

# HYD691 Datasheet

LOW-FLOW HYDRAULIC PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 690 bar (10,000 psi) | Max Outlet: 690 bar (10,000 psi) | Cv 0.06



## INTRODUCING THE HYD691...

The HYD691 is a low-flow hydraulic pressure regulator. Specifically targetting mineral oil applications, it has been designed as a compact and economical alternative to our LF690, yet still incorporates all of its key features including a ceramic seat. In comparison, the LF690 offers more extensive Cv options and caters for the harsh services encountered on water-based hydraulic applications such as water glycol.

Its ceramic ball has a 'glass-like' finish to provide a positive shut-off and is also fully supported to ensure fixed travel in the 'Y' axis. The HYD691 is self-relieving with a segregated captured vent as standard.

## SPECIFICATION

Max. Rated Inlet Pressure	690 bar (10,000 psi)
Outlet Ranges	Up to 690 bar (10,000 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	2.6kg (5.7lbs)

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

## FEATURES AND BENEFITS

### 1 CERAMIC SEATING DESIGN

Hard-wearing material for extended durability.

### 2 SEGREGATED CAPTURED VENT

Prevents deterioration to loading mechanism and allows media to be piped off to return tank.

### 3 COMPACT DESIGN

Perfect for when installation space is restricted.

### 4 MAIN VALVE CARTRIDGE DESIGN

Easy and convenient to service.

## STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603) <i>Approx. Temperatures: -196°C to 538°C</i>
Main Valve Ball	Ceramic (Zirconia) <i>Approx. Temperatures: 38°C to 800°C</i>
Soft Seat	Ceramic (Zirconia)
Valve Spring	Elgiloy® (UNS R30003) <i>Approx. Temperatures: -196°C to 450°C</i>
Piston	ASTM A479 316/316L Stainless Steel
Handwheel	Nylon
O-Rings	NBR N70 (Nitrile Buna N) <i>Approx. Temperatures: -30°C to 120°C</i>
Loading Spring	Silicon Chrome Wire

For the full list of material temperature ranges, please visit [www.pressure-tech.com](http://www.pressure-tech.com).

*Note:* Temperature details are provided as nominal values for guidance purposes only. No warranty is made, expressed or implied. Contact the office for specific temperature requirements.

