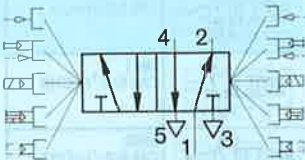


Basic cassette valve G¹/₂

for mounting on FESTO and standard sub-bases



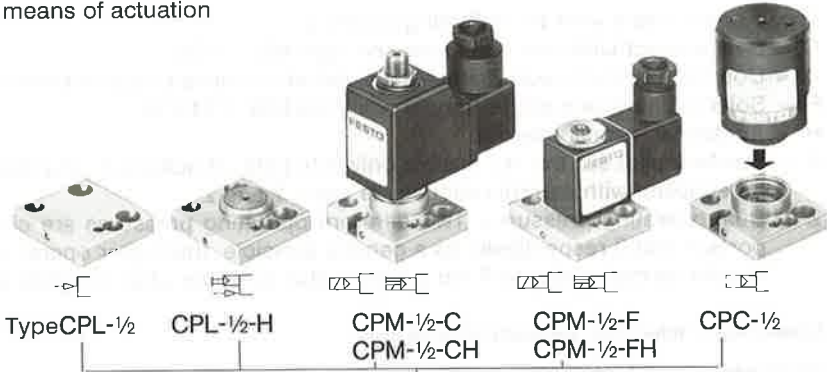
The FESTO cassette valve is a 5/2-way valve with a robust flat-slide design, working without cross-over the reinforced double-diaphragm drive gives a snap action. A self adjusting flat side compensates for any wear.

Valve variants:

Using the system components comprising of 7 actuator adapter plates, 4 interchangeable coded seals and various actuators, more than 100 valve combinations may be obtained from one basic valve. A valve variant consists of a basic valve, two seals, two actuator adaptor plates, an inscription label and 4 mounting screws M5 x 55, DIN 84.

Each adapter seal has various possible fitting positions. For identification purposes, the marking lugs of the adapter seal for the Y side are marked with letters, while those for the Z side are marked with figures. The markings must face upwards when the seal is fitted into position. Marking lugs which are not required should be cut off.

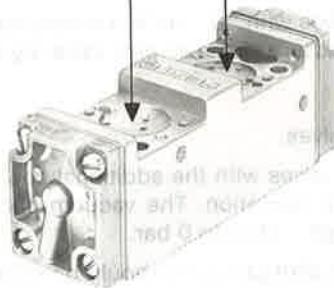
System components for various means of actuation



Seals for valve coding

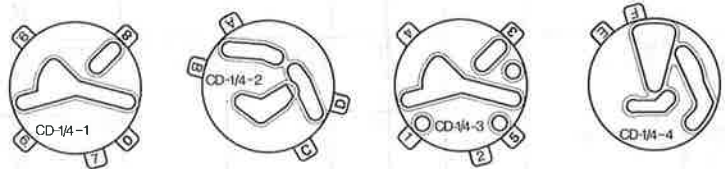


Basic valve
Type C-5/2-¹/₂



Code for valve identification

To describe the function of the valve, code letters are added to the type code, e.g. CJM-5/2-¹/₂-... These code letters have the following meaning:
C = Solenoid actuation with solenoid coil Type MSG/MSW.
D = Dominant signal at port Z against a signal at the same pressure present at port Y.
F = Solenoid actuation with solenoid coil Type MSFG/MSFW.
H = Additional manual override.
S = Auxiliary pilot air; this is possible only with indirect actuation. The pilot valve can be supplied with external pilot air via ports Y and Z.
Z = Dual operating pressures. Two different operating pressures are connected to ports R and S respectively. As a general principle, the higher operating pressure should be connected to R (to exert pressure on the slide plate for sealing).



Order code Part No./Type		Basic valve				Seals for valve coding	
Medium		5811	5751	5752	5753	6138	
Design		C-5/2- ¹ / ₂	CD- ¹ / ₄ -1	CD- ¹ / ₄ -2	CD- ¹ / ₄ -3	CD- ¹ / ₄ -4	
Mounting		Compressed air, filtered (lubricated or unlubricated)					
Connection		Flat slide valve with diaphragm control					
Working ports		On sub-bases (see 2.892.1)					
Pilot ports		G ¹ / ₂ (sub-base)					
Nominal size		G ¹ / ₈ (sub-base)					
Standard nominal flow rate (1 → 4)		12 mm					
		3000 l/min (basic valve)					
Pressure range		Depends on the valve variant (see fold-out page)					
Ambient temperature		– 5 to + 40 °C					
Medium temperature		– 10 to + 60 °C					
Materials		Housing: die-cast aluminium; diaphragms: polyurethane; seals: perbunan					
Weight		0.540 kg	0.002 kg				

Valve variants using the basic cassette valve G 1/4

Code for valve identification

To describe the function of the valve, code letters are added to the type code, e.g. CJM-5/2-1/4-...

