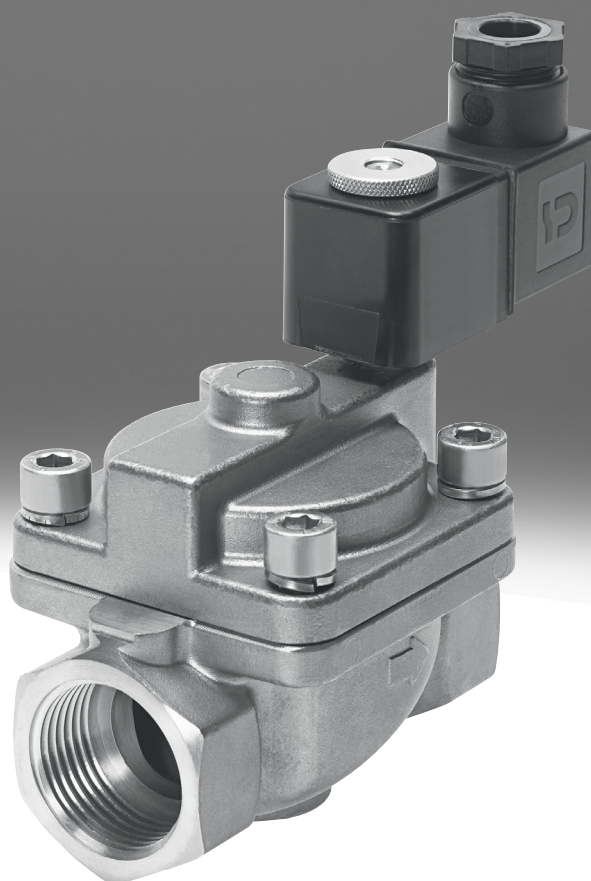


Solenoid valve VZWP

FESTO



Characteristics

At a glance

The solenoid valve VZWP-L... is a servo-controlled 2/2-way valve with solenoid coil. The solenoid valve is closed when de-energised. When current is applied, the pressure difference on the secondary side of the piston is reduced via the servo bore. The pressure difference lifts the piston off the valve seat.

- Small solenoids can be used to control high pressures with large nominal diameters
- The valves can be operated with air, neutral gases and neutral liquids
- The NC version ensures that the valve is closed in the event of a power failure

Application

- All applications with a differential pressure of 0.5 bar
- Applications with open medium circuit

Design type

The valve is characterised by a simple, solid design. The valve drive only fulfils a pilot control function, which relieves the main sealing element.

Type code

001	Series	
VZWP	Electrically actuated process valve, servo-controlled VZWP	
002	Directional control valve type	
L	In-line valve	
003	Valve function	
M22C	2/2-way valve, normally closed	
004	Process valve connection	
G14	G1/4	
G38	G3/8	
G12	G1/2	
G34	G3/4	
G1	G1	
N14	1/4 NPT	
N38	3/8 NPT	
N12	1/2 NPT	
N34	3/4 NPT	
N1	1 NPT	

005	Nominal width	
130	13 mm	
250	25 mm	
006	Sealant	
	Standard	
V	FPM	
007	Nominal operating voltage	
1	24 V DC	
2A	110 V AC/50-60 Hz	
3A	230 V AC/50-60 Hz	
008	Electrical connection	
P4	Plug socket, 3-wire	
009	Pressure of medium [bar]	
40	40	

Datasheet

General technical data

General technical data										
Connection Process valve	G1/4	G3/8	G1/2	G3/4	G1	1/4 NPT	3/8 NPT	1/2 NPT	3/4 NPT	1 NPT
Nominal size	13 mm			25 mm		13 mm			25 mm	
Valve function	2/2-way, closed, monostable									
Design	Piloted piston poppet valve									
Type of mounting	In-line installation									
Type of actuation	Electric									
Type of piloting	Pilot actuated									
Manual override	None									
Mounting position	Coil on top (preferred)									
Sealing principle	Soft									
Flow direction	Non-reversible									
Max. viscosity	22 mm²/s									
Degree of protection	IP65									
Product weight	600 g	575 g	550 g	1,500 g	1,400 g	600 g	575 g	550 g	1,500 g	1,400 g

