



Series L/PV-1

Ball Valves Series L/PV-1

Versions 2-, 3-, 4-, 5-way,
Type 2L/PV-1, 3L/PV-1, 4L/PV-1, 5L/PV-1

Special Features

- Corrosion-resistant
- Compact design
- Gas-tight
- Maintenance-free
- Easy to operate
- Easy mounting
- Position monitoring optionally

Application

The compact ball valves of the L/PV-1 series are suitable for shutting off gases and liquids in the temperature range up to +80 °C [176 °F]. The ball valves are specially designed for problems encountered in analytical technology and they are mainly used for shutting off and switching over sample-, test- and reference gases.

They have excellent chemical resistance to flue gases, SO₂, etc. In the case of solvents, please contact us.

Description

The ball valves of the L/PV-1 series are gas-tight, maintenance-free and easy to operate with the large T-handle.

Four versions are available as 2-, 3-, 4- and 5-way ball valves type 2L/PV-1, 3L/PV-1, 4L/PV-1 and 5L/PV-1 made of PVDF with 4 mm nominal diameter.

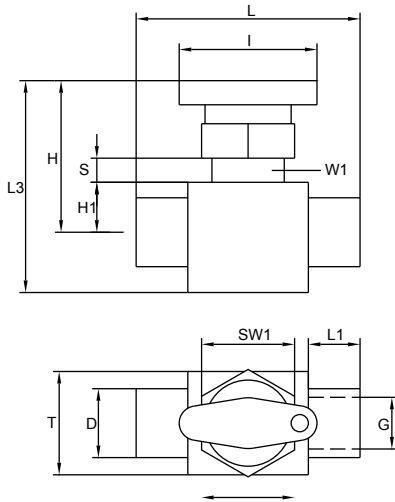
The ball sealing is ensured with adjustable pressure fittings and FKM O-rings. The ball valves are equipped with a G 1/4" female thread for flexible connection. An appropriate range of fittings is available for connecting hoses or tubes. - See data sheets "Flexible and rigid tube fittings, plugs and connectors with barbed fitting" and "Sample Lines Type SL1-8 DN" -

The ball valves are fixed by a lock nut which allows an easy system assembly with the connections being positioned as requested.

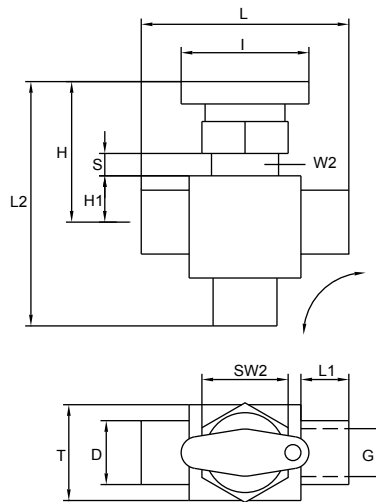
For monitoring a fixed position, e.g. when switching from sample gas to test gas, a micro-spring contact /K including position plate, mounting bracket, connection terminals and complete mounting on all 4 ball valve variants is optionally available. A potential-free change-over contact is provided for the status alarm.

