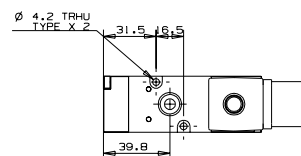
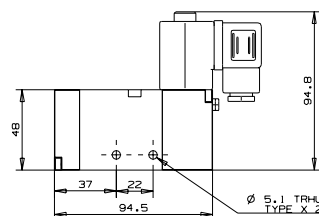
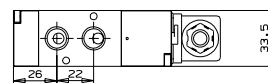
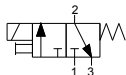


BC | Solenoid Operated

BCS3 | Sol-Spring

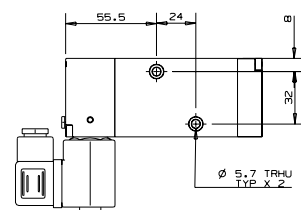
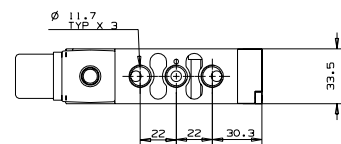
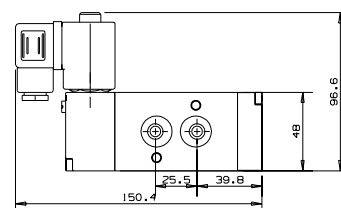
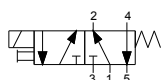


How to Order

BCS3	FUNCTION	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR
NC	1	None	0	without	0
NO	2	Plastic	1	6	1
		Brass slot	2 ⁽¹⁾	12	2
		non-locking St.st knob	3 ⁽¹⁾	24	3
		locking St.st knob	4 ⁽¹⁾	48	4
				110	5
				120	6
				230	7
				240	8
				other	9

(1) Special order

BCS-N | NAMUR type Sol-Spring



How to Order

BCS	N	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR
		None	0	without	0
		Plastic	1	6	1
		Brass slot	2 ⁽¹⁾	12	2
		non-locking St.st knob	3 ⁽¹⁾	24	3
		locking St.st knob	4 ⁽¹⁾	48	4
				110	5
				120	6
				230	7
				240	8
				other	9

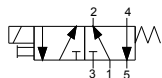
(1) Special order

PNEUMATIC VALVES | General Purpose

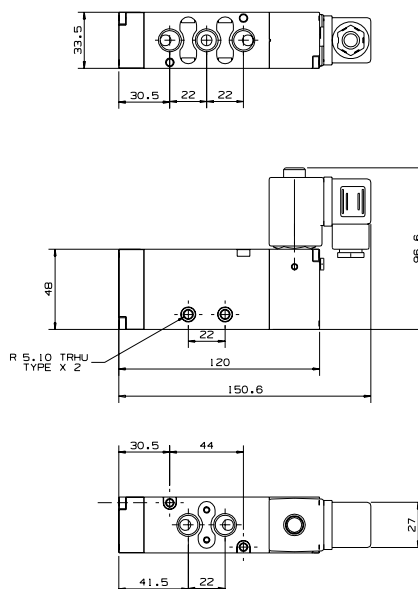
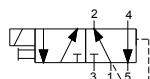
BC Series | 1/4" Body Ported Valves

BC | Solenoid Operated

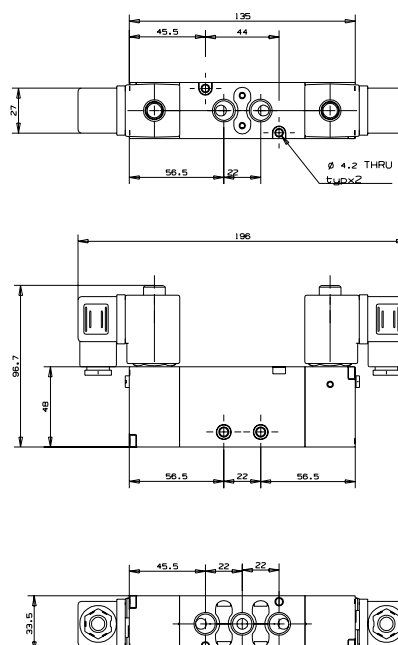
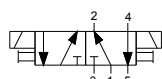
BCS5-S | Sol-Spring Return



