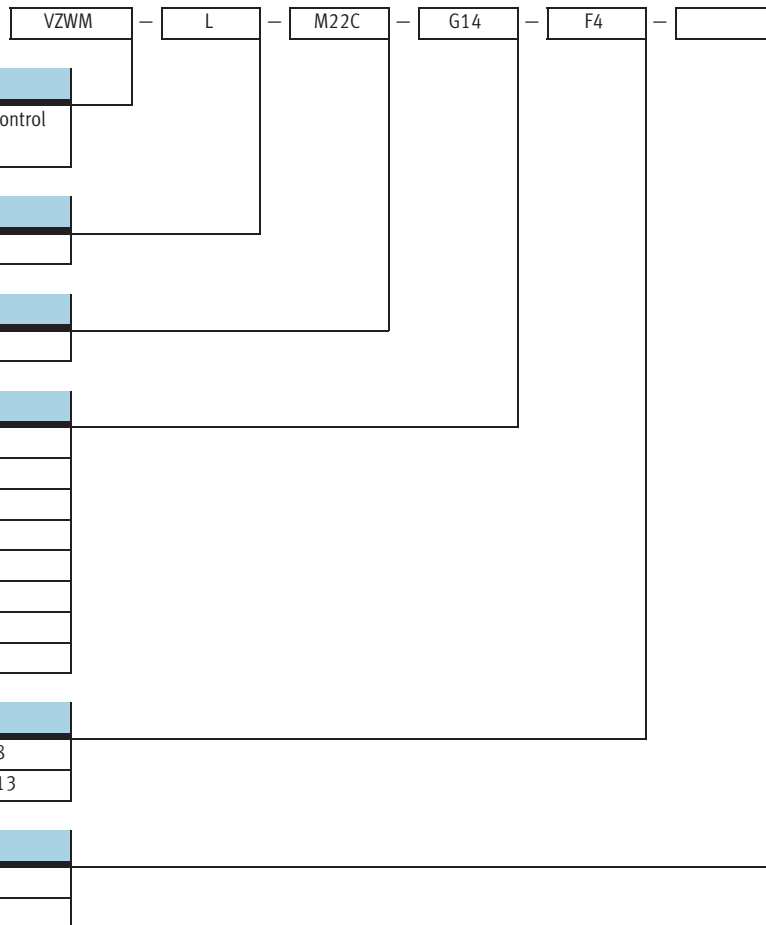




- Pneumatic connection  
G $\frac{1}{4}$  ... G2
- Flow rate 2,600 ... 39,000 l/min
- Available in brass or special  
steel casting

# Solenoid valves VZWM-L

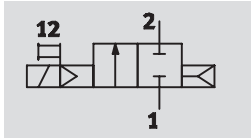
Type codes





## 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											
Pneumatic connection		G1/4	G3/8	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2		
Valve function		2/2, single solenoid									
Constructional design		Poppet valve with spring return									
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 <sup>3</sup> /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										
Pneumatic connection		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								
Nominal operating pressure		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 <sup>2</sup> /s]	22							

## Solenoid valves VZWM-L

Technical data

Valve response times										
Pneumatic connection			G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{3}{4}$	G1	G1 $\frac{1}{4}$	G1 $\frac{1}{2}$	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	750	1,900	2,000	2,800
	on	[ms]	100	110	110	400	400	1,400	1,400	2,100

Electrical data											
Electrical connection			G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{3}{4}$	G1	G1 $\frac{1}{4}$	G1 $\frac{1}{2}$	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/en/engineering](http://www.festo.com/en/engineering)

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	G1/4	M4	85.5	15	49	67	25	21	F4	4	27
VZWM-...-G38-F4	48	G3/8	M4	85.5	15	49	67	25	21	F4	4	27
VZWM-...-G12-F4	48	G1/2	M4	85	15	49	67	25	21	F4	4	27
VZWM-...-G34-F4	70	G3/4	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	G1 1/4	M6	143.5	32.5	88	140	59.5	40.25	F5	6	58
VZWM-...-G112-F5	96	G1 1/2	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	G1/4	M4	106	15.6	51	67	25	21	F5	4	27
VZWM-...-G38-F5-R1	44	G3/8	M4	106	15.6	51	67	25	21	F5	4	27
VZWM-...-G12-F5-R1	44	G1/2	M4	106	15.6	51	67	25	21	F5	4	27
VZWM-...-G34-F5-R1	70	G3/4	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	G1 1/4	M6	145	34	89.5	140	59.5	40.25	F5	6	58
VZWM-...-G112-F5-R1	96	G1 1/2	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				
Pneumatic connection	Brass housing		Special steel casting housing	
	Part No.	Type	Part No.	Type
G1/4	546 146	VZWM-L-M22C-G14-F4	546162	VZWM-L-M22C-G14-F5-R1
G3/8	546 147	VZWM-L-M22C-G38-F4	546163	VZWM-L-M22C-G38-F5-R1
G1/2	546 148	VZWM-L-M22C-G12-F4	546164	VZWM-L-M22C-G12-F5-R1
G3/4	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
G1 1/4	546 151	VZWM-L-M22C-G114-F5	546167	VZWM-L-M22C-G114-F5-R1
G1 1/2	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

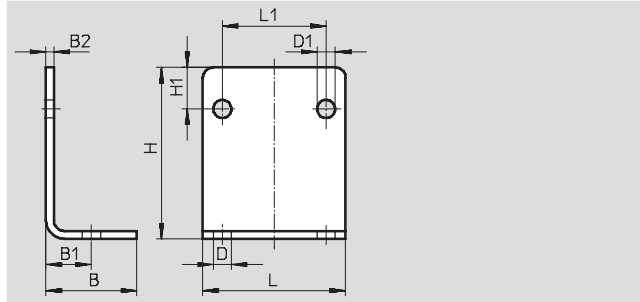
# Solenoid valves VZWM-L

Accessories

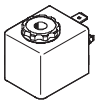
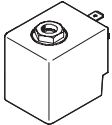



## Mounting bracket HRM

Material:  
Galvanised steel



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

Ordering data – Solenoid coils				Technical data → LEERER MERKER	
	Voltage	Part No.	Type		
<b>MD</b>					
	24 V DC	<b>549 903</b>	<b>MD-2-24VDC-PA</b>		
	110 V AC, 50 ... 60 Hz	<b>549 904</b>	<b>MD-2-110VAC-PA</b>		
	230 V AC, 50 ... 60 Hz	<b>549 905</b>	<b>MD-2-230VAC-PA</b>		
<b>MH</b>					
	24 V DC	<b>549 906</b>	<b>MH-2-24VDC-PA</b>		
	110 V AC, 50 ... 60 Hz	<b>549 907</b>	<b>MH-2-110VAC-PA</b>		
	230 V AC, 50 ... 60 Hz	<b>549 908</b>	<b>MH-2-230VAC-PA</b>		

Ordering data – Plug socket			Technical data → LEERER MERKER		
		Part No.	Type		
	3-pin, square design MSF	<b>550 067</b>	<b>MSSD-N</b>		

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