

CYL310 Datasheet

CYLINDER REGULATOR ASSEMBLY

PRESSURE TECH

● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414 bar (6,000 psi) | Max Outlet: 35 bar (510 psi) | Cv 0.06



INTRODUCING THE CYL310...

The CYL310 pressure regulator can be supplied as a single- or two-stage gas cylinder regulator assembly with full safety pattern gauges, relief valve and isolation valve. Please note - the CYL310 is supplied as standard with a bottle connector.

Using our ordering system on page 4, customers can effectively design their own assembly to suit their individual application requirements.

SPECIFICATION

Max. Rated Inlet Pressure	414 bar (6,000 psi)
Outlet Ranges	Up to 35 bar (510 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	1.4kg (3.1lbs)

Note: Pressure regulator rating may be limited by connection type, Cv and/or seat material. Contact the office for specific pressure requirements. Weight may vary depending on configuration required

FEATURES AND BENEFITS

1 CUSTOMISABLE TO SUIT INDIVIDUAL APPLICATION

Design assembly to suit customers' requirements.

2 SOLID DISK SEAT DESIGN

Perfect for use in aggressive or harsh conditions.

3 40 MICRON INLET FILTER

Soft seat protection from cylinder contamination.

4 INCONEL® X750 DIAPHRAGM

For ultimate strength and reliability on clean or corrosive applications.

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 Pin	ASTM A479 316/316L Stainless Steel
Soft Seat	PEEK™ (450G) <i>Approx. Temperatures: -50°C to 204°C</i> PCTFE (Kel-F) <i>Approx. Temperatures: -196°C to 180°C</i>
Valve Spring	Inconel® X750 (UNS N07750) <i>Approx. Temperatures: -196°C to 700°C</i>
Diaphragm	Inconel® X750
Handwheel	Nylon
O-Rings	FKM/FPM (Viton) <i>Approx. Temperatures: -20°C to 200°C</i>
Loading Spring	ASTM A240 301 Stainless Steel (UNS S30100) <i>Approx. Temperatures: -29°C to 370°C</i>
Filter	40 Microns
Gauges*	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603) <i>Approx. Temperatures: -20°C to 60°C*</i>

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.

* Gauge options for higher/lower operating temperatures may be available upon request

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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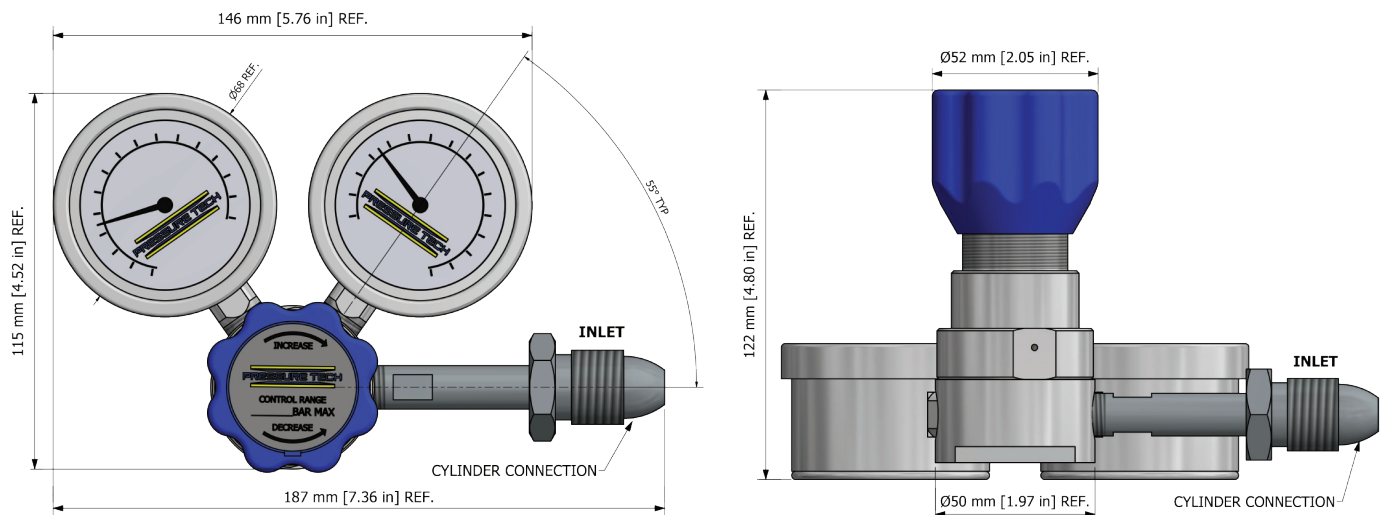