BCS5-DF | Sol-Differential



BCS5-D | Sol-Sol



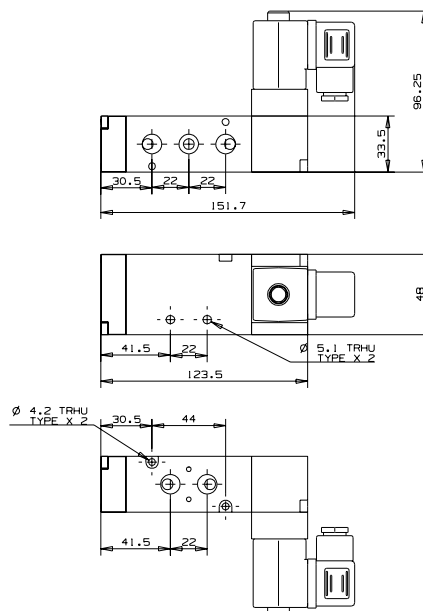
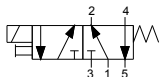
How to Order

BCS5	TYPE	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR
	Sol-Spring S	None	0	without	0
	Sol-Dif DF	Plastic	1	6	AC
	Sol-Sol D	Brass slot	2 ⁽¹⁾	12	2
		non-locking	24	3	AC
		St.st knob	48	4	8W60Hz
		locking	110	5	DC 10W
		St.st knob	120	6	3
			230	7	
			240	8	
			other	9	

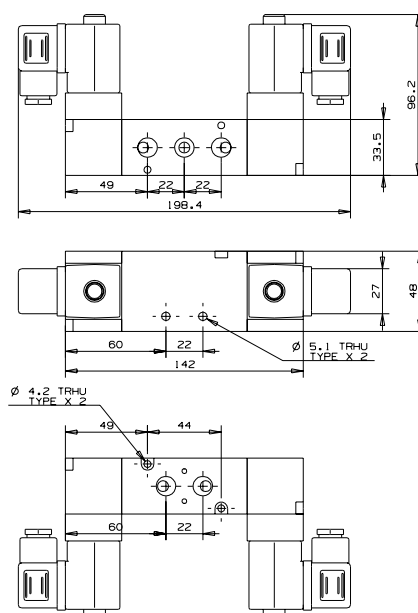
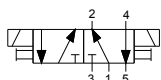
(1) Special order

BC | Solenoid Operated

BCS5-90S | Coil position 90° Sol-Spring



BCS5-90D | Coil position 90° Sol-Sol



How to Order

BCS5	-	90□	-	MANUAL OVERRIDE	-	COIL VOLTAGE	-	POWER	-	CONNECTOR	
		Sol-Spring	S	None	0	without	0	none	0	without	0
		Sol-Sol	D	Plastic	1	6	1	AC		standard	1
				Brass slot	2 ⁽¹⁾	12	2	8W50Hz	1	with LED	2
				non-locking		24	3	AC		with LED	
				St.st knob	3 ⁽¹⁾	48	4	8W60Hz	2	+ surge	3
				locking		110	5	DC 10W	3	protection	
				St.st knob	4 ⁽¹⁾	120	6			with 1/2" hub	4
						230	7				
						240	8				
						other	9				

(1) Special order

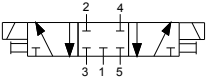
(1) Special order

PNEUMATIC VALVES | General Purpose

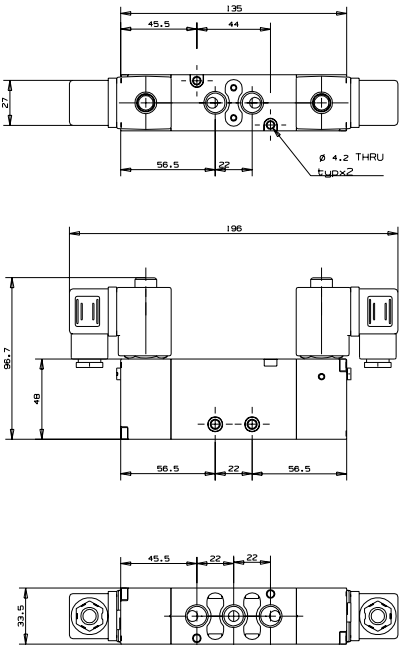
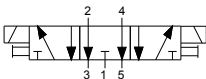
BC Series | 1/4" Body Ported Valves

BC | Solenoid Operated

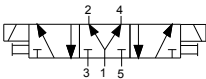
BCS53-P | 3 Position Closed Center Sol-Sol



