

BP-LF691 Datasheet

LOW-FLOW BACK PRESSURE REGULATOR



Gas
 Liquid
 Diaphragm
 Piston
 Max Rating: 1,034bar (15,000psi)
 Control Range: 900bar (13,050psi)
 Cv 0.1



INTRODUCING THE BP-LF691...

The BP-LF691 is a piston-sensed low-flow back pressure regulator for gas or liquid applications. The gas version includes a thermoplastic seat, whilst the liquid version features metal-to-metal seating. In addition to Stainless Steel, it is available in a range of materials including Titanium, Vespel® and Hastelloy®.

The BP-LF691 accurately controls inlet pressure and vents excess pressure back via the threaded NPT or MP outlet port of up to ½".

SPECIFICATION

Max Rating	1,034bar (15,000psi)
Control Range	Up to 900bar (13,050psi)
Design Proof Pressure	150% max WP
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	2.9kg (6.4lbs)

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) AISI 17-4 Stainless Steel (UNS S17400)
Main Valve Pin	Inconel® 718 (UNS N07718)
Seat	PEEK™ or AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Valve Spring	Phynox® (R30003)
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Handwheel	Nylon
'O'-Ring Seals	NBR FKM / FPM
Loading Spring	Alloy Spring Steel

FEATURES AND BENEFITS

1 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

2 RANGE OF SEAT MATERIALS

Covers a wide range of applications.

3 OPTIONAL AIR ACTUATOR

Fine remote adjustment.

4 LOW CV (0.02)

Accurate control of process media.

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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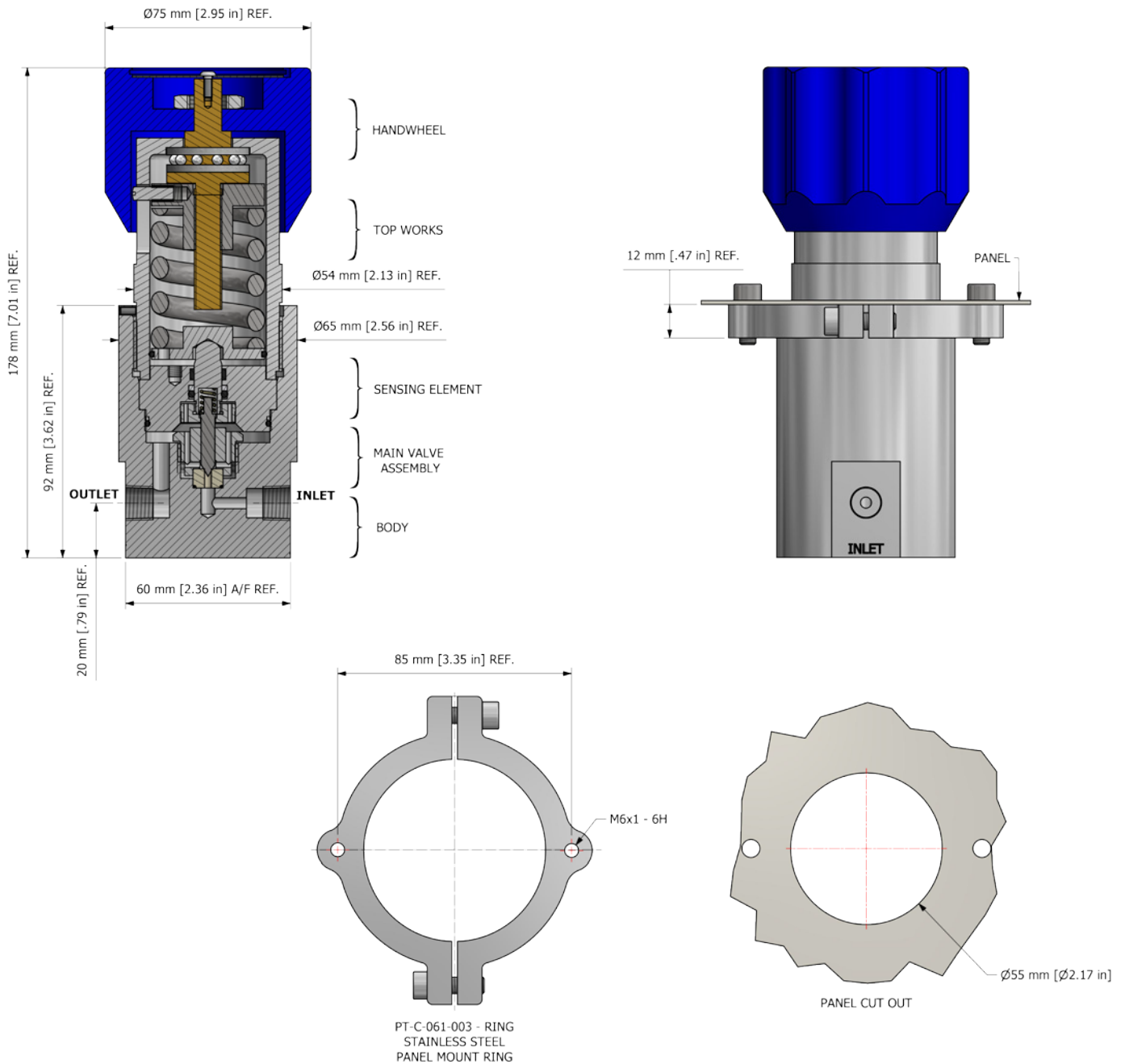
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● Gas ● Liquid | ● Diaphragm ● Piston | Max Rating: 1,034bar (15,000psi) | Control Range: 900bar (13,050psi) | Cv 0.1

DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/4" NPT option - please contact the office for additional connection options.