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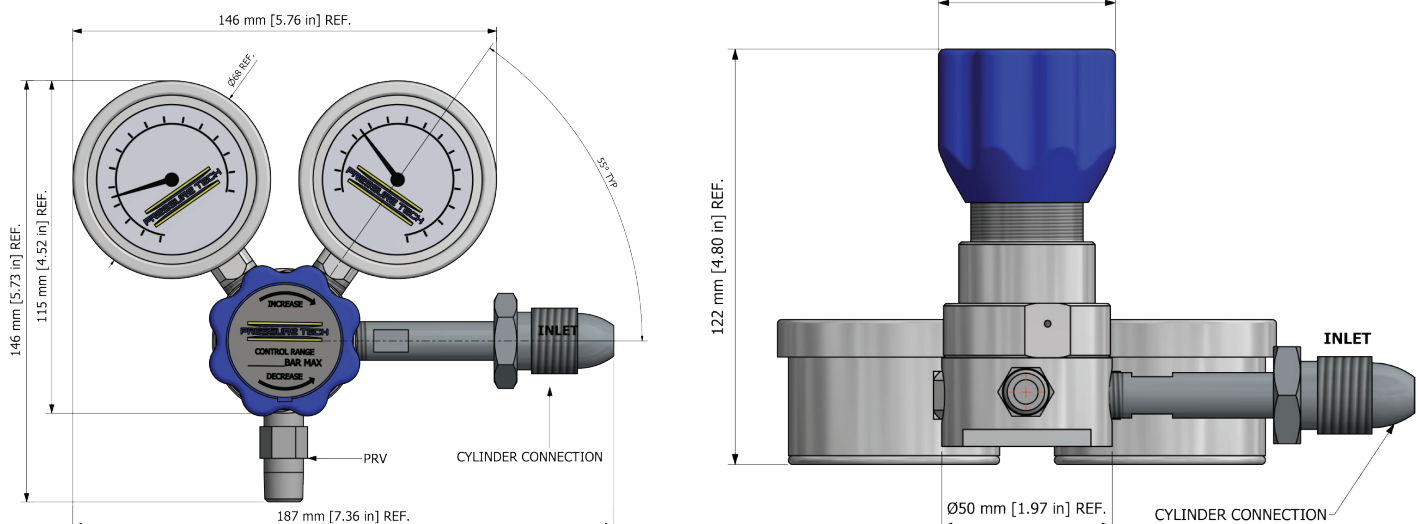
DRAWINGS AND INSTALLATION DIMENSIONS - SINGLE-STAGE REGULATOR SHOWN

For cross-section of regulator, please refer to LF310 (single-stage) or TS310 (two-stage) datasheet.

'A' PORTING



'R' PORTING



Note:

