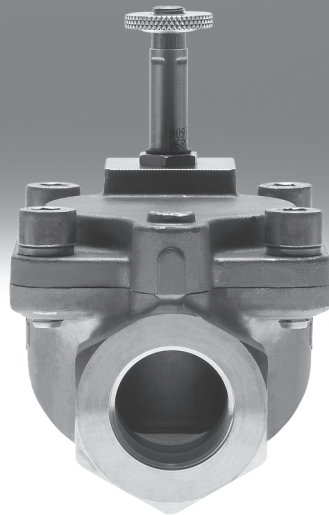


Solenoid valves VZWM-L

FESTO



Festo core product range
Covers 80% of your automation tasks

Worldwide:

Always in stock

Superb:

Festo quality at an attractive price

Easy:

Reduces procurement and storing complexity



Ready for dispatch from the Festo factory in 24 hours
Held in stock in 13 service centres worldwide
More than 2200 products



Ready for dispatch in 5 days maximum from stock
Assembled for you in 4 service centres worldwide
Up to 6×10^{12} variants per product series

Look for the star!

Solenoid valves VZWM-L

Key features and type codes

FESTO

Brief description

- Indirectly controlled poppet valve with diaphragm control
- Connection, valve G14 ... G2
- Flow rate 1400 ... 31000 l/min
- Available in brass or stainless steel casting
- Varied range of coils

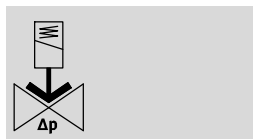
VZWM		—	L	—	M22C	—	G14	—	F4	—	
Type											
VZWM	Solenoid valve, process directional control valve										
Design											
L	In-line valve										
Valve function											
M22C	2/2-way valve, normally closed										
Connection, valve											
G14	G 1/4										
G38	G 3/8										
G12	G 1/2										
G34	G 3/4										
G1	G 1										
G114	G 1 1/4										
G112	G 1 1/2										
G2	G 2										
Electrical connection											
F4	With armature tube for solenoid coil MD-2- ... -PA										
F5	With armature tube for solenoid coil MH-2- ... -PA										
Housing material											
R1	Stainless steel casting										
	Brass										

Solenoid valves VZWM-L

FESTO

Technical data

Function



-  - Flow rate
1400 ... 31000 l/min

-  - Voltage
24 V DC
110/230 V AC



General technical data									
Connection, valve		G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
Nominal size DN (housing: brass)	[mm]	13.5	13.5	13.5	27.5	27.5	40	40	50
Nominal size DN (housing: stainless steel casting)	[mm]	13	13	13	25	25	40	40	50
Valve function		2/2, single solenoid							
Constructional design		Poppet valve with diaphragm control							
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]	1400	2100	2400	10000	11700	24000	26400	31000
Flow rate Kv	[m³/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
Materials	Housing	Brass or stainless steel casting							
	Diaphragm	NBR							
	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
	Cover screw	[Nm]	20	20	20	30	30	30	30
	Coil mounting	[Nm]	2	2	2	2	2	2	2

Solenoid valves VZWM-L

Technical data

FESTO

Operating and environmental conditions										
Connection, valve			G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
Medium			Compressed air in accordance with ISO 8573-1:2010 [7:4:4]							
			Neutral liquids							
			Inert gases							
			Water							
Ambient temperature ¹⁾		[°C]	-10 ... +60							
Medium pressure	Gases	[bar]	0.5 ... 10					0.7 ... 10		
	Fluids	[bar]	0.5 ... 6					0.7 ... 6		
Temperature of medium	Gases	[°C]	-10 ... +60							
	Fluids	[°C]	5 ... 50							
Max. viscosity		[mm²/s]	22							
CE mark (see declaration of conformity)			To EU Pressure Equipment Directive							
Corrosion resistance class CRC ²⁾	Brass		1							
	Stainless steel casting		3							

1) Note ambient temperature of solenoid coils

2) Corrosion resistance class 1 to Festo standard 940 070

Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Corrosion resistance class 3 to Festo standard 940 070

Components with heavy corrosion exposure. Externally visible components in direct contact with normal industrial atmosphere or media such as solvents and cleaning agents, where the surface requirement is predominantly functional.

