



HYDRAULIC | ELECTRICAL | AUTOMATION | PNEUMATICS



About Us

Your Comprehensive Solution for Design, Manufacturing, Construction, Parts, and Services in Hydraulic, Electrical, Automation and Pneumatic Engineering.

Hyspecs (Hydraulic Specialties) operates as a trusted provider of motion solutions, proudly serving both Australia and New Zealand. With over 50 years of expertise, we specialise in delivering end-to-end hydraulic system design, high-quality products, industrial automation, electrical engineering and dedicated services.

Whether you're based in New Zealand or Australia, our locally operated branches ensure exceptional service tailored to your specific needs.

Locally Operated, Globally Connected

- **Hyspecs NZ** was established in 1972 as a 100% New Zealand-owned and operated company. We were created to provide an alternative to single-brand, multinational suppliers, focusing on comprehensive hydraulic solutions.
- **Hyspecs Australia** was launched in 2010 as part of Hyspecs' expansion into the Australian market. Operating as an Australian-run business, we bring the same level of expertise and service to the region.

All branches are supported by our global network, sourcing products from trusted suppliers worldwide.

Why Hyspecs

Over \$10 million in stock across NZ and AU, with fast trans-Tasman supply and access to thousands more through our global network. Authorised Danfoss, Certified Rexroth, SMC and more. Long standing partnerships, proven trust with access to global suppliers.

Locally owned in NZ and AU, globally connected, 50+ experts with decades of know-how. Continuous training and industry seminars. Relentless on quality driven by expertise and innovation, committed to people and a more sustainable future.

Value Streams

Hydraulics, Electrical, Automation, Pneumatics, all under one roof

One partner, full solution, no juggling multiple suppliers or engineers

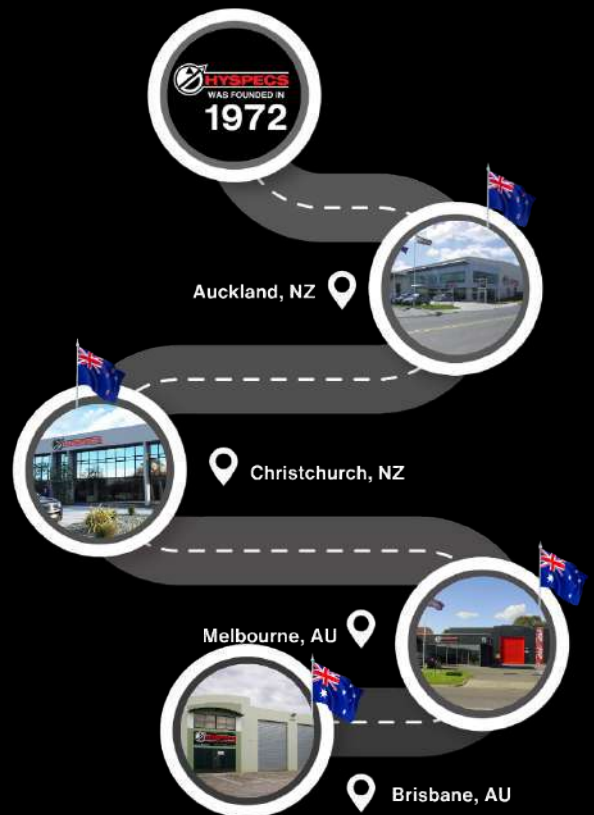
Systems that work seamlessly together, designed, built and serviced as a whole

Expert teams across every discipline, deep knowledge, better outcomes

Efficiency, reliability, innovation, the power of integration

Hyspecs... Your Motion Solution Provider

With a strong commitment to quality, reliability and innovation, Hyspecs is the trusted choice for engineering motion solutions in New Zealand and Australia. Whether you're looking for a specific component, system support or complete turnkey solutions, we are here to help.



HYDRAULIC



ELECTRICAL



AUTOMATION



PNEUMATICS



SMC Corporation

The Global Facts

Founded more than 65 years ago, SMC Corporation today operates in over 80 countries and employs more than 23,000 employees worldwide.

From its humble beginnings in Japan, SMC has today become the world's leading pneumatics provider and has gone on to receive numerous accolades including a Forbes Global 2000 listing as one of the World's Largest Public Companies and a third consecutive vote as one of Forbes World Most Innovative Companies.

One of the secrets to our long-standing success is underpinned by our commitment to R&D. With more than 12,000 products and over 700,000 variations, five R&D centres located in Japan, United States, United Kingdom, Germany, and China are responsible for anticipating needs and deliver cutting-edge solutions.

The centres are supported by more than 1,700 engineers who customise, engineer and design solutions based on customer feedback and demand.

SMC's broad portfolio comprises of Actuators, Air Line Equipment, Clean Room Products, Directional Control Valves, Fluid Control Equipment, Temperature Control, Vacuum Products, Sensors and Switches and Static Control. Through our global network, it is safe to say that there is almost no application that we do not have a solution for.

SMC has more than 550 sales offices around the world, backed by a dedicated, knowledgeable and passionate team of more than 8,300 sales staff members. With local strength and global reach, we deliver the right solutions wherever you need them.



80+

Countries



36+

Worldwide Production
Locations



5

R&D Centres
Japan, US, UK,
Germany, and China



550+

Sales Offices



700,000+

Variations



12,000+

Products



23,000+

Employees



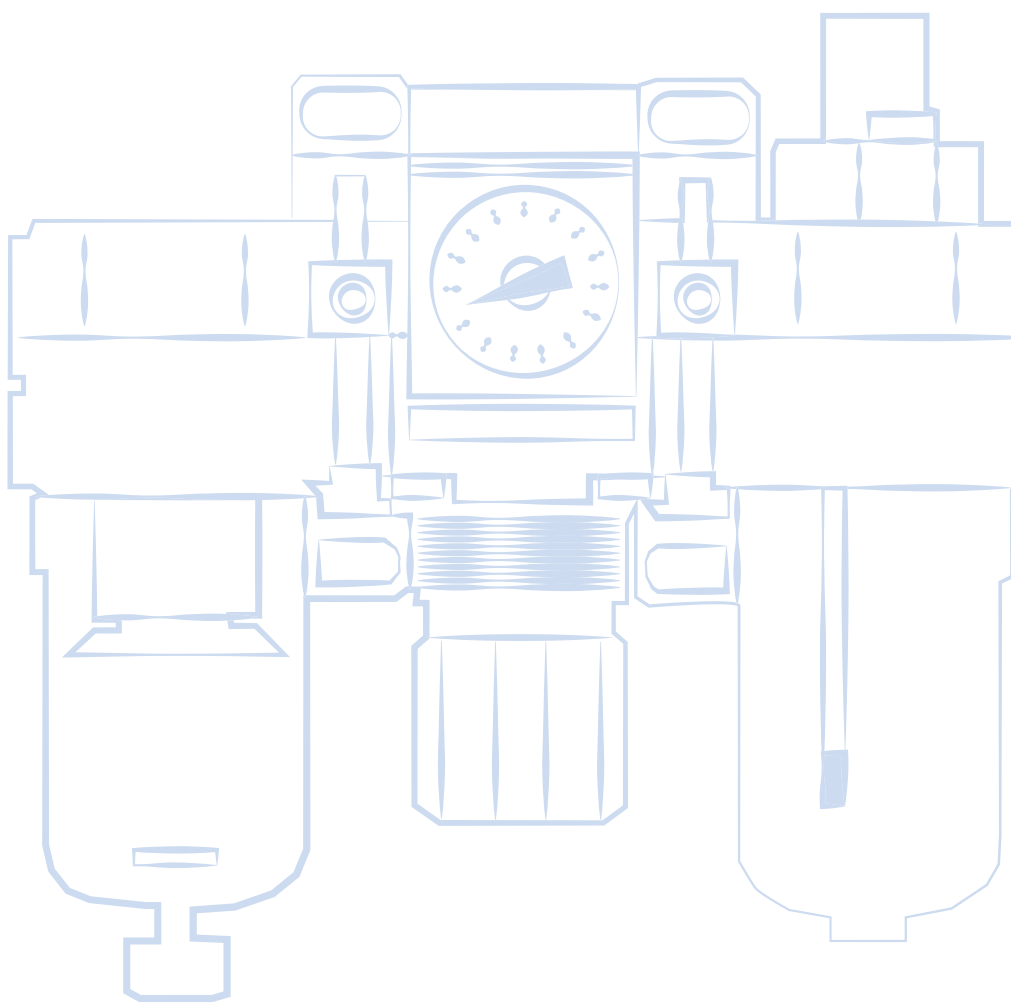
1,700+

Engineers



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Air preparation



**Product
Selection Guide**



**Air
Preparation**

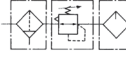


Air Preparation

Filter+Regulator+Lubricator Series AC



- Standard sizes with port M5 to Rc1
- Filter with optional manual or automatic drain
- 3 Bowl materials for different types of use (polycarbonate, nylon and metal)
- Temperature range -5 to 60°C

Part Number 1), 2)	Port Size	Set Pressure Range MPa	Drain Type	Filtration	Circuit Symbol			
AC20-01-C-D	Rc1/8	0.05 to 0.85	Manual discharge 1)	5 μm				
AC20-02-C-D	Rc1/4							
AC30-02-D	Rc1/4							
AC30-03-D	Rc3/8							
AC40-03-D	Rc3/8							
AC40-04-D	Rc1/2							
AC40-06-D	Rc3/4							
AC50-06-D	Rc3/4	0.05 to 0.85						
AC60-10-D	Rc1							

1) Add suffix **D** in part number for automation drain (normally open) only for size 30 or more eg. **AC40-03D-D**

2) Add suffix **G** or **E** in part number for gauge eg. **AC40-03G-D**

Filter Regulator+Lubricator Series AC



- Wide range of accessories for custom variants
- 3 bowl materials for different types of use (polycarbonate, nylon, metal)
- Temperature range -5 to 60° C
- Filter regulator with optional manual or automatic drain

Part Number 1), 2)	Port Size	Set Pressure Range MPa	Drain Type	Filtration	Circuit Symbol
AC20A-01-C-D	Rc1/8	0.05 to 0.85	Manual discharge 1)	5 µm	
AC20A-02-C-D	Rc1/4				
AC30A-02-D	Rc1/4				
AC30A-03-D	Rc3/8				
AC40A-03-D	Rc3/8				
AC40A-04-D	Rc1/2				
AC40A-06-D	Rc3/4				
AC60A-10-D	Rc1	0.05 to 0.85			

1) Add suffix **D** in part number for automation drain (normally open) only for size 30 or more eg. **AC40A-03D-D**

2) Add suffix **G** in part number for gauge eg. **AC40A-03G-D**

Filter Series AF



- Modular or individual construction
- Filtration rating 5 µm
- Optional manual or automatic drain
- 3 bowl materials for different types of use (polycarbonate, nylon, metal)
- Filter cartridge element can be changed quickly
- Temperature range -5 to 60° C

Part Number 1)	Port Size	Bowl Capacity (cm³)	Drain Type	Filtration	Circuit Symbol
AF20-01-C-D	Rc1/8	8	Manual discharge 1)	5 µm	
AF20-02-C-D	Rc1/4	8			
AF30-02-D	Rc1/4	25			
AF30-03-D	Rc3/8	25			
AF40-03-D	Rc3/8	45			
AF40-04-D	Rc1/2	45			
AF40-06-D	Rc3/4	45			
AF50-06-D	Rc3/4	45			
AF60-10-D	Rc1	45			

1) Add suffix **D** in part number for automation drain (normally open) only for size 30 or more eg. **AF40-03D-D**

Bracket Assembly

Body Size 20	Body Size 30	Body Size 40	Body Size 40-06	Body Size 50~60-A
AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF50P-050AS

Lubricator Series AL



- Modular or individual construction.
- Lubricator adjustable with visual inspection.
- Refillable under pressure from body size 30.
- Temperature range -5 to 60° C.

Part Number	Port Size	Bowl Capacity (cm ³)	Recommended Lubricant	Circuit Symbol
AL20-02-C-D	Rc1/4	25		
AL30-02-D	Rc1/4	55		
AL30-03-D	Rc3/8	55		
AL40-03-D	Rc3/8	135		
AL40-04-D	Rc1/2	135		
AL40-06-D	Rc3/4	135		
AL50-06-D	Rc3/4	135		
AL60-10-D	Rc1	135		

Bracket Assembly

Body Size 20	Body Size 30	Body Size 40	Body Size 40-06	Body Size 50~60
AF22P-050AS	AF32P-050AS	AF42P-050AS	AF42P-070AS	AF50P-050AS

Regulator Series AR



- Modular or individual construction.
- Piston-type regulator (AR10) or diaphragm regulator (AR20-60), relieving type.
- Panel mounting possible.
- Temperature range -5 to 60° C.
- Back-flow function available (AR-K).

Part Number 1)	Port Size	Port Size Gauge	Set pressure range MPa	Circuit Symbol
AR20K-01H-D	Rc1/8	Rc1/8	0.05 to 0.85	
AR20K-02H-D	Rc1/4			
AR30K-03H-D	Rc3/8			
AR40K-04H-D	Rc1/2			
AR40K-06H-D	Rc3/4			
AR50K-06-D	Rc3/4	Rc1/4		
AR60K-10-D	Rc1			

1) Add suffix G and E Part Number for gauge eg. **AR40K-03GH-D**

2) Add suffix -1 for set pressure range **A0.02-0.211**

Bracket Assembly

Body Size 20	Body Size 30	Body Size 40	Body Size 50~60
AR23P-270AS	AR33P-270AS	AR43P-270AS	AR52P-270AS

Filter Regulator Series AW



- Modular or individual construction.
- Piston-type or diaphragm regulator, relieving type.
- Panel mounting possible.
- Standard filtration rating 5 µm.
- Temperature range -5 to 60° C.
- Filter cartridge can be changed quickly.
- Back flow function available (AW-K).

Part Number 1)	Port Size	Port Size Gauge	Set pressure range MPa 2)	Drain Type	Filtration	Circuit Symbol				
AW20K-01H-C-D	Rc1/8	Rc1/8	0.05 to 0.85	Manual discharge 1)	5 μm					
AW20K-02H-C-D	Rc1/4									
AW30K-02H-D	Rc1/4									
AW30K-03H-D	Rc3/8									
AW40K-02H-D	Rc1/4									
AW40K-03H-D	Rc3/8									
AW40K-04H-D	Rc1/2									
AW40K-06H-D	Rc3/4	Rc1/4								
AW60K-06-D	Rc3/4									
AW60K-10-D	Rc1									

1) Add suffix D in Part Number for automatic drain (normally open) only for size 30 or more eg. **AW40-03D-D**

2) Add suffix G and E in Part Number for gauge eg **AW40-03G-D**

Bracket Assembly

Body Size 20	Body Size 30	Body Size 40	Body Size 60
AW23P-270AS	AR33P-270AS	AR43P-270AS	AW62P-270AS

Air Preparation

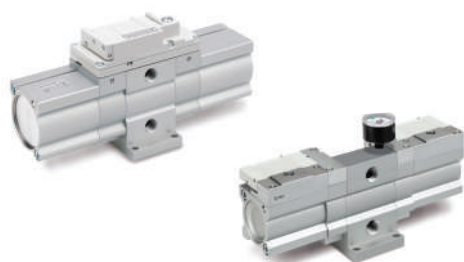
Heavy Duty Auto Drain Series ADH



Part Number	Port Size	Port Size Drain	Max. Drain Discharge	Bracket Set
ADH4000-04	Rc1/2	Rc1/2	400cc/min	BM58

- Suitable for dirty water drain.
- Easy maintenance.
- No need for electric power and no waste of air.
- Normally open drain.

Booster Regulator Series VBA



Part Number	Output Range MPa	Flow (l/min)	Port Size	Pressure Ratio	Circuit Symbol
VBA10A-02-X3145	0.3 - 1.2	237	Rc1/4	Fixed 1.7 : 1	
VBA11A-02-X3239	0.8 - 2.0	90		max. 4 : 1	
VBA10A-02-X3239	0.4 - 1.4	250		Fixed 2 : 1	
VBA20A-03	0.2 - 1.0	1000	Rc3/8	max. 2 : 1	
VBA22A-03 (*)					
VBA40A-04	0.2 - 1.0	1900	Rc1/2		
VBA42A-04 (*)					
VBA43A-04	0.2 - 1.6	1600			

(*) Air operated type

- Increases the main circuit pressure to an adjustable value.
- Major energy savings.
- No cooling required.
- Silencer means less operating noise.
- No other energy source required.
- Operating temperature: 2~50° C.
- Input pressure: 0.1~1 MPa.
- Mounting position: horizontal.
- Air and handle operated types available.

