

TS-311 Datasheet

TWO-STAGE PRESSURE REGULATOR



Gas
 Liquid
 Diaphragm
 Piston
 Self-Venting
 Non-Venting
 Max Inlet: 414bar (6,000psi)
 Max Outlet: 20bar (290psi)
 Cv 0.06



INTRODUCING THE TS-311...

The TS-311 is a two-stage piston-sensed pressure regulator, providing stable pressure control under decaying inlet conditions.

The first stage of the regulator is preset at the factory and locked to prevent alteration. The second stage of the regulator, with a PCTFE seat as standard, can be adjusted by the user between various outlet pressures within the range.

SPECIFICATION

Max Rated Inlet Pressure	414bar (6,000psi)
Outlet Ranges	Up to 20bar (290psi)
Design Proof Pressure	150% max WP
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	1.5kg (3.3lbs)

STANDARD MATERIALS OF CONSTRUCTION

Other materials are available - please contact the office.

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	PEEK™ or PCTFE
Valve Spring	Inconel® X750
Handwheel	Nylon
'O'-Ring Seals	FKM / FPM
Loading Spring	AISI 302 Stainless Steel (UNS S30200)
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)

FEATURES AND BENEFITS

1 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

2 0.04% DECAYING PRESSURE EFFECT

Stable outlet pressure under varying inlet conditions.

3 'INTERSTAGE' RELIEF VALVE OPTION

Ability to protect first stage from over pressurisation.

4 40 MICRON INLET FILTER

First stage soft seat protection from system contamination.