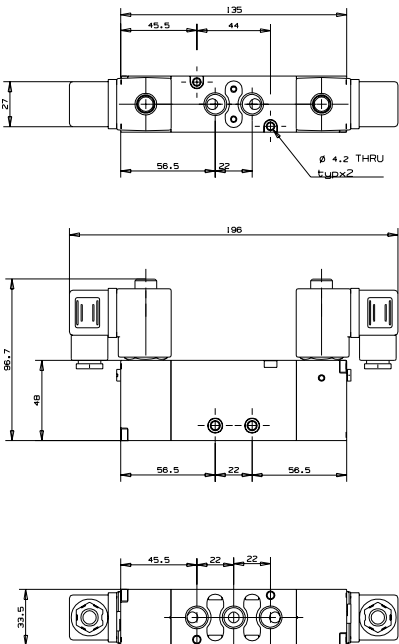
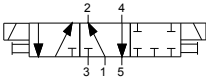
BCS53-U | 3 Position Exhaust Center Sol-Sol



BCS53-Y | 3 Position Pressure Center Sol-Sol



BCS53-A | 3 Position Shelf Control Sol-Sol



How to Order

BCS53	FUNCTION	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR
	Closed Center P	None 0	without 0	none 0	without 0
	Center P	Plastic 1	6 1	AC	standard 1
	Exhaust Center U	Brass slot 2 ⁽¹⁾	12 2	8W50Hz	with LED 2
	Center U	non-locking 24 3	AC		
	Pressure Center Y	St.st knob 3 ⁽¹⁾	48 4	8W60Hz	with LED + surge protection 3
	Center Y	locking 110 5	DC 10W	3	
	Shelf Control A	St.st knob 4 ⁽¹⁾	120 6		with 1/2" hub 4
			230 7		
			240 8		
			other 9		

(1) Special order

PNEUMATIC VALVES | Brass Heavy Duty PE Series

PE | Solenoid Operated

- Heavy duty brass valves, solenoid operated
- 3/2, 5/2, 5/3
- Port size : 1/4" & 1/2" BSP & NPT

Application

- Suitable for use in aggressive environments such as mining, cement manufacturing and flour milling industries.

Technical Data

Fluid	Air / Inert gas / Water
Operation pressure	-1 to 10 bar
Ambient temperature	-5° to 55° C (option for FKM seals) up to 150° C
Lubrication	Not required (use turbine oil class ISO VG32 if lubricated)
Port size	1/4" & 1/2" BSP or NPT
Flow rate (Air)	1/4" port size = 1,100 L/min (at 5.5 bar) 1/2" port size = 3,500 L/min (at 5.5 bar)
Coil voltage	6V DC & 12-24-48-110-120-230V AC/DC
Power consumption	26VA - 10W
Minimum pilot pressure	All valves : 3 bar