Accessories

Model	VBA10A-02 VBA11A-02	VBA20A-03	VBA22A-03	VBA40A-04 VBA42A-04	VBA43A-04
Pressure Gauge	G27-20-01	G36-K10-X7	KT-VBA22A-7	G36-K10-X7	G27-20-01
Silencer (High Noise Reduction)	AN20-02 (ANA1-02)	AN30-03 (ANA1-03)		AN40-04 (ANA1-04)	

Pressure Gauge Series G



- Rear entry (Male thread).

Part Number	Pressure Range MPa	Connection Thread	Outside Diameter
G15-10-01	0 to 1.0	R1/8, M5 (Female thread)	ø15
G27-10-R1	0 to 1.0	R1/16	ø26
G36-K2-01-X7	0 to 0.2	R1/8	ø37.5
G36-4-01	0 to 0.4		
G36-7-01	0 to 0.7		
G36-K10-01-X7	0 to 1.0		
G40-K10-02	0 to 1.0	R1/4	ø40

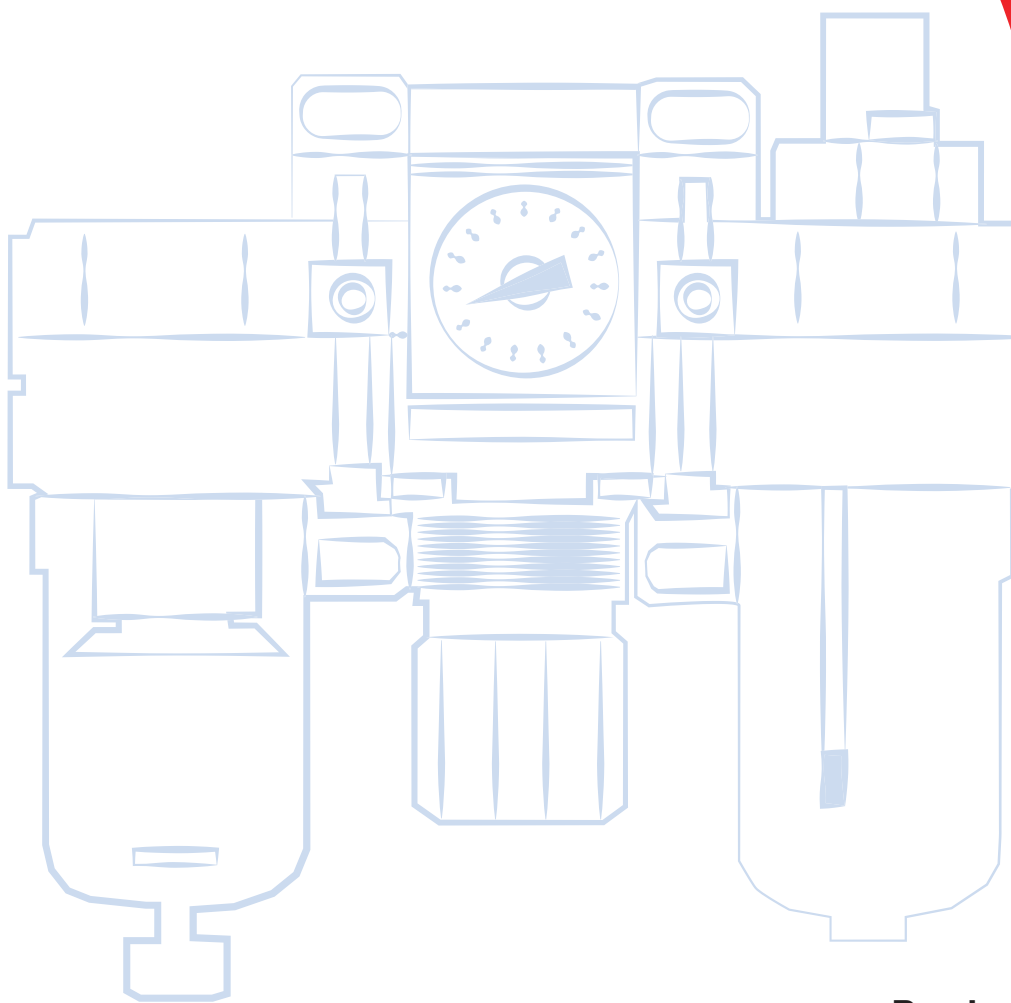
Standard Silencer Series AN



- For threads M5 ~ 2".
- Noise reduction up to 30 dB.
- Compact design.

Part Number	Thread Connection	Effective area mm ² (Cv)	Body Material	Weight (g)	Circuit Symbol
AN05-M5	M5	5 (0.3)	Resin	0.5	
AN10-01	R1/8	10 (0.6)		1	
AN20-02	R1/4	35 (1.9)		4	
AN30-03	R3/8	60 (3.3)		5.5	
AN40-04	R1/2	90 (5.0)		8.5	
AN500-06	R3/4	160 (8.8)	Metal	165	
AN600-10	R1	270 (15)		220	
AN700-12	R1 1/4	440 (24)		435	
AN800-14	R1 1/2	590 (33)		510	
AN900-20	R2	960 (53)		740	

Instrumentation



**Product
Selection Guide Instrumentation**



Paddle Style Flow Switch Series IF3



- Can be installed in piping ranging from 3/4B to 6B.
- Wetted copper parts are copper alloy or stainless steel.
- Can be used outdoors.

Part Number*	Flow Range (ℓ/min)	Port Size	Operating Pressure (MPa)	Wetted Parts
IF300-06-00	14 ~ 60	Rc3/4	1	Brass/ Phosphor bronze/ NBR
IF301-10-00	20 ~ 1500	Rc1		
IF311-10-00	20 ~ 1500	Rc1		
IF320-06-00	14 ~ 60	Rc3/4		
IF321-10-00	20 ~ 1500	Rc1		

Mechanical Pressure Switch Series ISG



- For use in oil, water, and compressed air systems.
- Available in drip proof construction.

Part Number* (Non-waterproof)	Part Number* (Drip proof)	Pressure Range (MPa)	Hysteresis	Proof Pressure (MPa)	Repeatability (MPa)
ISG110-030	ISG210-030	0.02 ~ 0.3	0.01 ~ 0.2	1	±0.006
ISG110-031	ISG210-031	0.02 ~ 0.3	0.01 ~ 0.2	1	±0.006
ISG120-030	ISG220-030	0.05 ~ 0.7	0.02 ~ 0.35	1.5	±0.014
ISG121-031	ISG221-031	0.05 ~ 0.7	0.02 ~ 0.45	1.5	±0.014
ISG130-031	ISG230-031	0.1 ~ 1.0	0.03 ~ 0.6	1.5	±0.02
ISG190-030	ISG290-030	-10 ~ -100 kPa	7 ~ 53 kPa	0.5	±2 kPa

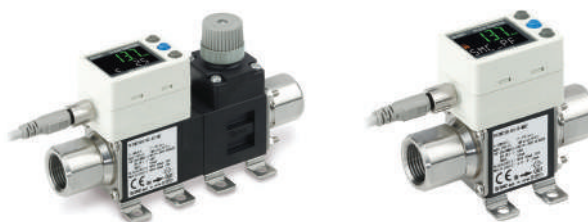
* For detail on contact rating please refer to table 1: Contact Rating
Note: Part number for drip proof construction type

Table 1: Contact Rating

Contact Load Current Rating				Contact Type	Contact Voltage
Resistive (NC/NO)	Incandescent (NC/NO)	Inductive (NC/NO)	Motor (NC/NO)		
5A/5A	3A/3A	4A/4A	3A/3A	SPDT	30VDC
5A/5A	1A/0.5A	4A/4A	1.5A/0.8A	SPDT	250VAC

Digital Flow Switch Series PF3A for Air and PF3W for Water

- 3 colour 2 or 4 screen display.
- Separated display (remote sensor unit) type available
- Built-in temperature sensor for the water version
- IO-link available



Part Number	Flow Range (ℓ/pm)	Port Size (Rc) inch	Maximum Operating Pressure (MPa)	Switch Output	Analogue (Flow)	Supply Voltage
PF3W740-06-F-MZ	5 ~ 40	3/4	1	PNP	4 ~ 20 mA	24 VDC
PF3W711-10-F-MZ	10 ~ 100	1	1	PNP	4 ~ 20 mA	
PF3A703H-10-FS	30 ~ 3000	1	1.5	PNP	4 ~ 20 mA	
PF3A706H-14-FS	60 ~ 6000	1-1/2	1.5	PNP	4 ~ 20 mA	
PF3A712H-20-FS	120 ~ 12000	2	1.5	PNP	4 ~ 20 mA	
PF3A801H-L2	10 ~ 1000	MODULAR	1	PNP/ NPN	IO - Link	

High Precision Digital Pressure Switch Series ISE20(A,B,C)

- 3 screen colour display.
- Improved Operability: simple 3-step setting.
- Response time: 1.5ms or less



Part Number	Rated Pressure Range	Connection Threadsize	Repeatability	Hysteresis	Fluid	Output	IP rating	Power Supply
ISE20B-L-01-W	-0.1 ~ 1.0 MPa	R1/8	±0.2% of F.S. ± 1 digit	Configurable	Air/Non Corrosive/ Inert gas	IO Link	IP65	12-24VDC
ISE20A-Y-01-J						PNP	IP40	
ISE20A-S-01-J						NPN and 4-20 mA	IP40	
ISE20A-V-01-J						PNP and 4-20 mA		
ISE20B-V-01-W						PNP and 4-20 mA	IP65	

Electro-Pneumatic Positioner Series IP8000/IP8100

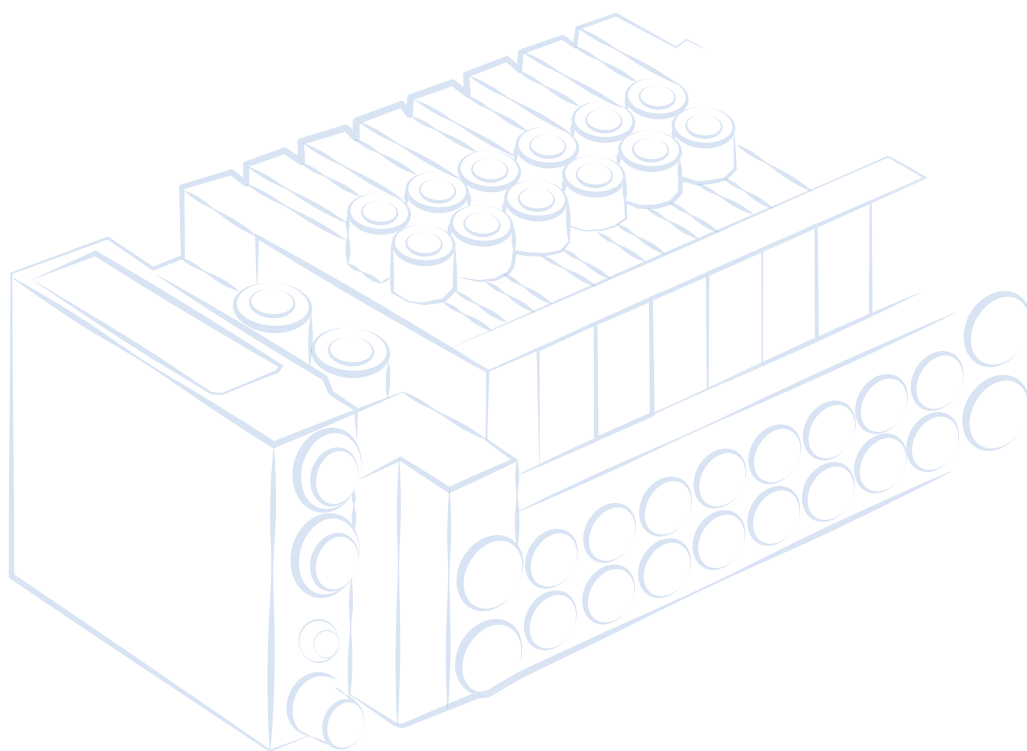


- With terminal box.
- Pressure gauge: 3MPa.



Part Number	Type	Supply Pressure	Air Connection	Electric Connection
IP8000-031	Linear	0.14 ~ 0.7 MPa	Rc1/4	G1/2
IP8100-031-X318	Rotary	0.14 ~ 0.7 MPa	Rc1/4	G1/2
IP8100-031-JR-X318	Rotary w/feed-back Reverse Acting	0.14 ~ 0.7 MPa	Rc1/4	G1/2
IP8100-031-J-X318	Rotary w/feed-back	0.14 ~ 0.7 MPa	Rc1/4	G1/2
IP8101-032-W	Rotary / Smart	0.14 ~ 0.7 MPa	Rc1/4	G1/2

Valves



Valves



**Product
Selection Guide**



Valves

Direct Operated 3 Port Solenoid Valves/ Rubber Seal Series VT



- Compact with large flow capacities.
- Low power consumption.

Part Number	Port Size	Type	Voltage	Cv	Max Pressure
VT307K-5DZ1-01	Rc1/8	3/2 SOL	24 VDC	0.18	1.0 MPa
VT307K-7DZ1-01	Rc1/8	3/2 SOL	240 VAC	0.18	1.0 MPa
VT317-5DZ-02	Rc1/4	3/2 SOL	24 VDC	0.47	0.9 MPa
VT317-7DZ-02	Rc1/4	3/2 SOL	240 VAC	0.47	0.9 MPa
VT325-035DLS	Rc3/8	3/2 SOL	24 VDC	1.4	1.0 MPa
VT325-037DLS	Rc3/8	3/2 SOL	240 VAC	1.4	1.0 MPa

5 Port Solenoid Valves Rubber Seal Series VF



- Robust, general purpose valve.
- Low power consumption.
- Reduced noise when switching.

Part Number	Port Size	Type	Voltage	Cv	Max Pressure
VF1120K-5DZ1-01	Rc1/8	5/2 SGL SOL	24 VDC	0.17	1.0 MPa
VF1120K-7DZ1-01	Rc1/8	5/2 SGL SOL	240 VAC	0.17	
VF1220K-5DZ1-01	Rc1/8	5/2 DBL SOL	24 VDC	0.17	
VF1220K-7DZ1-01	Rc1/8	5/2 DBL SOL	240 VAC	0.17	
VF3133K-5DZ1-02	Rc1/4	5/2 SGL SOL	24 VDC	1.0	
VF3133K-7DZ1-02	Rc1/4	5/2 SGL SOL	240 VAC	1.0	
VF3233K-5DZ1-02	Rc1/4	5/2 DBL SOL	24 VDC	1.0	
VF3233K-7DZ1-02	Rc1/4	5/2 DBL SOL	240 VAC	1.0	
VF5123K-5DZ1-03	Rc3/8	5/2 SGL SOL	24 VDC	2.4	
VF5123K-7DZ1-03	Rc3/8	5/2 SGL SOL	240 VAC	2.4	
VF5223K-5DZ1-03	Rc3/8	5/2 DBL SOL	24 VDC	2.4	
VF5223K-7DZ1-03	Rc3/8	5/2 DBL SOL	240 VAC	2.4	

5 Port Air Operated Valves Rubber Seal Series VFA



- Easy to use.
- Robust, general purpose valve.

Part Number	Port Size	Type	Pilot Pressure (MPa)	Cv	Max Pressure
VFA1120-01	Rc1/8	5/2 SGL PILOT	(0.4xP*+0.1) to 0.9	0.78	1.0 MPa
VFA1220-01	Rc1/8	5/2 DBL PILOT	0.15 to 0.9	0.78	
VFA3130-02	Rc1/4	5/2 SGL PILOT	(0.4xP*+0.1) to 0.9	1.0	
VFA3230-02	Rc1/4	5/2 DBL PILOT	0.15 to 0.9	1.0	
VFA5120-03	Rc3/8	5/2 SGL PILOT	(0.4xP*+0.1) to 0.9	2.4	
VFA5220-03	Rc3/8	5/2 DBL PILOT	0.15 to 0.9	2.4	

*P = Supply Pressure

5 Port Solenoid Valves Rubber Seal Series SY



- Suitable for use in machine and process control panels as well as most indoor applications.
- Extensive range that include base mount and manifold variants.
- Support for most industrial communication protocols are available.
- Available in a variety of voltages and electrical connections.