Dimensions

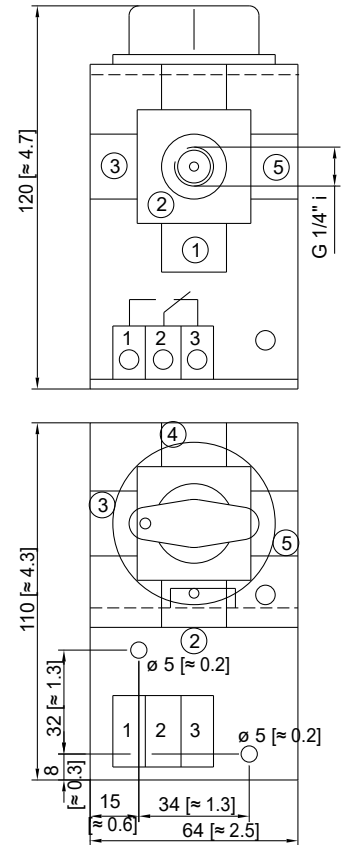
2-way-ball valve 2L/PV-1



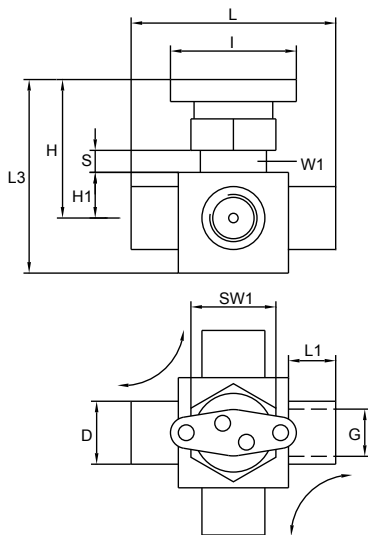
3-way-ball valve 3L/PV-1



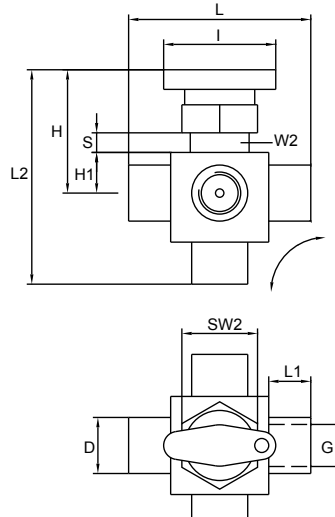
5-way-ball valve 5L/PV-1/K with status contact



4-way-ball valve 4L/PV-1

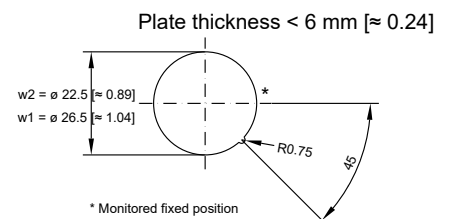


5-way-ball valve 5L/PV-1



- ① Central connection/outlet
- ② Monitored connection, e.g. sample gas
- ③ E.g. zero gas
- ④ E.g. test gas 1
- ⑤ E.g. test gas 2

Drilling diagram

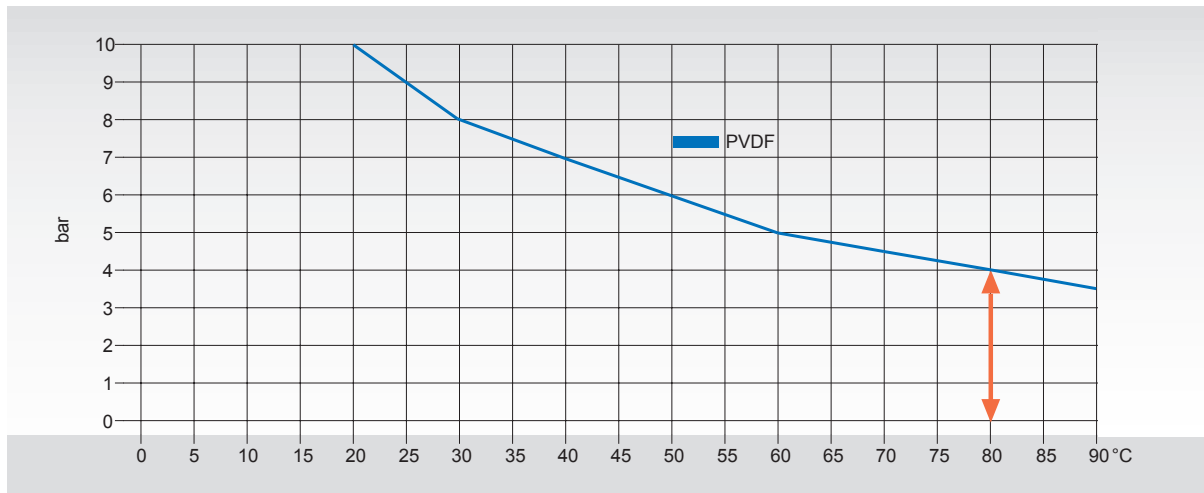


Dimensions in mm [Inches]