These code letters have the following meaning:

C = Solenoid actuation with solenoid coil Type MSG/MSW.

D = Dominant signal at port Z against a signal at the same pressure present at port Y.

F = Solenoid actuation with solenoid coil Type MSFG/MSFW.

H = Additional manual override.

S = Auxiliary pilot air; this is possible only with indirect actuation. The pilot valve can be supplied with external pilot air via ports Y and Z.

Z = Dual operating pressures. Two different operating pressures are connected to ports R and S respectively. As a general principle, the higher operating pressure should be connected to R (to exert internal pressure upon the slide plate).

Cassette valves for vacuum operation

Pneumatically-actuated valves:



Double pilot valves with the additional code letter "Z" are suitable for vacuum operation. The vacuum should be connected to P. Pressure range -0.95 to 0 bar.



Valves with "D" suffix indicate dominant signal at port Z and can be used as a single air pilot valve, by applying a continuous signal to port Y.

Solenoid-actuated valves:



All valves with the additional code letters "ZS" are suitable for vacuum operation. The vacuum should be connected to P. Pressure range -0.95 to 0 bar.



The pilot pressure should be connected to ports Z and Y.

This also applies to the corresponding basic valves with the additional code letters "ZS".

Valve, complete		Individual parts				Pressure range bar		
Graphical symbol	Order code	Basic valve	Coding		Order codes for system components		Inscription label Order code	
			Z side	Y side				Z side
Single pilot valves								
	5734 CL-5/2-1/4	5750 C-5/2-1/4	5	C	5851 CPL-1/4	5851 CPL-1/4	211 773	P = 1 to 10 Z = 2 to 10
	5735 CL-5/2-1/4-Z		4	C			211 774	P ₁ = 1 to 10 P ₁ > P ₂ Z = 2 to 10
	6148 CL-5/2-1/4-H		5	C	6139 CPL-1/4-H	5851 CPL-1/4	211 485	P = 1 to 10 Z = 2 to 10
	6149 CL-5/2-1/4-ZH		4	C			211 486	P ₁ = 1 to 10 P ₁ > P ₂ Z = 2 to 10
Double pilot valves								
	5736 CJ-5/2-1/4	5750 C-5/2-1/4	0	A	5851 CPL-1/4	5851 CPL-1/4	210 615	P = 1 to 16 Z, Y = 2 to 10
	5737 CJ-5/2-1/4-Z see "Vacuum operation"		9	A			210 618	P ₁ = 1 to 16 P ₁ > P ₂ Z, Y = 2 to 10 (P) = -1 to 0
	6150 CJ-5/2-1/4-H		0	E	6139 CPL-1/4-H	6139 CPL-1/4-H	211 487	P = 1 to 10 Z, Y = 2 to 10
	6151 CJ-5/2-1/4-ZH see "Vacuum operation"		9	E			211 488	P ₁ = 1 to 10 P ₁ > P ₂ Z, Y = 2 to 10 (P) = -1 to 0
	5738 CJ-5/2-1/4-D		5	D	5851 CPL-1/4	5851 CPL-1/4	210 616	P = 1 to 16 Z, Y = 2 to 10
	5739 CJ-5/2-1/4-DZ see "Vacuum operation"		4	D			210 617	P ₁ = 1 to 16 P ₁ > P ₂ Z, Y = 2 to 10 (P) = -1 to 0
	6152 CJ-5/2-1/4-DH		5	F	6139 CPL-1/4-H	6139 CPL-1/4-H	211 489	P = 1 to 10 Z, Y = 2 to 10
	6153 CJ-5/2-1/4-DZH see "Vacuum operation"		4	F			211 490	P ₁ = 1 to 10 P ₁ > P ₂ Z, Y = 2 to 10 (P) = -1 to 0

Valve, complete		Individual part	
Graphical symbol	Order code	Basic valve	Co
			Z s

Single solenoid valves

	6178 CM-5/2-1/4-C	5750 C-5/2-1/4	1
	5960 CM-5/2-1/4-CH		1
	5961 CM-5/2-1/4-CHS		5
	5962 CM-5/2-1/4-CHZ		3
	5963 CM-5/2-1/4-CHZS see "Vacuum operation"		4
	5740 CM-5/2-1/4-F		1
	5741 CM-5/2-1/4-FS		5
	5742 CM-5/2-1/4-FZ		3
	5743 CM-5/2-1/4-FZS see "Vacuum operation"		4
	6154 CM-5/2-1/4-FH	5750 C-5/2-1/4	1
	6155 CM-5/2-1/4-FHS		5
	6156 CM-5/2-1/4-FHZ		3
	6157 CM-5/2-1/4-FHZS see "Vacuum operation"		4