Part Number	Port Size	Type	Cv	Max Pressure	Voltage
SY5120-5DZ-01	Rc1/8	5/2 SGL SOL	0.49	0.7 MPa	24 VDC
SY5220-5DZ-01	Rc1/8	5/2 DBL SOL	0.49		
SY5320-5DZ-01	Rc1/8	5/3 CLOSED CENTRE	0.49		
SY5420-5DZ-01	Rc1/8	5/3 OPEN CENTRE	0.44		
SY5520-5DZ-01	Rc1/8	5/3 PRESSURE CENTRE	0.46		
SY7120-5DZ-02	Rc1/4	5/2 SGL SOL	0.93		
SY7220-5DZ-02	Rc1/4	5/2 DBL SOL	0.93		
SY7320-5DZ-02	Rc1/4	5/3 CLOSED CENTRE	0.70		
SY7420-5DZ-02	Rc1/4	5/3 OPEN CENTRE	0.65		
SY7520-5DZ-02	Rc1/4	5/3 PRESSURE CENTRE	0.97		
SY9120-5DZ-03	Rc3/8	5/2 SGL SOL	1.7		
SY9220-5DZ-03	Rc3/8	5/2 DBL SOL	1.7		
SY9320-5DZ-03	Rc3/8	5/3 CLOSED CENTRE	1.7		
SY9420-5DZ-03	Rc3/8	5/3 OPEN CENTRE	1.6		
SY9520-5DZ-03	Rc3/8	5/3 PRESSURE CENTRE	1.8		

3 and 5 Port Mechanical Valve Series VM200



- 3 and 5 port switching valve, port size Rc1/4".
- Robust poppet valve design.
- Limit switch, manual switch and foot pedal type mounted with a basic valve using a modular stacking system.
- Superior flow capacity for a low height.
- Minimal force to operate.

Part Number	Circuit Symbols	Actuator	Operating Pressure Range	Flow (Nl/min)
VM230-02-00A		Basic valve	0~1MPa	984
VM230-02-01A		Roller lever		
VM230-02-02A		One way roller lever		
VM230-02-08A		Toggle lever		
VM230-02-30BA		Black (mushroom) push button		
VM230-02-30RA		Red (mushroom) push button		
VM230-02-33A		Push button (Flash)		
VM230-02-34BA		Black twist selector		
VM230-02-36A		Twist selector with key		
VM230-02-35BA		Black twist selector (3 position)		
VM230-02-40A		Foot pedal (2 position)		
XT34-67		Foot pedal (5/2 position)*		

*) Rc1/8"

3 Port Mechanical Valve Series VM400



- 3 port switching valve, port size Rc1/8".
- Robust poppet valve design.
- Limit switch and manual switch mounted with a basic valve using a modular stacking system.
- Superior flow capacity for a low height.
- N.C. and N.O. version available.

Part Number	Circuit Symbols	Actuator	Operating Pressure Range	Flow (Nl/min)
VM430-01-00		Basic valve	0~1MPa	370
VM430-01-01		Roller lever		
VM430-01-02		One way roller lever		
VM430-01-08		Toggle lever		
VM430-01-30B		Black (mushroom) push button		
VM430-01-30R		Red (mushroom) push button		
VM430-01-33		Push button (Flash)		
VM430-01-34B		Black twist selector		
VM430-01-36		Twist selector with key		

4 Port Hand Valves Series VH



- Robust, 4 port manual lever valve, reliable round seal design.
- Variety of port sizes.
- Body for panel assembly or direct mounting.
- Stepless and crack adjustment of the flow from zero to the maximum via the lever's rotation angle.
- Pressure or exhaust centre for both cylinders.
- The cylinder may be positioned at the valve's center.

Part Number	Circuit Symbols	Type of Actuation	Operating Pressure Range	Port Size	Flow Cv
VH212-02		2 position	1MPa	Rc1/4	0.38
VH312-03				Rc3/8	1.5
VH412-04				Rc1/2	4.3
VH412-06				Rc3/4	4.5
VH210-02		3 position Closed centre	1MPa	Rc1/4	0.38
VH310-03				Rc3/8	1.5
VH410-04				Rc1/2	4.3
VH410-06				Rc3/4	4.5
VH600-06			0.7 MPa	Rc3/4	10.2
VH600-10				Rc1	10.5
VH211-02		3 position Exhaust centre	1MPa	Rc1/4	0.38
VH311-03				Rc3/8	1.5
VH411-04				Rc1/2	4.3
VH411-06				Rc3/4	4.5

2 Port Manually Operated Valves Series VHK



- Switch valve, compact design with 2 or 3 port function.
- Sizes from Ø 4-12 mm with superior flow capacity.
- Being made of lightweight plastic and having integral hose connections, it can be mounted directly in the piping (push in).
- Body with mounting holes.

Part Number	Circuit Symbols	Operating pressure range	Standard Type	Port Size	Bracket
VHK3A-04F-04F	 Two position	1 MPa	 Push-in Port Size	ø 4	VHK-B1A
VHK3A-06F-06F				ø 6	
VHK3A-08F-08F				ø 8	
VHK3A-10F-10F				ø 10	VHK-B2A
VHK3A-12F-12F				ø 12	
VHK3A-M5-M5			 Thread Port Size	M5 x 0,8	VHK-B1A
VHK3A-01S-01S				Rc1/8	
VHK3A-02S-02S				Rc1/4	
VHK3A-03S-03S				Rc3/8	
VHK3A-04S-04S				Rc1/2	

2 port function on request
Other thread and push-in combinations on request

3 Port Valves for Residual Pressure Release Series VHS



- With the use of a 3-port valve for residual pressure release, pressure left in the line can be easily exhausted.

Standard

Part Number	Symbol	Port Size	Port Size Exhaust Release Rc	Flow (Cv) P/A (A/R)	For modular Series
VHS20-01-S-M-D		Rc1/8	1/8	.65 (.69)	20
VHS20-02-S-M-D		Rc1/4	1/8	.88 (.84)	20
VHS30-03-S-M-D		Rc3/8	1/4	2.3 (1.9)	30
VHS40-04-S-M-D		Rc1/2	3/8	3.8 (3.6)	40
VHS50-06-S-M-D		Rc3/4	1/2	6.4 (5.9)	50/60
VHS50-10-S-M-D		Rc1	1/2	8.6 (6.4)	50/60

Direct operated valve for Air and Water (Normal Closed) Series JSX



- Improved environmental resistance (IP67 enclosure NEMA4X)
- Energy saving.
M12 connector available.
- Normally open versions are available upon request.

Part Number*	Port Size	Fluid	Body/Seal	Orifice	Voltage
JSX21-SN301R-5DZ	1/8	Air/Inert gas and water	Stainless Steel / NBR	3.2	24 VDC
JSX21-SN301R-7DZ	1/8				240 VAC
JSX21-SN303R-5DZ	3/8				24 VDC
JSX21-SN303R-7DZ	3/8				240 VAC
JSX31-SN402R-5DZ	1/4			4.0	24 VDC
JSX31-SN402R-7DZ	1/4				240 VAC
JSX31-SN403R-5DZ	3/8				24 VDC
JSX31-SN403R-7DZ	3/8				240 VAC

* Brackets are not included. Please request for the bracket type when mounting threads are required.

Valves

Direct Operated 2 Port Valve (Normal Closed) Series VX2



- Suitable for air and water
- Available in stainless steel as well
- Low power white top coils built to last longer
- Normally opened versions are available upon request

Part Number*	Port Size	Fluid	Body/Seal	Orifice	Voltage
VX212AZ2AXNB	Rc1/8	Air/Water/ Vacuum	Brass/ NBR	2	24 VDC
VX212AZ2HXXNB	Rc1/8			2	240 VAC
VX222AZ2AXNB	Rc1/4			4	24 VDC
VX222AZ2HXXNB	Rc1/4			4	240 VAC
VX232DZ2AXNB	Rc3/8			5	24 VDC
VX232DZ2HXXNB	Rc3/8			5	240 VAC

* Brackets are not included. Please request for the bracket type when mounting threads are required.

Valves Suitable for Steam up to 183°C Series VX2



- Coil insulation class H, allows use at ambient temperatures of up to 60C
- Available in stainless steel as well
- Low power white top coils built to last longer
- Normally opened versions are available upon request.

Part Number*	Port Size	Type	Body/Seal	Orifice	Voltage
VX215AZ2AXNB	Rc1/8	Normally Closed	Brass/FKM	2	24VDC
VX215AZ2HXXNB	Rc1/8			2	240 VAC
VX225AZ2AXNB	Rc1/4			4	24VDC
VX225AZ2HXXNB	Rc1/4			4	240 VAC
VX235DZ2AXNB	Rc3/8			5	24VDC
VX235DZ2HXXNB	Rc3/8			5	240 VAC
VX235GZ2AXNB	Rc1/2			10	24VDC
VX235GZ2HXXNB	Rc1/2			10	240 VAC

* Brackets are not included. Please request for the bracket type when mounting threads are required.

Pilot Operated 2 Port Process Valve (Normal Closed) Series JSXD



- IP67 enclosure/NEMA4X
- Energy saving
- Easy Installation
- M12 Connector available
- Normally open and other voltage options available

Part Number*	Port Size	Fluid	Body/Seal	Orifice	Voltage
JSXD31-CN02R-5DZ	1/4	Air Water Oil	Brass/NBR	10	24 VDC
JSXD31-CN02R-7DZ	1/4			10	240 VAC
JSXD41-CN04R-5DZ	1/2			15	24 VDC
JSXD41-CN04R-7DZ	1/2			15	240 VAC
JSXD61-CN10R-5DZ	1			25	24 VDC
JSXD61-CN10R-7DZ	1			25	240 VAC

* Brackets are not included. Please request for the bracket type when mounting threads are required.

Angle Seat 2 Port Process Valve Series JSB



- Optimised valve body flow path profile - high flow rate, up to 87.5 (Cv factor)
- **Reduce costs** – Long service life up to 10 million cycles
- **Save space** – As small as 121.3 mm in height.
- Port sizes: 3/8" to 2"

Part Number*	Port Size	Fluid	Body/Seal	Valve Type
JSB21-ST15AR-2S	1/2"	Air Water Stream	Stainless steel / Fluororesin	N.C.
JSB31-ST20AR-3S	3/4"			
JSB41-ST25AR-4S	1"			
JSB51-ST32AR-5S	1 1/4"			
JSB61-ST40AR-6S	1 1/2"			
JSB71-ST50AR-7S	2"			

Zero Differential Pressure 2 Port Process Valve (Normal Closed) Series VXZ

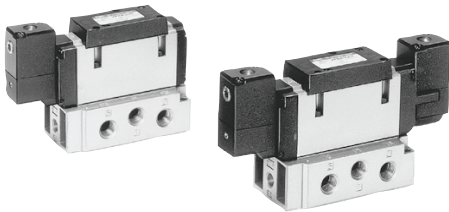


- Suitable for general applications.
- Low power white top coils built to last longer.
- Normally opened versions are available upon request.

Part Number*	Port Size	Fluid	Body/Seal	Orifice	Voltage
VXZ232AZ2A	Rc1/4	Air/Water	Brass/NBR	10	24 VDC
VXZ232AZ2H	Rc1/4			10	240 VAC
VXZ242FZ2A	Rc1/2			15	24 VDC
VXZ242FZ2H	Rc1/2			15	240 VAC
VXZ252HZ2A	Rc3/4			20	24 VDC
VXZ252HZ2H	Rc3/4			20	240 VAC
VXZ262KZ2A	Rc1			25	24 VDC
VXZ262KZ2H	Rc1			25	240 VAC

* Brackets are not included. Please request for the bracket type when mounting threads are required.

Single Connector ISO Size 1 & 2 Rubber Seal Series VP7



Part Number	Type	Voltage	Max Flow N(ℓ/min)	Max Pressure
VP7-6-FG-S-3Z	5/2 SGL SOL	24 VDC	1639	0.15~0.9 MPa
VP7-6-FG-S-7N	5/2 SGL SOL	240 VAC	1639	
VP7-6-FG-D-3Z	5/2 DBL SOL	24 VDC	1639	
VP7-6-FG-D-7N	5/2 DBL SOL	240 VAC	1639	
VP7-8-FG-S-3Z	5/2 SGL SOL	24 VDC	3533	
VP7-8-FG-S-7Z	5/2 SGL SOL	240 VAC	3533	
VP7-8-FG-D-3Z	5/2 DBL SOL	24 VDC	3533	
VP7-8-FG-D-7Z	5/2 DBL SOL	240 VAC	3533	

Double Connectors ISO Size 1, 2 & 3 Metal Seal Series EVS7



- Hi flow.
- High performance.
- Low power consumption.

Part Number	Type	Voltage	Max Flow N(ℓ/min)	Max Pressure
EVS7-6-FG-S-3CV	5/2 SGL SOL	24 VDC	1476	0.9 MPa
EVS7-6-FG-S-7CV	5/2 SGL SOL	240 VAC	1476	
EVS7-6-FG-D-3CV	5/2 DBL SOL	24 VDC	1476	
EVS7-6-FG-D-7CV	5/2 DBL SOL	240 VAC	1476	
EVS7-8-FG-S-3CV	5/2 SGL SOL	24 VDC	3148	
EVS7-8-FG-S-7CV	5/2 SGL SOL	240 VAC	3148	
EVS7-8-FG-D-3CV	5/2 DBL SOL	24 VDC	3148	
EVS7-8-FG-D-7CV	5/2 DBL SOL	240 VAC	3148	
EVS7-10-FG-S-3CV	5/2 SGL SOL	24 VDC	4900	
EVS7-10-FG-S-7CV	5/2 SGL SOL	240 VAC	4900	
EVS7-10-FG-D-3CV	5/2 DBL SOL	24 VDC	4900	
EVS7-10-FG-D-7CV	5/2 DBL SOL	240 VAC	4900	

Accessories: Sub-plate

	Rc1/4	Rc3/8	Rc1/2	Rc3/4	Rc1
ISO1	VS7-1-A02	VS7-1-A03	N/A	N/A	N/A
ISO2	N/A	VS7-2-A03	VS7-2-A04	VS7-2-A06	N/A
ISO3	N/A	N/A	N/A	EV57-3-A06F	EV57-3-A10F



Accessories: Interface Flow Controller Size 1 & 2

Part Number	Series
AXT503-23A	ISO Size 1
AXT510-32A	ISO Size 2

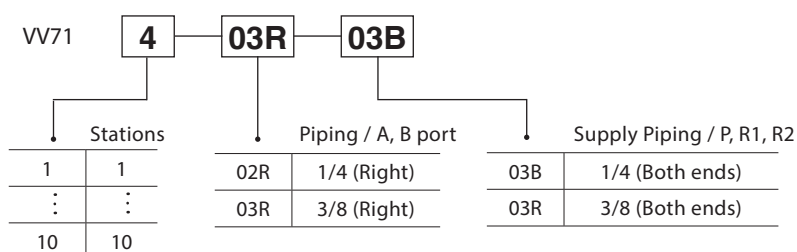


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Interface Flow Controller

Manifold ISO Size 1 and 2 Series VP7/VS7



How to order Manifold for ISO Size 1



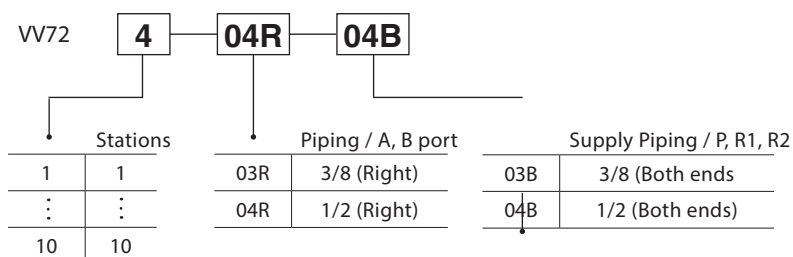
2, 4, 8, 10 station part numbers

Stations	Part number (Rc3/8)
2	VV712-03R-03B
4	VV714-03R-03B
8	VV718-03R-03B
10	VV7110-03R-03B

Manifold accessories for Size 1

Blanking plate	AXT502-9A
Interface regulator	ARB250-00-P
Interface flow controller	AXT503-23A

