

Pinch valve VZQH

FESTO



Characteristics

At a glance

The pinch valve VZQH is a manually operated 2/2-way valve that allows liquids, powder materials, solids and mixtures of substances to be controlled and shut off. The valve is in normal position and closed when the lever is at 90 degrees to the central axis. The locking or closing force is applied by a spring and transmitted to the plunger via a return piece. When the lever is released, the valve automatically returns to its normal state (NC). Another special feature of this valve is that it can be locked into place every 15°. To do this, simply push the blue locking element backwards at the appropriate lever position so that the lever engages. This ensures a continuous and reproducible flow of media. Both the intermediate positions and the fully open or closed position can also be secured with a lock if required.

Type code

001	Series	
VZQH	Pinch valve, manually operated	
002	Valve function	
2	2/2-way	
003	Actuation type	
H	Hand lever	
004	Nominal diameter DN	
6	6 mm	
005	Process valve connection type 1	
G	G female thread	
S1	Clamp ferrule to ASME-BPE, type A	
S5	Clamp ferrule to DIN 32676, series A	
T	NPT female thread	
006	Process valve connection type 2	
G	G female thread	
S1	Clamp ferrule to ASME-BPE, type A	
S5	Clamp ferrule to DIN 32676, series A	
T	NPT female thread	

007	Housing material	
V4	Stainless steel (chrome-nickel-molybdenum, austenitic/1.4401, 1.4404 (AISI 316L), 1.4408)	
008	Housing cover material	
V4	Stainless steel (austenitic chromium-nickel-molybdenum/1.4401, 1.4404 (AISI 316L), 1.4408)	
009	Shut-off element material	
E	EPDM	
S1	Silicone	
010	Hand lever material	
PM	Polymer	
011	Pressure range of media	
2	0 ... 2 bar	
6	0 ... 6 bar	

Datasheet

General technical data

Connection Process valve	Clamp to DIN 32676 series A	G1/4
Nominal size DN	6	
Nominal pressure PN	10	
Design	Pinch valve	
Type of actuation	Manual	
Sealing principle	Soft	
Mounting position	optional	
Valve function	2/2-way, closed, monostable	
Flow direction	Reversible	
Type of reset	Mechanical spring	
Type of piloting	Direct	
Type of mounting	In-line installation	
Switching time on	1,000 ms	
Switching time off	1,000 ms	
Flow rate Kv	0.7 m ³ /h	
Max. viscosity	4,000 mm ² /s	
Product weight	427 g	370 g