Double solenoid valves

	6183 CJM-5/2-1/4-C	5750 C-5/2-1/4	6
	5955 CJM-5/2-1/4-CH		6
	5956 CJM-5/2-1/4-CHS		0
	5957 CJM-5/2-1/4-CHZ		8
	5958 CJM-5/2-1/4-CHZS see "Vacuum operation"		9
	5852 CJM-5/2-1/4-CHD		1
	5856 CJM-5/2-1/4-CHDS		5
	5857 CJM-5/2-1/4-CHDZ		3
	5858 CJM-5/2-1/4-CHDZS see "Vacuum operation"		4
	5745 CJM-5/2-1/4-F		6
	5746 CJM-5/2-1/4-FS		0
	5747 CJM-5/2-1/4-FZ		8

Order codes for system components			Inscription label Order code	Pressure range bar
Z side	Y side			
5674 CPM-1/4-C	5851 CPL-1/4	211 515	P = 1.5 to 10	
5929 CPM-1/4-CH	5851 CPL-1/4	210 277	P = 1.5 to 10	
		210 281	P = 1.5 to 16 Z, Y = 1.5 to 10	
		210 278	P ₁ = 1.5 to 10 P ₁ > P ₂	
		210 279	P ₁ = 1.5 to 16 P ₁ > P ₂ Z, Y = 1.5 to 10 (P) = -1 to 0	
5850 CPM-1/4-F	5851 CPL-1/4	210 619	P = 1.5 to 8	
		210 620	P = 1.5 to 12 Z, Y = 1.5 to 8	
		210 621	P ₁ = 1.5 to 8 P ₁ > P ₂	
		210 622	P ₁ = 1.5 to 12 P ₁ > P ₂ Z, Y = 1.5 to 8 (P) = -1 to 0	
5673 CPM-1/4-FH	5851 CPL-1/4	211 491	P = 1.5 to 8	
		211 492	P = 1.5 to 12 Z, Y = 1.5 to 8	
		211 493	P ₁ = 1.5 to 8 P ₁ > P ₂	
		211 494	P ₁ = 1.5 to 12 P ₁ > P ₂ Z, Y = 1.5 to 8 (P) = -1 to 0	

5674 CPM-1/4-C	5674 CPM-1/4-C	211 520	P = 1.5 to 10	
5929 CPM-1/4-CH	5929 CPM-1/4-CH	210 291	P = 1.5 to 10	
		210 290	P = 1.5 to 16 Z, Y = 1.5 to 10	
		210 282	P ₁ = 1.5 to 10 P ₁ > P ₂	
		212 039	P ₁ = 1.5 to 16 P ₁ > P ₂ Z, Y = 1.5 to 10 (P) = -1 to 0	
		210 287	P = 1.5 to 10	
		210 286	P = 1.5 to 16 Z, Y = 1.5 to 10	
		210 285	P ₁ = 1.5 to 10 P ₁ > P ₂	
		210 284	P ₁ = 1.5 to 16 P ₁ > P ₂ Z, Y = 1.5 to 10 (P) = -1 to 0	
5850 CPM-1/4-F	5850 CPM-1/4-F	210 624	P = 1.5 to 8	
		210 625	P = 1.5 to 12 Z, Y = 1.5 to 8	
		210 626	P ₁ = 1.5 to 8 P ₁ > P ₂	

