

Pressure Tech LF 310 regulator

Analyser & Instrumentation
Pressure Regulator



Præcision i højtryk – når regulatoren ikke må svigte

Når processer drives af høje indgangstryk og samtidig kræver præcis styring af meget lave flow, er der ikke plads til svingninger, kompromiser eller ustabil regulering.

Det er netop i dette spændingsfelt, at Pressure Tech LF310 har etableret sig som en regulator, der ikke blot løser opgaven, men gør det med en driftssikkerhed, der normalt forbindes med større, tungere og mere komplekse systemer.

LF310 er udviklet til at levere stabil trykreduktion i applikationer, hvor nøjagtighed og forudsigelig performance er fundamentet for, at resten af processen fungerer, som den skal.

Regulatorens styrke begynder ved dens evne til at håndtere ekstreme indgangstryk.

Med kapacitet op til 414 bar kan LF310 anvendes direkte på krævende forsyningskilder som højtryksflasker, specialgasser eller procesmedier, hvor forsyningstryk og medieegenskaber udfordrer både komponenter og materialer.

Den interne konstruktion er centreret omkring en Inconel-membran, der er kendt for sin markante længere levetid sammenlignet med traditionelle design.

Det giver færre serviceindgreb, en mere stabil reguleringskurve og en regulator, der bevarer sin responsivitet – selv efter lang tids belastning. LF310's styrke kommer særligt til sin ret ved meget lave flow, hvor små trykvariationer kan påvirke downstream udstyr eller procesdata.

En Cv-værdi på 0,06 gør det muligt at opretholde en finfølt og stabil regulering, og det solide disksæde kombineret med et 40-micron indtagsfilter beskytter regulatorens bløde sæde mod partikler og slitage.

Disse detaljer er ofte afgørende for regulatorens totale levetid og sikrer, at dens performance fastholdes – også i applikationer, der kører kontinuerligt eller med hyppige cykliske belastninger.

Materialevalgmulighederne er brede og gør det muligt at konfigurere LF310 til både standard- og krævende driftsscenerier.

Uanset om installationen er placeret offshore, i laboratorier, i analyseenheder eller i kemiske processer, kan regulatoren tilpasses med 316/316L rustfrit stål, HT Messing eller Hastelloy C-276 samt sæder i PTFE, FEP, PCTFE eller PEEK. Kombinationen sikrer maksimal styrke og driftssikkerhed i installationer med rene eller korrosive medier, hvor materialekompatibilitet spiller en afgørende rolle for både sikkerhed og levetid.

Fleksibiliteten fortsætter i valget mellem Self-Venting or Non-Venting applikationer, så regulatoren kan tilpasses systemer, hvor afblæsning enten er ønsket eller ikke er tilladt af sikkerheds- eller miljøhensyn.

Sammen med temperaturtolerance fra -20 °C til +80 °C og mulighed for panelmontage giver det en regulator, der kan indgå i næsten enhver kritisk trykreducerende opgave.

Det er netop kombinationen af robusthed, præcision og langtidsholdbar konstruktion, der gør LF310 til en regulator, der ofte lever længere end forventet. Mange brugere oplever stabil drift, færre utilsigtede stop og lavere totaløkonomi, fordi regulatoren er designet til at beskytte både sig selv og det udstyr, der befinder sig nedstrøms.

LF310 er derfor ikke blot en regulator – men et strategisk valg, når processen kræver total kontrol og maksimal pålidelighed.

PG Flowteknik Scandinavia ApS er autoriseret Pressure Tech-forhandler i Skandinavien og rådgiver dagligt om dimensionering, materialevalg og konfiguration af regulatorer til både standardiserede og specialiserede applikationer. Har du en udfordring, et projekt eller et behov for præcis trykstyring, står vi klar til at hjælpe dig videre med den optimale løsning.

LF310 Datasheet

LOW-FLOW PRESSURE REGULATOR



● 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 LF310...

The LF310 is a single-stage diaphragm-sensed pressure regulator for applications that require higher supply pressures in addition to an extended life cycle.

Based on the LF300, with its long-lasting Inconel® X750 diaphragm, the LF310 also offers a 'solid disk' seat design which is more robust for aggressive or high temperature applications.