How to order Manifold for ISO Size 2



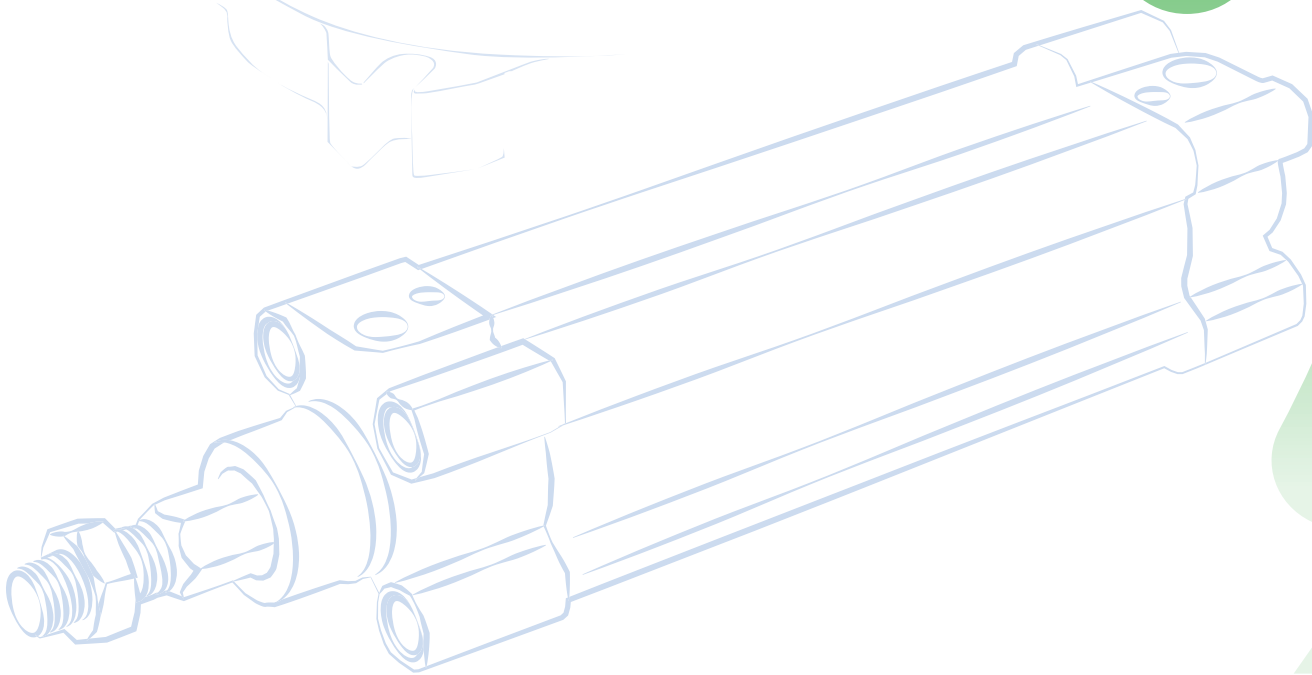
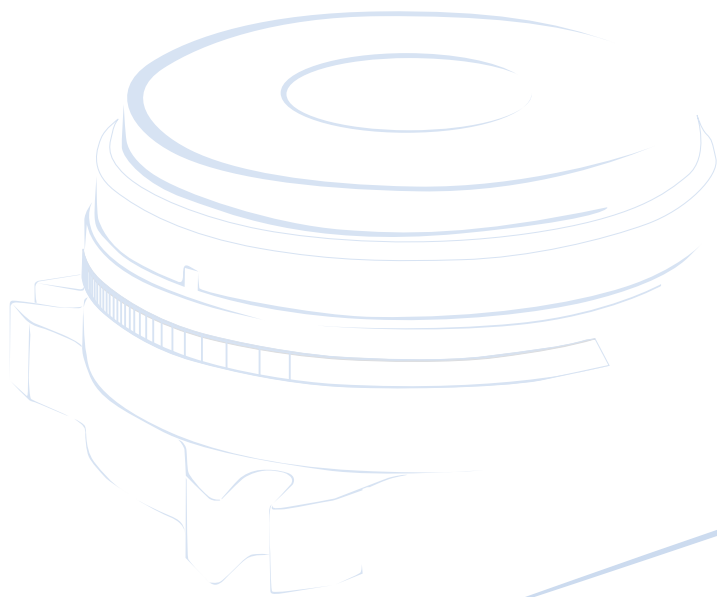
2, 4, 8, 10 station part numbers

Stations	Part number (Rc1/2)
2	VV722-04R-04B
4	VV724-04R-04B
8	VV728-04R-04B
10	VV7210-04R-04B

Manifold accessories for Size 2

Blanking plate	AXT512-9A
Interface regulator	ARB350-00-P
Interface flow controller	AXT510-32A

Cylinders



Cylinders



**Product
Selection Guide**



Cylinders

ISO Standard Cylinders Series C85



- ISO 6432.
- Single or double acting.
- Cylinders with adjustable air cushion from Ø10-25mm
- Cylinder body made from corrosion resistant materials.
- Auto switch mounting possible using band.
- Special seals fitted as standard for oil-free operation.

A wide variety of different designs is available, such as double piston rods, alternative cylinder head cover designs, without magnet, single-acting, etc.

Standard cylinder, double-acting built-in magnet, rubber bumper

Cylinder Ø (mm)	Standard strokes (mm)	Part number with Auto switch mounting style Band mounting	Maximum Operating Pressure
8	10, 25, 40, 50, 80, 100 (Max.400)	CD85N8- ☐ -B	1.0 MPa
10		CD85N10- ☐ -B	
12	10, 25, 40, 50, 80, 100, 125, 160, 200, (max. 400)	CD85N12- ☐ -B	
16		CD85N16- ☐ -B	
20	10, 25, 40, 50, 80, 100, 125, 160, 200, 250, 300, (max. 1000)	CD85N20- ☐ -B	
25		CD85N25- ☐ -B	

☐ Stroke length

Double-acting, adjustable cushion, built-in magnet

Cylinder Ø (mm)	Standard strokes (mm)	Part number with Auto switch mounting style Band mounting	Maximum Operating Pressure
10	10, 25, 40, 50, 80, 100 (Max.400)	CD85N10- ☐ C-B	1.0 MPa
12	10, 25, 40, 50, 80, 100, 125, 160, 200 (max. 400)	CD85N12- ☐ C-B	
16		CD85N16- ☐ C-B	
20	10, 25, 40, 50, 80, 100, 125, 160, 200, 250, 300 (max. 1000)	CD85N20- ☐ C-B	
25		CD85N25- ☐ C-B	

☐ Stroke length

Mounting band and switch holder for auto switch mounting

Bore size						Mounting band
8	10	12	16	20	25	
BJ2-008	BJ2-010	BJ2-012	BJ2-016	BM2-020	BM2-025	
BJ3-1						Switch holder

Possible auto switches

Band mounting

Reed 2-wire	D-A93Z (Bore size 16, 20, 25 only)
Solid state 2-wire	D-M9BZ
Solid state 3-wire NPN	D-M9NZ
Solid state 2-wire PNP	D-M9PZ

Accessories C85

	Foot (1 pc.)	Foot (2 pcs.) + 1 nut	Flange	Trunnion	Clevis	Single knuckle joint	Double knuckle joint	Floating joint
Ø (mm)								
8	C85L10A	C85L10B	C85F10	C85T10	C85C10	KJ4D	GKM4-8	JA10-4-070
10								
12	C85L16A	C85L16B	C85F16	C85T16	C85C16	KJ6D	GKM6-12	JA15-6-100
16								
20	C85L25A	C85F25B	C85F25	C85T25	C85C25	KJ8D	GKM8-16	JA20-8-125
25						KJ10D	GKM10-20	JA30-10-125

Standard ISO Profile Tube Cylinders Series CP96



- ISO15552 standard cylinders in profile design with integrated tie-rods.
- Bore sizes ø32-125 mm.
- Easy adjustment of the cushion valve.
- End of stroke air cushion provides smooth operation.
- Minimum piston rod deflection.
- Improved mounting accuracy.
- Maximum flexibility for auto-switch mounting.

Other design variations, such as, dual stroke cylinders, heat resistant cylinders, etc. are available.

Bore size (mm)	Piston rod Ø (mm)	Rod end thread	Port sizes	Cushion stroke (mm)	Operating pressure range
32	12	M10x1.25	G1/8	19	0.05 - 1 MPa
40	16	M12x1.25	G1/4	19	
50	20	M16x1.5	G1/4	24	
63	20	M16x1.5	G3/8	24	
80	25	M20x1.5	G3/8	30	
100	25	M20x1.5	G1/2	30	
125	32	M27x2	G1/2	31	

Standard

Part no.	Bore size (mm)	m Standard Strokes
CP96SDB32-□C	32	25, 40, 50, 75, 80, 100, 125, 150, 160, 200, 250, 300, 320, 350, 400, 450, 500
CP96SDB40-□C	40	25, 40, 50, 75, 80, 100, 125, 150, 160, 200, 250, 300, 320, 350, 400, 450, 500
CP96SDB50-□C	50	25, 40, 50, 75, 80, 100, 125, 150, 160, 200, 250, 300, 320, 350, 400, 450, 500, 600
CP96SDB63-□C	63	25, 40, 50, 75, 80, 100, 125, 150, 160, 200, 250, 300, 320, 350, 400, 450, 500, 600
CP96SDB80-□C	80	25, 40, 50, 75, 80, 100, 125, 150, 160, 200, 250, 300, 320, 350, 400, 450, 500, 600, 700, 800
CP96SDB100-□C	100	25, 40, 50, 75, 80, 100, 125, 150, 160, 200, 250, 300, 320, 350, 400, 450, 500, 600, 700, 800
CP96SDB125-□	125	Made to order

Possible auto switches

Reed 2-wire	D-A93Z
Solid State 2-wire	D-M9BZ
Solid state 3-wire NPN	D-M9NZ
Solid state 3-wire PNP	D-M9PZ



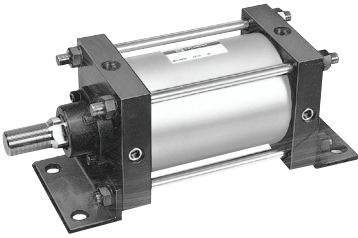
Piston rod of CP96K, non-rotating

Mounting Bracket for CP96

Bore size (mm)	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
	Foot	Female head end clevis (Corresponds to E accessory)	Male head end clevis	Female head end clevis (for ES accessory)	Male head end clevis with ball joint	Rod/Head end flange	Angled head end clevis	Angled head end clevis with ball joint	Piston rod ball joint (ISO 8139)	Rod clevis (ISO 8140)	Floating joint
32	L5032	D5032	C5032	DS5032	CS5032	F5032	E5032	ES5032	KJ10D	GKM10-20	JA30-10-125
40	L5040	D5040	C5040	DS5040	CS5040	F5040	E5040	ES5040	KJ12D	GKM12-24	JA40-12-125
50	L5050	D5050	C5050	DS5050	CS5050	F5050	E5050	ES5050	KJ16D	GKM16-32	JA50-16-150
63	L5063	D5063	C5063	DS5063	CS5063	F5063	E5063	ES5063	KJ16D	GKM16-32	JA50-16-150
80	L5080	D5080	C5080	DS5080	CS5080	F5080	E5080	ES5080	KJ20D	GKM20-40	JAH50-20-150
100	L5100	D5100	C5100	DS5100	CS5100	F5100	E5100	ES5100	KJ20D	GKM20-40	JAH50-20-150
125	L5125	D5125	C5125	DS5125	CS5125	F5125	E5125	ES5125	KJ27D	GKM30-54	JA125-27-200

Cylinders

Tie-rod Air Cylinders Series CS1



- Double acting, single rod/through type.
- 7 Mounting Options.
- Through rod type available.
- Air cushioning standard.
- Auto switch capable 125mm -200mm diameter.
- Air-hydro version (Series CS1mH).

Bore size (mm)	Piston rod ø (mm)	Rod end thread	Port Size
125	36	M30x1.5	Rc1/2
140	36	M30x1.5	Rc1/2
160	40	M36x1.5	Rc3/4
180	45	M40x1.5	Rc3/4
200	50	M45x1.5	Rc3/4
250	60	M56x2	Rc1
300	70	M64x2	Rc1

Circuit Symbol



Part Number

C D S1 B 160 300

Built-in magnet

Nil	Non-magnetic
D	Magnetic for autoswitches*

Mounting style

B	Basic style	125	125mm
L	Foot style	140	140mm
F	Rod side flange style	160	160mm
G	Head side flange style	180	180mm
C	Single clevis style	200	200mm
D	Double clevis style	250	250mm
T	Center trunnion style	300	300mm

Bore size

Cylinder stroke

Note: A rod end nut is not included with this cylinder, order as a loose part if needed.

Rod Accessories

Bore size (mm)	Single Knuckle Joint	Double Knuckle Joint	Rod End Nut	Floating Joint
125	1-12	Y-12	NT-12	JA140-30-150
140	1-14	Y-14	NT-12	JA140-30-150
160	1-16	Y-16	NT-16	JA160-36-150
180	1-18	Y-18	NT-18	JA180-40-150-X530
200	1-20	Y-20	NT-20	JA200-45-150-X530
250	1-25	Y-25	NT-25	N/A
300	1-30	Y-30	NT-30	N/A

*"D" option for bore sizes 125 ~ 200 only

Auto switch mounting bracket

Bore size						
125	140	160	180	200	250	300
BS5-125		BS5-160	BS5-180	BS5-200	N/A	N/A

Possible auto switches

Reed 2-wire	D-A93Z
Solid State 2-wire	D-M9BZ
Solid state 3-wire NPN	D-M9NZ
Solid state 3-wire PNP	D-M9PZ

Flow controls, fittings, blow guns and tubing

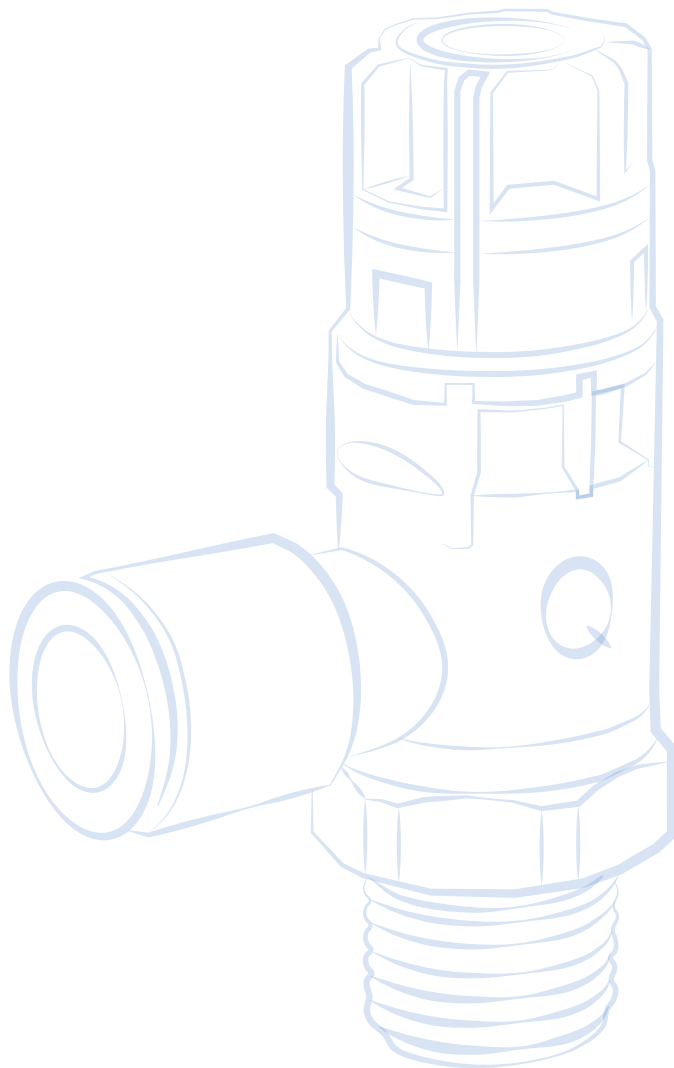
Tubing



Blow Guns



Flow Controls



Flow Controls

Flow Controllers Series AS



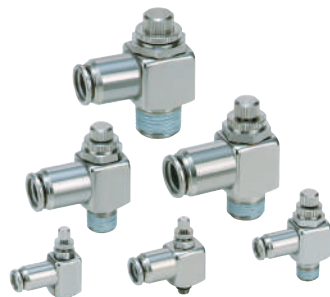
- 4 sizes.
- Suitable for polyurethane and nylon tubes.
- 360° rotation.
- Precise adjustment using special throttle pin shape and fine thread.
- Easy to mount.
- Teflon-coated connection thread (gasket for M3, M5).