Sol-Spring



Sol-Air



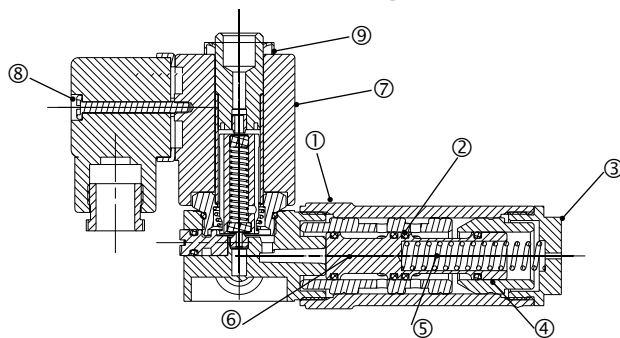
Sol-Sol



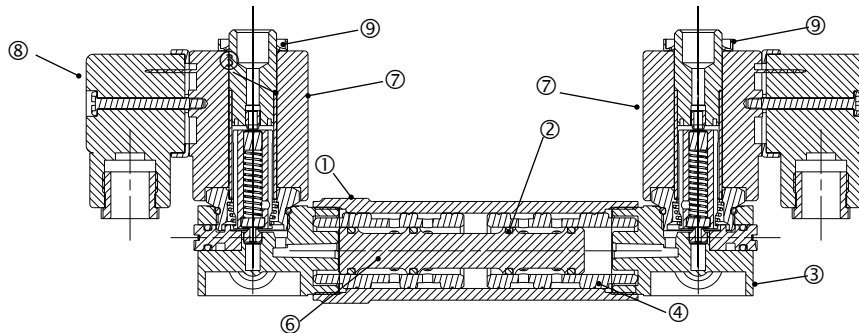
3 position Closed Center

Construction

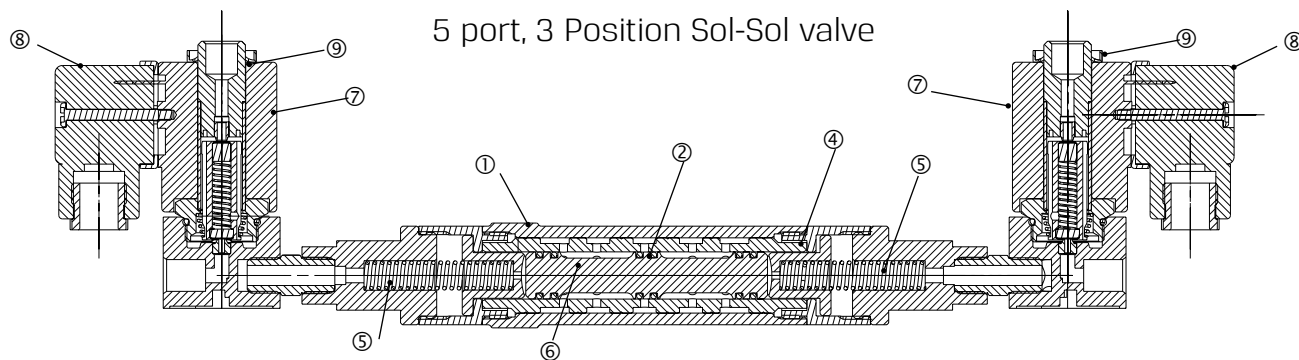
3 port Sol-Spring valve



5 port Sol-Sol valve



5 port, 3 Position Sol-Sol valve



Component Parts

No.	Description	Material
1	Body	Brass *
2	"O" ring	NBR or FKM
3	End cover	Brass
4	Sleeve	Brass
5	Spring	-
6	Spool	Brass
7	Solenoid coil	
8	Connector	
9	Tightening	

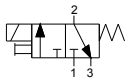
* Painted with grey polyester

PNEUMATIC VALVES | Brass Heavy Duty

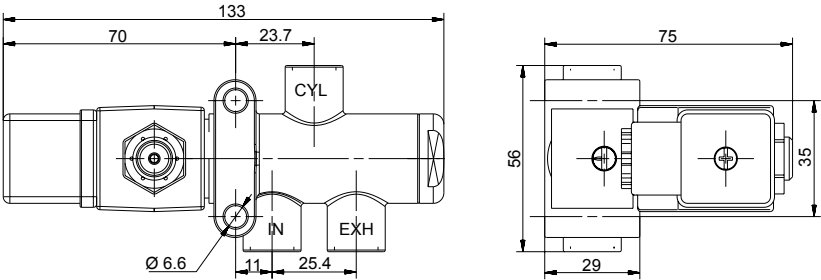
PE Series

PE | Solenoid Operated

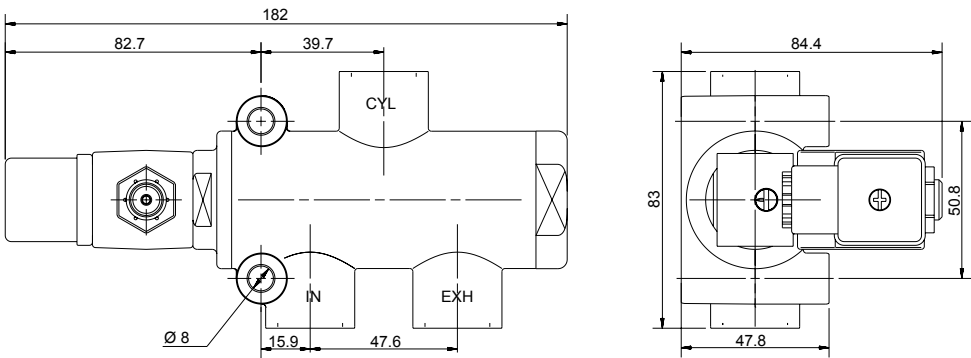
PES3-S | Sol-Spring | 1/4", 1/2" | 3 port



Port size : 1/4"



Port size : 1/2"