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	0.9kg (2lbs)

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Main Valve Pin	ASTM A479 316/316L Stainless Steel
Soft Seat	PEEK™ (450G) PCTFE (Kel-F)
Valve Spring	Inconel® X750 (UNS N07750)
Diaphragm	Inconel® X750 (UNS N07750)
Handwheel	Nylon
O-Rings	FKM/FPM (Viton)
Loading Spring	ASTM A240 301 Stainless Steel (UNS S30100)
Filter	40 Microns

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 INCONEL® X750 DIAPHRAGM

For ultimate strength and reliability on clean or corrosive applications.

2 316SS THREADED BONNET

For panel mounting option as standard.

3 40 MICRON INLET FILTER

First stage soft seat protection from system contamination.

4 SOLID DISK SEAT DESIGN

Robust design enabling higher inlet pressures of up to 414 bar (6,000 psi).

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

DESIGNED, MANUFACTURED AND BUILT IN THE UK

© 2024 Pressure Tech Ltd. All Rights Reserved.

LF310 Datasheet

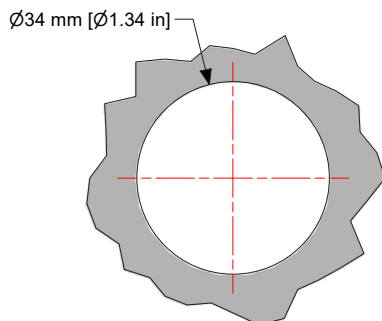
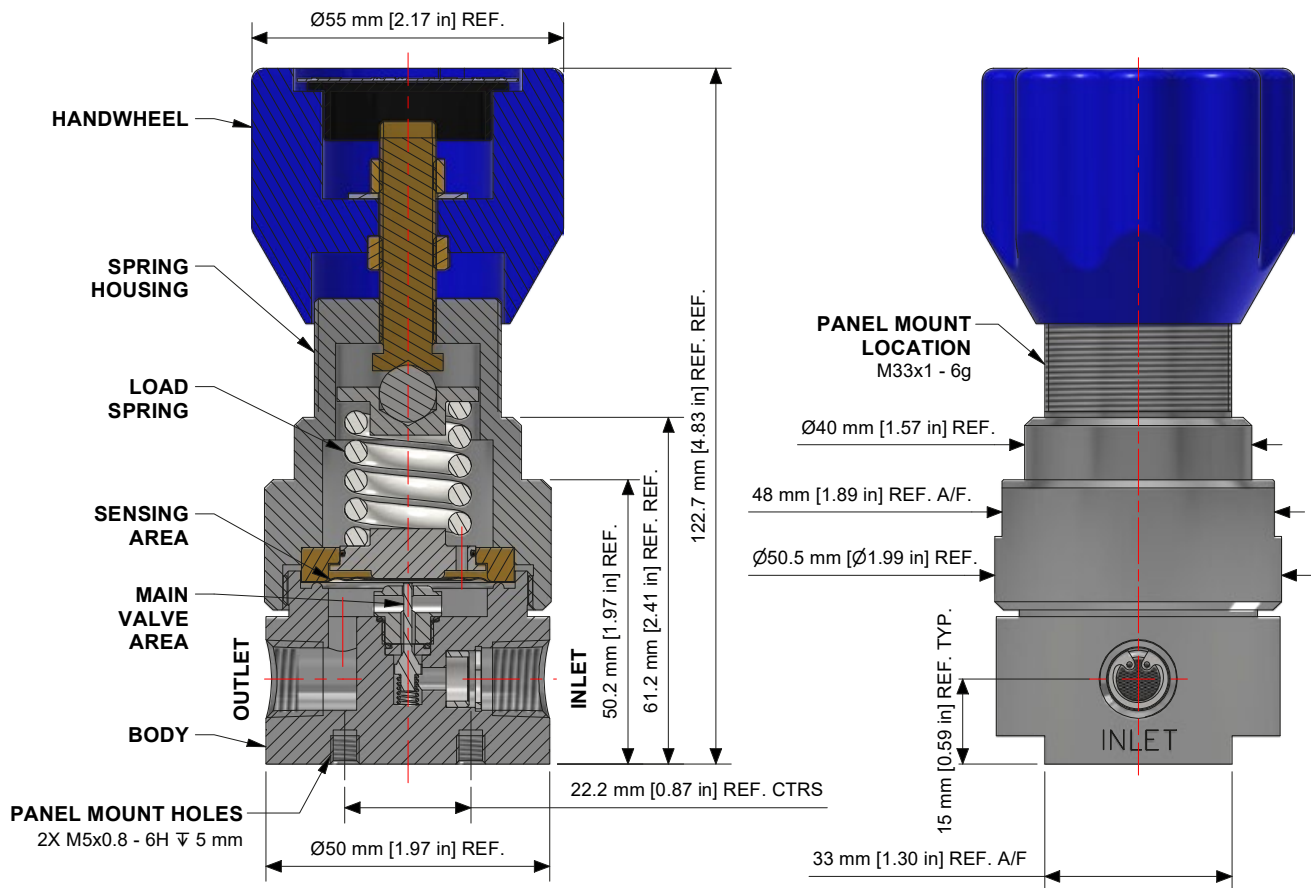
LOW-FLOW PRESSURE REGULATOR