Operating and environmental conditions

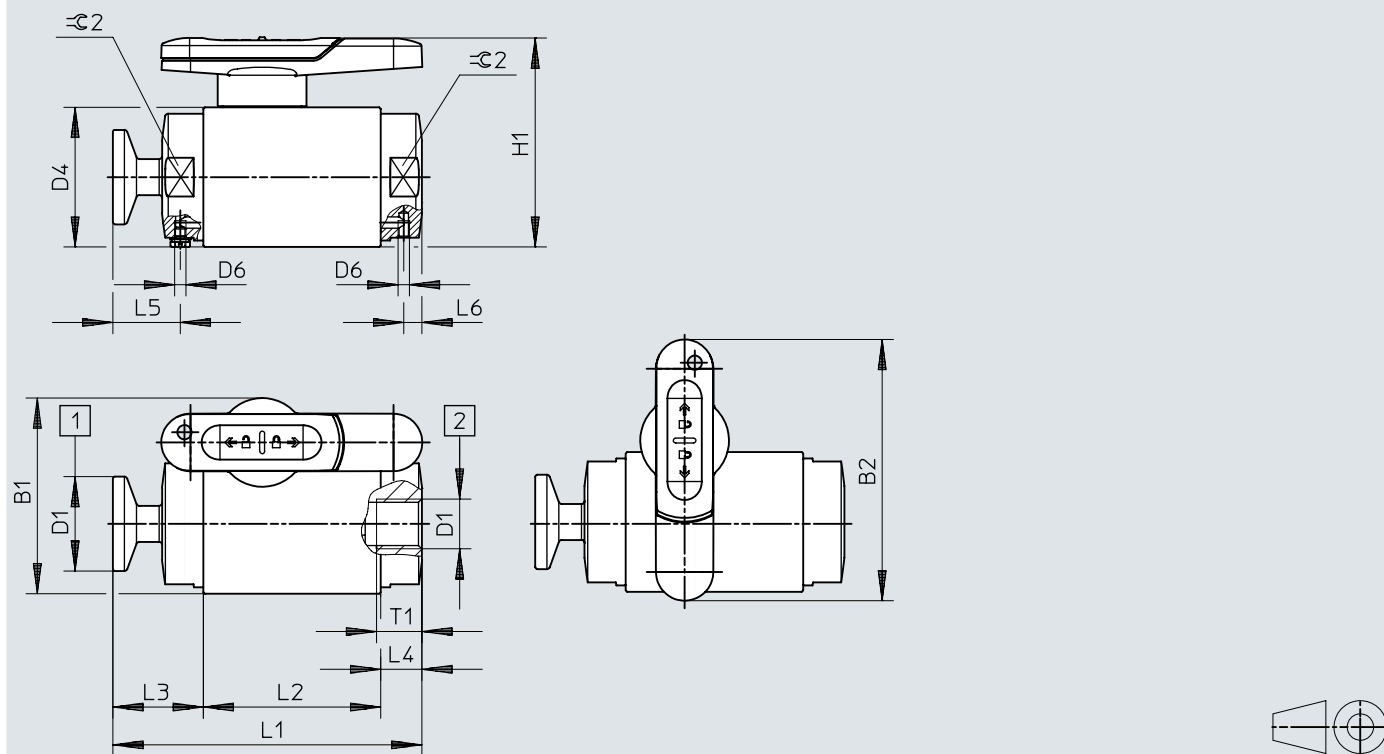
Connection Process valve	Clamp to DIN 32676 series A	G1/4
Burst pressure	1.6 MPa	
Burst pressure	16 bar	
Burst pressure	232 psi	
Medium pressure	0 - 0.6 MPa	
Medium pressure	0 - 6 bar	
Medium pressure	0 - 87 psi	
Ambient temperature	-5 ... 60°C	
Media temperature	-5 ... 100°C	
Storage temperature	5 ... 30°C	
Suitable for use with food	See supplementary material information See declaration of conformity	
Medium	Compressed air to ISO 8573-1:2010 [:::1] Water	

Materials

Material housing	High-alloy stainless steel
Material number housing	1.4408
Material housing cover	High-alloy stainless steel
Material number housing cover	1.4404 / AISI 316L
Material seals	FPM HNBR
Material shut-off element	EPDM VMQ (silicone)
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Dimensions

Dimensions – Manually actuated

Download CAD data www.festo.com


Dimensions

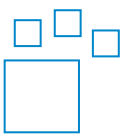
	B1	B2	D1 ¹⁾	D4 ∅	D6 ∅	H1
VZQH-2H-6-G G -V4V4...	51,8	69,1	G1/4 / G1/4	37	M3	55,4
VZQH-2H-6-T T -V4V4...			1/4NPT / 1/4NPT			
VZQH-2H-6-G T -V4V4...			G1/4 / 1/4NPT			
VZQH-2H-6-T G -V4V4...			1/4NPT / G1/4			
VZQH-2H-6-S5S5-V4V4...			25 / 25			
VZQH-2H-6-S5G -V4V4...			25 / G1/4			
VZQH-2H-6-S5T -V4V4...			25 / 1/4NPT			
VZQH-2H-6-G S5-V4V4...			G1/4 / 25			
VZQH-2H-6-T S5-V4V4...			1/4NPT / 25			
VZQH-2H-6-S1S1-V4V4...			25 / 25			
VZQH-2H-6-S1G -V4V4...			25 / G1/4			
VZQH-2H-6-S1T -V4V4...			25 / 1/4NPT			
VZQH-2H-6-G S1-V4V4			G1/4 / 25			
VZQH-2H-6-T S1-V4V4...			1/4NPT / 25			
VZQH-2H-6-S5S1-V4V4...			25 / 25			
VZQH-2H-6-S1S5-V4V4...			25 / 25			

