

# BP-MF690 (05) Datasheet

## MEDIUM-FLOW BACK PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | Max Rating: 550 bar (7,975 psi) | Control Range: 414 bar (6,000 psi) | Cv 0.5



### INTRODUCING THE BP-MF690 (05)...

The BP-MF690 (05) is a piston-sensed medium-flow back pressure regulator for gas or liquid applications. The gas version includes a PEEK™ seat, whilst the liquid version features Hastelloy® seating for excellent protection from cavitation and positive shut-off on medium-flow applications.

The BP-MF690 (05) accurately controls inlet pressures of up to 414 bar (6,000 psi) and vents excess pressure back via the threaded NPT, BSP or 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	5kg (11lbs)

### STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Main Valve Pin	Inconel® 718 (UNS N07718)
Seat	PEEK™ (450G) Hastelloy® C276 (UNS N10276)
Valve Spring	Elgiloy® (UNS R30003)
Piston	ASTM A479 316/316L Stainless Steel
Handwheel	Nylon
O-Rings	NBR N70 (Nitrile Buna N) FKM/FPM (Viton)
Loading Spring	Silicon Chrome Wire

*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 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

#### 2 PRECISION MACHINED SENSING ELEMENT

For accurate pressure control.

#### 3 OPTIONAL AIR ACTUATOR

For fine remote adjustment.

#### 4 OPTIONAL FLANGED CONNECTION

For compatibility with flanged systems.

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.



#### PRESSURE TECH LTD

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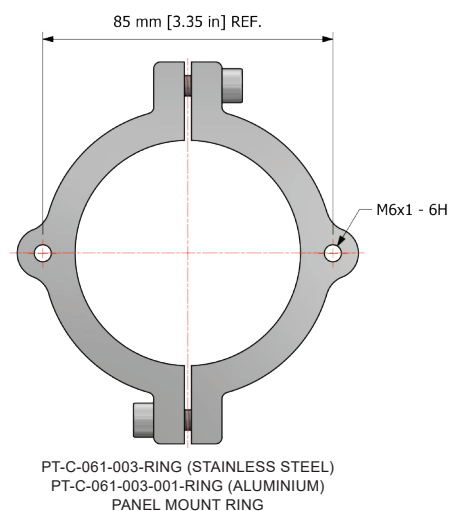
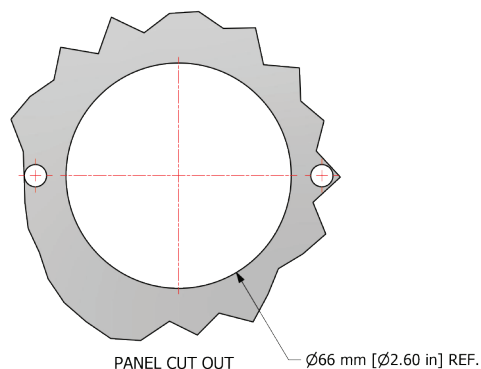
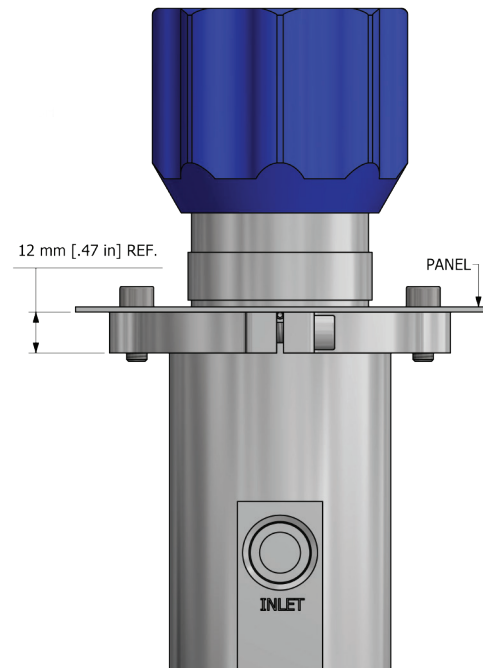
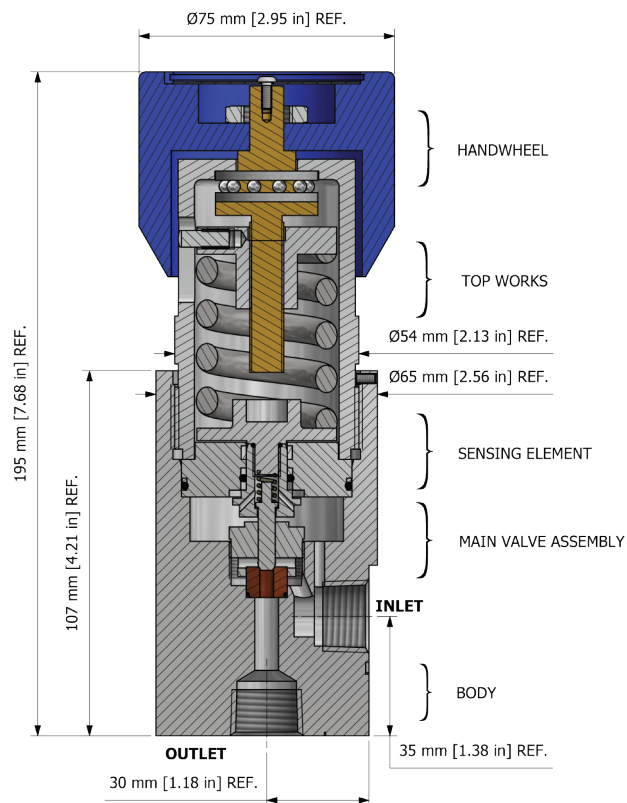
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### DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/2" NPT option and standard configurations only - please contact the office for other options.



