

# CYL310 Datasheet

CYLINDER REGULATOR ASSEMBLY



● 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)**

\* Pressure regulator rating may be limited by connection type and seat material

\*\* 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	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Main Valve Pin	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Soft Seat	PCTFE / PEEK™
Valve Spring	Inconel® X750
Diaphragm	Inconel® X750
Handwheel	Nylon
'O'-Ring Seals	FKM / FPM
Loading Spring	AISI 302 Stainless Steel (UNS S30200)
Filter	40 Microns

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

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

T +44 (0)1457 899 307

E [info@pressure-tech.com](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

170519

PAGE:  
1 OF 4

# CYL310 Datasheet

CYLINDER REGULATOR ASSEMBLY

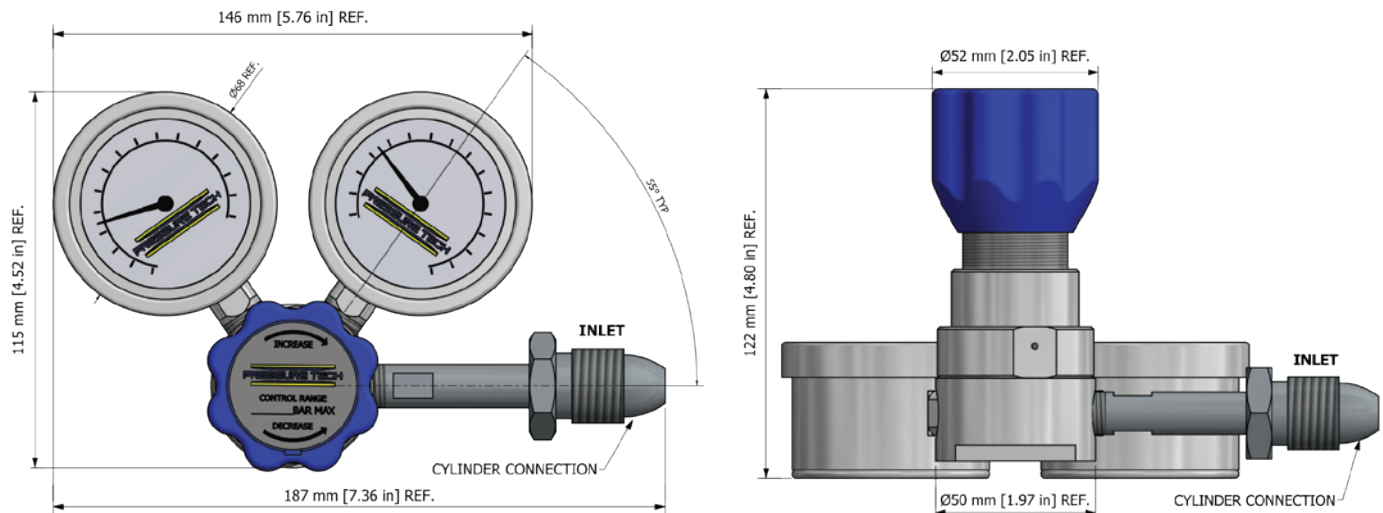


☒ Gas 
 ☐ Liquid 
 ☒ Diaphragm 
 ☐ Piston 
 ☒ Self-Venting 
 ☐ Non-Venting 
 Max Inlet: 414 bar (6,000 psi) 
 Max Outlet: 35 bar (510 psi) 
 Cv 0.06