Part number	Port Size	Tube ø (mm)	Flow* (ℓ/min)	Circuit Symbol
AS1201F-M3-02	M3	2	72	
AS1201F-M5-02	M5	2	72	
AS1201F-M3-23	M3	3.2	72	
AS1201F-M3-04		4	72	
AS1201F-M5-23A	M5	3.2	108	
AS1201F-M5-04A		4	108	
AS1201F-M5-06A		6	108	
AS2201F-01-04SA	R1/8	4	252	
AS2201F-01-06SA		6	288	
AS2201F-01-08SA		8	288	
AS2201F-02-06SA	R1/4	6	468	
AS2201F-02-08SA		8	468	
AS3201F-03-08SA	R3/8	8	864	
AS3201F-03-10SA		10	1188	
AS4201F-04-10SA	R1/2	10	1584	
AS4201F-04-12SA		12	1724	

Meter-in control option also available

*At 0.5 MPa set pressure

Stainless Steel Flow Controllers Series ASG



- SUS316 and special FKM construction to improve the resistance to corrosion.
- Elbow design to allow the rotation of the tubing connection ports and suit installation to air cylinders.
- Meter-in and meter-out type control.
- One-touch fittings and 5 body sizes.
- Applicable tubing: FEP, PFA, Nylon, Soft nylon, Polyurethane and Polyolefin.

Part number	Port Size	Tube ø (mm)	Flow* (ℓ/min)	Circuit Symbol
ASG220F-M5-04	M5	4	100	
ASG220F-M5-06		6	100	
ASG320F-01-04S	R1/8	4	180	
ASG320F-01-06S		6	230	
ASG2201-01-08S		8	230	
ASG2201-02-06S	R1/4	6	390	
ASG2201-02-08S		8	460	
ASG2201-02-10S		10	460	
ASG520F-03-08S	R3/8	8	790	
ASG3201-03-10S		10	920	
ASG520F-03-12S		12	920	
ASG620F-04-12S	R1/2	12	1580	

Meter-in control option also available

* Measured at 0.5 MPa and 20°C.

Quick Exhaust Valves Series AQ



- Large exhaust capacity.
- Port thread M5 to Rc3/4.
- Superior flow capacity.

Part number	Port Size	Effective Area (mm²)		Circuit Symbol
		IN → OUT	OUT → Exh.	
AQ1500-M5	M5	2	2,8	
AQ1510-01	R1/8	4	5,8	
AQ2000-01		25	25	
AQ2000-02	R1/4	35	40	
AQ3000-03	R3/8	60	70	
AQ5000-04	R1/2	105	115	
AQ5000-06	R3/4	135	180	

One-touch Fittings Series KQ2

- Quick mounting/removal
- For compressed air, water and vacuum
- Suitable for polyurethane and nylon tubes

Male Connector KQ2H



Part No.	R	ØD
KQ2H23-M3G1	*M3	3.2
KQ2H23-M5N1	*M5	3.2
KQ2H23-01NS1	R1/8	3.2
KQ2H23-02NS1	R1/4	3.2
KQ2H04-M5N1	*M5	4
KQ2H04-01NS1	R1/8	4
KQ2H04-02NS1	R1/4	4
KQ2H06-M5N1	*M5	6
KQ2H06-01NS1	R1/8	6
KQ2H06-02NS1	R1/4	6
KQ2H06-03NS1	R3/8	6
KQ2H08-01NS	R1/8	8
KQ2H08-02NS	R1/4	8
KQ2H08-03NS	R3/8	8
KQ2H10-01NS	R1/8	10
KQ2H10-02NS	R1/4	10
KQ2H10-03NS	R3/8	10
KQ2H10-04NS	R1/2	10
KQ2H12-02NS	R1/4	12
KQ2H12-03NS	R3/8	12
KQ2H12-04NS	R1/2	12
KQ2H16-03NS	R3/8	16
KQ2H16-04NS	R1/2	16

* with gasket

Hexagon Socket Head Male Connector KQ2S



Part No.	R	ØD
KQ2S02-M3G	*M3	2
KQ2S23-M3G1	*M3	3.2
KQ2S23-M5N1	*M5	3.2
KQ2S04-M5N1	*M5	4
KQ2S04-01NS1	R1/8	4
KQ2S06-M5N1	*M5	6
KQ2S06-01NS1	R1/8	6
KQ2S06-02NS1	R1/4	6
KQ2S08-01NS	R1/8	8
KQ2S08-02NS	R1/4	8
KQ2S08-03NS	R3/8	8
KQ2S10-01NS	R1/8	10
KQ2S10-02NS	R1/4	10
KQ2S10-03NS	R3/8	10
KQ2S10-04NS	R1/2	10
KQ2S12-02NS	R1/4	12
KQ2S12-03NS	R3/8	12
KQ2S12-04NS	R1/2	12
KQ2S16-03NS	R3/8	16
KQ2S16-04NS	R1/2	16

* with gasket

45° Male Elbow KQ2K



Part No.	R	ØD
KQ2K04-M5N1	*M5	4
KQ2K04-M6N1	*M6	4
KQ2K04-01NS1	R1/8	4
KQ2K04-02NS1	R1/4	4
KQ2K06-M5N1	*M5	6
KQ2K06-M6N1	*M6	6
KQ2K06-01NS1	R1/8	6
KQ2K06-02NS1	R1/4	6
KQ2K06-03NS1	R3/8	6
KQ2K08-01NS	R1/8	8
KQ2K08-02NS	R1/4	8
KQ2K08-03NS	R3/8	8
KQ2K10-01NS	R1/8	10
KQ2K10-02NS	R1/4	10
KQ2K10-03NS	R3/8	10
KQ2K10-04NS	R1/2	10
KQ2K12-02NS	R1/4	12
KQ2K12-03NS	R3/8	12
KQ2K12-04NS	R1/2	12
KQ2K16-03NS	R3/8	16
KQ2K16-04NS	R1/2	16

* with gasket

Female connector KQ2F



Part No.	Rc	ØD
KQ2F23-M3N1	M3	3.2
KQ2F23-M5N1	M5	3.2
KQ2F04-01N1	Rc1/8	4
KQ2F04-02N1	Rc1/4	4
KQ2F06-01N1	Rc1/8	6
KQ2F06-02N1	Rc1/4	6
KQ2F06-03N1	Rc3/8	6
KQ2F08-01N	Rc1/8	8
KQ2F08-02N	Rc1/4	8
KQ2F08-03N	Rc3/8	8
KQ2F10-02N	Rc1/4	10
KQ2F10-03N	Rc3/8	10
KQ2F12-02N	Rc1/4	12
KQ2F12-03N	Rc3/8	12
KQ2F12-04N	Rc1/2	12
KQ2F16-03N	Rc3/8	16
KQ2F16-04N	Rc1/2	16

Male Elbow KQ2L



Part No.	R	ØD
KQ2L02-M3G	*M3	2
KQ2L02-M5N	*M5	2
KQ2L23-M3G1	*M3	3.2
KQ2L23-M5N1	*M5	3.2
KQ2L23-01NS1	R1/8	3.2
KQ2L23-02NS1	R1/4	3.2
KQ2L04-M3G1	*M3	4
KQ2L04-M5N1	*M5	4
KQ2L04-M6N1	*M6	4
KQ2L04-01NS1	R1/8	4
KQ2L04-02NS1	R1/4	4
KQ2L06-M5N1	*M5	6
KQ2L06-M6N1	*M6	6
KQ2L06-01NS1	R1/8	6
KQ2L06-02NS1	R1/4	6
KQ2L06-03NS1	R3/8	6
KQ2L08-01NS	R1/8	8
KQ2L08-02NS	R1/4	8
KQ2L08-03NS	R3/8	8
KQ2L10-01NS	R1/8	10
KQ2L10-02NS	R1/4	10
KQ2L10-03NS	R3/8	10
KQ2L10-04NS	R1/2	10
KQ2L12-02NS	R1/4	12
KQ2L12-03NS	R3/8	12
KQ2L12-04NS	R1/2	12
KQ2L16-03NS	R3/8	16
KQ2L16-04NS	R1/2	16

* with gasket

Straight Union KQ2H



Part No.	ØD	ØD
KQ2H02-00A	2	2
KQ2H23-00A1	3.2	3.2
KQ2H04-00A1	4	4
KQ2H06-00A1	6	6
KQ2H08-00A	8	8
KQ2H10-00A	10	10
KQ2H12-00A	12	12
KQ2H16-00A	16	16

Extended Male Elbow KQ2W



Part No.	R	ØD
KQ2W02-M3G	*M3	2
KQ2W02-M5N	*M5	2
KQ2W23-M3G1	*M3	3.2
KQ2W23-M5N1	*M5	3.2
KQ2W23-01NS1	R1/8	3.2
KQ2W23-02NS1	R1/4	3.2
KQ2W04-M3G1	*M3	4
KQ2W04-M5N1	*M5	4
KQ2W04-01NS1	R1/8	4
KQ2W04-02NS1	R1/4	4
KQ2W06-M5N1	*M5	6
KQ2W06-01NS1	R1/8	6
KQ2W06-02NS1	R1/4	6
KQ2W06-03NS1	R3/8	6
KQ2W08-01NS	R1/8	8
KQ2W08-02NS	R1/4	8
KQ2W08-03NS	R3/8	8
KQ2W10-02NS	R1/4	10
KQ2W10-03NS	R3/8	10
KQ2W10-04NS	R1/2	10
KQ2W12-02NS	R1/4	12
KQ2W12-03NS	R3/8	12
KQ2W12-04NS	R1/2	12
KQ2W16-03NS	R3/8	16
KQ2W16-04NS	R1/2	16

* with gasket

Different Diameter Straight KQ2H



Part No.	Ød	ØD
KQ2H23-04A1	3.2	4
KQ2H04-06A1	4	6
KQ2H06-08A1	6	8
KQ2H08-10A	8	10
KQ2H10-12A	10	12
KQ2H12-16A	12	16

One-touch Fittings Series KQ2

**Female Elbow
KQ2LF**



Part No.	Rc	ØD
KQ2LF04-M5N1	M5	4
KQ2LF04-M6N1	M6	4
KQ2LF04-01N1	Rc1/8	4
KQ2LF04-02N1	Rc1/4	4
KQ2LF06-M5N1	M5	6
KQ2LF06-M6N1	M6	6
KQ2LF06-01N1	Rc1/8	6
KQ2LF06-02N1	Rc1/4	6
KQ2LF06-03N1	Rc3/8	6
KQ2LF08-01N	Rc1/8	8
KQ2LF08-02N	Rc1/4	8
KQ2LF08-03N	Rc3/8	8
KQ2LF10-02N	Rc1/4	10
KQ2LF10-03N	Rc3/8	10
KQ2LF10-04N	Rc1/2	10
KQ2LF12-02N	Rc1/4	12
KQ2LF12-03N	Rc3/8	12
KQ2LF12-04N	Rc1/2	12

**Universal Male Elbow
KQ2V**



Part No.	R	ØD
KQ2V04-M5N1	*M5	4
KQ2V04-01NS1	R1/8	4
KQ2V06-M5N1	*M5	6
KQ2V06-01NS1	R1/8	6
KQ2V06-02NS1	R1/4	6
KQ2V08-01NS	R1/8	8
KQ2V08-02NS	R1/4	8
KQ2V08-03NS	R3/8	8
KQ2V10-02NS	R1/4	10
KQ2V10-03NS	R3/8	10
KQ2V12-03NS	R3/8	12
KQ2V12-04NS	R1/2	12
KQ2V16-03NS	R3/8	16
KQ2V16-04NS	R1/2	16

* with gasket

**Hexagon Socket Head
Universal Male Elbow
KQ2VS**



Part No.	R	ØD
KQ2VS04-M5N1	*M5	4
KQ2VS04-01NS1	R1/8	4
KQ2VS06-M5N1	*M5	6
KQ2VS06-01NS1	R1/8	6
KQ2VS06-02NS1	R1/4	6
KQ2VS08-01NS	R1/8	8
KQ2VS08-02NS	R1/4	8
KQ2VS08-03NS	R3/8	8
KQ2VS10-02NS	R1/4	10
KQ2VS10-03NS	R3/8	10
KQ2VS12-03NS	R3/8	12
KQ2VS12-04NS	R1/2	12

* with gasket

**Universal Female Elbow
KQ2VF**



Part No.	R, Rc	ØD
KQ2VF04-M5N1	*M5	4
KQ2VF04-01NS1	1/8	4
KQ2VF06-M5N1	*M5	6
KQ2VF06-01NS1	1/8	6
KQ2VF06-02NS1	1/4	6
KQ2VF08-01NS	1/8	8
KQ2VF08-02NS	1/4	8
KQ2VF08-03NS	3/8	8
KQ2VF10-02NS	1/4	10
KQ2VF10-03NS	3/8	10
KQ2VF12-03NS	3/8	12
KQ2VF12-04NS	1/2	12

* with gasket

**Union Tee
KQ2T**



Part No.	ØD	ØD
KQ2T02-00A	2	2
KQ2T23-00A1	3,2	3,2
KQ2T04-00A1	4	4
KQ2T06-00A1	6	6
KQ2T08-00A	8	8
KQ2T10-00A	10	10
KQ2T12-00A	12	12
KQ2T16-00A	16	16

**Different Diameter Tee
KQ2T**



Part No.	Ød	ØD
KQ2T23-04A1	3,2	4
KQ2T04-06A1	4	6
KQ2T06-08A1	6	8
KQ2T08-10A	8	10
KQ2T10-12A	10	12
KQ2T12-16A	12	16

**Different Diameter Tee
KQ2T**



Part No.	Ød	ØD
KQ2T06-04A1	6	4
KQ2T08-06A1	8	6
KQ2T10-08A	10	8
KQ2T12-10A	12	10

**Delta Union
KQ2D**



Part No.	ØD	ØD
KQ2D04-00A1	4	4
KQ2D06-00A1	6	6
KQ2D08-00A	8	8
KQ2D10-00A	10	10
KQ2D12-00A	12	12

**Male Branch Tee
KQ2T**



Part No.	R	ØD
KQ2T02-M3G	*M3	2
KQ2T02-M5N	*M5	2
KQ2T23-M3G1	*M3	3,2
KQ2T23-M5N1	*M5	3,2
KQ2T23-01NS1	R1/8	3,2
KQ2T23-02NS1	R1/4	3,2
KQ2T04-M3G1	*M3	4
KQ2T04-M5N1	*M5	4
KQ2T04-M6N1	*M6	4
KQ2T04-01NS1	R1/8	4
KQ2T04-02NS1	R1/4	4
KQ2T06-M5N1	*M5	6
KQ2T06-M6N1	*M6	6
KQ2T06-01NS1	R1/8	6
KQ2T06-02NS1	R1/4	6
KQ2T06-03NS1	R3/8	6
KQ2T08-01NS	R1/8	8
KQ2T08-02NS	R1/4	8
KQ2T08-03NS	R3/8	8
KQ2T10-01NS	R1/8	10
KQ2T10-02NS	R1/4	10
KQ2T10-03NS	R3/8	10
KQ2T10-04NS	R1/2	10
KQ2T12-02NS	R1/4	12
KQ2T12-03NS	R3/8	12
KQ2T12-04NS	R1/2	12
KQ2T16-03NS	R3/8	16
KQ2T16-04NS	R1/2	16

* with gasket

**Male Run Tee
KQ2Y**



Part No.	R	ØD
KQ2Y02-M3G	*M3	2
KQ2Y02-M5N1	*M5	2
KQ2Y23-M3G1	*M3	3,2
KQ2Y23-M5N1	*M5	3,2
KQ2T23-01NS1	R1/8	3,2
KQ2Y23-02NS1	R1/4	3,2
KQ2Y04-M3G1	*M3	4
KQ2Y04-M5N1	*M5	4
KQ2Y04-M6N1	*M6	4
KQ2Y04-01NS1	R1/8	4
KQ2Y04-02NS1	R1/4	4
KQ2Y06-M5N1	*M5	6
KQ2Y06-M6N1	*M6	6
KQ2Y06-01NS1	R1/8	6
KQ2Y06-02NS1	R1/4	6
KQ2Y06-03NS1	R3/8	6
KQ2Y08-01NS	R1/8	8
KQ2Y08-02NS	R1/4	8
KQ2Y08-03NS	R3/8	8
KQ2Y10-01NS	R1/8	10
KQ2Y10-02NS	R1/4	10
KQ2Y10-03NS	R3/8	10
KQ2Y10-04NS	R1/2	10
KQ2Y12-02NS	R1/4	12
KQ2Y12-03NS	R3/8	12
KQ2Y12-04NS	R1/2	12
KQ2Y16-03NS	R3/8	16
KQ2Y16-04NS	R1/2	16

