

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)

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Main Valve Ball	Ceramic (Zirconia)
Soft Seat	Ceramic (Zirconia)
Valve Spring	Elgiloy® (UNS R30003)
Piston	ASTM A479 316/316L Stainless Steel
Handwheel	Nylon
O-Rings	NBR N70 (Nitrile Buna N)
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 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.

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.



PRESSURE TECH LTD

Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH

+44 (0)1457 899 307 | sales@pressure-tech.com | www.pressure-tech.com

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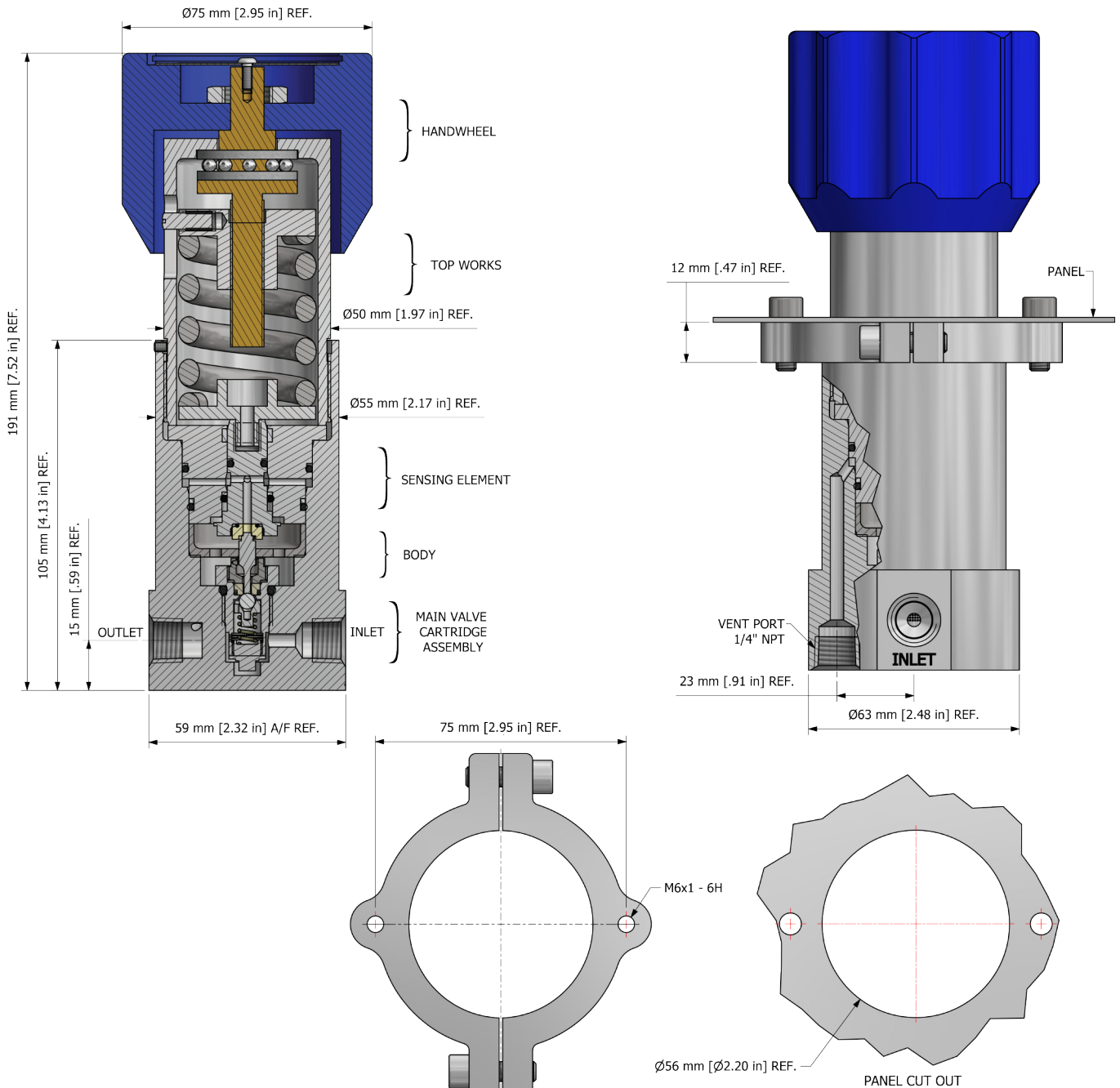
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DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/4" NPT option and standard configurations only – please contact the office for other options.



Note:

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

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

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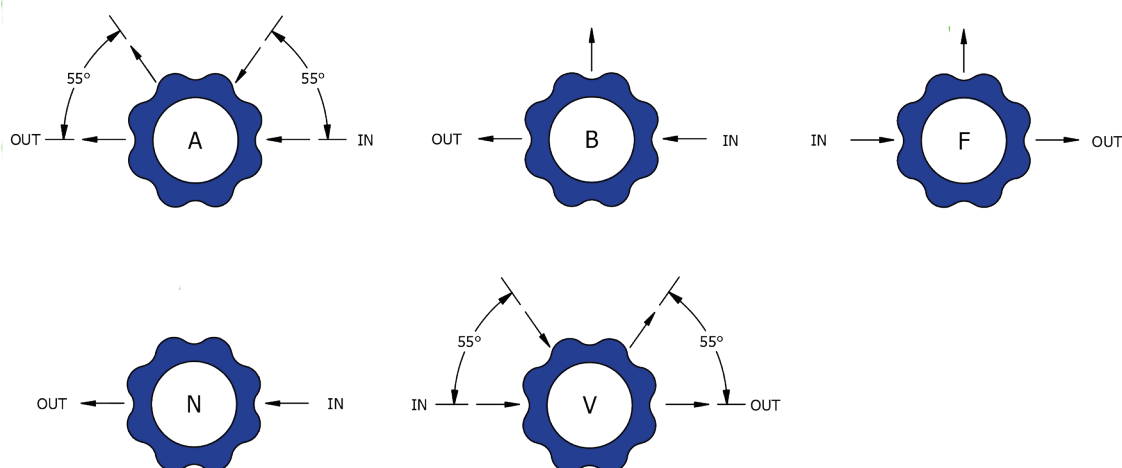


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FLOW CURVE

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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ORDERING INFORMATION

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

HYD691 - 06 - S - 50S - N - 02B - N - NV - XXX								
REGULATOR MODEL/SERIES HYD691 – Low-Flow Hydraulic Pressure Regulator - Piston-Sensed								MODIFICATIONS* Please contact the office for further information.
CV 06 – 0.06								VENTING NV – Non-Venting SV – Self-Venting
BODY MATERIAL ** S – AISI 316/316L Stainless Steel (UNS S31600/S31603)								PORTING CONFIGURATION N - No gauge ports Please refer to page 3 for porting configuration options.
CONTROL PRESSURE 50 – Up to 50 bar (725 psi) 100 – Up to 100 bar (1,450 psi) 200 – Up to 200 bar (2,900 psi) 414 – Up to 414 bar (6,000 psi) 690 – Up to 690 bar (10,000 psi)								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
LOADING MECHANISM S – Spring-Loaded								
O-RING MATERIAL ** N – NBR V – FKM/FPM								

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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Haldatec

Phone: +61 3 9872 5822

Email: sales@haldatec.com.au

Website: www.haldatec.com.au

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