

RF1034 Datasheet

PRESSURE REGULATOR FOR HYDROGEN
REFUELLING APPLICATIONS

● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 1,034 bar (15,000 psi) | Max Outlet: 1,034 bar (15,000 psi) | Cv 0.5/1.0



Locking cap
available.



INTRODUCING THE RF1034...

The RF1034 is a piston-sensed pressure regulator, designed for high pressure hydrogen refuelling applications up to 1,034 bar (15,000 psi).

With a **balanced main valve design** as standard, the RF1034 offers accurate control of the high pressures typically associated with hydrogen refuelling points.

The high-flow RF1034 is designed to ISO 19880-3 and offers convenient access to the seat cartridge in the base of the regulator for simplified servicing.

SPECIFICATION

Max. Rated Inlet Pressure	1,034 bar (15,000 psi)
Outlet Ranges	Up to 1,034 bar (15,000 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	Pneumatic: 11.4kg (25.1lbs) Spring: 7kg (15.4lbs) Electric: 8kg (17.6lbs)

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Main Valve	Inconel® 718 (UNS N07718)
Seat	Tecasint® 2011
Valve Spring	Elgiloy® / Phynox®
Sensor	ASTM A479 316/316L Stainless Steel
O-Rings	FKM/FPM
Filter	30 Microns

Note: Pressure regulator rating may be limited by connection type, Cv and/or seat material. Contact the office for specific pressure or temperature requirements.

FEATURES AND BENEFITS

1 HIGH-FLOW

Cv 0.5 or 1.0 for refuelling times as per SAE J2601 refuelling protocol.

2 DESIGNED TO ISO 19880-3

For safe performance of high pressure gas valves used in gaseous hydrogen stations.

3 VARIOUS ACTUATOR OPTIONS

Electrically actuated, pneumatically actuated or spring-loaded options for control of regulator.

4 EASY ACCESS TO SEAT CARTRIDGE

Simplified servicing through the base of the regulator.

Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues. Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



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PAGE:
1 OF 4

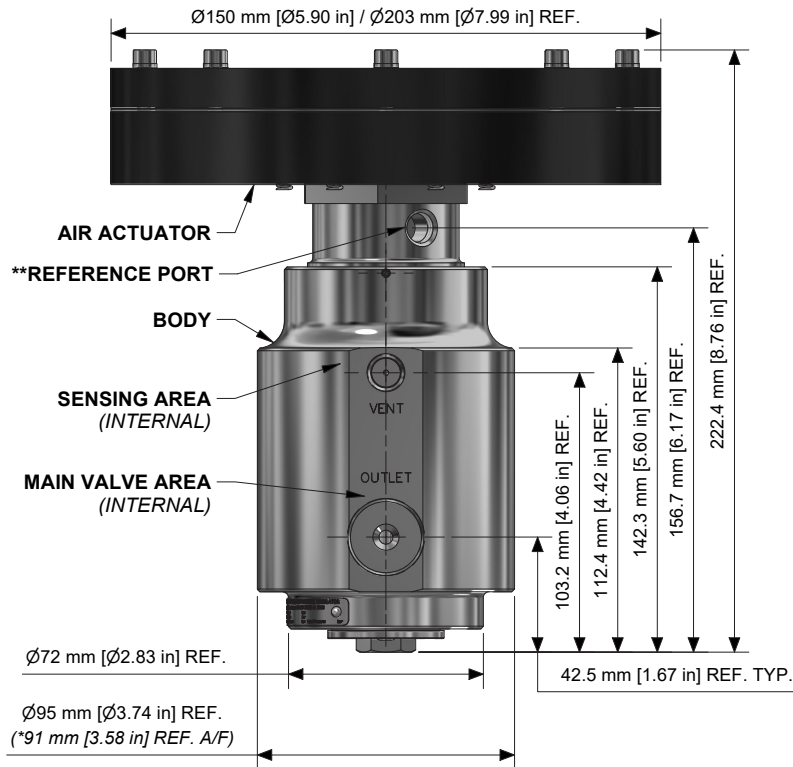
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DRAWING AND INSTALLATION DIMENSIONS

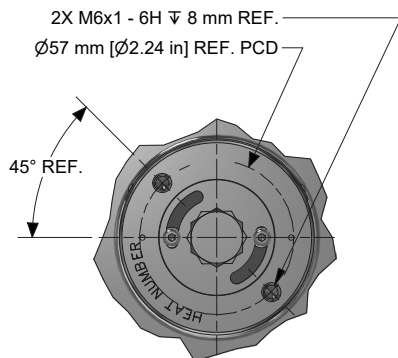
Dimensions shown for standard configurations only - please contact the office for other options.