Valve response times									
Connection, valve			G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2 G 2
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	1900	2000 2800
	on	[ms]	100	110	110	400	400	1400	1400 2100
Response time, variant R1	off	[ms]	210	190	200	950	950	1900	2000 2800
	on	[ms]	80	110	110	420	300	1400	1400 2100

Electrical data										
Connection, valve			G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
Electrical connection			With armature tube for solenoid coil MD-2- ... -PA, order separately						With armature tube for solenoid coil MH-2- ... -PA, 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						7.9	
	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



Weights [g]			
Brass housing		Stainless steel casting housing	
VZWM-...-G14-F4	500	VZWM-...-G14-F5-R1	400
VZWM-...-G38-F4	480	VZWM-...-G38-F5-R1	400
VZWM-...-G12-F4	450	VZWM-...-G12-F5-R1	360
VZWM-...-G34-F4	1270	VZWM-...-G34-F5-R1	1200
VZWM-...-G1-F4	1200	VZWM-...-G1-F5-R1	1100
VZWM-...-G114-F5	2850	VZWM-...-G114-F5-R1	2650
VZWM-...-G112-F5	2570	VZWM-...-G112-F5-R1	2400
VZWM-...-G2-F5	3800	VZWM-...-G2-F5-R1	3660

Solenoid valves VZWM-L

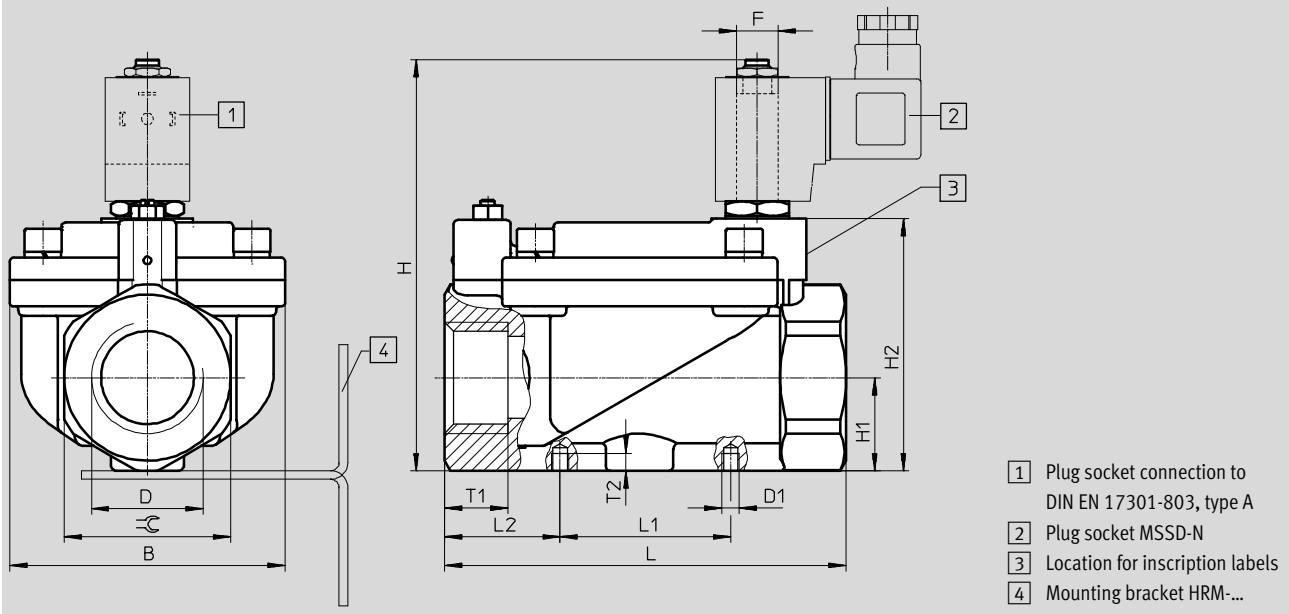
Technical data

FESTO

Dimensions

2/2-way valve

Download CAD data → www.festo.com



Type	B ±1.5	D	D1	H ±2	H1 ±1.5	H2 ±1	L ±2	L1 ±1.5	L2	F	T1	T2 ±0.5	≙
VZWM-...-G14-F4	48	G 1/4	M4	85.5	15	49	67	25	21	F4	12	4	27
VZWM-...-G38-F4	48	G 3/8	M4	85.5	15	49	67	25	21	F4	12	4	27
VZWM-...-G12-F4	48	G 1/2	M4	85	15	49	67	25	21	F4	12	4	27
VZWM-...-G34-F4	70	G 3/4	M6	107	24.2	70.5	96	40	28	F4	16	6	41
VZWM-...-G1-F4	70	G 1	M6	107	24.2	70.5	96	40	28	F4	16	6	41
VZWM-...-G114-F5	96	G 1 1/4	M6	143.5	32.5	88	140	59.5	40.25	F5	22	6	58
VZWM-...-G112-F5	96	G 1 1/2	M6	143.5	32.5	88	140	59.5	40.25	F5	22	6	58
VZWM-...-G2-F5	112	G 2	M6	159	38.5	103.5	168	59.5	54.25	F5	25	6	70
VZWM-...-G14-F5-R1	44	G 1/4	M4	106	15.6	51	67	25	21	F5	–	4	27
VZWM-...-G38-F5-R1	44	G 3/8	M4	106	15.6	51	67	25	21	F5	–	4	27
VZWM-...-G12-F5-R1	44	G 1/2	M4	106	15.6	51	67	25	21	F5	–	4	27
VZWM-...-G34-F5-R1	70	G 3/4	M6	126	24.2	70	96	40	28	F5	–	6	41
VZWM-...-G1-F5-R1	70	G 1	M6	126	24.2	70	96	40	28	F5	–	6	41
VZWM-...-G114-F5-R1	96	G 1 1/4	M6	145	34	89.5	140	59.5	40.25	F5	–	6	58
VZWM-...-G112-F5-R1	96	G 1 1/2	M6	145	34	89.5	140	59.5	40.25	F5	–	6	58
VZWM-...-G2-F5-R1	112	G 2	M6	159	38.5	104	168	59.5	54.25	F5	–	6	70