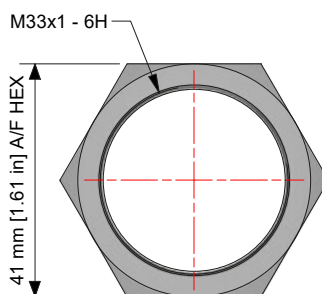
☒ Gas ☒ Liquid | ☒ Diaphragm ☒ Piston | ☒ Self-Venting ☒ Non-Venting | Max Inlet: 414 bar (6,000 psi) | Max Outlet: 35 bar (510 psi) | Cv 0.06

DRAWINGS AND INSTALLATION DIMENSIONS

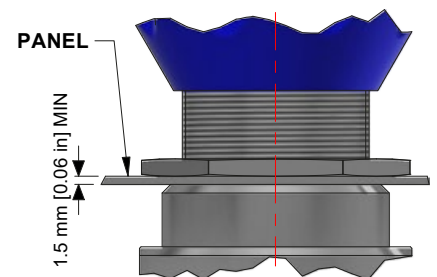
Dimensions shown for 1/4" NPT option and standard configurations only - please contact the office for other options.



Note: **PANEL CUTOUT**
All gauge ports are 1/4" NPT as standard.



PANEL MOUNT RING
(PT-C-024)
STAINLESS STEEL



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
DESIGNED, MANUFACTURED AND BUILT IN THE UK
© 2024 Pressure Tech Ltd. All Rights Reserved.

