

Solenoid valves VZWM-L

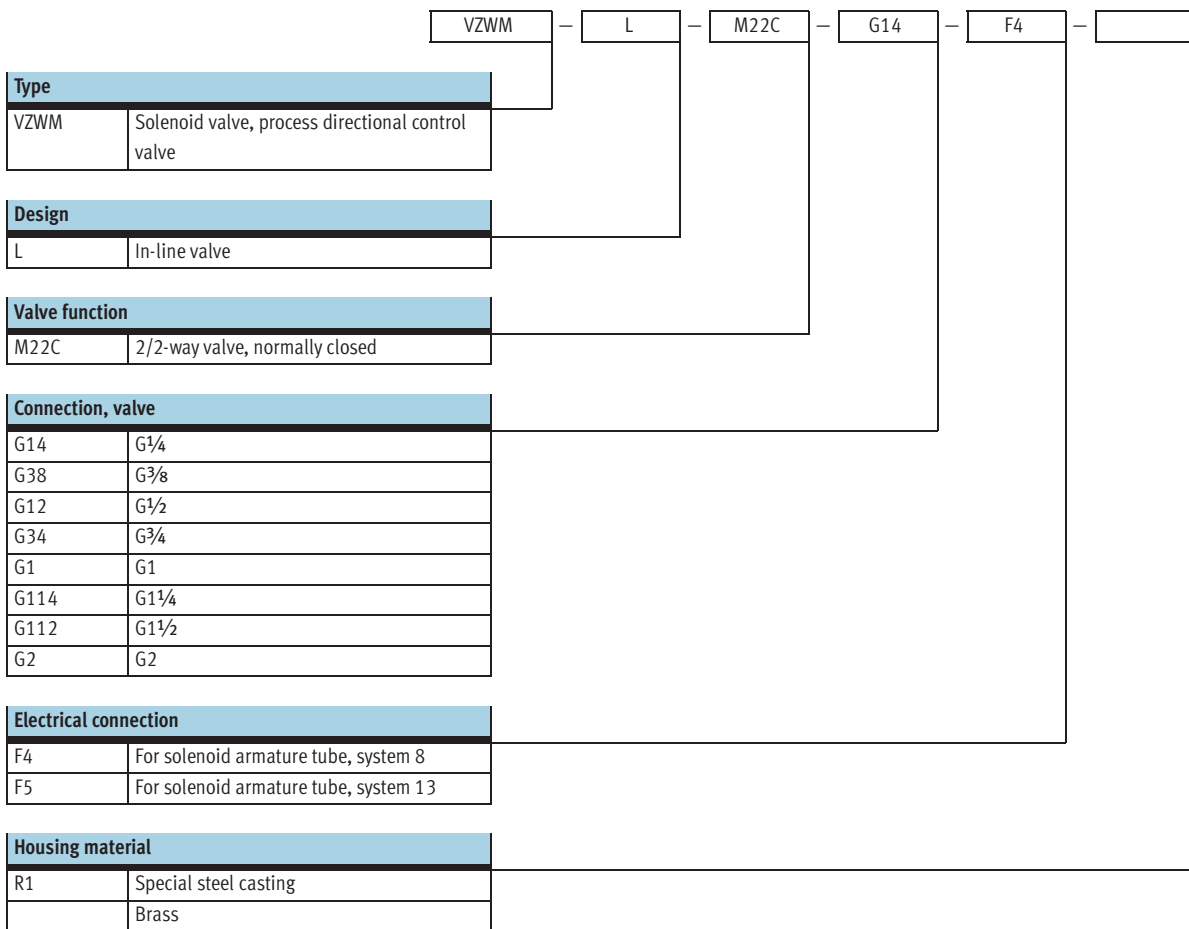


Solenoid valves VZWM-L

Key features and type codes

Brief description

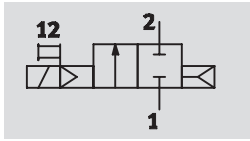
- Indirectly controlled diaphragm valve
- Connection, valve G $\frac{1}{4}$... G2
- Flow rate 2,600 ... 39,000 l/min
- Available in brass or special steel casting
- Varied range of coils