NOTE: 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

050717

PAGE: 1 OF 4

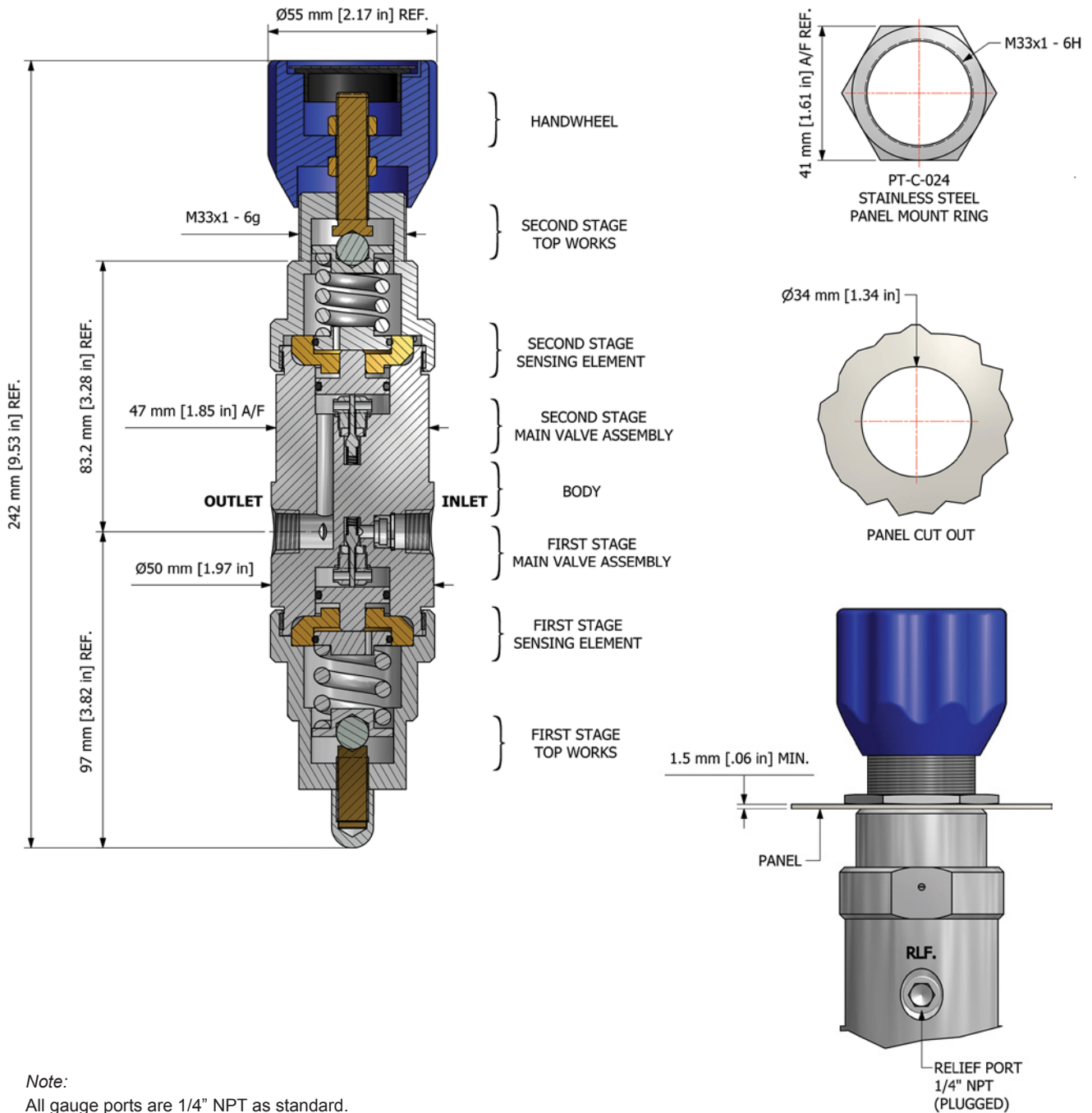
TS-311 Datasheet

TWO-STAGE PRESSURE REGULATOR



Gas
 Liquid
 Diaphragm
 Piston
 Self-Venting
 Non-Venting
 Max Inlet: 414bar (6,000psi)
 Max Outlet: 20bar (290psi)
 Cv 0.06