	D	G	H	H1	I	L	L1	L2	L3	S	SW1	SW2	T	W1	W2
2-way	ø 20 [≈ 0.79]	G 1/4" i	45 [≈ 1.77]	12.5 [≈ 0.49]	45.8 [≈ 1.80]	65 [≈ 2.56]			61 [≈ 2.40]	Max. 6 [≈ 0.24]	32 [≈ 1.26]		32 [≈ 1.26]	26 [≈ 1.02]	
3-way	ø 20 [≈ 0.79]	G 1/4" i	46.7 [≈ 1.84]	14 [≈ 0.55]	45.8 [≈ 1.80]	65 [≈ 2.56]	15 [≈ 0.59]	79.2 [≈ 3.12]		Max. 7 [≈ 0.28]		27 [≈ 1.06]	32 [≈ 1.26]		22 [≈ 0.87]
4-way	ø 20 [≈ 0.79]	G 1/4" i	45 [≈ 1.77]	12.5 [≈ 0.49]	45.8 [≈ 1.80]	65 [≈ 2.56]			61 [≈ 2.40]	Max. 6 [≈ 0.24]	32 [≈ 1.26]			26 [≈ 1.02]	
5-way	ø 20 [≈ 0.79]	G 1/4" i	≈ 49 [≈ 1.93]	14 [≈ 0.55]	ø 25 [≈ 0.98]	65 [≈ 2.56]	15 [≈ 0.59]	≈ 81.5 [≈ 3.21]		Max. 7 [≈ 0.28]		27 [≈ 1.06]			22 [≈ 0.87]

Dimensions in mm [Inches]

Max. operating pressure depending on the operating temperature



The max. operating pressure decreases with increasing temperature.
The reference temperature of 20 °C [68 °F] is based on air at 65 % humidity (DIN 50014).

Technical Data

Ball valves series L	Type 2L/PV1	Type 3L/PV1	Type 4L/PV1	Type 5L/PV1	Contact /K
Part No.	01V3000	01V3050	01V3100	01V3150	01V2005
Ball hole	I-shaped	L-shaped vertical	2 x L-shaped	L-shaped vertical	
Nominal width	NW 4*				
Max. operating pressure at 20 °C [68 °F]	PN10, 10 bar				
Flow coefficient	0.43*				
Operating and ambient temperature	-20 to +80 °C* [-4 to 176 °F]				-10 to +60 °C [14 to 140 °F]
Storage temperature	-30 to +110 °C [-22 to 230 °F]				-25 to +70 °C [-13 to 158 °F]
Operation	Manually				Manually
Type of mounting	Front plate Option for wall-mounting: mounting brackets as /K, Part No.: 01V2006 01V2004 01V2006 01V2004				Wall-mounting
Material of sample-contacting parts	PVDF, FKM*				
Connections G 1/4" i DIN ISO 228/1*	2 x	3 x	4 x	5 x	
Controlled position					1x
Electrical connection					Terminals 3 x 4 mm ²
Protection					IP20 EN 60529
Max. contact rating of change-over contact					48 V, 0.5 A, 24 W
Weight	0.07 kg [≈ 0.15 lb]	0.08 kg [≈ 0.18 lb]	0.09 kg [≈ 0.2 lb]	0.1 kg [≈ 0.22 lb]	0.14 kg [≈ 0.31 lb]

* Standard version ex stock; different designs, materials, nominal width or connections upon request.