 (l/min)	1	2	3		
SCVA081BBOA02400	G1/4	8	4,8	3 ... 10	1280	1550	G1/4	G1/4	G1/4	0680003000000000, EN 175301-803 - form B	0881400000000000
SCVA201EFOB02400	G3/4	20	11	2 ... 10	3900	14000	G3/4	G3/4	G1	0570275000000000, EN 175301-803 - form A	0881400000000000
SCVA321FHOC02400	G1	32	16	2 ... 10	8250	30000	G1	-	-	0570275000000000, EN 175301-803 - form A	0881400000000000



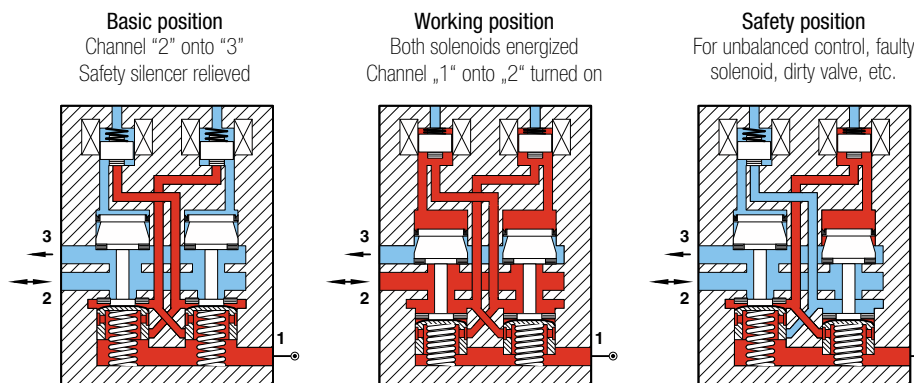
*2) The pressure switch is not required as part of the safe functioning system within the valve, its is offered as a means of indicating that the valve taken up a safe condition ie. no pressure at the output port 2.

Technical data – Solenoids

Standard voltages	24 V d.c.
Duty cycle	100% ED
Protection class	IP65

Other voltages on request!

Functional diagram



SOLENOID ACTUATED SAFETY VALVES

SCVA08, SCVA20 & SCVA32 3/2 – G1/4, G3/4, G1

● Time to vent residual pressure to 0,5 bar

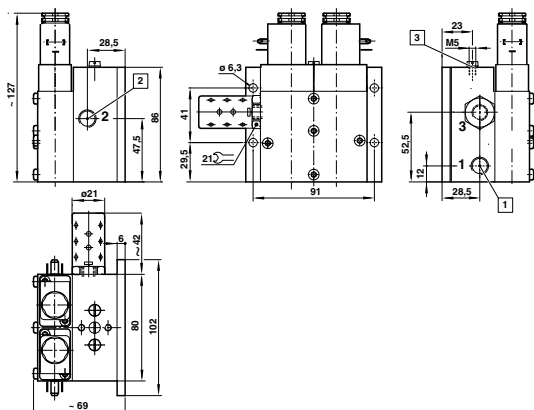
Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA081...	1	5	200
		8	250
		10	290
	3	5	560
		8	730
		10	820

Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA321...	20	5	310
		8	400
		10	420
	50	5	730
		8	930
		10	1100

Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA201...	8	5	230
		8	290
		10	330
	20	5	520
		8	700
		10	800

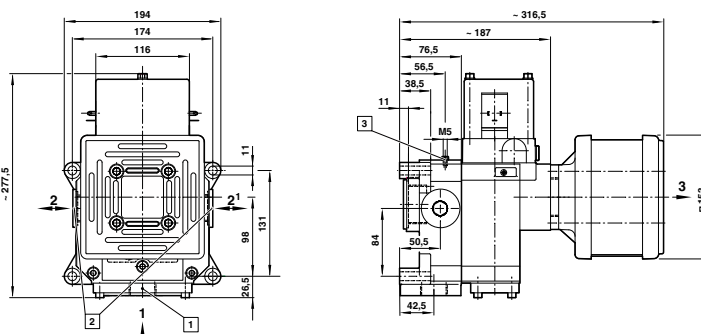
● Dimensions

SCVA081BB0A02400 (G1/4)



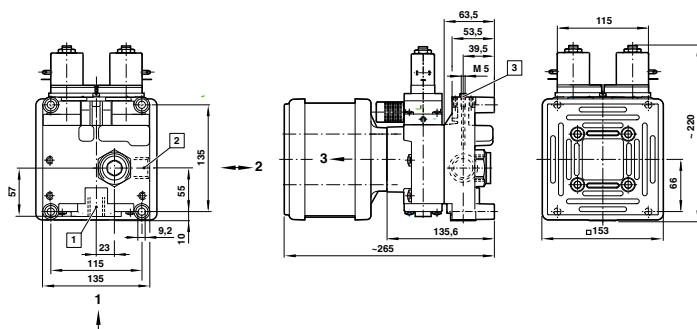
- 1 Port 1 (G1/4)
- 2 Port 2 (G1/4)
- 3 Interface for pressure switch

SCVA321FH0C02400 (G1)



- 1 Port 1 (G1)
- 2 Alternative ports (G1), two plugs are in scope of delivery
- 3 Interface for pressure switch

SCVA201EF0B02400 (G3/4)



- 1 Port 1 (G3/4)
- 2 Port 2 (G3/4)
- 3 Interface for pressure switch

SOLENOID ACTUATED SAFETY VALVES

SCVA10 3/2 – G1/2

- Redundant valve assembly, pneumatic self-monitoring with integrated safety silencer
- Ensures safe loading and venting
- Requires no cyclical monitoring or evaluation system
- With the appropriate application, performance level "e" (cat. 4) of DIN EN ISO 13849-1 is achieved for the safety function "Pressure building up from '1' to '2' and pressure dropping from '2' to '3' " - DGUV approval
- Valve interface enables direct mount to the Excelon 73/74 & Excelon Plus 84 series air preparation products

Technical Data

Medium:
Compressed air, filtered ≤ 50 µm, lubricated or non-lubricated

Operating pressure:
See table below

Mounting:
Preferably upright with solenoids

Press control:
Valves are not approved for press clutch and brake applications

Ambient temperature:
-10°C ... +60°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Models

Model	Orifice (mm)	Power at 24 V d.c. (W)	Pressure range (bar)	Flow		Port sizes			Connector form A, DIN EN 175301-803	Quikclamp® with wall bracket *1)	Quikmount pipe adaptor	Pressure switch - flange/face mounted direct onto valve *2)
				1 » 2 (l/min)	2 » 3 (l/min)	1	2	3				

SCVA101DE1A02400	10	4,8	2 ... 10	3400	6500	G1/2	G1/2	G3/4	0680003000000000	4314-52	4315-11 (G1/2)	0881400000000000
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*1) Quikmount pipe adaptor please order separately.

*2) The pressure switch is not required as part of the safe functioning system within the valve, its is offered as a means of indicating that the valve taken up a safe condition ie. no pressure at the output port 2.

Accessories



Technical data – Solenoids

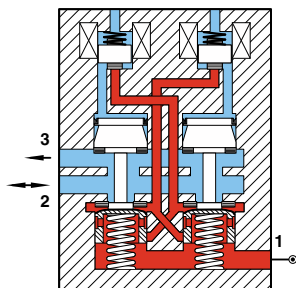
Standard voltages	24 V d.c.
Duty cycle	100% ED
Protection class	IP65

Other voltages on request!

Functional diagram

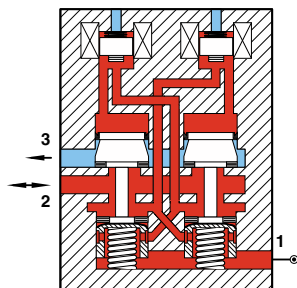
Basic position

Channel "2" onto "3"
Safety silencer relieved



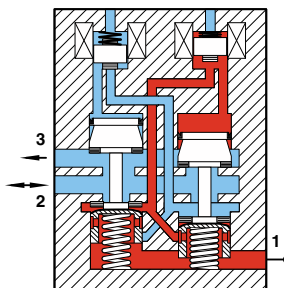
Working position

Both solenoids energized
Channel „1" onto „2" turned on



Safety position

For unbalanced control, faulty solenoid, dirty valve, etc.



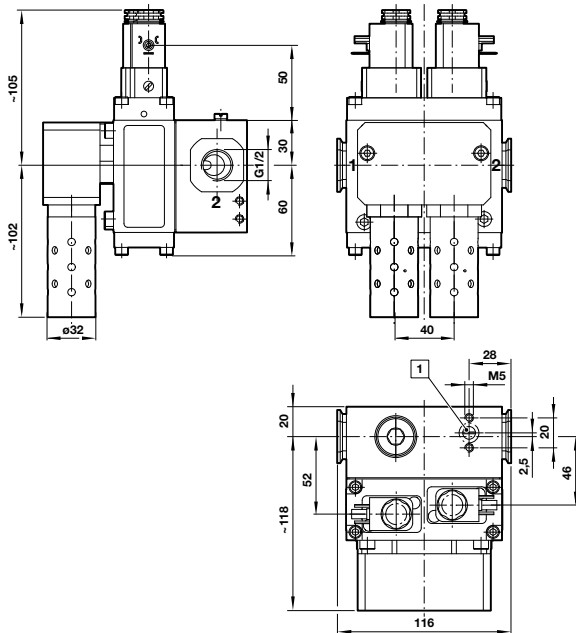
SOLENOID ACTUATED SAFETY VALVES

SCVA10 3/2 – G1/2

- Time to vent residual pressure to 0,5 bar

Model	Volume (dm ³)	Operating pressure (bar)	Exhaust time (ms)
SCVA101...	3	5	200
		8	250
		10	280
	8	5	450
		8	580
		10	640

- Dimensions



SAFETY VALVES WITH INTEGRATED SOFT START FUNCTION

SCSQ 3/2, G1/2

- Redundant valve assembly, pneumatic self-monitoring with integrated safety silencer
- Requires no cyclical monitoring or evaluation system
- With the appropriate application, performance level "e" (cat. 4) of DIN EN ISO 13849-1 is achieved for the safety function "Pressure building up from '1' to '2' and pressure dropping from '2' to '3' " - DGUV approval
- Valve interface enables direct mount to the Excelon 73/74 & Excelon Plus 84 series air preparation products

Technical Data

Medium:

Compressed air, filtered $\leq 50 \mu\text{m}$, lubricated or non-lubricated

Operating pressure:

See table below

Mounting:

Preferably upright with solenoids on top

Press control:

Valves are not approved for press clutch and brake applications

Ambient temperature:

$-10^{\circ}\text{C} \dots +60^{\circ}\text{C}$

Air supply must be dry enough to avoid ice formation at temperatures below $+2^{\circ}\text{C}$



Models

Model	Orifice (mm)	Power at 24 V d.c. (W)	Pressure range (bar)	Flow		Port sizes			Connector form A, DIN EN 175301-803	Quikclamp® with wall bracket *1)	Quikmount pipe adaptor	Pressure switch - flange/face mounted direct onto valve *2)
				1 » 2 (l/min)	2 » 3 (l/min)	1	2	3				
SCSQ101D01D02400	10	4,5	3,5 ... 10	3000	5700	G1/2	G1/2	G3/4	057027500000000000	4314-52	4315-11 (G1/2)	088140000000000000



*1) Quikmount pipe adaptor please order separately.

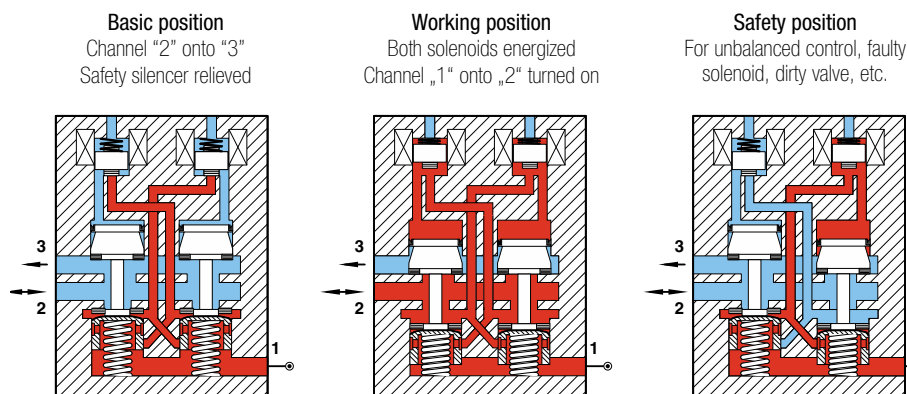
*2) The pressure switch is not required as part of the safe functioning system within the valve, its is offered as a means of indicating that the valve taken up a safe condition ie. no pressure at the output port 2.

Technical data – Solenoids

Standard voltages	24 V d.c.
Duty cycle	100% ED
Protection class	IP65

Other voltages on request!

Functional diagram



Soft start function

The safety valve with soft start function provides for a controlled build-up of pressure at the valve output in two stages:

Stage 1 – The pressure builds up slowly depending on the setting of the throttle valve and the volume of the system to be filled.

Stage 2 – At a certain pressure level (ps) an internal pilot valve operates bypassing the throttle allowing full operating pressure at the valve outlet. This pressure level (ps) will be dependant on the operating pressure (po) of the system and can be estimated to be greater than 60% of the operating pressure ($ps > = 0,6 \times po$)

SAFETY VALVES WITH INTEGRATED SOFT START FUNCTION

SCSQ 3/2, G1/2

● Filling time depending on throttle position of soft start valve

From switching signal ON to pressure build-up 90% of rated pressure

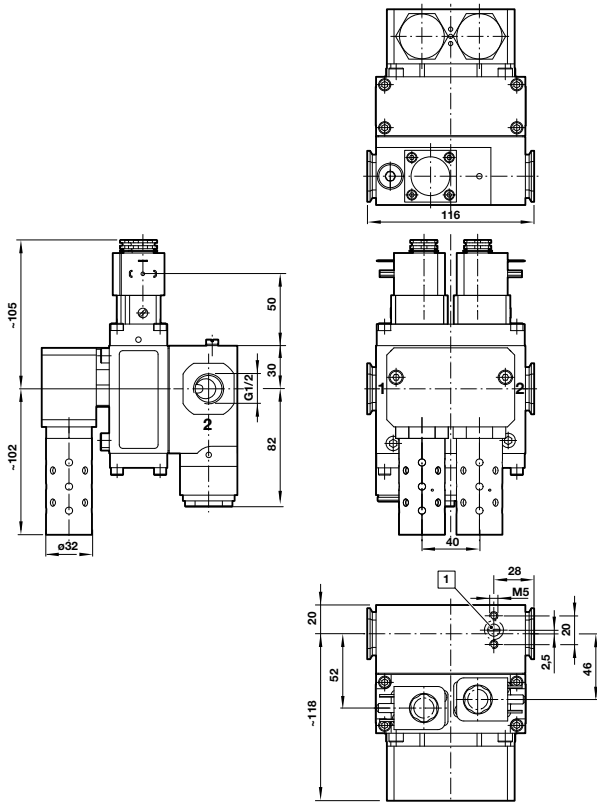
Operating pressure (bar)	Volume (dm ³)	Filling time approx. (ms)		
		Numbers of needle turn		
		4	6	12
5	3	3200	2600	1700
	8	8300	7000	4300
6	3	3000	2400	1500
	8	7800	6500	3900
8	3	2700	2200	1400
	8	7300	5700	3700

● Exhausting time

From switching signal OFF to pressure reduction to 10% of rated pressure

Operating pressure (bar)	Volume (dm ³)	Exhaust time (ms)
5	3	190
	8	440
6	3	200
	8	460
8	3	210
	8	480

● Dimensions



1 Interface for pressure switch

SOLENOID ACTUATED PRESS SAFETY VALVES

XSz 8 ... XSz 50 3/2, G1/4 ... G2

- Inherently fail-safe without residual pressure
- Dynamic self monitoring
- For use with pneumatic clutch and brake systems and other 3-way safety functions
- Conforms to DIN ISO13849-1 (perf level 'e', cat IV) OSHA, BG, CSA and other approvals
- Improves safety and reduces downtime
- No additional electrical monitoring required
- Easily fitted into existing systems

Technical Data

Medium:
Compressed air, filtered ($\leq 50 \mu\text{m}$), lubricated and non-lubricated

Suitable oils:
Shell Tellus S2 MA 32, ExxonMobil Febis K 32 or comparable oil with DV values < 8 (DIN ISO 1817) and ISO viscosity class 32-46 (DIN 51519)

Operating Pressure:
2 ... 10 bar
For more details please see table

Mounting position:
Preferably upright with solenoids on top

Ambient temperature:
-10°C ... +60°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Models

Model *	Series	Pressure range (bar)	Flow		Port sizes				Dimension No.
			1 (P) (m³/h)	2 (A) 2 (A) » 3 (R) (m³/h)	1 (P)	2 (A)	2, (A ₁)	3 (R)	
2492806305202400	XSz 8 *1)	3 ... 10	77	93	G1/4	G1/4	–	G1/4	1
2492932305202400	XSz 10 *2)	2 ... 10	190	390	G1/2	G1/2	(G1/2)	–	2
2493032020002400	XSz 20 *2)	2 ... 8	230	840	G3/4	G3/4	G1	–	3
2493105080002400	XSz 32 *2)	2 ... 8	495	1800	G1	G1	G1 1/2	–	4

Port sizes in brackets are plugged.

* 24VDC Solenoids included. For other voltages please contact us. All solenoids are delivered without plugs.

*1) XSz 8 valves are delivered with silencer.

*2) Valves delivered with integrated silencer and without flange (R ports).

Technical data – Solenoids

Model	0200, 0800, and 3052
Standard voltages	24 V d.c. and 230 V a.c., other on request
Duty cycle	100% ED
Protection class	IP65
Electrical connection	DIN EN 175301-803 (DIN 43650), form A

Model	Power consumption V d.c. (W)	Current V a.c.	
		Inrush (VA)	Hold (VA)
0200	11	22	15
0800	16	50	27
3052	4,8	12	8,5

Accessories

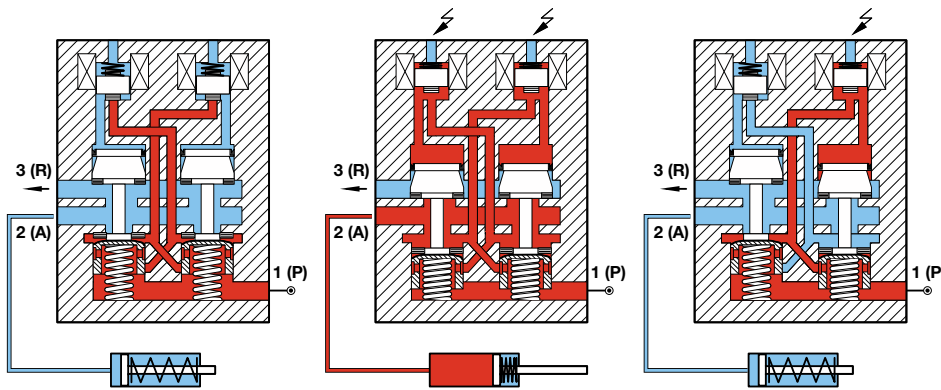
Series	Connector DIN EN 175301-803	Silencer
XSz 8	0680003000000000	MB002B (G1/4), MB003B (G3/8)
XSz 10	0680003000000000	–
XSz 20	0570275000000000	–
XSz32	0570275000000000	–

Caution: the safety is related to the quality of the silencer, use only IMI Norgren original silencers.

SOLENOID ACTUATED PRESS SAFETY VALVES

XSz 8 ... XSz 50 3/2, G1/4 ... G2

● Functional diagram



Solenoids de-energized

A port is exhausted. P port is closed, no connection from P to A. No residual pressure on port A as port A is freely exhausted through port R. No acting pressure on port A.

Solenoids energized

Pilots are synchronously energised. Connection from port P to A. Working pressure on A. No passage from P to R. Dynamic self monitoring of both pilot systems, checking each other at each cycle for proper functioning.

Malfunction

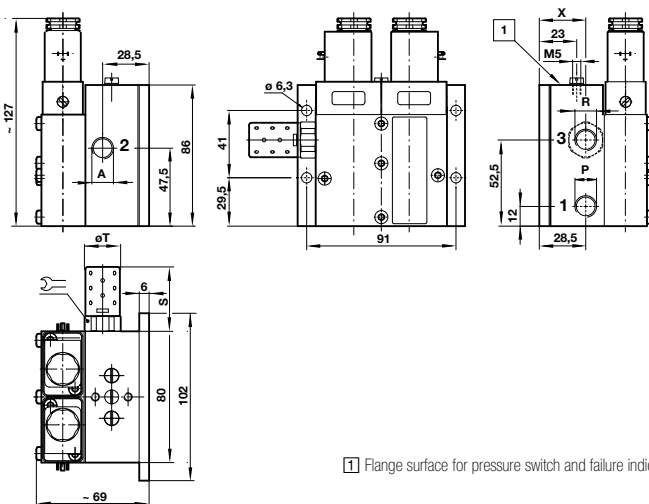
Pilots non-synchronously energised. Dynamic monitor notices failure operation and prevents the pistons from giving connection from P to A. Synchronously port A exhausts through R. No residual pressure remains in the system since P and A are not connected. The pilot line has lost the pressure and is locked.

1 (P) = Air pressure port, 2 (A) = Power port (clutch / brake), 3 (R) = Exhaust.

IMI Norgren XSz Safety valves comply with the Category IV of DIN EN ISO 13849-1, if the operating system has been designed and realised according to Category IV.

● Dimensions

1 - XSz 8 - with silencer

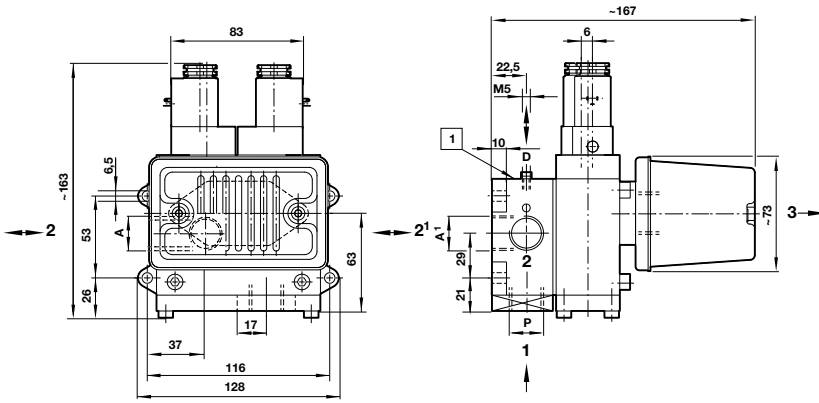


Model	1 (P)	2 (A)	3 (R)	S	øT	X	☞
24928063052	G1/4	G1/4	G1/4	42	21	-	21

SOLENOID ACTUATED PRESS SAFETY VALVES

XSz 8 ... XSz 50 3/2, G1/4 ... G2

2 - XSz 10 - with silencer

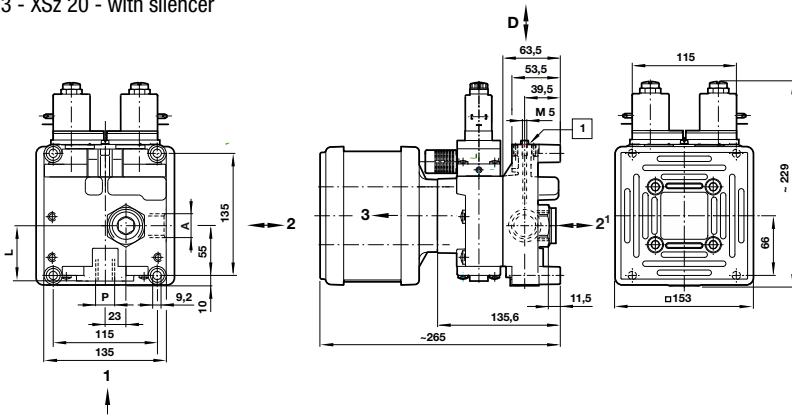


Model	1 (P)	2 (A)	2' (A')	3 (R)
24929323052	G1/2	G1/2	G1/2 *	-

* Closed

1 Flange surface for pressure switch and failure indicator unit

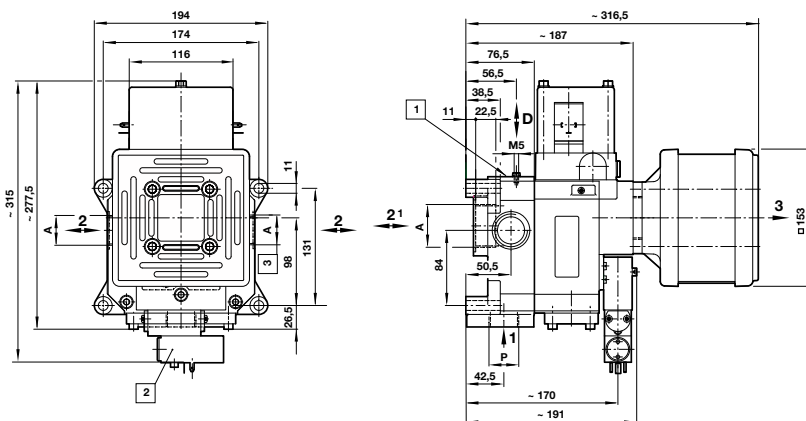
3 - XSz 20 - with silencer



Model	1 (P)	2 (A)	2' (A')	3 (R)	L
24930320200	G3/4	G3/4	G1	-	66,5 (57)

1 Flange surface for pressure switch and failure indicator unit

4 - XSz 32 - with silencer



Model	1 (P)	2 (A)	2' (A')	3 (R)
24931050800	G1	G1	G1 1/2	-

1 Flange surface for pressure switch and failure indicator unit



Lighter and more compact



Super X series Manual and mechanical valve

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. New er 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. 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

Find out more

www.imi-precision.com



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 **IMI NORGREN**

MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

- Suitable for multi-directional flow and dual supply applications
- High flow rate
- 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, lubricated and non-lubricated

Operating pressure:
Maximum 10 bar

Flow:
1/8" 335 l/min
1/4" 965 l/min

Ambient temperature:
0°C ... +70°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

3/2 way PA body valves
Metal versions are available on request




Port assembly torque:
Use recommended torque for fittings. This should not exceed 10 Nm, otherwise damage may occur to body.

Please contact us - many options available ex-stock



● Models – 3/2 mechanical valves











Accessories

	Model	Port size	Actuation	Operating pressure (bar)	Operating force (N)	Dimension No.	Straight fitting	Elbow fitting	Silencer
	03040002	G1/8	Plunger/spring	- 0,9 ... 10	31	1	C02250618	C02470618	T40C1800
	03060002	G1/4	Plunger/spring	- 0,9 ... 10	53	8	C02250828	C02470828	T40C2800
	03040202	G1/8	Roller/spring	- 0,9 ... 10	31	2	C02250618	C02470618	T40C1800
	03060202	G1/4	Roller/spring	- 0,9 ... 10	61	9	C02250828	C02470828	T40C2800
	03041102	G1/8	Roller lever/spring	- 0,9 ... 10	31	3	C02250618	C02470618	T40C1800
	03061102	G1/4	Roller lever/spring	- 0,9 ... 10	45	10	C02250828	C02470828	T40C2800
	03029302	G1/8	Roller lever (heavy duty) /spring	- 0,9 ... 10	31	4	C02250618	C02470618	T40C1800



● Models – 3/2 manual valves

Accessories

	Model	Port size	Actuation	Colour	Operating pressure (bar)	Operating force (N)	Dimension No.	Straight fitting	Elbow fitting	Silencer
	03040402	G1/8	Button/spring	Black	- 0,9 ... 10	31	13	C02250618	C02470618	T40C1800
	03040602	G1/8	Button/spring	Red	- 0,9 ... 10	31	13	C02250618	C02470618	T40C1800
	03041402	G1/8	Button (shrouded)/spring	Black	- 0,9 ... 10	31	14	C02250618	C02470618	T40C1800
	03041502	G1/8	Button (shrouded)/spring	Green	- 0,9 ... 10	31	14	C02250618	C02470618	T40C1800
	03041602	G1/8	Button (shrouded)/spring	Red	- 0,9 ... 10	31	14	C02250618	C02470618	T40C1800
	03042802	G1/8	Emergency stop/twist reset	Red	- 0,9 ... 10	18	15	C02250618	C02470618	T40C1800
	03041902	G1/8	Rotary knob/set reset	Black	- 0,9 ... 10	–	20	C02250618	C02470618	T40C1800
	03029602	G1/8	Lever toggle/spring	Black	- 0,9 ... 10	13	16	C02250618	C02470618	T40C1800
	03040302	G1/8	Toggle/toggle	Black	- 0,9 ... 10	28	17	C02250618	C02470618	T40C1800
	03042402	G1/8	Knob/knob or pilot	Black	- 0,9 ... 10	18	19	C02250618	C02470618	T40C1800
	03062702	G1/4	Knob/knob or pilot	Black	- 0,9 ... 10 *	13	32	C02250828	C02470828	T40C2800
	03043702	G1/8	Lever/lever	Black	- 0,9 ... 10	9	18	C02250618	C02470618	T40C1800
	03063702	G1/4	Lever/lever	Black	- 0,9 ... 10	13	33	C02250828	C02470828	T40C2800
	03043802	G1/8	Lever/spring	Black	- 0,9 ... 10	9	18	C02250618	C02470618	T40C1800
	03048102	G1/8	Pedal/spring	–	- 0,9 ... 10	22	21	C02250618	C02470618	T40C1800
	03068102	G1/4	Pedal/spring	–	- 0,9 ... 10	22	31	C02250828	C02470828	T40C2800



* Reset pressure: 4 bar minimum.



Pressure for pilot function is the minimum pressure to operate the valve. The valve may switch below this pressure.

MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

● Models – 5/2 mechanical valves










Accessories

Model	Port size	Actuation	Colour	Operating pressure (bar)	Operating force (N)	Dimension No.	Straight fitting	Elbow fitting	Silencer
 X3044202	G1/8	Roller/spring	–	- 0,9 ... 10	54	5	C02250618	C02470618	T40C1800
X3064202	G1/4	Roller/spring	–	- 0,9 ... 10	67	11	C02250828	C02470828	T40C2800
 X3045102	G1/8	Roller lever/spring	–	- 0,9 ... 10	31	6	C02250618	C02470618	T40C1800
X3065102	G1/4	Roller lever/spring	–	- 0,9 ... 10	45	12	C02250828	C02470828	T40C2800
X3039302	G1/8	Roller lever (heavy duty)/spring	–	- 0,9 ... 10	31	7	C02250618	C02470618	T40C1800



● Models – 5/2 manual valves

Accessories


Model	Port size	Actuation	Colour	Operating pressure (bar)	Operating force (N)	Dimension No.	Straight fitting	Elbow fitting	Silencer
 X3046802	G1/8	Emergency stop/twist reset	Red	- 0,9 ... 10	18	22	C02250618	C02470618	T40C1800
 X3045802801	G1/8	Key/key	–	- 0,9 ... 10	–	29	C02250618	C02470618	T40C1800
 X3045902	G1/8	Rotary knob/knob reset	–	- 0,9 ... 10	–	23	C02250618	C02470618	T40C1800
 X3046502	G1/8	Knob/knob	Black	- 0,9 ... 10	22	27	C02250618	C02470618	T40C1800
X3066502	G1/4	Knob/knob	Black	- 0,9 ... 10	13	34	C02250618	C02470618	T40C1800
 X3046402	G1/8	Knob, push/knob, pull or pilot	Black	- 0,9 ... 10 *	22	28	C02250618	C02470618	T40C1800
 X3047802	G1/8	Lever/spring	Black	- 0,9 ... 10	16	38	C02250828	C02470828	T40C2800
X3067802	G1/4	Lever/spring	Black	- 0,9 ... 10	15	35	C02250618	C02470618	T40C1800
X3029602	G1/8	Toggle/toggle	Black	- 0,9 ... 10	13	24	C02250618	C02470618	T40C1800
 X3044302	G1/8	Toggle/spring	Black	- 0,9 ... 10	48	25	C02250618	C02470618	T40C1800
X3047702	G1/8	Toggle/lever	Black	- 0,9 ... 10	13	38	C02250618	C02470618	T40C1800
X3067702	G1/4	Toggle/lever	Black	- 0,9 ... 10	13	35	C02250828	C02470828	T40C2800
 X3048202	G1/8	Pedal/spring	Black	- 0,9 ... 10	22	30	C02250618	C02470618	T40C1800
X3068202	G1/4	Pedal/spring	Black	- 0,9 ... 10	22	37	C02250828	C02470828	T40C2800
 X3048402	G1/8	Pedal/pedal	Black	- 0,9 ... 10	22	30	C02250618	C02470618	T40C1800
X3068402	G1/4	Pedal/pedal	Black	- 0,9 ... 10	22	37	C02250828	C02470828	T40C2800



* The operating pressure for pilot function is the minimum pressure to operate the valve. The valve may switch below this pressure.

● Models – 5/3 manual valves

Accessories

Model	Port size	Actuation	Colour	Operating pressure (bar)	Operating force (N)	Dimension No.	Straight fitting	Elbow fitting	Silencer
 X3343702	G1/8	Lever/lever/lever	Black	- 0,9 ... 10	12	26	C02250618	C02470618	T40C1800
X3363702	G1/4	Lever/lever/lever	Black	- 0,9 ... 10	12	36	C02250828	C02470828	T40C2800

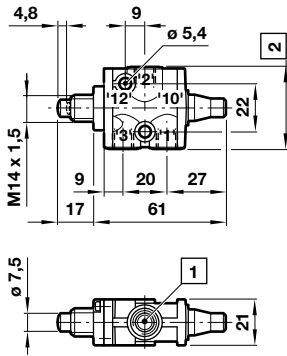


MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

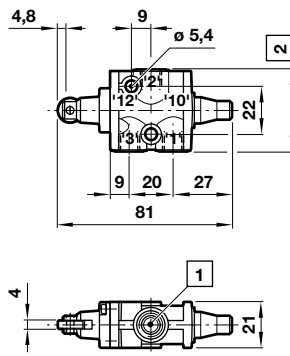
● Dimensions

1
03040002
3/2 Plunger actuated spring return valve



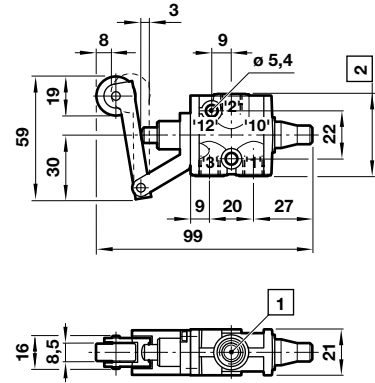
The plunger on this valve is designed for axial loading only.
Nut and mounting washer kit supplied as optional extra part number 03 0430 00

2
03040202
3/2 Roller actuated spring return valve



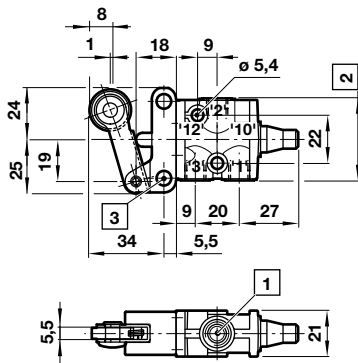
Maximum recommended cam rise: 4,5 mm
Cam angle of approach: 30° maximum
Cam speed: 8 m/min. maximum
Operating speed: 300 cpm

3
03041102
3/2 Roller lever actuated spring return valve



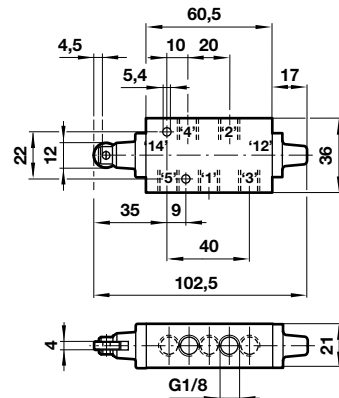
Operating travel: 8 mm
Over-travel: 3 mm
Cam angle of approach: 45° maximum
Cam speed: 8 m/min. maximum
Operating speed: 300 cpm

4
03029302
3/2 Heavy duty roller lever actuated spring return valve



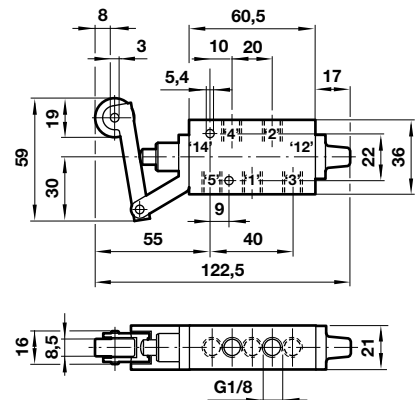
Operating Travel: 8 mm
Over-travel: 1 mm
Cam angle of approach: 45° maximum
Cam speed: 8 m/min. maximum
Operating speed: 300 cpm

5
X3044202
5/2 Roller actuated spring return valve



Maximum recommended can rise: 4,5 mm
Cam angle of approach: 30° maximum
Cam speed: 8 m/min. maximum
Operating speed: 300 cpm

6
X3045102
5/2 Roller lever actuated spring return valve



Operating travel: 8 mm
Over-travel: 3 mm
Cam angle of approach: 45° maximum
Cam speed: 8 m/min. maximum
Operating speed: 300 cpm

- 1 Port size G1/8 or ø 6 mm
- 2 37 mm for G1/8 and 45 mm for ø 6 mm
- 3 0,7 mm thick spacing washer must be used if additional mounting holes are used.

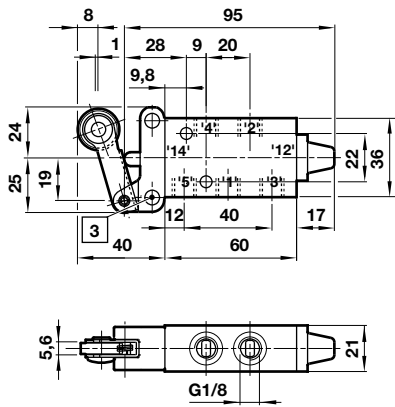
MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

7

X3039302

5/2 Heavy duty roller lever actuated spring return valve

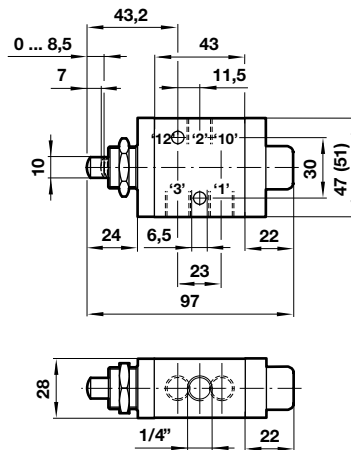


Operating travel: 8 mm
Over-travel: 1 mm
Cam angle of approach: 45° maximum
Cam speed: 8 m/min. maximum
Operating speed: 300 cpm

8

03060002

3/2 Plunger actuated spring return valve

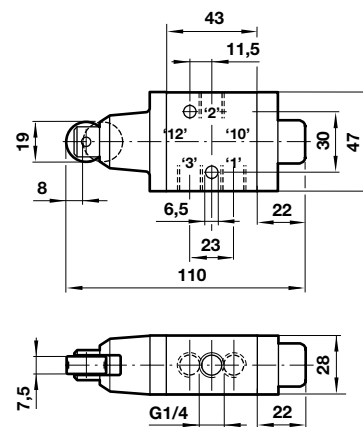


Panel hole: Ø 21 mm
The plunger on this valve is designed for axial loading only.

9

03060202

3/2 Roller actuated spring return valve

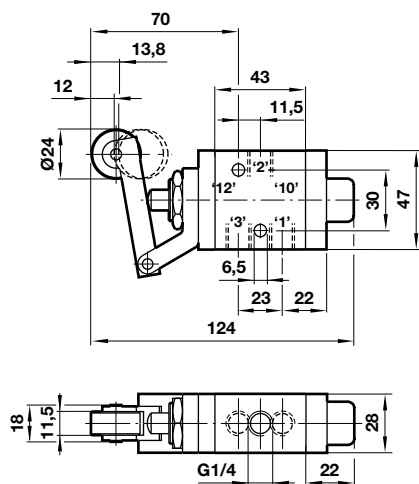


Cam angle of approach: 45° maximum
Cam speed: 6 m/min. maximum
Operating speed: 200 cpm

10

03061102

3/2 Roller lever actuated spring return valve

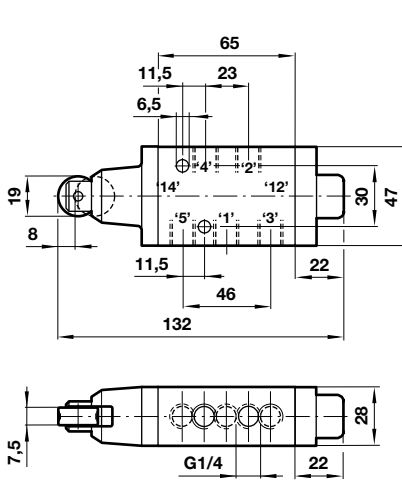


Cam angle of approach: 45° maximum
Cam speed: 5 m/min. maximum
Operating speed: 150 cpm

11

X3064202

5/2 Roller actuated spring return valve

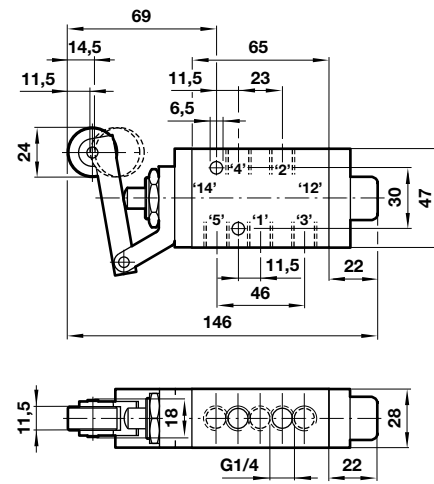


Cam angle of approach: 45° maximum
Cam speed: 6 m/min. maximum
Operating speed: 200 cpm

12

X3065102

5/2 Roller lever actuated spring return valve



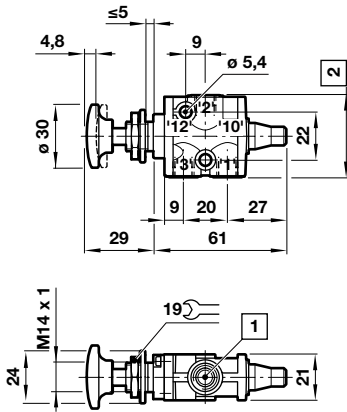
Cam angle of approach: 45° maximum
Cam speed: 5 m/min. maximum
Operating speed: 150 cpm

MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

13

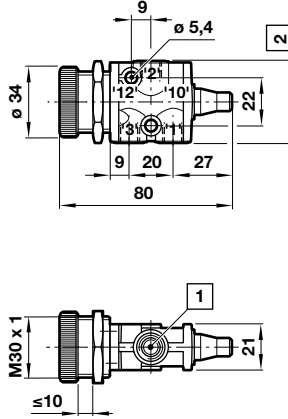
03040402, 03040602
3/2 Button operated spring return valves



These valves are suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00; a shrouded panel mounting kit is also available, reference 03 0429 00.

14

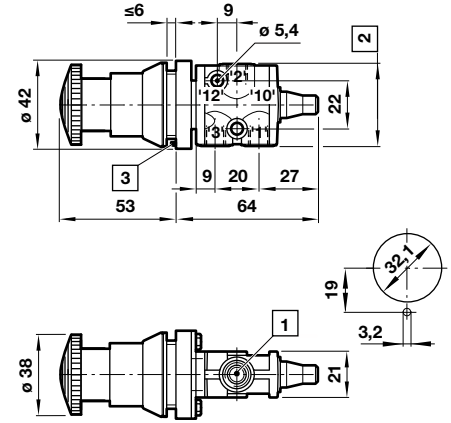
03041402, 03041502, 03041602
3/2 Button (Shrouded) operated spring return valves



These valves are suitable for panel mounting.

15

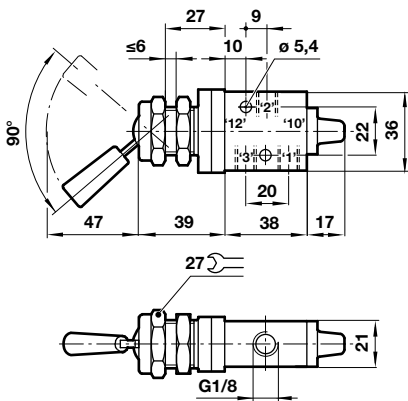
03042802
3/2 Button (Palm) operated, twist return valve (Emergency stop)



Valve latches when button is depressed and returns when the locking ring is rotated anti-clockwise. This valve is suitable for panel mounting.

16

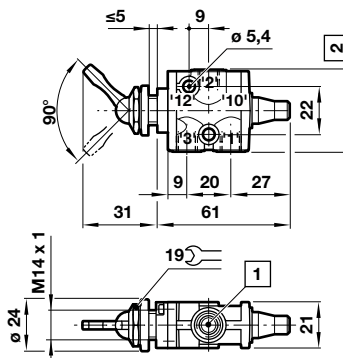
03029602
3/2 Lever toggle spring return valve



Panel hole: Ø 22,5 mm
This valve is suitable for panel mounting.

17

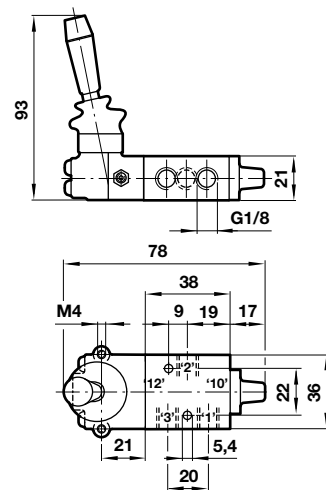
03040302
3/2 Toggle operated spring return valve



This valve is suitable for panel mounting. A fingertip extension is available for this valve, reference 07003301.

18

03043802 & 03043702
3/2 Lever operated spring return valve



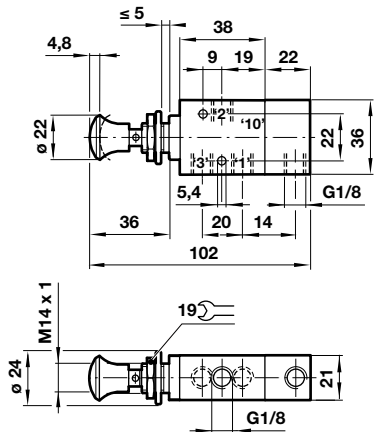
Model 03043702 features a positive detent. Panel hole: Ø 24 mm
Panel thickness: 8 mm maximum

- 1 Port size G1/8 or Ø 6 mm
- 2 37 mm for G1/8 and 45 mm for Ø 6 mm
- 3 0,7 mm thick spacing washer must be used if additional mounting holes are used.

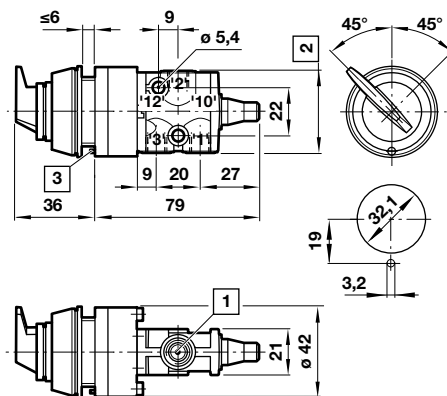
MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

19
03042402
3/2 Knob operated, knob or pilot return valve



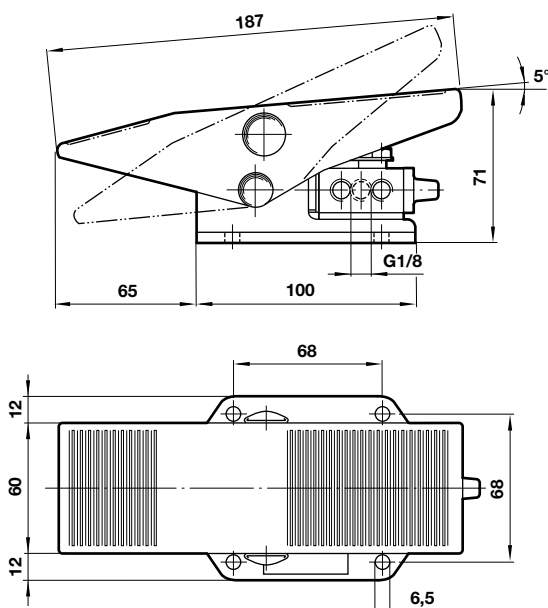
20
03041902
3/2 Rotary knob operated rotary knob return valve



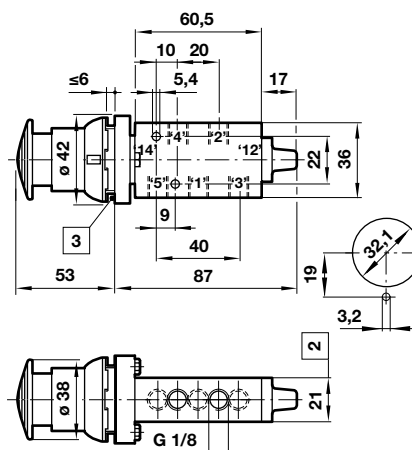
This valve is suitable for panel mounting by means of an optional nut and washer, reference 03 0430 00.

Switch shown in non-operated position
This valve is suitable for panel mounting.

21
03048102
3/2 Pedal operated spring return valve



22
X3046802
5/2 Button (Palm) operated spring return valves



These valves are suitable for panel mounting.

A foot guard is available for this valve, reference 03 0480 60.

- 1 Port size G1/8 or 6 mm
- 2 37 mm for G1/8 and 45 mm for 6 mm
- 3 0.7 mm thick spacing washer must be used if additional mounting holes are used.

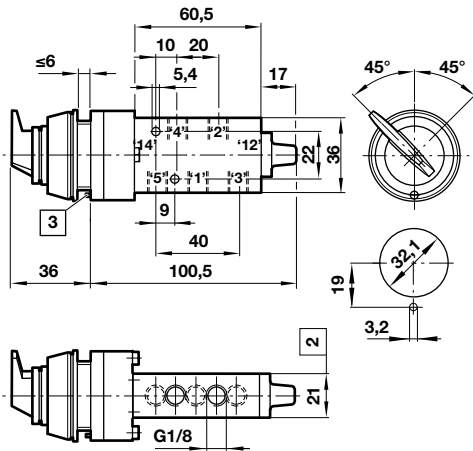
MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

23

X3045902

5/2 Rotary knob operated rotary knob return valve

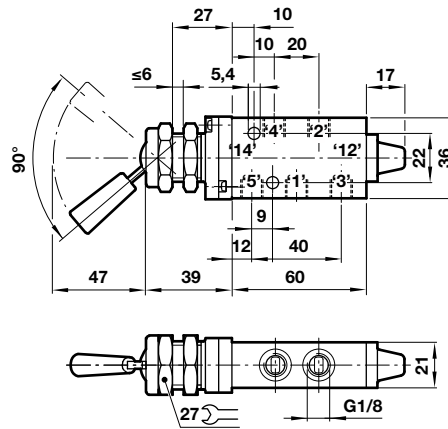


Switch shown in non-operated position
This valve is suitable for panel mounting.

24

X3029602

5/2 Toggle operated toggle return valve

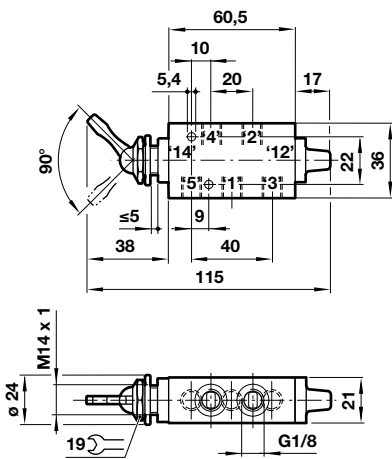


Panel hole: \varnothing 22,5 mm
This valve is suitable for panel mounting.

25

X3044302

5/2 Toggle operated spring return valve

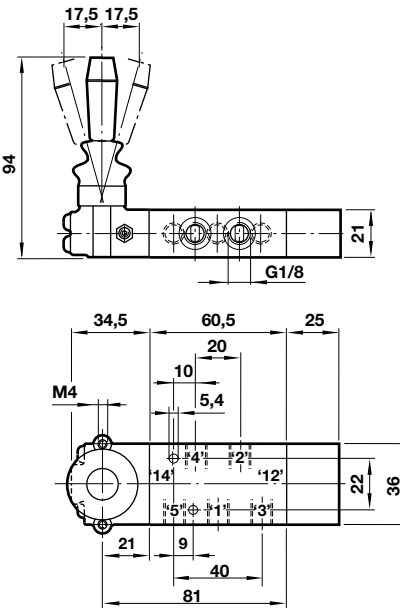


This valve is suitable for panel mounting.
A fingertip extension is available for use on this valve,
reference 07 0033 01.

26

X3343702

5/3 Lever operated valves

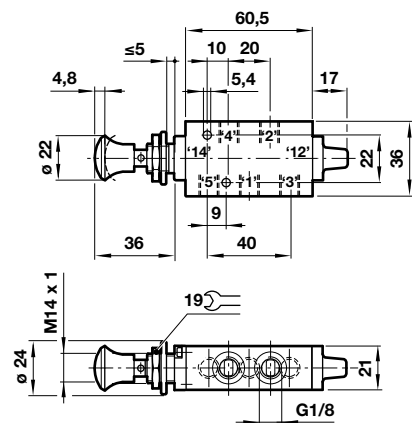


All models are suitable for panel mounting, by means of
a bezel kit, reference 03 3437 64.
Panel hole: \varnothing 24 mm
Panel thickness: 8 mm maximum

27

X3046502

5/2 Knob operated knob return valve



This valve is suitable for panel mounting by means of an
optional nut and washer, reference 03043000.

- 1 Port size G1/8 or \varnothing 6 mm
- 2 37 mm for G1/8 and 45 mm for \varnothing 6 mm
- 3 0,7 mm thick spacing washer must be used if additional mounting holes are used.

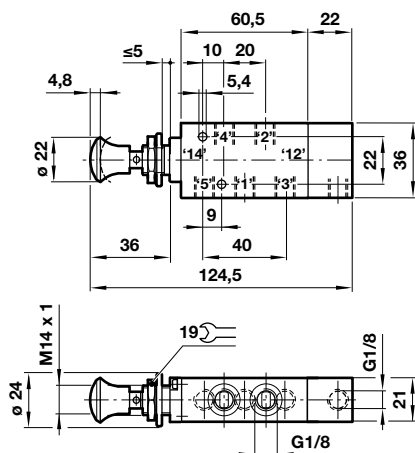
MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

28

X3046402

5/2 Knob operated, knob or pilot return valve

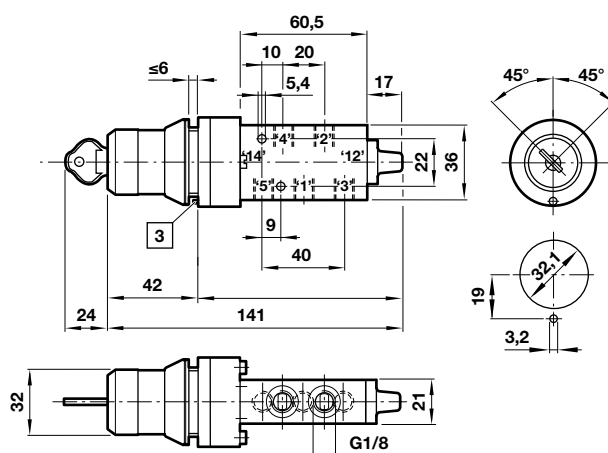


These valves are suitable for panel mounting by means of an optional nut and washer, reference 03043000

29

X3045802801

5/2 Key operated key return valve



The key is removable in both positions.
Key slot shown in non-operated position.
Two keys are supplied.
This valve is suitable for panel mounting.

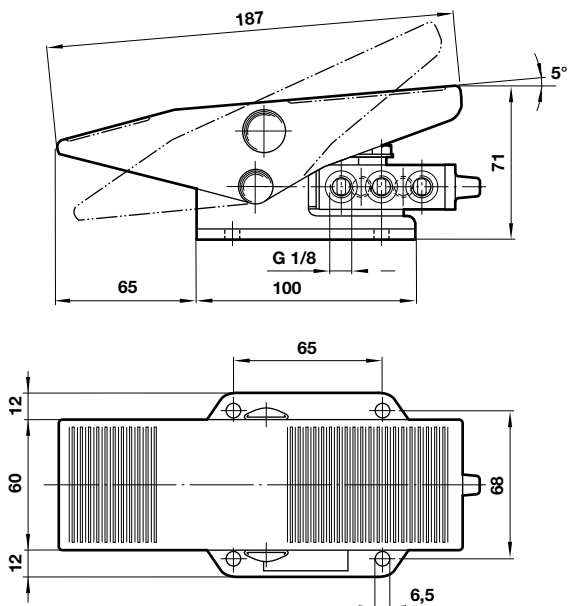
30

X3048202

5/2 Pedal operated spring return valve

X3048402

5/2 Pedal operated pedal return valve

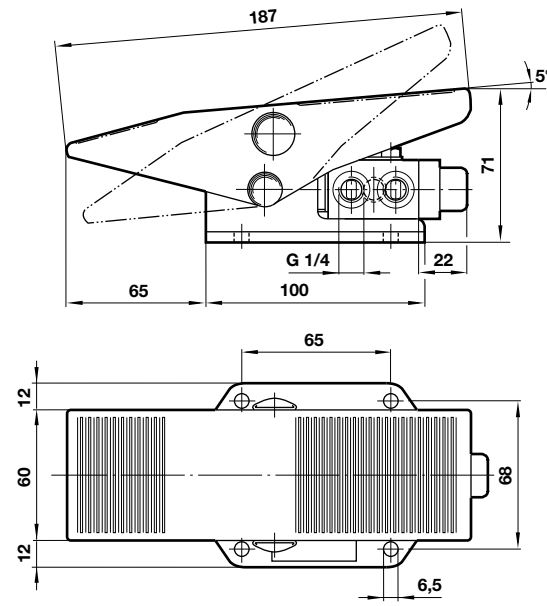


A foot guard is available for this valve, reference 03048060.

31

03068102

3/2 Pedal operated spring return valve



A foot guard is available for this valve, reference 03048060.

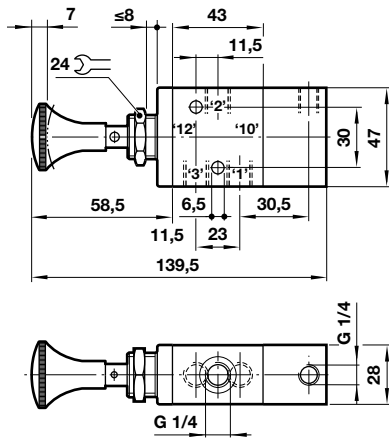
MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

32

03062702

3/2 Knob operated, knob or pilot return valve



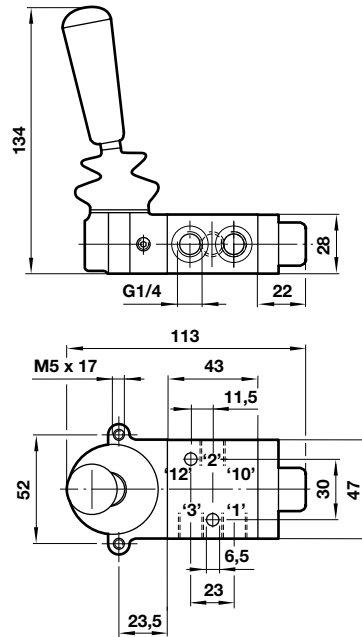
This valve is suitable for panel mounting and includes a nut and washer.

