

BP-LF690 Datasheet

LOW-FLOW BACK PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | Max Rating: 550 bar (7,975 psi) | Control Range: 414 bar (6,000 psi) | Cv 0.1



INTRODUCING THE BP-LF690...

The BP-LF690 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-LF690 accurately controls inlet pressure and vents excess pressure back via the threaded 1/2" NPT/BSPP or 9/16" MP outlet port.

SPECIFICATION

Max. Rating	550 bar (7,975 psi)
Control Range	Up to 414 bar (6,000 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	2.9kg (6.4lbs)

Note: Pressure regulator rating may be limited by connection type, Cv and/or seat material

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	AISI 316/316L Stainless Steel (UNS S31600 / S31603)
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-Rings	NBR or 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.



DESIGNED AND BUILT IN THE UK

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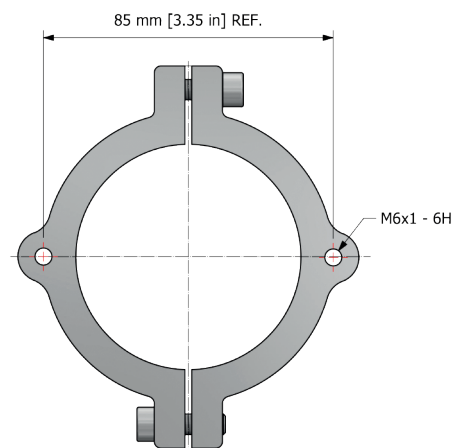
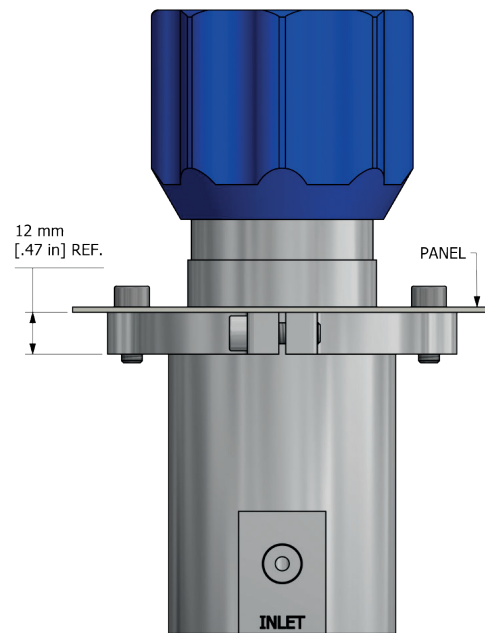
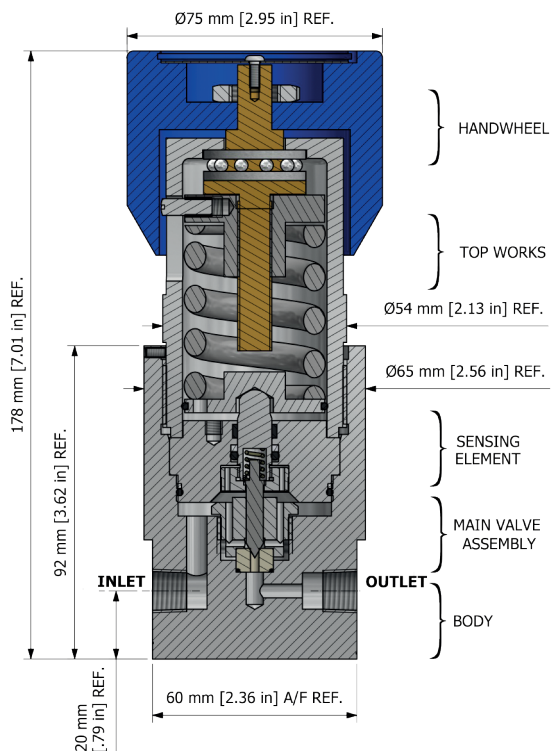
LOW-FLOW BACK PRESSURE REGULATOR



