

J48

Gas Pressure Regulator

Inlet Pressure 5 psig

Nominal Diameter 2½" - 6"



Applications

- Industrial
- Commercial

Brief information

Operation: The J48 is a highly versatile proven range of Industrial Low Pressure Regulators, suitable for a wide range of pressure reduction applications. The J48 is available in sizes from ½" to 3", the smaller sized units (up to 2") being described in a separate leaflet.

Application: The J48 is a service and appliance regulator suitable for a wide range of domestic, commercial and industrial applications. All units are designed for natural, liquefied petroleum and manufactured gases.

The J48 can be installed in both horizontal and vertical pipelines, with certain sizes available with angled connections for meter services applications. The J48 has positive lock up.

Control: A comprehensive range of loading springs is available, as described overleaf. The outlet pressure can be easily and accurately adjusted by turning the spring adjustment unit located under the top cap.

If required the units can be supplied factory set with a security seal at extra cost.

Technical Data: Maximum inlet pressure: 5 psig
Maximum outlet Pressure: Low Pressure Version: 30"wc
High Pressure Version: 40"wc

Approvals

Jeavons J48 Series models are AGA / CGA approved to the following specifications:

CGA 6.3 - M95 / ANSI Z21.18 – 1995
CGA 6.3a - M98 / ANSI Z21.18a – 1998
CGA 6.3b - M100 / ANSI Z21.18b – 2000

Servicing: The J48 has been designed for ease of access, inspection and servicing of all internal components. A standard soft spares kit is available for all sizes.

2½" and 3" reference number 52980K006

Main features

- Sizes 2½" screwed and 3" screwed or flanged (for ¾" – 2" see separate leaflet)
- Temperature range -4°F to +158°F
- Threaded connections to NPT (other threads may be available upon request)
- Flanged connections to ANSI125 (other flanges may be available upon request)
- Fully inlet pressure balanced
- Full lock-up capability
- Internal impulse
- Spring loaded
- Excellent outlet pressure control



J48: Low Pressure Regulator

Regulating Capacities

All capacities in SCFH 0.64 s.g.

Setting Flow Rate: 688 SCFH

REGULATOR SIZE: 2½"

OUTLET PRESSURE SETTING ("wc) / DROOP (%)

	4"		7"		8"		11"		20"		34"	
	10%	20%	10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "wc												
6	2931	4908	-	-	-	-	-	-	-	-	-	-
8	3001	4979	3673	6312	-	-	-	-	-	-	-	-
10	3355	5509	3885	7169	4167	7769	-	-	-	-	-	-
Pin PSIG												
0.50	3461	5792	4697	7769	4909	8511	4591	8758	-	-	-	-
0.75	4026	6109	5439	8440	5615	8793	5862	10029	6145	10428	-	-
1.00	4167	6675	5933	9005	6109	9464	6463	10524	6886	12396	-	-
1.50	4803	6180	6039	9358	6321	9747	6816	10983	7346	13879	8935	18470
2.00	5403	6357	6215	10347	6463	10383	7063	11160	7699	9747	9994	20977
3.00	6498	7204	6710	8334	6816	10700	6004	11654	8687	14691	12148	21366
5.00	8264	8440	7769	10630	8687	9924	9111	9994	9464	15680	13172	21648

REGULATOR SIZE: 3"

OUTLET PRESSURE SETTING ("wc) / DROOP (%)

Setting Flow Rate: 688 SCFH

	4"		7"		8"		11"		20"		34"	
	10%	20%	10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "wc												
6	3284	5509	-	-	-	-	-	-	-	-	-	-
8	3743	5968	4061	7522	-	-	-	-	-	-	-	-
10	4556	6463	5297	9288	5403	10383	-	-	-	-	-	-
Pin PSIG												
0.50	5827	8264	7063	9712	7275	11265	5050	11689	-	-	-	-
0.75	7734	9464	9924	12148	11831	21366	7522	12360	4909	11124	-	-
1.00	9712	11689	11477	14444	14797	22531	10171	13067	7240	16563	-	-
1.50	11477	13702	15221	18328	18752	19635	11407	14938	9924	19211	8935	21401
2.00	14126	15680	20306	21648	20977	22284	14832	16104	11619	21366	13031	24721
3.00	8405	11972	22425	25568	16280	21048	18117	20659	9747	20483	15892	25603
5.00	8405	9712	23838	28040	23520	26239	23167	25603	21860	25815	13031	25038

J48: Low Pressure Regulator

The tests are performed with the regulator set at a constant inlet pressure, a predetermined flow rate and the required outlet pressure. The flow rate is then increased whilst keeping the inlet pressure constant. The capacities are recorded when the outlet pressure has fallen by 10% and 20% from the set point.

The capacities on the previous pages are given in SCFH of natural gas (0.64 SG). For other gases multiply the capacity by:

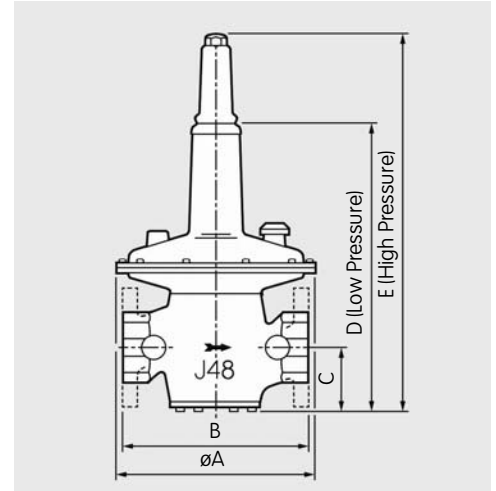
$$\sqrt{\frac{0.64}{\text{gas sg}}}$$

GAS	SG
Air	1.00
Towns Gas	0.50
Propane	1.53
Propane / Air	1.20

J48: Low Pressure Regulator

Dimensions and Weights

SIZE	A	B	C	D	E	Weight (Kg)
2½"	335	310	107	482	678	12.0
3"	335	310	107	482	678	12.0



Material Specifications

A summary of the material specification for the J48 is given for reference. All material has been selected to provide maximum durability and reliability in service.

Components	Specification
Body, diaphragm case, top cover, top cap, base plate, valve disc holder, valve disc clamping washer.	Aluminum Alloy
Valve spindle, spring adjusting screw, diaphragm spacer, diaphragm plates, reinforcing plate, secondary diaphragm washer.	Mild steel
Spring holder	Brass
Main diaphragm, secondary diaphragm.	Fabric reinforced Nitrile (Buna)
Valve discs, "O" rings	Nitrile (Buna)
Springs	Carbon Steel

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 ISO9001:2000.

Loading Springs

	Spring Range ("wc)	Part No.	Color Code
Low Pressure	2.6 – 6	J4811-020	White / Yellow
	5 - 10	J4811-021	White / Black
	9 – 15	J4811-022	White / Orange
	14 – 20	J4811-028	White / Brown
	18 - 30	J4811-029	White
High Pressure	28 - 40	J4811-030	White / Red
	40 – 60	J4811-031	White / Gray

Contact

USA
 Elster American Meter
 2221 Industrial Road
 Nebraska City, NE 68410-6889
 T +1 402 873 8200
 F +1 402 873 7616
 www.elster-meterservices.com

J483US01

A19.2.2008

All rights reserved

Subject to change without prior notice