Operating and ambient conditions

Connection Process valve	G1/4	G3/8	G1/2	G3/4	G1	1/4 NPT	3/8 NPT	1/2 NPT	3/4 NPT	1 NPT
Switching time on	100 ms			130 ms		100 ms			130 ms	
Switching time off	250 ms			300 ms		250 ms			300 ms	
Standard nominal flow rate (standardised to DIN 1343)	1,600 l/min	2,100 l/min	2,650 l/min	8,750 l/min	12,250 l/min	1,600 l/min	2,100 l/min	2,650 l/min	8,750 l/min	12,250 l/min
Flow rate Kv	1.5 m ³ /h	2 m ³ /h	2.5 m ³ /h	8.2 m ³ /h	11.5 m ³ /h	1.5 m ³ /h	2 m ³ /h	2.5 m ³ /h	8.2 m ³ /h	11.5 m ³ /h
Medium pressure	0.05 ... 4 MPa									
Medium pressure	0.5 ... 40 bar									
Medium pressure	7.25 ... 580 psi									
Nominal pressure PN	40									
Pressure difference	0.05 MPa									
Pressure difference	0.5 bar									
Pressure difference	7.25 psi									
Medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gases, Neutral fluids, Other media on request									
Ambient temperature	-10 ... 35°C									
Media temperature	-10 ... 80°C									
Leakage rate to EN 12266-1	A									
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress									
UKCA marking (see declaration of conformity)	To UK regulations for electrical equipment									

1) More information www.festo.com/catalogue/ukb

Materials

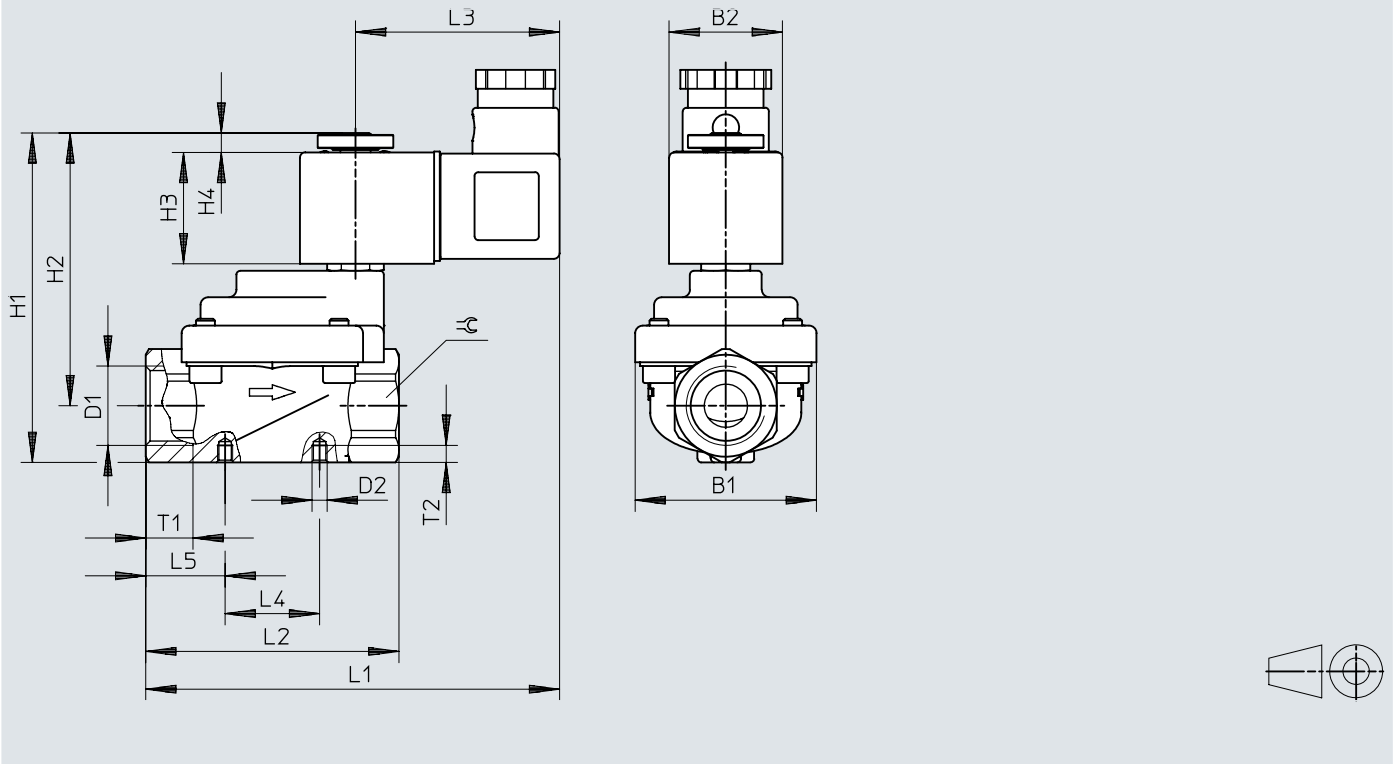
Material housing	Cast brass
Material number housing	CW617N
Material screws	High-alloy stainless steel
Material number screw	1.4301
Material seals	FPM, NBR
Note on materials	RoHS-compliant