	L1	L2	L3	L4	L5	L6	T1	≈ 2
VZQH-2H-6-G G -V4V4...	68,8	47	10,9	10,9	4,8	4,8	12 / 12	32
VZQH-2H-6-T T -V4V4...	68,8		10,9	10,9	4,8	4,8	10 / 10	
VZQH-2H-6-G T -V4V4...	68,8		10,9	10,9	4,8	4,8	12 / 10	
VZQH-2H-6-T G -V4V4...	68,8		10,9	10,9	4,8	4,8	10 / 12	
VZQH-2H-6-S5S5-V4V4...	94,9		24	24	17,9	17,9	- / -	
VZQH-2H-6-S5G -V4V4...	81,9		24	10,9	17,9	4,8	- / 12	
VZQH-2H-6-S5T -V4V4...	81,9		24	10,9	17,9	4,8	- / 10	
VZQH-2H-6-G S5-V4V4...	81,9		10,9	24	4,8	17,9	12 / -	
VZQH-2H-6-T S5-V4V4...	81,9		10,9	24	4,8	17,9	10 / -	
VZQH-2H-6-S1S1-V4V4...	94,9		24	24	17,9	17,9	- / -	
VZQH-2H-6-S1G -V4V4...	81,9		24	10,9	17,9	4,8	- / 12	
VZQH-2H-6-S1T -V4V4...	81,9		24	10,9	17,9	4,8	- / 10	
VZQH-2H-6-G S1-V4V4	81,9		10,9	24	4,8	17,9	12 / -	
VZQH-2H-6-T S1-V4V4...	81,9		10,9	24	4,8	17,9	10 / -	
VZQH-2H-6-S5S1-V4V4...	94,9		24	24	17,9	17,9	- / -	
VZQH-2H-6-S1S5-V4V4...	94,9		24	24	17,9	17,9	- / -	