PNEUMATICALLY ACTUATED

* ACROSS FLATS BETWEEN INLET AND OUTLET PORTS

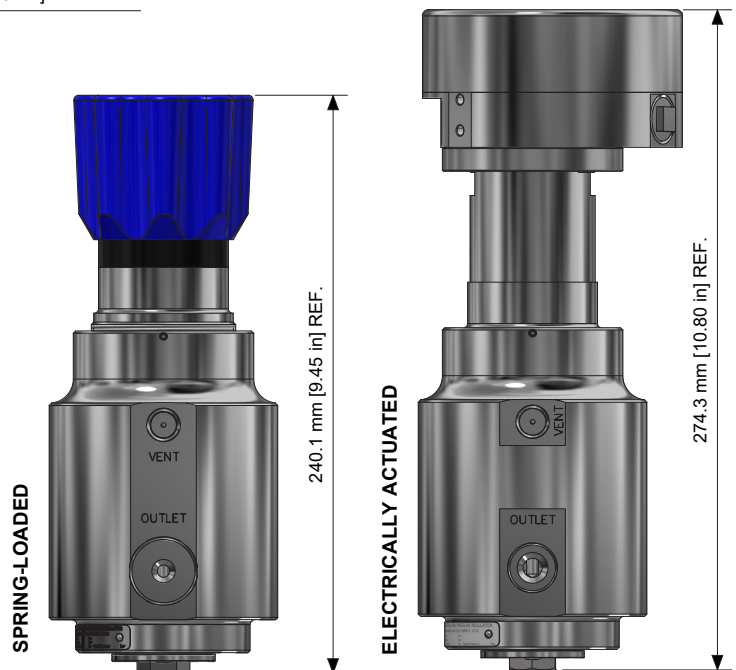
** NOTE THE REFERENCE PORT ORIENTATION IS NOT FIXED



PANEL MOUNT HOLES

Note:

All gauge ports are 1/4" MP as standard.



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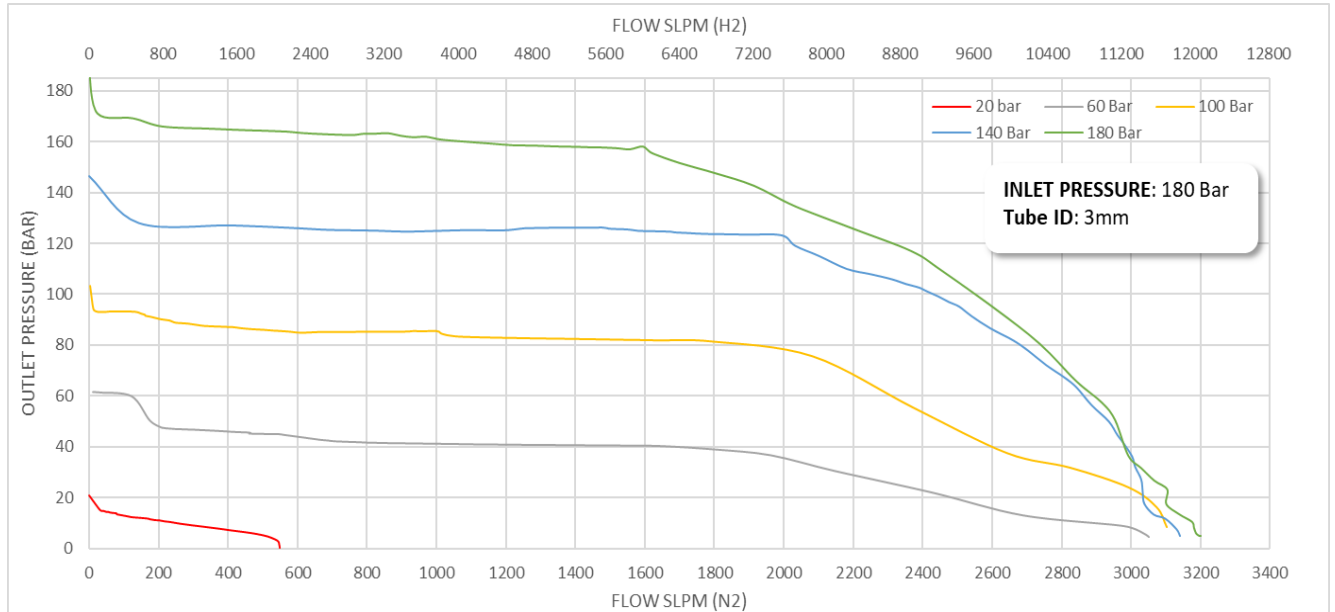
PAGE:
2 OF 4

