

Flow Control Equipment

Flow control valve / PFC, SP, SC	P.474
Blocker valve / PWB, PWR	P,479
Soft start valve / PWD	P.483
Back pressure / PWC, PWS	P.485

Air Line Equipment

Fitting / FSC	P.489
Silencer / AS, ASS, SM1	P.502
Tube / PHHU	P.498

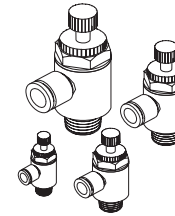
Cylinder Accessory

Floting Joint / PAJS	P.503
Rod Swivel Coupling / PSC	P,505
Quick Exhaust Valve / ORB	P.507
Check Valve / VB	P.509
Hand Sleeve Valve / HSV	P.510

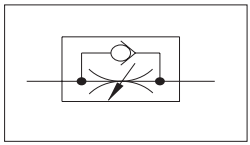
Flow Control Valve

M5,1/8,1/4,3/8,1/2

PFC□2 One touch fitting built-in Meter-out type



Symbol



Ordering Insturction

PFC ① **1** ② **2** – **02** ③ – **06** ④

1. Series

2. Body Size

1	M5
2	1/8", 1/4"
3	1/4", 3/8"
4	1/2"

3. Tube Diameter

04	4 mm
06	6 mm
08	8 mm
10	10 mm
12	12 mm

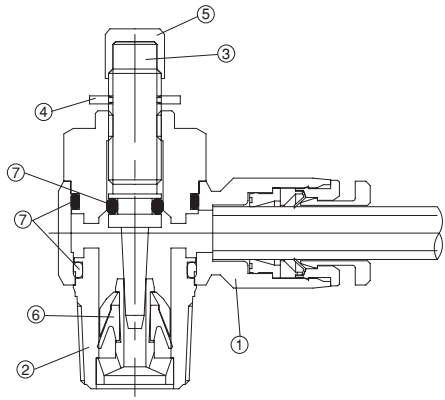
4. Port Size

M5	M5
1/8	1/8"
1/4	1/4"
3/8	3/8"
1/2	1/2"

Specification

Proof Pressure	12 bar
Max Using Pressure	9.9 bar
Temperature Range	5~60℃
Fiuid	Air
Material	Nylon, Polyurethan
Port Size	M5,1/8,1/4,3/8,1/2
Applicable Tube diameter(mm)	Φ4,Φ6,Φ8,Φ10,Φ12

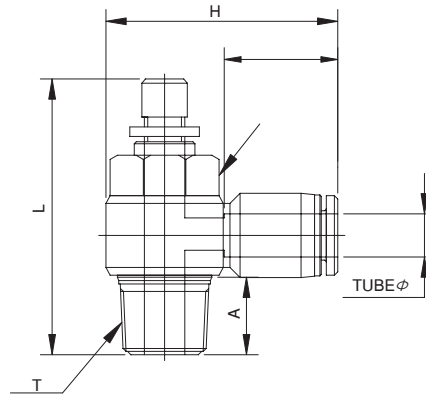
Construction



	Description	Material
1	Body	Resin
2	Body	Brass
3	Needle	Brass
4	Lock Nut	Brass
5	Handle	Brass
6	U packing	NBR
7	O-ring	NBR

Dimension

PFC Series



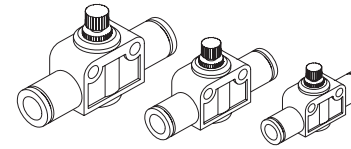
(Unit : mm)

Model No	L		T	H	Tube Diameter	F	A	Nut Φ
	Max	Min						
PFC12-04-M5	33.7	37	M5 x 0.8P	26.6	4	16.8	4.6	08 x 9.24
PFC12-06-M5	33.7	37	M5 x 0.8P	27.2	6	17.6	4.6	08 x 9.24
PFC22-04-1/8	44.3	48.6	PT1/8	31.5	4	16.8	8	14 x 16.1
PFC22-06-1/8	44.3	48.6	PT1/8	32.4	6	17.6	8	14 x 16.1
PFC22-08-1/8	44.3	48.6	PT1/8	39.2	8	18.7	8	14 x 16.1
PFC22-04-1/4	44.3	48.6	PT1/4	34.8	4	16.8	10	17 x 19.6
PFC22-06-1/4	44.3	48.6	PT1/4	35.6	6	17.6	10	17 x 19.6
PFC22-08-1/4	44.3	48.6	PT1/4	37.7	8	18.7	10	17 x 19.6
PFC22-10-1/4	47.6	52	PT1/4	37.9	10	19.6	10	17 x 19.6
PFC22-12-1/4	47.6	52	PT1/4	39.2	12	21.9	10	17 x 19.6
PFC32-06-3/8	47.6	52	PT3/8	40.9	6	17.6	11	21 x 24.2
PFC32-08-3/8	52	57.5	PT3/8	42.7	8	18.7	11	21 x 24.2
PFC32-10-3/8	52	57.5	PT3/8	43.6	10	19.6	11	21 x 24.2
PFC32-12-3/8	52	57.5	PT3/8	45.9	12	21.9	11	21 x 24.2
PFC42-10-1/2	61.3	67.2	PT1/2	45.6	10	19.6	14	24 x 27.7
PFC42-12-1/2	61.3	67.2	PT1/2	48.3	12	21.9	14	24 x 27.7

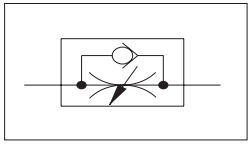
Flow Control Valve

Φ4, Φ6, Φ8, Φ10, Φ12

PFC25 In- line Type
One touch fitting built-in



Symbol



Ordering Insturction

PFC25 — **06**
① ②

1. Series

2. Tube Diameter

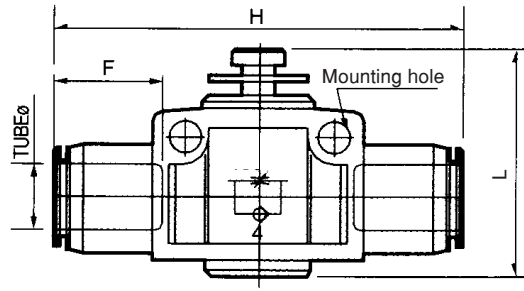
04	4 mm
06	6 mm
08	8 mm
10	10 mm
12	12 mm

Specification

Proof Pressure	MPa(bar)	12
Max Using Pressure		9.9
Temperature Range	℃	5~60
Fluid		Air
Material		Nylon, Polyurethan
Applicable Tube diameter(mm)	mm	Φ4,Φ6,Φ8,Φ10,Φ12

Dimension

(Unit : mm)



Model No	L		Mounting hole(Φ)	H	Tube Φ	(F) Tube insert length
	Min	Max				
PFC25-04	29.9	33.3	3.3	45.1	4	16.8
PFC25-06	35	39.5	4.3	50.3	6	17.6
PFC25-08	37.4	42.1	4.4	55.7	8	18.7
PFC25-10	43.8	49	4.4	61.2	10	19.6
PFC25-12	467.4	53.6	4.4	69.8	12	21.9

Cylinder Controller

SP Series

Flow Control Valve / In-Line Type

SP-H-M5

In-Line Type
Port Size M5

Symbol



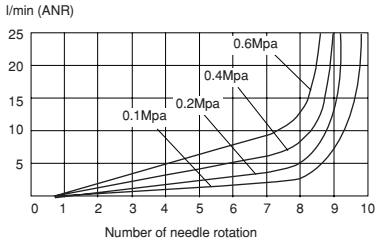


Specification

Series	Unit	SP-H-M5
Port Size	PT	M5 X 1.0
Effective area	mm^2	1
Fluid		Air
Using pressure Range	Mpa(bar)	0 ~ 0.8 (0 ~ 8.0)
Temperature Range	℃	-5 ~ 60
Weight	g	10

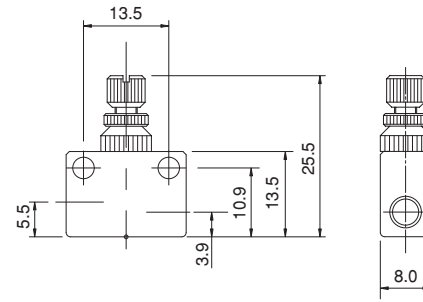
Note)

Flow Characteristics



Dimension

(Unit : mm)

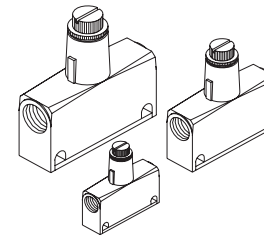


Cylinder Controller

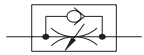
SC Series

Flow Control Valve / In-Line Type

SC320	IN-Line Type Port Size Rc1/4
SC330	IN-Line Type Port Size Rc3/8
SC340	IN-Line Type Port Size Rc1/2



Symbol

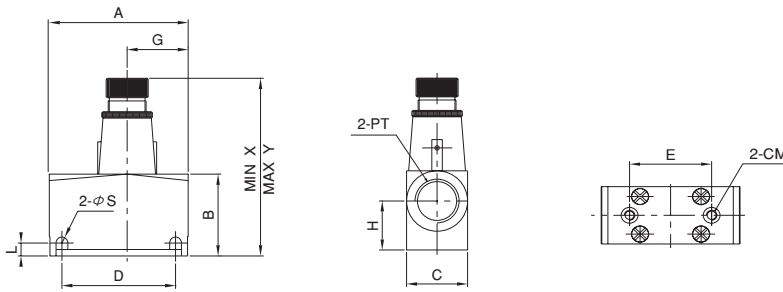


Specification

Series		Unit	SC320-08	SC330-10	SC340-15
Port Size		Rc(PT)	1/4	3/8	1/2
Free Flow	Air Flow	ℓ /min	340	800	1650
	Effective Area	mm^2	5	12	24
Controlled Flow	Air Flow	ℓ /min	250	800	1650
	Effective Area	mm^2	3.7	12	24
Fluid			Air		
Using Pressure Range			0.5~0.9		
Temperature Range		℃	0~60		
Weight		g	115	125	240

Dimension

(Unit : mm)



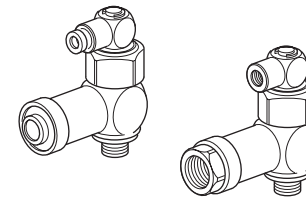
Series	A	B	C	D	E	G	H	L	PT	ΦS	X	Y	CM
SC320-08	40	27	18	31	31	18	18	5	1/4	4.6	52	56	M3X0.5P dp6
SC330-10	56	33	24	45	32	25	21	5.5	3/8	5.6	63.5	69	M4X0.7P dp9
SC340-15	66	38	29	54	39	29	24	6	1/2	5.6	79	87	M5X0.8P dp8