1) Process valve 1/process valve 2

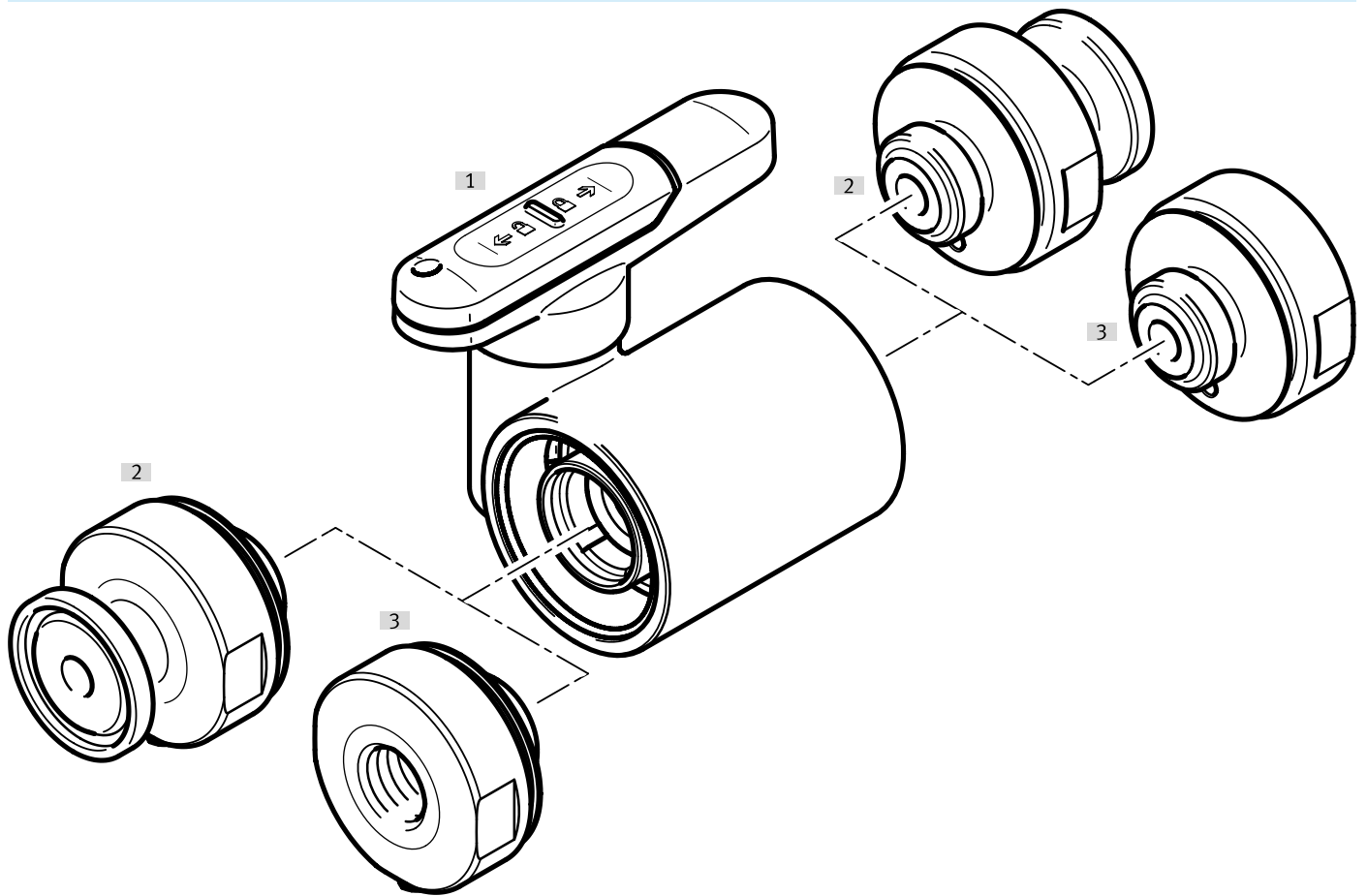
Ordering data

Ordering data						
	Nominal size DN	Connection Process valve	Material shut-off element	Product weight	Part no.	Type
	6	Clamp to DIN 32676 series A	EPDM	427 g	8187048	VZQH-2H-6-S5S5-V4V4EPM-6
			VMQ (silicone)		8187049	VZQH-2H-6-S5S5-V4V4S1PM-2
	G1/4		EPDM	370 g	8187050	VZQH-2H-6-GG-V4V4EPM-6
			VMQ (silicone)		8187047	VZQH-2H-6-GG-V4V4S1PM-2

Ordering data – Modular product system						
	Valve function	Process valve connection type 1	Process valve connection type 2	Material housing cover	Part no.	Type
	2/2-way, closed, monostable	G female thread, Clamp ferrule to ASME-BPE, type A, Clamp ferrule to DIN 32676, series A, NPT female thread	G female thread, Clamp ferrule to ASME-BPE, type A, Clamp ferrule to DIN 32676, series A, NPT female thread	High-alloy stainless steel	8174234	VZQH-

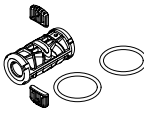
Peripherals

Peripherals overview



Accessories			→ Link
Type/order code	Description		
[1] Basic body VZQH	"Stainless steel housing material" variant		vzqh
[2] Connection 1	Various connections are available: <ul style="list-style-type: none"> • G female thread • NPT female thread • Clamp ferrule DIN 32676, series A • Clamp ferrule ASME-BPE, type A 		
[3] Connection 2	<ul style="list-style-type: none"> • G female thread • NPT female thread • Clamp ferrule DIN 32676, series A • Clamp ferrule ASME-BPE, type A 		

Accessories

Seal cartridge VAVC					
	Nominal size DN	Storage temperature	Material shut-off element	Part no.	Type
	6	5 ... 20 °C	EPDM	3418620	VAVC-Q2-M22C-6-E
		5 ... 30 °C	VMQ (silicone)	8119890	VAVC-Q2-M22C-6-S1