Solenoid valves VZWM-L

FESTO

Technical data

★ Core product range

Ordering data		
Connection, valve	Brass housing	
	Part No.	Type
G 1/4	★ 546146	VZWM-L-M22C-G14-F4
G 3/8	★ 546147	VZWM-L-M22C-G38-F4
G 1/2	★ 546148	VZWM-L-M22C-G12-F4
G 3/4	★ 546149	VZWM-L-M22C-G34-F4
G 1	★ 546150	VZWM-L-M22C-G1-F4

Ordering data		
Connection, valve	Brass housing	
	Part No.	Type
Brass housing		
G 1 1/4	546151	VZWM-L-M22C-G114-F5
G 1 1/2	546152	VZWM-L-M22C-G112-F5
G 2	546153	VZWM-L-M22C-G2-F5
Stainless steel casting housing		
G 1/4	546162	VZWM-L-M22C-G14-F5-R1
G 3/8	546163	VZWM-L-M22C-G38-F5-R1
G 1/2	546164	VZWM-L-M22C-G12-F5-R1
G 3/4	546165	VZWM-L-M22C-G34-F5-R1
G 1	546166	VZWM-L-M22C-G1-F5-R1
G 1 1/4	546167	VZWM-L-M22C-G114-F5-R1
G 1 1/2	546168	VZWM-L-M22C-G112-F5-R1
G 2	546169	VZWM-L-M22C-G2-F5-R1

Festo core product range

- ★ Generally ready for shipping ex works in 24 hours
- ☆ Generally ready for shipping ex works in 5 days

Solenoid valves VZWM-L

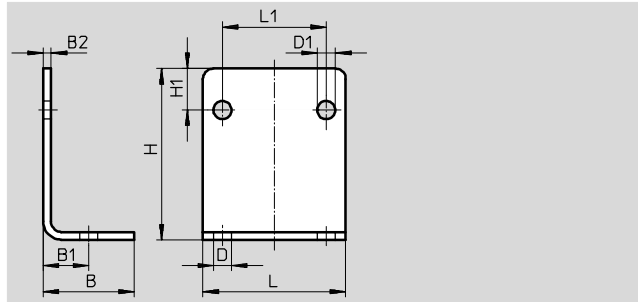
Accessories

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	9769	HRM-1
35	17.5	3	7	7	66	16	55	40	130	9770	HRM-2
47	23.5	3	9	7	87	23	75	59.5	246	9771	HRM-3

Ordering data – Solenoid coils			Technical data → Internet: solenoid coil	
	Voltage	Part No.	Type	
Solenoid coil for VZWM- ... -F4- ... ¹⁾				
	24 V DC	★ 549903	MD-2-24VDC-PA	
	110 V AC, 50 ... 60 Hz	549904	MD-2-110VAC-PA	
	230 V AC, 50 ... 60 Hz	549905	MD-2-230VAC-PA	
Solenoid coil for VZWM- ... -F5- ... ¹⁾				
	24 V DC	549906	MH-2-24VDC-PA	
	110 V AC, 50 ... 60 Hz	549907	MH-2-110VAC-PA	
	230 V AC, 50 ... 60 Hz	549908	MH-2-230VAC-PA	

1) Ambient temperature –20 ... +50 °C

Ordering data – Plug socket			Technical data → Internet: mssd-n	
		Part No.	Type	
	3-pin, square design, connection pattern to EN 175301-803, type A	★ 550067	MSSD-N	

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Festo - Your Partner in Automation



1 Festo Inc.

5300 Explorer Drive
Mississauga, ON L4W 5G4
Canada

Festo Customer Interaction Center

Tel: 1 877 463 3786
Fax: 1 877 393 3786
Email: customer.service.ca@festo.com



2 Festo Pneumatic

Av. Ceylán 3,
Col. Tequesquináhuac
54020 Tlalneantla,
Estado de México

Multinational Contact Center

01 800 337 8669
ventas.mexico@festo.com



3 Festo Corporation

1377 Motor Parkway
Suite 310
Islandia, NY 11749

Festo Customer Interaction Center

1 800 993 3786
1 800 963 3786
customer.service.us@festo.com



4 Regional Service Center

7777 Columbia Road
Mason, OH 45040

Connect with us



www.festo.com/socialmedia



www.festo.com

Subject to change