Panel hole: \varnothing 21 mm

33

03063702

3/2 Lever operated valve



Model 03063702 features a positive detent in each position. Both models are suitable for panel mounting by means of a bezel kit, reference 03363764.

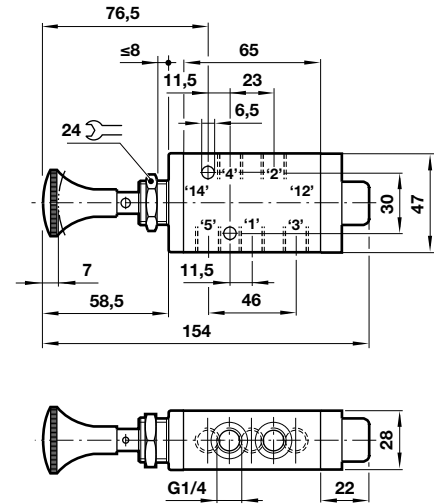
Panel hole: \varnothing 31 mm;

Panel thickness: 8 mm maximum

34

X3066502

5/2 Knob operated knob return valve



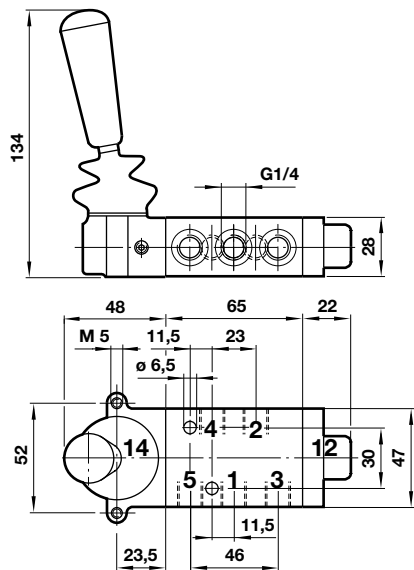
This valve is suitable for panel mounting and includes a nut and washer.

Panel hole: \varnothing 21 mm

35

X3067802, X3067702

5/2 Lever operated valve



Model X3067702 features a positive detent in each position.

Both models are suitable for panel mounting by means of a bezel kit, reference 03363764.

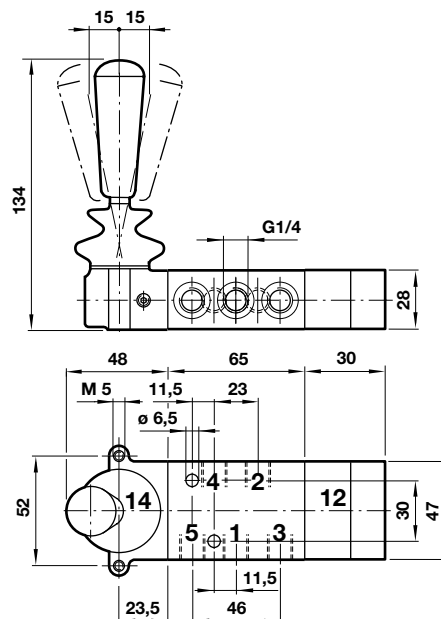
Panel hole: \varnothing 31 mm

Panel thickness: 8 mm maximum

36

X3363702

5/3 Three position lever operated valves



These valves are suitable for panel mounting by means of a bezel kit, reference 03363764.

Panel hole: \varnothing 31 mm

Panel thickness: 8 mm maximum

MANUALLY & MECHANICALLY ACTUATED SPOOL VALVE

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

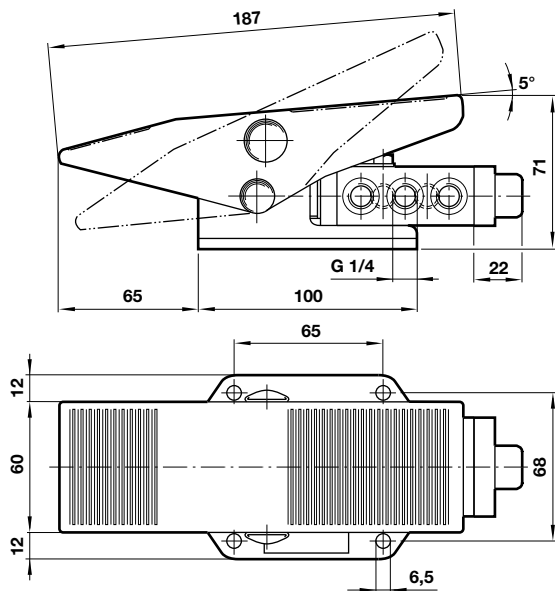
37

X3068202

5/2 Pedal operated spring return valve

X3068402

5/2 Pedal operated pedal return valve



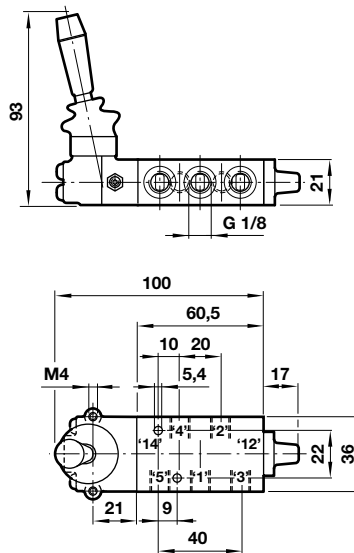
38

X3047802

5/2 Lever/spring

X3047702

5/2 Toggle/lever



A foot guard is available for this valve, reference 03048060.

ROTARY HAND VALVE

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

- Manually operated hand valve
- Easy to grasp and rotate handle
- Detented centre position
- Panel mounting option
- High flow

Technical Data

Medium:
Compressed air, filtered,
lubricated and non-lubricated

Operating pressure:
0 ... 9,7 bar

Flow:
400 ... 3100 l/min

Ambient temperature:
-5°C ... +60°C

Air supply must be dry enough to avoid ice
formation at temperatures below +2°C

Materials






Body and cover:
Aluminium alloy

Seals:
NBR



Models

Accessories

Model	Port size	Function	Flow (l/min)	Panel mount nut	Straight fitting	Elbow fitting	Silencer
	G1/4	4/2	400				
VHLA402-04G	G1/2	4/2	3100	VHLA-400N	C02251248	C02471248	T40C4800
VHLA200-02G	G1/4	4/3 APB	400	VHLA-200N	C02250828	C02470828	T40C2800
VHLA400-04G	G1/2	4/3 APB	3100	VHLA-400N	C02251248	C02471248	T40C4800

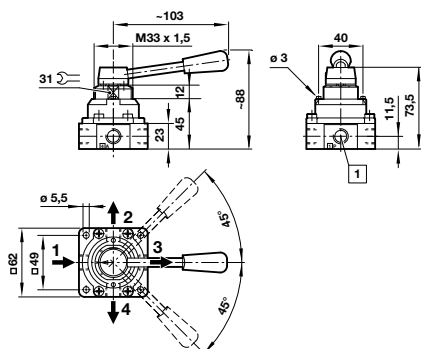
Caution: These valves are not leak free, care should be taken with safety critical applications and where an APB valve is used to hold an actuator in a mid position.

Installation: It is recommended that air pressure is applied only at port 1, otherwise leakage may occur - (ie. reverse porting is not recommended). It is recommended that a silencer is fitted in the exhaust port, particularly in applications where dust is present.

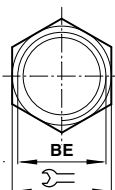
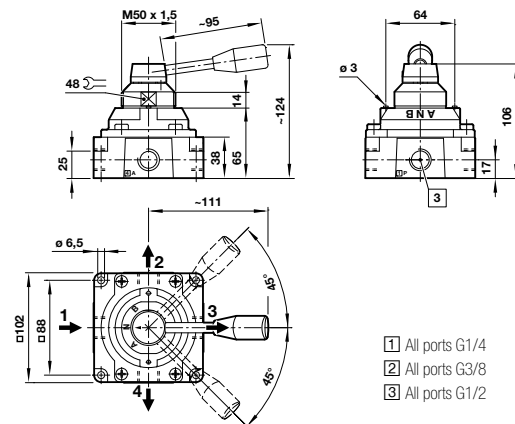
Dimensions

Panel mount nut

G1/4



G1/2



BE	KW	Model
M33x1,5	40	VHLA-200N
M50x1,5	55	VHLA-400N

MANUAL IN-LINE VALVE

M/1700 5/2, 5/3, G1/4, G1/2

- 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

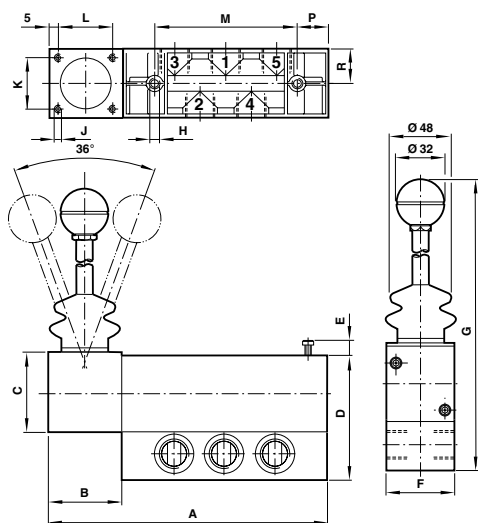
Ambient temperature:
-20°C ... +80°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C



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/Lever	–
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

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

POPPET VALVE MANUAL/MECHANICAL

S/666 3/2 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:

666 range = 174 l/min

667 range = 156 l/min

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

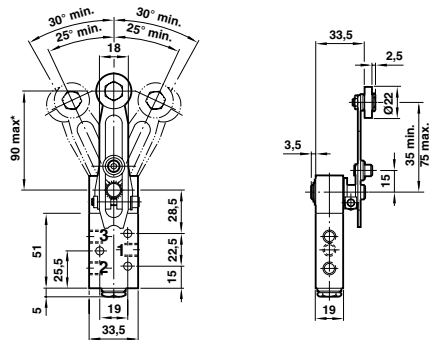


● Models

Model	Function	Actuation	Dimension No.
Pilot			
S/666/40	3/2 NC	Pilot/Spring	9
S/667/40	3/2 NO	Pilot/Spring	9
Mechanical			
S/666/14	3/2 NC	Plunger/Spring	7
S/666/8	3/2 NC	Roller/Spring	8
S/667/8	3/2 NO	Roller/Spring	8
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			
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

● Dimensions

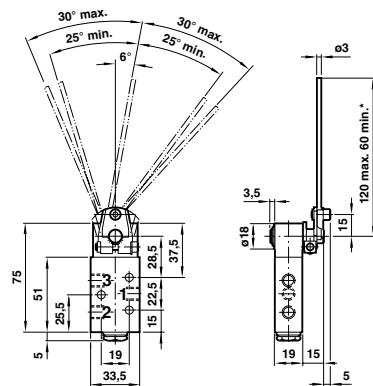
1-S/666/108



Mechanism may be operated either side of centre line. When the valve is mounted horizontally, the roller is recommended to be positioned on the upper face of the arm.

*Alternative position

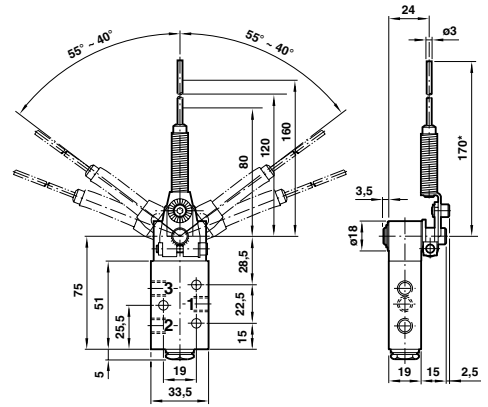
2- S/666/106



Mechanism may be operated either side of centre line.

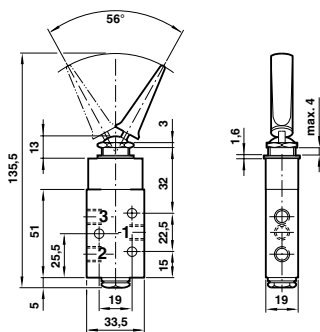
*Recommended

3-S/666/116



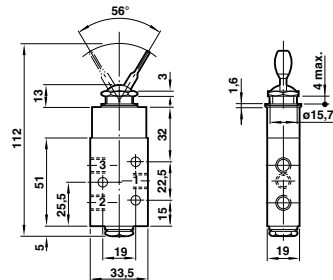
*Rotation at Point of Application: 40° minimum @ 80 mm, 50° minimum @ 120 mm, 55° minimum @ 160 mm. Mechanism may be operated either side of centre line.

4-S/666/117



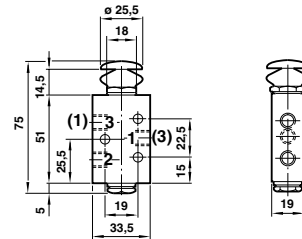
Panel hole: \varnothing 16 mm
Panel thickness: 4 mm maximum

5-S/666/7

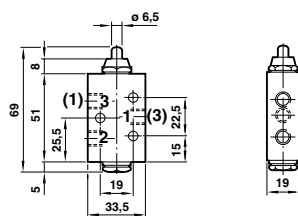


Panel hole: \varnothing 16 mm
Panel thickness: 4 mm maximum

6-S/666/1

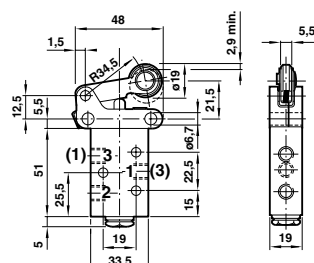


7-S/666/14



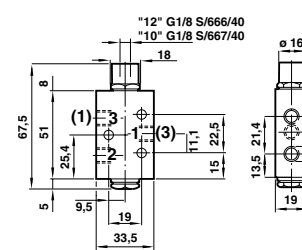
Pre-travel: 0,8 mm closed top seat
Operating Travel: 0,8 mm open bottom seat
Over-travel: 1,5 mm
Model number S/667/14 type 3/2 normally open numbers are shown in brackets.

8-S/666/8 y S/667/8



Pre-travel: 1,4 mm closed top seat
Operating Travel: 1,4 mm open bottom seat
Over-travel: 2,2 mm
Model number S/667/8 type 3/2 normally open numbers are shown in brackets.

9-S/666/40 y S/667/40



PROPORTIONAL PRESSURE CONTROL VALVE

VP50S G1/4

- 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

Supply pressure:

Minimum 2 bar above maximum output required, 12 bar max.

Supply sensitivity:

Better than 0,75% span output change per bar supply pressure change

Flow:

Standard units up to 1400 N l/min (see characteristic curves)

Air consumption:

<5 N l/min

Ambient temperature:

0°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Linearity:

<1%


Hysteresis and deadband:

<1%



Models

Accessories

Model	Port size	Flow (l/min)	Output pressure (bar)	Control signal	Straight fitting	Elbow fitting	Silencer	Connector with 5m moulded cable
	G1/4	1400	0 ... 6	0 ... 10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5006SBJ411H00	G1/4	1400	0 ... 6	4 ... 20 mA	C02250828	C02470828	T40C2800	0250081000000000
VP5010SBJ111H00	G1/4	1400	0 ... 10	0 ... 10 V	C02250828	C02470828	T40C2800	0250081000000000
VP5010SBJ411H00	G1/4	1400	0 ... 10	4 ... 20 mA	C02250828	C02470828	T40C2800	0250081000000000

Pin configuration

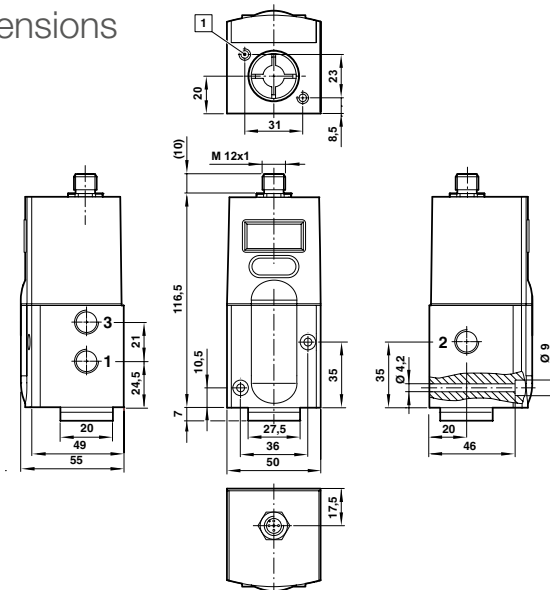
Electrical information

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, <±1% Accuracy
Connections	M12x1, 5 pin



1	+24 V d.c. supply
2	0 ... 10V feedback
3	Control signal (+VE)
4	Common (supply signal and feedback return)
5	Chassis

Dimensions



PROPORTIONAL PRESSURE CONTROL VALVE

VP51 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

Ambient temperature:

0°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Air Supply sensitivity:

Better than 0,75% span output change per bar supply pressure change

Flow:

Standard units up to 1400 N l/min (see characteristic curves)

Air consumption:

<5 N l/min

Linearity:

<1%

Hysteresis and deadband:





<1%



Models

Model	Port size	Max. flow (l/min)	Output 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

Straight fitting	Elbow fitting	Silencer	Connector with 5m moulded cable
			

Electrical information

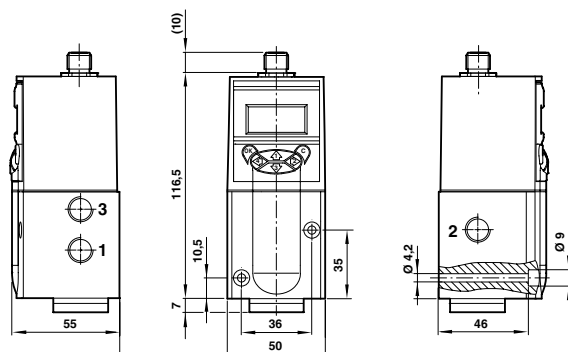
Electromagnetic compatibility	CE marked: conforms to EC requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical input signal	4 ... 20 mA or 0 ... 10 V factory set
Electrical power input	24 V d.c. ±25% (power consumption <1 W)
Output pressure feedback signal	0 ... 10 V full range or user-configurable switched output
Connections	M12 5 pin

Pin configuration



1	+24 V d.c. supply
2	0 ... 10 V feedback
3	Control signal (+ve)
4	Common (DC supply signal and feedback return)
5	Chassis

Dimensions





Valve technology
for over 75 years



IMI Buschjost valves

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.

In fact, in Germany, IMI Buschjost process valves are amongst only three brands which are SIL certified for use in power plants.

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

Engineering
GREAT Solutions



Find out more

www.imi-precision.com

 **IMI BUSCHJOST**

2/2-WAY DIRECTLY OPERATED VALVES

Series 82510

- 2/2-way seat valves
- G1/4 ... 3/8
- Suitable for vacuum
- High flow rate
- Functional compact design
- Body with M5 fastening thread as standard
- Solenoid interchangeable without tools (Click-on®)
- Valve operates without pressure differential (Zero delta P)

Technical Data

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top



● Models - Valves normally closed

Port size	Orifice (mm)	Series 82510 Model	Operating pressure (bar)
G1/4	1,5	8251000.9101.xxxxx	0 ... 25
G1/4	2,5	8251020.9101.xxxxx	0 ... 10
G3/8	2,5	8251120.9101.xxxxx	0 ... 10
G1/4	3	8251040.9101.xxxxx	0 ... 4
G1/4	4	8251060.9151.xxxxx	0 ... 12
G3/8	4	8251160.9151.xxxxx	0 ... 12

Replace xxxx with Voltage code & frequency from the table below

Technical data

82510	
Medium	Neutral gases and liquids
Port size	G1/4 ... 3/8
Operating pressure	0 ... 10/25/4 bar
Temperature	
Media temperature	-10°C ... +90°C
Ambient temperature	-10°C ... +50°C
Material	
Body	Brass (CW617N)
Seat seal	NBR
Internal parts	Stainless steel, brass

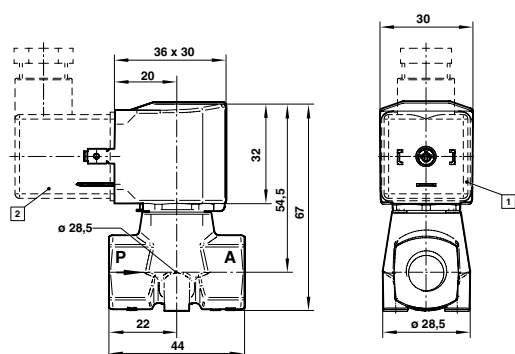
Voltage codes and spare coils

Voltage and frequency solenoid									
Model	9151	Code Voltage	Code Frequency	Voltage	Frequency	Power consumption			
9101	9151					Inrush	Holding	Inrush	Holding
						9101 *1)		9151 *1)	
0000000.9101.02400	0000000.9151.02400	024	00	24 V d.c.	–	8 W	8 W	18 W	18 W
0000000.9101.23050	0000000.9151.23050	230	50	230 V a.c.	50 Hz	15 VA	12 VA	45 VA	35 VA

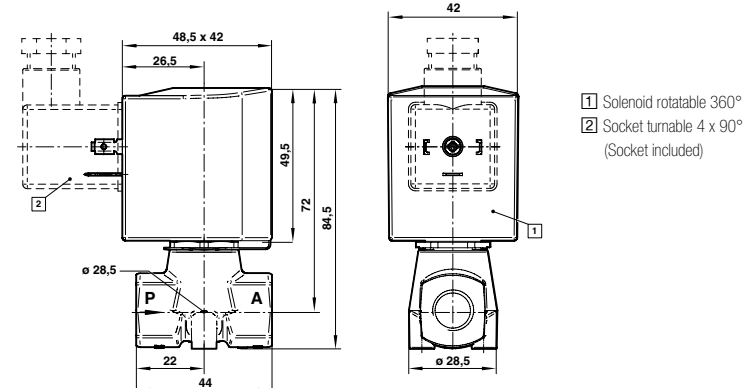
*1) Note: coil only / up to +55°C ambient temperature.
Further versions on request!

● Dimensions

82510 with solenoid 9101



82510 with solenoid 9151



2/2-WAY INDIRECTLY OPERATED SOLENOID VALVES

Series 82400

- 2/2-way seat valves
- DN 8 ... 50, G1/4 ... 2
- High flow rate
- Damped operation
- Functional compact design
- Solenoid interchangeable without tools (Click-on®)
- Fluids of Group 2 acc. Pressure Equipment Directive 97/23/EC (Series 83030)

Technical Data

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Differential pressure:
0,1 bar required



Standard models

Port size	Orifice (mm)	Series 82400 Model	Operating pressure (bar)
G1/4	8	8240000.9101.xxxxx	0,1 ... 16
G3/8	10	8240100.9101.xxxxx	0,1 ... 16
G1/2	12	8240200.9101.xxxxx	0,1 ... 16
G3/4	20	8240300.9101.xxxxx	0,1 ... 16
G1	25	8240400.9101.xxxxx	0,1 ... 16
G1 1/4	32	8240500.9101.xxxxx	0,1 ... 10 *1)
G1 1/2	40	8240600.9101.xxxxx	0,1 ... 10 *1)
G2	50	8240700.9101.xxxxx	0,1 ... 10 *1)

*1) Note: Operating pressure 0,1 ... 16 bar with solenoid 9151.
Replace xxxx with voltage code & frequency from the table below.

Technical data

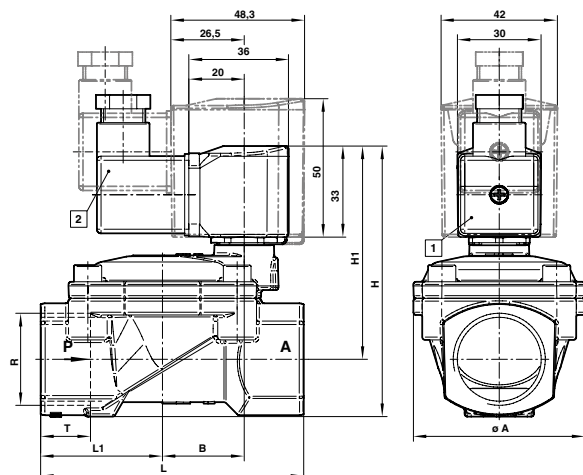
82400 (82410)	
Medium	Neutral gases and liquids
Port size	G1/4 ... 2
Operating pressure	0,1 ... 10/16 bar
Temperature	
Media temperature	-10°C ... +90°C
Ambient temperature	-10°C ... +50°C
Material	
Body	Brass (CW617N)
Seat seal	NBR
Internal parts	Stainless steel, PVDF, brass from DN 25

Voltage codes and spare coils

Voltage and frequency solenoid									
Model	Code Voltage	Code Frequency	Voltage	Frequency	Power consumption				
					Inrush	Holding	Inrush	Holding	
9101	9151				9101 *2)		9151*2)		
0000000.9101.02400	0000000.9151.02400	024	00	24 V d.c.	—	8 W	8 W	18 W	18 W
0000000.9101.23050	0000000.9151.23050	230	50	230 V a.c.	50 Hz	15 VA	12 VA	45 VA	35 VA

*2) Note: coil only / up to +55°C ambient temperature.
Further versions on request!

Dimensions



- 1 Solenoid rotatable 360°
2 Socket turnable 4 x 90° (Socket included)

Model	Port size	A	B	H	H1	L	L1	T
8240000.9101.xxxxx	G1/4	44	19,5	78,5	67	60	27,5	12
8240100.9101.xxxxx	G3/8	44	19,5	78,5	67	60	27,5	12
8240200.9101.xxxxx	G1/2	44	19,5	81	67	67	31	14
8240300.9101.xxxxx	G3/4	50	24	88	71,5	80	36,5	16
8240400.9101.xxxxx	G1	62	29,5	97,5	77	95	44	18
8240500.9101.xxxxx	G1 1/4	92	44,5	124,5	95,5	132	60	20
8240600.9101.xxxxx	G1 1/2	92	44,5	124,5	95,5	132	60	22
8240700.9101.xxxxx	G2	109	54,5	142,5	108	160	74	24

Replace xxxx with voltage code & frequency from the voltage codes table.

2/2-WAY PRESSURE ACTUATED VALVES BY EXTERNAL FLUID

Series 84500

- 2/2-way seat valves
- DN 15 ... 50, G1/2 ... 2
- Easy rebuilding into »normally open« or »double-acting« without tools
- Optical position indicator is standard
- Damped closing (Valve closes against flow direction)
- Suitable for contaminated flow fluid
- Suitable for vacuum up to max. 90%
- Reversed flow direction optional

Technical Data

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top



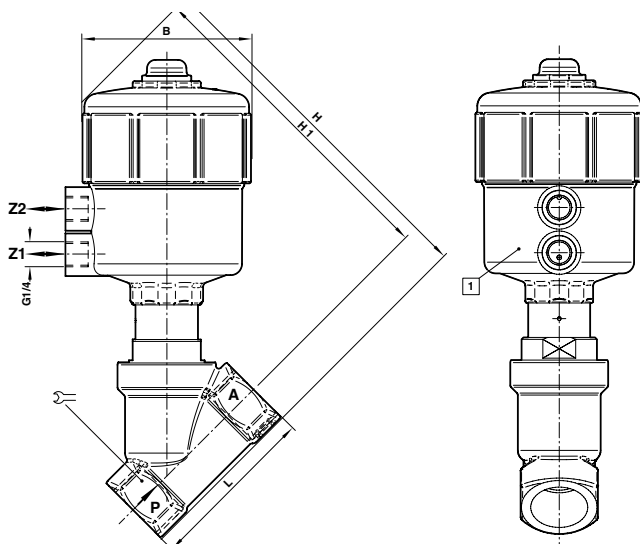
Standard models

Port size	Series 84500 Model	Operating pressure (bar)
G1/2	8450200.0000.00000	0 ... 16 (25)
G3/4	8450300.0000.00000	0 ... 10 (16)
G1	8450400.0000.00000	0 ... 10
G1 1/4	8450500.0000.00000	0 ... 7
G1 1/2	8450600.0000.00000	0 ... 4,5
G2	8450700.0000.00000	0 ... 3

Technical data

84500	
Medium	Neutral gases and liquids
Pilot fluid	Neutral gases max. +60°C
Port size	G1/2 ... 2
Operating pressure	0 ... 25 bar (depends on port size)
Pilot pressure	3,5 ... 10 bar
Temperature	
Media temperature	-10°C ... +180°C
Ambient temperature	-10°C ... +60°C
Material Process fluid	
Body	Brass (CW617N)
Seat seal	PTFE
Internal parts	Brass, stainless steel
Material Pilot fluid	
Body	Polyamid 66 with glass fibre 30%
Seals	NBR
Internal parts	Brass, stainless steel

Dimensions



1 Actuator may be rotated 360°

Model	Port size	B	H	H1	L	⌀
8450200.0000.00000	G1/2	89,5	177,5	164	65	27
8450300.0000.00000	G3/4	89,5	184	168	75	32
8450400.0000.00000	G1	89,5	194,5	174	90	41
8450500.0000.00000	G1 1/4	89,5	209,5	184,5	110	50
8450600.0000.00000	G1 1/2	89,5	208,5	186	120	55
8450700.0000.00000	G2	89,5	229,5	194,5	150	70



Efficient and inexpensive dust filter cleaning

Filter valves for air-blasting have been developed to allow efficient and inexpensive cleaning. Top priorities in the developers' requirements specification were to optimise the filter cleaning, reduce air consumption and prolong the valves' service life. To achieve optimum cleaning with the compressed air pulse, the pressure in the filter has to reach the set point very quickly. This means that the valves must open fully within a few milliseconds.

