

SS691 Datasheet

SUBSEA HYDRAULIC PRESSURE REGULATOR



Gas
 Liquid
 |
 Diaphragm
 Piston
 |
 Self-Venting
 Non-Venting
 |
 Max Inlet: 1,034 bar (15,000 psi)
 |
 Max Outlet: 690 bar (10,000 psi)
 |
 Cv 0.1



INTRODUCING THE SS691...

The SS691 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 SS691 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 | 1,034 bar (15,000 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) |

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 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 MP35N VALVE 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.

STANDARD MATERIALS OF CONSTRUCTION

| PART | MATERIALS |
|-----------------|--|
| Body and Bonnet | ASTM A479 Duplex Stainless Steel (UNS S31803) <i>Approx. Temperatures: -50°C to 315°C</i> |
| Main Valve Pin | ASTM A479 Duplex Stainless Steel Ceramic (Zirconia) <i>Approx. Temperatures: 38°C to 800°C</i> |
| Seat | Ceramic (Zirconia) |
| Valve Spring | MP35N (UNS R30035) <i>Approx. Temperatures: -196°C to 450°C</i> |
| Piston | ASTM A479 Duplex Stainless Steel |
| Locking Cap | ASTM A479 Duplex Stainless Steel |
| O-Rings | NBR N70 (Nitrile Buna N) <i>Approx. Temperatures: -30°C to 120°C</i> |
| Loading Spring | MP35N (UNS R30035) |

For the full list of material temperature ranges, please visit 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.

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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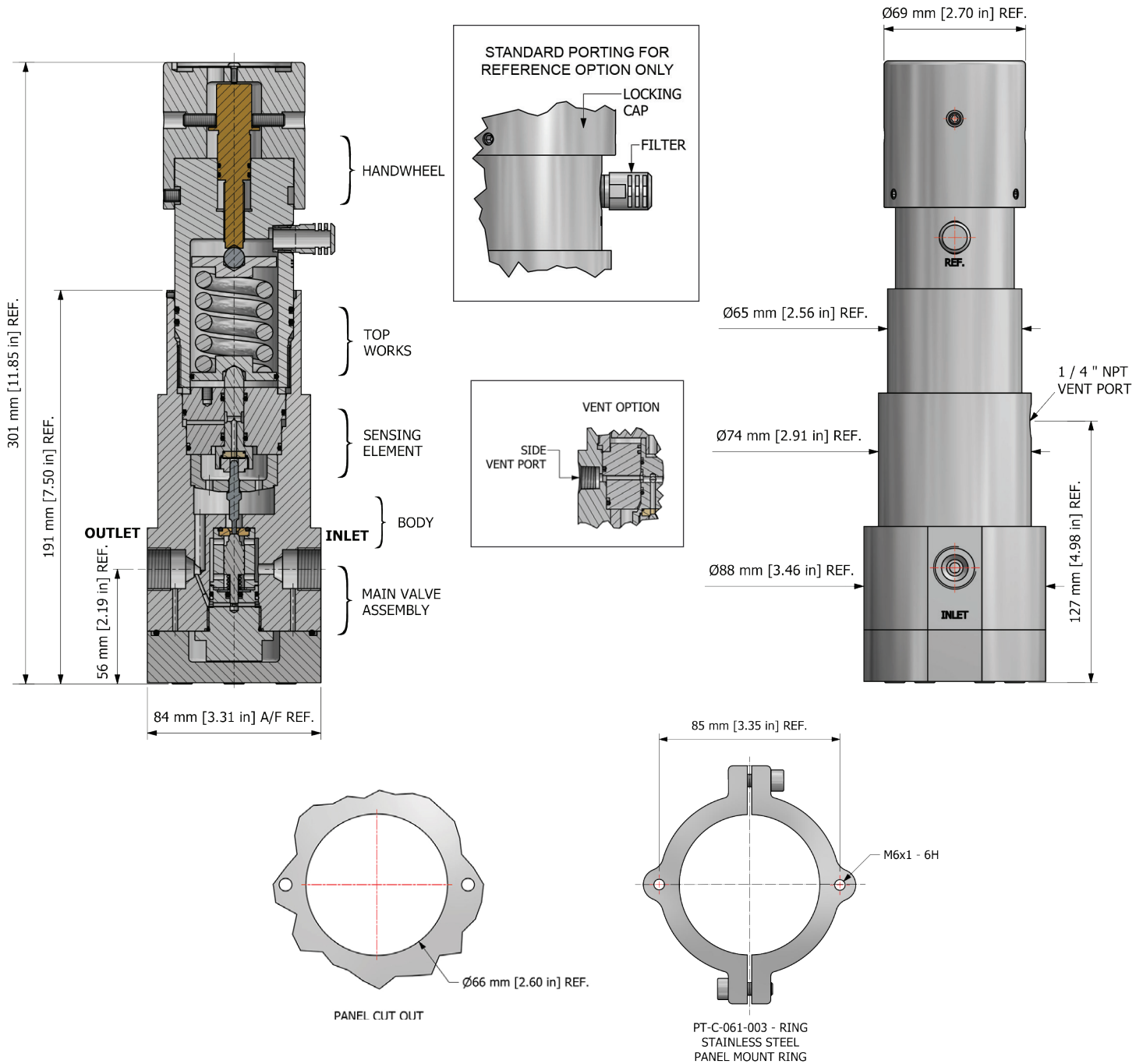
SUBSEA HYDRAULIC PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 1,034 bar (15,000 psi) | Max Outlet: 690 bar (10,000 psi) | Cv 0.1