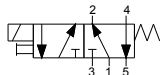


How to Order

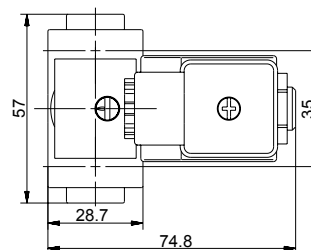
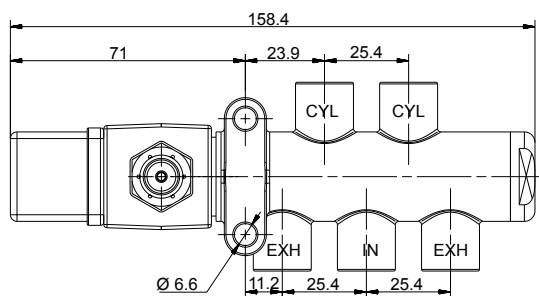
PES3	PORT SIZE	S	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR
	1/4" BSP 0		NBR N	without 1	None 0	without 0	none 0	without 0
	1/4" NPT 1		FKM V	with 2	Plastic 1	6 1	AC 8W50Hz 1	standard 1
	1/2" BSP 2				Brass slot 2 ⁽²⁾	12 2		with LED 2
	1/2" NPT 3				non-locking St.st knob 3 ⁽²⁾	24 3	AC 8W60Hz 2	with LED + surge protection 3
					locking St.st knob 4 ⁽²⁾	48 4	DC10W 3	
						110 5		with 1/2" hub 4
						120 6		
						230 7		
						240 8		
						other 9		

(1) Only for BSP
(2) Special order

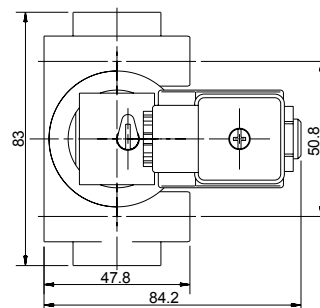
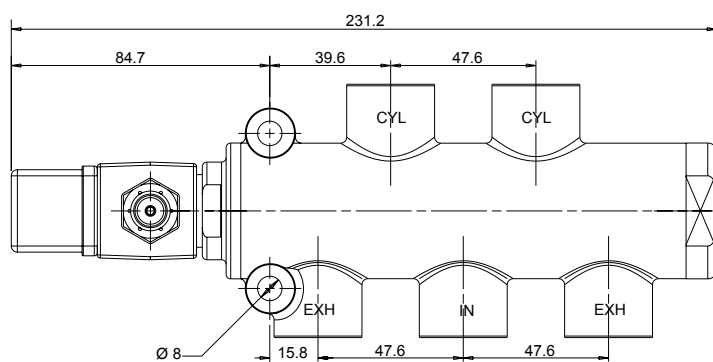
PES5-S | Sol-Spring | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



How to Order

PES5	PORT SIZE	S	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR					
	1/4" BSP	0	NBR	N	without	1	None	0	without	0			
	1/4" NPT	1	FKM	V	with	2	Plastic	1	standard	1			
	1/2" BSP	2				Brass slot	2 ⁽²⁾	12	2	8W50Hz	1	with LED	2
	1/2" NPT	3				non-locking	3 ⁽²⁾	24	3	AC	2	with LED + surge	3
						St.st knob	4 ⁽²⁾	48	4	8W60Hz	3	protection	4
						locking		110	5	DC10W		with 1/2" hub	
						St.st knob		120	6				
								230	7				
								240	8				
								other	9				