Cylinder Controller

PWB-A Series

Blocker Valve

PWB-A14	Pilot Port-Push in Type / Supply Port-Push in Type
PWB-A18	Pilot Port-Thread Type / Supply Port-Thread Type



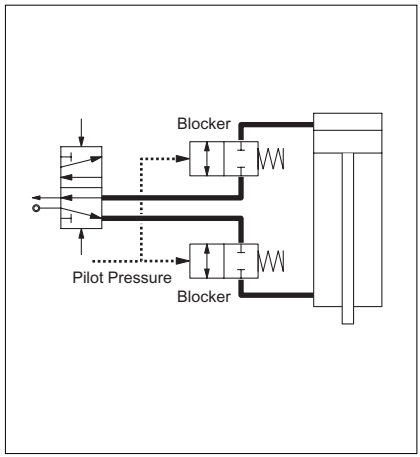
Symbol



ORDER KEY

Order key		Cylinder Port	Tube Port (mm)	Max.Flow (l/min)	Weight (kg)
R(PT)	BSPP(G)				
—	PWB-A1468	1/8	6	420	0.15
PWB-A14692	PWB-A1469	1/4	6	550	
PWB-A14892	PWB-A1489	1/4	8		
PWB-A14832	PWB-A1483	3/8	8	1300	0.18
PWB-A14932	PWB-A1493	3/8	12		
PWB-A14122	PWB-A1412	1/2	12	2300	0.50

Air Circuit



Order key		Cylinder Port	Female Port	Max.Flow (l/min)	Weight (kg)
PT	BSPP(G)				
PWB-A18982	PWB-A1898	1/8	1/4	420	0.18
PWB-A18992	PWB-A1899	1/4	1/4	550	
PWB-A18332	PWB-A1833	3/8	3/8	1300	0.19
PWB-A18222	PWB-A1822	1/2	1/2	2300	0.48

Specification

Class	Unit	PWB-A
Operating rpessure	bar	0 ~ 10
Permissible fluids		Air
Operating temperature	℃	-15 ~ 60
Mehanical life		1Million (6bar/20℃-1Hz)
Frequency	Hz	10
Material	Body	Zine alloy
	Mounting	Brass alloy

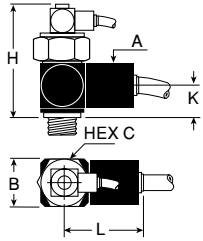
Pilot Operating Pressure

Class	Pilot operating pressure				Pilot release pressure			
	2 bar	4 bar	6 bar	8 bar	2 bar	4 bar	6 bar	8 bar
1/8	2.30	2.70	3.05	3.40	1.50	1.80	2.15	2.40
1/4	2.30	2.70	3.05	3.40	1.50	1.80	2.15	2.40
3/8	2.45	2.75	3.05	3.40	1.40	1.70	2.00	3.50
1/2	3.05	3.40	3.70	4.05	1.75	2.10	2.40	2.80

Cylinder Controller

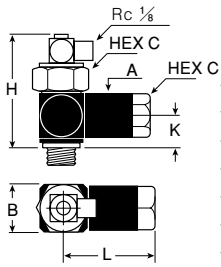
Blocker Valver

• Push-in Fittings



Order key		ΦA	B	D	H	K	L	Cylinder Port	Tube Size (mm)
R(PT)	BSPP(G)								
–	PWB-A1468	22	21	24	59	19.5	39	1/8	6
PWB-A14692	PWB-A1469	22	21	24	59	19.5	39	1/4	6
PWB-A14892	PWB-A1489	-	-	-	-	-	-	1/4	8
PWB-A14832	PWB-A1483	27	28	24	53	14.0	50	3/8	8
PWB-A14932	PWB-A1493	-	-	-	-	-	-	3/8	10
PWB-A14122	PWB-A1412	31	33	30	66	24.0	66	1/2	12

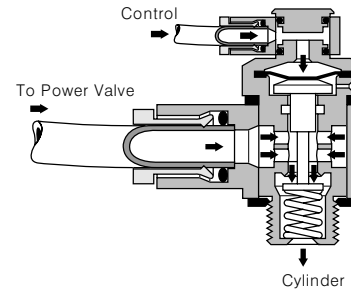
• Threaded Connections & tube Pilot



Order key		ΦA	B	D	H	K	L2	Cylinder Port	Female Port (mm)
R(PT)	BSPP(G)								
PWB-A18982	PWB-A1898	22	21	24	59	19.5	43.5	1/8	1/4
PWB-A18992	PWB-A1899	22	21	24	53	19.5	43.5	1/4	1/4
PWB-A18332	PWB-A1833	27	28	24	53	14.0	55.5	3/8	3/8
PWB-A18222	PWB-A1822	31	33	30	66	24.0	63.0	1/2	1/2

Operation

A blocking valve has a spring loaded poppet which normally prevents flow through the valve in both directions. when an air pilot control signal (see pilot pressure chart below for required pilot signal pressure) is applied to the top of the valve, the poppet opens and allows the valve to flow in both directions like a standard fitting. when the pilot signal is removed, the poppet springs shut and prevents air from entering or leaving cylinder, thus stopping cylinder travel.



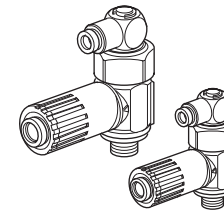
Cylinder Controller

PWR-HB Series

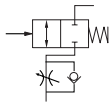
Blocker+Flow Control Valve

PWR-HB

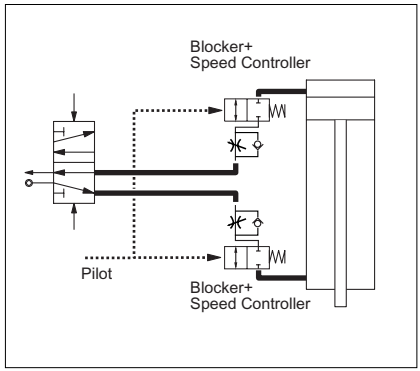
Pilot Port-Push in Type
Supply Port-Push in Type



Symbol



Air Circuit



ORDER KEY

Order key	Cylinder Port BSPP(G)	Tube Port	Max.Flow (l/min)	Weight (kg)
PWR-HB1448	1/8	Φ4	330	0.13
PWR-HB1468	1/8	Φ6	410	
PWR-HB1469	1/4	Φ6	420	
PWR-HB1489	1/4	Φ8		
PWR-HB1483	3/8	Φ8	1150	0.18
PWR-HB1493	3/8	Φ10		

specification

Class	Unit	PWR-HB
Operating rpessure	bar	0 ~ 10
Permissible fluids		Air
Operating temperature	℃	
Mehanical life		1Million (6bar/20℃-1Hz)
Frequency	Hz	10
Material	Body	Zine alloy
	Mounting	brass alloy

Pilot Operating Pressure

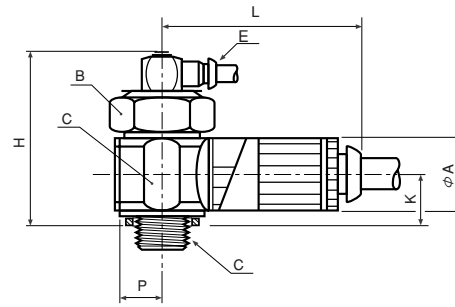
Order No.	Pilot Operating Pressure				Pilot Release Pressure			
	2 bar	4 bar	6 bar	8 bar	2 bar	4 bar	6 bar	8 bar
PWR-HB1448	2.30	2.70	3.05	3.40	1.50	1.80	2.15	2.40
PWR-HB1468	2.30	2.70	3.05	3.40	1.50	1.80	2.15	2.40
PWR-HB1469	2.30	2.70	3.05	3.40	1.50	1.80	2.15	2.40
PWR-HB1489	2.30	2.70	3.05	3.40	1.50	1.80	2.15	2.40
PWR-HB1483	2.45	2.75	3.05	3.40	1.40	1.70	2.00	2.35
PWR-HB1493	2.45	2.75	3.05	3.40	1.40	1.70	2.00	2.35

PWR-HB Series

Dimensions

(Unit : mm)

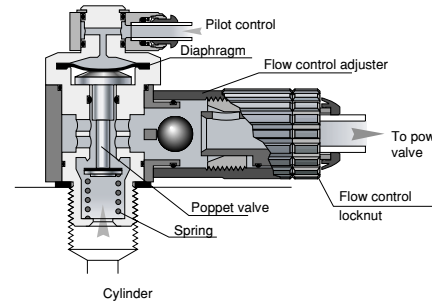
• Blocker+Flow Control



Order key	ΦA	B	C	D	ΦE	H	K	L	P
PWR-HB-1448	22.5	21	G1/8	24	4	59	19.5	47.0	12.5
PWR-HB-1468	22.5	21	G1/8	24	6	59	19.5	47.0	12.5
PWR-HB-1469	22.5	21	G1/4	24	6	53	13.5	47.0	12.5
PWR-HB-1489	22.5	21	G1/4	24	8	53	13.5	47.0	12.5
PWR-HB-1483	29.0	28	G3/8	24	8	53	15.5	60.0	15.0
PWR-HB-1493	29.0	28	G3/8	24	10	53	15.5	60.0	15.0

Operation

- Pilot operated diaphragm maintains full flow when pilot signal is present.
- Spring Closes the poppet valve locking air in the cylinder when the pilot signal is removed.
- Prestobloc fittings used in conjunction with Prestoflow flow regulators are mounted on inlet and outlet ports.
- Pilot signal should be independent from the control valve.



