

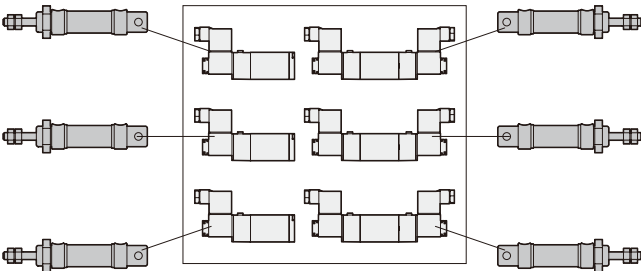
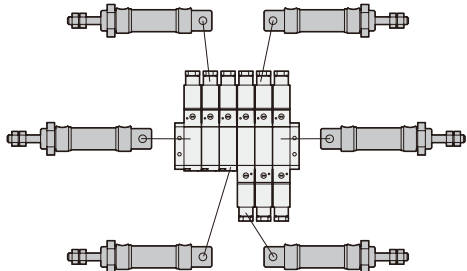
Pressure conversion chart

Pa	kPa	MPa	bar	mbar	kgf/cm ²	cmH ₂ O	mmH ₂ O	mmHg	p.s.i.
1	0.001	0.000001	0.00001	0.01	0.0000102	0.0102	0.10197	0.0075	0.000145
1000	1	0.001	0.01	10	0.0102	10.2	101.97	7.5	0.145
1000000	1000	1	10	10000	10.2	10200	101970	7500	145
100000	100	0.1	1	1000	1.02	1020	10200	750.06	14.5
100	0.1	0.0001	0.001	1	0.00102	1.02	10.2	0.75	0.0145
98066.5	98.07	0.09807	0.98	980.67	1	1000	10000	735.56	14.22
98.0665	0.9807	0.0009807	0.00098	0.98	0.001	1	10	0.74	0.01422
9.80665	0.09807	0.00009807	0.00009807	0.09807	0.0001	0.1	1	0.07356	0.00142
133.32	0.13332	0.00013332	0.00133	1.33	0.00136	1.36	13.6	1	0.01934
6895	6.895	0.006895	0.06895	68.95	0.07031	70.31	703.07	51.71	1

Flow rate conversion chart

m ³ /s	l/s	cm ³ /s	m ³ /h	m ³ /min	l/h	l/min	ft ³ /min (scfm)	gallon min UK	gallon min USA
1	1000	1000000	3600000	60	3600000	60000	2120	13200	15850
0.001	1	1000	3.6	0.06	3600	60	2.12	13.2	15.85
0.000001	0.001	1	0.0036	0.00006	3.6	0.06	0.0212	0.0132	0.01585
0.00028	0.28	280	1	0.01667	1000	16.67	0.59	3.67	4.4
0.01667	16.67	16670	60	1	60000	1000	35.31	219.97	264.17
0.00000028	0.00028	0.28	0.001	0.00001667	1	0.01667	0.00059	0.00367	0.0044
0.00001667	0.01667	16.67	0.06	0.001	60	1	0.03531	0.21997	0.264
0.00047	0.47	470	1.699	0.02832	1699	28.32	1	6.23	7.48
0.00007579	0.07577	75.77	0.273	0.00455	273	4.55	0.16	1	1.2
0.00006309	0.06309	63.09	0.227	0.00379	227	3.79	0.13	0.83	1

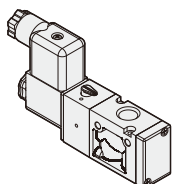
Integrated connection system offers improvements on facilities

Facilities with traditional connection system	Facilities applied with integrated connection system
<ul style="list-style-type: none"> ● Longer distance from the controlling valve to the operating unit. ● Slower response time. ● More air consumption. ● Complicated connection arrangements. ● Mass electric wiring and connections to controlling valves task. ● Higher cost to run the facilities. ● Higher pressure drop. 	<ul style="list-style-type: none"> ● Shorter distance from the controlling valve to the operating unit. ● Quicker response time. ● Less air consumption. ● Simple connection arrangements. ● Moderate electric wiring connections task. ● Lower cost to run the facilities. ● Lower pressure drop. 