* with gasket

One-touch Fittings Series KQ2

Union Elbow KQ2L



Part No.	ØD	ØD
KQ2L23-00A1	3,2	3,2
KQ2L04-00A1	4	4
KQ2L06-00A1	6	6
KQ2L08-00A	8	8
KQ2L10-00A	10	10
KQ2L12-00A	12	12
KQ2L16-00A	16	16

Pug-in Elbow KQ2L



Part No.	ØD	ØD
KQ2L23-99A1	3,2	3,2
KQ2L04-99A1	4	4
KQ2L06-99A1	6	6
KQ2L08-99A	8	8
KQ2L10-99A	10	10
KQ2L12-99A	12	12
KQ2L16-99A	16	16

Extended Plug-in Elbow KQ2W



Part No.	ØD	ØD
KQ2W23-99A1	3,2	3,2
KQ2W04-99A1	4	4
KQ2W06-99A1	6	6
KQ2W08-99A	8	8
KQ2W10-99A	10	10
KQ2W12-99A	12	12

Reducer Elbow KQ2L



Part No.	Ød	ØD
KQ2L23-04A1	3,2	4
KQ2L04-06A1	4	6
KQ2L04-08A1	4	8
KQ2L06-08A1	6	8
KQ2L06-10A1	6	10
KQ2L08-10A	8	10
KQ2L08-12A	8	12
KQ2L10-12A	10	12
KQ2L12-16A	12	16

Union «Y» KQ2U



Part No.	ØD	ØD
KQ2U02-00A	2	2
KQ2U23-00A	3,2	3,2
KQ2U04-00A	4	4
KQ2U06-00A	6	6
KQ2U08-00A	8	8
KQ2U10-00A	10	10
KQ2U12-00A	12	12
KQ2U16-00A	16	16

Different Diameter Union KQ2U «Y»



Part No.	Ød	ØD
KQ2U02-23A	2	3,2
KQ2U02-04A	2	4
KQ2U23-04A	3,2	4
KQ2U04-06A	4	6
KQ2U06-08A	6	8
KQ2U08-10A	8	10
KQ2U10-12A	10	12
KQ2U12-16A	12	16

Plug-in «Y» KQ2U



Part No.	ØD	ØD
KQ2U23-99A	3,2	3,2
KQ2U04-99A	4	4
KQ2U06-99A	6	6
KQ2U08-99A	8	8
KQ2U10-99A	10	10
KQ2U12-99A	12	12
KQ2U16-99A	16	16

Different Diameter Plug-in «Y» KQ2X



Part No.	Ød	ØD
KQ2X23-04A	3,2	4
KQ2X04-06A	4	6
KQ2X06-08A	6	8
KQ2X08-10A	8	10
KQ2X10-12A	10	12

Branch Union Elbow KQ2LU



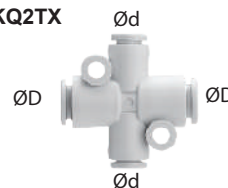
Part No.	ØD	ØD
KQ2LU04-00A	4	4
KQ2LU06-00A	6	6
KQ2LU08-00A	8	8
KQ2LU10-00A	10	10
KQ2LU12-00A	12	12

Cross KQ2TW



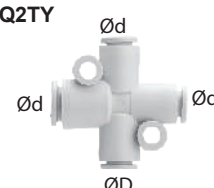
Part No.	ØD
KQ2TW04-00A1	4
KQ2TW06-00A1	6
KQ2TW08-00A	8
KQ2TW10-00A	10
KQ2TW12-00A	12

Different Diameter Cross KQ2TX



Part No.	Ød	ØD
KQ2TX06-08A1	6	8
KQ2TX08-10A	8	10
KQ2TX10-12A	10	12

Different Diameter Cross KQ2TY



Part No.	Ød	ØD
KQ2TY06-08A1	6	8
KQ2TY08-10A	8	10
KQ2TY10-12A	10	12

One-touch Fittings Series KQ2

Branch «Y» KQ2U



Part No.	R	ØD
KQ2U23-M5N	*M5	3,2
KQ2U23-01NS	R1/8	3,2
KQ2U23-02NS	R1/4	3,2
KQ2U04-M5N	*M5	4
KQ2U04-01NS	R1/8	4
KQ2U04-02NS	R1/4	4
KQ2U06-M5N	*M5	6
KQ2U06-01NS	R1/8	6
KQ2U06-02NS	R1/4	6
KQ2U06-03NS	R3/8	6
KQ2U08-01NS	R1/8	8
KQ2U08-02NS	R1/4	8
KQ2U08-03NS	R3/8	8
KQ2U10-02NS	R1/4	10
KQ2U10-03NS	R3/8	10
KQ2U10-04NS	R1/2	10
KQ2U12-02NS	R1/4	12
KQ2U12-03NS	R3/8	12
KQ2U12-04NS	R1/2	12
KQ2U16-03NS	R3/8	16
KQ2U16-04NS	R1/2	16

* with gasket

Bulkhead Connector KQ2E



Part No.	Rc	ØD
KQ2E23-02N1	Rc1/4	3,2
KQ2E04-01N1	Rc1/8	4
KQ2E04-02N1	Rc1/4	4
KQ2E06-01N1	Rc1/8	6
KQ2E06-02N1	Rc1/4	6
KQ2E06-03N1	Rc3/8	6
KQ2E08-01N	Rc1/8	8
KQ2E08-02N	Rc1/4	8
KQ2E08-03N	Rc3/8	8
KQ2E10-02N	Rc1/4	10
KQ2E10-03N	Rc3/8	10
KQ2E12-03N	Rc3/8	12
KQ2E12-04N	Rc1/2	12
KQ2E16-03N	Rc3/8	16
KQ2E16-04N	Rc1/2	16

Plug-in reducer KQ2R



Part No.	Ød	ØD
KQ2R23-04A1	3,2	4
KQ2R04-06A1	4	6
KQ2R04-08A1	4	8
KQ2R04-10A1	4	10
KQ2R06-04A1	6	4
KQ2R06-08A1	6	8
KQ2R06-10A1	6	10
KQ2R06-12A1	6	12
KQ2R08-10A	8	10
KQ2R08-12A	8	12
KQ2R10-12A	10	12
KQ2R10-16A	10	16
KQ2R12-16A	12	16

Tube Cap KQ2C



Part No.	ØD
KQ2C04-00A1	4
KQ2C06-00A1	6
KQ2C08-00A	8
KQ2C10-00A	10
KQ2C12-00A	12
KQ2C16-00A	16

Plug KQ2P



Part No.	ØD
KJP-02	2
KQ2P-23	3,2
KQ2P-04	4
KQ2P-06	6
KQ2P-08	8
KQ2P-10	10
KQ2P-12	12
KQ2P-16	16

Adaptor KQ2N



Part No.	R	ØD
KQ2N04-M5N	*M5	4
KQ2N04-01NS	R1/8	4
KQ2N06-M5N	*M5	6
KQ2N06-01NS	R1/8	6
KQ2N06-02NS	R1/4	6
KQ2N08-02NS	R1/4	8
KQ2N08-03NS	R3/8	8
KQ2N10-03NS	R3/8	10

* with gasket

Nipple KQ2N



Part No.	ØD	ØD
KQ2N04-99	4	4
KQ2N06-99	6	6
KQ2N08-99	8	8
KQ2N10-99	10	10
KQ2N12-99	12	12
KQ2N16-99	16	16

Double Plug-in «Y» KQ2XD



Part No.	Ød	ØD
KQ2XD04-06A	4	6
KQ2XD06-08A	6	8

Delta Branch KQ2UD



Part No.	R	ØD
KQ2UD04-01NS	R1/8	4
KQ2UD04-02NS	R1/4	4
KQ2UD06-01NS	R1/8	6
KQ2UD06-02NS	R1/4	6

Bulkhead Union KQ2E



Part No.	ØD	ØD
KQ2E23-00N1	3,2	3,2
KQ2E04-00N1	4	4
KQ2E06-00N1	6	6
KQ2E08-00N	8	8
KQ2E10-00N	10	10
KQ2E12-00N	12	12
KQ2E16-00N	16	16

Reducer Nipple KQ2N



Part No.	Ød	ØD
KQ2N04-06	4	6
KQ2N06-08	6	8
KQ2N08-10	8	10
KQ2N10-12	10	12
KQ2N12-16	12	16

Different Diameter Double Union «Y» KQ2UD



Part No.	Ød	ØD
KQ2UD04-06A	4	6
KQ2UD06-08A	6	8

Bulkhead Male Elbow KQ2LE



Part No.	ØD	ØD
KQ2LE04-00N1	4	4
KQ2LE06-00N1	6	6
KQ2LE08-00N	8	8
KQ2LE10-00N	10	10
KQ2LE12-00N	12	12

One-touch Fittings Series KQ2

Branch Universal Male Elbow KQ2Z



Part No.	R	ØD
KQ2Z04-M5N	*M5	4
KQ2Z04-01NS	R1/8	4
KQ2Z06-01NS	R1/8	6
KQ2Z06-02NS	R1/4	6
KQ2Z06-03NS	R3/8	6
KQ2Z08-01NS	R1/8	8
KQ2Z08-02NS	R1/4	8
KQ2Z08-03NS	R3/8	8
KQ2Z10-02NS	R1/4	10
KQ2Z10-03NS	R3/8	10
KQ2Z12-03NS	R3/8	12
KQ2Z12-04NS	R1/2	12

* with gasket

Branch Universal Female Elbow KQ2ZF



Part No.	R, Rc	ØD
KQ2ZF04-M5N	*M5	4
KQ2ZF04-01NS	1/8	4
KQ2ZF06-01NS	1/8	6
KQ2ZF06-02NS	1/4	6
KQ2ZF08-01NS	1/8	8
KQ2ZF08-02NS	1/4	8
KQ2ZF10-02NS	1/4	10
KQ2ZF10-03NS	3/8	10
KQ2ZF12-03NS	3/8	12
KQ2ZF12-04NS	1/2	12

* with gasket

Male Branch Connector KQ2LU



Part No.	R	ØD
KQ2LU04-M5N	*M5	4
KQ2LU04-01NS	R1/8	4
KQ2LU04-02NS	R1/4	4
KQ2LU06-M5N	*M5	6
KQ2LU06-01NS	R1/8	6
KQ2LU06-02NS	R1/4	6
KQ2LU06-03NS	R3/8	6
KQ2LU08-01NS	R1/8	8
KQ2LU08-02NS	R1/4	8
KQ2LU08-03NS	R3/8	8
KQ2LU10-02NS	R1/4	10
KQ2LU10-03NS	R3/8	10
KQ2LU10-04NS	R1/2	10
KQ2LU12-02NS	R1/4	12
KQ2LU12-03NS	R3/8	12
KQ2LU12-04NS	R1/2	12

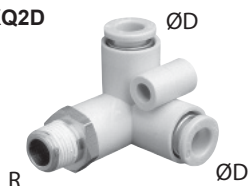
* with gasket

Double Universal Male Elbow KQ2VD



Part No.	R	ØD
KQ2VD04-01NS	R1/8	4
KQ2VD04-02NS	R1/4	4
KQ2VD04-03NS	R3/8	4
KQ2VD06-01NS	R1/8	6
KQ2VD06-02NS	R1/4	6
KQ2VD06-03NS	R3/8	6
KQ2VD08-01NS	R1/8	8
KQ2VD08-02NS	R1/4	8
KQ2VD08-03NS	R3/8	8
KQ2VD08-04NS	R1/2	8
KQ2VD10-02NS	R1/4	10
KQ2VD10-03NS	R3/8	10
KQ2VD10-04NS	R1/2	10
KQ2VD12-02NS	R1/4	12
KQ2VD12-03NS	R3/8	12
KQ2VD12-04NS	R1/2	12

Male Delta Union KQ2D



Part No.	R	ØD
KQ2D04-M5N1	*M5	4
KQ2D04-M6N1	*M6	4
KQ2D04-01NS1	R1/8	4
KQ2D04-02NS1	R1/4	4
KQ2D06-M5N1	*M5	6
KQ2D06-M6N1	*M6	6
KQ2D06-01NS1	R1/8	6
KQ2D06-02NS1	R1/4	6
KQ2D06-03NS1	R3/8	6
KQ2D08-01NS	R1/8	8
KQ2D08-02NS	R1/4	8
KQ2D08-03NS	R3/8	8
KQ2D10-02NS	R1/4	10
KQ2D10-03NS	R3/8	10
KQ2D10-04NS	R1/2	10
KQ2D12-02NS	R1/4	12
KQ2D12-03NS	R3/8	12
KQ2D12-04NS	R1/2	12

* with gasket

Triple Universal Male Elbow KQ2VT



Part No.	R	ØD
KQ2VT04-01NS	R1/8	4
KQ2VT04-02NS	R1/4	4
KQ2VT04-03NS	R3/8	4
KQ2VT06-01NS	R1/8	6
KQ2VT06-02NS	R1/4	6
KQ2VT06-03NS	R3/8	6
KQ2VT08-01NS	R1/8	8
KQ2VT08-02NS	R1/4	8
KQ2VT08-03NS	R3/8	8
KQ2VT08-04NS	R1/2	8
KQ2VT10-02NS	R1/4	10
KQ2VT10-03NS	R3/8	10
KQ2VT10-04NS	R1/2	10
KQ2VT12-02NS	R1/4	12
KQ2VT12-03NS	R3/8	12
KQ2VT12-04NS	R1/2	12

Double Branch Universal Male Elbow KQ2ZD



Part No.	R	ØD
KQ2ZD04-01NS	R1/8	4
KQ2ZD04-02NS	R1/4	4
KQ2ZD04-03NS	R3/8	4
KQ2ZD06-01NS	R1/8	6
KQ2ZD06-02NS	R1/4	6
KQ2ZD06-03NS	R3/8	6
KQ2ZD08-01NS	R1/8	8
KQ2ZD08-02NS	R1/4	8
KQ2ZD08-03NS	R3/8	8
KQ2ZD08-04NS	R1/2	8
KQ2ZD10-02NS	R1/4	10
KQ2ZD10-03NS	R3/8	10
KQ2ZD10-04NS	R1/2	10
KQ2ZD12-02NS	R1/4	12
KQ2ZD12-03NS	R3/8	12
KQ2ZD12-04NS	R1/2	12

Triple Branch Universal Male Elbow KQ2ZT



Part No.	R	ØD
KQ2ZT04-01NS	R1/8	4
KQ2ZT04-02NS	R1/4	4
KQ2ZT04-03NS	R3/8	4
KQ2ZT06-01NS	R1/8	6
KQ2ZT06-02NS	R1/4	6
KQ2ZT06-03NS	R3/8	6
KQ2ZT08-01NS	R1/8	8
KQ2ZT08-02NS	R1/4	8
KQ2ZT08-03NS	R3/8	8
KQ2ZT08-04NS	R1/2	8
KQ2ZT10-02NS	R1/4	10
KQ2ZT10-03NS	R3/8	10
KQ2ZT10-04NS	R1/2	10
KQ2ZT12-02NS	R1/4	12
KQ2ZT12-03NS	R3/8	12
KQ2ZT12-04NS	R1/2	12

Fittings

One-touch Metal Fittings Series KQB2

Male Connector KQB2H



Part No.	R	ØD
KQB2H23-M5	M5x0.8	3.2
KQB2H23-01S	1/8	3.2
KQB2H23-02S	1/4	3.2
KQB2H04-M5	M5x0.8	4
KQB2H04-01S	1/8	4
KQB2H04-02S	1/4	4
KQB2H06-M5	M5x0.8	6
KQB2H06-01S	1/8	6
KQB2H06-02S	1/4	6
KQB2H06-03S	3/8	6
KQB2H08-01S	1/8	8
KQB2H08-02S	1/4	8
KQB2H08-03S	3/8	8
KQB2H10-01S	1/8	10
KQB2H10-02S	1/4	10
KQB2H10-03S	3/8	10
KQB2H10-04S	1/2	10
KQB2H12-02S	1/4	12
KQB2H12-03S	3/8	12
KQB2H12-04S	1/2	12
KQB2H16-03S	3/8	16
KQB2H16-04S	1/2	16

Hexagon Socket Head Male Connector KQB2S



Part No.	R	ØD
KQB2S23-M5	M5x0.8	3.2
KQB2S04-M5	M5x0.8	4
KQB2S04-01S	1/8	4
KQB2S06-M5	M5x0.8	6
KQB2S06-01S	1/8	6
KQB2S06-02S	1/4	6
KQB2S08-01S	1/8	8
KQB2S08-02S	1/4	8
KQB2S08-03S	3/8	8
KQB2S10-01S	1/8	10
KQB2S10-02S	1/4	10
KQB2S10-03S	3/8	10
KQB2S10-04S	1/2	10
KQB2S12-02S	1/4	12
KQB2S12-03S	3/8	12
KQB2S12-04S	1/2	12
KQB2S16-03S	3/8	16
KQB2S16-04S	1/2	16