(1) Only for BSP

(2) Special order

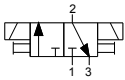
(1) Only for BSP
(2) Special order

PNEUMATIC VALVES | Brass Heavy Duty

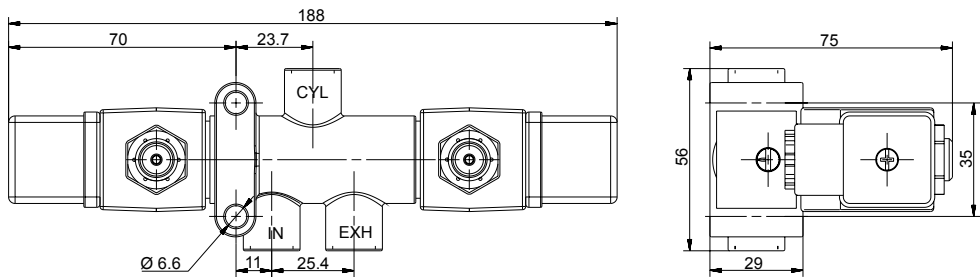
PE Series

PE | Solenoid Operated

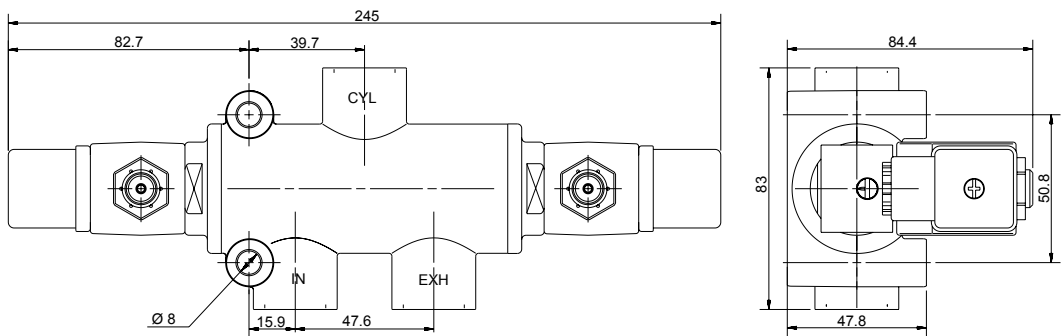
PES3-D | Sol-Sol | 1/4", 1/2" | 3 port



Port size : 1/4"



Port size : 1/2"



How to Order

PES3	PORT SIZE	D	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR		
	1/4" BSP	0	NBR	N	without	1	None	0	without	0
	1/4" NPT	1	FKM	V	with	2	Plastic	1	standard	1
	1/2" BSP	2					Brass slot	2 ⁽²⁾	with LED	2
	1/2" NPT	3					non-locking	3 ⁽²⁾	with LED + surge protection	3
							St.st knob	4 ⁽²⁾	with 1/2" hub	4
							locking	5		
							St.st knob	6		
							120	7		
							230	8		
							240	9		
							other			

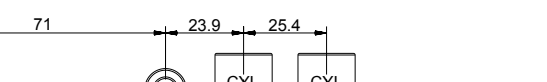
(1) Only for BSP

(2) Special order

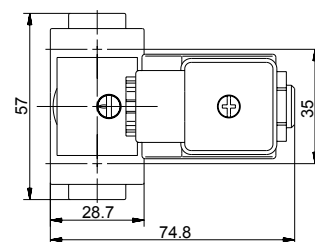
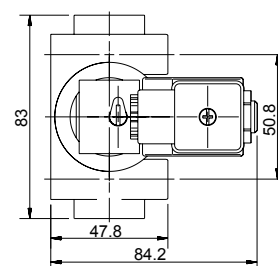


(1) Only for BSP
(2) Special order

A schematic diagram of a five-bar linkage mechanism. It consists of five links: a fixed frame (link 1), two side links (links 2 and 3), and two coupler links (links 4 and 5). The joints are labeled as follows: 1 is a revolute joint between the frame and link 2; 2 is a revolute joint between link 2 and link 3; 3 is a revolute joint between link 3 and link 4; 4 is a revolute joint between link 4 and link 5; and 5 is a revolute joint between link 5 and the frame. The diagram shows the mechanism in a specific configuration with arrows indicating the direction of motion for links 2 and 3.



Technical drawing of the 1000 Series 1/2" valve. The drawing shows a side view of the valve with dimensions in inches. The total length is 213. The distance from the left end to the center of the first cylinder is 71. The distance between the centers of the two cylinders is 23.9. The distance from the center of the second cylinder to the right end is 25.4. The distance from the center of the first cylinder to the center of the first exhaust port is 11.2. The distance between the centers of the two exhaust ports is 25.4. The distance from the center of the second exhaust port to the center of the second cylinder is 25.4. The drawing also shows the valve body with a central port labeled 'IN' and two side ports labeled 'EXH'. The valve is shown in a closed position with the handle on the left.

[illegible]

PES5	PORT SIZE	D	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾		MANUAL OVERRIDE		COIL VOLTAGE		POWER		CONNECTOR		
	1/4" BSP	0	NBR	N	without	1	None	0	without	0	none	0	without	0
	1/4" NPT	1	FKM	V	with	2	Plastic	1	6	1	AC	1	standard	1
	1/2" BSP	2					Brass slot	2 ⁽²⁾	12	2	8W50Hz		with LED	2
	1/2" NPT	3					non-locking		24	3	AC		with LED +	
							St.st knob	3 ⁽²⁾	48	4	8W60Hz	2	surge	3
							locking		110	5	DC10W	3	protection	
							St.st knob	4 ⁽²⁾	120	6			with 1/2"	4
									230	7			hub	
									240	8				
									other	9				