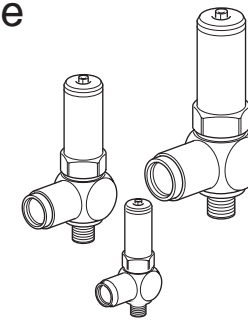
Cylinder Controller

PWD-P Series

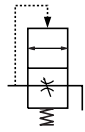
Slow Start Flow Control Valve

PWD-P

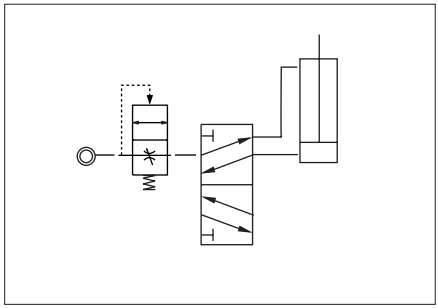
Push-in Type
Soft Start Valve



Symbol



Air Circuit



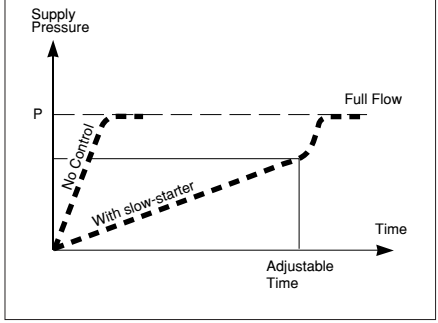
ORDER KEY

Order key	Cylinder Port BSPP(G)	Tube Port	Max.Flow (l/min)	Weight (kg)
PWD-P2489	1/4	Φ8	1500	0.070
PWD-P2499	1/4	Φ10	2000	0.120
PWD-P2493	3/8	Φ10	2000	0.130

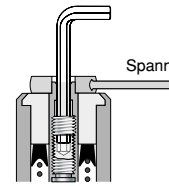
Specification

Class	Unit	PWD-P
Operating rpessure	bar	0 ~ 10
Permissible fluids		Air
Operating temperature	℃	- 15 ~ + 60
Mehanical life		1Million(6bar/20℃-1Hz)
Frequency	Hz	10
Material	Body	Zine alloy
	Mounting	Brass alloy

Pressure Graph



Adjustment



Adjustment

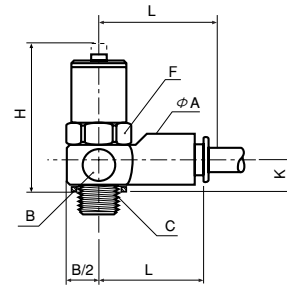
Use a spanner to prevent the bolt assembley turning.
Use an Allen key to adjust the needle valve.
Maximum torque 1N/m.

PWD Series

Dimensions

(Unit : mm)

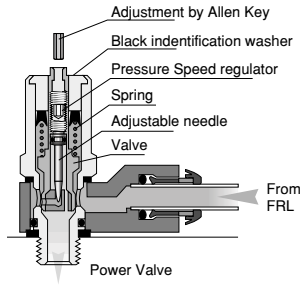
Push-in Type



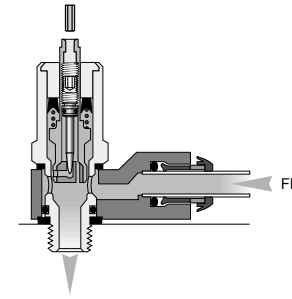
Order key	ΦA	B	ΦC	D	H	K	L
PWD-P2489	15.0	20	G1/4	17	61.0	8.5	27.5
PWD-P2499	19.5	25	G1/4	22	62.0	11.8	41.0
PWD-P2493	19.5	25	G3/8	22	62.0	11.8	41.0

Operation

The First Supply Stage



The Stable Supply Stage



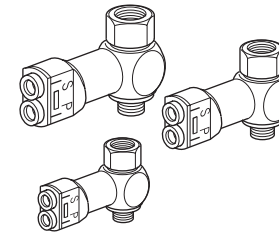
- Mounted on otulet port of FRL to control downstream installation.
- Initial flow through the bolt is controlled by a restrictor and adjustable needle valve.
- When 2/3rd system pressure is achieved the spring is compressed allowing immediate increase to full system pressure.
- When the system is pressurized after an emergency stop all cylinders will return to the position they were in before the system air was vented.

Cylinder Controlloer
PWS-C Series
Back Pressure

PWS-C — Back Pressure, Cylinder Mounting Style

Symbol





ORDER KEY

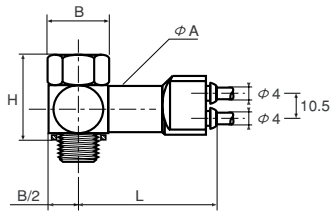
Order key	Cyilnder Port	Supply Port	Tube Port Φ(mm)	Weight (kg)
PWS-C1145	M5	M5	2	0.10
PWS-C4148	G1/8	G1/8	5	0.11
PWS-C1149	G1/4	G1/4	7	0.10
PWS-C4143	G3/8	G3/8	10	0.17
PWS-C1142	G1/2	G1/2	14	0.15

Specification

Series		Unit	PWS-C
Pressure range		bar	0 ~ 10
Fluid			Air
Temperature range		℃	-15 ~ + 70
Durability			10 Million (6bar/20℃-1Hz)
Max.Operating frequency		Hz	10
Pilot Pressure (at 6bar)	Operating	bar	1.6 ±0.2
	Release		0.30
Material	Body		Zinc alloy
	Mounting		Brass alloy

Dimension

(Unit : mm)

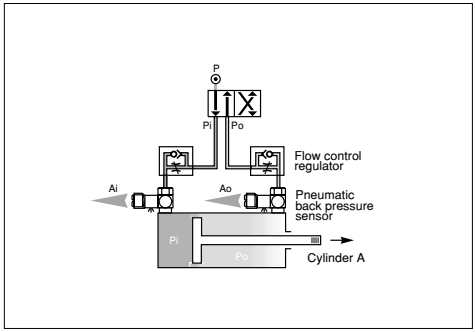


Order key	ΦA	B	H	L
PWS-C1145	19	11.0	16.0	42
PWS-C4148	22	16.5	29.0	40
PWS-C1149	22	23.5	26.0	43
PWS-C4143	22	23.5	36.5	43
PWS-C1142	22	32.0	29.5	48

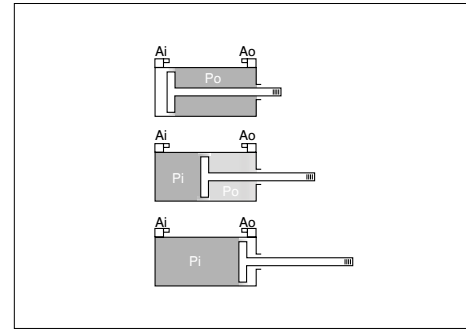
PWS-C Series

Pressure Signal Transmission System

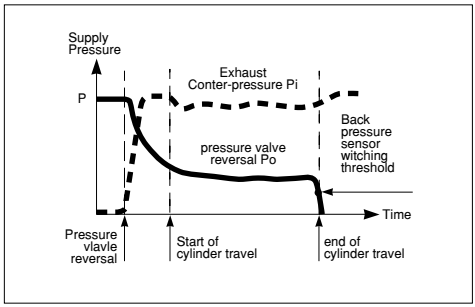
Mounting of oressure sensors



Signals from pressure sensors



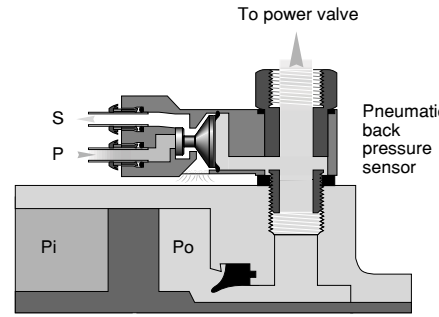
Pressure Change Graph in Internal Cylinder



Operation

Prestosensor fittings are designed for direct mounting onto the cylinder. These sensors detect end of stroke travel by the variation in internal operating pressure. The sensing can be pneumatic, electric of electronic to suit the application. These fittings femove the need for mechanical position switches.

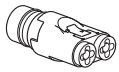
· mounting to cylinder port
· Pressure sensors should be mounted in conjunction with flow regulators
· pressure sensing on diaphragm valve.

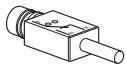


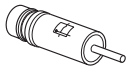
Cylinder Contoller
PWS-□ Series
Plug-in Back Pressure Sensor

PWS-P	Pneumatic Output Φ4mm Push-in
PWS-M	Electrical Otuput 3-Wires / C/O Contact
PWS-E	Eletrical Putput 3-Wires / PNP Type

• Plug-in Sensors







ORDER KEY

Order key	Sensig function	Output function	Output connection	Output characteristics	Weight (kg)
PWS-P111	Exhaust back pressure decay	Pneumatic	Push-in Φ4mm	No Valve (Flow : 1.5 l/s)	0.09
PWS-M1012		Electrical ~Ve=3A	3-Wires 0.5㎟ length 2m	CO Contact 12~230 V ~/ 10 VA 12~48 VDC /5W*	0.08
PWS-E101		Solid state	3-Wires 0.1㎟ length 2m	PNP Type NC 10/30 VDC	0.07
PWS-E111				75 mA, NO	0.07

* Suitable for low currents : 250V~/4mA : 24VDC/10mA

• Banjo Sokets



Order key	Thread size for cylinder port	Female thread	Tool required	Weight (kg)
PWS-B155	M5	M6	8 mm Flat spanner	0.04
PWS-B188	G1/8	G1/8	5 mm Allen key	
PWS-B199	G1/4	G1/4	8 mm Allen key	0.05
PWS-B133	G3/8	G3/8	10 mm Allen key	0.07
PWS-B122	G1/2	G1/2	12 mm Allen key	0.11

사양

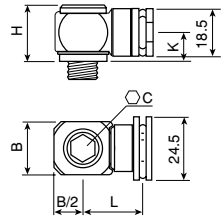
Series		Unit	PWS-P111	PWS-M1012	PWS-E101	PWS-E111
Pressure range		bar	0 ~ 10			
Fluid			Air			
Temperature range		℃	-15 ~ + 70			
Durability			10 millon			
Max.Operating frequency		Hz	10			
Protective grade				IP40	IP67	IP67
Pilot Pressure (at 6bar)	Operating	bar	4.40	1.00	0.70	0.70
	Release		0.40	0.60	0.50	0.50
Material	Body		Zinc alloy			
	Mounting		Brass alloy			

Cylinder Controller

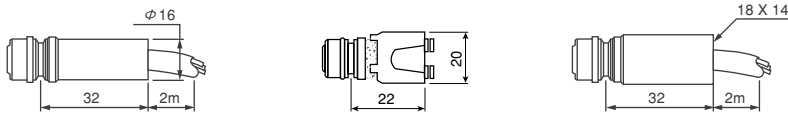
Dimension

(Unit : mm)

- Back Pressure Sensors

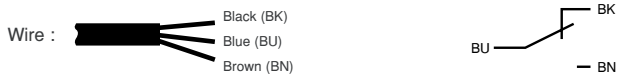


Order key	C	B	H	K	L
PWS-B155	8	11	16.5	10	17.0
PWS-B188	5	16	20.0	10	20.0
PWS-B199	8	21	20.0	10	22.0
PWS-B133	10	28	22.0	12	25.0
PWS-B122	12	33	26.0	14	26.0