DRAWINGS AND INSTALLATION DIMENSIONS



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

NOTE: 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

050717

PAGE: 2 OF 4

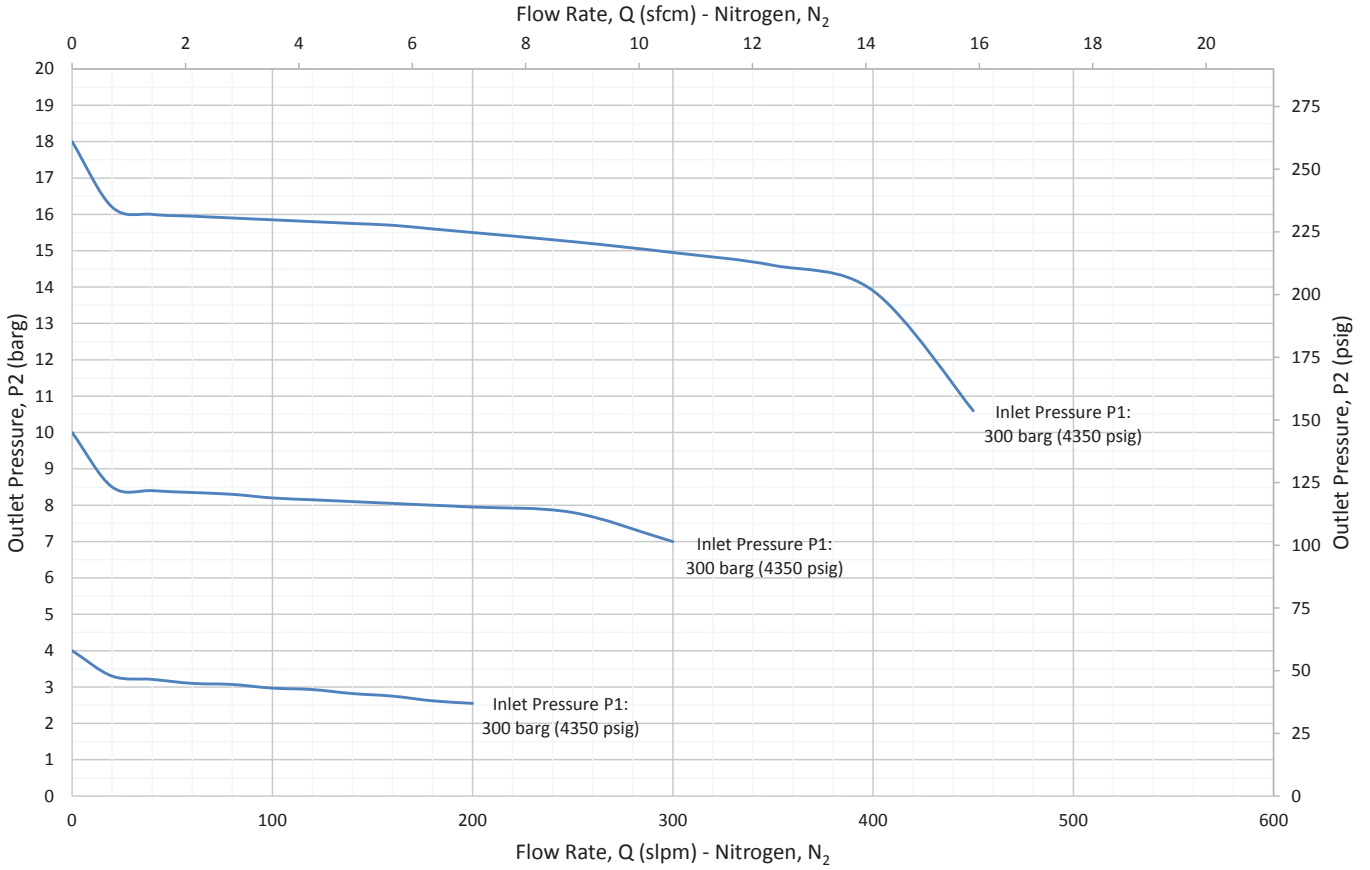
TS-311 Datasheet

TWO-STAGE PRESSURE REGULATOR

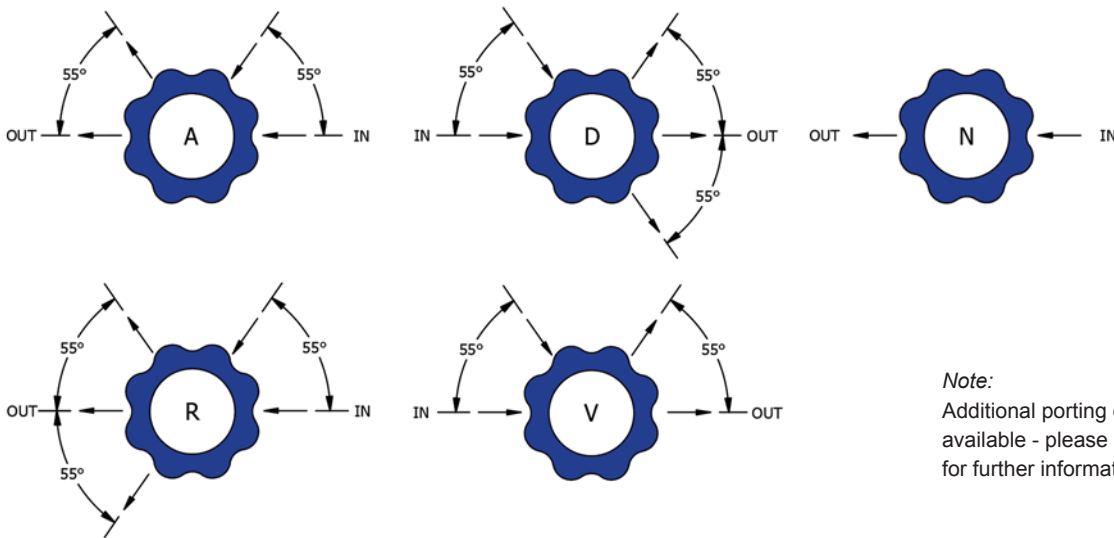


Gas
 Liquid
 Diaphragm
 Piston
 Self-Venting
 Non-Venting
 Max Inlet: 414bar (6,000psi)
 Max Outlet: 20bar (290psi)
 Cv 0.06

FLOW CURVE



PORTING CONFIGURATIONS



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

NOTE: 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

050717

PAGE:
3 OF 4

TS-311 Datasheet

TWO-STAGE PRESSURE REGULATOR



Gas
 Liquid
 Diaphragm
 Piston
 Self-Venting
 Non-Venting
 Max Inlet: 414bar (6,000psi)
 Max Outlet: 20bar (290psi)
 Cv 0.06

ORDERING INFORMATION

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

TS311 - 06 - S - 10 - K - N - XXX	
REGULATOR MODEL/SERIES TS311 – Two-Stage Pressure Regulator - Piston-Sensed	MODIFICATIONS* Please contact the office for further information.
CV VALUE 06 – 0.06	PORTING CONFIGURATION N - No gauge ports Please refer to page 3 for porting configuration options.
BODY MATERIAL S – AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)	SEAT MATERIAL (1ST STAGE) K – PCTFE (300bar / 4350psi inlet) P – PEEK™ (414bar / 6000psi inlet)
CONTROL PRESSURE 02 – 0 to 2bar (0 to 30psi) 04 – 0 to 4bar (0 to 60psi) 10 – 0 to 10bar (0 to 145psi) 20 – 0 to 20bar (0 to 290psi)	* Where applicable

OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-TS311-06-U-K-23-V	PCTFE seat and FKM/FPM seals
Service Kit	SRK-TS311-06-U-P-23-V	PEEK™ seat and FKM/FPM seals
Panel Mounting Ring	PT-C-024	-

Note:
Ancillary Equipment also available. Please contact the office for further information.

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

NOTE: 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

050717