Electrical data

Nominal operating voltage	24 V DC	110 V AC/50-60 Hz	230 V AC/50-60 Hz
Characteristic coil data	24 V DC: 6.8 W	110 V AC: 50/60 Hz, pick-up power 10.5 VA, holding power 8.0 VA	230 V AC: 50/60 Hz, pick-up power 10.5 VA, holding power 7.6 VA
Electrical connection	Type A, Plugs, To EN 175301-803, Square design		
Permissible voltage fluctuations	+/- 10%		
Duty cycle	100%		
Degree of protection	IP65		
CE mark (see declaration of conformity)	— To EU Low Voltage Directive		

Dimensions

Dimensions – Nominal width 130

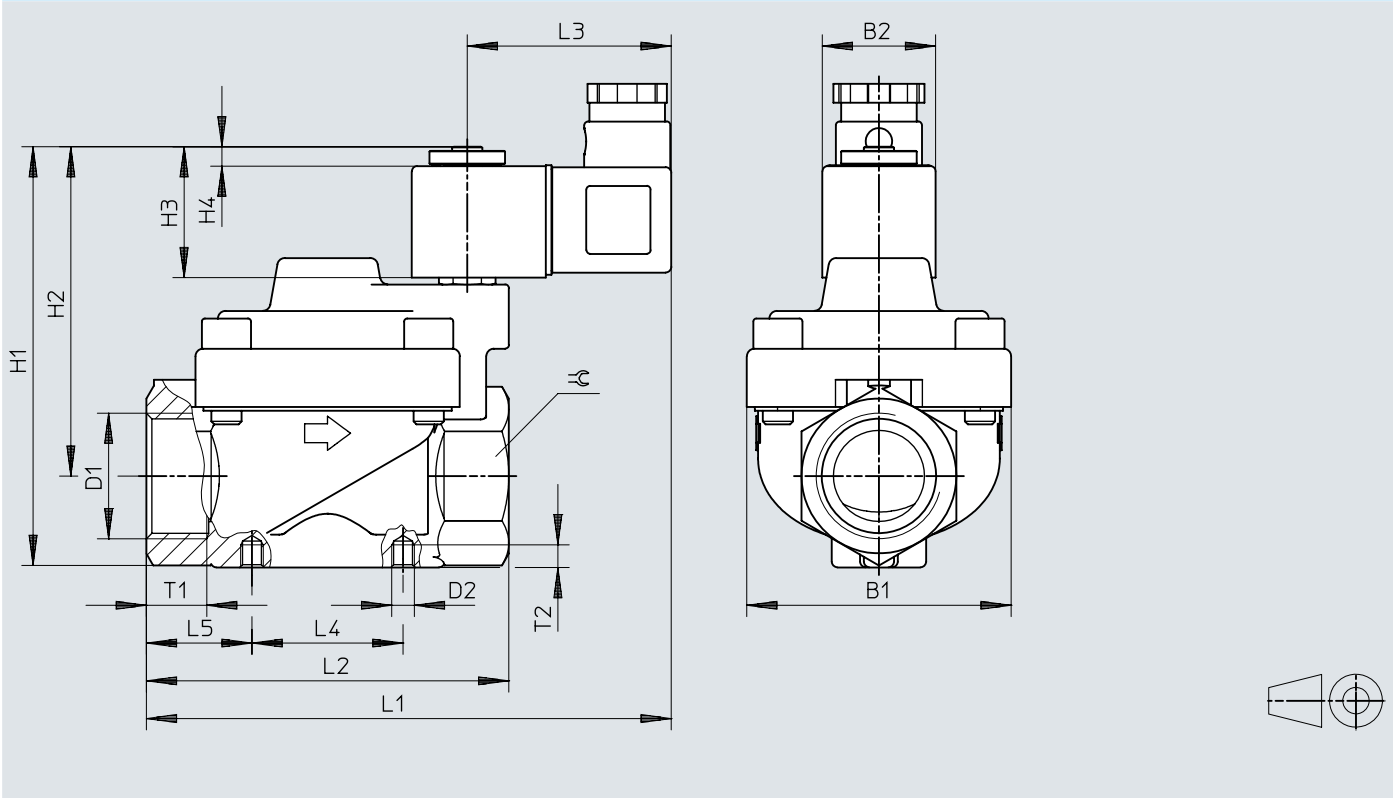
[Download CAD data](#) www.festo.com


	B1	B2	D1	D2	H1	H2	H3	H4
VZWP-L-M22C-G14-130-...	48	30	G1/4	M4	88	73	30	5
VZWP-L-M22C-G38-130-...	48	30	G3/8	M4	88	73	30	5
VZWP-L-M22C-G12-130-...	48	30	G1/2	M4	88	73	30	5
VZWP-L-M22C-N14-130-...	48	30	1/4 NPT	M4	88	73	30	5
VZWP-L-M22C-N38-130-...	48	30	3/8 NPT	M4	88	73	30	5
VZWP-L-M22C-N12-130-...	48	30	1/2 NPT	M4	88	73	30	5