Solenoid valves VZWM-L

Technical data

Function



-  - Flow rate
1,400 ... 31,000 l/min

-  - Voltage
24 V DC
110/230 V AC



General technical data		G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2		
Connection, valve		G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2		
Valve function		2/2, single solenoid									
Constructional design		Diaphragm valve									
Sealing principle		Soft									
Actuation type		Electrical									
Reset method		Pneumatic spring									
Control type		Piloted									
Direction of flow		Non-reversible									
Exhaust function		No flow control									
Manual override		None									
Type of mounting		In-line installation									
Mounting position		Preferably vertical									
Standard nominal flow rate		[l/min]	1,400	2,100	2,400	10,000	11,700	24,000	26,400	31,000	
Flow rate Kv		[m ³ /h]	1.6	2	2.4	8.5	10.7	21.3	27.4	39	
C value		[l/sbar]	6	8.8	9.8	39	41	75	82	110	
b value			0.3	0.35	0.37	0.5	0.57	0.6	0.67	0.68	
Differential pressure		[bar]	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	
Product weight		Brass housing	[g]	500	480	450	1,270	1,200	2,850	2,570	3,800
		Special steel casting housing	[g]	400	400	330	1,200	1,100	2,650	2,400	3,660
Materials		Housing		Brass or special steel casting							
		Diaphragm		Nitrile rubber							
		Plunger tube		High-alloy steel							
Note on materials		Contains paint wetting impairment substances									
Max. tightening torque		Connecting thread	[Nm]	35	60	105	200	350	450	540	620
		Cover screw	[Nm]	20	20	20	30	30	30	30	30
		Coil mounting	[Nm]	0.5	0.5	0.5	0.5	0.5	2	2	2

Operating and environmental conditions		G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2		
Connection, valve		G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2		
Operating medium		Filtered compressed air, lubricated, grade of filtration 50 µm, neutral gases, water, neutral fluids									
Operating pressure, valve		Gases	[bar]	0.5 ... 10			0.7 ... 10				
		Fluids	[bar]	0.5 ... 6			0.7 ... 10				
Ambient temperature		[°C]	-10 ... +60								
Temperature of medium		Gases	[°C]	-10 ... +60							
		Fluids	[°C]	5 ... 50							
Max. viscosity		[mm ² /s]	22								

Solenoid valves VZWM-L

Technical data

Valve response times										
Connection, valve			G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2
Gases										
Response time	off	[ms]	10	10	10	12	12	20	20	21
	on	[ms]	8	8	8	15	15	26	26	62
Fluids										
Response time	off	[ms]	200	210	220	930	930	1,900	2,000	2,800
	on	[ms]	100	110	110	400	400	1,400	1,400	2,100

Electrical data											
			G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	
Electrical connection			Solenoid armature tube, system 8 (order separately)					Solenoid armature tube, system 13 (order separately)			
Operating voltage	DC voltage	[V DC]	24								
	AC voltage	[V AC]	110/230 (50 ... 60 Hz)								
Coil characteristics	DC voltage	[W]	6.8					7.6			
	AC voltage	[VA]	Pull: 14.5 Hold: 10.5					14			
Protection class to EN 60529			IP65 (with plug socket)								

Solenoid valves VZWM-L

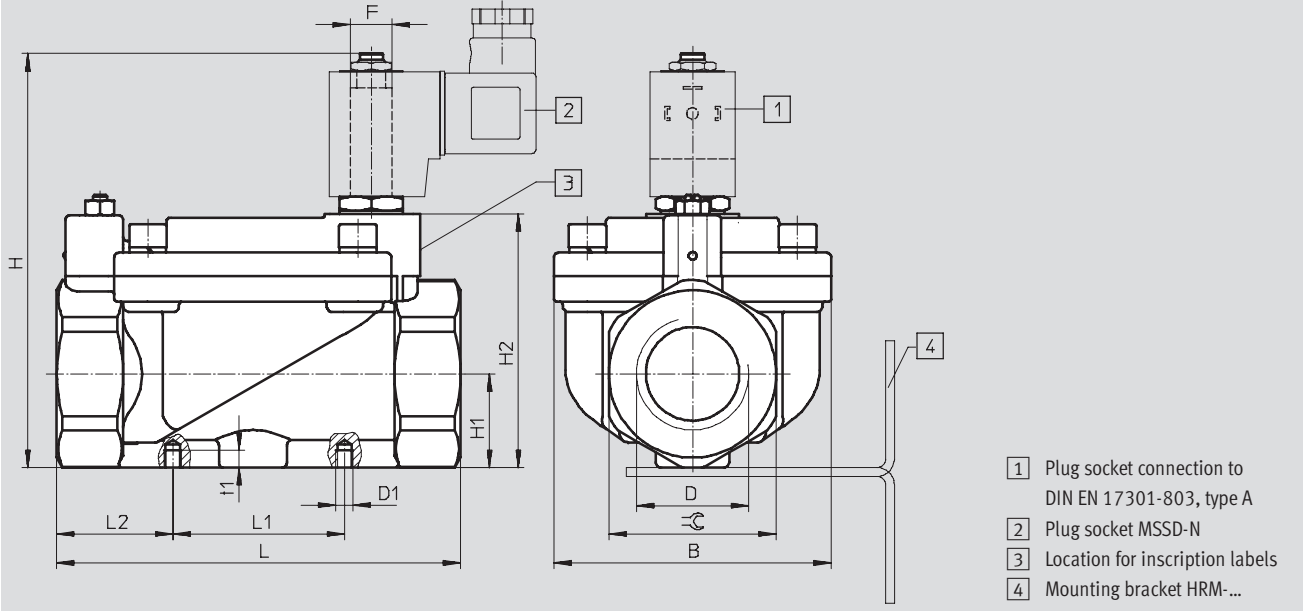
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

2/2-way valve



- 1 Plug socket connection to DIN EN 17301-803, type A
- 2 Plug socket MSSD-N
- 3 Location for inscription labels
- 4 Mounting bracket HRM-...