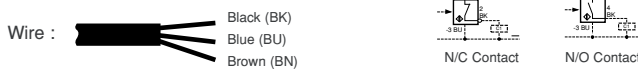


Connection

PWS-M : Breaking pressure = 0.5 bar

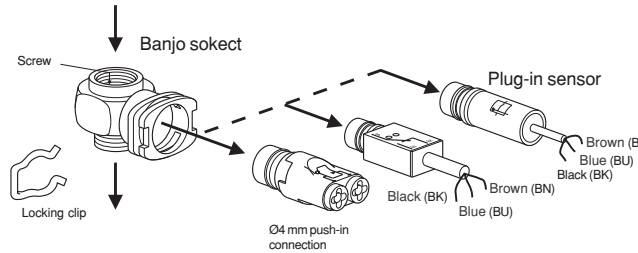


PWS-E : Pilot pressure = 0.5 bar



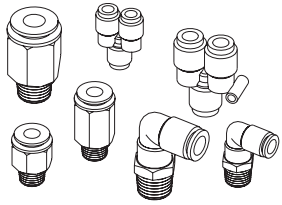
Assembly

All back pressure sensors are a comination of two distinct parts : a banjo socket + a plug-in sensor



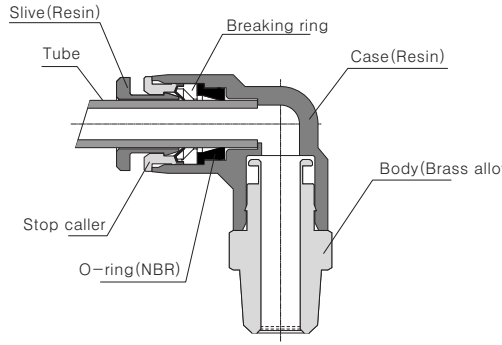
Fitting Series

Φ4, Φ6, Φ8, Φ10, Φ12



Specification

Max pressure	MPa (bar)	1.2 (12.0)
Pressure range		0.99 (9.9)
Temperature range	℃	5~60
Fluid		Air, Water
Material		Nylon, Polyuretans
Port size		M5, 1/8, 1/4, 3/8, 1/2
Tube OD	mm	Φ4, Φ6, Φ8, Φ10, Φ12



Fitting Series

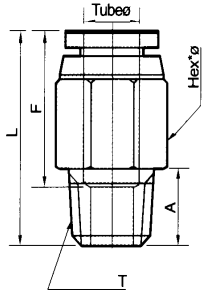
Kind of Connector

kind of connector	Model	port size	Apply tube (Φ)				
			4	6	8	10	12
Male	FSC	M5	○	○			
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Male	FSCL	M5	○	○			
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Male elbow	FSE	M5	○	○			
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Long elbow	FLE	M5	○	○			
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Female	FSF	1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8			○	○	○
		1/2					○
Female	FSFP	1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8			○	○	○
		1/2					○
Male branch tee swivel	FST	M5	○	○	○		
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Male branch tee swivel	FSTL	M5	○	○			
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Bulkhead equal union	FSB	–	○	○	○	○	○

kind of connector	Model	port size	Apply tube (Φ)				
			4	6	8	10	12
Union Y male	FSY	M5	○	○			
		1/8	○	○	○	○	
		1/4	○	○	○	○	○
		3/8		○	○	○	○
		1/2			○	○	○
Male elbow	FSES	M5	○	○			
		1/8	○	○			
		1/4		○	○	○	
		3/8			○	○	○
		1/2				○	○
Union cross	FUC	–	○	○	○	○	○
Plyg-in Y elbow	FEY	–	○	○	○	○	○
Plyg-in elbow	FEP		○	○	○	○	○
Plyg-in Y	FEYR	06	○				
		08		○			
		10			○		
		12				○	
Equal union reducer	FUER	06	○				
		08		○			
		10			○		
		12				○	
Union Y reducer	FUYR	06	○				
		08		○			
		10			○		
		12				○	
Union manifold	FUM	Φ4		○	○		
		Φ6			○	○	
		Φ8				○	
Union manifold	FUMC	1/8(Φ4)		○			
		1/4(Φ4)			○		
		1/4(Φ6)			○		
		3/8(Φ8)				○	
Union manifold	FUML	Φ4		○	○		
		Φ6			○		
		Φ8				○	
Union	FUT	–	○	○	○	○	○
Union Y	FUY	–	○	○	○	○	○
Equal union	FUE	–	○	○	○	○	○
Union elbow	FUL	–	○	○	○	○	○

Male connector / FSC

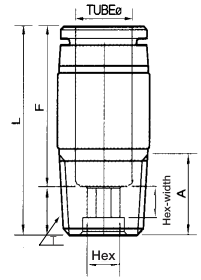
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	A	Tube insert depth (F)	Hex
FSC04-M5	4	M5×0.8P	21.9	4.6	15.9	10×11.5
FSC04-1/8	4	R 1/8	21.6	8	15.9	10×11.5
FSC04-1/4	4	R 1/4	20.6	10	15.9	14×16.1
FSC06-M5	6	M5×0.8P	23.6	4.6	16.5	10×11.5
FSC06-1/8	6	R1/8	22.2	8	16.5	12×13.8
FSC06-1/4	6	R1/4	21	10	16.5	14×16.1
FSC06-3/8	6	R3/8	22	11	16.5	17×18.5
FSC08-1/8	8	R1/8	27.5	8	17.7	12×13.0
FSC08-1/4	8	R1/4	25.5	10	17.7	14×15.4
FSC08-3/8	8	R3/8	23	11	17.7	17×18.5
FSC08-1/2	8	R1/2	29.7	14	17.7	22×24.5
FSC10-1/8	10	R1/8	28.7	8	18.6	12×13.0
FSC10-1/4	10	R1/4	30.7	10	18.6	14×15.4
FSC10-3/8	10	R3/8	24.7	11	18.6	17×18.5
FSC10-1/2	10	R1/2	29.7	14	18.6	22×24.5
FSC12-1/4	12	R1/4	32.8	10	20.9	14×15.4
FSC12-3/8	12	R3/8	29.8	11	20.9	17×18.5
FSC12-1/2	12	R1/2	29.8	14	20.9	22×24.5

Male connector / FSCL

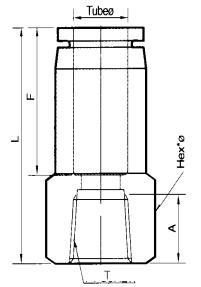
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	A	Tube insert depth (F)	Hex
FSCL04-M5	4	M5×0.8P	21.8	4.6	15.9	02×2.31
FSCL04-1/8	4	R1/8	20.4	8	15.9	03×3.46
FSCL04-1/4	4	R1/4	20.4	10	15.9	03×3.46
FSCL06-M5	6	M5×0.8P	22.6	4.6	16.5	02×2.31
FSCL06-1/8	6	R1/8	21.8	8	16.5	04×4.62
FSCL06-1/4	6	R1/4	22.5	10	16.5	04×4.62
FSCL06-3/8	6	R3/8	22.5	11	16.5	04×4.62
FSCL08-1/8	8	R1/8	27	8	17.7	06×6.93
FSCL08-1/4	8	R1/4	25	10	17.7	06×6.93
FSCL08-3/8	8	R3/8	25	11	17.7	06×6.93
FSCL08-1/2	8	R1/2	25	14	17.7	05×5.77
FSCL10-1/8	10	R1/8	27	8	18.6	06×6.93
FSCL10-1/4	10	R1/4	26.6	10	18.6	06×6.93
FSCL10-3/8	10	R3/8	26.6	11	18.6	06×6.93
FSCL10-1/2	10	R1/2	26.6	14	18.6	06×6.93
FSCL12-1/4	12	R1/4	32.4	10	20.9	06×6.93
FSCL12-3/8	12	R3/8	32.4	11	20.9	08×9.24
FSCL12-1/2	12	R1/2	32.4	14	20.9	08×9.24

Female connector / FSF

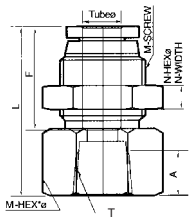
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	A	Tube insert depth (F)	Hex
FSF04-1/8	4	PT1/8	26.7	9	15.9	12×13.0
FSF04-1/4	4	PT1/4	28.7	11	15.9	14×15.4
FSF06-1/8	6	PT1/8	27.3	9	16.5	12×13.0
FSF06-1/4	6	PT1/4	29.3	11	16.5	14×15.4
FSF06-3/8	6	PT3/8	30.2	12	16.5	17×18.5
FSF08-1/8	8	PT1/8	28.5	9	17.7	12×13.0
FSF08-1/4	8	PT1/4	30.5	11	17.7	14×15.4
FSF08-3/8	8	PT3/8	31.5	12	17.7	17×18.5
FSF10-1/8	10	PT1/8	31.4	9	18.6	12×13.0
FSF10-1/4	10	PT1/4	31.5	11	18.6	14×15.4
FSF10-3/8	10	PT3/8	32.4	12	18.6	17×18.5
FSF12-1/4	12	PT1/4	34.7	11	20.9	14×15.4
FSF12-3/8	12	PT3/8	34.7	12	20.9	17×18.5
FSF12-1/2	12	PT1/2	36.7	14	20.9	22×24.5

Female connector / FSFP

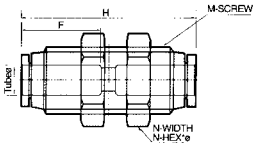
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	N	M	A	HexN	Tube insert depth (F)	Hex
FSFP04-1/8	4	PT1/8	26.7	5	M12×1.0P	9	14×16.1	16.8	14×16.1
FSFP06-1/8	6	PT1/8	28.3	5	M14×1.0P	9	17×19.6	17.6	17×19.6
FSFP06-1/4	6	PT1/4	30.3	5	M14×1.0P	11	17×19.6	17.6	17×19.6
FSFP08-1/8	8	PT1/8	29.5	5	M16×1.0P	9	19×21.9	18.7	19×21.9
FSFP08-1/4	8	PT1/4	31.5	5	M16×1.0P	11	19×21.9	18.7	19×21.9
FSFP08-3/8	8	PT3/8	32.5	5	M16×1.0P	12	19×21.9	18.7	22×25.4
FSFP10-1/4	10	PT1/4	32.4	5	M20×1.0P	11	24×27.7	19.6	24×27.7
FSFP10-3/8	10	PT3/8	33.4	5	M20×1.0P	12	24×27.7	19.6	24×27.7
FSFP12-1/4	12	PT1/4	37.9	5	M22×1.0P	11	26×30.0	21.9	24×27.7
FSFP12-3/8	12	PT3/8	37.9	5	M22×1.0P	12	26×30.0	21.9	24×27.7
FSFP12-1/2	12	PT1/2	39.9	5	M22×1.0P	14	26×30.0	21.9	24×27.7

