

Spring Loaded Regulator

J46 is a unbalanced valve, diaphragm sensed, spring-loaded pressure regulator, used for quick control of outlet pressure. Accurate and reliable through manual operation, ideal for low and medium pressure applications.

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



Standard Features

Valve Size:

- 3/8" UNBALANCED

Materials of construction:

- BODY - ALUMINIUM ALLOY - L102
- SPRING HOUSING - STAINLESS STEEL - 316
- SEAT - STAINLESS STEEL - BS EN 10088 1.4401
- TRIM - STAINLESS STEEL/PCTFE
- ELASTOMERS - HIGH NITRILE
- HANDWHEEL - NYLON

Connections:

- LINE 3/4" BSPP; GAUGE 1/4" BSPP (INLET & OUTLET)

Maximum Inlet Pressure:

- 80 BAR (1160 PSI)

Outlet Pressure Range:

- 0.1 - 33 BAR (1.5 - 475 PSI)

Pressure Release for down stream venting:

- VENTING WITH 1/8" BSPP CONNECTION

Media:

- LIQUID AND GASES

Weight:

- 4.2 Kg ST STL; 2.5 Kg ALU

Additional Features

- DIFFERENTIAL CONTROL
- NON VENTING
- LOCKING DEVICE
- PANEL MOUNTING BRACKET

Options

Valve Size:

- 3/16" UNBALANCED
- 1/4" UNBALANCED
- 1/2" UNBALANCED

Materials of construction:

- BODY - STAINLESS STEEL - BS EN 10088 1.4401
- ELASTOMERS - FLUOROCARBON OR EPDM

Connections:

- NPT LINE, GAUGE AND VENT CONNECTIONS

Applications

- Gas mixing
- Gas distribution
- Chemical Processing
- Manufacturing processes
- Purging & charging systems
- Air compressors
- Analyser systems
- Engine air starter systems
- Oxygen service

Ordering Information

TYPE	MATERIAL OPTION	VALVE SEAT SIZE	OUTLET PRESSURE	RELEASE OPTION	ELASTOMER	2ND OPTIONS
J46	A9 (ST/STL) T9 (ALUMINIUM)	B (3/16") C (1/4") E (3/8") G (1/2")	F (0.1-1.03 BAR) M (0.3-5.15BAR) P (0.5-11 BAR) T (10-33 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)	(BLANK NOT REQUIRED) 01 (LOCKING VERSION) 02 (NPT)

ORDERING INFORMATION EXAMPLE:

J46A9CPRV

Notes

Technical Specifications

Pressure

	PRESSURE
TEST (PROOF) PRESSURE	120 BAR (1740 PSI)
MAXIMUM INLET PRESSURE	80 BAR (1160 PSI) RESTRICT TO 50 BAR ON 0.1 TO 1 BAR OUTLET VERSIONS

Outlet Pressure Ranges

PRESSURE	VALVE SIZE
0.1 - 1.03 BAR (1.5 - 15 PSI)	3/16" 1/4"
0.3 - 5.15 BAR (4 - 75 PSI)	3/16" 1/4" 3/8" 1/2"
0.5 - 11 BAR (7 - 160 PSI)	3/16" 1/4" 3/8" 1/2"
10 - 33 BAR (145 - 480 PSI)	3/16" 1/4" 3/8" 1/2"