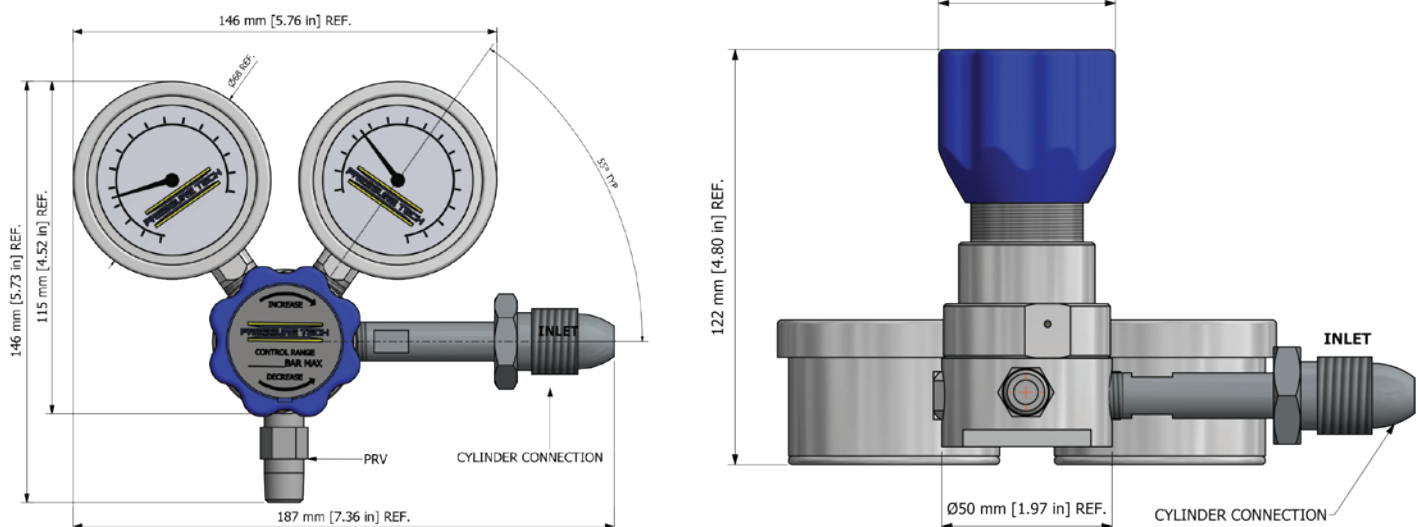
## DRAWINGS AND INSTALLATION DIMENSIONS - SINGLE-STAGE REGULATOR SHOWN

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.

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

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

T +44 (0)1457 899 307

E [info@pressure-tech.com](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

170519

PAGE:  
2 OF 4

# CYL310 Datasheet

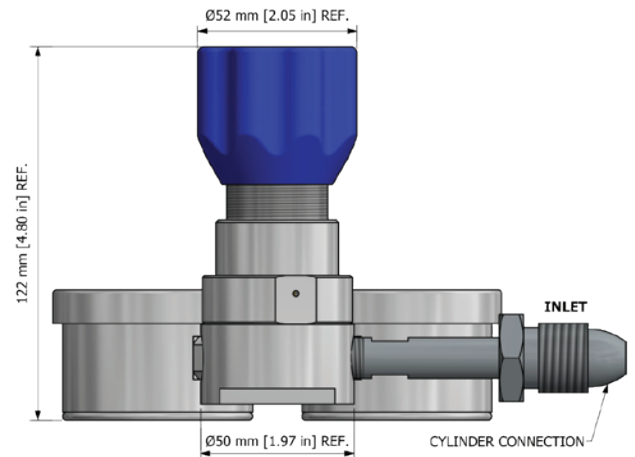
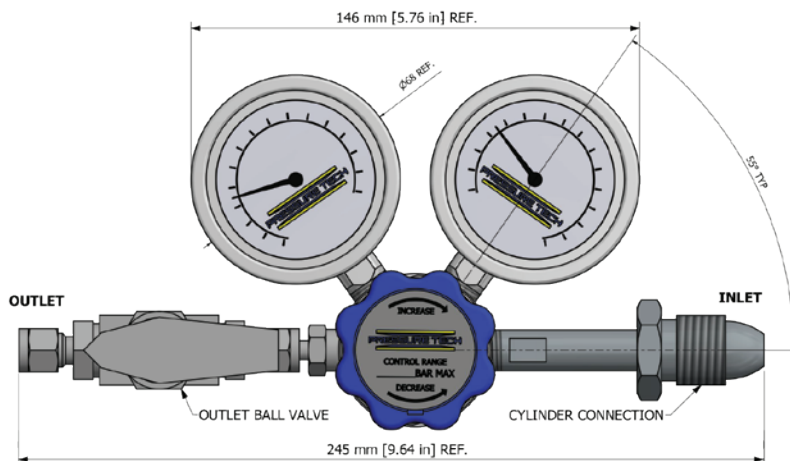
CYLINDER REGULATOR ASSEMBLY