Bulkhead equal union / FSB

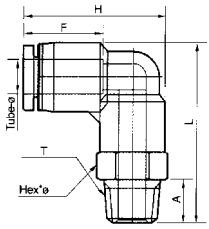
(unit : mm)



order code	Apply tybe dia. (Φ)	H	Tube insert depth (F)	M	N- depth (N-Hex)
FSB04	4	29.8	16.3	M12×10P	5(14×16.1)
FSB06	6	33	17.6	M14×10P	5(17×19.6)
FSB08	8	35.4	18.7	M16×10P	5(19×21.9)
FSB10	10	37.8	19.6	M20×10P	5(24×27.7)
FSB12	12	47.4	21.9	M22×10P	5(26×30.0)

Male elbow swivel / FSE

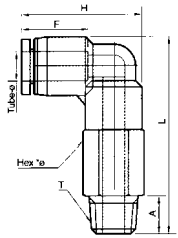
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	H	Tube insert depth (F)	Hex
FSE04-M5	4	M5×0.8P	27.25	23.8	4.6	10×11.0
FSE04-1/8	4	PT1/8	29.75	23.8	8	10×11.0
FSE04-1/4	4	PT1/4	31.75	23.8	10	14×15.4
FSE06-M5	6	M5×0.8P	30.25	26.5	4.6	10×11.0
FSE06-1/8	6	PT1/8	32.75	26.5	8	12×13.0
FSE06-1/4	6	PT1/4	35.75	26.5	10	14×15.4
FSE06-3/8	6	PT3/8	36.75	26.5	11	17×18.5
FSE08-1/8	8	PT1/8	35.15	29.7	8	12×13.0
FSE08-1/4	8	PT1/4	38.15	29.7	10	14×15.4
FSE08-3/8	8	PT3/8	39.15	29.7	11	17×18.5
FSE08-1/2	8	PT1/2	42.15	29.7	14	22×24.5
FSE10-1/8	10	PT1/8	37.25	32.1	8	12×13.0
FSE10-1/4	10	PT1/4	40.25	32.1	10	14×15.4
FSE10-3/8	10	PT3/8	41.25	32.1	11	17×18.5
FSE10-1/2	10	PT1/2	44.25	32.1	14	22×24.5
FSE12-1/4	12	PT1/4	44.65	36.9	10	14×15.4
FSE12-3/8	12	PT3/8	45.65	36.9	11	17×18.5
FSE12-1/2	12	PT1/2	48.65	36.9	14	22×24.5

Long elbow / FLE

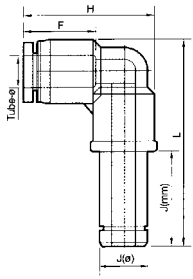
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	H	A	Tube insert depth (F)	Hex
FLE04-M5	4	M5×0.8P	38.75	23.8	4.6	16.8	10×11.0
FLE04-1/8	4	PT1/8	40.75	23.8	8	16.8	10×11.0
FLE04-1/4	4	PT1/4	42.75	23.8	10	16.8	14×15.4
FLE06-M5	6	M5×0.8P	44.25	26.5	4.6	17.6	10×11.0
FLE06-1/8	6	PT1/8	46.25	26.5	8	17.6	12×13.0
FLE06-1/4	6	PT1/4	48.25	26.5	10	17.6	14×15.4
FLE06-3/8	6	PT3/8	49.25	26.5	11	17.6	17×18.5
FLE08-1/8	8	PT1/8	51.15	29.7	8	18.7	12×13.0
FLE08-1/4	8	PT1/4	53.15	29.7	10	18.7	14×15.4
FLE08-3/8	8	PT3/8	54.15	29.7	11	18.7	17×18.5
FLE08-1/2	8	PT1/2	57.15	29.7	14	18.7	22×24.5
FLE10-1/8	10	PT1/8	48.45	32.1	8	19.6	12×13.0
FLE10-1/4	10	PT1/4	50.45	32.1	10	19.6	14×15.4
FLE10-3/8	10	PT3/8	51.45	32.1	11	19.6	17×18.5
FLE10-1/2	10	PT1/2	54.45	32.1	14	19.6	22×24.5
FLE12-1/4	12	PT1/4	66.15	36.9	10	21.9	14×15.4
FLE12-3/8	12	PT3/8	67.15	36.9	11	21.9	17×18.5
FLE12-1/2	12	PT1/2	70.15	36.9	14	21.9	22×24.5

Plug-in elbow / FEP

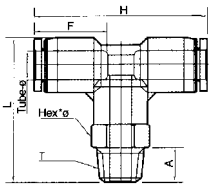
(unit : mm)



order code	Apply tybe dia. (Φ)	J(mim)	JΦ	L	H	Tube insert depth (F)
FEP04	4	20.5	4	39.2	23.8	16.8
FEP06	6	23	6	44.7	26.5	17.6
FEP08	8	26.5	8	50.6	28.4	18.7
FEP10	10	29	10	55.2	32.1	19.6
FEP12	12	33.3	12	63.9	36.9	21.9

Male branch tee swivel / FST

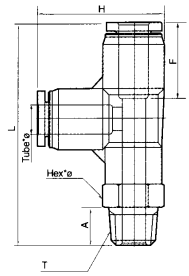
(unit : mm)



order code	Apply tybe dia. (Φ)	T	L	H	A	Tube insert depth (F)	Hex
FST04-M5	4	M5×0.8P	27.25	37.6	4.6	16.8	10×11.5
FST04-1/8	4	PT1/8	29.75	37.6	8	16.8	10×11.5
FST04-1/4	4	PT1/4	31.75	37.6	10	16.8	14×16.1
FST06-M5	6	M5×0.8P	30.25	41	4.6	17.6	10×11.5
FST06-1/8	6	PT1/8	32.75	41	8	17.6	12×13.8
FST06-1/4	6	PT1/4	35.75	41	10	17.6	14×16.1
FST06-3/8	6	PT3/8	36.75	41	11	17.6	17×19.6
FST08-1/8	8	PT1/8	35.25	44.4	8	18.7	12×13.8
FST08-1/4	8	PT1/4	38.25	44.4	10	18.7	14×16.1
FST08-3/8	8	PT3/8	39.25	44.4	11	18.7	17×19.6
FST08-1/2	8	PT1/2	42.25	44.4	14	18.7	22×25.4
FST10-1/8	10	PT1/8	37.25	47.2	8	19.6	12×13.8
FST10-1/4	10	PT1/4	40.25	47.2	10	19.6	14×16.1
FST10-3/8	10	PT3/8	41.25	47.2	11	19.6	17×19.6
FST10-1/2	10	PT1/2	44.25	47.2	14	19.6	22×25.4
FST12-1/4	12	PT1/4	44.65	54.8	10	21.9	14×16.1
FST12-3/8	12	PT3/8	45.65	54.8	11	21.9	17×19.6
FST12-1/2	12	PT1/2	48.65	54.8	14	21.9	22×25.4

Male branch tee swivel / FSTL

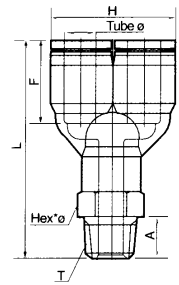
(unit : mm)



order code	Apply tybe dia. (φ)	T	L	H	A	Tube insert depth (F)	Hex
FSTL04-M5	4	M5×0.3P	42.3	25.1	4.6	16.8	10×11.5
FSTL04-1/8	4	PT1/8	45.3	25.1	8	16.8	10×11.5
FSTL04-1/4	4	PT1/4	48.3	25.1	10	16.8	14×16.1
FSTL06-M5	6	M5×0.8P	46.1	28.1	4.6	17.6	10×11.5
FSTL06-1/8	6	PT1/8	48.6	28.1	8	17.6	12×13.8
FSTL06-1/4	6	PT1/4	51.2	28.1	10	17.6	14×16.1
FSTL06-3/8	6	PT3/8	52.2	28.1	11	17.6	17×19.6
FSTL08-1/8	8	PT1/8	52.2	30.9	8	18.7	12×13.8
FSTL08-1/4	8	PT1/4	55.2	30.9	10	18.7	14×16.1
FSTL08-3/8	8	PT3/8	56.2	30.9	11	18.7	17×19.6
FSTL08-1/2	8	PT1/2	59.2	30.9	14	18.7	22×25.4
FSTL10-1/8	10	PT1/8	55.6	34.6	8	19.6	12×13.8
FSTL10-1/4	10	PT1/4	58.6	34.6	10	19.6	14×16.1
FSTL10-3/8	10	PT3/8	59.6	34.6	11	19.6	17×19.6
FSTL10-1/2	10	PT1/2	62.6	34.6	14	19.6	22×25.4
FSTL12-1/4	12	PT1/4	64.8	40.3	10	21.9	14×16.1
FSTL12-3/8	12	PT3/8	65.8	40.3	11	21.9	17×19.6
FSTL12-1/2	12	PT1/2	68.8	40.3	14	21.9	22×25.4

Union Y male connector / FSTL

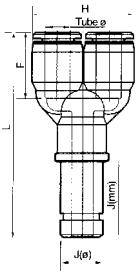
(unit : mm)



order code	Apply tybe dia. (φ)	T	L	H	A	Tube insert depth (F)	Hex
FSY04-M5	4	M5×0.8P	34.8	21	4.6	16.8	10×11.5
FSY04-1/8	4	PT1/8	41.3	21	8	16.8	10×11.5
FSY04-1/4	4	PT1/4	42.3	21	10	16.8	14×16.1
FSY06-M5	6	M5×0.8P	41.6	25	4.6	17.6	10×11.5
FSY06-1/8	6	PT1/8	44.1	25	8	17.6	12×13.8
FSY06-1/4	6	PT1/4	47.1	25	10	17.6	14×16.1
FSY06-3/8	6	PT3/8	48.1	25	11	17.6	17×19.6
FSY08-1/8	8	PT1/8	45.5	29	8	18.7	12×13.8
FSY08-1/4	8	PT1/4	48.5	29	10	18.7	14×16.1
FSY08-3/8	8	PT3/8	48.5	29	11	18.7	17×19.6
FSY08-1/2	8	PT1/2	52.5	29	14	18.7	22×25.4
FSY10-1/8	10	PT1/8	49.2	35	8	19.6	12×13.8
FSY10-1/4	10	PT1/4	52.2	35	10	19.6	14×16.1
FSY10-3/8	10	PT3/8	53.2	35	11	19.6	17×19.6
FSY10-1/2	10	PT1/2	56.2	35	14	19.6	22×25.4
FSY12-1/4	12	PT1/4	54.5	41	10	21.9	14×16.1
FSY12-3/8	12	PT3/8	55.4	41	11	21.9	17×19.6
FSY12-1/2	12	PT1/2	58.4	41	14	21.9	22×25.4

