

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, it's heavy duty construction allows it to be installed in the most arduous of environments.



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 - FLUOROCARBON 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 ON REQUEST	BUBBLE TIGHT (TYPICALLY 10 ⁻⁶ AT CM ³ SEC ⁻¹) HELIUM LEAK TESTED TO 10 ⁻⁸ AT 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