Valve, complete		Individual parts				Pressure range		
Graphical symbol	Order code	Basic valve	Coding		Order codes for system components		Inscription label Order code	bar
			Z side	Y side	Z side	Y side		
Double solenoid valves								
	5748 CJM-5/2-1/4-FZS see "Vacuum operation"	5750 C-5/2-1/4	9	A			212 040	$P_1 = 1.5$ to 12 $Z, Y = 1.5$ to 8 (P) = -1 to 0
	6159 CJM-5/2-1/4-FH		6	B	5673 CPM-1/4-FH	5673 CPM-1/4-FH	211 496	$P = 1.5$ to 8
	6166 CJM-5/2-1/4-FHS		0	A			211 503	$P = 1.5$ to 12 $Z, Y = 1.5$ to 8
	6160 CJM-5/2-1/4-FHZ		8	B			211 497	$P_1 = 1.5$ to 8 $P_1 > P_2$
	6161 CJM-5/2-1/4-FHZS see "Vacuum operation"		9	A			211 498	$P_1 = 1.5$ to 12 $P_1 > P_2$ $Z, Y = 1.5$ to 8 (P) = -1 to 0
	5756 CJM-5/2-1/4-FD		1	C	5850 CPM-1/4-F	5850 CPM-1/4-F	210 629	$P = 1.5$ to 8
	5757 CJM-5/2-1/4-FDS		5	D			210 630	$P = 1.5$ to 12 $Z, Y = 1.5$ to 8
	5758 CJM-5/2-1/4-FDZ		3	C			210 631	$P_1 = 1.5$ to 8 $P_1 > P_2$
	5759 CJM-5/2-1/4-FDZS see "Vacuum operation"		4	D			210 632	$P_1 = 1.5$ to 12 $P_1 > P_2$ $Z, Y = 1.5$ to 8 (P) = -1 to 0
	6163 CJM-5/2-1/4-FHD		1	C	5673 CPM-1/4-FH	5673 CPM-1/4-FH	211 500	$P = 1.5$ to 8
	6164 CJM-5/2-1/4-FHDS		5	D			211 501	$P = 1.5$ to 12 $Z, Y = 1.5$ to 8
	6165 CJM-5/2-1/4-FHDZ		3	C			211 502	$P_1 = 1.5$ to 8 $P_1 > P_2$
	6168 CJM-5/2-1/4-FHDZS see "Vacuum operation"	4	D			211 505	$P_1 = 1.5$ to 12 $P_1 > P_2$ $Z, Y = 1.5$ to 8 (P) = -1 to 0	
Basic valves piloted in one direction								
	9204 CLC-5/2-1/4	5750 C-5/2-1/4	1	C	9219 CPC-1/4	5851 CPL-1/4	215 351	$P = 1.5$ to 10
	9205 CLC-5/2-1/4-S		5	D			215 352	$P = 1.5$ to 16 $Z, Y = 1.5$ to 10
	9206 CLC-5/2-1/4-Z		3	C			215 353	$P_1 = 1.5$ to 10 $P_1 > P_2$
	9207 CLC-5/2-1/4-ZS see "Vacuum operation"		4	D			215 354	$P_1 = 1.5$ to 16 $P_1 > P_2$ $Z, Y = 1.5$ to 10 (P) = -1 to 0
Basic valves piloted in both directions								
	9209 CJC-5/2-1/4	5750 C-5/2-1/4	6	B	9219 CPC-1/4	9219 CPC-1/4	215 356	$P = 1.5$ to 10
	9210 CJC-5/2-1/4-S		0	A			215 357	$P = 1.5$ to 16 $Z, Y = 1.5$ to 10
	9211 CJC-5/2-1/4-Z		8	B			215 358	$P_1 = 1.5$ to 10 $P_1 > P_2$
	9212 CJC-5/2-1/4-ZS see "Vacuum operation"		9	A			215 359	$P_1 = 1.5$ to 16 $P_1 > P_2$ $Z, Y = 1.5$ to 10 (P) = -1 to 0
	9214 CJC-5/2-1/4-D		1	C			215 361	$P = 1.5$ to 10
	9215 CJC-5/2-1/4-DS		5	D			215 362	$P = 1.5$ to 16 $Z, Y = 1.5$ to 10
	9216 CJC-5/2-1/4-DZ		3	C			215 363	$P_1 = 1.5$ to 10 $P_1 > P_2$
	9217 CJC-5/2-1/4-DZS see "Vacuum operation"		4	D			215 364	$P_1 = 1.5$ to 16 $P_1 > P_2$ $Z, Y = 1.5$ to 10 (P) = -1 to 0

Actuator plates with mounting screws


 Actuator cover plate Type CPL-¹/₂ for pneumatic pilot actuation


 Actuator cover plate Type CPL-¹/₂-H for pneumatic pilot actuation with additional manual override


 Solenoid actuator plate Type CPM-¹/₂-C for electric actuation with solenoid coil MSG/MSW (see sheet 2.590) without manual override


 Solenoid actuator plate Type CPM-¹/₂-CH for electric actuation with solenoid coil MSG/MSW (see sheet 2.590) with manual override

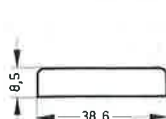
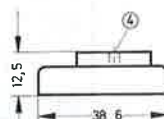
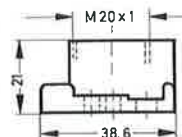
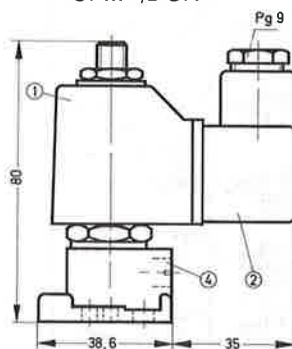

