

# 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 | AISI 316/316L Stainless Steel<br>(UNS S31600/S31603) |
| Main Valve Pin  | Inconel® 718<br>(UNS N07718)                         |
| Seat            | PEEK™ or Hastelloy®                                  |
| Valve Spring    | Elgiloy®<br>(UNS R30003)                             |
| Piston          | AISI 316/316L Stainless Steel<br>(UNS S31600/S31603) |
| Handwheel       | Nylon  |
| O-Rings         | NBR or FKM/FPM                                       |
| Loading Spring  | Silicon Chrome Wire                                  |

### 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.



DESIGNED AND BUILT IN THE UK

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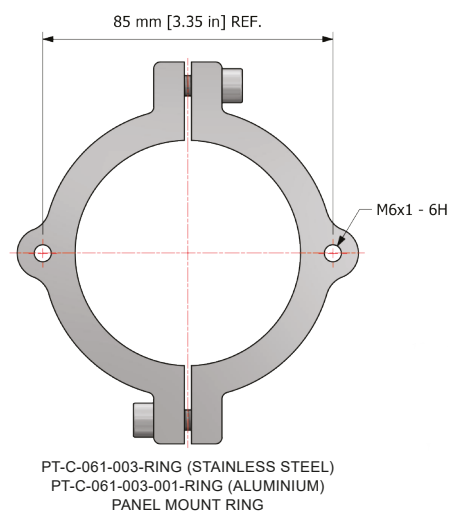
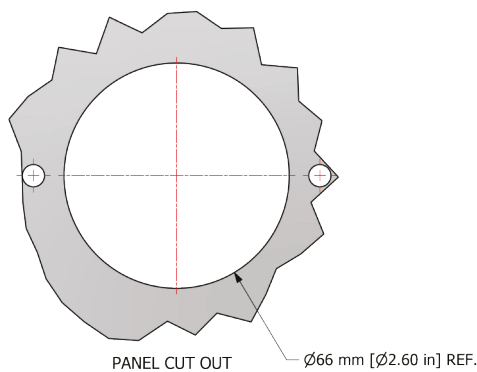
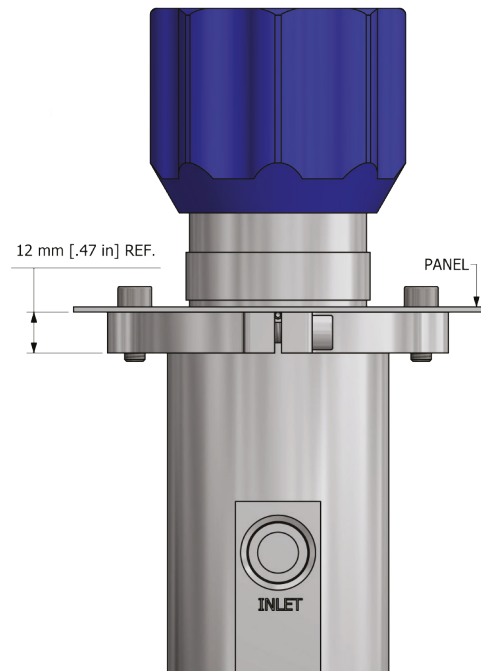
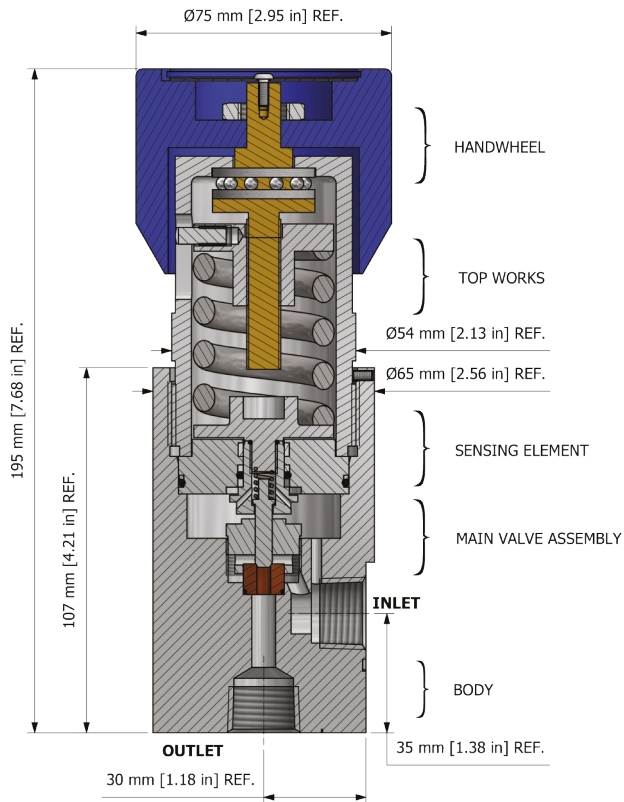
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Gas    Liquid   |    Diaphragm    Piston   |   Max Rating: 550 bar (7,975 psi)   |   Control Range: 414 bar (6,000 psi)   |   Cv 0.5

## DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/2" NPT option - please contact the office for additional connection options.