SOLENOID VALVE

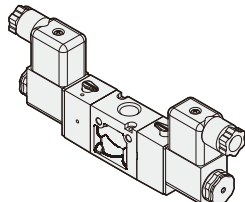
3E1

3 way / Single solenoid



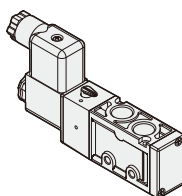
3E2

3 way / Double solenoid



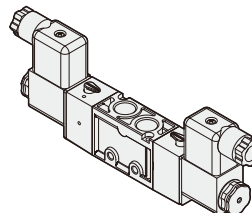
4E1

4 way / Single solenoid



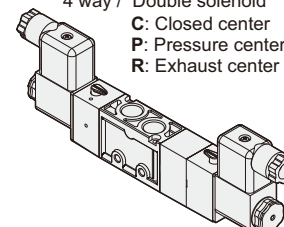
4E2

4 way / Double solenoid

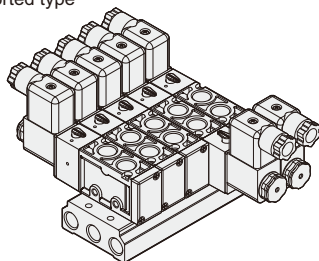


4E2C.P.R

4 way / Double solenoid
C: Closed center
P: Pressure center
R: Exhaust center

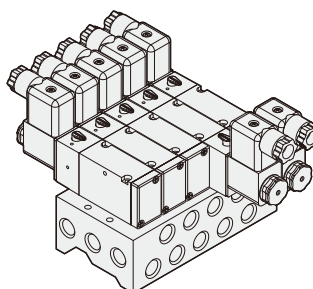


Body ported type



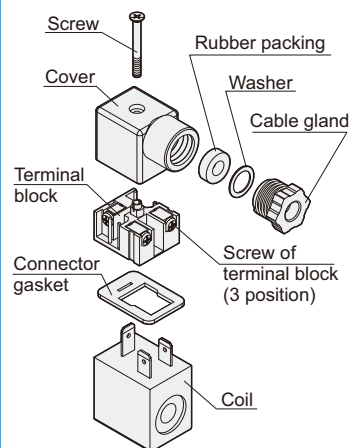
M

Manifold type

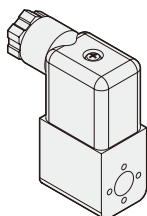


DIN connector

- Suitable cables : $\phi 6 \sim \phi 9$
Max. conductor size : 1.5mm²
- Recommended tightening torque
Screw : 0.5Nm
Screw of terminal block : 0.5Nm

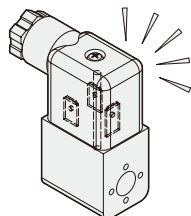


DIN connector



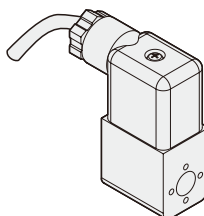
L

LED indicator



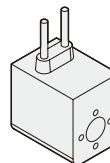
E

Explosion protection



W

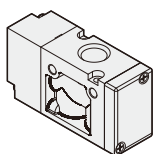
Lead wire



PILOT VALVE

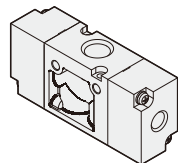
3A1

3/2 Single pilot



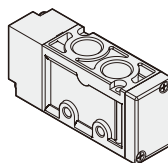
3A2

3/2 Double pilot



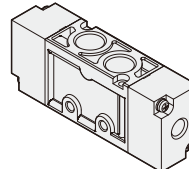
4A1

5/2 Single pilot



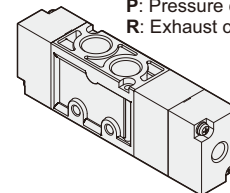
4A2

5/2 Double pilot



4A2(C.P.R)