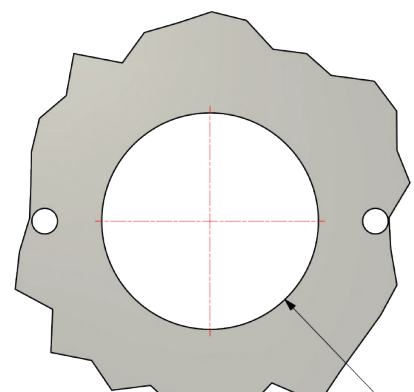
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DRAWINGS AND INSTALLATION DIMENSIONS

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



PT-C-061-003-RING (STAINLESS STEEL)
PT-C-061-003-001-RING (ALUMINIUM)
PANEL MOUNT RING



Note:

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

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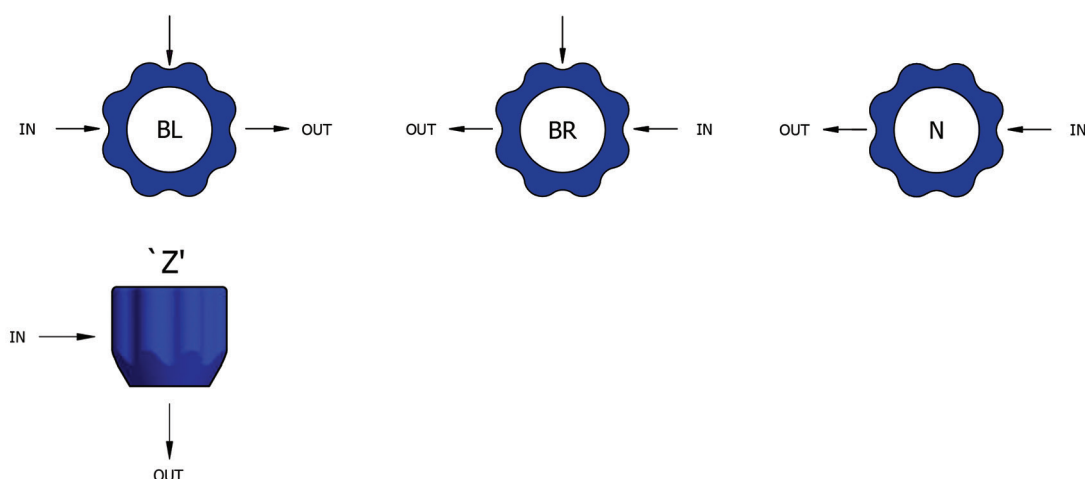


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FLOW CURVE

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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ORDERING INFORMATION

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

BP-LF690G - 02 - S - 50S - N - 03N - N - XXX						
REGULATOR MODEL/SERIES BP-LF690G – Low-Flow Back Pressure Regulator - Piston-Sensed - Gas BP-LF690H – 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)						INLET/OUTLET CONNECTION** 02A – 1/4" MP 02B – 1/4" BSPP 02N – 1/4" NPT 03A – 3/8" MP 03B – 3/8" BSPP 03N – 3/8" NPT 04A – 9/16" MP 04B – 1/2" BSPP 04N – 1/2" NPT
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)*** 200 – Up to 200 bar (2,900 psi) 414 – Up to 414 bar (6,000 psi)						O-RING MATERIAL ** N – NBR V – FKM/FPM
LOADING MECHANISM S – Spring-Loaded A – Air-Loaded						

OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-BP-LF690...	Various options available
Panel Mounting Ring	PT-C-061-003-RING	Stainless Steel panel mount ring
Panel Mounting Ring	PT-C-061-003-001-RING	Aluminium panel mount ring

Note:
Ancillary equipment also available

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Inconel® is a registered trademark of Inco Alloys International
PEEK™ is a trademark of Victrex PLC
Phynox® is a registered trademark of Imphy UGINE Precision
Vespel® is a registered trademark of DuPont

* Where applicable
** Other materials/connections may be available - please contact the office
*** Air-loaded only

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