Plug-in Y connector / FEY

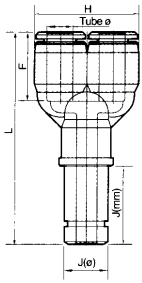
(unit : mm)



order code	Apply tybe dia. (φ)	J	J (φ)	L	H	Tube insert depth (F)
FEY04	4	20.5	4	56.7	21	16.8
FEY06	6	23	6	61.1	25	17.6
FEY08	8	26.5	8	67.4	29	18.7
FEY10	10	29	10	74	35	19.6
FEY12	12	33.3	12	83.6	41	21.9

Plug-in Y connector / FEYR

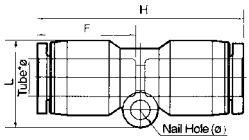
(unit : mm)



order code	Apply tybe dia. (Φ)	J	J (Φ)	L	H	Tube insert depth (F)
FEYR0604	4	23	6	56.2	21	17.6
FEYR0806	6	26.5	8	61	25	18.7
FEYT1008	8	29	10	69.1	29	19.6
FEYR1210	10	33.3	12	76.7	35	21.9

Equal union / FUE

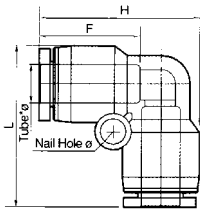
(unit : mm)



order code	Apply tybe dia. (Φ)	H	L	Nail hole (Φ)	Tube insert depth (F)
FUE04	4	34.6	12.75	3.3	16.8
FUE06	6	36.8	14.75	3.3	17.6
FUE08	8	39.4	19.85	4.3	18.7
FUE10	10	43.2	20	4.3	19.6
FUE12	12	47.8	23.3	4.3	21.9

Union elbow / FUL

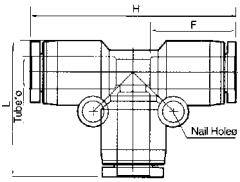
(unit : mm)



order code	Apply tybe dia. (Φ)	H	L	Nail hole (Φ)	Tube insert depth (F)
FUL04	4	36.6	24.2	3.3	16.8
FUL06	6	41.8	27.5	3.3	17.6
FUL08	8	44.9	30.65	4.3	18.7
FUL10	10	48.2	34.05	4.3	19.6
FUL12	12	56.8	39.85	4.3	21.9

Union Tee / FUT

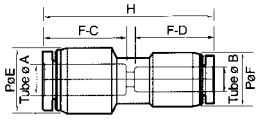
(unit : mm)



order code	Apply tybe dia. (Φ)	H	L	Nail hole (Φ)	Tube insert depth (F)
FUT04	4	36.6	24.2	3.3	16.8
FUT06	6	41.8	27.5	3.3	17.6
FUT08	8	44.9	30.65	4.3	18.7
FUT10	10	48.2	34.05	4.3	19.6
FUT12	12	56.8	39.85	4.3	21.9

Equal union reducer / FUER

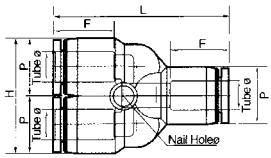
(unit : mm)



order code	Apply tybe dia. (φ)		H	F-C	F-D	PφE	PφF
	A	B					
FUER06-04	6	4	36.6	17.6	16.8	12.5	10.5
FUER08-06	8	6	37.6	18.7	17.6	14.5	12.5
FUER10-08	10	8	41	19.6	18.7	17.5	14.5
FUER12-10	12	10	44	21.9	19.6	20.5	17.5

Union Y connector / FUY

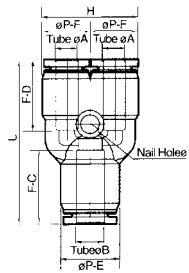
(unit : mm)



order code	Apply tybe dia. (φ)	H	L	F	φP	Nail hole (φ)
FUY04	4	21	37.1	16.8	10.5	3.3
FUY06	6	25	40.2	17.6	12.5	3.3
FUY08	8	29	43.4	18.7	14.5	4.3
FUY10	10	35	47.7	19.6	17.5	4.3
FUY12	12	41	53.3	21.9	20.5	4.3

Union Y connector reducer / FUYR

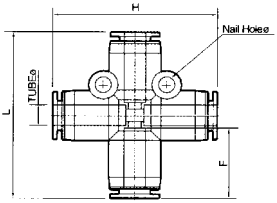
(unit : mm)



order code	Apply tybe dia. (φ)		L	H	F-C	F-D	PφE	PφF	Nail hole (φ)
	A	B							
FUYR06-04	6	4	37.9	21	17.6	16.8	12.5	10.5	3.3
FUYR08-06	8	6	41.3	25	18.7	17.6	14.5	12.5	4.3
FUYR10-08	10	8	43.3	29	19.6	18.7	17.5	14.5	4.3
FUYR12-10	12	10	46.5	35	21.9	19.6	20.5	17.5	4.3

Union cross / FUC

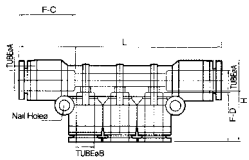
(unit : m m)



order code	Apply tybe dia. (φ)	Nail hole (φ)	H	L	T
FUC04	4	3.3	36.6	37.9	16.8
FUC06	6	3.3	41.8	42.5	17.6
FUC09	8	4.3	44.9	46.8	18.7
FUC10	10	4.3	48.2	50.5	19.6
FUC12	12	4.3	54.8	57.2	21.9

Union manifold connector / FUM

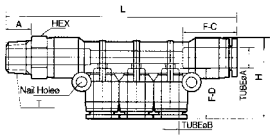
(unit : mm)



order code	Apply tybe dia. (φ)		Nail hole (φ)	H	L	Tube insert depth (F)	F-D
	A	B					
FUM06−04	6	4	3.3	24.2	63.7	17.6	16.8
FUM08−04	8	4	4.3	28.5	65.7	18.7	16.8
FUM08−06	8	6	4.3	34	71.7	18.7	17.6
FUM10−06	10	6	4.3	32	78.1	19.6	17.6
FUM10−08	10	8	4.3	34.5	83.4	19.6	18.7

Union manifold connector / FUMC

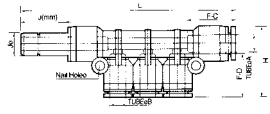
(unit : mm)



order code	Apply tybe dia. (φ)		Nail hole (φ)	H	L	Tube insert depth (F)	F-D	A	T	Hex
	A	B								
FUMC0604−1/8	6	4	3.3	24.2	72.3	17.6	16.8	8	1/8	12×13.8
FUMC0804−1/4	8	4	4.3	28.5	77.2	18.7	16.8	10	1/4	17×19.6
FUMC0806−1/4	8	6	4.3	34	84.4	18.7	17.6	10	1/4	17×19.6
FUMC1008−3/8	10	8	4.3	34.5	91	19.6	18.7	11	3/8	22×25.4

Union manifold connector / FUML

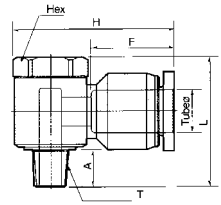
(unit : mm)



order code	Apply tybe dia. (φ)		Nail hole (φ)	H	L	Tube insert depth (F)	F-D	J	J (φ)
	A	B							
FUML0604	6	4	3.3	24.2	84.3	17.6	16.8	25	6
FUML0804	8	4	4.3	28.5	89.5	18.7	16.8	28.5	8
FUML0806	8	6	4.3	34	95.5	18.7	17.6	28.5	8
FUML1008	10	8	4.3	34.5	109.7	19.6	18.7	31	10

Male elbow / FSES

(unit : mm)



order code	Apply tybe dia. (¥)	T	L	H	A	Hex
FSES04−M5	4	M5×0.8P	22.1	26.6	4.6	8×9.24
FSES04−1/8	4	PT1/8	32.4	31.5	8	14×16.8
FSES06−M5	6	M5×0.8P	22.1	27.2	4.6	8×9.24
FSES06−1/8	6	PT1/8	32.4	32.4	8	14×16.8
FSES06−1/4	6	PT1/4	35.3	35.6	10	17×19.6
FSES08−1/8	8	PT1/8	32.4	39.2	8	14×16.8
FSES08−1/4	8	PT1/4	35.3	37.7	10	17×19.6
FSES08−3/8	8	PT3/8	39.7	42.7	11	21×24.2
FSES10−1/4	10	PT1/4	35.3	42.5	10	17×19.6
FSES10−3/8	10	PT3/8	39.7	43.6	11	21×24.2
FSES10−1/2	10	PT1/2	47.8	45.6	14	24×27.7
FSES12−3/8	12	PT3/8	39.7	45.9	11	21×24.2
FSES12−1/2	12	PT1/2	47.8	48.3	14	24×27.7

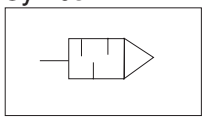
Silencer

M5, R1/8, R1/4, R3/8, R1/2

AS - 5
AS - 6
AS - 8
AS - 10
AS - 15



Symbol



Specification

Model No.	Unit	AS-5	AS-6	AS-8	AS-10	AS-15
Port Size	PT	M5	1/8	1/4	3/8	2/1
Effective area	mm^2	4	16	40	80	106
Fluid		Air				
Temperature range	℃	-5~60				
Noise	dB	30 or less				
Weight	g	3	6	13	21	33

ORDER KEY

AS – 6
① ②

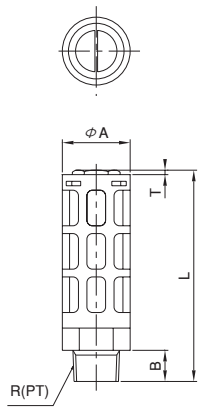
1. Seires
Silencer

2. Port size

5	M5
6	1/8
8	1/4
10	3/8
15	1/2

Dimension

(Unit : mm)