**NOTE:** 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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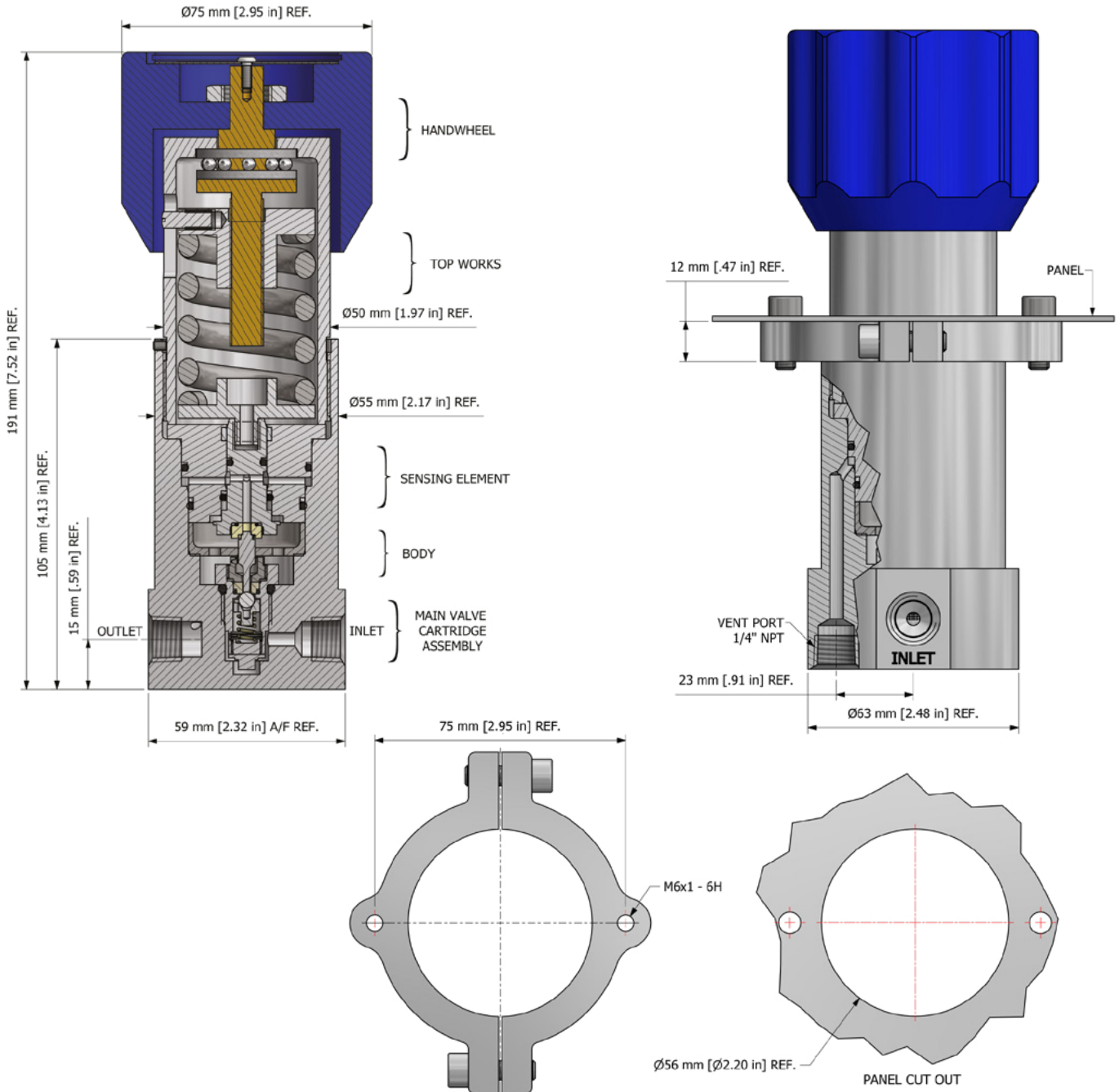
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## DRAWINGS AND INSTALLATION DIMENSIONS

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



PT-C-061-005-RING (STAINLESS STEEL)  
 PT-C-061-005-001-RING (ALUMINIUM)  
 PANEL MOUNT RING

**Note:**

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

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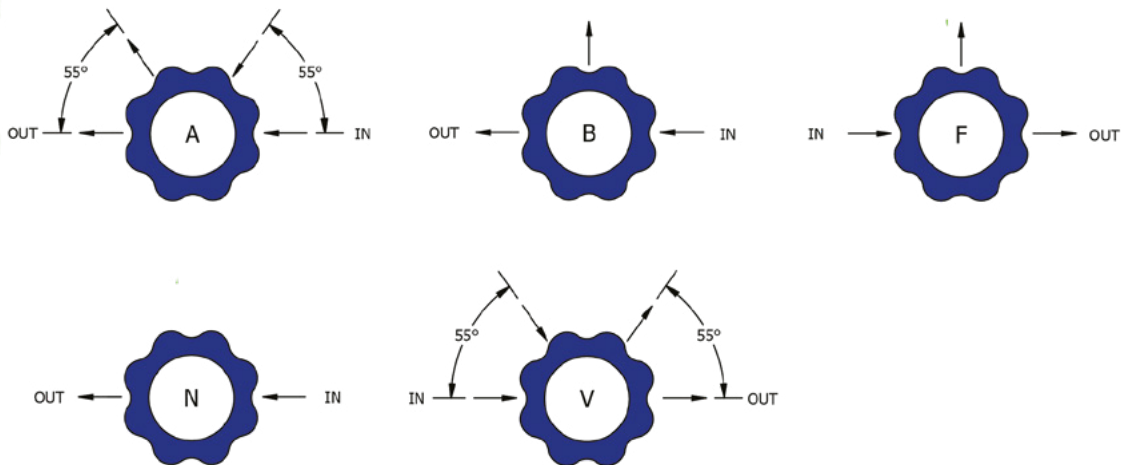


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## FLOW CURVE

Please contact the office for further information.

