

Spring Loaded Pressure Maintaining Valve

L45 is a 1/2" balanced, spring loaded, pressure maintaining valve, used for quick and accurate control of inlet pressures. Ideal for low, and medium pressure applications, It is manually adjustable for maintaining a set pressure of upstream media, its heavy duty construction allows it to be installed in the most arduous of environments.

For an operational overview, please refer to pages 18 and 19.



Standard Features

Valve Size:

- 1/2" BALANCED

Materials of construction:

- BODY - STAINLESS STEEL - BS EN 10088 1.4541
- SPRING HOUSING - STAINLESS STEEL - BS 3146 ANC.4 BFC. 316
- SEAT - STAINLESS STEEL - BS EN 10088 1.4401
- ELASTOMERS - HIGH NITRILE

Connections:

- LINE 1" BSPP; GAUGE 1/4" BSPP (INLET & OUTLET)

Maximum Inlet Pressure:

- 70 BAR (1015 PSI)

Set Pressure Range:

- 0.5 - 70 BAR (7 - 1015 PSI)

Media:

- LIQUID AND GASES

Weight:

- 8 Kg (18 lb)

Additional Features

- BASE MOUNTING
- ADJUSTABLE

Options

Materials of construction:

- BODY - CARBON STEEL - BS970 230M07
- SPRING HOUSING - CARBON STEEL - BS970 230M07
- TRIM, DIAPHRAGM AND 'O' RINGS - FLUROCARBON OR EPDM

Connections:

- NPT LINE AND GAUGE CONNECTIONS

Applications

- Compressors
- Dryer systems
- Filter systems
- Brewery plants
- Gas & liquid sampling
- Pump pressure control
- Research laboratories
- Aerospace ground support

Ordering Information

TYPE	MATERIAL OPTION	OUTLET PRESSURE	ELASTOMER	CONNECTIONS
L45	B9 (ST/STL) K3 (CARBON STEEL)	P (0.5 - 11 BAR) S (0.5 - 28 BAR) U (0.5 - 40 BAR) X (0.5 - 70 BAR)	N (NITRILE) V (FLUOROCARBON) E (EPDM)	(BLANK FOR BSP) 01 (NPT)

ORDERING INFORMATION EXAMPLE:

L45B9UN

Notes

Technical Specifications

Pressure

	PRESSURE
TEST (PROOF) PRESSURE	105 BAR (1524 PSI)
MAXIMUM INLET PRESSURE	70 BAR (1015 PSI)

Set Pressure Range

PRESSURE
0.5 - 11 BAR (7 - 160 PSI)
0.5 - 28 BAR (7 - 406 PSI)
0.5 - 40 BAR (7 - 580 PSI)
0.5 - 70 BAR (7 - 1015 PSI)

Leakage

STANDARD	BUBBLE TIGHT (TYPICALLY 10^{-6} atm.cm ³ /sec ⁻¹)
ON REQUEST	HELIUM LEAK TESTED TO 10^{-8} atm.cm ³ /sec ⁻¹

Temperature Range

	TEMPERATURE	BODY MATERIAL
STANDARD	-10°C TO +100°C	ALL
OPTION	-40°C TO +150°C	CONSULT IVP

Valve Size and Flow Area

NOMINAL SIZE	12.7mm (1/2")
ORIFICE AREA A1	97mm ² (0.15in ²)
PORT AREA A2	387mm ² (0.6in ²)
FLOW COEFFICIENT	Kv = 2.9 (Cv = 3.4)

Spares Code

SPARES	OUTLET PRESSURE	ELASTOMER
L45S	P (0.5 - 11 BAR) S (0.5 - 28 BAR) U (0.5 - 40 BAR) X (0.5 - 70 BAR)	N (NITRILE) V (FLUOROCARBON) E (EPDM)

Spares BOM

ITEM	DESCRIPTION	MATERIAL	QTY	REQUIRED
1	DIAPHRAGM	Rubber	1	*
2	VALVE PAD	Rubber	1	*
3	'O' RING	Rubber	1	*
4	'O' RING	Rubber	1	*
5	'O' RING	Rubber	1	*
6	'O' RING	Rubber	1	*
7	'O' RING	Rubber	1	*

DIAPHRAGM OPTION

PISTON OPTION

Technical Specifications