Straight Union KQB2H



Part No.	ØD
KQB2H23-00	3.2
KQB2H04-00	4
KQB2H06-00	6
KQB2H08-00	8
KQB2H10-00	10
KQB2H12-00	12
KQB2H16-00	16

Different Diameter Straight KQB2H



Part No.	ØD	ØD
KQB2H23-04	3.2	4
KQB2H04-06	4	6
KQB2H06-08	6	8
KQB2H08-10	8	10
KQB2H10-12	10	12
KQB2H12-16	12	16

Extended Male Elbow KQB2W



Part No.	R	ØD
KQB2W23-M5	M5x0.8	3.2
KQB2W23-01S	1/8	3.2
KQB2W23-02S	1/4	3.2
KQB2W04-M5	M5x0.8	4
KQB2W04-01S	1/8	4
KQB2W04-02S	1/4	4
KQB2W06-M5	M5x0.8	6
KQB2W06-01S	1/8	6
KQB2W06-02S	1/4	6
KQB2W06-03S	3/8	6
KQB2W08-01S	1/8	8
KQB2W08-02S	1/4	8
KQB2W08-03S	3/8	8
KQB2W10-02S	1/4	10
KQB2W10-03S	3/8	10
KQB2W10-04S	1/2	10
KQB2W12-02S	1/4	12
KQB2W12-03S	3/8	12
KQB2W12-04S	1/2	12
KQB2W16-03S	3/8	16
KQB2W16-04S	1/2	16

Bulkhead Connector KQB2E



Part No.	Rc	ØD
KQB2E04-01	1/8	4
KQB2E04-02	1/4	4
KQB2E06-01	1/8	6
KQB2E06-02	1/4	6
KQB2E06-03	3/8	6
KQB2E08-01	1/8	8
KQB2E08-02	1/4	8
KQB2E08-03	3/8	8
KQB2E10-02	1/4	10
KQB2E10-03	3/8	10
KQB2E12-03	3/8	12
KQB2E12-04	1/2	12
KQB2E16-03	3/8	16
KQB2E16-04	1/2	16

Female Connector KQB2F



Part No.	Rc	ØD
KQB2F23-01	1/8	3.2
KQB2F04-01	1/8	4
KQB2F04-02	1/4	4
KQB2F06-01	1/8	6
KQB2F06-02	1/4	6
KQB2F06-03	3/8	6
KQB2F08-01	1/8	8
KQB2F08-02	1/4	8
KQB2F08-03	3/8	8
KQB2F10-02	1/4	10
KQB2F10-03	3/8	10
KQB2F12-02	1/4	12
KQB2F12-03	3/8	12
KQB2F12-04	1/2	12
KQB2F16-03	3/8	16
KQB2F16-04	1/2	16

Male Elbow KQB2L



Part No.	R	ØD
KQB2L23-M5	M5x0.8	3.2
KQB2L23-01S	1/8	3.2
KQB2L23-02S	1/4	3.2
KQB2L04-M5	M5x0.8	4
KQB2L04-01S	1/8	4
KQB2L04-02S	1/4	4
KQB2L06-M5	M5x0.8	6
KQB2L06-01S	1/8	6
KQB2L06-02S	1/4	6
KQB2L06-03S	3/8	6
KQB2L08-01S	1/8	8
KQB2L08-02S	1/4	8
KQB2L08-03S	3/8	8
KQB2L10-01S	1/8	10
KQB2L10-02S	1/4	10
KQB2L10-03S	3/8	10
KQB2L10-04S	1/2	10
KQB2L12-02S	1/4	12
KQB2L12-03S	3/8	12
KQB2L12-04S	1/2	12
KQB2L16-03S	3/8	16
KQB2L16-04S	1/2	16

Bulkhead Union KQB2E



Part No.	ØD
KQB2E23-00	3.2
KQB2E04-00	4
KQB2E06-00	6
KQB2E08-00	8
KQB2E10-00	10
KQB2E12-00	12
KQB2E16-00	16

One-touch Metal Fittings Series KQB2

Union "Y" KQB2U	
	
Part No.	ØD
KQB2U23-00	3.2
KQB2U04-00	4
KQB2U06-00	6
KQB2U08-00	8
KQB2U10-00	10
KQB2U12-00	12
KQB2U16-00	16

Different Diameter Union "Y" KQB2U			
			
Part No.	ØD	ØD	ØD
KQB2U23-04	3.2	4	
KQB2U04-06	4	6	
KQB2U06-08	6	8	
KQB2U08-10	8	10	
KQB2U10-12	10	12	
KQB2U12-16	12	16	

Plug-in Reducer KQB2R		
		
Part No.	ØD	ØD
KQB2R23-04	3.2	4
KQB2R04-06	4	6
KQB2R06-08	6	8
KQB2R08-10	8	10
KQB2R10-12	10	12
KQB2R12-16	12	16

Union Elbow KQB2L	
	
Part No.	ØD
KQB2L23-00	3.2
KQB2L04-00	4
KQB2L06-00	6
KQB2L08-00	8
KQB2L10-00	10
KQB2L12-00	12
KQB2L16-00	16

Male Branch Tee KQB2T			
			
Part No.	R	ØD	ØD
KQB2T23-M5	M5x0.8	3.2	
KQB2T23-01S	1/8	3.2	
KQB2T23-02S	1/4	3.2	
KQB2T04-M5	M5x0.8	4	
KQB2T04-01S	1/8	4	
KQB2T04-02S	1/4	4	
KQB2T06-M5	M5x0.8	6	
KQB2T06-01S	1/8	6	
KQB2T06-02S	1/4	6	
KQB2T06-03S	3/8	6	
KQB2T08-01S	1/8	8	
KQB2T08-02S	1/4	8	
KQB2T08-03S	3/8	8	
KQB2T10-01S	1/8	10	
KQB2T10-02S	1/4	10	
KQB2T10-03S	3/8	10	
KQB2T10-04S	1/2	10	
KQB2T12-02S	1/4	12	
KQB2T12-03S	3/8	12	
KQB2T12-04S	1/2	12	
KQB2T16-03S	3/8	16	
KQB2T16-04S	1/2	16	

Different Diameter tee KQB2T		
		
Part No.	ØD	ØD
KQB2T23-04	3.2	4
KQB2T04-06	4	6
KQB2T06-08	6	8
KQB2T08-10	8	10
KQB2T10-12	10	12
KQB2T12-16	12	16

Union Tee KQB2T	
	
Part No.	ØD
KQB2T23-00	3.2
KQB2T04-00	4
KQB2T06-00	6
KQB2T08-00	8
KQB2T10-00	10
KQB2T12-00	12
KQB2T16-00	16

One-touch 316 Stainless Steel Fittings Series KQG

Male Connector KQG2H



Part No.	R	ØD
KQG2H23-M5	M5x0.8	3.2
KQG2H23-01S	1/8	3.2
KQG2H23-02S	1/4	3.2
KQG2H04-M5	M5x0.8	4
KQG2H04-01S	1/8	4
KQG2H04-02S	1/4	4
KQG2H06-M5	M5x0.8	6
KQG2H06-01S	1/8	6
KQG2H06-02S	1/4	6
KQG2H06-03S	3/8	6
KQG2H08-01S	1/8	8
KQG2H08-02S	1/4	8
KQG2H08-03S	3/8	8
KQG2H10-01S	1/8	10
KQG2H10-02S	1/4	10
KQG2H10-03S	3/8	10
KQG2H10-04S	1/2	10
KQG2H12-02S	1/4	12
KQG2H12-03S	3/8	12
KQG2H12-04S	1/2	12
KQG2H16-03S	3/8	16
KQG2H16-04S	1/2	16

Hexagon Socket Head Male Connector KQG2S



Part No.	R	ØD
KQG2S23-M5	M5x0.8	3.2
KQG2S04-M5	M5x0.8	4
KQG2S04-01S	1/8	4
KQG2S06-M5	M5x0.8	6
KQG2S06-01S	1/8	6
KQG2S06-02S	1/4	6
KQG2S08-01S	1/8	8
KQG2S08-02S	1/4	8
KQG2S08-03S	3/8	8
KQG2S10-01S	1/8	10
KQG2S10-02S	1/4	10
KQG2S10-03S	3/8	10
KQG2S10-04S	1/2	10
KQG2S12-02S	1/4	12
KQG2S12-03S	3/8	12
KQG2S12-04S	1/2	12
KQG2S16-03S	3/8	16
KQG2S16-04S	1/2	16

Straight Union KQG2H



Part No.	ØD
KQG2H23-00	3.2
KQG2H04-00	4
KQG2H06-00	6
KQG2H08-00	8
KQG2H10-00	10
KQG2H12-00	12
KQG2H16-00	16

Different Diameter Straight KQB2H



Part No.	a ØD	b ØD
KQB2H23-04	3.2	4
KQB2H04-06	4	6
KQB2H06-08	6	8
KQB2H08-10	8	10
KQB2H10-12	10	12
KQB2H12-16	12	16

Extended Male Elbow KQG2W



Part No.	R	ØD
KQG2W23-M5	M5x0.8	3.2
KQG2W23-01S	1/8	3.2
KQG2W23-02S	1/4	3.2
KQG2W04-M5	M5x0.8	4
KQG2W04-01S	1/8	4
KQG2W04-02S	1/4	4
KQG2W06-M5	M5x0.8	6
KQG2W06-01S	1/8	6
KQG2W06-02S	1/4	6
KQG2W06-03S	3/8	6
KQG2W08-01S	1/8	8
KQG2W08-02S	1/4	8
KQG2W08-03S	3/8	8
KQG2W10-02S	1/4	10
KQG2W10-03S	3/8	10
KQG2W10-04S	1/2	10
KQG2W12-02S	1/4	12
KQG2W12-03S	3/8	12
KQG2W12-04S	1/2	12
KQG2W16-03S	3/8	16
KQG2W16-04S	1/2	16

Bulkhead Connector KQG2E



Part No.	Rc	ØD
KQG2E04-01	1/8	4
KQG2E04-02	1/4	4
KQG2E06-01	1/8	6
KQG2E06-02	1/4	6
KQG2E06-03	3/8	6
KQG2E08-01	1/8	8
KQG2E08-02	1/4	8
KQG2E08-03	3/8	8
KQG2E10-02	1/4	10
KQG2E10-03	3/8	10
KQG2E12-03	3/8	12
KQG2E12-04	1/2	12
KQG2E16-03	3/8	16
KQG2E16-04	1/2	16

Female Connector KQG2F



Part No.	Rc	ØD
KQG2F23-01	1/8	3.2
KQG2F04-01	1/8	4
KQG2F04-02	1/4	4
KQG2F06-01	1/8	6
KQG2F06-02	1/4	6
KQG2F06-03	3/8	6
KQG2F08-01	1/8	8
KQG2F08-02	1/4	8
KQG2F08-03	3/8	8
KQG2F10-02	1/4	10
KQG2F10-03	3/8	10
KQG2F12-02	1/4	12
KQG2F12-03	3/8	12
KQG2F12-04	1/2	12
KQG2F16-03	3/8	16
KQG2F16-04	1/2	16

Male Elbow KQG2L



Part No.	R	ØD
KQG2L23-M5	M5x0.8	3.2
KQG2L23-01S	1/8	3.2
KQG2L23-02S	1/4	3.2
KQG2L04-M5	M5x0.8	4
KQG2L04-01S	1/8	4
KQG2L04-02S	1/4	4
KQG2L06-M5	M5x0.8	6
KQG2L06-01S	1/8	6
KQG2L06-02S	1/4	6
KQG2L06-03S	3/8	6
KQG2L08-01S	1/8	8
KQG2L08-02S	1/4	8
KQG2L08-03S	3/8	8
KQG2L10-01S	1/8	10
KQG2L10-02S	1/4	10
KQG2L10-03S	3/8	10
KQG2L10-04S	1/2	10
KQG2L12-02S	1/4	12
KQG2L12-03S	3/8	12
KQG2L12-04S	1/2	12
KQG2L16-03S	3/8	16
KQG2L16-04S	1/2	16

Bulkhead Union KQG2E



Part No.	ØD
KQG2E23-00	3.2
KQG2E04-00	4
KQG2E06-00	6
KQG2E08-00	8
KQG2E10-00	10
KQG2E12-00	12
KQG2E16-00	16

One-touch 316 Stainless Steel Fittings Series KQG

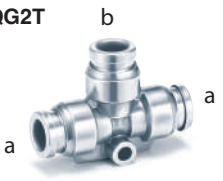
Union "Y" KQG2U	
	
Part No.	ØD
KQG2U23-00	3.2
KQG2U04-00	4
KQG2U06-00	6
KQG2U08-00	8
KQG2U10-00	10
KQG2U12-00	12
KQG2U16-00	16

Different Diameter Union "Y" KQG2U			
			
Part No.	ØD	ØD	ØD
KQG2U23-04	3.2	4	
KQG2U04-06	4	6	
KQG2U06-08	6	8	
KQG2U08-10	8	10	
KQG2U10-12	10	12	
KQG2U12-16	12	16	

Plug-in Reducer KQG2R		
		
Part No.	ØD	ØD
KQG2R23-04	3.2	4
KQG2R04-06	4	6
KQG2R06-08	6	8
KQG2R08-10	8	10
KQG2R10-12	10	12
KQG2R12-16	12	16

Union Elbow KQG2L	
	
Part No.	ØD
KQG2L23-00	3.2
KQG2L04-00	4
KQG2L06-00	6
KQG2L08-00	8
KQG2L10-00	10
KQG2L12-00	12
KQG2L16-00	16

Male Branch Tee KQ		
		
Part No.	R	ØD
KQG2T23-M5	M5x0.8	3.2
KQG2T23-01S	1/8	3.2
KQG2T23-02S	1/4	3.2
KQG2T04-M5	M5x0.8	4
KQG2T04-01S	1/8	4
KQG2T04-02S	1/4	4
KQG2T06-M5	M5x0.8	6
KQG2T06-01S	1/8	6
KQG2T06-02S	1/4	6
KQG2T06-03S	3/8	6
KQG2T08-01S	1/8	8
KQG2T08-02S	1/4	8
KQG2T08-03S	3/8	8
KQG2T10-01S	1/8	10
KQG2T10-02S	1/4	10
KQG2T10-03S	3/8	10
KQG2T10-04S	1/2	10
KQG2T12-02S	1/4	12
KQG2T12-03S	3/8	12
KQG2T12-04S	1/2	12
KQG2T16-03S	3/8	16
KQG2T16-04S	1/2	16

Different Diameter tee KQG2T		
		
Part No.	ØD	ØD
KQG2T23-04	3.2	4
KQG2T04-06	4	6
KQG2T06-08	6	8
KQG2T08-10	8	10
KQG2T10-12	10	12
KQG2T12-16	12	16

Union Tee KQG2T	
	
Part No.	ØD
KQG2T23-00	3.2
KQG2T04-00	4
KQG2T06-00	6
KQG2T08-00	8
KQG2T10-00	10
KQG2T12-00	12
KQG2T16-00	16

Blow Guns

Blow Guns Series VMG



Part No.	Piping Direction	Port Thread	Colour	Operating pressure (MPa)
VMG11BU-02	Bottom	Rc1/4	Blue	0 - 1.0
VMG11W-02		Rc1/4	White	
VMG12BU-02	Top	Rc1/4	Blue	
VMG12W-02		Rc1/4	White	

- Ergonomically designed body with patented valve design and KN nozzles produces considerable reduction in pressure losses
- 20% reduction in power consumption with the SMC 'Blow gun' + 'S coupler' + 'Coil tube'
- 2 Connection options
- Minimum actuation force required
- White colour available on indent only. Blue available as standard

Please Note: A air nozzle must be purchased as they are supplied separately.

Air Nozzles Series KN

Male Thread Nozzle



Part No.	Nozzle-Ø (mm)	Piping thread
KN-R02-100	1	R1/4
KN-R02-150	1.5	R1/4
KN-R02-200	2	R1/4
KN-R02-250	2.5	R1/4

High Efficiency Nozzle



Part No.	Nozzle-Ø (mm)	Piping thread
KNH-R02-100	1	R1/4
KNH-R02-150	1.5	R1/4
KNH-R02-200	2	R1/4

Long Copper Pipe Nozzle



Part No.	Nozzle-Ø (mm)	O.D. (mm)	Length (mm)
VMG1-06-150-300	1.5	6	300
VMG1-06-200-300	2	6	300
VMG1-06-150-600	1.5	6	600
VMG1-06-200-600	2	6	600

- Wide range of various blow nozzles.
- Designed for use with compressed air and cutting oils.