### Note:

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

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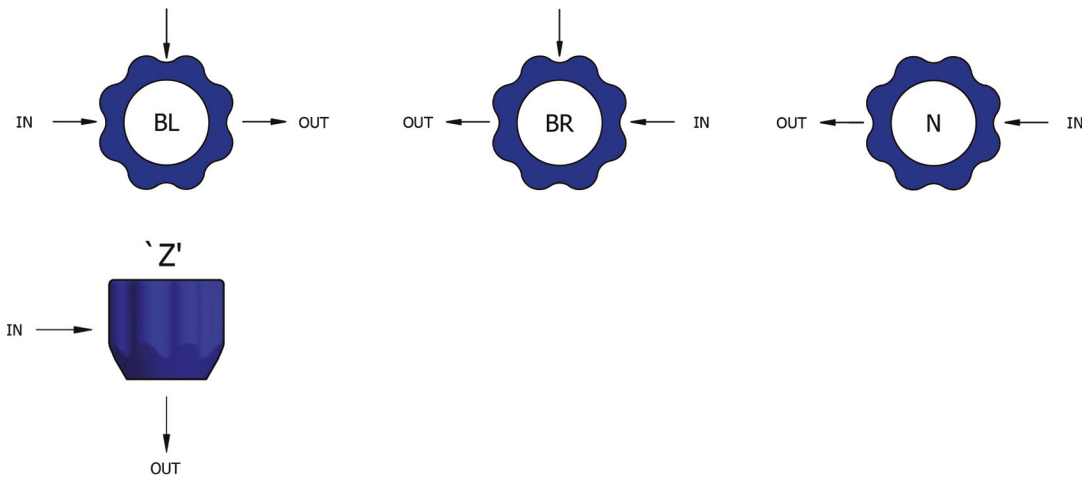


● Gas ● Liquid | ● Diaphragm ● Piston | Max Rating: 550 bar (7,975 psi) | Control Range: 414 bar (6,000 psi) | Cv 0.5

## 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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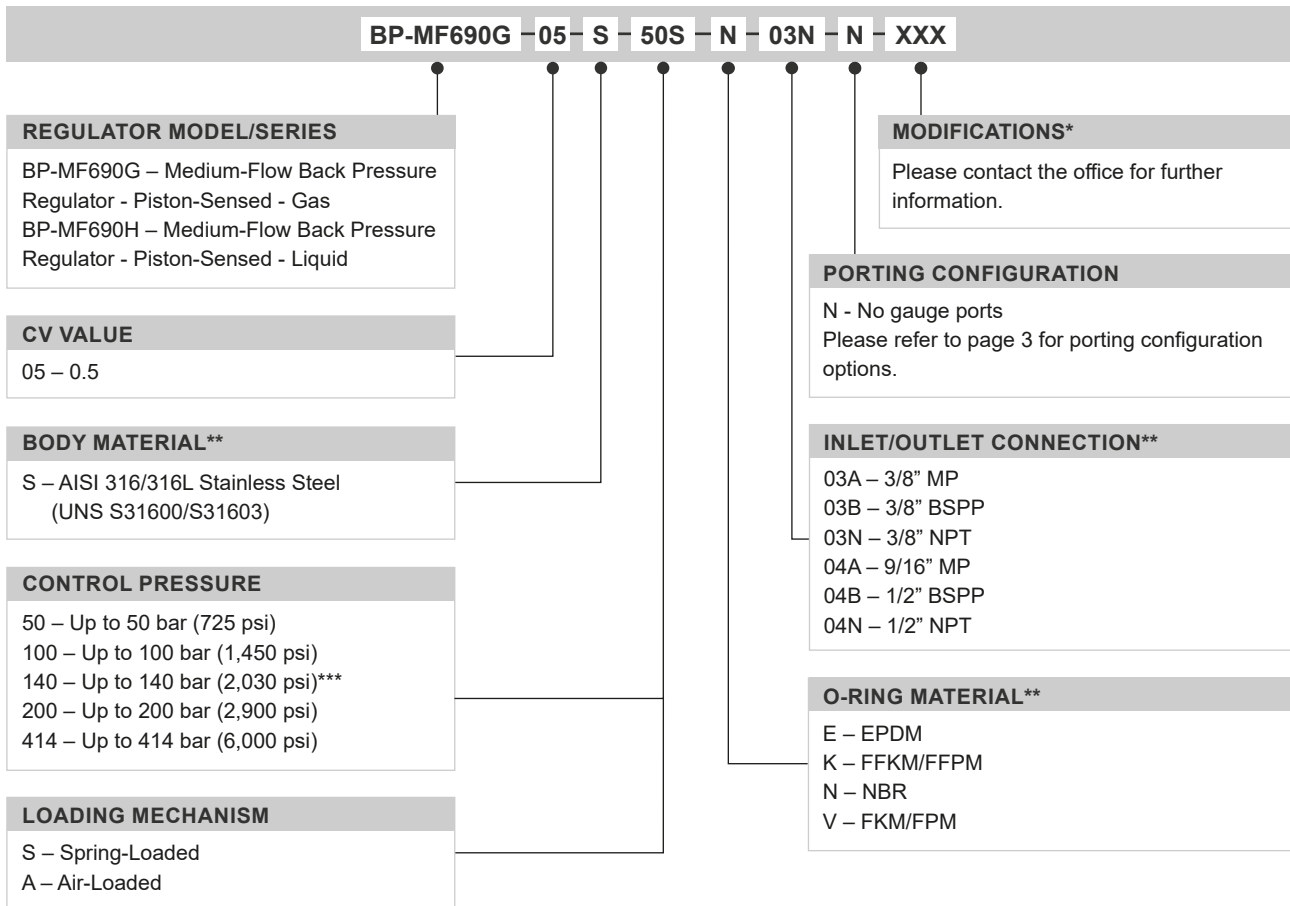
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 |  
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## ORDERING INFORMATION

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



| 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

**TRADEMARK:** Elgiloy® is a registered trademark of Elgiloy Specialty Metals  
 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 - please contact the office  
 \*\*\* Air-loaded only

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