DRAWINGS AND INSTALLATION DIMENSIONS

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



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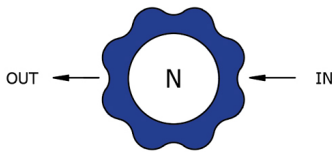


Gas Liquid | Diaphragm Piston | Self-Venting Non-Venting | Max Inlet: 1,034 bar (15,000 psi) | Max Outlet: 690 bar (10,000 psi) | Cv 0.1

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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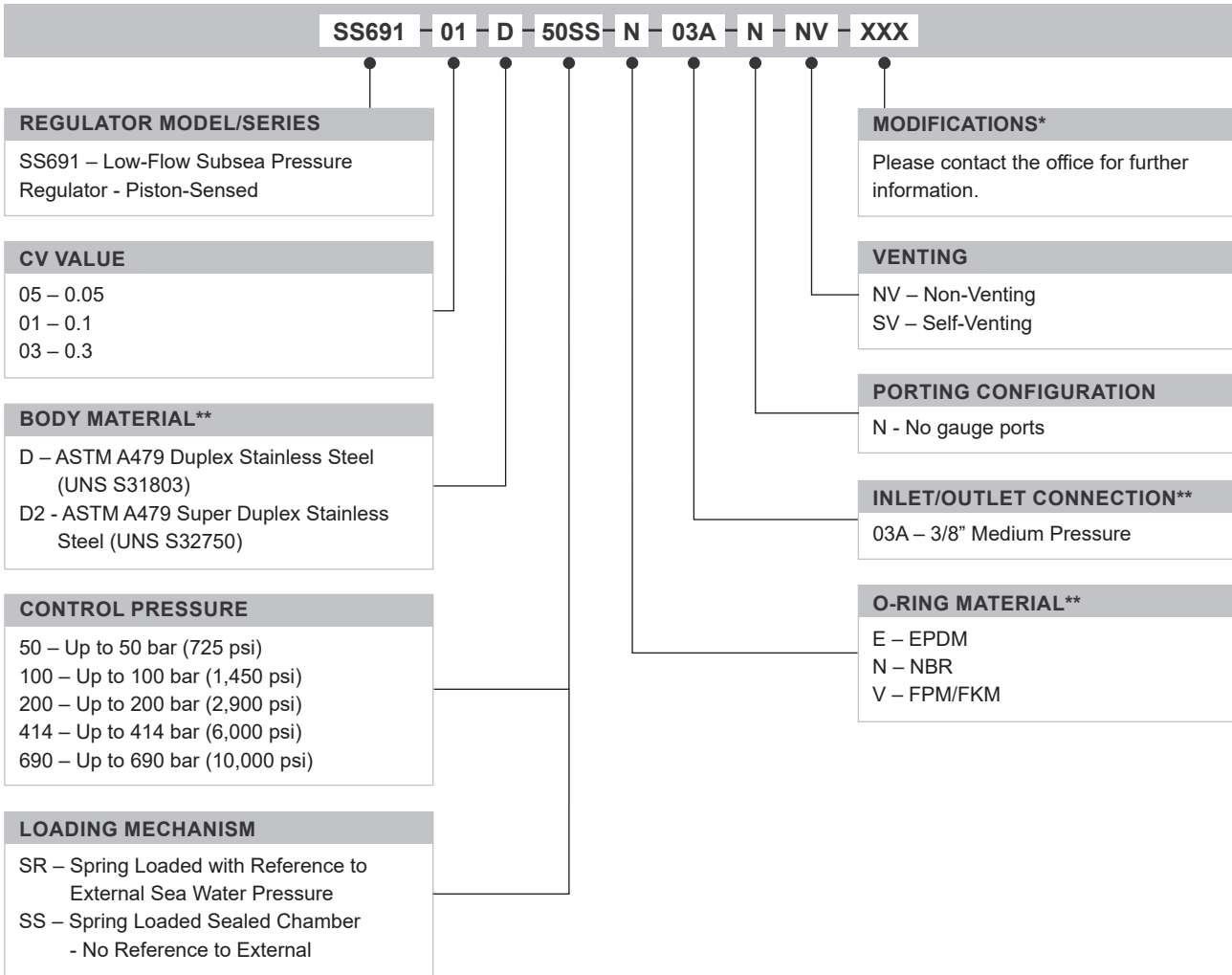
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ORDERING INFORMATION

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



| OPTIONAL EXTRAS | | |
|---------------------|-------------------|---------------------------|
| | PART NUMBER | DESCRIPTION |
| Service Kit | SRK-SS691... | 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 connections/materials may be available - please contact the office

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