Compared with the previous models, the IMI Buschjost filter valve series has extremely fast opening times, which are essential for effective, intensive cleaning. The closing mechanism is just as fast as the opening mechanism. This determines the economical operation of a valve. The air pulse must return to zero as quickly as possible, as any minor delay will only consume air and cost money.

Product highlight:

- > High grade materials
- > Solenoid exchangeable without tools (TWIST-ON®)
- > CE-mark
- > Optimized strength
- > Designed with newest CAD-technologies
- > High flow rate
- > One-piece diaphragm
- > Usable from -40°C ... +140°C
- > High corrosion resistance (optional)
- > Explosion proof up to hazardous area 1/21 and temperature class T4/ T5
- > Usable for low pressure- and vacuum applications
- > Integrated silencer
- > Frost proof solenoid system
- > International registrations like GOST-R or CRN available

*Engineering
GREAT Solutions*



Find out more

www.imi-precision.com



DIRECT SOLENOID ACTUATED POPPET VALVES

95000 2 ... 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

Technical Data

Medium:
Neutral gaseous and liquid fluids

Flow direction:
Fixed

Mounting position:
Optional, preferably with solenoid on top

Media temperature:
-25°C ... +80°C NBR

Ambient temperature:
Depending on solenoid system
-25°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures 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	Dimension No.
9500200xxxx*****	2/2 NC	G1/4	2	0 ... 35	120	13B	1
9500300xxxx*****	2/2 NC	G1/4	3	0 ... 10	200	13C	1
9500400xxxx*****	2/2 NC	G1/4	4	0 ... 12	350	13D	1
9501500xxxx*****	2/2 NC	G1/4	5	0 ... 5	450	16D	2
9501600xxxx*****	2/2 NC	G1/4	6	0 ... 5	550	16D	2
9502210xxxx*****	2/2 NO	G1/4	2	0 ... 40	70	13B	3
9502310xxxx*****	2/2 NO	G1/4	3	0 ... 10	160	13B	3

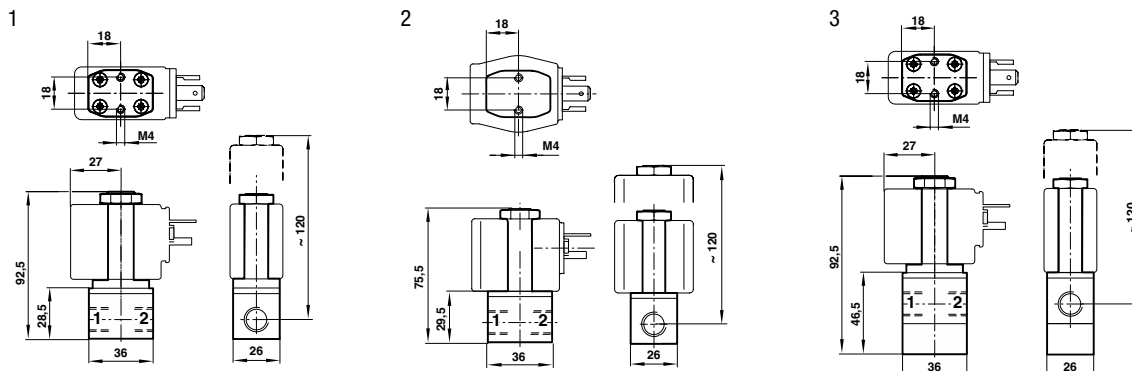
xxxx Insert solenoid code according to solenoid group from tables on page 129. ***** Insert voltage codes from table below.
Replace both xxxx and ***** with '0' for valve without solenoid.

Voltage codes

24 V d.c.	02400
230 V a.c.	23050

Other voltages available, please contact us for more information.

Dimensions



DIRECT SOLENOID ACTUATED POPPET VALVES

96000 2 ... 5 mm orifice (ND) 3/2, NC/NO, G1/4

- Direct acting solenoid – operation down to zero bar pressure
- Short switching times
- Assembled oil and grease-free

Technical Data

Medium:
Neutral gaseous and liquid fluids

Flow direction:
Fixed

Mounting position:
Optional, preferably with solenoid on top

Media temperature:
-25°C ... +80°C NBR

Ambient temperature:
Depending on solenoid system
-25°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures 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	Dimension 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
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

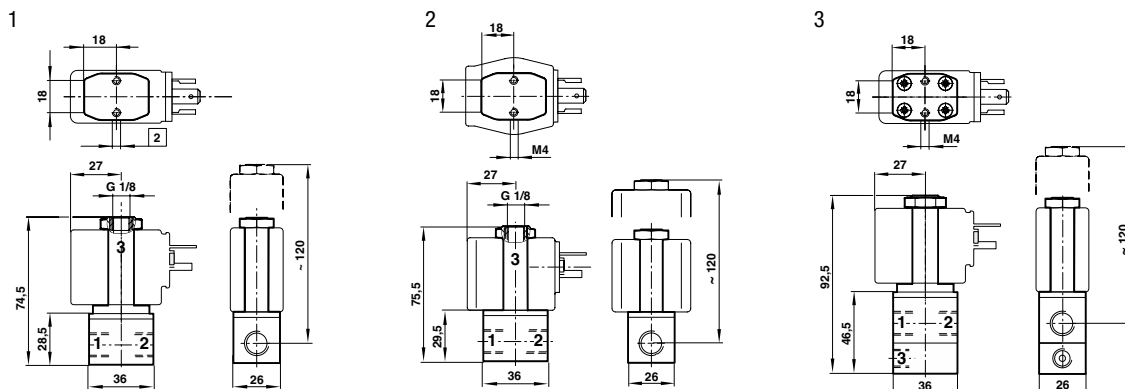
xxxx Insert solenoid code according to solenoid group from tables on page 129. ***** Insert voltage codes from table below.
Replace both xxxx and ***** with '0' for valve without solenoid.

Voltage codes

24 V d.c.	02400
230 V a.c.	23050

Other voltages available, please contact us for more information.

Dimensions



SOLENOID OPERATORS

95000 & 96000 Poppet Valves

Model	Power consumption		Voltage		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (mA)	230 V a.c. (mA)					



Group 13B	8,0	–	331	–	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	0246 ⁷⁾
Group 13B	–	9,2	–	40	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	3206 ⁷⁾

Model	Power consumption		Voltage		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (mA)	230 V a.c. (mA)					



Group 13C	12,1	–	504	–	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	0200 ⁷⁾
Group 13C	–	11,3	–	49	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	3204 ⁷⁾

Model	Power consumption		Voltage		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (mA)	230 V a.c. (mA)					



Group 13D	16,9	–	703	–	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	0700 ⁷⁾
Group 13D	–	19,5	–	75	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	3703 ⁷⁾

Model	Power consumption		Voltage		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (mA)	230 V a.c. (mA)					



Group 16C	6,8	–	284	–	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	0827 ⁷⁾
Group 16C	–	10,6	–	46	–	IP 65 (with connector) ⁵⁾	-25 ... +60 Fluid: max. 80	DIN EN 175301-803 Form A ⁶⁾	3805 ⁷⁾

Model	Power consumption		Voltage		Protection category	Protection class	Temperatures °C ambient/fluid	Electrical connection	Solenoid code
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (mA)	230 V a.c. (mA)					



Group 16D	16,9	–	703	–	–	IP00 without plug ⁵⁾ IP65 with plug ⁵⁾	-25 ... +60	DIN EN 175301-803 Form A ⁶⁾	0800 ⁷⁾
Group 16D	–	17,3	–	75	–	IP00 without plug ⁵⁾ IP65 with plug ⁵⁾	-25 ... +60	DIN EN 175301-803 Form A ⁶⁾	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.

5) Required connector type 0570275000000000.

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).

Accessories

Connectors



0570275000000000

IN-LINE FLOW REGULATORS (BLOCK FORM)

COOGE and COOGP Uni-directional – 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.

Ambient temperature:
0°C ... +60°C
Air supply must be dry enough to avoid ice
formation at temperatures below +2°C

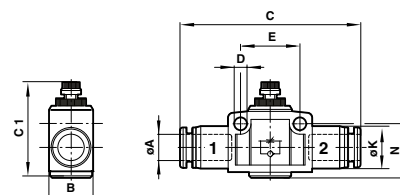
Tube sizes:
4 ... 12 mm

Tubing types:
Nylon 11 or 12, Polyurethane
85, 95 or 98 durometer



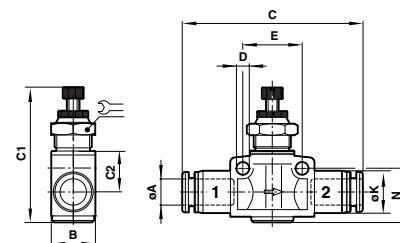
● Models – In-line flow control

Model	ØA	B	C	C1		D	E	ØK	N
				min.	max.				
COOGE0400	4	12	45	30	33	3,3	15	11	13,5
COOGE0600	6	16	50	35	39,5	4,4	20,5	13	17,5
COOGE0800	8	19	55,5	37,5	42	4,4	23	15	20
COOGE1000	10	23	61	44	49	4,4	28	17,5	23
COOGE1200	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.								
COOGP0400	4	12	42	35,5	38	5,5	3,2	15,5	11	13,5	12	11	5
COOGP0600	6	16	49,5	43	48,5	8	4,3	20,5	13	17,5	17	16	6
COOGP0800	8	19	56,5	47,5	53	8,5	4,3	23	15	20	19	17	6
COOGP1000	10	23	63	53,5	61,5	10,5	4,3	27,5	17,5	23	22	17	7
COOGP1200	12	26,5	73,5	57,5	64,5	12	4,4	32,5	20,5	25,5	24	21	7



NON-RETURN VALVES

T55 In-line G1/8 ... G1/2

- Permit free flow of air in one direction only
- Simple, reliable design
- Silicone free
- Low cracking pressure

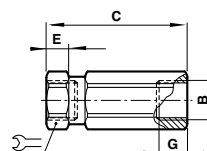
Technical Data

Medium:
Compressed air, filtered,
lubricated and non-lubricated

Operating pressure:
0,1 ... 10 bar

Ambient temperature:
-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Models

BSPP	Port size	Flow factor C*	CV
T55C1800	1/8	2,4	0,59
T55C2800	1/4	5,5	1,35
T55C3800	3/8	9,0	2,20
T55C4800	1/2	15,0	3,70

* Measured in dm³/(s.bar).

Dimensions

Model	B	C	E	G	
T55C1800	G1/8	42,5	7	7	14
T55C2800	G1/4	54	8	10	17
T55C3800	G3/8	63	9	13,5	24
T55C4800	G1/2	77	12	13,5	27

SHUTTLE VALVE

T65 G1/8 & G1/4

- 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

Technical Data

Medium:
Compressed air, filtered, lubricated
or non-lubricated, inert gas

Operation:
Shuttle valve ('OR' logic function)

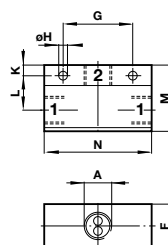
Operating pressure:
0,7 ... 10 bar

Port size:
G1/8, G1/4

Mounting:
Line mounted

Ambient temperature:
-20°C ... +80°C max.

Air supply must be dry enough to avoid ice formation at temperatures below +2°C



Models

Model	A	F	Ø H	K	L	M	N
T65C1800	G1/8	15	5,25	6	10	25	36
T65C2800	G1/4	20	5,25	8	12	30	50

Dimensions

Model	Port size	Flow factor C *1)	CV	Flow at 6 - 1 bar (dm ³ /min)
T65C1800	G1/8	1,7	0,42	412
T65C2800	G1/4	2,6	0,64	631

*1) Measured in dm³/(s.bar).

SOLENOID PLUGS AND CABLES

15 mm, 22 mm & 30 mm

● 15 mm plugs according to DIN EN175301-803 form C

Connector	Model	Connector type	Cable length	Voltage		Features	Suppression	Protection class	Gland size	Power consumption
				a.c.	d.c.					
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	–
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-D03	DIN EN175301-803	3000 mm	24 V	24 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-D03	DIN EN175301-803	3000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 7	0,25W

● 22 mm plugs according to Industrial standard or DIN EN175301-803 form B

Connector	Model	Connector type	Cable length	Voltage		Features	Suppression	Protection class	Gland size	Power consumption
				a.c.	d.c.					
Plug with moulded cable	MP43313/1	22 mm Industrial std.	1000 mm	–	–	–	–	IP 65	Pg 9	–
	MP43313/3	22 mm Industrial std.	3000 mm	–	–	–	–	IP 65	Pg 9	–
Plug with cable gland	MP19063	22 mm Industrial std.	–	–	–	–	–	IP 65	Pg 9	–
Indicator plug	MP24121/1	22 mm Industrial std.	–	12 ... 24 V	12 ... 24 V	LED,VDR	•	IP 65	Pg 9	0,25W
	MP24121/2	22 mm Industrial std.	–	110 V	110 V	LED,VDR	•	IP 65	Pg 9	0,25W
	MP24121/3	22 mm Industrial std.	–	220 V	220 V	LED,VDR	•	IP 65	Pg 9	0,25W
Indicator plug with moulded cable	MP43314/13	22 mm Industrial std.	3000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 9	0,25W
	MP43314/23	22 mm Industrial std.	3000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 9	0,25W
	MP43314/33	22 mm Industrial std.	3000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 9	0,25W

● 30 mm plugs according to DIN EN175301-803 form A

Connector	Model	Connector type	Cable length	Voltage		Features	Suppression	Protection class	Gland size	Power consumption
				a.c.	d.c.					
Plug with moulded cable	MP43315/1	DIN EN175301-803	1000 mm	–	–	–	–	IP 65	Pg 11	–
	MP43315/3	DIN EN175301-803	3000 mm	–	–	–	–	IP 65	Pg 11	–
Plug with cable gland	MP15737	DIN EN175301-803	–	250 V	300 V	–	–	IP 65	Pg 11	–
	MP19117	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	MP24120/1	DIN EN175301-803	–	10 ... 50 V	10 ... 50 V	LED,VDR	•	IP 65	Pg 11	0,25W
	MP24120/2	DIN EN175301-803	–	70 ... 115 V	70 ... 115 V	LED,VDR	•	IP 65	Pg 11	0,25W
	MP24120/3	DIN EN175301-803	–	150 ... 240 V	150 ... 240 V	LED,VDR	•	IP 65	Pg 11	0,25W
Indicator plug with moulded cable	MP43316/13	DIN EN175301-803	3000 mm	24 V	24 V	LED,VDR	•	IP 65	Pg 11	0,25W
	MP43316/23	DIN EN175301-803	3000 mm	110 V	110 V	LED,VDR	•	IP 65	Pg 11	0,25W
	MP43316/33	DIN EN175301-803	3000 mm	220 V	220 V	LED,VDR	•	IP 65	Pg 11	0,25W

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.

Strong, versatile →



Light, compact, easy to use ↗



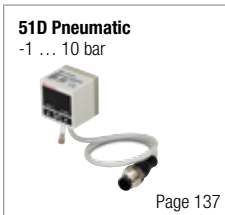
Fast Find Guide

Please note: These products represent only part of the IMI Precision Engineering pressure switch range. If you can't see the option you require please contact us.

● Electro-Mechanical Pressure Switches



● Electronic Pressure Switches



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:
For filtered, lubricated or non lubricated compressed air, neutral and incombustible gases

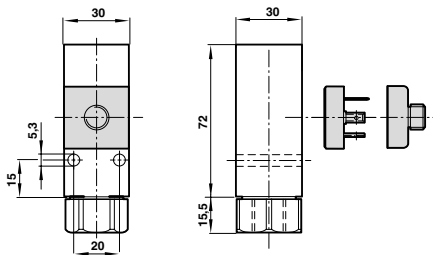
Operation:
Diaphragm

Ambient temperature:
-10°C ... +85°C
except for ATEX versions
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Repeatability:
±4%, of full scale



Dimensions



Models

Accessories

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	–	–
	0880326000000000*	0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	0570110000000000	–
	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	–	–
	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	0570110000000000	–

MODELS CONFORMING TO ATEX – ZONE 2 AND 22 (Ex II 3G/D)								
	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.

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

Ambient/Media temperature:

-25°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Media viscosity:

Up to 1000 mm²/s

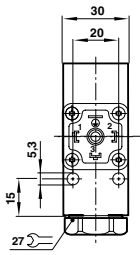
Repeatability:

±4%, of full scale

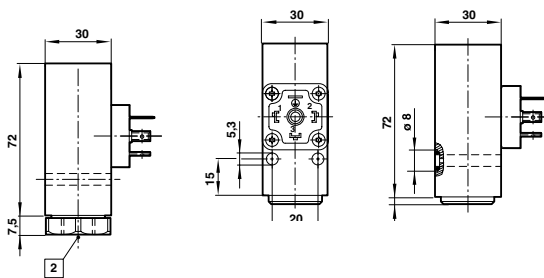


● Dimensions





G1/4



Flange



● Models

Standard Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference (bar)	Max. over pressure (bar)	Connector DIN EN 175301-803
	5 ... 70	G1/4	DIN EN 175301-803 Form A	10,5 ... 15	400	0570110000000000 (Form A)
	10 ... 160	G1/4	DIN EN 175301-803 Form A	11 ... 17	400	0570110000000000 (Form A)
	25 ... 250	G1/4	DIN EN 175301-803 Form A	11 ... 17	400	0570110000000000 (Form A)
	40 ... 420	G1/4	DIN EN 175301-803 Form A	17 ... 38	600	0570110000000000 (Form A)

All versions include standard connector plug.

Accessories



ELECTRONIC PRESSURE SWITCH

51D Pneumatic -1 ... 10 bar

- System pressure (unit bar, psi, Mpa, KPa, kgf/cm², mmHg, InHg or mmH₂O) selectable
- High accuracy and resolution
- Switching status indicated by LED

Technical Data

Medium:
For filtered, lubricated or non lubricated compressed air, neutral and incombustible gases

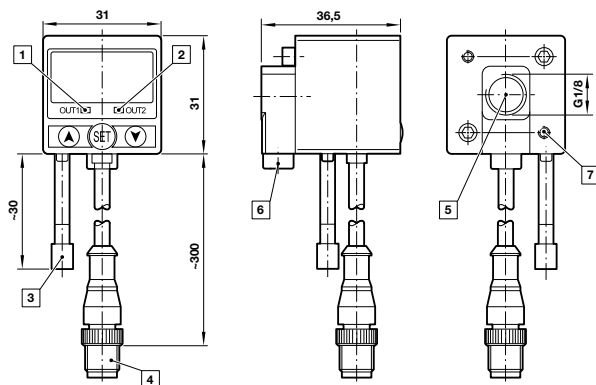
Ambient temperature:
0°C ... +50°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Display:
3 1/2 digit LED

Repeatability (switch output):
≤ ±0,2% of full scale (FS) ±1 digit
- without temperature sensitivity



Dimensions



- 1 Switch OUT 1, green LED
- 2 Switch OUT 2, red LED
- 3 Dustproof protector
- 4 Connector M12 x 1
- 5 Inlet port
- 6 Alternative inlet port G1/8 plugged
- 7 Thread for mounting screw

Electrical parameters





Electrical connection:	M12 x 1
Power supply:	12 ... 24 V d.c.
	24 V d.c. (PNP) maximum
	30 V d.c. (NPN) maximum

Electrical connection M12 x 1

PIN-No.	Signal	Cable colour
1	+UB	Brown
2	Out 2	White
3	-	Blue
4	Out 1	Black



Models

Model	Port size	Switching pressure range (bar)	Over pressure (bar)	Output signal	Mounting bracket (wall mounting)	Mounting bracket (bottom mounting)	Panel mounting kit (safety adaptor & panel adaptor)
	G1/8	-1 ... 10	15	2 x PNP			
0860815000000000	G1/8	-1 ... 10	15	2 x NPN	0860000000000000	0860001000000000	0860002000000000 & 0860003000000000
0860820000000000	G1/8	-1 ... 1	3	2 x PNP	0860000000000000	0860001000000000	0860002000000000 & 0860003000000000
0860825000000000	G1/8	-1 ... 1	3	2 x NPN	0860000000000000	0860001000000000	0860002000000000 & 0860003000000000

Accessories

Long service life



Easy to service



High functional reliability



Low maintenance



Compact design



Smooth-moving piston



Flanged valves Tough, durable, reliable

Tough, durable, reliable: IMI Buschjost branded flanged valves have proven reliable in the field for many years. Customers in various industries have relied on IMI Precision Engineering's innovative products for more than 50 years – including general mechanical engineering and plant construction, the chemical industry, right up to the power plant sector.

Product highlights:

- > Long service life
- > High functional reliability
- > Low maintenance
- > Smooth-moving piston
- > Compact design
- > Easy to service

Engineering
GREAT Solutions



Find out more

www.imi-precision.com



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. We list units for general purpose use and more specialised applications - precision regulators, items 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 webstore or call the team for rapid quotation and delivery.

Modular assembly



Unique plug-in yoke system








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 please contact us.

● Olympian Plus – Plug-in, Quick Change System

Combination filter/regulator & lubricator BL64, BL68 G1/2 & G1  Page 143	General purpose filters F64G, F68G G1/2 ... G1  Page 144	High efficiency oil removal filters F64H, F68H G1/2 ... G1  Page 145	High efficiency oil/oil vapour removal filters F64L G1/2  Page 146	Pressure regulators R64G, R68G G1/2 ... G1  Page 147	Filter/regulators B64G, B68G G1/2 ... G1  Page 148
Lubricators L64M, L68M G1/2 ... G1  Page 149	Soft start/dump valves P64F, P68F G1/2 ... G1  Page 150	Pressure relief valves V64H, V68H G1/2 ... G1  Page 151	Accessories  Page 152		

● Excelon® Plus – Modular System

Combination filter/regulator & lubricator BL84 G3/8 ... G1/2  Page 154	General purpose filters F84G G3/8 ... G1/2  Page 155	'Puraire'® high efficiency oil removal filters F84C G3/8 ... G1/2  Page 156	'Ultraire'® high efficiency oil vapour removal filters F84V G1/2  Page 157	Pressure regulators R84G G3/8 ... G1/2  Page 158	Filter/regulators B84G G3/8 ... G1/2  Page 159
Lubricators L84M G3/8 ... G1/2  Page 160	Shut-off valves T84T G3/8 ... G1/2  Page 161	Accessories  Page 162			

● Excelon® – Modular System

Combination filter/regulator & lubricator BL72, BL73, BL74 G1/4 ... G1/2  Page 163	General purpose filters F72G, F73G, F74G G1/4 ... G1/2  Page 164	High efficiency Oil removal filters F72C, F73C, F74H G1/4 ... G1/2  Page 165	High efficiency Oil vapour removal filters F72V, F74V G1/4 ... G1/2  Page 166	Pressure regulators R72G, R73G, R74G G1/4 ... G1/2  Page 167	Filter/regulators B72G, B73G, B74G G1/4 ... G1/2  Page 168
Lubricators L72M, L73M, L74M G1/4 ... G1/2  Page 169	Soft start/dump valves P72F, P74F G1/4 ... G1/2  Page 170	Pressure relief valves V72G, V74G G1/4 ... G1/2  Page 171	Accessories  Page 172		

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 please contact us.

● Miniature Series, General Purpose

<p>Filter/regulators and lubricators P1H G1/8, G1/4</p>  <p>Page 173</p>	<p>General purpose filter F07 G1/8, G1/4</p>  <p>Page 174</p>	<p>Puraire® oil removal filter F39 G1/8, G1/4</p>  <p>Page 175</p>	<p>Pressure regulators R07 G1/8, G1/4</p>  <p>Page 176</p>	<p>Filter/regulator B07 G1/8, G1/4</p>  <p>Page 177</p>	<p>Lubricators L07 G1/8, G1/4</p>  <p>Page 178</p>
<p>Pressure relief valve – diaphragm type V07 G1/8, G1/4</p>  <p>Page 179</p>					

● Large Capacity Series Units

<p>General purpose filters F18 G1 1/2 & 2"</p>  <p>Page 180</p>	<p>Pilot operated regulators 11-808, R18, 11-400 G1/4 ... G2</p>  <p>Page 181</p>
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● Special Purpose

<p>Pre-set regulator R16 G1/4</p>  <p>Page 183</p>	<p>Precision and instrument regulator 11-818, R27 G1/4</p>  <p>Page 184</p>
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● Accessories

<p>Gauges</p>  <p>Page 185</p>	<p>Auto drain</p>  <p>Page 185</p>	<p>Drip leg drain</p>  <p>Page 185</p>
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Units ready to use



Pre-assembled

Air preparation Box Sets

The IMI Norgren 'box set' concept gives 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
- > Metal bowls on Olympian unit offers greatest protection against contamination and contains an automatic drain valve for safe removal of contaminant (filter only)

Engineering
GREAT Solutions

Find out more
www.imi-precision.com



OLYMPIAN PLUS PLUG-IN SYSTEM

Combination filter/regulators and lubricator BL64, BL68 – 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

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures 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

BL64

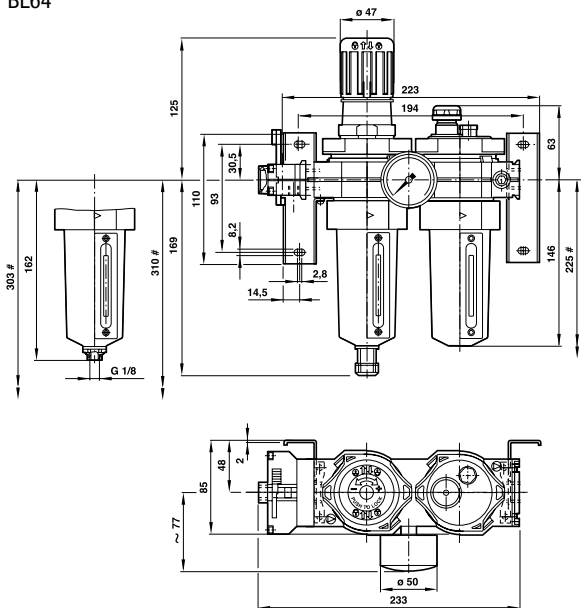


BL68

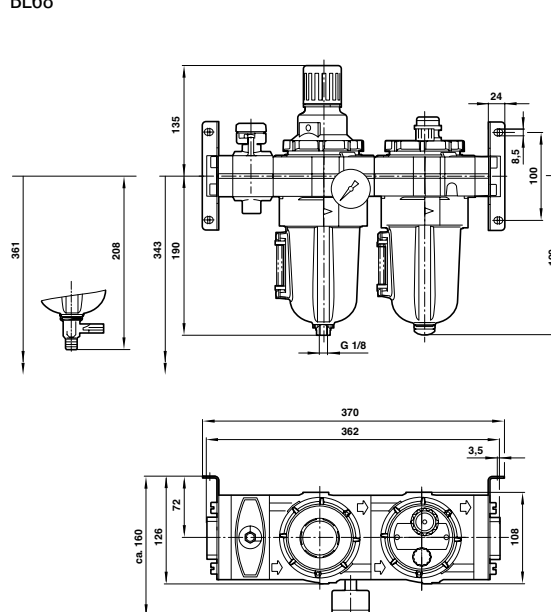


Dimensions

BL64



BL68



Minimum clearance required to remove bowl

Models

Boxed sets BL64 and BL68 with shut-off valve

Auto drain Model	Manual drain Model	Port size
BL64-401	BL64-421	G1/2
BL68-801	BL68-821	G1



Accessories

Tamper resistant kit



4355-51

Service Kit

Service kits

Auto drain

Manual drain



B64G-KITA40R & L64M-KIT

B68G-KITA40R & L68M-KIT

B64G-KITM40R & L64M0KIT

B68G-KITM40R & L68M-KIT

OLYMPIAN PLUS PLUG-IN SYSTEM

General purpose filters F64G, F68G – G1/2 ... G1

- 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

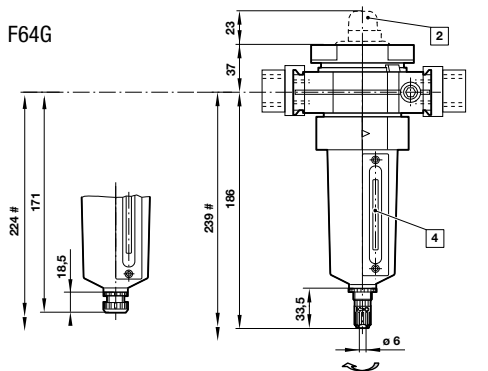
Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

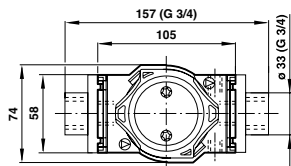
Dimensions

F64G

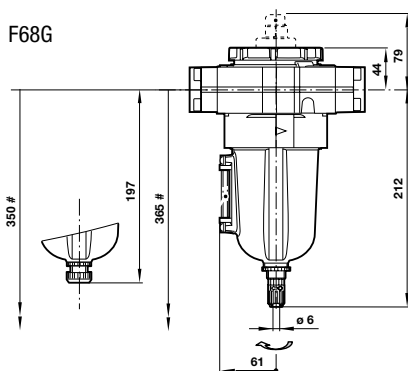


Manual drain

Auto drain

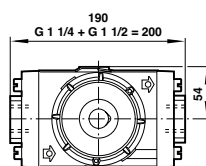


F68G



Manual drain

Auto drain



F64G



F68G



Minimum clearance required to remove bowl

2 Service indicator optional

4 Sight glass

Models

F64G series					Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Flow* (dm ³ /s)	Element (µm)					
		G1/2	75	40	74504-50	T64T-4GB-P1N	T40B1800		
F64G-6GN-AD3	F64G-6GN-MD3	G3/4	75	40	74504-50	T64T-6GB-P1N	T40B1800	F64G-KITA40	F64G-KITM40
F64G-NNN-AD3	F64G-NNN-MD3	without	75	40	-	-	-	F64G-KITA40	F64G-KITM40

F68G series					Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Flow* (dm ³ /s)	Element (µm)					
		G1	190	40	18-001-979	T68H-8GB-B2N	T40B2800		
F68G-NNN-AR3	F68G-NNN-MR3	without	190	40	-	-	-	F68G-KITA40	F68G-KITM40

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop.

** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

'Puraire'® high efficiency oil removal filters F64H, F68H – G1/2 ... 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

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F64H

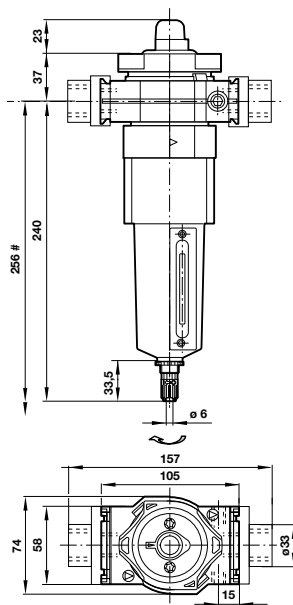


F68H

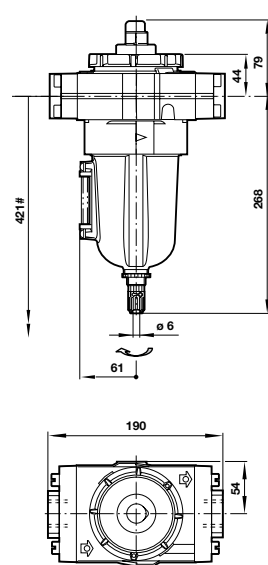


Dimensions

F64H Auto drain



F68H Auto drain



Minimum clearance required to remove bowl

Typical performance characteristics

Inlet pressure (bar)	Maximum recommended flow dm ³ /s*	
	F64H	F68H
1	11,2	24
3	19,3	41
5	24,9	53
6,3	28,0	60
7	29,5	63
9	33,5	72

* Maximum flow to maintain stated oil removal performance.

Models

F64H series	Auto drain Model	Port size	Flow* (dm ³ /s)	Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)	Auto drain
		G1/2	28				
F64H-4GD-AD0		G1/2	28	74504-50	T64T-4GB-P1N	T40B1800	F64H-KITA0C
F64H-NND-AD0		without	28	-	-	-	F64H-KITA0C

Accessories

Service Kit

F68H series	Auto drain Model	Port size	Flow* (dm ³ /s)	Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)	Auto drain
		G1	60				
F68H-8GD-AU0		G1	60	18-001-979	T68H-8GB-B2N	T40B2800	F68H-KITA0C
F68H-NND-AU0		without	60	-	-	-	F68H-KITA0C

* To maintain stated oil content at 6,3 inlet pressure. ** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

'Ultraire'[®] high efficiency oil/oil vapour removal filters F64L – G1/2

- F64L is a 'dual function' products incorporating an oil removal element (bottom) and an oil vapour removal element (top)
- 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 when contaminated
- Carbon pack service life 1000 hours at 21°C

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:

17 bar

Remaining oil content:

0,003 mg/m³ at 21°C

Ambient temperature:

-20°C ... +65°C

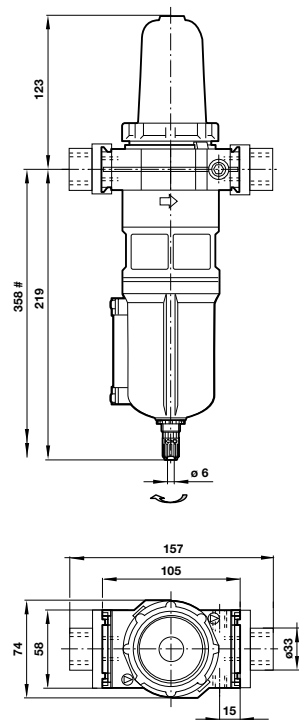
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F64L



Dimensions

F64L Auto drain



Minimum clearance required to remove bowl

Typical performance characteristics

Inlet pressure (bar)	Maximum recommended flow dm ³ /s*
1	4,4
3	7,6
5	9,8
6,3	11,0
7	11,5
9	13,2

* Maximum flow to maintain stated oil removal performance.

Models

Accessories

Service Kit

F64L series			Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)	Auto drain
Auto drain Model	Port size	Flow* (dm ³ /s)				
	G1/2	11				
F64L-4GN-ARO	G1/2	11	74504-50	T64T-4GB-P1N	T40B1800	F64L-KITA0V
F64L-NNN-ARO	without	11	-	-	-	F64L-KITA0V

* To maintain stated oil at 6,3 bar inlet pressure.

** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

Pressure regulators R64G, R68G – G1/2 ... G1

- Diaphragm and balanced valve design ensure good regulation and flow characteristics
- Non-rising adjusting knob has snap-action lock

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:

R64G: 17 bar

R68G: 20 bar

Gauge ports:

Rc1/8

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures 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

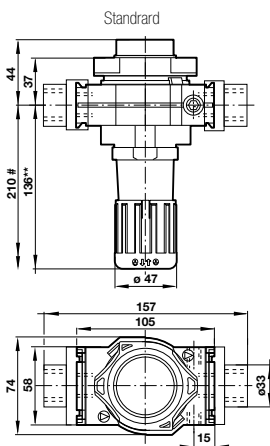


R68G

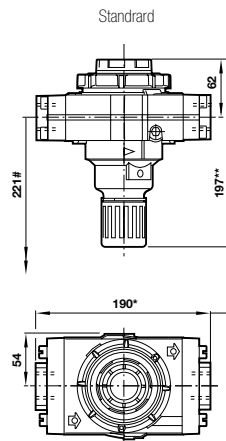


Dimensions

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

Accessories

Service Kit

R64G series				Wall mounting bracket	Gauge (0...10bar)	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit	
Model	Port size	Pressure range (bar)	Flow* (dm³/s)						
	G1/2	0,3 ... 10	120						
R64G-4GK-RMN	G1/2	0,3 ... 10	120	74504-50	18-015-013	T64T-4GB-P1N	T40B1800	4355-51	R64G-KITR
R64G-6GK-RMN	G3/4	0,3 ... 10	120	74504-50	18-015-013	T64T-6GB-P1N	T40B1800	4355-51	R64G-KITR
R64G-NNK-RMN	without	0,3 ... 10	120	–	18-015-013	–	–	4355-51	R64G-KITR

R68G series				Wall mounting bracket	Gauge (0...10bar)	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit	
Model	Port size	Pressure range (bar)	Flow* (dm³/s)						
	G1	0,4 ... 8	170						
R68G-8GK-RLN	G1	0,4 ... 8	170	18-001-979	18-015-013	T68H-8GB-B2N	T40B2800	4355-51	R68G-KITR
R68G-NNK-RLN	without	0,4 ... 8	170	–	18-015-013	–	–	4355-51	R68G-KITR

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar.

** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

Filter/regulators B64G, B68G – G1/2 ... G1

- High efficiency water removal
- Good flow and 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

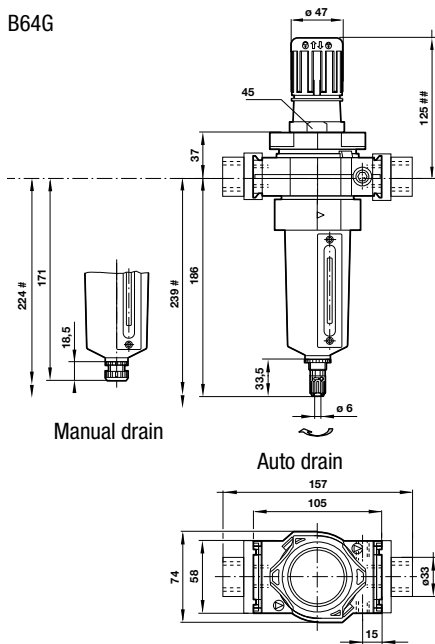
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Pressure range:
B64G: 0,3 ... 10 bar
B68G: 0,4 ... 8 bar

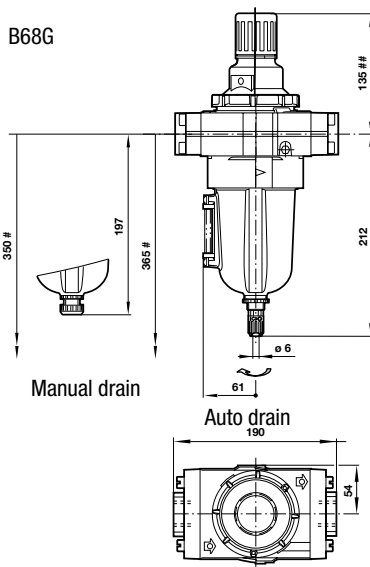
Note: Outlet pressure can be adjusted in excess of and also less than those listed

Dimensions

B64G



B68G



Minimum clearance required to remove bowl
Reduces by 4 mm with knob in locked position

B64G



B68G



Models

B64G series		Port size	Pressure range (bar)	Flow* (dm³/s)	Element (µm)
Auto drain Model	Manual drain Model				
		G1/2	0,3 ... 10	106	40
		G3/4	0,3 ... 10	106	40
		without	0,3 ... 10	106	40

B68G series		Port size	Pressure range (bar)	Flow* (dm³/s)	Element (µm)
Auto drain Model	Manual drain Model				
		G1	0,4 ... 8	240	40
		without	0,4 ... 8	240	40

Accessories

Wall mounting bracket	Gauge (0 ... 10bar)	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit
74504-50	18-015-013	T64T-4GB-P1N	T40B1800	4355-51
74504-50	18-015-013	T64T-6GB-P1N	T40B1800	4355-51
-	18-015-013	-	-	4355-51

Service Kit

Auto drain	Manual drain
B64G-KITA40R	B64G-KITM40R
B64G-KITA40R	B64G-KITM40R
B64G-KITA40R	B64G-KITM40R

Wall mounting bracket	Gauge (0 ... 10bar)	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit	Auto drain	Manual drain
18-001-979	18-015-013	T68H-8GB-B2N	T40B2800	4355-51	B68G-KITA40R	B68G-KITM40R
-	18-015-013	-	-	4355-51	B68G-KITA40R	B68G-KITM40R

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar.
** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

Lubricators L64M, L68M – G1/2 ... G1

- 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:

L64M: 1,5 dm³/s

L68M: 6 dm³/s

Bowl Capacity:

L64M: 0,2 l

L68M: 0,5 l

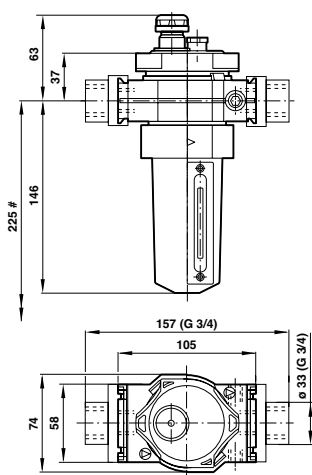
Ambient temperature:

-20°C ... +80°C

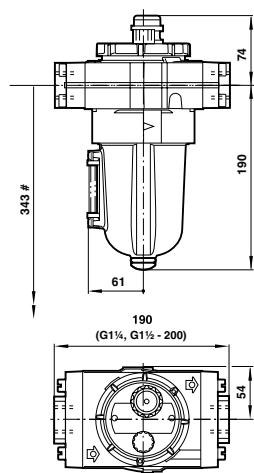
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Dimensions

L64M



L68M



Minimum clearance required to remove bowl



PRODUCT 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

L64M




L68M



Models

Accessories

Service Kit

L64M series				Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)		
Model	Type	Port size	Flow* (dm ³ /s)					
	L64M-4GP-EDN	Micro-fog	G1/2	72	74504-50	T64T-4GB-P1N	T40B1800	L64M-KIT
	L64M-6GP-EDN	Micro-fog	G3/4	72	74504-50	T64T-6GB-P1N	T40B1800	L64M-KIT
	L64M-NNP-EDN	Micro-fog	without	72	-	-	-	L64M-KIT

L68M series				Wall mounting bracket	3/2 Shut-off valve**	Silencer (shut-off valve)		
Model	Type	Port size	Flow* (dm ³ /s)					
	L68M-8GP-ERN	Micro-fog	G1	175	18-001-979	T68H-8GB-B2N	T40B2800	L68M-KIT
	L68M-NNP-ERN	Micro-fog	without	175	-	-	-	L68M-KIT

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop.

** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

Soft start dump valve P64F & P68F – G1/2 ... G1

- Assists machine designers in complying with the European Machineries 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)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Air pilot port:

P64F: Rc1/4 P68F: G1/4

Exhaust port:

P64F: G1/2 P68F: G1

Maximum flow:

P64F: 57 dm³/s P68F: 147 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

P64F



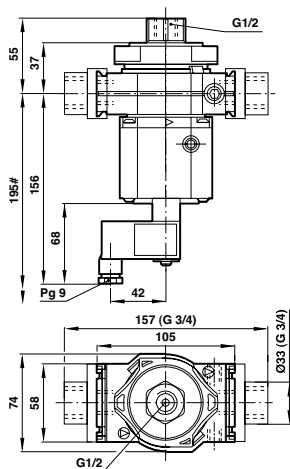
P68F



Dimensions

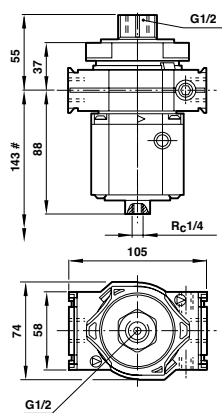
P64F

Solenoid

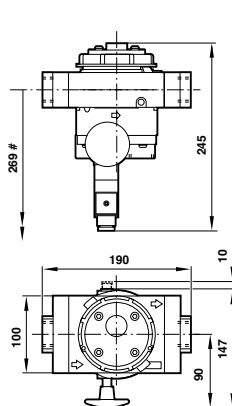


P64F

Air Pilot



P68F



Minimum clearance required to remove unit

Models

Accessories

P64F & P68F series – 24V d.c.		Port size	Wall mounting bracket	Silencer (dump valve)	3/2 Shut-off valve*	Silencer (shut-off valve)	Basic solenoid plug
Solenoid pilot operated Model	Air pilot operated Model						
		G1/2					
P64F-4GC-PFN	P64F-4GA-NNN	G1/2	74504-50	MB004B	T64T-4GB-P1N	T40B1800	0657868000000000
		Without	–		–	–	
P64F-NNC-PFN	P64F-NNA-NNN	Without	–	MB004B	–	–	0657868000000000
		G1					
P68F-8GC-PFN	P68F-8GB-NNN	G1	18-001-979	MB008B	T68H-8GB-B2N	T40B2800	0657868000000000
		Without	–		–	–	
P68F-NGC-PFN	P68F-NGB-NNN	Without	–	MB008B	–	–	0657868000000000

* Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer to page 152.

OLYMPIAN PLUS PLUG-IN SYSTEM

Pressure relief valves V64H, V68H – G1/2 ... G1

- 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:

V64H: G1/2

V68H: G1

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Relief pressure adjustment range:

V64H - ... - RMN: 1 ... 10 bar

V68H - ... - RMN: 0,3 ... 10 bar

V64H

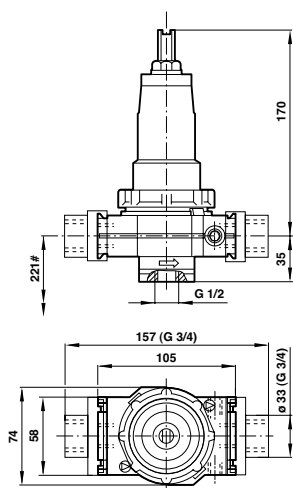


V68H

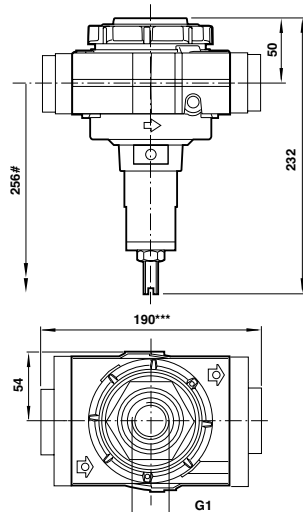


Dimensions

V64H



V68H









*** For 1 1/4 and 1 1/2 ported yokes add 10 mm
Minimum clearance required to remove unit from yoke

Models

Accessories

Service Kit

V64H series			Wall mounting bracket	Gauge (0 ... 10bar)	Silencer (relief valve)	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit	Service Kit
Model	Port size	Pressure range (bar)							
	G1/2	1 ... 10	74504-50						
V64H-4GD-RMN	G1/2	1 ... 10	74504-50	18-015-013	MB004B	T64T-4GB-P1N	T40B1800	1581-90	V64H-KIT
	Without	1 ... 10	-	18-015-013	MB004B	-	-	1581-90	V64H-KIT
V64H-NND-RMN	Without	1 ... 10	-	18-015-013	MB004B	-	-	1581-90	V64H-KIT
V68H series			Wall mounting bracket	Gauge (0 ... 10bar)	Silencer (relief valve)	3/2 Shut-off valve**	Silencer (shut-off valve)	Tamper resistant kit	Service Kit
Model	Port size	Pressure range (bar)							
	G1	0,3 ... 10	18-001-979						
V68H-8GD-RMN	G1	0,3 ... 10	18-001-979	18-015-013	MB008B	T68H-8GB-B2N	T40B2800	1581-90	V68H-KIT
	Without	0,3 ... 10	-	18-015-013	MB008B	-	-	1581-90	V68H-KIT
V68H-NND-RMN	Without	0,3 ... 10	-	18-015-013	MB008B	-	-	1581-90	V68H-KIT

** Threaded exhaust port.

For other styles of mounting bracket and accessories, please refer next page.

OLYMPIAN PLUS PLUG-IN SYSTEM

Accessories

YOKES

- When installed, enables Olympian basic units to be 'plugged in' or removed without disturbing connecting pipework



YOKE CONNECTOR KIT

- Allows quick and easy connection of one Olympian Plus product/accessory to another



END CONNECTOR

- Provides a threaded end to an assembly



SHUT-OFF VALVE

- 3 port/2 position
- Easy to operate
- Lockable in the 'closed' position



PORTING BLOCKS

- Provides 3 auxiliary air outlets



Models

Single Unit Model	Double Unit 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
74785-98*	–	68	without

Yokes may be installed in a pipe system in advance of the selection or fitment of the basic units.

* For use with porting blocks & end connector kits.

Models

Model	Series
74503-51	64
18-026-987	68

Models

Model	Series	Port size
74505-50	64	G1/2
74505-53	64	G3/4
5524-55	68	G3/4
5524-52	68	G1
5523-52	68	G1 1/4
5523-93	68	G1 1/2

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.

Models

Model	Series	Top port	Side port
74507-50	64	G3/8	G1/4

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. When placed as first or last component of a boxed set, an additional end connector is necessary.

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Meet Excelon® Plus: the next generation of Air Preparation offering exceptional performance. Designed with safety in mind, it offers built in tamper-proof technology and a unique double safety lock on the bowl. Quality construction that's robust yet lighter and smaller. It all makes Excelon® Plus safer, simpler and faster to service, keeping your machines moving safely and efficiently.

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Engineering

EXCELON® PLUS MODULAR SYSTEM

Combination filter/regulators and lubricators BL84 – G3/8 ... G1/2

- Tamper proof shut off valve for safe isolation of supply
- General purpose filter removing condensate and particle contamination
- Tamper proof 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
- Integrated pressure gauge for constant monitoring of output pressure

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

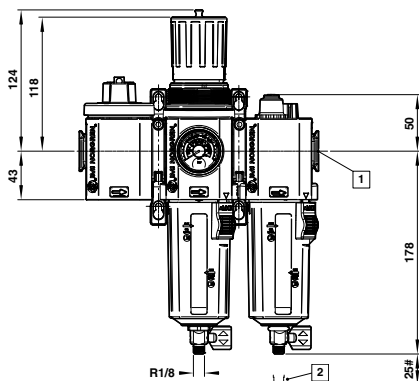
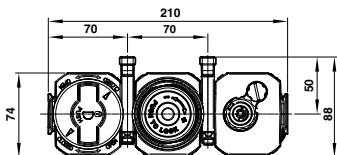
Ambient temperature:
-20°C ... +60°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Pressure range:
0,3 ... 10 bar
Note: Outlet pressure can be adjusted in excess of and also less than those listed

BL84



Dimensions



Minimum clearance required to remove bowl

Models

Accessories

Service Kit

including shut-off valve, gauge and mounting bracket						Integral Gauge (0 ... 10 bar)	Element Kit
Auto drain Model	Manual drain Model	Port size	Element (µm)	Type	Bowl		
		G3/8	40	Micro Fog	GT*		840073-01KIT
BL84-301G	BL84-321G	G3/8	40	Micro Fog	GT*	840073-01KIT	840038-51KIT
BL84-401G	BL84-421G	G1/2	40	Micro Fog	GT*	840073-01KIT	840038-51KIT

* GT= Guarded transparent bowl.

EXCELON® PLUS MODULAR SYSTEM

General purpose filters F84G – G3/8 ... G1/2

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- Double Safety lock on bowl
- New Filter Maintenance system

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

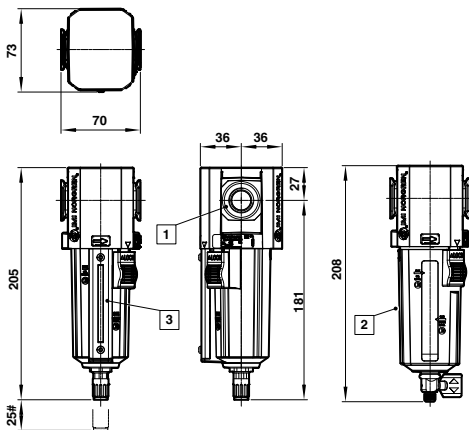
Ambient temperature:
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F84G








Dimensions



Minimum clearance required to remove bowl

Models

F84G series						Accessories			Service Kit
Auto drain Model	Manual drain Model	Port size	Flow* (dm³/s)	Element (µm)	Bowl	Wall mounting bracket	Quikclamp	Quikclamp with bracket	Element
		G3/8	66	40	GT**				840038-51KIT
F84G-4GN-AP3	F84G-4GN-QP3	G1/2	83	40	GT**	840024-50KIT	840014-51KIT	840014-52KIT	840038-51KIT

** GT= Guarded 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 162.
NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® PLUS MODULAR SYSTEM

'Puraire'® high efficiency oil removal filters F84C – G3/8 ... G1/2

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- High efficiency oil and particle removal
- Double Safety lock on bowl
- Service indicator standard

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

Remaining oil content:
0,01 mg/m³ at +21°C

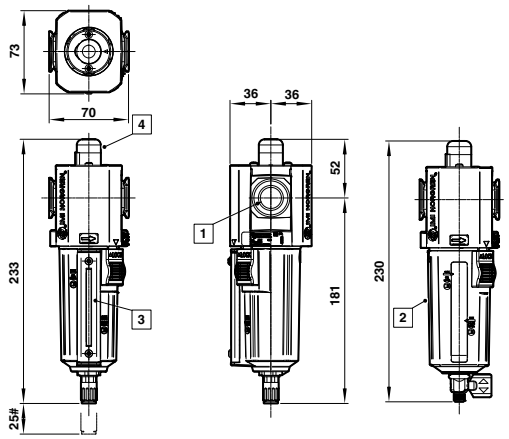
Particle removal:
To 0,01 µm

Ambient temperature:
-20°C ... +60°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F84C

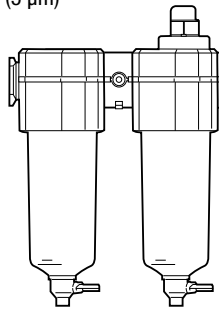


Dimensions



Minimum clearance required to remove bowl

High efficiency filters must be protected upstream by an oil removal filter (5 µm)



Typical performance characteristics

Inlet pressure (bar)	Maximum flow (dm³/s)*
1	11,2
3	19,3
5	24,9
6,3	28,0
7	29,5
9	33,5

* Maximum flow to maintain stated oil removal performance.

Models

F84C series	Port size	Flow* (dm³/s)	Bowl
F84C-3GD-AP0	G3/8	16	GT**
F84C-4GD-AP0	G1/2	28	GT**

Accessories

Wall mounting bracket	Quikclamp	Quikclamp with bracket
840024-50KIT	840014-51KIT	840014-52KIT
840024-50KIT	840014-51KIT	840014-52KIT

Service Kit

Element Kit
840044-50KIT
840044-50KIT

** GT= Guarded 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 162.
NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® PLUS MODULAR SYSTEM

'Ultraire'® high efficiency oil vapour removal filters F84V – G1/2

- Excelon® Plus design allows inline or modular installation with other Excelon® Plus products
- Adsorbing type activated carbon element removes oil vapours and most hydrocarbon odours
- Double Safety lock on bowl
- Carbon pack service life 1000 hours at 21°C

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:
10 bar

Remaining oil content:
0,003 mg/m³ max. at +21°C

Ambient temperature:

Transparent bowl:

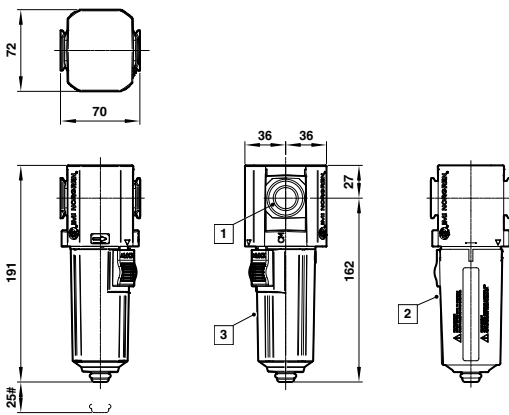
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F84V



Dimensions



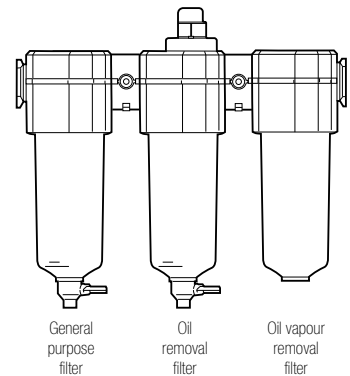
Minimum clearance required to remove bowl

Typical performance characteristics

Inlet pressure (bar)	Maximum flow (dm ³ /s)*
	F84V
2,5	8,7
4	10,7
6,3	13,3
8	15,6
10	17,6

* Maximum flow to maintain stated oil removal performance.