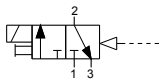
(1) Only for BSP
(2) Special order

PNEUMATIC VALVES | Brass Heavy Duty

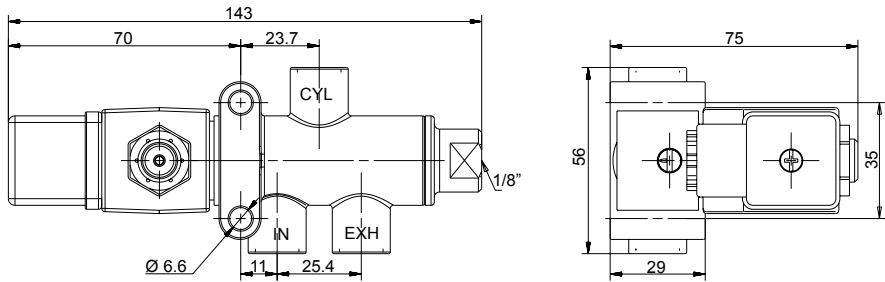
PE Series

PE | Solenoid Operated

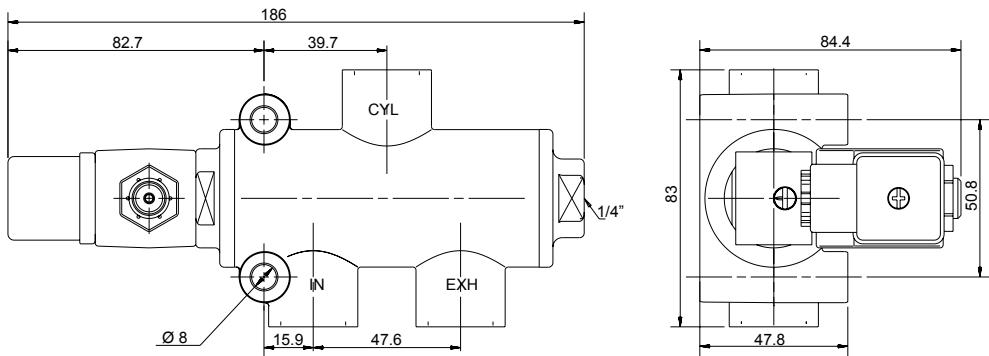
PES3-A | Sol-Air | 1/4", 1/2" | 3 port



Port size : 1/4"



Port size : 1/2"



How to Order

PES3	PORT SIZE	A	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR					
	1/4" BSP	0	NBR	N	without	1	None	0	without	0			
	1/4" NPT	1	FKM	V	with	2	Plastic	1	standard	1			
	1/2" BSP	2			Brass slot	2 ⁽²⁾	12	2	8W50Hz	1	with LED	2	
	1/2" NPT	3			non-locking St.st knob	3 ⁽²⁾	24	3	AC	8W60Hz	2	with LED + surge protection	3
					locking St.st knob	4 ⁽²⁾	48	4	DC10W	3	with 1/2" hub	4	
							110	5					
							120	6					
							230	7					
							240	8					
							other	9					

