

- > **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 barg (1160 psig)

Outlet pressure range:

0,1 ... 1 barg (1.4 ... 15 psig)
 0,3 ... 5 barg (4.4 ... 73 psig)
 0,5 ... 11 barg (7.3 ... 160 psig)
 10 ... 33 barg (145 ... 479 psig)
 For outlet range 'F' (0,1-1 barg) restrict inlet pressure to 50 barg, for 1/4" & 3/16" valve size and 20 barg, for 3/8" & 1/2" valve size.

Leakage:

Bubble tight (standard, typically 10⁻⁶ atm.cm³/sec⁻¹)
 Helium leak tested to 10⁻⁸ atm.cm³/sec⁻¹ (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:

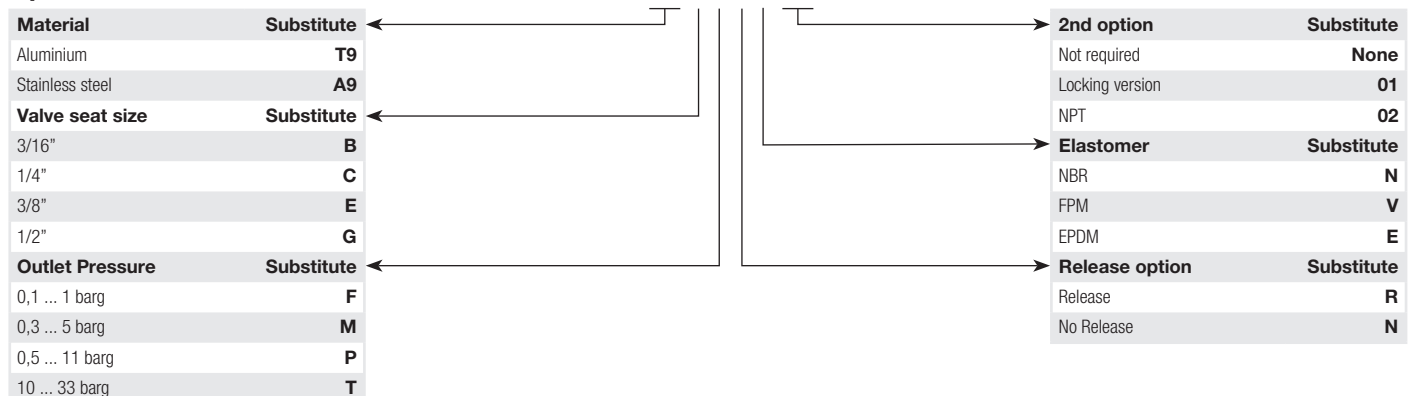
Body: Stainless steel BS EN 10088 1.4401 or aluminium alloy L102
 Spring housing: stainless steel 316
 Seat: stainless steel BS EN 10088 1.4401
 Trim: stainless steel/PCTFE
 Handwheel: PA
 Elastomers: NBR, FPM, EPDM

Technical data

Symbol	Port size	Valve seat size (mm)	Valve seat size (inch)	Seat flow area (mm ²)	Seat flow area (inch ²)	Port flow area (mm ²)	Port flow area (inch ²)	Flow coefficient (Kv)	Flow coefficient (Cv)	Weight (kg)	Model
	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★★★★

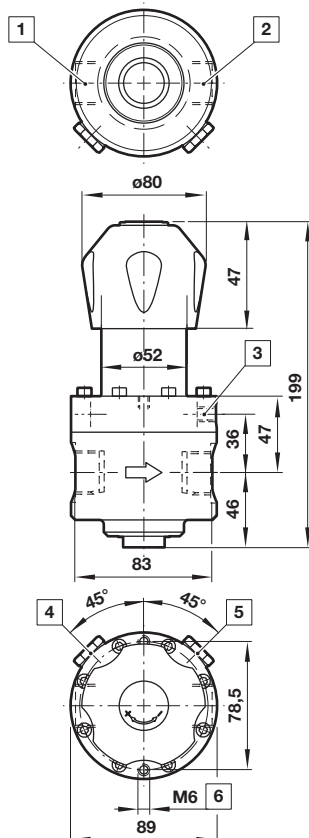
Valve seat size	Substitute
3/16"	B
1/4"	C
3/8"	E
1/2"	G
Outlet Pressure	Substitute
0,1 ... 1 barg	F
0,3 ... 5 barg	M
0,5 ... 11 barg	P
10 ... 33 barg	T

Elastomer	Substitute
NBR	N
FPM	V
EPDM	E
Release option	Substitute
Release	R
No Release	N

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 G 3/4 inlet port
- 2 G 3/4 outlet port
- 3 G 1/8 relief port
- 4 G 1/4 inlet gauge port, A/F 19 mm
- 5 G 1/4 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**«.

Before using these products with fluids other than those specified 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.