Order key	R(PT)	A	B	L	T
ASS-5	M5	8	-	11	-
ASS-6	1/8	16.5	7	41	2
ASS-8	1/4	21.5	10	65	2
ASS-10	3/8	25.5	13	85	2
ASS-15	1/2	30.5	14	95	2

Silencer

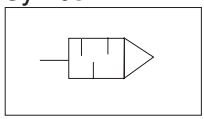
3/4', 1"

AS-20

AS-25



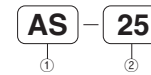
Symbol



Specification

Model No.	Unit	AS-20	AS-25
Port Size	PT	3/4"	1"
Effective area	mm^2	200	230
Max. Pressure	Mpa	1.5	
Temperature range	℃	0~60	
Noise	dB	20 or less	
Weight	g	70	100

ORDER KEY

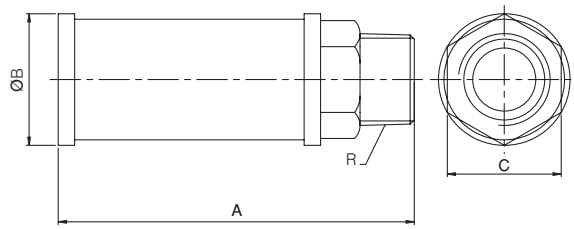


1. Seires
Silencer

2. Port size

20	3/4"
25	1"

Dimension



MODEL	R	A	⌀B	C
AS-20	3/4"	104	44	30
AS-25	1"	130	48	37

Sintered Bronze Silencer

ASS Series

M5, R1/8, R1/4, R3/8, R1/2

Symbol



ORDER KEY

Order key	Port size
ASS-5	M5
ASS-6	R1/8
ASS-8	R1/4
ASS-10	R3/8
ASS-15	R1/2



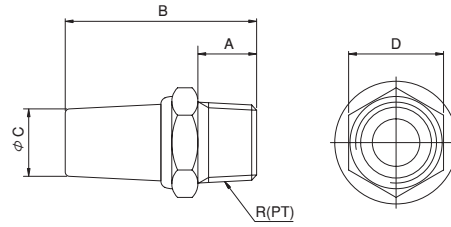
Specification

Model No.	Unit	ASS-5	ASS-6	ASS-8	ASS-10	ASS-15
Port Size	R(PT)	M5	1/8	1/4	3/8	1/2
Fluid		Air				
Temperature range	℃	-5~60				
Noise	dB	25 less				
Weight	g	2	6	17	28	35

Note) Do not use compressed air containing humidity, sa this may cause faulty operation.

Dimension

(Unit : mm)



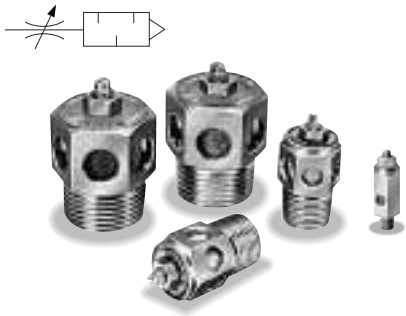
Order No.	R(PT)	A	B	C	D
ASS-5	M5	4	18	7	7
ASS-6	1/8	7	24	8	11
ASS-8	1/4	8	32	10.5	15
ASS-10	3/8	10	39	12	19
ASS-15	1/2	14	44	15	22

Flow Control

SM1 Series

M5, R1/8, R1/4, R3/8, R1/2, R3/4, R1

Symble



ORDER KEY

Order No.	Port size
SM100	M5
SM101	R1/8
SM102	R1/4
SM103	R3/8
SM104	R1/2
SM106	R3/4
SM108	R1

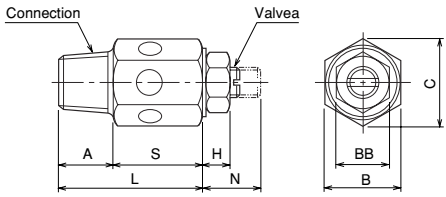
Specification

Model No.	Unit	SM100	SM101	SM102	SM103	SM104	SM106	SM108
Port Size		M5	R(PT)1/8	R(PT)1/4	R(PT)3/8	R(PT)1/2	R(PT)3/4	R(PT)1
Effective area	mm^2	4	11	16	20	45	60	60
Fluid		Air						
Use pressure range	Mpa (bar)	0~0.7(0~7)	0 ~ 1 (0 ~ 10)					
Proof pressure	Mpa (bar)	1.05	1.5 (15.0)					
Temperature range	℃	0 ~ 80						
Weight	g	5	20	30	40	70	120	220

Note) do not use compressed air containing humidity, as this may cause faulty operation.

Dimension

(Unit : mm)



Series	A	B	BB	C	H	L	N		S
							Max.	Min.	
SM100	4	8	5.5	9	2	18	6	3.5	14
SM101	8.5	12	8	13.8	3.2	25	13	6	16.5
SM102	12	14	10	16.2	3.6	30	16.5	6	18
SM103	12	17	10	19.6	3.6	30	16.5	6	18
SM104	16	22	10	25.4	3.6	37	18.5	6	21
SM106	18	27	10	31.0	3.6	43	22	8	25
SM108	19	36	13	41.0	5	46	22	7.5	27

Tube

Φ4,Φ6,Φ8,Φ10,Φ12

Polyurethane Tube

- High reistance to chemical
- More flexible than Nylon



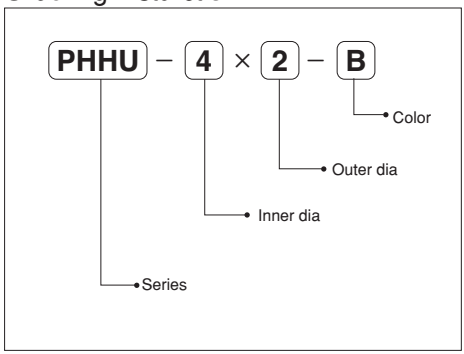
Specification

Fluid	Unit	Air
Proof pressure	MPa(bar)	2.3(23)
Pressure range	MPa(bar)	0~0.9(0~9)
Temperature range	℃	-15~60
Material		Polyurethane

- When temperature goes down below 5℃, complete dry air shall be supplied to prevent from freezing.

Model No	Outer dia (mm)	Inner dia (mm)	Width (mm)	Weighr (g/m)	Min. curvature radius (mm)	Color
PHHU- 4×2	4	2	1	11	10	LB : Blue C : Clean
PHHU- 6×4	6	4	1	19	15	B : Black
PHHU- 8×5	8	5	1.5	37	23	Y : Yellow
PHHU- 10×6.5	10	6.5	1.75	55	30	R : Red
PHHU- 12×8	12	8	2	76	35	G : Green

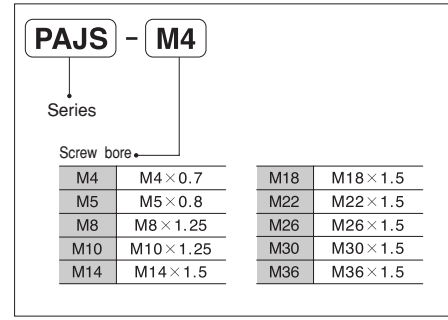
Ordering Insturction



Floating Joint
PAJS Series



ORDER KEY



M4	M4×0.7	M18	M18×1.5
M5	M5×0.8	M22	M22×1.5
M8	M8×1.25	M26	M26×1.5
M10	M10×1.25	M30	M30×1.5
M14	M14×1.5	M36	M36×1.5

Specifications

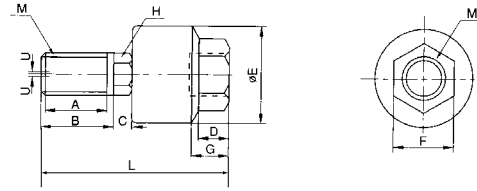
Model No.	Unit	PAJS-M4	PAJS-M5	PAJS-M8	PAJS-M10	PAJS-M14
Screw bore	mm	M4×0.7	M5×0.8	M8×1.25	M10×1.25	M14×1.5
Screw direction		Right				
Temperature range	℃	-10~60				
Oscillation angle		±5°	±5°	±5°	±5°	±5°
Radial deflection	mm	0.5	0.5	0.5	0.5	0.75
Allowable tension	Kgf	12	12	110	250	600

Model No.	Unit	PAJS-M18	PAJS-M22	PAJS-M26	PAJS-M30	PAJS-M36
Screw bore	mm	M18×1.5	M22×1.5	M26×1.5	M30×1.5	M36×1.5
Screw dinection		Right				
Temperature range	℃	-10~60				
Oscillation angle		±5°	±5°	±5°	±5°	±5°
Radial deflection	mm	1.0	1.25	2.0	2.5	3.0
Allowable tension	Kgf	1,100	1,800	2,800	5,400	7,100

PAJS Series

Dimensions

(Unit : mm)



Part code	M	L	A	B	C	D	E	F	G	H	U
PAJS-M4	M4 x 0.7	26	9	10	1.5	4	12	7	5	4	0.5
PAJS-M5	M5 x 0.8	34.5	12.5	14	2	5	16	10	7	6	0.5
PAJS-M8	M8 x 1.25	44	15.5	16.5	5	7	21	13	8	7	0.5
PAJS-M10	M10 x 1.25	49	17.5	18.5	5	8	24	17	9	8	0.5
PAJS-M14	M14 x 1.5	62	20	22	5	11	31	22	12	11	0.75
PAJS-M18	M18 x 1.5	76	25	27	6	13	40	27	14	14	1
PAJS-M22	M22 x 1.5	89	27	29	8	16	50	32	17	19	1.25
PAJS-M26	M26 x 1.5	110	35	37	8.5	20	59.5	41	24	24	2
PAJS-M30	M30 x 1.5	153	41.5	44.5	14	22	79	46	30	27	2.5
PAJS-M36	M36 x 1.5	179	52	54.5	16	24	96	55	36	32	3

Rod Swivel Coupling

PSC Series



ORDER KEY

PSC - M10

① ②

1. **Series**

2. **Screw size**

Non-Lubricated		Lubricated	
M5	M5 × 0.8	M22	M22 × 1.5
M8	M8 × 1.25	M26	M26 × 1.5
M10	M10 × 1.25	M30	M30 × 1.5
M14	M14 × 1.5	M36	M36 × 1.5
M18	M18 × 1.5		