## PORTING CONFIGURATIONS



### Notes:

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

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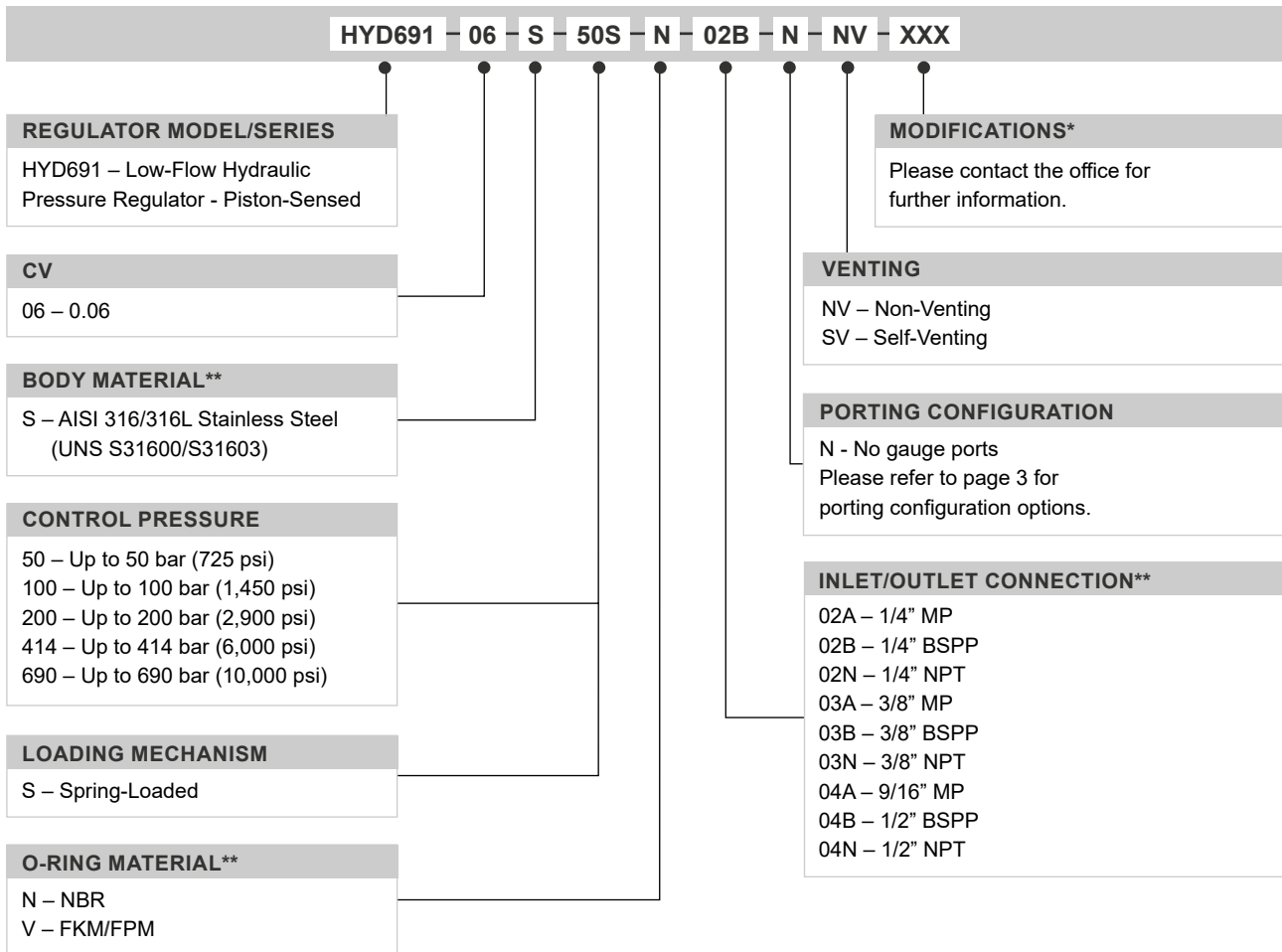
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## ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-HYD691...	Various options available
Panel Mounting Ring	PT-C-061-005-RING	Stainless Steel panel mount ring
Panel Mounting Ring	PT-C-061-005-001-RING	Aluminium panel mount ring

**Note:**  
Ancillary Equipment also available.

\* Where applicable  
\*\* Other materials/connections may be available - please contact the office

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