

J123

Gas Pressure Regulator Inlet Pressure 4 bar DN 50mm, 80mm & 100mm



Applications

- Distribution
- Industrial
- Commercial

Brief information

Operation: The J123 is a spring loaded distribution and industrial regulator. It can be used as a monitor or active regulator. Designed for use in installations complying with the requirements of BGC/PS/E26 (formerly DIR6) and IGE/TD/10.

Application:

All units are suitable for use with natural, liquefied petroleum and manufactured gases and can be installed in horizontal or vertical pipelines. The regulator must be externally impulsed from a point at least 15 pipe diameters downstream.

The J123HP is also available with outlet pressures up to 1.015 bar (see separate catalogue).

Control: A comprehensive range of springs is available, as described overleaf.

Technical Data:

Maximum inlet pressure:	4 bar (60 psig)
Maximum outlet Pressure:	350mb (5 psig)

Approvals: The J123 has been approved to modules B + D of the PED 97/23/EC by BSI (Notified body No. 0086). It is classified as Category IV equipment and a pressure accessory.

Servicing: By removing only four nuts the J123 module can be withdrawn from the body without disturbing the pipework. This allows routine servicing and maintenance to be undertaken under workshop conditions. A standard soft spares kit is available for all sizes.

50mm	reference number SK12309-01
80mm	reference number SK12311-01
100mm	reference number SK12312-01

Capacity: The flow rate can be calculated using:

$$Q = K \sqrt{P_o (P_i - P_o)} \quad \text{when } P_i / P_o < 1.894$$
$$Q = K P_i / 2 \quad \text{when } P_i / P_o > 1.894$$

Where

Q	=	Flow Rate m ³ / hr (SG = 0.6)
P _i	=	Inlet Pressure Absolute (Bar)
P _o	=	Outlet Pressure Absolute (Bar)
K	=	Flow Constant (see overleaf)

Assuming absolute atmospheric pressure = 1.014 Bar

To convert to ft³ / hr multiply by 35.315

To convert to specific gravities other than 0.6 multiply by

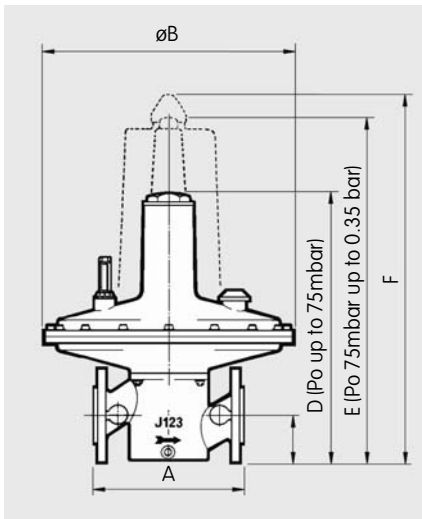
$$\sqrt{\frac{0.6}{\text{specific gravity of gas}}}$$

Main features

- Sizes 50mm, 80mm, 100mm
- Temperature range
-20°C to +70°C
- Flanged to BS EN 1092-2 NP16 or ANSI unless otherwise requested.
- Fully inlet pressure balanced
- Full lock-up capability
- External impulse
- Spring loaded
- Valve Travel Indicator
- Breather Hole Dust Cap
- Excellent outlet pressure control
- Can be installed in horizontal or vertical pipework.
- Very high flow capacity
- Can be used for monitor applications



J123: Industrial Regulator



Material Specifications

Components	Specification
Body and Valve Seat Holder	Nodular Iron
Diaphragm Case and Top Cover	Aluminium Alloy
Main & Rolling Secondary Diaphragm	Reinforced Nitrile Synthetic Rubber
Valve Spindle, Valve Seat, Annular Valve Spindle Guide	Stainless Steel
Main Diaphragm Clamping Plates, Valve Disc Clamping Washer and Holder	Mild Steel, Zinc Plated and Passivated
Secondary Diaphragm Clamping Plates and Top Spring Holder.	Aluminium Alloy
Valve Disc and "O" rings	Nitrile Synthetic Rubber
Loading Springs	Carbon Steel, Zinc Plated and Passivated

Dimensions and Weights

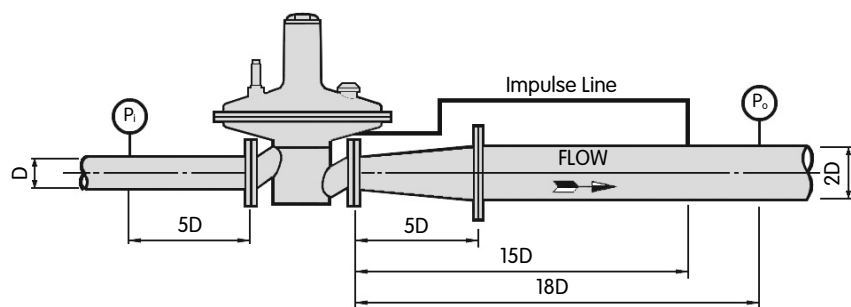
SIZE	A	B	C	D	E	F	Weight (Kg)	'K' Factor
50	250	426	83	489	638	-	25	1830
80	320	426	105	545	694	-	36	4880
100	350	540	125	-	-	756	80	6780

Loading Springs

Spring Range	50mm and 80mm		100mm		
	Part No.	Colour Code	Part No.	Colour Code	
Low Pressure	10 – 25mbar (4 – 10"wg)	J12311-024	Dark Blue / Gold	Not Available	
	20 – 40mbar (8 – 16"wg)	J4811-029	White	J12312-026	Red / Silver
	35 – 50mbar (14 – 20"wg)	J4811-030	White / Red	J12312-027	Red / Pink
	45 – 75mbar (18 – 30"wg)	J12311-023	Dark Blue / Yellow	J12312-028	Red / Light Green
Medium Pressure	70 – 100mbar (28 – 40"wg)	J12311-022	Dark Blue / Orange	J12312-029	Red / Dark Blue
	100 – 150mbar (40 – 60"wg)	J12311-021	Dark Blue / Dark Green	J12312-030	Red / Dark Green
	0.15 – 0.2 Bar (2.2 – 3 psig)	J12311-020	Dark Blue / Light Blue	J12312-031	Red / Light Blue
	0.2 – 0.35 Bar (3 – 5 psig)	J12311-019	Dark Blue / Brown	J12312-032	Red / Brown

Quality:

Elster Jeavons is committed to a programme of continuous quality enhancement. All equipment designed and manufactured by the Elster-Instromet group benefits from the group's quality assurance standards which are approved to EN ISO9001:2008.



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