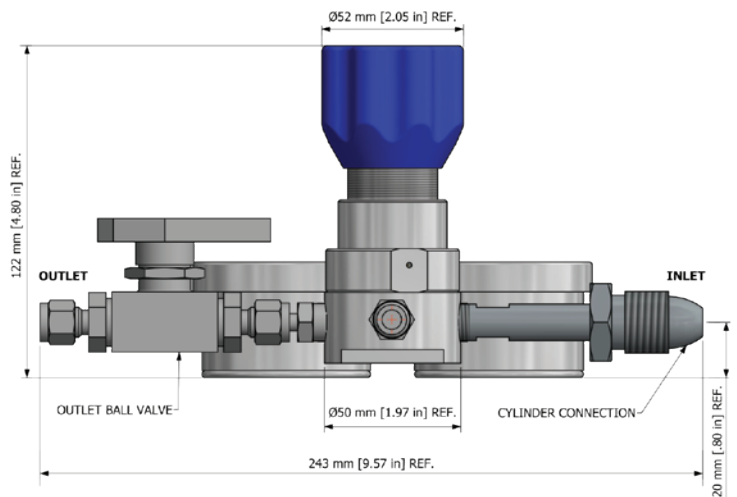
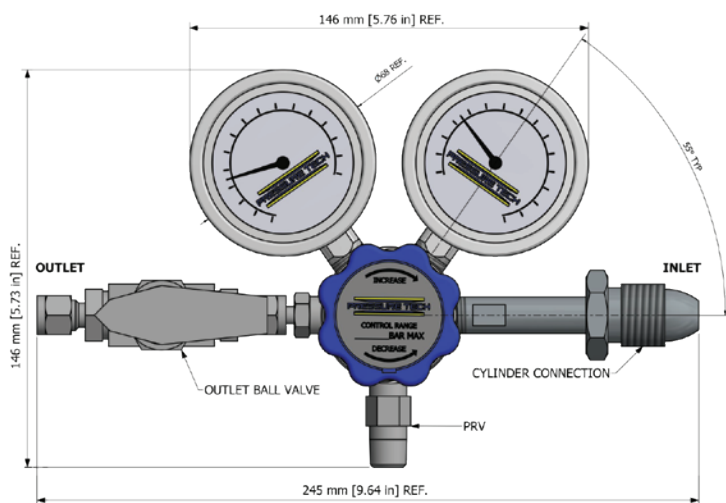
☒ Gas 
 ☒ Liquid 
 | 
 ☒ Diaphragm 
 ☐ Piston 
 | 
 ☒ Self-Venting 
 ☒ Non-Venting 
 | 
 Max Inlet: 414 bar (6,000 psi) 
 | 
 Max Outlet: 35 bar (510 psi) 
 | 
 Cv 0.06

CONTINUED...

'AV' PORTING



'RV' PORTING



*Note:*

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

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**

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

T +44 (0)1457 899 307

E [info@pressure-tech.com](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

170519

PAGE:  
3 OF 4

# CYL310 Datasheet

CYLINDER REGULATOR ASSEMBLY



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

## 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							
<b>REGULATOR MODEL/SERIES</b> CYL310 – Cylinder Regulator Assembly - Diaphragm-Sensed							<b>MODIFICATIONS*</b> Please contact the office for further information.
<b>TYPE</b> SS – Single-Stage TS – Two-Stage (max. control 20 bar / 290 psi)							<b>PORTING AND VALVE OPTIONS</b> 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
<b>BOTTLE CONNECTOR**</b> 3 – BS341 No. 3 connector 4 – BS341 No. 4 connector							<b>SEAT MATERIAL</b> K – PCTFE (max. inlet 300 bar / 4,350 psi) P – PEEK™ (max. inlet 414 bar / 6,000 psi)
<b>CV VALUE</b> 06 – 0.06							<b>CONTROL PRESSURE</b> 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)
<b>BODY MATERIAL*</b> S – AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)							

## OPTIONAL EXTRAS

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

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

\* Other connections/materials may be available.

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

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

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

T +44 (0)1457 899 307

E info@pressure-tech.com

W www.pressure-tech.com

170519

PAGE:  
4 OF 4