 Solenoid actuator plate Type CPM-¹/₂-F for electric actuation with solenoid coil MSFG/MSFW (see sheet 2.592) without manual override


 Solenoid actuator plate Type CPM-¹/₂-FH for electric actuation with solenoid coil MSFG/MSFW (see sheet 2.592) with manual override

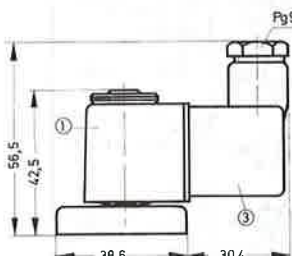
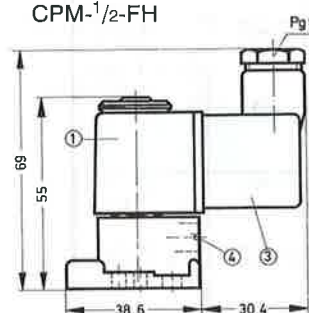
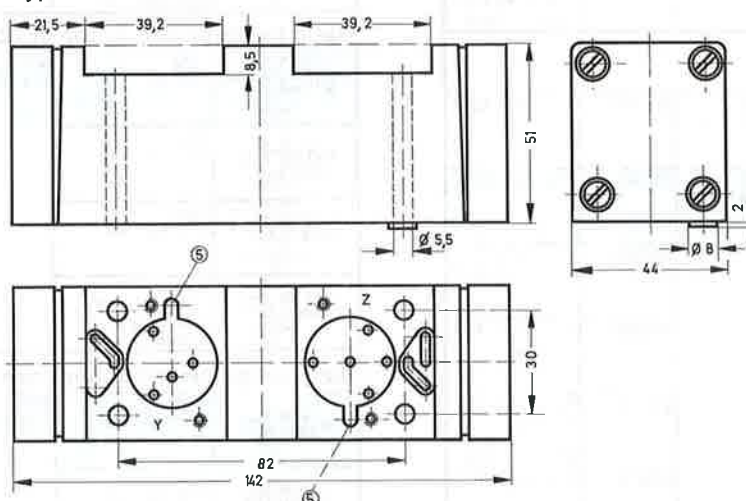

 Cover plate Type CPC-¹/₂ to accept various valve actuators (e.g. Type UV, LSK, VE and MKC), see sheet 2.880 to 2.885

Mounting possibilities:

The cassette valve is fitted directly onto FESTO sub-bases (sheet 2.892.1) or, by means of adapters, to standard sub-bases as per DIN (VDMA) (sheets 2.960, 2.962).

Type CPL-¹/₂CPL-¹/₂-HCPC-¹/₂Type CPM-¹/₂-C
CPM-¹/₂-CH

- ① Solenoid coil can be rotated
- ② Plug can be repositioned by 90°
- ③ Plug can be repositioned by 180°
- ④ Manual override
- ⑤ Slot to accept the seal code lug

Type CPM-¹/₂-FCPM-¹/₂-FHType C-5/2-¹/₂

Order code Part No./Type		CPM- ¹ / ₂ -CCPM- ¹ / ₂ -FSystem components						
		5855 CPL- ¹ / ₂	6206 CPL- ¹ / ₂ -H	9575 CPM- ¹ / ₂ -C	5854 CPM- ¹ / ₂ -CH	5853 CPM- ¹ / ₂ -F	6205 CPM- ¹ / ₂ -FH	9235 CPC- ¹ / ₂
		+ voltage supply						
DC	Standard voltages	—	—	12 and 24 V		12 and 24 V		—
AC	Special voltages			6 to 240 V		12 to 220 V		
	Standard voltages			24, 42, 110, 220 V/50 Hz		24, 42, 110, 220 V/50 Hz		
	Special voltages			6 to 380 V/50 or 60 Hz		8 to 240 V/50 or 60 Hz		
Power consumption	DC	—	—	12 to 15 W		4,5 W		—
	AC			Hold: 21 VA, Pull: 30 VA		Hold: 6,5 VA, Pull: 8 VA		
Duty cycle		—	—	100%				—
Degree of protection to DIN 40050		—	—	IP 65 (DIN 40050)				—
Materials		Anodized aluminium						
Weight		0.040 kg	0.055 kg		0.280 kg	0.130 kg	0.130 kg	0.060 kg