Oil vapour removal filters must be protected upstream by an oil removal filter. A typical assembly:



Models

Accessories

Service Kit

F84V series				Wall mounting bracket	Quikclamp	Quikclamp with bracket	Element Kit
Model	Port size	Flow* (dm ³ /s)	Bowl				
	G1/2	13	GT**				
F84V-4GN-EPA	G1/2	13	GT**	840024-50KIT	840014-51KIT	840014-52KIT	840041-50KIT

** GT= Guarded 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 162.

NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® PLUS MODULAR SYSTEM

Pressure regulators R84G – G3/8 ... G1/2

- Excelon® Plus 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 proof as standard
- Integrated Gauge

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

Ambient temperature:
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

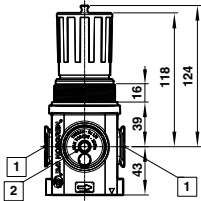
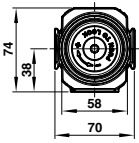
Pressure range:
0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

R84G









Dimensions



Models

Accessories

R84G series				Panel mounting ring	Neck Mounting bracket (Including Panel mounting ring)	Quikclamp	Quikclamp with bracket	Integral Gauge (0 ... 10 bar)
Model	Port size	Pressure range (bar)	Flow* (dm³/s)					
	G3/8	0,3 ... 10	98					
R84G-3GK-RMG	G3/8	0,3 ... 10	98	840048-89KIT	840068-51KIT	840014-51KIT	840014-52KIT	840073-01KIT
R84G-4GK-RMG	G1/2	0,3 ... 10	105	840048-89KIT	840068-51KIT	840014-51KIT	840014-52KIT	840073-01KIT

* 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 162.
NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® PLUS MODULAR SYSTEM

Filter/regulators B84G – G3/8 ... G1/2

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- High efficiency water and particle removal
- Double Safety lock on bowl
- Push to lock adjusting knob with tamper proof as standard
- Integrated Gauge

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

Pressure range:
0,3 ... 10 bar

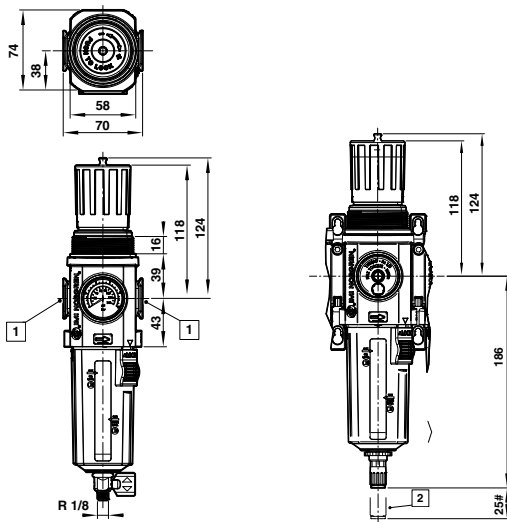
Ambient temperature:
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

B84G



Dimensions



Minimum clearance required to remove bowl

Models

B84G series							Accessories			Service Kit		
Auto drain Model	Manual drain Model	Port size	Pressure range (bar)	Flow* (dm³/s)	Element (µm)	Bowl	Panel mounting ring	Neck Mounting bracket (Including Panel mounting ring)	Quikclamp	Quikclamp with bracket	Integral Gauge (0 ... 10 bar)	Element Kit
		G3/8	0,3 ... 10	77	40	GT**						
B84G-3GK-AP3-RMG	B84G-3GK-QP3-RMG	G3/8	0,3 ... 10	77	40	GT**	840048-89KIT	840068-51KIT	840014-51KIT	840014-52KIT	840073-01KIT	840038-51KIT
		G1/2	0,3 ... 10	100	40	GT**						
B84G-4GK-AP3-RMG	B84G-4GK-QP3-RMG	G1/2	0,3 ... 10	100	40	GT**	840048-89KIT	840068-51KIT	840014-51KIT	840014-52KIT	840073-01KIT	840038-51KIT

** GT = Guarded 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 162.

NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® PLUS MODULAR SYSTEM

Lubricators L84M – G3/8 ... G1/2

- Excelon® Plus 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
- Double Safety lock on bowl

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

Start point:
0,94 dm³/s
Minimum flow required for lubricator operation at 6,3 bar inlet pressure

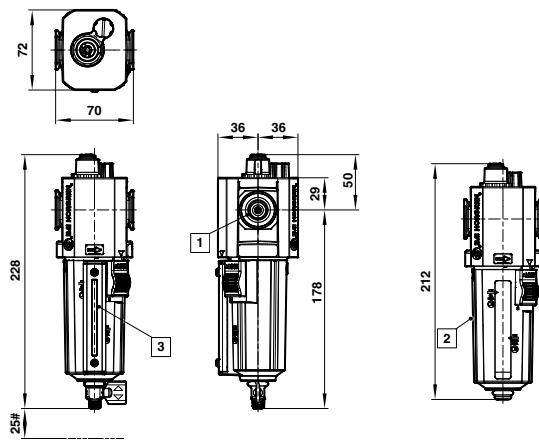
Ambient temperature:
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

L84M






Dimensions



Minimum clearance required to remove bowl

Models

L84M series					Wall mounting bracket	Quikclamp	Quikclamp with bracket
Model	Type	Port size	Flow* (dm ³ /s)	Bowl			
L84M-3GP-EPN	Micro fog	G3/8	50	GT**			
L84M-4GP-EPN	Micro fog	G1/2	73	GT**	840024-50KIT	840014-51K	840014-52KIT

** GT= Guarded 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 162.

NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

Accessories

EXCELON® PLUS MODULAR SYSTEM

Shut-off valves T84T – G3/8 ... G1/2

- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- Rotating safety Shut off
- Tamper proof padlock feature on operating knob
- Full flow device

Technical Data

Medium:
Compressed air only

Maximum inlet pressure:
10 bar

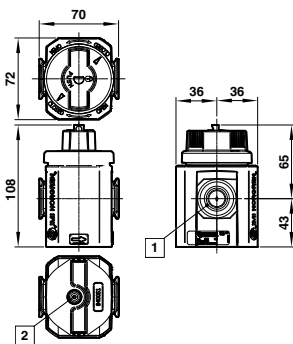
Ambient temperature:
-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

T84T









Dimensions



Models

Accessories

T84T series				Wall mounting bracket	Quikclamp	Quikclamp with bracket	Silencer	Plastic silencer
Model	Port Size	Function	Exhaust Port					
	G3/8	3/2	G1/4					
T84T-3GA-B1N	G3/8	3/2	G1/4	840024-50KIT	840014-51KIT	840014-52KIT	T40C2800	0146000000000000
T84T-4GA-B1N	G1/2	3/2	G1/4	840024-50KIT	840014-51KIT	840014-52KIT	T40C2800	0146000000000000

For other styles of mounting bracket and accessories, please refer to page 162.
NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® PLUS MODULAR SYSTEM

Accessories

SHUT-OFF VALVES

- Ideal for isolating sub-systems not in use
- Easy to operate – quarter turn device
- Lockable in the ‘closed’ position



WALL MOUNTING BRACKET

- Provides secure wall mounting for individual Excelon® Plus products



QUIKCLAMP

- Allows easy connection of one Excelon® Plus unit to another
- Uniquely, connected products can be rotated in 90° increments



QUIKCLAMPS AND WALL BRACKETS

- Allows easy connection of one Excelon® Plus unit to another
- Uniquely, connected products can be rotated in 90° increments
- Secure mounting to a wall, panel or machine surface



FULL FLOW MANIFOLD BLOCK

- Provides a manifolding capability for up to 3 products, with G3/4 ports
- Ideal for right-angled piping



PRESSURE SENSING BLOCK

- Provides 3 G1/4 auxiliary air outlets
- Ideal for adding a pressure switch to allow pressure sensing
- When placed between a filter-regulator and lubricator allows branching off to systems requiring a non-lubricated supply




PANEL MOUNTING RING

- Allows bonnets with panel mounting thread to be directly mounted



Models

Model Accessories	3/2 Shut-off valve*	Wall mounting bracket	Quikclamp	Quikclamps and wall brackets	Full Flow Manifold Block	Pressure Sensing Block	Panel Mounting Ring
							
	T84T-4GA-B1N	840024-50KIT	840014-51KIT	840014-52KIT	840028-53KIT	840016-51KIT	840048-89KIT

* Threaded exhaust port.

NOTE: End connectors required for use with quikclamps if directly mounting to pipework / fittings – contact us for further details.

EXCELON® MODULAR SYSTEM

Combination filter/regulators and lubricators BL72, BL73, BL74 – 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

Air supply must be dry enough to avoid ice formation at temperatures 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



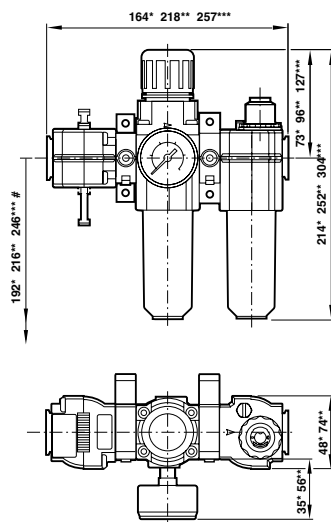
BL73



BL74



Dimensions












* BL72, ** BL73, *** BL74
Minimum clearance required to remove bowl

Models

Accessories

Service Kit

Boxed sets BL72, BL73 and BL74 with shut-off valve, gauge and mounting bracket				Tamper resistant kit	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Bowl			
		G1/4	T			
BL72-201GA	BL72-221G	G1/4	T	4255-51	B72G-KITA40R & L72M-KIT	B72G-KITM40R & L72M-KIT
		G3/8	T	4455-51	B73G-KITA40R & L73M-KIT	B73G-KITM40R & L73M-KIT
BL73-301G	BL73-321G	G3/8	T	4455-51	B73G-KITA40R & L73M-KIT	B73G-KITM40R & L73M-KIT
		G1/2	GT**	4355-51	B74G-KITA40R & L74M-KIT	B74G-KITM40R & L74M-KIT
BL74-401G	BL74-421G	G1/2	GT**	4355-51	B74G-KITA40R & L74M-KIT	B74G-KITM40R & L74M-KIT

** GT= Guarded transparent bowl, T= Transparent bowl.

EXCELON® MODULAR SYSTEM

General purpose filters F72G, F73G, F74G – G1/4 ... G1/2

- 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

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F72G



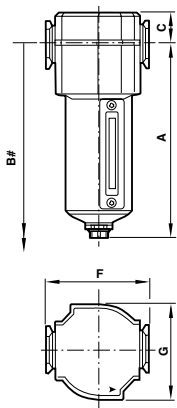
F73G



F74G



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	74

Minimum clearance required to remove bowl

Models

Accessories

Service Kit

F72G series						Wall mounting bracket	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Flow* (dm³/s)	Element (µm)	Bowl			
		G1/4	28	40	T			
F72G-2GN-AL3	F72G-2GN-QT3	G1/4	28	40	T	4224-50	F72G-KITA40	F72G-KITM40
F73G series						Wall mounting bracket	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Flow* (dm³/s)	Element (µm)	Bowl			
		G3/8	35	40	T			
F73G-3GN-AT3	F73G-3GN-QT3	G3/8	35	40	T	4424-50	F73G-KITA40	F73G-KITM40
F74G series						Wall mounting bracket	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Flow* (dm³/s)	Element (µm)	Bowl			
		G1/2	83	40	GT			
F74G-4GN-AP3	F74G-4GN-QP3	G1/2	83	40	GT	4324-50	F74G-KITA40	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 172.

EXCELON® MODULAR SYSTEM

'Puraire'® high efficiency oil removal filters F72C, F73C, 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 F72C with transparent bowl and auto drain

Remaining oil content:

0,01 mg/m³ at +21°C

Particle removal:

To 0,01 µm

Ambient temperature:

-34°C ... +50°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F72C



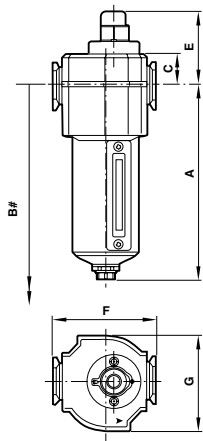
F73C



F74H



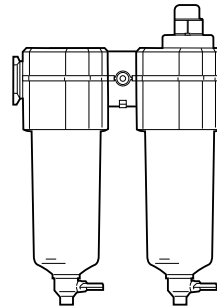
Dimensions



Minimum clearance required to remove bowl

Series	Drain	A	B	C	E	F	G
F72C	Auto	141	192	19	53	50	48
F73C	Auto	147	207	25	60	68	62
F74H	Auto	214	267	25	60	80	74

High efficiency filters must be protected upstream by an oil removal filter (5 µm)





Typical performance characteristics

Inlet pressure (bar)	Maximum recommended flow (dm ³ /s)		
	F72C	F73C	F74H
1	1,8	4,0	11,2
3	3,1	6,9	19,3
5	4,0	8,9	24,9
6,3	4,5	10,0	28,0
7	4,7	10,5	29,5
9	5,4	12,0	33,5

* Maximum recommended flow to maintain stated oil removal performance.

Models

Auto drain				Wall mounting bracket	Service Kit
Model	Port size	Flow* (dm ³ /s)	Bowl		
					
F72C-2GD-AL0	G1/4	4,5	T	4224-50	F72C-KITAOC
F73C-3GD-ATO	G3/8	10	T	4424-50	F73C-KITAOC
F74H-4GD-AP0	G1/2	28	GT	4324-50	F74H-KITAOC

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 172.

EXCELON® MODULAR SYSTEM

'Ultraire'® high efficiency oil vapour removal filters F72V, F74V – G1/4 ... G1/2

- 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 when contaminated
- Carbon pack service life 1000 hours at 21°C

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:

F72V: 10 bar

F74V: 17 bar

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)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

F72V

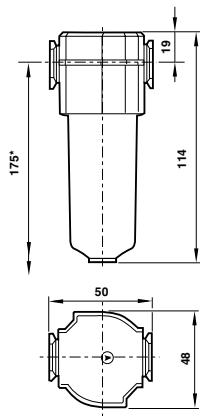


F74V

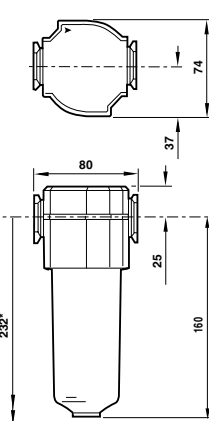


Dimensions

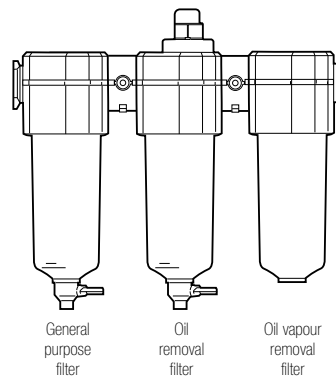
F72V



F74V



Oil vapour removal filters must be protected upstream by an oil removal filter. A typical assembly:









Minimum clearance required to remove bowl

Models

Accessories

Service Kit

F72V series				Wall mounting bracket	Service Kit
Model	Port size	Flow* (dm ³ /s)	Bowl		
	G1/4	1,6	T		
F72V-2GN-ETC	G1/4	1,6	T	4224-50	F72V-KITA0V

F74V series				Wall mounting bracket	Service Kit
Model	Port size	Flow* (dm ³ /s)	Bowl		
	G1/2	13	M		
F74V-4GN-EMA	G1/2	13	M	4324-50	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 172.

Typical performance characteristics

Inlet pressure (bar)	Maximum recommended flow (dm ³ /s)	
	F72V	F74V
2,5	1,0	8,7
4	1,3	10,7
6,3	1,6	13,3
8	1,8	15,6
10	2,0	17,6

* Maximum recommended flow to maintain stated oil removal performance.

EXCELON® MODULAR SYSTEM

Pressure regulators R72G, R73G, R74G – G1/4 ... G1/2

- 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:

R72G: -34°C ... +65°C

R73G & R74G: -34°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Pressure range:

0,3 ... 10 bar (Knob)

Note: Outlet pressure can be adjusted in excess of and also less than those listed

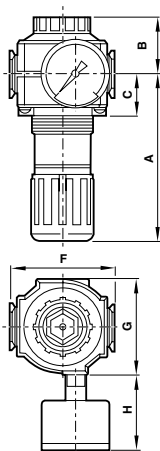
R72G



R73G & R74G



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

Accessories

Service Kit

R72G series				Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10bar)	Tamper resistant kit	
Model	Port size	Pressure range (bar)	Flow* (dm³/s)					
	G1/4	0,3 ... 10	33					R72G-KITR
R72G-2GK-RMN	G1/4	0,3 ... 10	33	4224-50	74316-50	18-015-989	4255-51	
R73G series				Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10bar)	Tamper resistant kit	
Model	Port size	Pressure range (bar)	Flow* (dm³/s)					
	G3/8	0,3 ... 10	60					R73G-KITR
R73G-3GK-RMN	G3/8	0,3 ... 10	60	4424-50	4461-50	18-015-013	4455-51	
R74G series				Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10bar)	Tamper resistant kit	
Model	Port size	Pressure range (bar)	Flow* (dm³/s)					
	G1/2	0,3 ... 10	105					R74G-KITR
R74G-4GK-RMN	G1/2	0,3 ... 10	105	4324-50	4368-51	18-015-013	4355-51	

* 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 172.

EXCELON® MODULAR SYSTEM

Filter/regulators B72G, B73G, B74G – G1/4 ... G1/2

- 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: Polycarbonate and Guarded Polycarbonate bowl

Pressure range:
0,3 ... 10 bar - B72
0,7 ... 17 bar - B73, B74

Gauge ports:
Rc1/8

Ambient temperature:
-34°C ... +50°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

B72G



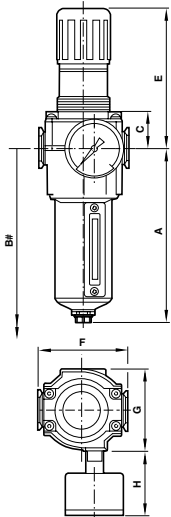
B73G



B74G



Dimensions



Minimum clearance required to remove bowl

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

Accessories

Service Kit

B72G series							Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10 bar)	Tamper resistant kit	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Pressure range (bar)	Flow* (dm³/s)	Element (µm)	Bowl						
		G1/4	0,3 ... 10	38	40	T						
B72G-2GK-AL3-RMN	B72G-2GK-QT3-RMN	G1/4	0,3 ... 10	38	40	T	4224-50	74316-50	18-015-989	4255-51	B72G-KITA40R	B72G-KITM40R

B73G series							Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10bar)	Tamper resistant kit	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Pressure range (bar)	Flow* (dm³/s)	Element (µm)	Bowl						
		G3/8	0,3 ... 10	50	40	T						
B73G-3GK-AT3-RMN	B73G-3GK-QT3-RMN	G3/8	0,3 ... 10	50	40	T	4424-50	4461-50	18-015-013	4455-51	B73G-KITA40R	B73G-KITM40R

B74G series							Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10bar)	Tamper resistant kit	Auto drain	Manual drain
Auto drain Model	Manual drain Model	Port size	Pressure range (bar)	Flow* (dm³/s)	Element (µm)	Bowl						
		G1/2	0,3 ... 10	100	40	GT						
B74G-4GK-AP3-RMN	B74G-4GK-QP3-RMN	G1/2	0,3 ... 10	100	40	GT	4324-50	4368-51	18-015-013	4355-51	B74G-KITA40R	B74G-KITM40R

* 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 172.

GT = Guarded transparent bowl, T = Transparent bowl.

EXCELON® MODULAR SYSTEM

Lubricators L72M, L73M, L74M – G1/4 ... G1/2

- 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:

L72M: 0,05 l

L73M: 0,10 l

L74M: 0,20 l

Ambient temperature:

-34°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

L72M



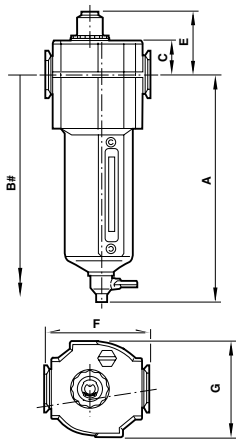
L73M



L74M



Dimensions



Series	A	B	C	E	F	G
72	110	191	19	41	50	48
73	156	255	25	46	68	62
74	177	276	25	46	80	74

Minimum clearance required to remove bowl



PRODUCT 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

L72M series					Wall mounting bracket	Auto drain
Auto drain Model	Type	Port size	Flow* (dm ³ /s)	Bowl		
	Micro-fog	G1/4	24	T		
L72M-2GP-ETN	Micro-fog	G1/4	24	T	4224-50	L72M-KIT

L73M series					Wall mounting bracket	Auto drain
Auto drain Model	Type	Port size	Flow* (dm ³ /s)	Bowl		
	Micro-fog	G3/8	38	T		
L73M-3GP-ETN	Micro-fog	G3/8	38	T	4424-50	L73M-KIT

L74M series					Wall mounting bracket	Auto drain
Auto drain Model	Type	Port size	Flow* (dm ³ /s)	Bowl		
	Micro-fog	G1/2	73	GT		
L74M-4GP-QPN	Micro-fog	G1/2	73	GT	4324-50	L74M-KIT

* 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 172.

GT= Guarded transparent bowl, T= Transparent bowl.

EXCELON® MODULAR SYSTEM

Soft start/dump valves P72F, P74F – G1/4 ... G1/2

- Assists machine designers in complying with the European Machineries 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:

P72F: -20°C ... +65°C

P74F: -20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures 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

P72F

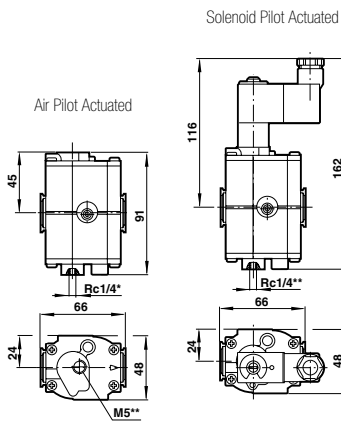


P74F

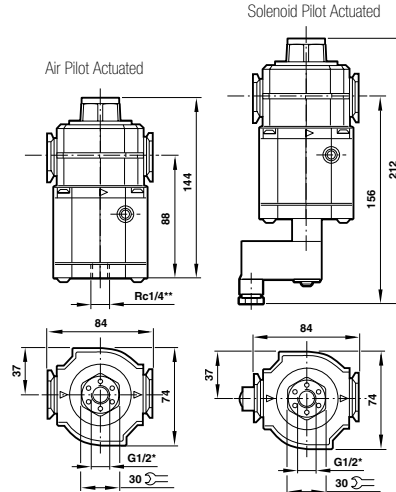


Dimensions

P72F











P74F



* Exhaust port
** Pilot port

Models

P72F series - 24V d.c.			Accessories	
Solenoid pilot operated Model	Air pilot operated Model	Port size	Silencer	Basic solenoid plug
		G1/4		
P72F-2GC-PFN	P72F-2GA-NNN	G1/4	MB002B	0657868000000000
P74F series - 24V d.c.			Accessories	
Solenoid pilot operated Model	Air pilot operated Model	Port size	Silencer	Basic solenoid plug
		G1/2		
P74F-4GC-PFN	P74F-4GA-NNN	G1/2	MB004B	0657868000000000

For mounting bracket and accessories, please refer to page 172.

EXCELON® MODULAR SYSTEM

Pressure relief valves V72G, V74G – G1/4 ... G1/2

- 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:
V72G: Rc1/4
V74G: G1/2

Ambient temperature:
V72G: -34°C ... +65°C
V74G: -34°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Relief pressure adjustment range:
0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed

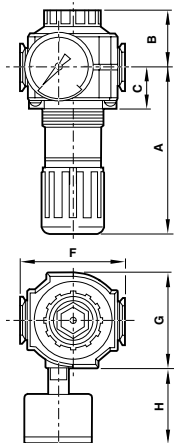
V72G



V74G













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

Accessories

V72G series		Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10 bar)	Tamper resistant kit	Silencer
Model	Port size					
						
V72G-2GK-NMN	G1/4	4224-50	74316-50	18-015-989	4255-51	MB002B
V74G series		Wall mounting bracket	Neck mounting bracket	Gauge (0 ... 10 bar)	Tamper resistant kit	Silencer
Model	Port size					
						
V74G-4GK-NMN	G1/2	4324-50	4368-51	18-015-013	4355-51	MB004B

For other styles of mounting bracket and accessories, please refer to page 172.

EXCELON® MODULAR SYSTEM

Accessories

SHUT-OFF VALVES

- Ideal for isolating sub-systems not in use
- 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 in any position 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 in any position 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 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



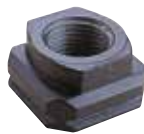
PORTING BLOCK

- 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



PANEL MOUNTING RING

- Allows bonnets with panel mounting thread to be directly mounted



Models

Series	Port size	3/2 Shut-off valve*	Wall mounting bracket	Quikclamp	Quikclamps and wall brackets	Manifold block	Porting block	Quikmount pipe adaptors	Panel Mounting Ring
72	G1/4	T72T-2GA-P1N	4224-50	4214-51	4214-52	4228-03	4216-52	4215-08	4248-89
73	G3/8	T73T-3GA-P1N	4424-50	4314-51	4314-52	4328-53	4316-52	4315-10	5191-88
74	G1/2	T74T-4GA-P1N	4324-50	4314-51	4314-52	4328-53	4316-52	4315-11	4348-89

* Threaded exhaust port.

MINIATURE UNITS, GENERAL PURPOSE

Combination filter/regulators and lubricators P1H – G1/8, G1/4

- Pre-assembled boxed sets
- Extremely compact
- Micro-fog versions for optimum lubrication

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:

10 bar

Ambient temperature:

-20°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

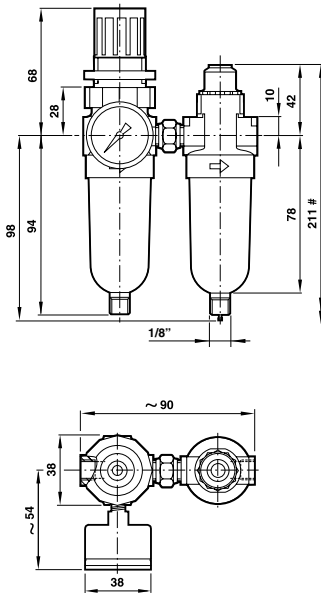
Pressure range:

0,3 ... 10 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed



Dimensions



Minimum clearance required to remove bowl



PRODUCT LINKS

Have you thought about...

See our 60 series ball valves or our Pneufit C versions complete with push in fittings on Fittings, Tubing and Accessories section



Models

Accessories

Service Kit

P1H series		Port size	Neck mounting bracket and nut	Gauge (0 ... 10bar)	Service Kit	
Auto drain Model	Manual drain Model				Auto drain	Manual drain
		G1/8				
P1H-100-A3QG	P1H-100-M3QG	G1/8	18-025-003	18-015-989	B07-KITA40R & L07-KIT	B07-KITM40R & L07-KIT
		G1/4				
P1H-200-A3QG	P1H-200-M3QG	G1/4	18-025-003	18-015-989	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.

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:

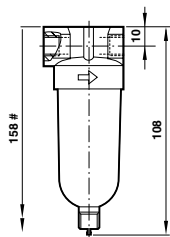
-34°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

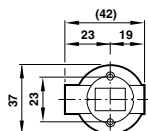
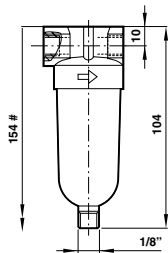


Dimensions

Manual drain



Auto drain



Minimum clearance required to remove bowl

Models

Accessories

Service Kit

F07 series					Wall mounting bracket	Service Kit	
Auto drain Model	Manual drain Model	Port size	Flow* (dm³/s)	Element (µm)		Auto drain	Manual drain
		G1/8	9	40			
F07-100-A3TG	F07-100-M3TG	G1/8	9	40		F07-KITA40	F07-KITM40
		G1/4	11,5	40			
F07-200-A3TG	F07-200-M3TG	G1/4	11,5	40		F07-KITA40	F07-KITM40

* Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop.

MINIATURE UNITS, PURAIRE® OIL REMOVAL

High-efficiency filters F39 – G1/8, G1/4

- Very compact unit
- Highly efficient particle removal to 0,01 µm

Technical Data

Medium:

Compressed air only

Maximum inlet pressure:

10 bar Transparent bowl

Filter element:

0,01 µm

Remaining oil content:

0,01 ppm at +21°C

Bowl size:

31 ml

Drain:

Manual or automatic

Ambient/Media temperature:

Transparent bowl -34°C ... +50°C

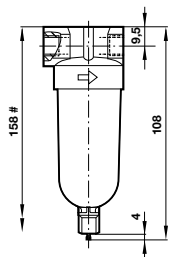
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Note: Install an F07 filter with a 5 µm filter element upstream of the F39 filter for maximum service life.

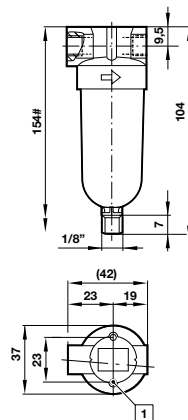


Dimensions

Manual drain



Auto drain







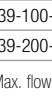
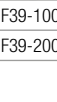
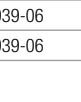
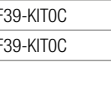
Minimum clearance required to remove bowl

Typical performance characteristics

Inlet pressure (bar)	Maximum recommended flow* (dm ³ /s)
1	1,2
3	2
5	2,7
6,3	3
7	3,1
9	3,6

* Maximum recommended flow to maintain stated oil removal performance.

Models

F39 series					Accessories	Service Kit	
Auto drain Model	Manual drain Model	Port size	Flow* (dm ³ /s)	Element (µm)	Wall mounting bracket	Auto drain	Manual drain
		G1/8	2,8	0,01			
F39-100-A0TG	F39-100-M0TG	G1/8	2,8	0,01	5939-06	F39-KIT0C	F39-KIT0C
		G1/4	3	0,01			
F39-200-A0TG	F39-200-M0TG	G1/4	3	0,01	5939-06	F39-KIT0C	F39-KIT0C

* Max. flow at 6,3 bar.

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

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

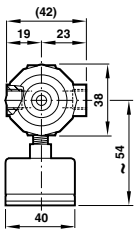
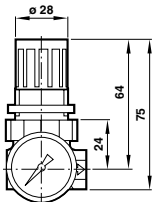
Pressure range:

0,3 ... 7 bar

Note: Outlet pressure can be adjusted in excess of and also less than those listed








Dimensions



Models

Accessories

Service Kit

R07 series Model	Port size	Outlet pressure range (bar)	Flow* (dm³/s)	Neck mounting bracket (incl. nut)	Mounting nut only plastic	Mounting nut only metal	Gauge (0 ... 10bar)	Service Kit
	G1/8	0,3 ... 7	6,5					R07-KITR
R07-200-RNKG	G1/4	0,3 ... 7	6,5	18-025-003	2962-89	2962-04	18-015-989	R07-KITR

* Typical flow with 10 bar inlet pressure and 1 bar droop from set pressure of 6,3 bar.

MINIATURE UNITS, GENERAL PURPOSE

Filter regulator B07 – G1/8, G1/4

- 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:

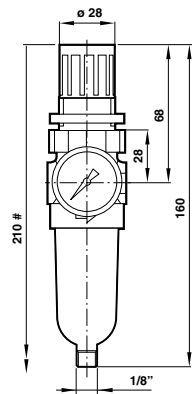
-34°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

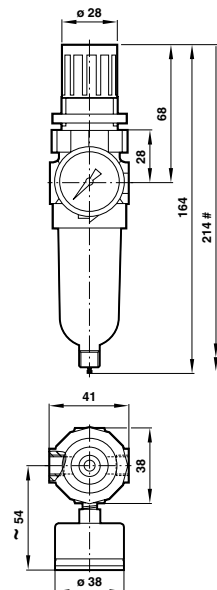


Dimensions

Auto drain








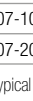
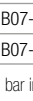


Manual drain



Minimum clearance required to remove bowl

Models

B07 series		Port size	Pressure range (bar)	Flow* (dm ³ /s)	Element (µm)	Bowl	Accessories			Service Kit		
Auto drain Model	Manual drain Model						Wall mounting bracket (incl. nut)	Panel mounting nut only plastic	Panel mounting nut only metal	Gauge (0 ... 10bar)	Auto drain	Manual drain
		G1/8	0,3 ... 7	6,2	40	T						
B07-101-A3KG	B07-101-M3KG	G1/8	0,3 ... 7	6,2	40	T	18-025-003	2962-89	2962-04	18-015-989	B07-KITA40R	B07-KITM40R
		G1/4	0,3 ... 7	6,5	40	T	18-025-003	2962-89	2962-04	18-015-989	B07-KITA40R	B07-KITM40R
B07-201-A3KG	B07-201-M3KG	G1/4	0,3 ... 7	6,5	40	T	18-025-003	2962-89	2962-04	18-015-989	B07-KITA40R	B07-KITM40R

* Typical flow with 10 bar inlet pressure and 1 bar drop from set pressure of 6,3 bar. T= Transparent bowl.