	L1	L2	L3	L4	L5	T1	T2	≙
VZWP-L-M22C-G14-130-...	110	67	54	25	21	12,5	4,5	27
VZWP-L-M22C-G38-130-...	110	67	54	25	21	12,5	4,5	27
VZWP-L-M22C-G12-130-...	110	67	54	25	21	12,5	4,5	27
VZWP-L-M22C-N14-130-...	110	67	54	25	21	12,5	4,5	27
VZWP-L-M22C-N38-130-...	110	67	54	25	21	12,5	4,5	27
VZWP-L-M22C-N12-130-...	110	67	54	25	21	12,5	4,5	27

Dimensions

Dimensions – Nominal width 250 Download CAD data www.festo.com



	B1	B2	D1	D2	H1	H2	H3	H4
VZWP-L-M22C-G34-250-...	70	30	G3/4	M6	112	88	30	5
VZWP-L-M22C-G1-250-...	70	30	G1	M6	112	88	30	5
VZWP-L-M22C-N34-250-...	70	30	3/4 NPT	M6	112	88	30	5
VZWP-L-M22C-N1-250-...	70	30	1 NPT	M6	112	88	30	5

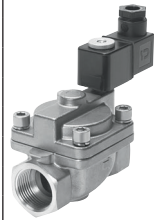
	L1	L2	L3	L4	L5	T1	T2	≡
VZWP-L-M22C-G34-250-...	139	96	54	40	28	16	6	41
VZWP-L-M22C-G1-250-...	139	96	54	40	28	16	6	41
VZWP-L-M22C-N34-250-...	139	96	54	40	28	16	6	41
VZWP-L-M22C-N1-250-...	139	96	54	40	28	16	6	41