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

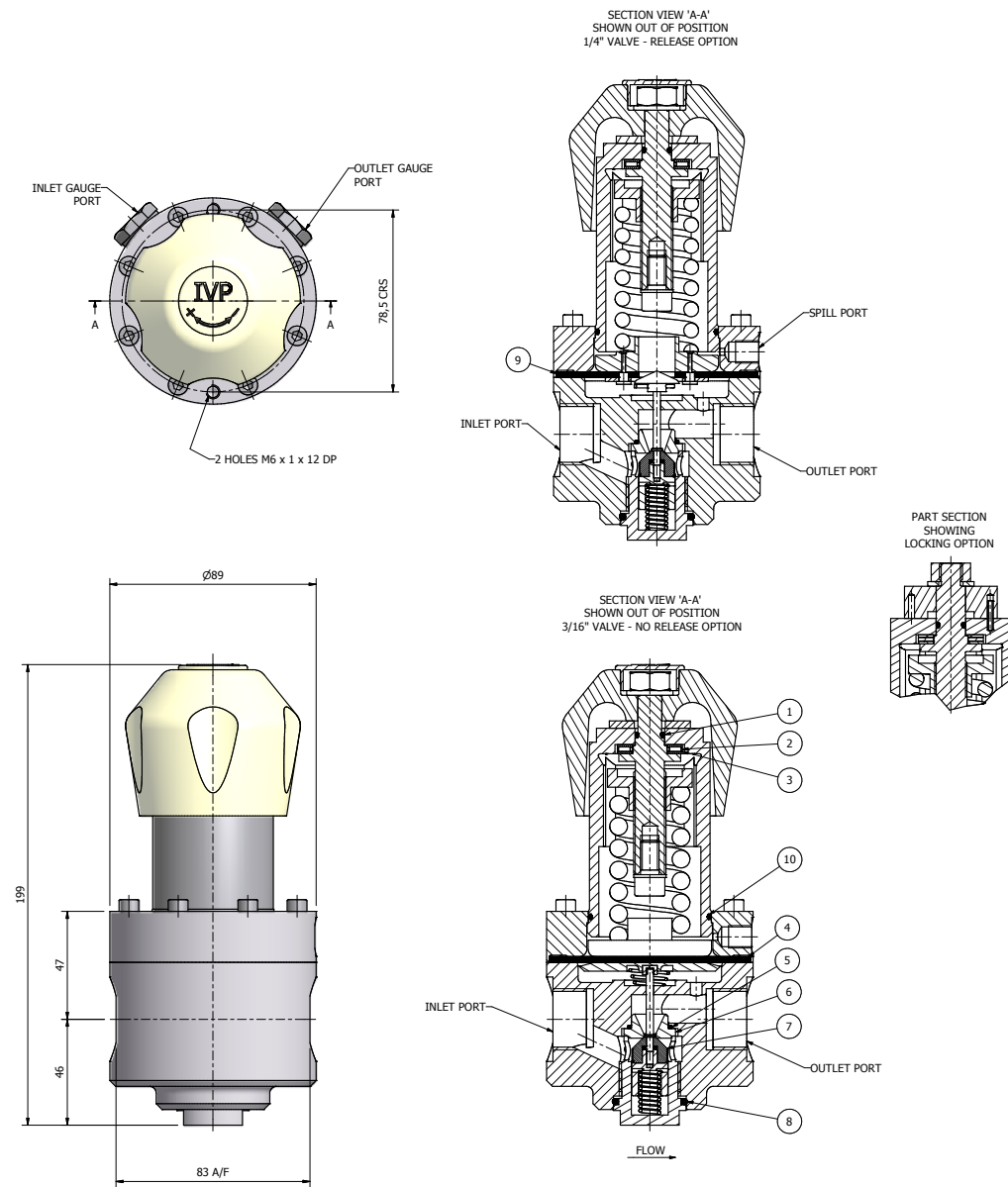
Valve Size and flow area

	3/16"	1/4"	3/8"	1/2"
NOMINAL SIZE	4.7mm (3/16")	6.35mm (1/4")	9.52mm (3/8")	12.7mm (1/2")
ORIFICE AREA A1	014mm ² (0.021in ²)	24mm ² (0.037 in ²)	63mm ² (0.098 in ²)	95mm ² (0.147 in ²)
PORT AREA A2	126mm ² (1.96in ²)	126mm ² (1.96in ²)	126mm ² (1.96in ²)	126mm ² (1.96in ²)
FLOW COEFFICIENT	Kv = 0.43 (Cv = 0.5)	Kv = 0.72 (Cv = 0.84)	Kv = 1.9 (Cv = 2.24)	Kv = 2.76 (Cv = 3.35)

Spares Code

SPARES	VALVE SEAT SIZE	OUTLET PRESSURE	RELEASE OPTION	ELASTOMER
J46S	B (3/16") C (1/4") E (3/8") G (1/2")	F (0.1 - 1.03 BAR) M (0.3-5.15 BAR) P (0.5-11 BAR) T (10-33 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)

Technical Specifications



Spares BOM

ITEM	DESCRIPTION	MATERIAL	QTY	REQUIRED	
1	'O' RING	Rubber	1	*	*
2	NEEDLE BEARING	Steel	1	*	*
3	BEARING WASHER	Steel	2	*	*
4	DIAPHRAGM	Rubber	1	*	*
5	'O' RING	Rubber	1	*	*
6	SEAT	St/Stl 1.0088 1.4057	2	*	*
7	VALVE ASSY	Various	1	*	*
8	'O' RING	Rubber	1	*	*
9	DIAPHRAGM ASSY	Various	1		*
10	'O' RING	Rubber			

NO RELEASE

RELEASE