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

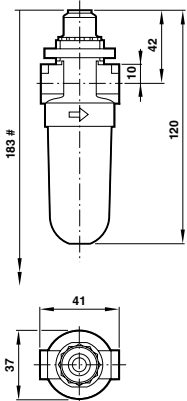
Ambient temperature:

-20°C ... +50°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C



● Dimensions






Minimum clearance required to remove bowl

● Models

Accessories

Service Kit

L07 series			Neck mounting bracket and nut	Service Kit
Model	Port size	Flow* (dm ³ /s)		
	G1/8	5		
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.

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 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:
As inlet port

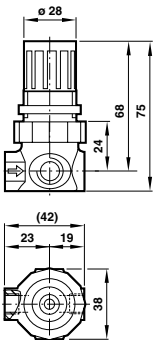
Ambient temperature:
-34°C ... +65°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C




Relief pressure adjustment range:
0,3 ... 7 bar



● Dimensions



● Models

V07 series				Accessories	
Model	Port size	Inlet Pressure (bar)	Relief Pressure (bar)	Neck mounting bracket and nut	Gauge 0 ... 10 bar
	G1/8	20	0,3 ... 7		
V07-200-NNKG	G1/4	20	0,3 ... 7	18-025-003	18-015-989

LARGE CAPACITY GENERAL PURPOSE UNITS

General purpose filters F18 – G1 1/2 & 2

- Direct ported filter with high water removal efficiency
- High flow with minimal pressure drop
- Highly visible prismatic liquid level indicator lens

Technical Data

Medium:
Compressed air only

Maximum pressure:
17 bar

Ambient temperature:
-34°C ... +80°C

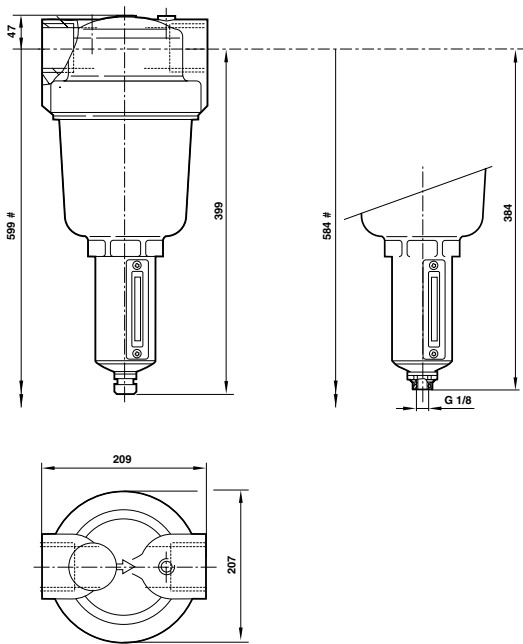
Particle removal:
40 µm



● Dimensions

Manual drain

Auto drain



Minimum clearance required to remove bowl

● Models

Service Kit

F18 - Model	Port size	Flow* (dm³/s)	Element Size	Bowl	Service Kit
Auto drain					
F18-B00-A3DG	G1 1/2	765	40 µm	Metal	F18-100A
F18-C00-A3DG	G2	765	40 µm	Metal	F18-100A

*Typical flow with 6,3 bar inlet pressure and 0,5 bar pressure drop.

LARGE CAPACITY PILOT OPERATED REGULATORS

11-808, R18, 11-400/11-204 – G1/4 ... G2

- 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:
11-808: 20 bar
11-400: 25 bar
R18: 31 bar

Ambient temperature:
-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

11-808



R18 remote pilot

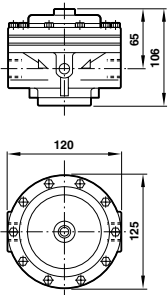


R18 integral pilot

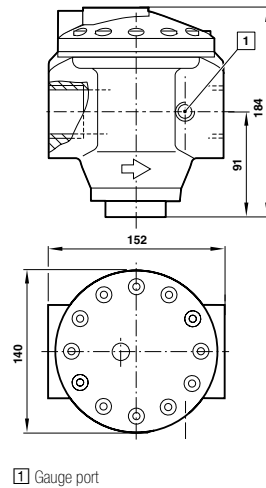


Dimensions

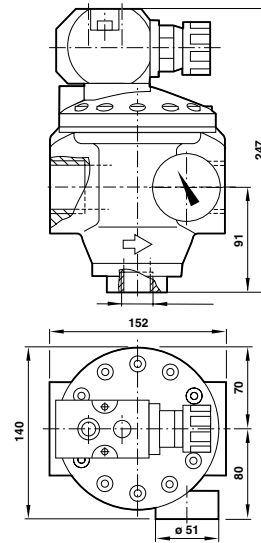
11-808





R18 remote pilot




R18 integral pilot





Models

R18 remote pilot					Exhaust silencer	Gauge adaptor	Gauge** (0 ... 25bar)		
Model	Port size	Flow* (dm³/s)	Pressure range (bar)	Operation					
	R18-B00-RNXG	G1 1/2	944	0,16 ... 17	Relieving	MB006B	150232818	18-015-014	R18-100R
	R18-C00-RNXG	G2	944	0,16 ... 17	Relieving	MB006B	150232818	18-015-014	R18-100R

R18 integral pilot					Exhaust silencer	Gauge adaptor	Gauge** (0 ... 10bar)		
Model	Port size	Flow* (dm³/s)	Pressure range (bar)	Operation					
	R18-C05-RNLG	G2	944	0,3 ... 8,5	Relieving	MB006B	150232818	18-015-013	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 ... 25bar)		
Model	Port size	Flow* (dm³/s)	Pressure range (bar)	Operation				
	11-808-960	G3/4	180	20 Max.	Relieving	18-001-027	18-015-014	11-908-100
	11-808-980	G1	180	20 Max.	Relieving	18-001-027	18-015-014	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 185.

Accessories

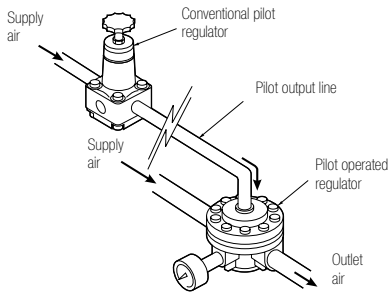
Service Kit

PILOT OPERATED REGULATORS

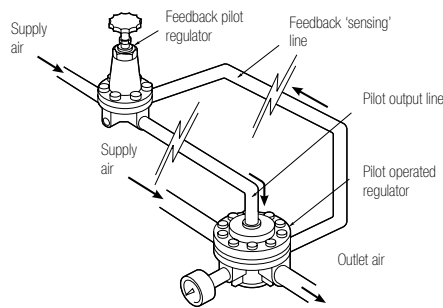
11-808, R18, 11-400 – G1/4 ... G2

● 11-400/11-204

Conventional pilot

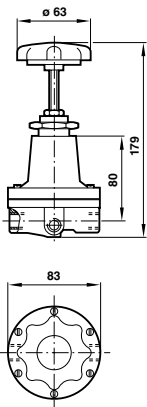


Feedback pilot



Feedback pilot regulators give more sensitive control and quicker reaction to downstream pressure changes
 Feedback 'sensing' line to be kept to minimum length (<200 mm)

● Dimensions







● Model

Conventional pilot regulators

Accessories

Service Kit

11-400, 20AL series					Bracket	Gauge	
Model	Port size	Pressure range (bar)	Operation	Mounting			
	G1/4	0,06 ... 2	Relieving	Bracket			
11400-2G-PC100	G1/4	0,06 ... 2	Relieving	Bracket	18-001-005	18-015-010	11400-100-20AL
11400-2G-PE100	G1/4	0,06 ... 4	Relieving	Bracket	18-001-005	18-015-011	11400-100-20AL
11400-2G-PG100	G1/4	0,16 ... 7	Relieving	Bracket	18-001-005	18-015-012	11400-100-20AL
20AL-X2G-PK100	G1/4	7 ... 20	Relieving	Bracket	18-001-005	18-015-014	11400-100-20AL

MINIATURE PRE-SET REGULATOR

R16 G1/4"

- Factory pre-set and sealed to give a regulated pressure of 2 bar
- Tamper resistant
- Compact

Technical Data

Medium:

Compressed air only

Maximum pressure:
28 bar

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Typical Setting Accuracy of Regulator with 7 bar inlet pressure and zero flow:

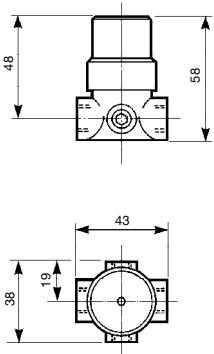
2 bar (+0,07 bar, - 0,2 bar)

Gauge ports:

Rc 1/8



Dimensions



Models

Model	Port size	Pre-set pressure
R16-200-R30G	G1/4	2 bar

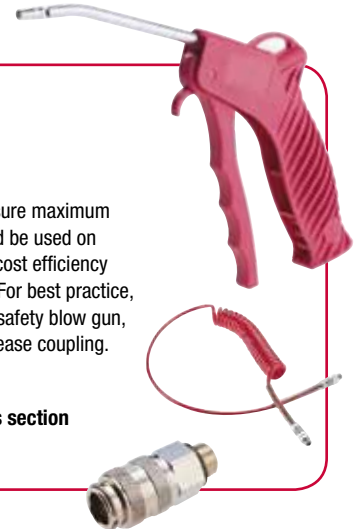


PRODUCT LINKS

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.

See Fittings, Tubing and Accessories section



PRECISION & INSTRUMENT REGULATOR

Pressure regulator R27-200, 11-818 – G1/4

R27-200:

- 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:

- 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

Technical Data

Medium:

Dry, oil free air, filtered to 5µm

Maximum inlet pressure:

R27: 10 bar
 11-818 (0,02 ... 0,5 bar): 8 bar
 11-818 (0,07 ... 4 bar): 10 bar
 11-818 (0,4 ... 10 bar): 14 bar

Ambient temperature:

R27: -20°C ... +70°C
 11-818: 0°C ... +70°C

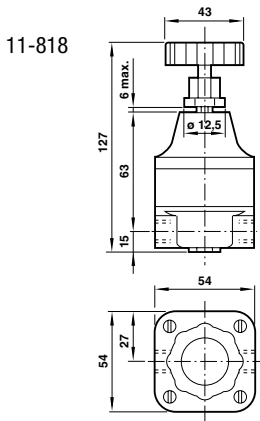
R27-200



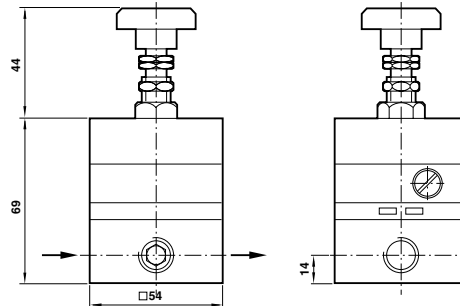
11-818



Dimensions



R27-200



Models

11-818 series							Panel mounting nut
Model	Port size	Pressure range (bar)	Flow* (dm³/s)	Accuracy # (bar)	Operation	Gauge ports	
11-818-999	G1/4	0,02 ... 0,50 (low)		0,01	Relieving	–	3081-01
11-818-100	G1/4	0,07 ... 4 (standard)	8	0,03	Relieving	–	3081-01
11-818-110	G1/4	0,4 ... 10 (high)		0,05	Relieving	–	3081-01
11-818-987	G1/4	0,02 ... 0,50 (low)		0,01	Relieving	R1/4	3081-01
11-818-993	G1/4	0,07 ... 4 (standard)	8	0,03	Relieving	R1/4	3081-01
11-818-991	G1/4	0,4 ... 10 (high)		0,05	Relieving	R1/4	3081-01

* Typical flow with 8 bar inlet pressure and 0,05 bar drop 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 pressure regulator with low air consumption in dead-end applications (0 flow). No air consumption under flow conditions.

R27-200 series							
Model	Port size	Pressure range (bar)	Flow* (dm³/s)	Hysteresis/ repeatability#	Sensitivity	Operation	Gauge ports
R27-200-RNCG	G1/4	0,14 ... 2,0	8	< 0,05%	> 0,3 mbar	Relieving	G1/4
R27-200-RNFG	G1/4	0,14 ... 4,0	8	< 0,05%	> 0,3 mbar	Relieving	G1/4
R27-200-RNLG	G1/4	0,14 ... 8,0	8	< 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 0,016 dm³/s.

Accessories

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

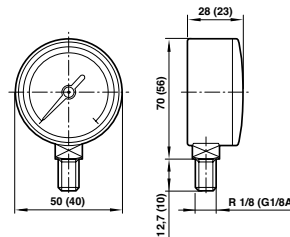


● Standard Steel and plastic

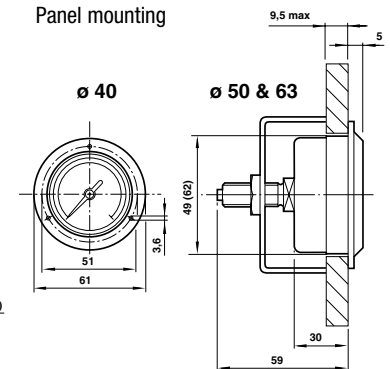
Model	Pressure range (bar)	Nominal diameter (mm)	Connection type / mounting	Port connection
18-015-887	0 ... 1	40	Centre Back	R1/8
18-015-991	0 ... 1,6	40	Centre Back	R1/8
18-015-886	0 ... 2,5	40	Centre Back	R1/8
18-015-990	0 ... 4	40	Centre Back	R1/8
18-015-885	0 ... 6	40	Centre Back	R1/8
18-015-989	0 ... 10	40	Centre Back	R1/8
18-015-884	0 ... 16	40	Centre Back	R1/8
18-015-908	0 ... 25	40	Centre Back	R1/8
18-015-010	0 ... 1,6	50	Centre Back	R1/8
18-015-011	0 ... 4	50	Centre Back	R1/8
18-015-012	0 ... 6	50	Centre Back	R1/8
18-015-013	0 ... 10	50	Centre Back	R1/8
18-015-014	0 ... 25	50	Centre Back	R1/8
18-015-893	0 ... 1	63	Centre Back	R1/8
18-015-892	0 ... 2,5	63	Centre Back	R1/8
18-015-856	0 ... 10	63	Centre Back	R1/8
18-015-855	0 ... 16	63	Centre Back	R1/8
18-015-888	0 ... 25	63	Centre Back	R1/8
18-015-879	0 ... 1,6	40	Panel Mounted	G1/8A
18-015-878	0 ... 6	40	Panel Mounted	G1/8A
18-015-877	0 ... 10	40	Panel Mounted	G1/8A
18-015-858	0 ... 6	50	Panel Mounted	G1/8A
18-015-857	0 ... 10	50	Panel Mounted	G1/8A
18-015-883	0 ... 1,6	63	Panel Mounted	G1/4A
18-015-882	0 ... 6	63	Panel Mounted	G1/4A
18-015-852	0 ... 10	63	Panel Mounted	G1/4A
18-015-851	0 ... 16	63	Panel Mounted	G1/4A
18-015-024	0 ... 1,6	50	Bottom	R1/8
18-015-025	0 ... 4	50	Bottom	R1/8
18-015-026	0 ... 6	50	Bottom	R1/8
18-015-027	0 ... 10	50	Bottom	R1/8
18-015-028	0 ... 25	50	Bottom	R1/8
18-015-854	0 ... 10	63	Bottom	G1/4A
18-015-853	0 ... 16	63	Bottom	G1/4A

● Dimensions

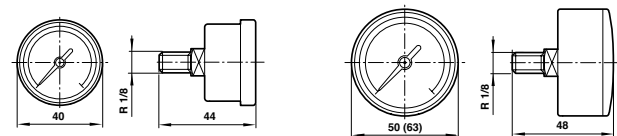
Bottom



Panel mounting

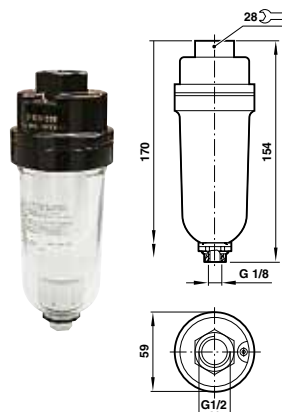


Centre back



● DRIP LEG DRAIN

- Fully automatic unit that can drain liquid from low points in compressed air systems



● Models

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

● Models

Model	Bowl
4000-50R	Excelon 72
4000-51R	Excelon 73
3000-97	Excelon 74
6000-50	Olympian 64, 68



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 IMI Precision Engineering 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 please contact us.

● Fittings

<p>Pneufit push-in fittings Ø 4 ... 14 mm</p>  <p>Page 189</p>	<p>Pneufit C composite fittings Ø 3 ... 16 mm</p>  <p>Page 189</p>	<p>BSP & hose fittings M5, 1/8" ... 1" BSP</p>  <p>Page 199</p>	<p>Pneufit C selection box</p>  <p>Page 198</p>
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● Tubing & Hoses

<p>Nylon tubing Ø 4 ... 16 mm</p>  <p>Page 202</p>	<p>Polyurethane tubing Ø 4 ... 12 mm</p>  <p>Page 202</p>	<p>Pneuflex tubing Ø 6 ... 8 mm</p>  <p>Page 203</p>	<p>Tube cutter</p>  <p>Page 203</p>	<p>Tubing channels & clips Ø 6 ... 8 mm</p>  <p>Page 203</p>
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● Accessories

<p>M/S Porous plastic silencers M5, G1/8 ... G1</p>  <p>Page 204</p>	<p>T40 series Sintered bronze silencers M5, G1/8 ... G1</p>  <p>Page 204</p>	<p>M/1500 series Exhaust filters G1/8 ... G1</p>  <p>Page 204</p>	<p>MB series Silencers R1/8 ... R1</p>  <p>Page 205</p>	<p>238 series Single shut off quick release couplings</p>  <p>Page 206</p>	<p>60 series Ball valves 1/8" ... 1 1/2"</p>  <p>Page 207</p>
<p>M/7300 Sleeve valve G1/8 ... G1/2</p>  <p>Page 208</p>	<p>BG series Blow guns</p>  <p>Page 208</p>	<p>T1000 Uni-directional M5, G1/8 ... G1/2</p>  <p>Page 209</p>	<p>T1100 Bi-directional G1/8 ... G1/2</p>  <p>Page 209</p>	<p>T20 M5, G1/8 ... G1/2</p>  <p>Page 210</p>	<p>COT, COK, COS, COL BANJO FLOW REGULATORS (COMPOSITE BODY)</p>  <p>Page 196</p>
<p>10K51, BANJO FLOW REGULATORS (METAL BODY)</p>  <p>Page 196</p>	<p>16K51, BANJO FLOW REGULATORS (METAL BODY)</p>  <p>Page 201</p>	<p>COOGL Non-return valves Ø 4 ... 12 mm</p>  <p>Page 211</p>	<p>T70 Quick exhaust valves G1/8 ... G1/2</p>  <p>Page 212</p>		

PUSH-IN FITTINGS

● PNEUFIT

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

Technical Data

Medium:

Compressed air

Operating pressure:

Vacuum – 18 bar unless otherwise stated (dependant on tubing specification)

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Tubing:

Nylon 11 or 12, polyurethane 85 to 98

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

● PNEUFIT C

Metric Ø 4 ... 16 mm O/D tube



- 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

Technical Data

Medium:

Compressed air

Operating pressure:

750 mm Hg to 10 bar

Ambient temperature:

-20°C ... +60°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Tubing:

Nylon 11 or 12, polyurethane 85 to 98

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:

Chemitech G-175L

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 our Fleetfit range on our website.

PUSH-IN FITTINGS

Straight adaptors and connectors

● Straight Adaptor (External & Internal) Parallel



Metric & BSPP Thread	O/D Tube	Pneufit	Pneufit C
M5	4	102250405	C02250405
M5	6	102250605	C02250605
G1/8	4	102250418	C02250418
G1/8	6	102250618	C02250618
G1/8	8	102250818	C02250818
G1/8	10	102251018	C02251018
G1/4	4	–	C02250428
G1/4	6	102250628	C02250628
G1/4	8	102250828	C02250828
G1/4	10	102251028	C02251028
G1/4	12	102251228	C02251228
G3/8	4	–	C02250438
G3/8	8	102250838	C02250838
G3/8	10	102251038	C02251038
G3/8	12	102251238	C02251238
G3/8	14	102251438	–
G3/8	16	–	C02251638
G1/2	8	–	C02250848
G1/2	10	102251048	C02251048
G1/2	12	102251248	C02251248
G1/2	14	102251448	–
G1/2	16	–	C02251648

● Straight Adaptor (External & Internal) Taper



BSPT Thread	O/D Tube	Pneufit	Pneufit C
R1/8	4	101250418	C01250418
R1/8	6	101250618	C01250618
R1/8	8	101250818	C01250818
R1/8	10	101251018	C01251018
R1/8	12	–	C01251218
R1/4	4	101250428	C01250428
R1/4	6	101250628	C01250628
R1/4	8	101250828	C01250828
R1/4	10	101251028	C01251028
R1/4	12	–	C01251228
R3/8	4	–	C01250438
R3/8	6	–	C01250638
R3/8	8	101250838	C01250838
R3/8	10	101251038	C01251038
R3/8	12	101251238	C01251238
R3/8	16	–	C01251638
R1/2	6	–	C01250648
R1/2	8	101250848	C01250848
R1/2	10	101251048	C01251048
R1/2	12	101251248	C01251248
R1/2	16	–	C01251648

● Straight Adaptor (Internal Hex Only) Parallel



Metric & BSPP Thread	O/D Tube	Pneufit C
M5	4	C022A0405
M5	6	C022A0605

● Bulkhead Connector



O/D Tube	Bulkhead Thread	Pneufit	Pneufit C
4	M10x1,0	100290400	–
4	M12 x 1	–	C00290400
6	M14 x 1	–	C00290600
6	M14x1,5	100290600	–
8	M16 x 1	–	C00290800
8	M16x1,5	100290800	–
10	M20 x 1	–	C00291000
10	M20x1,5	100291000	–
12	M22x1	–	C00291200
12	M24x1,5	100291200	–
14	M24x1,5	100291400	–

PUSH-IN FITTINGS

Straight adaptors and connectors

● Straight Union (Equal)



O/D Tube	O/D Tube	Pneufit	Pneufit C
4	4	100200400	C00200400
6	6	100200600	C00200600
8	8	100200800	C00200800
10	10	100201000	C00201000
12	12	100201200	C00201200
14	14	100201400	-
16	16	-	C00201600

● Straight Union (Unequal)



O/D Tube	O/D Tube	Pneufit C
6	4	C00200604
8	4	C00200804
8	6	C00200806
10	6	C00201006
10	8	C00201008
12	8	C00201208
12	10	C00201210
16	12	C00201612

● Straight Adaptor (Female Thread)



Thread	O/D Tube	Pneufit C
M5	4	C02260405
G1/8	4	C02260418
G1/8	6	C02260618
G1/8	8	C02260818
G1/8	10	C02261018
G1/4	4	C02260428
G1/4	6	C02260628
G1/4	8	C02260828
G1/4	10	C02261028
G1/4	12	C02261228
G3/8	4	C02260438
G3/8	6	C02260638
G3/8	8	C02260838
G3/8	10	C02261038
G3/8	12	C02261238
G1/2	8	C02260848
G1/2	10	C02261048
G1/2	12	C02261248

● Stem Reducer



O/D Stem	O/D Tube	Pneufit	Pneufit C
6	4	100230604	C00230604
8	4	100230804	C00230804
8	6	100230806	C00230806
10	4	100231004	-
10	6	-	C00231006
10	8	100231008	C00231008
12	6	100231206	C00231206
12	8	100231208	C00231208
12	10	100231210	C00231210
14	8	100231408	-
14	10	100231410	-
14	12	100231412	-
16	12	-	C00231612

● Stem Union (Equal)



O/D Stem	Pneufit	Pneufit C
4	100220400	C00220400
6	100220600	C00220600
8	100220800	C00220800
10	100221000	C00221000
12	100221200	C00221200

● Stem Expander (Stem/Tube)



O/D Stem	O/D Tube	Pneufit C
4	6	C00230406
6	8	C00230608

PUSH-IN FITTINGS

Straight adaptors and connectors

● Straight Stem Adaptor - Parallel



BSPP Thread	O/D Stem	Pneufit
G1/8	4	102150418
G1/8	5	102150518
G1/8	6	102150618
G1/8	8	102150818
G1/4	4	102150428
G1/4	5	102150528
G1/4	6	102150628
G1/4	8	102150828
G1/4	10	102151028
G3/8	8	102150838
G3/8	10	102151038
G3/8	12	102151238
G3/8	14	102151438
G1/2	10	102151048
G1/2	12	102151248
G1/2	14	102151448

● Straight Stem Adaptor - Taper



BSPT Thread	O/D Stem	Pneufit
R1/8	4	101150418
R1/8	6	101150618
R1/8	8	101150818
R1/4	4	101150428
R1/4	6	101150628
R1/4	8	101150828
R1/4	10	101151028
R3/8	10	101151038
R3/8	12	101151238
R1/2	12	101151248

● Plug



O/D Tube	Pneufit C
4	C00040400
6	C00040600
8	C00040800
10	C00041000
12	C00041200
16	C00041600

● Cap (Female Plug)



O/D Tube	Pneufit C
4	C00120400
6	C00120600
8	C00120800
10	C00121000
12	C00121200

PUSH-IN FITTINGS

Elbow adaptors and connectors

● Elbow Union (Equal)



O/D Tube	O/D Tube	Pneufit	Pneufit C
4	4	100400400	C00400400
6	6	100400600	C00400600
8	8	100400800	C00400800
10	10	100401000	C00401000
12	12	100401200	C00401200
14	14	100401400	-
16	16	-	C00401600

● Stem Elbow (Equal)



O/D Tube	O/D Stem	Pneufit	Pneufit C
4	4	100430400	C00430400
6	6	100430600	C00430600
8	8	100430800	C00430800
10	10	-	C00431000
12	12	-	C00431200
16	16	-	C00431600

● 90° Swivel Elbow Adaptor - Parallel



Metric & BSPP Thread	O/D Tube	Pneufit	Pneufit C
M5	4	102470405	C02470405
M5	6	102470605	C02470605
G1/8	4	102470418	C02470418
G1/8	6	102470618	C02470618
G1/8	8	102470818	C02470818
G1/8	10	102471018	C02471018
G1/4	4	102470428	C02470428
G1/4	6	102470628	C02470628
G1/4	8	102470828	C02470828
G1/4	10	102471028	C02471028
G1/4	12	-	C02471228
G3/8	4	-	C02470438
G3/8	6	-	C02470638
G3/8	8	102470838	C02470838
G3/8	10	102471038	C02471038
G3/8	12	102471238	C02471238
G3/8	14	102471438	-
G3/8	16	-	C02471638
G1/2	8	-	C02470848
G1/2	10	-	C02471048
G1/2	12	102471248	C02471248
G1/2	14	102471448	-
G1/2	16	-	C02471648

● 90° Swivel Elbow Adaptor - Taper



BSPT Thread	O/D Tube	Pneufit	Pneufit C
R1/8	4	101470418	C01470418
R1/8	6	101470618	C01470618
R1/8	8	101470818	C01470818
R1/8	10	101471018	C01471018
R1/8	12	-	C01471218
R1/4	4	101470428	C01470428
R1/4	6	101470628	C01470628
R1/4	8	101470828	C01470828
R1/4	10	101471028	C01471028
R1/4	12	-	C01471228
R3/8	4	-	C01470438
R3/8	6	-	C01470638
R3/8	8	101470838	C01470838
R3/8	10	101471038	C01471038
R3/8	12	101471238	C01471238
R3/8	16	-	C01471638
R1/2	6	-	C01470648
R1/2	8	101470848	C01470848
R1/2	10	101471048	C01471048
R1/2	12	101471248	C01471248
R1/2	16	-	C01471648

● Bulkhead Swivel Elbow Connector



O/D Tube	Bulkhead thread	Pneufit C
4	M12 x1,0	C00490400
6	M14x1,0	C00490600
8	M16 x 1	C00490800
10	M20 x 1	C00491000
12	M22 x 1	C00491200

● 45° Swivel Adaptor - Parallel



BSPP Thread	O/D Stem	Pneufit
G1/8	6	102570618
G1/8	8	102570818
G1/4	6	102570628
G1/4	8	102570828

PUSH-IN FITTINGS

Y connectors

Union Y (Equal)



O/D Tube	Pneufit	Pneufit C
4	100820400	C00820400
6	100820600	C00820600
8	100820800	C00820800
10	100821000	C00821000
12	-	C00821200

Union Y (Unequal)



O/D Tube	O/D Tube	Pneufit C
4	6	C00820604
4	8	C00820804
6	8	C00820806
6	10	C00821006
8	10	C00821008
8	12	C00821208
10	12	C00821210

Swivel Y Adaptor - Parallel



Metric & BSPP Thread	O/D Tube	Pneufit C
M5	4	C02880405
M5	6	C02880605
G1/8	4	C02880418
G1/8	6	C02880618
G1/8	8	C02880818
G1/8	10	C02881018
G1/4	4	C02880428
G1/4	6	C02880628
G1/4	8	C02880828
G1/4	10	C02881028
G1/4	12	C02881228
G3/8	4	C02880438
G3/8	6	C02880638
G3/8	8	C02880838
G3/8	12	C02881238
G1/2	6	C02880648
G1/2	8	C02880848
G1/2	10	C02881048
G1/2	12	C02881248

Swivel Y Adaptor - Taper



BSPT Thread	O/D Tube	Pneufit C
R1/8	4	C01880418
R1/8	6	C01880618
R1/8	8	C01880818
R1/8	10	C01881018
R1/4	4	C01880428
R1/4	6	C01880628
R1/4	8	C01880828
R1/4	10	C01881028
R3/8	4	C01880438
R3/8	6	C01880638
R3/8	8	C01880838
R3/8	10	C01881038
R1/2	6	C01880648
R1/2	8	C01880848
R1/2	10	C01881048