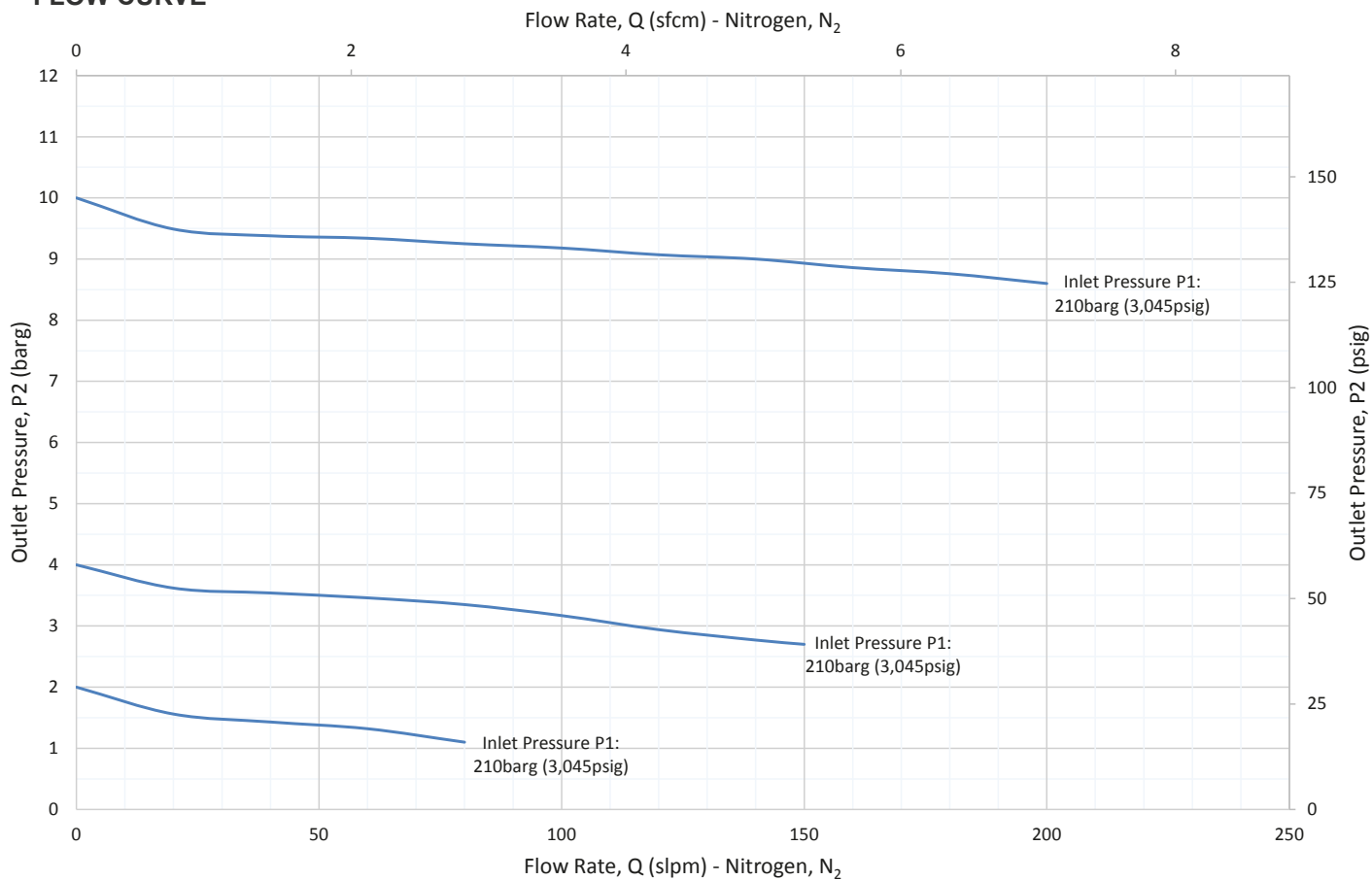
LF310 Datasheet

LOW-FLOW PRESSURE REGULATOR

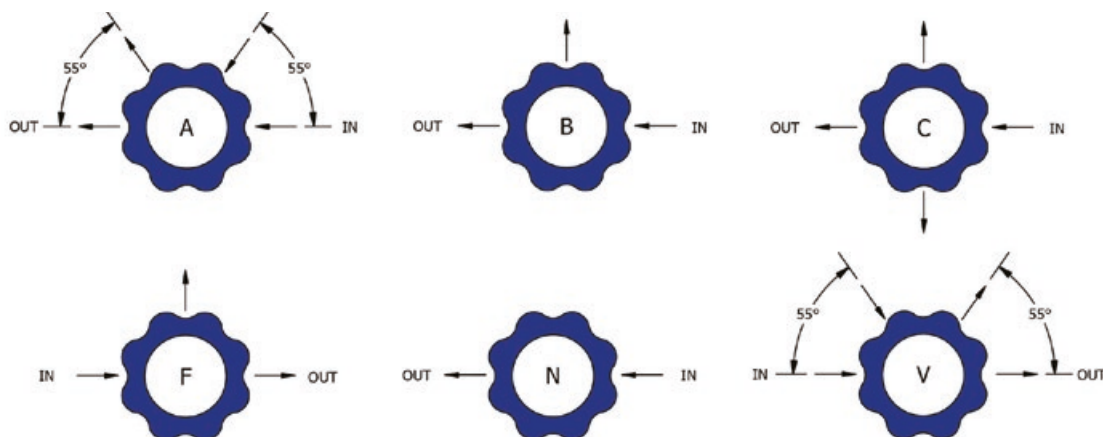


☒ Gas ☒ Liquid | ☒ Diaphragm ☒ Piston | ☒ Self-Venting ☒ Non-Venting | Max Inlet: 414 bar (6,000 psi) | Max Outlet: 35 bar (510 psi) | Cv 0.06

FLOW CURVE



PORTING CONFIGURATIONS



Note:

Additional porting configurations are available - please contact the office for further information.