5/3 Double pilot
C: Closed center
P: Pressure center
R: Exhaust center



MECHANICAL VALVE

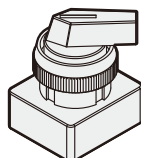
EB

Latching palm button



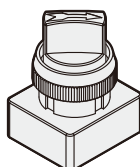
LB

Extended twist button



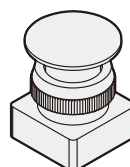
TB

Twist button



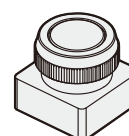
PB

Mushroom palm button



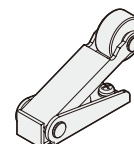
PP

Push button



R1

Roller lever



Selector table

Model	Valve type						Body type				
	3/2		5/2		5/3			Body ported type	Manifold type		Base type
	Normally closed (NC)	Normally open (NO)	Single acting	Double acting	Closed center	Pressure center	Exhaust center				
MVSC-220	●	●		●	●	●	●	●	●		
MVSC-260				●	●	●	●	●			
MVSC-300	●	●		●	●	●	●	●			
MVSC-460	●	●		●	●	●	●	●			
MVSD-180	●	●		●	●	●	●	●			
MVSD1-180				●	●	●	●	●			
MVSE-260				●	●	●	●	●			
MVSE-300				●	●	●	●	●			
MVSE-500				●				●			
MVSE-510				●				●			
MVSE-600				●				●			
MVSF-100	●	●		●				●	●		
MVSG-180				●	●	●	●	●			
MVSI-260				●	●	●	●		●	●	
MVSI-450				●					●	●	
MVSI-510				●					●	●	
MVSN-220				●				●			
MVSN-300				●	●	●	●	●			
MVSP-150				●				●	●		
MVSP-156				●	●	●	●	●	●		
MVSP-180	●	●		●	●	●	●	●			
MVSP-188				●	●	●	●	●	●		
MVSP-220	●	●		●	●	●	●	●	●		
MVSY-100				●	●	●	●	●	●		
MVSY-156				●	●	●	●	●	●		
MVSY-188				●	●	●	●	●	●		
MVSY-100				●				●			
MVDC-220	●							●			
MVDY-100	●								●	●	

MVS* /MVD* series

SOLENOID VALVE



mindman

	※ A, B port size & effective orifice mm ² (Cv factor)								Body width (mm)	Power consumption W(DC)	※ Working pressure range MPa	Page
	M3	M5	1/8"	1/4"	3/8"	1/2"	3/4"	1"				
			18 (1.00)	18 (1.00)					22	2	0.2~0.8	1-4
				18 (1.00)					26	2	0.2~0.8	1-9
					35 (1.94)				30	2	0.2~0.8	1-12
						50 (2.78)			30	2	0.2~0.8	1-16
			12 (0.67)						18	3	0.15~0.8	1-20
			12 (0.67)						18	2.9	0.15~0.8	1-24
				18 (1.00)					26	2.5	0.2~1.2	1-28
					35 (1.94)				30	2.5	0.2~1.2	1-31
						41 (2.28)			30	2.5	0.2~1.2	1-34
						65 (3.61)			68	10	0.2~0.7	1-36
							115 (6.39)	135 (7.5)	68	10	0.2~0.7	1-38
	1.0 (0.06)								10	0.55	0.15~0.7	1-40
			10 (0.56)						18	1.6	0.15~0.7	1-44
				22 (1.22)					35	2.5	0.2~0.7	1-47
				27 (1.5)					45	2.5	0.2~0.7	1-49
						65 (3.61)			68	10	0.2~0.7	1-54
				18 (1.00)					22	2.5	0.2~0.7	1-56
				35 (1.94)					30	2.5	0.2~0.8	1-58
		3.8 (0.21)							15	0.95	0.15~0.8	1-62
			11 (0.61)						15	0.95	0.15~0.7	1-64
			12 (0.67)						18	0.95	0.15~0.8	1-69
				15 (0.83)					18	0.95	0.15~0.7	1-72
			18 (1.00)	18 (1.00)					22	0.95	0.2~0.8	1-76
		4.5 (0.25)							10	0.55	0.2~0.8	1-80
			11 (0.61)						15	0.55	0.15~0.7	1-84
				15 (0.84)					18	0.55	0.15~0.7	1-90
		4.7 (0.26)							10	0.55	0.15~0.7	1-95
			0.8 (0.044)						22	2.5	0.01~0.7	1-97
		0.28 (0.016)							10	0.55	0~0.9	1-99

※ The data is based on 5/2.