#### Note:

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

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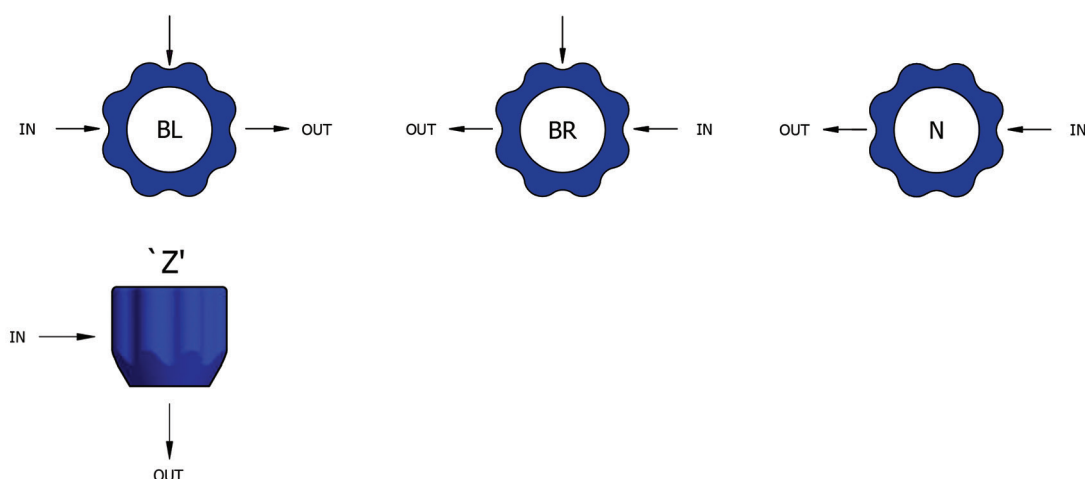


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### FLOW CURVE

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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## ORDERING INFORMATION

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

BP-MF690G - 05 - S - 50S - N - 03N - N - XXX							
<b>REGULATOR</b> BP-MF690G – Gas BP-MF690H – Liquid				<b>MODIFICATIONS*</b> Contact the office for information.			
<b>CV VALUE</b> 05 – 0.5				<b>PORTING CONFIGURATION</b> N - No gauge ports Refer to page 3 for porting options.			
<b>BODY MATERIAL**</b> S – ASTM A479 316/316L Stainless Steel				<b>INLET/OUTLET CONNECTION**</b> 03A – 3/8" MP 03B – 3/8" BSPP 03N – 3/8" NPT 04A – 9/16" MP 04B – 1/2" BSPP 04N – 1/2" NPT			
<b>CONTROL PRESSURE</b> 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)				<b>O-RING MATERIAL**</b> E – EPDM K – FFKM/FFPM N – NBR V – FKM/FPM			
<b>LOADING MECHANISM</b> S – Spring-Loaded A – Air-Loaded							

## OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-BP-MF690-05...	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  
Hastelloy® is a registered trademark of Haynes International, Inc

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

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