

SS690 Datasheet

SUBSEA 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 0.1



INTRODUCING THE SS690...

The SS690 is a piston-sensed low-flow subsea pressure regulator with ceramic seating for water-based hydraulic oil applications and systems. With the **balanced main valve** option it can provide stable control under varying inlet pressures and cope with higher flow rates.

Operating at depths of up to 3,000 metres (10,000ft), the SS690 uses either the external seawater pressure as a reference or works within a sealed chamber to remain completely unaffected by atmospheric conditions.

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	10.5kg (23.1lbs)

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Main Valve Pin	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603) / Ceramic
Seat	Ceramic
Valve Spring	AISI 302 Stainless Steel (UNS S30200)
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Locking Cap	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
'O'-Ring Seals	NBR
Loading Spring	Elgiloy® (UNS R30003) / Steel Spring

FEATURES AND BENEFITS

1 SUITABLE FOR DEEPER WATERS

Can operate at depths of up to 3,000 metres (10,000ft).

2 ANTI-TAMPER LOCKING CAP

Cap prevents unwanted pressure adjustments to regulator.

3 ELGILOY® SPRING

Very high strength with excellent corrosion resistance for sea water ref options.

4 OPTIONAL REMOTE OPERATION

Optional ROV handwheel or subsea multi-turn electric actuator.

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

PRESSURE TECH LTD

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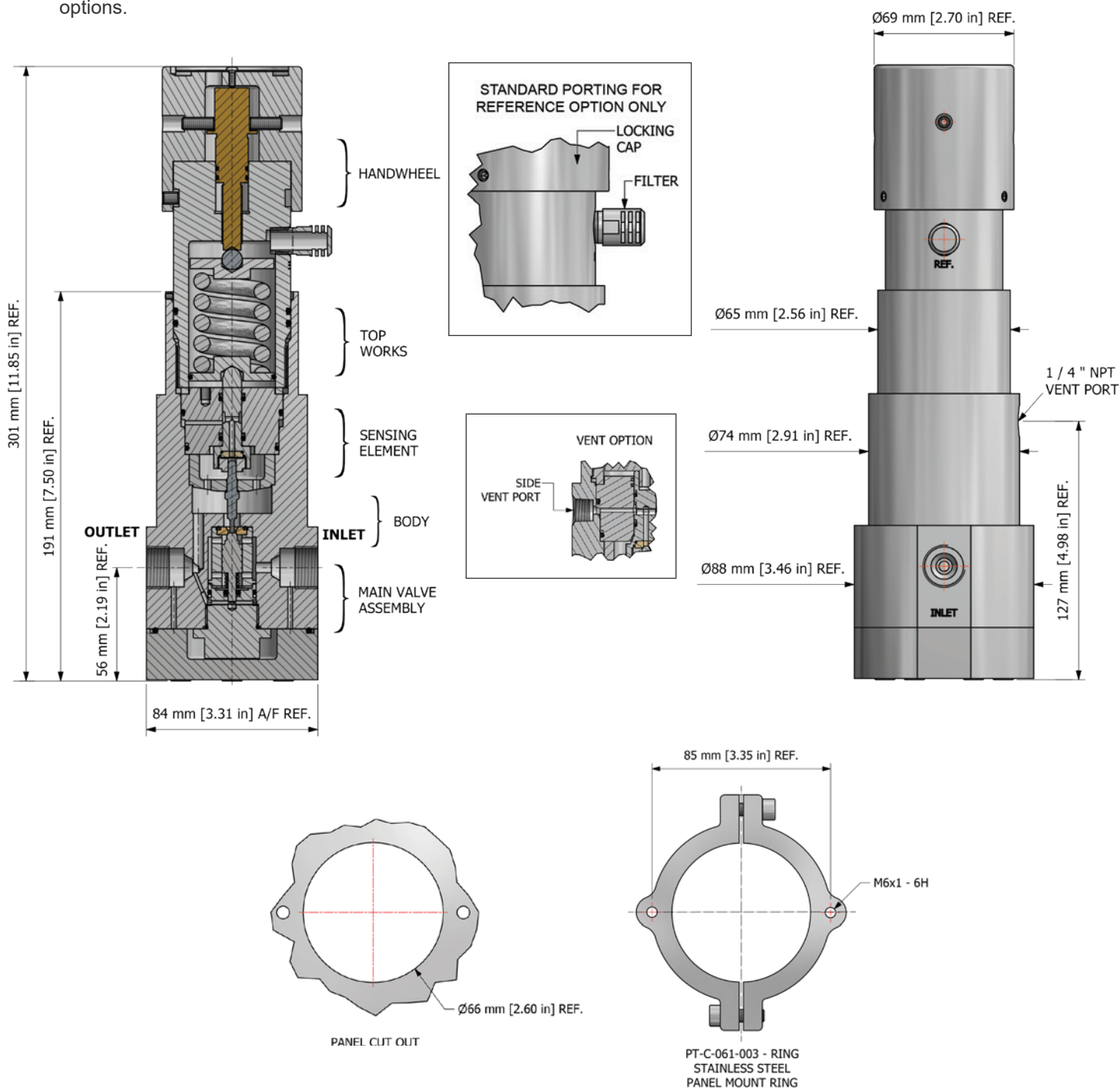
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DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 3/8" Medium Pressure option - please contact the office for additional connection/gauge options.



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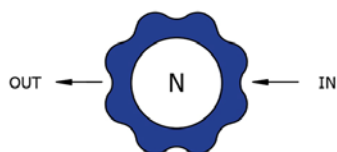


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FLOW CURVE

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:

SS690 01 S 50SS N 03A N NV XXX									
REGULATOR MODEL/SERIES SS690 – Low-Flow Subsea Pressure Regulator - Piston-Sensed				MODIFICATIONS* Please contact the office for further information.					
CV VALUE 05 – 0.05 01 – 0.1				VENTING NV – Non-Venting SV – Self-Venting					
BODY MATERIAL** S – AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)				PORTING CONFIGURATION N - No gauge ports					
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** 03A – 3/8" Medium Pressure					
LOADING MECHANISM SR – Spring Loaded with Reference to External Sea Water Pressure SS – Spring Loaded with Sealed Chamber - No Reference				O-RING MATERIAL ** E – EPDM N – NBR V – FPM/FKM					

OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-SS690...	Various options available
Panel Mounting Ring	PT-C-061-003-RING	-

Note: Ancillary equipment also available

TRADEMARK: Elgiloy® is a registered trademark of Elgiloy Specialty Metals
Hastelloy® is a registered trademark of Haynes International, Inc

* Where applicable

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

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