

## Spring Loaded Regulator

The J45 is a heavy duty, medium/high pressure, manually adjustable, balanced, pressure regulator.

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
- TRIM, DIAPHRAGM AND 'O' RINGS - HIGH NITRILE

**Connections:**

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

**Maximum Inlet Pressure:**

- 250 BAR (3625 PSI)

**Set Pressure Range:**

- 0.5 - 70 BAR (7 - 1015 PSI)

**Media:**

- LIQUID AND GASES

**Weight:**

- 8 Kg (18 lb)

### Additional Features

- DIFFERENTIAL CONTROL

### Options

**Materials of construction:**

- BODY - CARBON STEEL - BS970 230M07
- SPRING HOUSING - CARBON STEEL - BS970 230M07
- ELASTOMERS - FLUOROCARBON OR EPDM

**Connections:**

- NPT LINE AND GAUGE CONNECTIONS

**Valve Poppets:**

- 210 BAR - RUBBER PAD
- 250 BAR - PCTFE VALVE

## Applications

- Marine industries
- Gas & Oil industries
- Off shore / aggressive environments
- Oxygen use approved
- CO<sub>2</sub> Blanketing
- Air Compressors
- Gas Analyser / Instrumentation
- Gas distribution / mixing
- Pressure test rigs
- Piloting for Dome loaded regulators
- Fire control systems
- Nace

## Ordering Information

TYPE	MATERIAL OPTION	OUTLET PRESSURE	ELASTOMER	CONNECTIONS	OPTIONS
J45	<b>B9</b> (ST/STL) <b>K3</b> (CARBON STEEL)	<b>F</b> (0.1 - 1 BAR) <b>M</b> (0.5 - 5 BAR) <b>P</b> (1 - 11 BAR) <b>S</b> (2.8 - 28 BAR) <b>X</b> (7 - 70 BAR)	<b>N</b> (NITRILE) <b>V</b> (FLUOROCARBON) <b>E</b> (EPDM)	(BLANK FOR BSP) <b>01</b> (NPT)	(BLANK FOR BASIC) <b>D</b> (DIFFERENTIAL SPRING HOUSING) <b>P</b> (PCTFE VALVE - 250 BAR INLET) <b>DP</b> (DIFFERENTIAL SPRING HOUSING AND PCTFE VALVE 250 BAR INLET)

ORDERING INFORMATION EXAMPLE:

J45B9PV01

## Notes

## Technical Specifications

### Pressure

	PRESSURE
TEST (PROOF) PRESSURE	207 Bar variant - 310 BAR (4495 PSI) 250 Bar variant - 375 BAR (5438 PSI)
MAXIMUM INLET PRESSURE	207 BAR (3000 PSI) 250 BAR (3625 PSI)

### Set Pressure Ranges

PRESSURE	SENSING
0.1 - 1 BAR	DIAPHRAGM
0.5 - 5 BAR	DIAPHRAGM
1 - 11 BAR	DIAPHRAGM
2.8 - 28 BAR	DIAPHRAGM
7 - 70 BAR	PISTON

### Leakage

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

### Temperature Range

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

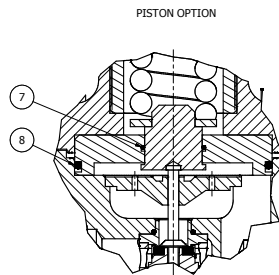
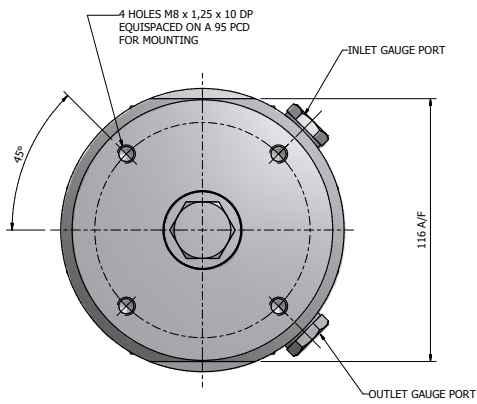
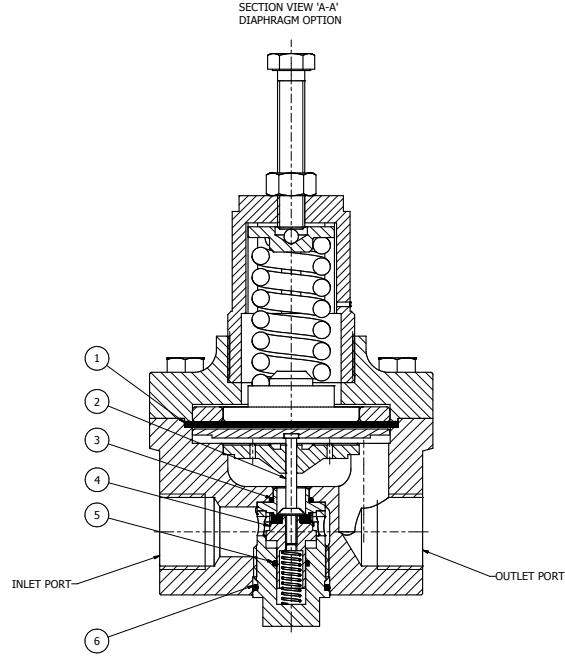
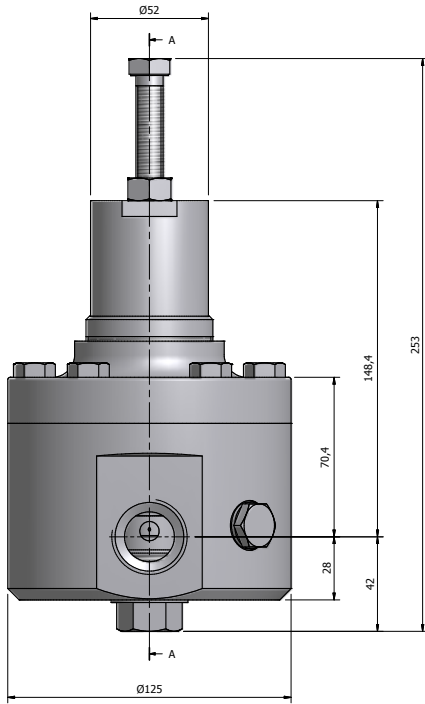
### Valve Size

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

### Spares Code

SPARES	OUTLET PRESSURE	ELASTOMER
<b>J45S</b>	<b>F</b> (0.1 - 1 BAR) <b>M</b> (0.5 - 5 BAR) <b>P</b> (1 - 11 BAR) <b>S</b> (2.8 - 28 BAR) <b>X</b> (7 - 70 BAR)	<b>N</b> (NITRILE) <b>V</b> (FLUOROCARBON) <b>E</b> (EPDM)

## Technical Specifications



## Spares BOM

ITEM	DESCRIPTION	MATERIAL	QTY	REQUIRED
1	DIAPHRAGM	Rubber	1	*
2	PUSH ROD	BS 3S 145 (NORMALISED)	1	*
3	'O' RING	Rubber	1	*
4	VALVE ASSY	Various	1	*
5	'O' RING	Rubber	1	*
6	'O' RING	Rubber	1	*
7	'O' RING	Rubber	1	*
8	'O' RING	Rubber	1	*

DIAPHRAGM OPTION

PISTON OPTION