Stem Y (Equal)



O/D Stem	O/D Tube	Pneufit C
4	4	C00840400
6	6	C00840600
8	8	C00840800
10	10	C00841000
12	12	C00841200

Stem Y (Unequal)



O/D Stem	O/D Tube	Pneufit C
6	4	C00840604
8	6	C00840806
10	8	C00841008
12	10	C00841210

PUSH-IN FITTINGS

Tee adaptors and connectors

● Union Tee (Equal)



O/D Tube	Pneufit	Pneufit C
4	100600400	C00600400
6	100600600	C00600600
8	100600800	C00600800
10	100601000	C00601000
12	100601200	C00601200
14	100601400	–
16	–	C00601600

● Union Tee (Unequal)



O/D Tube	O/D Tube	Pneufit C
4	6	C006A0604
6	8	C006A0806
6	10	C006A1006
8	10	C006A1008
8	12	C006A1208
10	12	C006A1210
10	16	C006A1610
12	16	C006A1612

● Swivel Tee Adaptor - Parallel



Metric & BSPP Thread	O/D Tube	Pneufit	Pneufit C
M5	4	–	C02670405
M5	6	–	C02670605
G1/8	4	102670418	C02670418
G1/8	6	102670618	C02670618
G1/8	8	102670818	C02670818
G1/8	10	–	C02671018
G1/4	4	–	C02670428
G1/4	6	102670628	C02670628
G1/4	8	102670828	C02670828
G1/4	10	102671028	C02671028
G1/4	12	–	C02671228
G3/8	4	–	C02670438
G3/8	6	–	C02670638
G3/8	8	102670838	C02670838
G3/8	10	102671038	C02671038
G3/8	12	102671238	C02671238
G3/8	14	102671438	–
G3/8	16	–	C02671638
G1/2	8	–	C02670848
G1/2	10	–	C02671048
G1/2	12	–	C02671248
G1/2	14	102671448	–
G1/2	16	–	C02671648

● Swivel Tee Adaptor - Taper



BSPT Thread	O/D Tube	Pneufit	Pneufit C
R1/8	4	101670418	C01670418
R1/8	6	101670618	C01670618
R1/8	8	101670818	C01670818
R1/8	10	–	C01671018
R1/8	12	–	C01671218
R1/4	4	101670428	C01670428
R1/4	6	101670628	C01670628
R1/4	8	101670828	C01670828
R1/4	10	101671028	C01671028
R1/4	12	–	C01671228
R3/8	4	–	C01670438
R3/8	6	–	C01670638
R3/8	8	101670838	C01670838
R3/8	10	101671038	C01671038
R3/8	12	101671238	C01671238
R1/2	6	–	C01670648
R1/2	8	–	C01670848
R1/2	10	101671048	C01671048
R1/2	12	101671248	C01671248

● Stem Tee (Equal)



O/D Stem	O/D Tube	Pneufit C
4	4	C00630400
6	6	C00630600
8	8	C00630800
10	10	C00631000
12	12	C00631200

● Stem Tee (Unequal)



O/D Stem	O/D Tube	Pneufit C
6	4	C00630604
8	6	C00630806
10	8	C00631008
12	10	C00631210

PUSH-IN FITTINGS

Banjo flow controler and banjo accessories

● Banjo Flow Control - Parallel (Regulating Out)



Metric & BSPP Thread	O/D Tube	Pneufit	Pneufit C
M5	4	-	COK510405
M5	6	-	COK510605
G1/8	4	10K510418	COK510418
G1/8	6	10K510618	COK510618
G1/8	8	10K510818	COK510818
G1/4	4	-	COK510428
G1/4	6	10K510628	COK510628
G1/4	8	10K510828	COK510828
G1/4	10	10K511028	COK511028
G1/4	12	-	COK511228
G3/8	6	-	COK510638
G3/8	8	10K510838	COK510838
G3/8	10	10K511038	COK511038
G3/8	12	10K511238	COK511238
G1/2	8	-	COK510848
G1/2	10	-	COK511048
G1/2	12	10K511248	COK511248

● Banjo Flow Control - Taper (Regulating Out)



BSPT Thread	O/D Tube	Pneufit C
R1/8	4	COTA00418
R1/8	6	COTA00618
R1/8	8	COTA00818
R1/4	4	COTA00428
R1/4	6	COTA00628
R1/4	8	COTA00828
R1/4	10	COTA01028
R1/4	12	COTA01228
R3/8	6	COTA00638
R3/8	8	COTA00838
R3/8	10	COTA01038
R3/8	12	COTA01238
R1/2	10	COTA01048
R1/2	12	COTA01248

* Pressure rating on this item 10 bar.

● Banjo Flow Control - Parallel (Regulating In)



Metric & BSPP Thread	O/D Tube	Pneufit C
M5	4	COL510405
M5	6	COL510605
G1/8	4	COL510418
G1/8	6	COL510618
G1/8	8	COL510818
G1/4	4	COL510428
G1/4	6	COL510628
G1/4	8	COL510828
G1/4	10	COL511028
G3/8	8	COL510838
G3/8	10	COL511038
G3/8	12	COL511238
G1/2	10	COL511048
G1/2	12	COL511248

● Banjo Flow Control - Taper (Regulating In)



BSPT Thread	O/D Tube	Pneufit C
R1/8	4	COSA00418
R1/8	8	COSA00618
R1/4	4	COSA00428
R1/4	6	COSA00628
R1/4	8	COSA00828
R3/8	6	COSA00638
R3/8	8	COSA00838
R3/8	10	COSA01038
R3/8	12	COSA01238
R1/2	8	COSA00848
R1/2	10	COSA01048
R1/2	12	COSA01248

● Shrouded Banjo (Regulating Out - Parallel)



Metric & BSPP Thread	O/D Tube	Pneufit C
M5	4	COKB00405
M5	6	COKB00605
G1/8	4	COKB00418
G1/8	6	COKB00618
G1/8	8	COKB00818
G1/4	4	COKB00428
G1/4	6	COKB00628
G1/4	8	COKB00828
G1/4	10	COKB01028
G1/4	12	COKB01228
G3/8	6	COKB00638
G3/8	8	COKB00838
G3/8	10	COKB01038
G3/8	12	COKB01238
G1/2	8	COKB00848
G1/2	10	COKB01048
G1/2	12	COKB01248

● Elbow Banjo Assembly (Non-Regulating Bolt - Parallel)



Metric & BSPP Thread	O/D Tube	Pneufit	Pneufit C
M5	4	-	COA510405
M5	6	-	COA510605
G1/8	4	10A510418	COA510418
G1/8	6	10A510618	COA510618
G1/8	8	10A510818	COA510818
G1/4	4	-	COA510428
G1/4	6	10A510628	COA510628
G1/4	8	10A510828	COA510828
G1/4	10	10A511028	COA511028
G3/8	6	-	COA510638
G3/8	8	10A510838	COA510838
G3/8	10	10A511038	COA511038
G3/8	12	-	COA511238
G1/2	8	-	COA510848
G1/2	10	-	COA511048
G1/2	12	-	COA511248

PUSH-IN FITTINGS

Cross, manifolds and shut off valves

● Manifold Union



Pneufit C	
O/D Tube Outlet	O/D Tube Inlet
4	6
4	8
6	8
6	10
8	10

● Union Cross



Pneufit C	
O/D Tube	
4	C00900400
6	C00900600
8	C00900800
10	C00901000
12	C00901200

● 3/2 Shut off valves (Taper Male)



BSPT Thread	Pneufit C
R1/8	C01GG1818
R1/4	C01GG2828
R3/8	C01GG3838
R1/2	C01GG4848

● 3/2 Shut off valves (Tube/Taper Male)



BSPT Thread	O/D Tube	Pneufit C
R1/8	6	C01GH0618
R1/8	8	C01GH0818
R1/4	6	C01GH0628
R1/4	8	C01GH0828
R1/4	10	C01GH1028
R1/4	12	C01GH1228
R3/8	6	C01GH0638
R3/8	8	C01GH0838
R3/8	10	C01GH1038
R3/8	12	C01GH1238
R1/2	10	C01GH1048
R1/2	12	C01GH1248

● 3/2 Shut off valves (Tube/Tube)



O/D Tube	Pneufit C
6	C00GF0600
8	C00GF0800
10	C00GF1000
12	C00GF1200

● 3/2 Shut off valves (Taper Male/Tube)



BSPT Thread	O/D Tube	Pneufit C
R1/8	6	C01GJ0618
R1/8	8	C01GJ0818
R1/4	6	C01GJ0628
R1/4	8	C01GJ0828
R1/4	10	C01GJ1028
R1/4	12	C01GJ1228
R3/8	6	C01GJ0638
R3/8	8	C01GJ0838
R3/8	10	C01GJ1038
R3/8	12	C01GJ1238
R1/2	10	C01GJ1048
R1/2	12	C01GJ1248



Large variety of fittings

Clear lid holds fittings in place



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

Model	Type
NE/11152	4 & 6 mm fittings kit
NE/11154	6 & 8 mm fittings kit
NE/11433	8 & 10 mm fittings kit
NE/11376	10 & 12 mm fittings kit

Engineering
GREAT Solutions



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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

Brass type OT UNI EN 12164/5 CW614/7N and undergo a nickel-plating process

Sealing washers:
Copper (Acetal for M5 items)



● Sleeve Adaptor (Parallel Threads)



Metric & BSPP Thread	Metric & BSPP Thread	Model
M5	M5	160220505
G1/8	M5	160221805
G1/8	G1/8	160221818
G1/4	G1/8	160222818
G1/4	G1/4	160222828
G3/8	G1/8	160223818
G3/8	G1/4	160223828
G3/8	G3/8	160223838
G1/2	G1/8	160224818
G1/2	G1/4	160224828
G1/2	G3/8	160224838
G1/2	G1/2	160224848
G3/4	G1/2	160226848
G3/4	G3/4	160226868
G1	G3/4	160228868
G1	G1	160228888

● Reducing Connector



Reducing Male BSPT	Female BSPP	Model
R1/8	G1/8	150231818
R1/4	G1/8	150232818
R1/4	G1/4	150232828
R3/8	G1/8	150233818
R3/8	G1/4	150233828
R3/8	G3/8	150233838
R1/2	G1/8	150234818
R1/2	G1/4	150234828
R1/2	G3/8	150234838
R1/2	G1/2	150234848
R3/4	G1/4	150236828
R3/4	G3/8	150236838
R3/4	G1/2	150236848
R1	G1/2	150238848
R1	G3/4	150238868

● Reducing Connector (Parallel)



Reducing Male BSPP	Female and BSPP Thread	Model
G1/8	M5	160231805
G1/4	G1/8	160232818
G3/8	G1/8	160233818
G3/8	G1/4	160233828
G1/2	G1/8	160234818
G1/2	G1/4	160234828
G1/2	G3/8	160234838
G3/4	G1/4	160236828
G3/4	G3/8	160236838
G3/4	G1/2	160236848

● Bulkhead Connector



Metric & BSPP Thread	Male Metric Thread	Model
M5	M10x1,0	160290005
G1/8	M16x1,5	160290018
G1/4	M20x1,5	160290028
G3/8	M26x1,5	160290038
G1/2	M28x1,5	160290048
G3/4	M33x1,5	160290068
G1	M42x1,5	160290088

Supplied with locknut.

BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP

Expanding Connector (Parallel)



Metric & BSPP Thread	Female BSPP	Model
M5	G1/8	160230518
G1/8	G1/4	160231828
G1/8	G3/8	160231838
G1/4	G3/8	160232838
G1/4	G1/2	160232848
G3/8	G1/2	160233848
G1/2	G3/4	160234868

Supplied with sealing washer.

Expanding Connector (Taper)



Expanding		
Male BSPT	Female BSPP	Model
R1/8	G1/4	150231828
R1/8	G3/8	150231838
R1/8	G1/2	150231848
R1/4	G3/8	150232838
R1/4	G1/2	150232848
R3/8	G1/2	150233848
R3/8	G3/4	150233868
R1/2	G3/4	150234868
R3/4	G1	150236888

Nipple Adaptor (Parallel Threads)



Metric & BSPP Thread	Metric & BSPP Thread	Model
G1/8	G1/8	160201818
G1/4	G1/8	160202818
G1/4	G1/4	160202828
G3/8	G1/4	160203828
G3/8	G3/8	160203838
G1/2	G1/4	160204828
G1/2	G3/8	160204838
G1/2	G1/2	160204848
G3/4	G1/2	160206848
G3/4	G3/4	160206868
G1	G3/4	160208868
G1	G1	160208888

Supplied with sealing washer.

Nipple Adaptor (Taper Threads)



BSPT Thread	BSPT Thread	Model
R1/4	R1/8	150202818
R1/4	R1/4	150202828
R3/8	R1/8	150203818
R3/8	R1/4	150203828
R3/8	R3/8	150203838
R1/2	R1/8	150204818
R1/2	R1/4	150204828
R1/2	R3/8	150204838
R1/2	R1/2	150204848
R3/4	R1/2	150206848
R3/4	R3/4	150206868
R1	R3/4	150208868
R1	R1	150208888

Elbow Connector (Parallel Threads)



Female BSPP	Model
G1/8	160420018
G1/4	160420028
G3/8	160420038
G1/2	160420048
G3/4	160420068

Plug (Parallel Threads)



Metric & BSPP Threads	Model
M5	160050005
G1/8	160050018
G1/4	160050028
G3/8	160050038
G1/2	160050048
G3/4	160050068
G1	160050088

Supplied with sealing washers.

BSP & HOSE FITTINGS

M5, 1/8" ... 1" BSP



● Tee Connector

Male BSPT	Female BSPP	Model
R1/8	G1/8	150690018
R1/4	G1/4	150690028
R3/8	G3/8	150690038
R1/2	G1/2	150690048



● Elbow Connector

Male BSPT	Female BSPP	Model
R1/8	G1/8	150430018
R1/4	G1/4	150430028
R3/8	G3/8	150430038
R1/2	G1/2	150430048
R3/4	G3/4	150430068



● Tee Connector (Parallel Threads)

Female BSPP	Model
G1/8	160620018
G1/4	160620028
G3/8	160620038
G1/2	160620048
G3/4	160620068



● Hose Adaptor (Parallel Threads)

Hose Bore mm	BSPP Thread	Model
3	M5	292170305
4	G1/8	292170418
6	G1/8	292170618
6	G1/4	292170628
9	G1/8	292170918
9	G1/4	292170928
9	G3/8	292170938
9	G1/2	292170948
19	G3/4	292171968

Supplied with sealing washer.



● Hose Adaptor (Taper Threads)

Hose Bore mm	BSPT Thread	Model
7	R1/8	291170718
7	R1/4	291170728
7	R3/8	291170738
8	R1/4	291170828
8	R3/8	291170838
10	R1/4	291171028
10	R3/8	291171038
12	R3/8	291171238
16	R3/8	291171638
16	R1/2	291171648
25	R3/4	291172568
25	R1	291172588

● Elbow Banjo Assembly Non-Regulating (Parallel Threads)



Male BSPP	Female BSPP	Model
G1/8	G1/8	16A511818
G1/4	G1/4	16A512828
G3/8	G3/8	16A513838
G1/2	G1/2	16A514848

Female parallel BSP thread to male parallel BSP thread.

● Elbow Banjo Assembly Regulating Out (Parallel Threads)



Male BSPP	Female BSPP	Model
G1/8	G1/8	16K511818
G1/4	G1/4	16K512828
G3/8	G3/8	16K513838
G1/2	G1/2	16K514848

Arrow on bolt hexagon indicates free flow direction.
Pressure range 1 ... 10 bar.

TUBING & HOSES

Ø 4 ... 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, 16 mm O/D)
- 25 metre lengths supplied in cartons providing good protection and easy storage
- Polyurethane offers excellent mechanical properties and industry leading flexibility

Technical Data

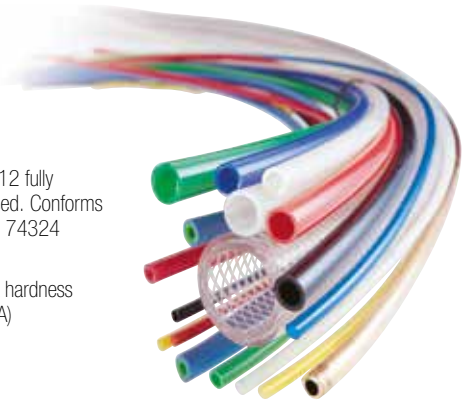
Medium:
Compressed air. Consult our Technical Service for use with other fluids.

Operating pressure:
See table below

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)



● Maximum operating pressures and bend radii

O/D mm		4	6	8	10	12	14	16
Max. pressure (bar)* at -40°C ... +20°C	Nylon	31	27	19	19	19	16	19
	Polyurethane	10	9	9	9	9	–	–
Min. bend radius mm	Nylon	25	30	40	60	60	80	95
	Polyurethane	6	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	1
+30°C	0,83	0,85
+40°C	0,75	0,7
+50°C	0,64	0,6
+60°C	0,57	0,5
+80°C	0,47	–

To calculate working pressures at various temperatures, multiply working pressure at -40°C ... +20°C by factor given in table.

Maximum continuous working temperature: Nylon +80°C, Polyurethane +60°C.

● Tube sizes (metric)

O/D mm	4	6	8	10	12	14	16
Nylon	•	•	•	•	•	•	•
Polyurethane	•	•	•	•	•	–	–



PRODUCT LINKS

Perfect for use with blow gun installations...

For blow gun range see page 208

For preset regulator R16 see the air preparation section



TUBING & HOSES

Ø 4 ... 16 mm O/D



● Nylon tube

Colour	Length (m)	O/D I/D tube						
		4/2,5*	6/4	8/6	10/7,5	12/9	14/11*	16/12
Natural	25	PA2-0004025C	PA2-0006025C	PA2-0008025C	PA2-0010025C	PA2-0012025C	PA2-0014025C	PA2-0016025C
Red	25	PA2-0104025C	PA2-0106025C	PA2-0108025C	PA2-0110025C	PA2-0112025C	–	–
Yellow	25	PA2-0304025C	PA2-0306025C	PA2-0308025C	PA2-0310025C	PA2-0312025C	–	–
Blue	25	PA2-0504025C	PA2-0506025C	PA2-0508025C	PA2-0510025C	PA2-0512025C	PA2-0514025C	PA2-0516025C
Black	25	PA2-0704025C	PA2-0706025C	PA2-0708025C	PA2-0710025C	PA2-0712025C	PA2-0714025C	PA2-0716025C

Note: 'C' at last digit in part number indicates packed in a box/carton.
* Tube size does not conform to DIN 74324.



● Polyurethane tube

Colour	Length (m)	O/D I/D tube				
		4/2,5	6/4	8/5,5	10/7	12/8
Natural	25	PU2-0004025C	PU2-0006025C	PU2-0008025C	PU2-0010025C	PU2-0012025C
Red	25	PU2-0104025C	PU2-0106025C	PU2-0108025C	PU2-0110025C	PU2-0112025C
Yellow	25	PU2-0304025C	PU2-0306025C	PU2-0308025C	PU2-0310025C	PU2-0312025C
Blue	25	PU2-0504025C	PU2-0506025C	PU2-0508025C	PU2-0510025C	PU2-0512025C
Black	25	PU2-0704025C	PU2-0706025C	PU2-0708025C	PU2-0710025C	PU2-0712025C

Note: 'C' at last digit in part number indicates packed in a box/carton.



● Pneuflex Tubing

Model	O/D tube	Adaptor (thread)	Length of closed spiral	Working length (mm)	Operating pressure (bar)
PU310600218	6	R1/8	165	2000	10
PU310800228	8	R1/4	180	2000	10
PU310800428	8	R1/4	400	4000	10

● Tube cutter



Model	Type
M/3314	Cutter

For use on nylon and polyurethane tubing 4 ... 16 mm.

● Tubing channels



Model	O/D Tube	No. of channels
100HA0600	6	10
100HA0800	8	10

SILENCERS

● POROUS PLASTIC SILENCERS

M/S



- Reduce the noise levels of pneumatic equipment
- Compact, efficient and lightweight
- Operating pressure is -1 ... 10 bar
- Operating temperature is -20°C ... +80°C

Technical Data

Medium:

Compressed air, filtered 50 µm, lubricated and non lubricated/vacuum, inert gases

Operating pressure:

-1 ... 10 bar maximum (vacuum service)

Media temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

Body:

UHMW PE porous plastic

Connector base:

PE (black)

● 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

Technical Data

Medium:

Compressed air, filtered, lubricated or non lubricated, vacuum, Inert gases

Operating pressure:

10 bar maximum

Media temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

Body:

Brass

Element:

Sintered bronze

● EXHAUST FILTERS

M/1500 series



- Prevent the ingress of dirt with minimal flow restriction
- Robust and compact
- Operating pressure is 10 bar max.
- Operating temperature is -20°C ... +80°C

Technical Data

Medium:

Compressed air, filtered, lubricated or non-lubricated, inert gases

Operating pressure:

10 bar max.

Media temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

Body:

Aluminium alloy

Element:

Sintered bronze

SILENCERS

● QUIETAIRE HEAVY DUTY SILENCERS

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

● Standard silencers



	Porous Plastic	Sintered Bronze	Exhaust Filter	Quietaire
Male Thread				
M5	M/S0	T40M0500	–	–
G1/8	M/S1	T40C1800	M/1511	–
R1/8	–	T40B1800	–	MB001B
G1/4	M/S2	T40C2800	M/1512	–
R1/4	–	T40B2800	–	MB002B
G3/8	M/S3	T40C3800	–	–
R3/8	–	T40B3800	–	MB003B
G1/2	M/S4	T40C4800	M/1514	–
R1/2	–	T40B4800	–	MB004B
G3/4	M/S6	T40C6800	M/1516	–
R3/4	–	T40B6800	–	MB006B
G1	M/S8	T40C8800	M/1518	–
R1	–	T40B8800	–	MB008B

QUICK RELEASE COUPLINGS

238 Series

- 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 supply must be dry enough to avoid ice formation at temperatures below +2°C

Air flow:
1000 l/min (input pressure 6 bar, pressure drop 0,5 bar)

Materials

Coupling:

Body & Sleeve:
Nickel plated brass

Valve:
Brass

Spring & Locking ring/balls:
Stainless steel

Seals:
NBR

Body:
Nickel plated brass



● Coupling with BSPP male thread



Type	B	Model
Coupling Male Thread	G1/4	238210028
Coupling Male Thread	G3/8	238210038
Coupling Male Thread	G1/2	238210048

● Plug with BSPP male thread



Type	B	Model
Plug Male Thread	G1/4	238110028
Plug Male Thread	G3/8	238110038
Plug Male Thread	G1/2	238110048

● Coupling with BSPP female thread



Type	B	Model
Coupling Female Thread	G1/4	238220028
Coupling Female Thread	G1/2	238220048

● Plug with BSPP female thread



Type	B	Model
Plug Female Thread	G1/4	238120028
Plug Female Thread	G3/8	238120038
Plug Female Thread	G1/2	238120048

● Coupling with metric hose tail



Type	Hose Bore Ø A	Model
Coupling Hose Barb	6	238230600
Coupling Hose Barb	9	238230900
Coupling Hose Barb	13	238231300

● Plug with metric hose tail



Type	Hose Bore Ø A	Model
Plug Hose Barb	6	238130600
Plug Hose Barb	9	238130900
Plug Hose Barb	13	238131300

BALL VALVES

60 Series Brass 1/8" ... 1 1/2" 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,
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



● Standard full bore



Model	Female (B)	Maximum pressure (bar)
602112128	Rp1/4	40
602112138	Rp3/8	40
602112148	Rp1/2	40
602112168	Rp3/4	40
602112188	Rp1	40
6021121A8	Rp1 1/4	40
6021121B8	Rp1 1/2	40
6021121C8	Rp2	40

PTFE seats, HNBR seals Operating temperature: -15°C ... +90°C.

● Exhausting full bore



Model	Female (B)	Maximum pressure (bar)
602113128EX	G1/4	12
602113138EX	G3/8	12
602113148EX	G1/2	12
602113168EX	G3/4	12
602113188EX	G1	12

PTFE seats, nitrile seals Operating temperature: 0°C ... +60°C.

● Lockable Exhausting full bore



Model	Female (B)	Maximum pressure (bar)
601812128	G1/4	13,6
601812138	G3/8	13,6
601812148	G1/2	13,6
601812168	G3/4	13,6
601812188	G1	13,6

Note: lever lockable only in closed position Standard handle accepts Ø 7 mm shackle.
Operating Temperature -10°C ... +100°C.

● Mini Reduced bore



Model	Female (B)	Maximum pressure (bar)
601112118	G1/8	10
601112128	G1/4	10
601112138	G3/8	10
601112148	G1/2	10

Model	Female/ Male (B)	Maximum pressure (bar)
601112218	G1/8	10
601112228	G1/4	10
601112238	G3/8	10
601112248	G1/2	10

PTFE seats, nitrile seals Operating temperature: -10°C ... +90°C.

MANUALLY ACTUATED SLEEVE VALVE

M/7300 3/2, G1/8 ... G1/2

- Sliding sleeve operation
- Very compact in-line units Easy to install
- Very simple and reliable operation 3/2 function

Technical Data

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Sleeve valve, directly actuated, with open exhaust

Operating pressure:

10 bar max.

Mounting:

Concentrically directly in the pipework

Ambient temperature:

-20°C ... +80°C max.

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

Body:

Chrome-nickel plated brass

Sleeve:

Grey anodised aluminium

Seals:

NBR



Models

Model	Port size	Flow 1 » 2 at 6 » 5 bar (NI/min)
M/7318	G1/8	376
M/7328	G1/4	775
M/7338	G3/8	1590
M/7348	G1/2	3025

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

Materials

Body:

BG4000: brass bright chrome finish

BG5000: one piece design in moulded high impact plastic



Models

Model	Port size	Description
BG4000	G1/4	Metal Blow Gun
BG5000	G1/4	Plastic Blow Gun



PRODUCT LINKS

Have you seen...

We also have 3/2 shut off valves complete with push in fittings and/or BSP threads

See Pneufit C series in this section



BLOCK FORM FLOW REGULATORS

T1000 and T1100 Uni-directional (T1000) – M5, G1/8 ... G1/2 Bi-directional (T1100) – G1/8 ... G1/4

- 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
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

Body:
Aluminium alloy

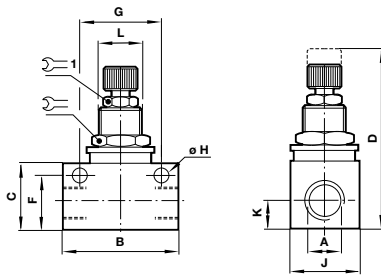
Seals:
Nitrile

Needle and internal parts:
Brass

External parts:
Aluminium alloy



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

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).

EXHAUST FLOW REGULATOR/SILENCERS

T20 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:
1 ... 10 bar

Ambient temperature:
-20°C ... +80°C
Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

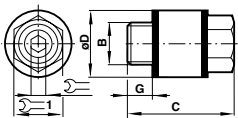
Body and washer:
Nylon

Silencer:
Porous polyethylene

Adjusting screw:
High tensile zinc electroplated steel



Dimensions



Model	B	C	G	Ø D	⌀	1
T20M0500	M5	16	5	–	1,5	8
T20C1800	G1/8	20,5	6	15	2,5	13
T20C2800	G1/4	29	7	18	4	15
T20C3800	G3/8	38	8	24	6	20
T20C4800	G1/2	50	10	30	8	25

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).

NON-RETURN VALVE

COOGL Ø 4 ... 12

- High flow performance

Technical Data

Medium:

Compressed air, filtered,
lubricated and non-lubricated

Operating pressure:

10 bar max.

Ambient temperature:

0°C ... +60°C

Air supply must be dry enough to avoid ice
formation at temperatures below +2°C

Tube sizes:

4 ... 12 mm

Tubing types:

Nylon 11 or 12

Polyurethane 85, 95 or 98 durometer

Materials

Tube to tube bodies:

Ø 4 ... Ø 8: PBT

Ø 10 ... Ø 12: Aluminium

Threaded bodies:

Nickel plated brass

Seals:

NBR (silicone free) u-packing and O-rings

Release sleeve and backing ring:

POM

Grab-ring:

Stainless steel

Collar:



Nickel plated brass

Thread sealant:

Threebond 2350Bl



● Models - tube to tube

Model	Model	O/D Tube
		
COOGL0400	–	4
COOGL0600	–	6
COOGL0800	–	8
–	COOGL1000	10
–	COOGL1200	12

QUICK EXHAUST VALVES

T70 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)

Ambient temperature:

-20°C ... +80°C

Air supply must be dry enough to avoid ice formation at temperatures below +2°C

Materials

Body & cover:

Zinc alloy (T70*1800 & T70*2800), aluminium alloy (T70*3800 & T70*4800)

Seals:

Nitrile (T70)

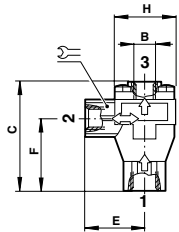
O-ring:

Nitrile



Dimensions

T70



Model	B	C	E	F	
T70C1800	G1/8	53	28	35,5	19
T70C2800	G1/4	53	28	35,5	19
T70C3800	G3/8	73,5	40	48	30
T70C4800	G1/2	73,5	40	48	30

Models

Model	Port size BSPP	Flow (1 ... 2)** C*	Cv	Flow (2 ... 3)** C*	Cv	
	T70C1800	G1/8	3,8	0,93	7	1,72
	T70C2800	G1/4	7,4	1,8	9,7	2,38
	T70C3800	G3/8	14,5	3,55	20,5	5
	T70C4800	G1/2	19,7	4,83	25	6,13

* C = dm³/(s.bar). ** Flow factor measured at 6 bar inlet pressure.

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