Multi-hole structure to reduce noise



Part No.	Nozzle-Ø (mm)	Piping thread
KNS-R02-075-4	Ø0.75 x 4	R1/4
KNS-R02-090-8	Ø0.9 x 8	R1/4
KNS-R02-100-4	Ø1 x 4	R1/4
KNS-R02-100-4	Ø1 x 4	R1/4

Nozzle for one-touch fittings



Part No.	Nozzle-Ø (mm)	Piping thread
KN-Q06-100	Ø1	6
KN-Q06-150	Ø1.5	6
KN-Q06-200	Ø2	6

OSHA Compliant Nozzle for one-touching fittings



Model	KNA-Q10-180	KNAG-Q10-180
Material	PBT	Stainless steel 316
Fluid	Air	
Max. operating pressure	1 MPa	
Ambient and fluid temperatures	-5 to 60°C (No freezing)	-5 to 150°C (No freezing)
Nozzle diameter	Equivalent to ø1.8	
Weight	3g	17g
Applicable one-touch fitting size	ø10	

Tubing

Polyurethane Tube Series TU

FEATURES:

- Max. operating pressure: 0.8 MPa (at 20°C)
- Extremely flexible with excellent memory.
- Kink & abrasion resistant.
- Low gas permeability, extractables and compression set.
- Resistant to chemicals, water, fuel, oil and fungus.
- Transparent and opaque colors.



Colours Available:

White, Black, Blue, Red, Yellow, Green, Clear and 22 other colours available as special orders. Other size rolls available upon request

Specifications

FDA approved tube is available as special order

Product Code	Outside Diameter	Internal Diameter	Min Bend radius	Standard Coil
Metric	mm	mm	mm	mtr
TU0212	2	1,2	4	20
TU0425	4	2,5	10	20, 100, 200
TU0604	6	4	15	20, 100, 200
TU0805	8	5	20	20, 100
TU1065	10	6,5	27	20, 100
TU1208	12	8	35	20, 100
TU1610	16	10	45	20, 100
Inch	Inch	Inch	Inch	mtr
TIUB01	1/8	2	10	20, 100
TIUB05	3/16	3,18	15	20
TIUB07	1/4	4,23	23	20
TIUB11	3/8	6,35	27	20
TIUB13	1/2	8,46	35	20

Recommended temperature / Pressure range

Celsius	-20	0	10	20	30	40	50	60
Working psi	230	230	230	230	180	160	130	115
Working kPa	1600	1600	1600	1600	1300	1100	900	800

Burst pressure 2750 kPa (400psi) at 20°C.

Note: Prolonged exposure to temperatures over 40 C may have ageing effect on the tube in certain environments.

Also available



Tube cutter: 12mm or less
Part No. TK-3



Tube cutter: 16mm or less
Part No. TK-6



Tube releasing tool: 4 & 6mm tube
Part No. TG-1

Theoretical Output Table

Even the theoretical output of non-applicable cylinders can be calculated using the bore and rod sizes in the table below.

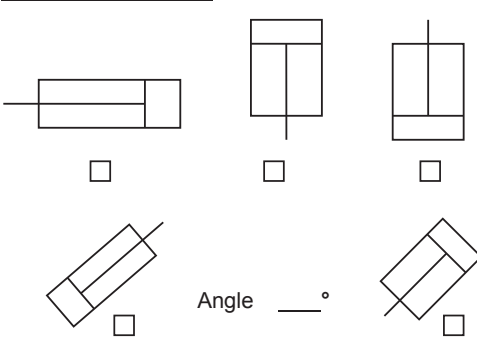
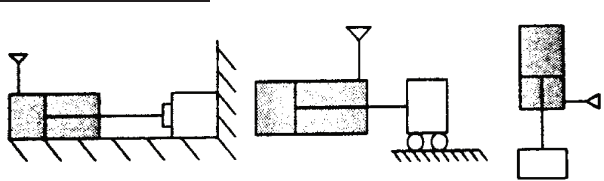
Double Acting Cylinder

Bore size (mm)	Rod size (mm)	"Operating direction"	Piston area (mm ²)	Operating pressure (MPa)								
				0,2	0,3	0,4	0,5	0,6	0,7	0,8	0,9	1
6	3	OUT	28,3	5,66	8,49	11,3	14,2	17	19,8	-	-	-
		IN	21,2	4,24	6,36	8,48	10,6	12,7	14,8	-	-	-
10	4	OUT	78,5	15,7	23,6	31,4	39,3	47,1	55	-	-	-
		IN	66	13,2	19,8	26,4	33	39,6	46,2	-	-	-
16	5	OUT	201	40,2	60,3	80,4	101	121	141	-	-	-
		IN	181	36,2	54,3	72,4	90,5	109	127	-	-	-
20	8	OUT	314	62,8	94,2	126	157	188	220	251	283	314
		IN	264	52,8	79,2	106	132	158	185	211	238	264
25	10	OUT	491	98,2	147	196	246	295	344	393	442	491
		IN	412	82,4	124	165	206	247	288	330	371	412
32	12	OUT	804	161	241	322	402	482	563	643	724	804
		IN	691	138	207	276	346	415	484	553	622	691
40	14	OUT	1260	252	378	504	630	756	882	1010	1130	1260
		IN	1100	220	330	440	550	660	770	880	990	1100
	16	OUT	1260	252	378	504	630	756	882	1010	1130	1260
		IN	1060	212	318	424	530	636	742	848	954	1060
50	20	OUT	1960	392	588	784	980	1180	1370	1570	1760	1960
		IN	1650	330	495	660	825	990	1160	1320	1490	1650
63	20	OUT	3120	624	936	1250	1560	1870	2180	2500	2810	3120
		IN	2800	560	840	1120	1400	1680	1960	2240	2520	2800
80	25	OUT	5030	1010	1510	2010	2520	3020	3520	4020	4530	5030
		IN	4540	908	1360	1820	2270	2720	3180	3630	4090	4540
100	30	OUT	7850	1570	2360	3140	3930	4710	5500	6280	7070	7850
		IN	7150	1430	2150	2860	3580	4290	5010	5720	6440	7150
125	32	OUT	12300	2460	3690	4920	6150	7380	8610	9840	11100	12300
		IN	11500	2300	3450	4600	5750	6900	8050	9200	10400	11500
	36	OUT	12300	2460	3690	4920	6150	7380	8610	9840	11100	12300
		IN	11300	2260	3390	4520	5650	6780	7910	9040	10200	11300
140	32	OUT	15400	3080	4620	6160	7700	9240	10800	12300	13900	15400
		IN	14600	2920	4380	5840	7300	8760	10200	11700	13100	14600
	36	OUT	15400	3080	4620	6160	7700	9240	10800	12300	13900	15400
		IN	14400	2880	4320	5760	7200	8640	10100	11500	13000	14400
160	38	OUT	20100	4020	6030	8040	10100	12100	14100	16100	18100	20100
		IN	19000	3800	5700	7600	9500	11400	13300	15200	17100	19000
	40	OUT	20100	4020	6030	8040	10100	12100	14100	16100	18100	20100
		IN	18800	3760	5640	7520	9400	11300	13200	15000	16900	18800
180	45	OUT	25400	5080	7620	10200	12700	15200	17800	20300	22900	25400
		IN	23900	4780	7170	9560	12000	14300	16700	19100	21500	23900
200	50	OUT	31400	6280	9420	12600	15700	18800	22000	25100	28300	31400
		IN	29500	5900	8850	11800	14800	17700	20700	23600	26600	29500
250	60	OUT	49100	9820	14700	19600	24600	29500	34400	39300	44200	49100
		IN	46300	9260	13900	18500	23200	27800	32400	37000	41700	46300
300	70	OUT	70700	14100	21200	28300	35400	42400	49500	56600	63600	70700
		IN	66800	13400	20000	26700	33400	40100	46800	53400	60100	66800

Single Acting, Spring Return Cylinder

Bore size (mm)	Rod size (mm)	"Operating direction"	Piston area (mm ²)	Operating pressure (MPa)								
				0,2	0,3	0,4	0,5	0,6	0,7	0,8	0,9	1,0
2,5	1	OUT	4,9	-	0,34	0,83	1,32	1,81	2,3	-	-	-
		IN	-	0,64								
4	2	OUT	12,6	-	0,74	2	3,26	4,52	5,78	-	-	-
		IN	-	1,47								
6	3	OUT	28,3	1,94	4,77	7,6	10,4	13,3	16,1	-	-	-
		IN	-	1,77								
10	4	OUT	78,5	8,84	16,7	24,5	32,4	40,2	48,1	-	-	-
		IN	-	3,53								
16	5	OUT	201	26	46,1	66,2	86,3	106,4	126,5	-	-	-
		IN	-	6,86								
20	8	OUT	314	23,8	55,2	87	118	149	181	212	244	275
		IN	-	7,8								
25	10	OUT	491	51,2	100	149	199	248	297	346	395	444
		IN	-	14								
32	12	OUT	804	94	174	255	335	415	496	576	657	737
		IN	-	15								
40	14, 16	OUT	1260	176	302	428	554	680	806	934	1054	1184
		IN	-	24								

If you need to contact SMC regarding the selection of cylinders, you can email us after filling the relevant information in this form

Your/Company Name:		Email:																																	
Affecting Factors Load Force/Mass _____ Kg ☐ Single Acting ☐ Double Acting Operating Pressure _____ MPa		Environment ☐ Normal Factory Temperature ☐ 0 - 60° ☐ 60 - 150°C Chemicals ☐ ☐ Other Description _____																																	
Cylinder Orientation  ☐ ☐ ☐ Angle _____° ☐		Notes (i.e., Critical dimensions or conditions)																																	
Bore _____ mm		Load Support / Guide  ☐ Sliding ☐ Rolling ☐ Guideless																																	
Stroke _____ mm		Load Direction ☐ Push (Extending) ☐ Pull (Retracting) ☐ Vertical ☐ Horizontal ☐ Angled ☐ Side load _____ kg ☐ Deflection _____ mm																																	
Duty Cycle _____ cycles/(Min)(Sec)		Load Attachment ☐ Direct ☐ Clevis/Joint																																	
Cylinder speed _____ mm/sec		Medium ☐ Air ☐ Air-Hydro ☐ Lube ☐ Non-Lube ☐ Other (specify): _____																																	
Stroke Time _____ sec		Shock Absorber ☐ Yes ☐ No _____ Type																																	
Auto Switch ☐ Yes ☐ No _____ Type ☐ Reed ☐ Solid state: ☐ PNP ☐ NPN ☐ Flying leads ☐ Pre-wired																																			
Mounting <table border="0"> <tr> <td>Rear Clevis</td> <td>☐ Double</td> <td>☐ Single</td> <td></td> </tr> <tr> <td>Trunnion</td> <td>☐ Centre</td> <td>☐ Offset (Simple Special)</td> <td>☐ Adjustable (RFS)</td> </tr> <tr> <td>Foot</td> <td>☐</td> <td></td> <td></td> </tr> <tr> <td>Flange</td> <td>☐ Front</td> <td>☐ Rear</td> <td></td> </tr> <tr> <td>Rod</td> <td>☐ Single</td> <td>☐ Double</td> <td>☐ Non-rotating</td> </tr> <tr> <td>Rod Clevis</td> <td>☐ Double</td> <td>☐ Single</td> <td>_____ Clevis P/N</td> </tr> <tr> <td>Floating Joint</td> <td>☐ Yes</td> <td>☐ No</td> <td></td> </tr> <tr> <td>Piston Rod Ball Joint</td> <td>☐ Yes</td> <td>☐ No</td> <td></td> </tr> </table>				Rear Clevis	☐ Double	☐ Single		Trunnion	☐ Centre	☐ Offset (Simple Special)	☐ Adjustable (RFS)	Foot	☐			Flange	☐ Front	☐ Rear		Rod	☐ Single	☐ Double	☐ Non-rotating	Rod Clevis	☐ Double	☐ Single	_____ Clevis P/N	Floating Joint	☐ Yes	☐ No		Piston Rod Ball Joint	☐ Yes	☐ No	
Rear Clevis	☐ Double	☐ Single																																	
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Foot	☐																																		
Flange	☐ Front	☐ Rear																																	
Rod	☐ Single	☐ Double	☐ Non-rotating																																
Rod Clevis	☐ Double	☐ Single	_____ Clevis P/N																																
Floating Joint	☐ Yes	☐ No																																	
Piston Rod Ball Joint	☐ Yes	☐ No																																	
Comments																																			
Closest SMC Cylinder P/N																																			
Opposition Cylinder P/N																																			
Picture of Existing Cylinder ☐ Yes ☐ No		Existing SMC Job Number																																	

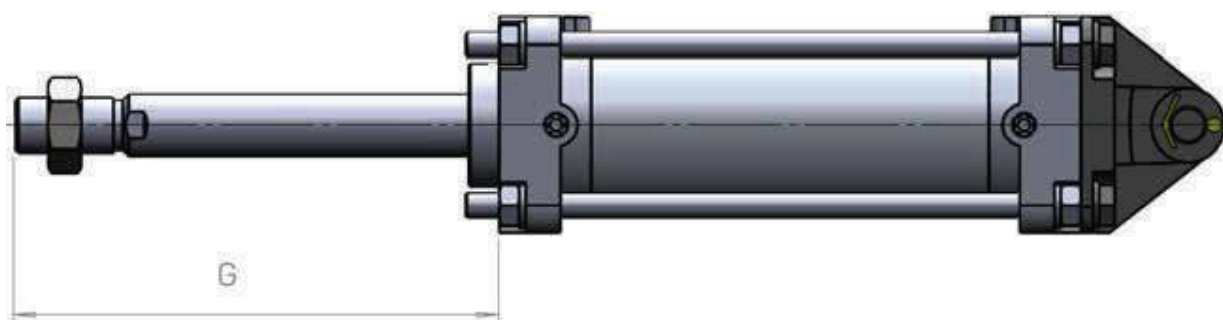
Your/Company Name:	Email:
Bore, D (Ø) _____ mm	Load Force/Mass _____ Kg
Stroke, (G-H) _____ mm	Operating Pressure _____ MPa
Port Size _____	Auto Switch ☐ Yes ☐ No _____ Type

Dimensions

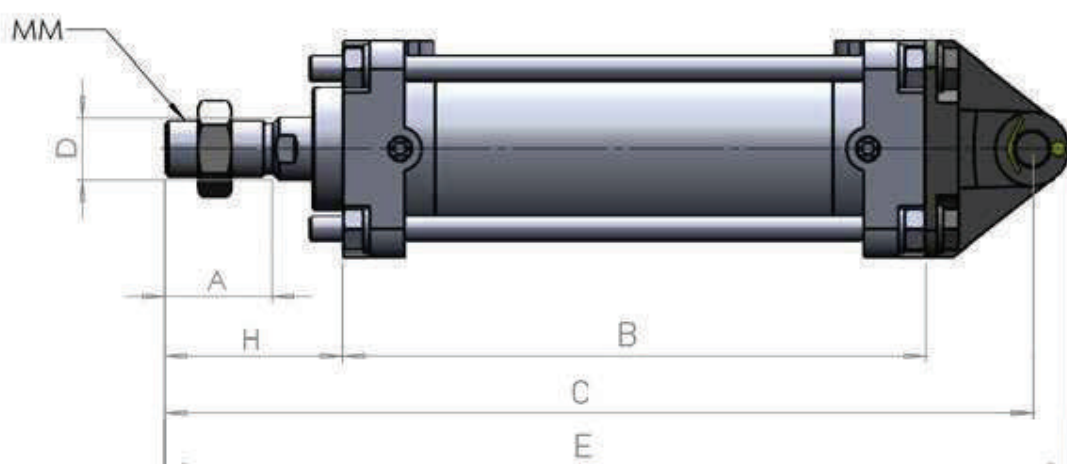
G _____ mm	H _____ mm	STROKE (G – H)
D (Ø) _____ mm	B _____ mm	_____ mm
A _____ mm	C _____ mm	
MM _____	E _____ mm	

Dimensions guide

EXTENDED ROD



RETRACTED ROD



Closest SMC Cylinder P/N

Opposition Cylinder P/N

Picture of Existing Cylinder ☐ Yes ☐ No

Existing SMC Job Number

SMC Corporation

Valve Selection Guide

If you need to contact SMC regarding the selection of valves, you can email us after filling the relevant information in this form

[illegible]



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