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

DESIGNED, MANUFACTURED AND BUILT IN THE UK

© 2024 Pressure Tech Ltd. All Rights Reserved.

LF310 Datasheet

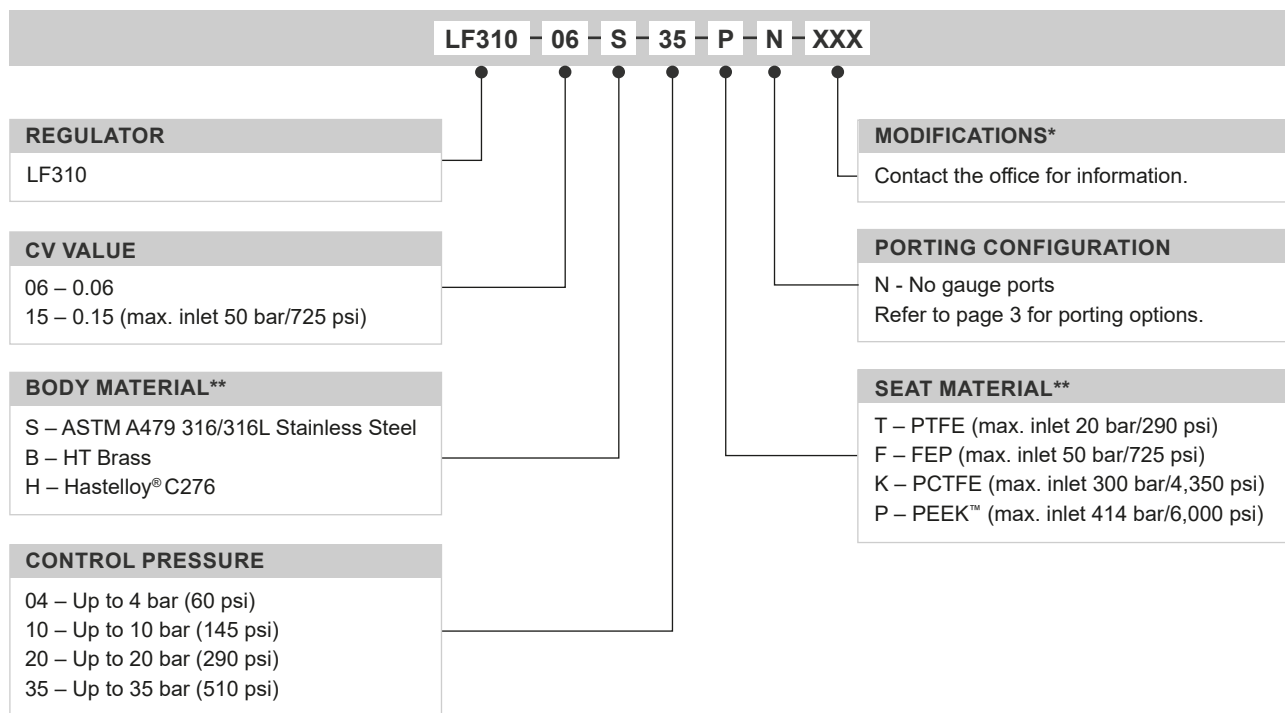
LOW-FLOW PRESSURE REGULATOR



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

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-LF310-06-U-K-M2-V	PCTFE seat and FKM/FPM seals
Service Kit	SRK-LF310-06-U-P-M2-V	PEEK™ seat and FKM/FPM seals
Panel Mounting Ring	PT-C-024	-

Note: Ancillary equipment and additional Service Kit options also available

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

* Where applicable
** Other materials may be available

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
DESIGNED, MANUFACTURED AND BUILT IN THE UK
© 2024 Pressure Tech Ltd. All Rights Reserved.



Metalgangen 13
DK-2690 Karlslunde
Danmark
+(45) 73 84 12 30
info@pgflowtechnik.dk
www.pgflowtechnik.dk
CVR 3146 9090