

- > Port size: 3/4" ISO G/NPT
- > Wide choice of valve sizes for optimized performance
- > Exceptional pressure control at low to medium outlet pressure
- > Option for Non-Relieving or Relieving



**Technical features**

J46 series spring loaded pressure regulator offer exceptional pressure control and are ideal for low and medium pressure applications.

**Applications:**

- Gas mixing
- Gas distribution
- Chemical Processing
- Manufacturing processes
- Purging & charging systems
- Air compressors

**Medium:**

Liquid and gases  
**Maximum inlet pressure:**  
 80 bar (1160 psi)  
**Outlet pressure range:**  
 0,1 ... 1 bar (1.4 ... 15 psi)  
 0,3 ... 5 bar (4.4 ... 73 psi)  
 0,5 ... 11 bar (7.3 ... 160 psi)  
 10 ... 33 bar (145 ... 479 psi)  
 For outlet range 'F' (0,1-1 bar) restrict inlet pressure to 50 bar, for 1/4" & 3/16" valve size and 20 bar, for 3/8" & 1/2" valve size.

**Leakage:**

Bubble tight (standard, typically 10<sup>-6</sup> atm.cm<sup>3</sup>/sec<sup>-1</sup>)  
 Helium leak tested to 10<sup>-8</sup> atm.cm<sup>3</sup>/sec<sup>-1</sup> (on request)  
**Ambient/Media temperature:**  
 NBR: -10 ... +100°C (+14 ... +202°F)  
 FPM: -20 ... +150°C (-4 ... +302°F)  
 EPDM: -30 ... +115°C (-22 ... +239°F)  
 Aluminium: -40 ... +150°C (-40 ... +302°F)  
 Stainless Steel: -40 ... +150°C (-40 ... +302°F)

**Materials:**

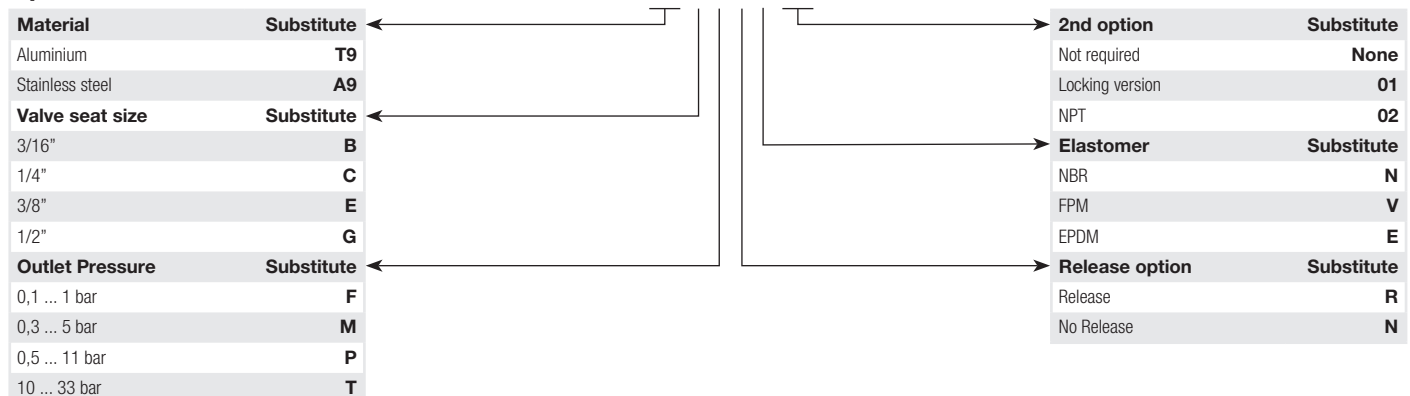
Body: Stainless steel BS EN 10088 1.4401 or aluminium alloy L102  
 Spring housing: Stainless steel 316  
 Seat: Stainless steel BS EN 10088 1.4401  
 Trim: Stainless steel/PCTFE  
 Handwheel: PA  
 Elastomers: NBR, FPM, EPDM

**Technical data**

Symbol	Port size	Valve seat size		Seat flow area		Port flow area		Flow coefficient		Weight	Model
		(mm)	(inch)	(mm <sup>2</sup> )	(inch <sup>2</sup> )	(mm <sup>2</sup> )	(inch <sup>2</sup> )	(Kv)	(Cv)	(kg)	
	3/4"	4,7	0.18	14	0.021	126	1.96	0,43	0.50	3 (Aluminium)	J46
		6,35	0.25	24	0.037	126	1.96	0,72	0.84	5 (Stainless steel)	
		9,52	0.37	63	0.098	126	1.96	1,90	2.24		
		12,7	0.50	95	0.147	126	1.96	2,76	3.35		

**Option selector**

J46★★★★★★



**Option selector**

**J46S★★★★**

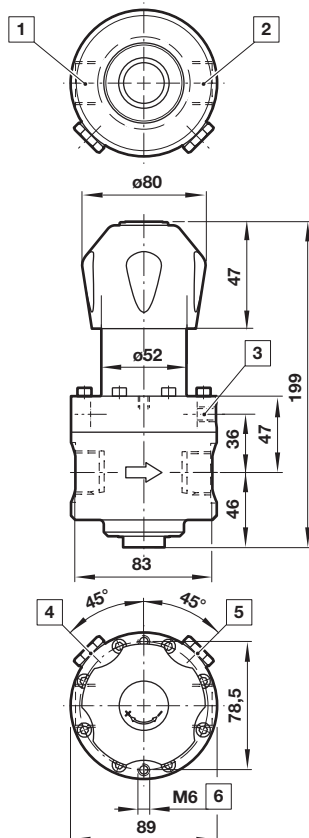
<b>Valve seat size</b>	<b>Substitute</b>
3/16"	<b>B</b>
1/4"	<b>C</b>
3/8"	<b>E</b>
1/2"	<b>G</b>
<b>Outlet Pressure</b>	<b>Substitute</b>
0,1 ... 1 bar	<b>F</b>
0,3 ... 5 bar	<b>M</b>
0,5 ... 11 bar	<b>P</b>
10 ... 33 bar	<b>T</b>

<b>Elastomer</b>	<b>Substitute</b>
NBR	<b>N</b>
FPM	<b>V</b>
EPDM	<b>E</b>
<b>Release option</b>	<b>Substitute</b>
Release	<b>R</b>
No Release	<b>N</b>

**Spares BOM**

Description	Material	QTY	No release	Release
'O'-Ring	Rubber	1	X	X
Needle bearing	Steel	1	X	X
Bearing washer	Steel	2	X	X
Diaphragm	Rubber	1	X	—
'O'-Ring	Rubber	1	X	X
Seat	St/St 1.0088 1.4057	2	X	X
Valve assy	Various	1	X	X
'O'-Ring	Rubber	1	X	X
Diaphragm assy	Various	1	—	X
'O'-Ring	Rubber	1	x	X

**Dimensions**



Dimensions in mm  
Projection/First angle



- 1 G3/4 inlet port
- 2 G3/4 outlet port
- 3 G1/8 relief port
- 4 G1/4 inlet gauge port, A/F 19 mm
- 5 G1/4 outlet gauge port, A/F 19 mm
- 6 Mounting thread, 12 mm deep

### Warning

Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering, Thompson Valves Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.