RF1034 Datasheet

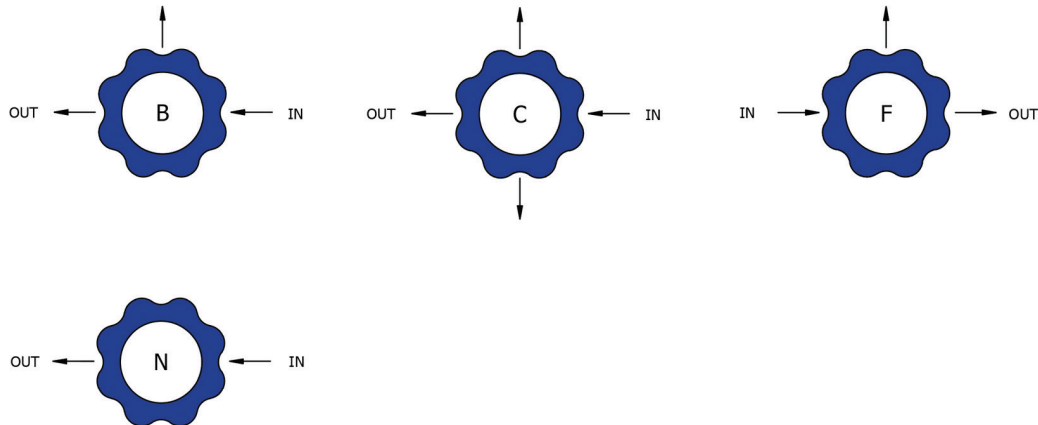
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FLOW CURVE (Cv 0.5)



PORTING CONFIGURATIONS



Note: Additional porting configurations are available - please contact the office for further information.

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PAGE:
3 OF 4

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ORDERING INFORMATION

To build a Pressure Tech part number, simply combine the characters identified below in sequence:

RF1034	10	S	1034A	V	04H	N	NV	XXX	
REGULATOR RF1034	CV VALUE 05 – 0.5 10 – 1.0	BODY MATERIAL** S – ASTM A479 316/316L Stainless Steel	CONTROL PRESSURE 50 – Up to 50 bar (725 psi) 100 – Up to 100 bar (1,450 psi) 140 – Up to 140 bar (2,030 psi)*** 150 – Up to 150 bar (2,175 psi) 200 – Up to 200 bar (2,900 psi) 414 – Up to 414 bar (6,000 psi) 500 – Up to 500 bar (7,250 psi) 600 – Up to 600 bar (8,700 psi)*** 690 – Up to 690 bar (10,000 psi) 1,034 – Up to 1,034 bar (15,000 psi)	LOADING MECHANISM A – Pneumatically Actuated E – Electrically Actuated EL – Low-Speed Electrically Actuated S – Spring-Loaded	MODIFICATIONS* Contact the office for further information.	VENTING NV – Non-Venting SV – Self-Venting (Captured)	PORTING CONFIGURATION N - No gauge ports Refer to page 3 for porting options.	CONNECTION** 03A – 3/8" Medium Pressure (Cv 0.5 only) 03H – 3/8" High Pressure (Cv 0.5 only) 04A – 9/16" Medium Pressure 04H – 9/16" High Pressure	SEAT MATERIAL A – Acetal-C (POM) M – Polysulfone (PSU) N – Polyamide Imide (PAI) O – Tecapeek® V – Tecasint® 2011 W – Vespel®

OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-RF1034-05-Q-1034A-V...	FKM/FPM o-ring.

Note: Ancillary equipment also available

TRADEMARKS: Inconel® is a registered trademark of Inco Alloys International
Tecasint® is a registered trademark of Ensinger GmbH

* Where applicable
** Other connections/materials may be available
*** Air-loaded only

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PAGE:
4 OF 4