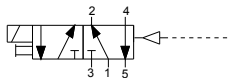
(1) Only for BSP

(2) Special order

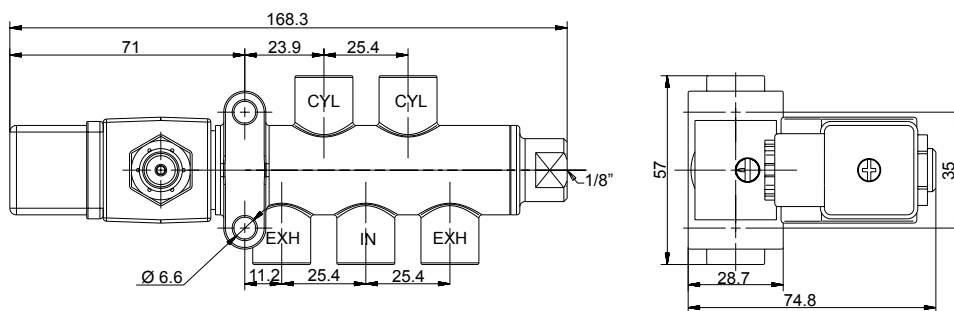
CCAP

(1) Only for BSP
(2) Special order

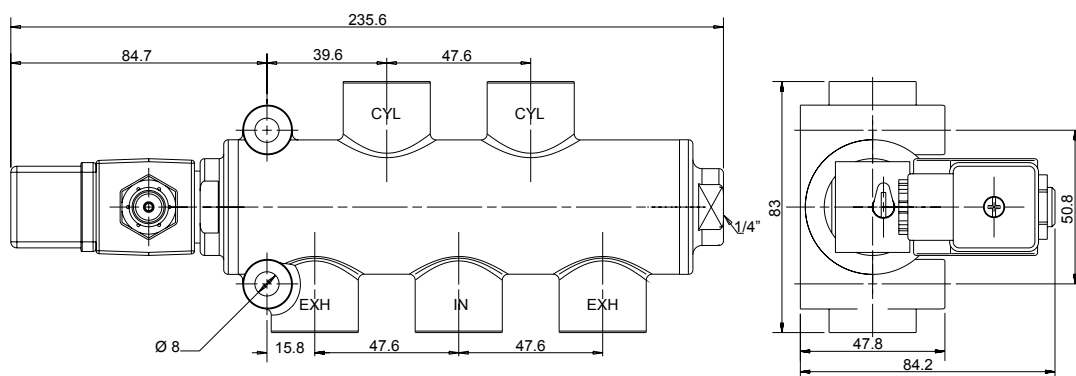
PES5-A | Sol-Air | 1/4", 1/2" | 5 port



Port size : 1/4"



Port size : 1/2"



How to Order

PES5	PORT SIZE	A	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR				
	1/4" BSP	0	NBR	N	without	1	None	0	without	0		
	1/4" NPT	1	FKM	V	with	2	Plastic	1	standard	1		
	1/2" BSP	2					Brass slot	2 ⁽²⁾	with LED	2		
	1/2" NPT	3					non-locking	24	3	with LED + surge	3	
							St.st knob	48	4	8W60Hz	3	
							locking	110	5	DC10W	3	
							St.st knob	120	6		with 1/2" hub	4
								230	7			
								240	8			
								other	9			

(1) Only for BSP

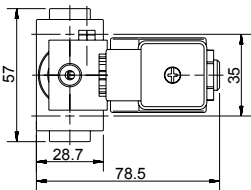
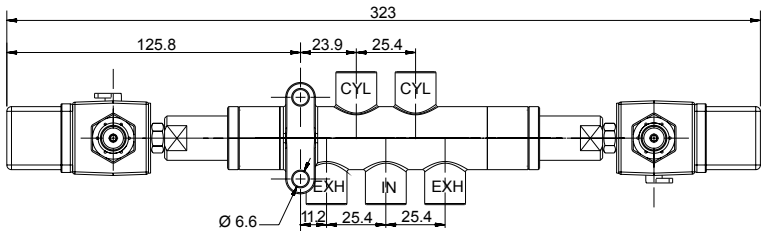
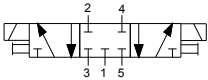
(2) Special order

(1) Only for BSP
(2) Special order

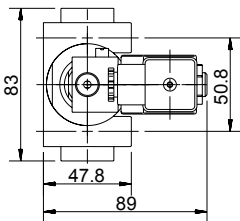
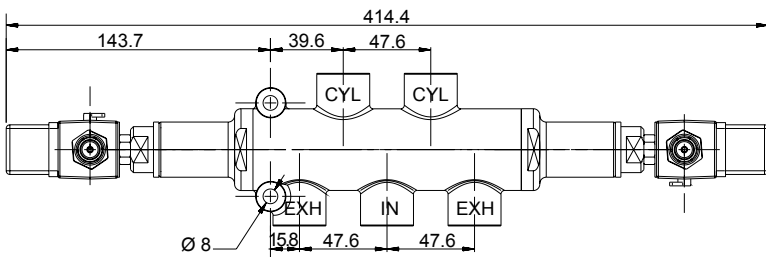
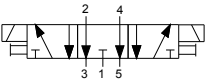
PNEUMATIC VALVES | Brass Heavy Duty
PE Series

PE | Solenoid Operated

PES5-P | 3 Position Closed Center | Sol-Sol | 1/4" | 5 port



PES5-U | 3 Position Exhaust Center | Sol-Sol | 1/2" | 5 port



How to Order

PES5	PORT SIZE	FUNCTION	SEAL MATERIAL	EXTERNAL AIR SUPPLY ⁽¹⁾	MANUAL OVERRIDE	COIL VOLTAGE	POWER	CONNECTOR
	1/4" BSP 0	Closed Center P	NBR N	without 1	None 0	without 0	none 0	without 0
	1/2" BSP 2	Exhaust Center U	FKM V	with 2	Plastic 1	6 1	AC 8W50Hz 1	standard 1
					Brass slot 2 ⁽²⁾	12 2		with LED 2
					non-locking 3 ⁽²⁾	24 3	AC 8W60Hz 2	with LED + surge protection 3
					St.st knob 4 ⁽²⁾	48 4	DC10W 3	
					locking 110 5			with 1/2" hub 4
					St.st knob 120 6			
					230 7			
					240 8			
					other 9			

(1) Only for BSP
(2) Special order