Specifications

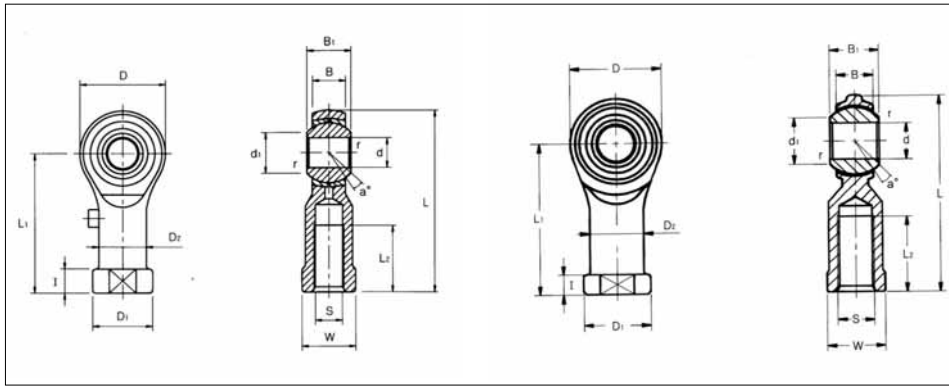
Model	Unit	PSC-M5	PSC-M8	PSC-M10	PSC-M14	PSC-M18
Screw bore		M5 × 0.8P	M8 × 1.25P	M10 × 1.25P	M14 × 1.5P	M18 × 1.5P
Screw direction		Right Screw				
Temperature range	℃	-10~60				
Oscillation angle	degree	13				
Weight	g	16.5g	43g	72g	160g	295g
Lubrication		Non-Lubricated				

Model	Unit	PSC-M22	PSC-M26	PSC-M30	PSC-M36
Screw bore		M22 × 1.5P	M26 × 1.5P	M30 × 1.5P	M36 × 1.5P
Screw direction		Right Screw			
Temperature range	℃	- 10~60			
Oscillation angle	degree	13			
Weight	g	490g	750g	900g	1,400g
Lubrication		Lubricated			

PSC series

Dimensions

Unit:mm



Part code (Bearing No.)	Dimensions (mm)														Spherical Diameter (mm)	Basic Static Load Ratings (Co/Kgf)
	d	Threads KS 2-/S	D	B	B1	D1	L	I	L1	L2	W	D1	D2	r		
PSC−M5	5	M5×0.8	16	6	8	7.7	35	4	27	14	9	11	9	0.5	11.1	400
PSC−M8	8	M8×1.25	23	9	12	10.4	47	5	35.5	17	14	16	13	0.5	15.87	760
PSC−M10	10	M10×1.5	27	10.5	14	12.9	56	7	42.5	21	17	19	15	0.5	19.05	960
PSC−M14	14	M14×1.5	35	13.5	19	16.9	75	8.5	57.5	27	22	25	20	0.5	25.4	1,550
PSC−M18	18	M18×1.5	43	16.2	23	12.7	92	10	71.5	36	27	31	25	0.5	31.6	2,570
PSC−M22	22	M22×1.5	52	20	28	25.8	110	12	84	43	32	37	30	0.5	38.1	4,200
PSC−M26	25	M26×1.5	60	22	31	29.8	124	12	94	50	36	42	33.5	0.5	43	7,400
PSC−M30	30	M30×1.5	73	21	32	34.4	145	16.5	108.5	50	47	49	40	0.5	47	9,100
PSC−M35	35	M36×1.5	82	23	35	39.8	173	17	132	60	49	58	48	0.5	53	11,400

Quick Exhaust Valve

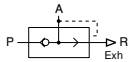
ORB Series

G1/8, G1/4, G3/8, G1/2, G3/4

0RB12□B
0RB25□B
0RB37□B
0RB50□B
0RB75□B



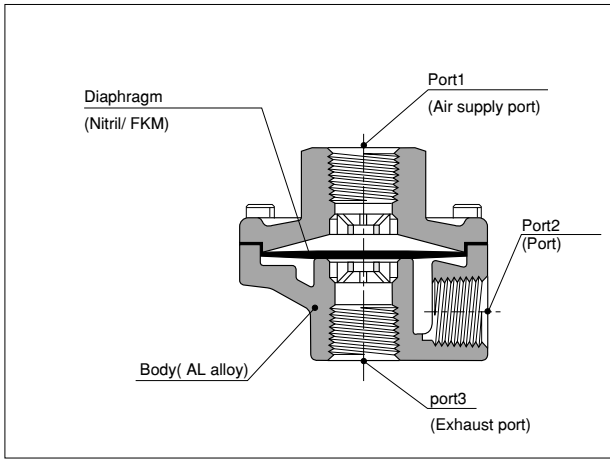
Sumbol



Specification

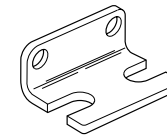
Model No.	Standard	0RB12B	0RB25B	0RB37B	0RB50B	0RB75B
	High Temperature	0RB12VB	0RB25VB	0RB37VB	0RB50VB	0RB75VB
Port Size	G	1/8	1/4	3/8	1/2	3/4
Pressure Range	bar	0.2 ~ 10				
Fluid		Air				
Cv Flow	l/min (ANR)	2,000	2,570	6,850	12,850	15,700
Temperature Range	℃	-10 ~ 80 (High Temperature : -10 ~ 180)				
Material	Diaprhagm	Urethane (High Temperature : FKM)				
	Seal	Nitril (High Temperature : FKM)				

Construction



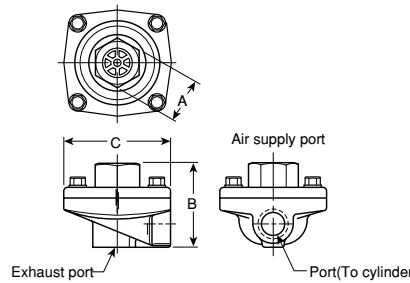
Mounting Bracket

Order key: 03640 8100
Application: 0R12 ~ 0R25



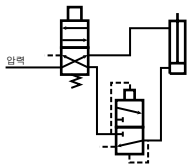
Quick Exhaust Valve

Dimension



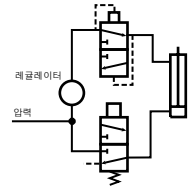
	BSPP (G)	A	B	C
0RB12B	1/8"	7/8" Sq.	1.75	1.88
0RB25B	1/4"	7/8" Sq.	1.75	1.88
0RB37B	3/8"	1" Hex	2.06	2.44
0RB50B	1/2"	1-1/2" Hex	2.88	3.38
0RB75B	3/4"	1-1/2" Hex	2.88	3.38

Typical "Shuttle Valve" Applications



Rapid Retraction-Double Acting Cylinder

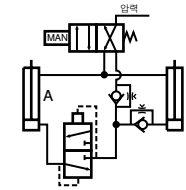
In this circuit, air is exhausted through a Quick Exhaust Valve that is Close coupled to the Quick Exhaust Valve has a greater exhaust capacity than the four-way Control Valve, Increased cylinder speed can be accomplished with a smaller and less expensive control vlave.



Dual pressure Actuation of Double Acting Cylinder

This circuit utilizes a Quick Exhaust Valve and a three-way Control Valve to permit rapid extension of the cylinder at a high pressrue.
Retraction can be accomplished at a lower pressure, thus saving air and increasing cylinder life.

Note) Line pressure must be 3 or 4 times greater than rod end pressure. Effective working pressure is the differntial between the cap and rod end.

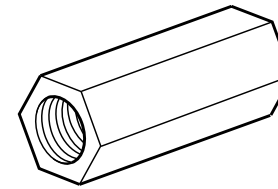


Bi-Directional Control of Two Double Acting Cylinders

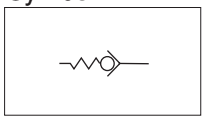
This circuit provides Maximum control with a minimum of valving. A large four-way Control Valve is not needed to permit the rapid retraction of Cylinder A, as the Quick Exhaust Valve oerforms this function. the extension of Cylinder B are controlled by Speed Control Valves.

Non return valve

VB12-Q-NQ-5
VB22-Q-NQ-5
VB42-Q-NQ-5



Symbol



- Rugged brass or aluminium bodies
- Nitrile or viton options
- Low 0.1 bar operating pressurs
- Ful flow one direction only
- Compact design

Specification

Model No.	Unit	VB12	VB22	VB42
Port Size		G1/8	G1/4	G1/2
Operating pressure	bar	10 bar		
Fluid used		Air Water		
Temperature Range	℃	-20 ℃ ~70 ℃		
Weight	g	10	10	50

ORDER KEY

VB ① **12** ② **– Q – NQ – 5**

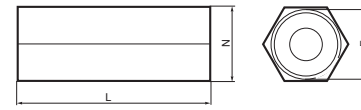
1. Series
Non return valve

2. Port Size

12	G1/8
22	G1/4
42	G1/2

Dimensions

(Unit : mm)



Model No	F	L	N
VB12-Q-NQ-5	G1/8	31	14
VB22-Q-NQ-5	G1/4	40	17
VB42-Q-NQ-5	G1/2	59	27

Sliding Sleeve Valve

HSV Series

M5, R1/8, R1/4, R3/8, R1/2, R3/4



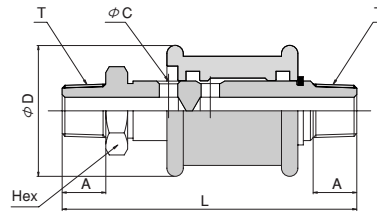


Specification

Series	Unit	HVS-5	HVS-6	HVS-8	HVS-10	HVS-15	HVS-20
Port Size	PT	M5	R1/8"	R1/4"	R3/8"	R1/2"	R3/4"
Effective Area	mm	2.0	2.5	4.0	4.5	5.4	8.0
Fluid		Air					
Operating Pressure	MPa(bar)	0 ~ 1.0 (0 ~ 10)					
Temperature Range	℃	-730mmHg ~ 60					

Dimension

(Unit : mm)



Model	ΦD	T	L	A	ΦC	Hex
HSV - M5	19.0	M5	45.0	4.1	2.0	9.0
HSV - 6	24.0	R1/8	54.0	8.0	2.5	14.0
HSV - 8	30.0	R1/4	73.5	10.0	4.0	17.0
HSV - 10	41.0	R3/8	83.0	11.0	4.5	27.0
HSV - 15	41.0	R1/2	89.0	14.0	5.4	27.0
HSV - 20	49.0	R3/4	104.5	15.0	8.0	32.0