



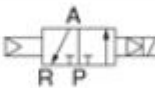
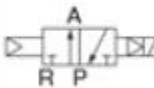
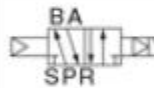
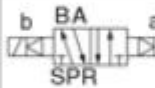
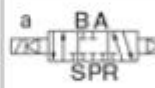
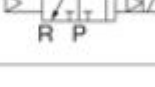
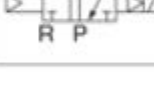
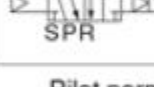
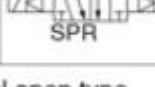
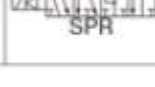
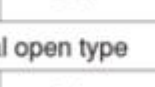
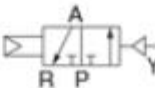
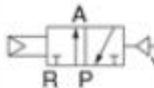
Soft Seal Type (Type E)

3E*-08 / 5E*-08 / 5E*-10 Series

SH valves using soft seals

- The valves of this type have a spool structure and use a unique T-shaped seal which does not stick out. This mechanism prevents wear of the seal while it is passing the port.
- This type ensures a larger flow rate than the type H using a body of the same size.

Specification

Item \ Model		3-port		5-port			
		2-position		2-position		3-position	4-position
		Normal closed	Normal open	Return	Detent	Closed center	Exhaust center
Model number	Direct type	3EC-08E	3EP-08E	5ER-08E	5ED-08E	—	—
	Sub-plate type	—	—	5ER-08S 5ER-10S	5ED-08S 5ED-10S	5EC-08S 5EC-10S	5EE-08S 5EE-10S
	Valve for Mono-manifold	—	—	5ER-08M	5ED-08M	5EC-08M	5EE-08M
	Valve with stack manifold	—	—	5ER-08N 5ER-10N	5ED-08N 5ED-10N	5EC-08N 5EC-10N	5EE-08N 5EE-10N
JIS symbol	General-purpose type						
	Splash proof type						
	Pressure-resisting explosion-proof type						
JIS symbol	Operation type	Pilot normal open type					
	Master valve						

		Pilot operation type	Normal closed			Normal open	
Port size	Direct	P·A·B·R·S	G1/4			—	
	Sub-plate	P·A·B·R·S	—		G1/4 · G3/8		
Note 1) Effective sectional area			18 mm ²		30 (25) mm ²		(25) mm ²
Working fluid			Air				
Lubrication			Unnecessary (Use additive-free turbine oil Class 1 ISO VG32 or its equivalent.)				
Working pressure range			0.15 to 1.0 MPa		0.2 to 1.0 MPa		
Pilot pressure range			Over working pressure to 1.0 MPa (for master valve)				
Proof test pressure			1.6 MPa				
Note 2) Response time in ON/OFF state			25/30 ms or less		25/35 ms or less	20 ms or less	25/35 ms or less
Working temperature range			+5 to +50°C (ambient temperature and fluid temperature)				
Manual type			Pushing				
Installing direction			Free				

Note 1) The parenthesized values apply to the sub-plate and manifold types.

Note 2) Values at an air pressure of 0.5 MPa. Values from the opposite positions in the case of 2-position valves or from the valve neutral positions in the case of 3- and 4-position valves

Note 3) The JIS symbol of 4-position valve  indicates the non-energized state of the solenoids on both sides, and  indicates the energized state of the solenoids on both sides.

Note 4) The working pressure range of 5-port, detent and closed center master valves is 0 to 1.0 MPa.

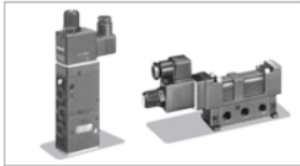
Use any of these valves at a pilot pressure which is higher than the working pressure and in the range from 0.2 to 1.0 MPa.

How to Order

3-port valve (port size: G1/4)



5-port valve (port size: G3/8)



3E C - 08 E - 10 S4 - F

5E R - 08 E - 10 S4 - F

Option
Wiring type
Voltage/operation type

• Switching type

No. of ports	Symbol	Switching type
3-port	C	Normal closed
	P	Normal open
5-port	R	Return
	D	Detent
	C	Closed center
	E	Exhaust center

• Port size

Symbol	Ports A and B
08	G1/4
10	G3/8(Note)

Note) The port size symbol 10 is applicable only to the sub-plate type.

• Mounting type

Symbol	Mounting type
E	Direct type (Note 1)
S	Sub-plate type (Note 2)

Note 1) Closed center and exhaust center valves of direct type are not available.

Note 2) 3-port valves of sub-plate type are not available.

Note) The JIS symbols indicate the types for solenoid valves.

• Voltage/operation type			
Symbol	Voltage/ operation type	Suitability	
		General- purpose type	Special purpose Master valve
12	12 V DC	○	—
24	24 V DC	○	—
48	48 V DC	—	○
D1	100 V DC	—	○
10	100 V AC 50/60 Hz	○	—
20	200 V AC 50/60 Hz	○	—
11	110 V AC 50/60 Hz	○	—
22	220 V AC 50/60 Hz	○	—
P	Master valve	—	○

Note) General-purpose 100-VAC and 110-VAC valves can be used also at 100 V DC and 110 V DC, respectively.

• Wiring type	
Symbol	Wiring type
L1	Lead wire/2000 mm 
S4	DIN socket/wiring part G1/2 
SO	DIN socket/wiring part Pg11 (Note 1) With orange lamp (Note 2)
SG	DIN socket/wiring part Pg11 (Note 1) With green lamp (Note 2)
T1	Terminal 
TO	Terminal/with orange lamp (Note 2)
TG	Terminal/with green lamp (Note 2)
W	Splash proof type 
E	Pressure-resisting explosion-proof type 

• Option	
Symbol	Option
None	None
F	With left mounting plate (for Easy manifold left side) 
H	With right mounting plate (for Easy manifold right side) 

Note) The plates can be fitted only to direct type 3-port and 5-port return valves. They cannot be fitted to other valves.

Note 1) Wiring port: Pg11 is a screw size according to DIN40430.
Note 2) 12-VDC valves do not have lamps.
Note 3) Symbol for master valves