Type	B ±1.5	D	D1	H ±2	H1 ±1.5	H2 ±1	L ±2	L1 ±1.5	L2	F	t1 ±1.5	⌀
VZWM-...-G14-F4	48	G¼	M4	85.5	15	49	67	25	21	F4	4	27
VZWM-...-G38-F4	48	G¾	M4	85.5	15	49	67	25	21	F4	4	27
VZWM-...-G12-F4	48	G½	M4	85	15	49	67	25	21	F4	4	27
VZWM-...-G34-F4	70	G¾	M6	107	24.2	70.5	96	40	28	F4	6	41
VZWM-...-G1-F4	70	G1	M6	107	24.2	70.5	96	40	28	F4	6	41
VZWM-...-G114-F5	96	G1¼	M6	143.5	32.5	88	140	59.5	40.25	F5	6	58
VZWM-...-G112-F5	96	G1½	M6	143.5	32.5	88	140	59.5	40.25	F5	6	58
VZWM-...-G2-F5	112	G2	M6	159	38.5	103.5	168	59.5	54.25	F5	6	70
VZWM-...-G14-F5-R1	44	G¼	M4	106	15.6	51	67	25	21	F5	4	27
VZWM-...-G38-F5-R1	44	G¾	M4	106	15.6	51	67	25	21	F5	4	27
VZWM-...-G12-F5-R1	44	G½	M4	106	15.6	51	67	25	21	F5	4	27
VZWM-...-G34-F5-R1	70	G¾	M6	126	24.2	70	96	40	28	F5	6	41
VZWM-...-G1-F5-R1	70	G1	M6	126	24.2	70	96	40	28	F5	6	41
VZWM-...-G114-F5-R1	96	G1¼	M6	145	34	89.5	140	59.5	40.25	F5	6	58
VZWM-...-G112-F5-R1	96	G1½	M6	145	34	89.5	140	59.5	40.25	F5	6	58
VZWM-...-G2-F5-R1	112	G2	M6	159	38.5	104	168	59.5	54.25	F5	6	70

Ordering data

Connection, valve	Brass housing		Special steel casting housing	
	Part No.	Type	Part No.	Type
G¼	546 146	VZWM-L-M22C-G14-F4	546162	VZWM-L-M22C-G14-F5-R1
G¾	546 147	VZWM-L-M22C-G38-F4	546163	VZWM-L-M22C-G38-F5-R1
G½	546 148	VZWM-L-M22C-G12-F4	546164	VZWM-L-M22C-G12-F5-R1
G¾	546 149	VZWM-L-M22C-G34-F4	546165	VZWM-L-M22C-G34-F5-R1
G1	546 150	VZWM-L-M22C-G1-F4	546166	VZWM-L-M22C-G1-F5-R1
G1¼	546 151	VZWM-L-M22C-G114-F5	546167	VZWM-L-M22C-G114-F5-R1
G1½	546 152	VZWM-L-M22C-G112-F5	546168	VZWM-L-M22C-G112-F5-R1
G2	546 153	VZWM-L-M22C-G2-F5	546169	VZWM-L-M22C-G2-F5-R1

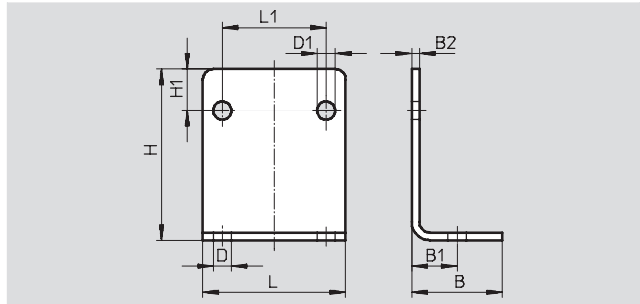
Solenoid valves VZWM-L

Accessories

FESTO

Mounting bracket HRM

Material:
Galvanised steel



Dimensions and ordering data											
B	B1	B2	D Ø	D1 Ø	H	H1	L	L1	Weight [g]	Part No.	Type
25	12.5	2	6	5	37	10	40	25	39	9 769	HRM-1
35	17.5	3	7	7	66	16	55	40	130	9 770	HRM-2
47	23.5	3	9	7	87	23	75	59.5	246	9 771	HRM-3

Ordering data – Solenoid coils				Technical data → Internet: md, mh
	Voltage	Part No.	Type	
MD				
	24 V DC	549 903	MD-2-24VDC-PA	
	110 V AC, 50 ... 60 Hz	549 904	MD-2-110VAC-PA	
	230 V AC, 50 ... 60 Hz	549 905	MD-2-230VAC-PA	
MH				
	24 V DC	549 906	MH-2-24VDC-PA	
	110 V AC, 50 ... 60 Hz	549 907	MH-2-110VAC-PA	
	230 V AC, 50 ... 60 Hz	549 908	MH-2-230VAC-PA	

Ordering data – Plug socket			Technical data → Internet: mssd
	Part No.	Type	
	550 067	MSSD-N	3-pin, square design MSF