Ordering data

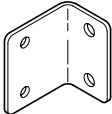
VZWP with G thread			
	Connection Process valve	Part no.	Type
	G1/4	1489960	VZWP-L-M22C-G14-130-3AP4-40
		1489945	VZWP-L-M22C-G14-130-V-1P4-40
		1489965	VZWP-L-M22C-G14-130-V-3AP4-40
		1489940	VZWP-L-M22C-G14-130-1P4-40
		1489955	VZWP-L-M22C-G14-130-V-2AP4-40
		1489950	VZWP-L-M22C-G14-130-2AP4-40
	G3/8	1489941	VZWP-L-M22C-G38-130-1P4-40
		1489961	VZWP-L-M22C-G38-130-3AP4-40
		1489946	VZWP-L-M22C-G38-130-V-1P4-40
		1489966	VZWP-L-M22C-G38-130-V-3AP4-40
		1489951	VZWP-L-M22C-G38-130-2AP4-40
		1489956	VZWP-L-M22C-G38-130-V-2AP4-40
	G1/2	1489957	VZWP-L-M22C-G12-130-V-2AP4-40
		1489947	VZWP-L-M22C-G12-130-V-1P4-40
		1489962	VZWP-L-M22C-G12-130-3AP4-40
		1489942	VZWP-L-M22C-G12-130-1P4-40
		1489967	VZWP-L-M22C-G12-130-V-3AP4-40
		1489952	VZWP-L-M22C-G12-130-2AP4-40
	G3/4	1489953	VZWP-L-M22C-G34-250-2AP4-40
		1489963	VZWP-L-M22C-G34-250-3AP4-40
		1489948	VZWP-L-M22C-G34-250-V-1P4-40
		1489968	VZWP-L-M22C-G34-250-V-3AP4-40
		1489943	VZWP-L-M22C-G34-250-1P4-40
		1489958	VZWP-L-M22C-G34-250-V-2AP4-40
	G1	1489954	VZWP-L-M22C-G1-250-2AP4-40
		1489964	VZWP-L-M22C-G1-250-3AP4-40
		1489969	VZWP-L-M22C-G1-250-V-3AP4-40
		1489944	VZWP-L-M22C-G1-250-1P4-40
		1489949	VZWP-L-M22C-G1-250-V-1P4-40
		1489959	VZWP-L-M22C-G1-250-V-2AP4-40

VZWP with NPT thread			
	Connection Process valve	Part no.	Type
	1/4 NPT	1489975	VZWP-L-M22C-N14-130-V-1P4-40
		1489980	VZWP-L-M22C-N14-130-2AP4-40
		1489970	VZWP-L-M22C-N14-130-1P4-40
		1489985	VZWP-L-M22C-N14-130-V-2AP4-40
		1489995	VZWP-L-M22C-N14-130-V-3AP4-40
		1489990	VZWP-L-M22C-N14-130-3AP4-40
	3/8 NPT	1489971	VZWP-L-M22C-N38-130-1P4-40
		1489981	VZWP-L-M22C-N38-130-2AP4-40
		1489996	VZWP-L-M22C-N38-130-V-3AP4-40
		1489976	VZWP-L-M22C-N38-130-V-1P4-40
		1489986	VZWP-L-M22C-N38-130-V-2AP4-40
		1489991	VZWP-L-M22C-N38-130-3AP4-40
	1/2 NPT	1489987	VZWP-L-M22C-N12-130-V-2AP4-40
		1489997	VZWP-L-M22C-N12-130-V-3AP4-40
		1489972	VZWP-L-M22C-N12-130-1P4-40
		1489992	VZWP-L-M22C-N12-130-3AP4-40
		1489977	VZWP-L-M22C-N12-130-V-1P4-40
		1489982	VZWP-L-M22C-N12-130-2AP4-40
	3/4 NPT	1489993	VZWP-L-M22C-N34-250-3AP4-40

Ordering data

VZWP with NPT thread			
	Connection Process valve	Part no.	Type
	3/4 NPT	1489973	VZWP-L-M22C-N34-250-1P4-40
		1489998	VZWP-L-M22C-N34-250-V-3AP4-40
		1489983	VZWP-L-M22C-N34-250-2AP4-40
		1489978	VZWP-L-M22C-N34-250-V-1P4-40
		1489988	VZWP-L-M22C-N34-250-V-2AP4-40
	1 NPT	1489999	VZWP-L-M22C-N1-250-V-3AP4-40
		1489974	VZWP-L-M22C-N1-250-1P4-40
		1489994	VZWP-L-M22C-N1-250-3AP4-40
		1489989	VZWP-L-M22C-N1-250-V-2AP4-40
		1489979	VZWP-L-M22C-N1-250-V-1P4-40
		1489984	VZWP-L-M22C-N1-250-2AP4-40

Accessories

Mounting bracket HRM					
	Size	Material bracket	LABS (PWIS) conformity	Part no.	Type
	Size 1	Steel, Galvanised	VDMA24364-B1/B2-L	9769	HRM-1