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

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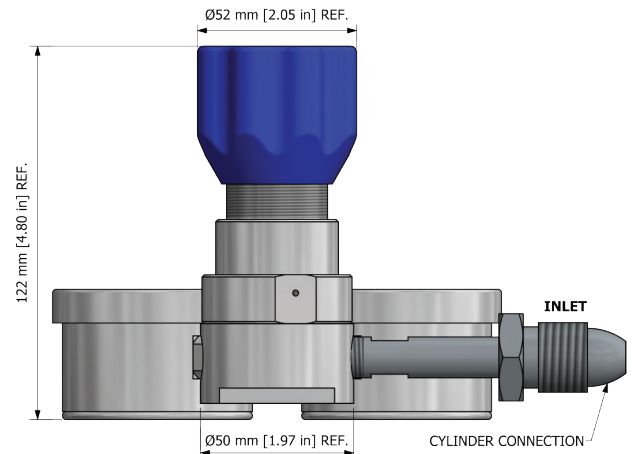
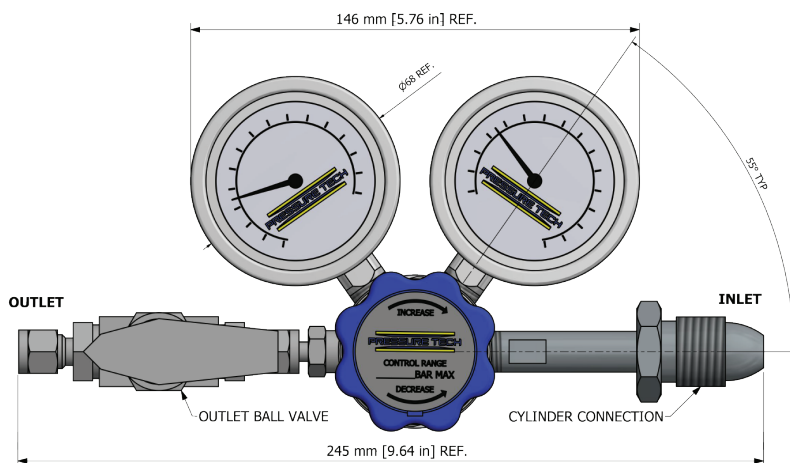
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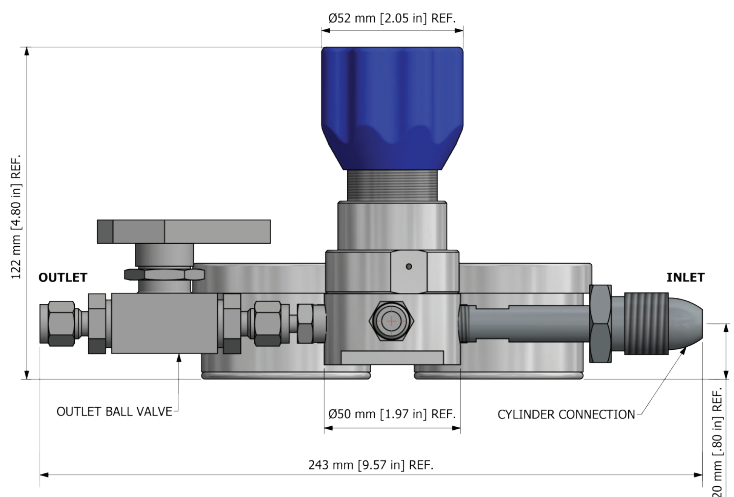
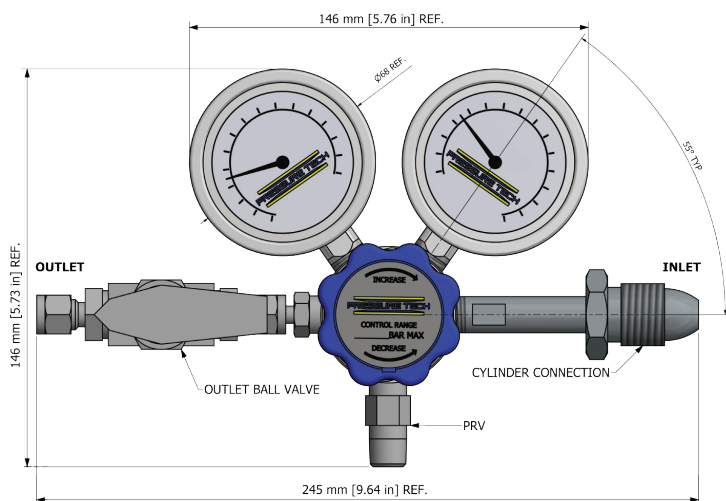
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CONTINUED...

'AV' PORTING



'RV' PORTING



Note:

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FLOW CURVE

Please contact the office for further information.

ORDERING INFORMATION

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

CYL310 SS3 06 S 05 K A XXX							
REGULATOR MODEL/SERIES CYL310 – Cylinder Regulator Assembly - Diaphragm-Sensed				MODIFICATIONS* Please contact the office for further information.			
TYPE SS – Single-Stage TS – Two-Stage (max. control 20 bar / 290 psi)				PORTING AND VALVE OPTIONS A – Fitted with inlet/outlet gauges only R – Fitted with inlet/outlet gauges & relief valve AV – Fitted with inlet/outlet gauges & outlet ball valve RV – Fitted with inlet/outlet gauges, relief valve & outlet ball valve			
BOTTLE CONNECTOR*** 3 – BS341 No. 3 Connector 4 – BS341 No. 4 Connector				SEAT MATERIAL ** K – PCTFE (max. inlet 300 bar/4,350 psi) P – PEEK™ (max. inlet 414 bar/6,000 psi)			
CV VALUE 06 – 0.06				CONTROL PRESSURE 04 – Up to 4 bar (58 psi) 10 – Up to 10 bar (145 psi) 20 – Up to 20 bar (290 psi) 35 – Up to 35 bar (510 psi)			
BODY MATERIAL ** S – AISI 316/316L Stainless Steel (UNS S31600/S31603)							

OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-CYL310...	Various options available
Note: Ancillary equipment also available		

TRADEMARKS: Inconel® is a registered trademark of Inco Alloys International
PEEK™ is a trademark of Victrex PLC

* Where applicable

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

*** Bottle connectors are supplied as standard. They are available to meet BS341, DIN477, CGA and other specifications

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