Note:

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

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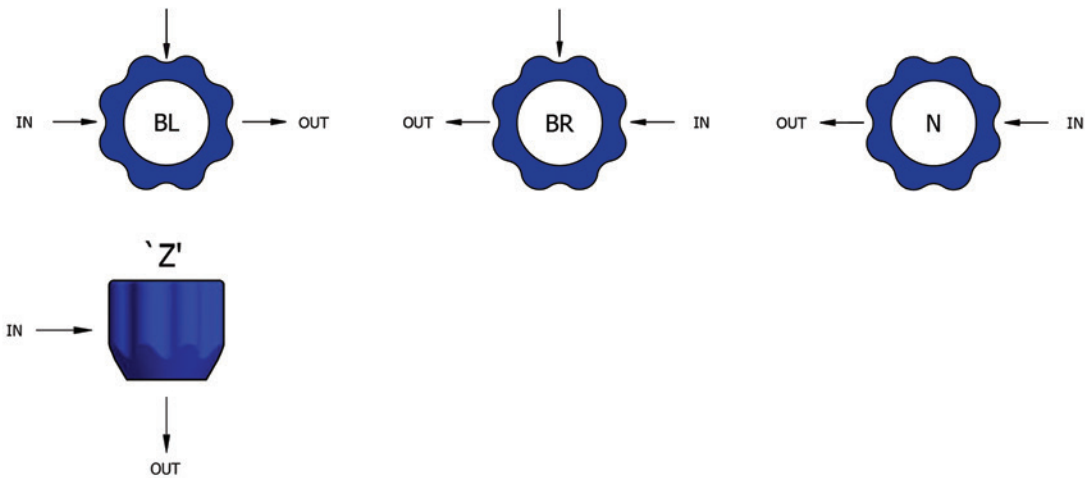
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FLOW CURVE

Please contact the office for further information.

PORTING CONFIGURATIONS



Note:

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

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● Gas ● Liquid | ● Diaphragm ● Piston | Max Rating: 1,034bar (15,000psi) | Control Range: 900bar (13,050psi) | Cv 0.1

ORDERING INFORMATION

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

BP-LF691G - 02 - S - 50S - N - 03N - N - XXX	
REGULATOR MODEL/SERIES BP-LF691G – Low-Flow Back Pressure Regulator - Piston-Sensed - Gas BP-LF691H – Low-Flow Back Pressure Regulator - Piston-Sensed - Liquid	MODIFICATIONS* Please contact the office for further information.
CV VALUE 01 – 0.1 02 – 0.02	PORTING CONFIGURATION N - No gauge ports Please refer to page 3 for porting configuration options.
BODY MATERIAL** S – AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) R – AISI 17-4 Stainless Steel (UNS S17400)	INLET/OUTLET CONNECTION SIZE** 02 – 1/4" 03 – 3/8" 04 – 1/2"
CONTROL PRESSURE 50 – 5 to 50bar (0 to 725psi) 100 – 5 to 100bar (0 to 1,450psi) 140 – 5 to 140bar (0 to 2,030psi)*** 200 – 5 to 200bar (0 to 2,900psi) 414 – 5 to 414bar (0 to 6,000psi) 600 – 5 to 600bar (0 to 8,700psi)*** 690 – 5 to 690bar (0 to 10,000psi) 860 – 5 to 860bar (0 to 12,470psi) - 'R' body required*** 900 – 5 to 900bar (0 to 13,050psi) - 'R' body required*** / ****	INLET/OUTLET CONNECTION TYPE** A – MP N – NPT
LOADING MECHANISM S – Spring Loaded A – Air Ratio Loaded	O-RING MATERIAL** N – NBR V – FKM/FPM

OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-BP-LF691...	Various options available
Panel Mounting Ring	PT-C-061-006-RING	Stainless Steel panel mount ring

Note: Ancillary equipment also available

TRADEMARK: Hastelloy® is a registered trademark of Haynes International, Inc
 Inconel® is a registered trademark of Inco Alloys International
 PEEK™ is a trademark of Victrex PLC
 Phynox® is a registered trademark of Imphy Ugin Precision
 Vespel® is a registered trademark of DuPont

* Where applicable
 ** Other materials/connections may be available - please contact the office
 *** Air loaded only
 **** T-Bar adjustment / long bonnet

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