TS311 Datasheet

TWO-STAGE PRESSURE REGULATOR

PRESSURE TECH

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

INTRODUCING THE TS311...

The TS311 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. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	1.5kg (3.3lbs)

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 (UNS S31600/S31603)
Soft Seat	PEEK™ (450G)
	PCTFE (Kel-F)
Valve Spring	Inconel® X750 (UNS N07750)
Piston	ASTM A479 316/316L Stainless Steel (UNS S31600/S31603)
Handwheel	Nylon
O-Ring	FKM/FPM (Viton)
Loading Spring	ASTM A240 301 Stainless Steel (UNS S30100)

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 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.

PRESSURE TECH LTD
Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH
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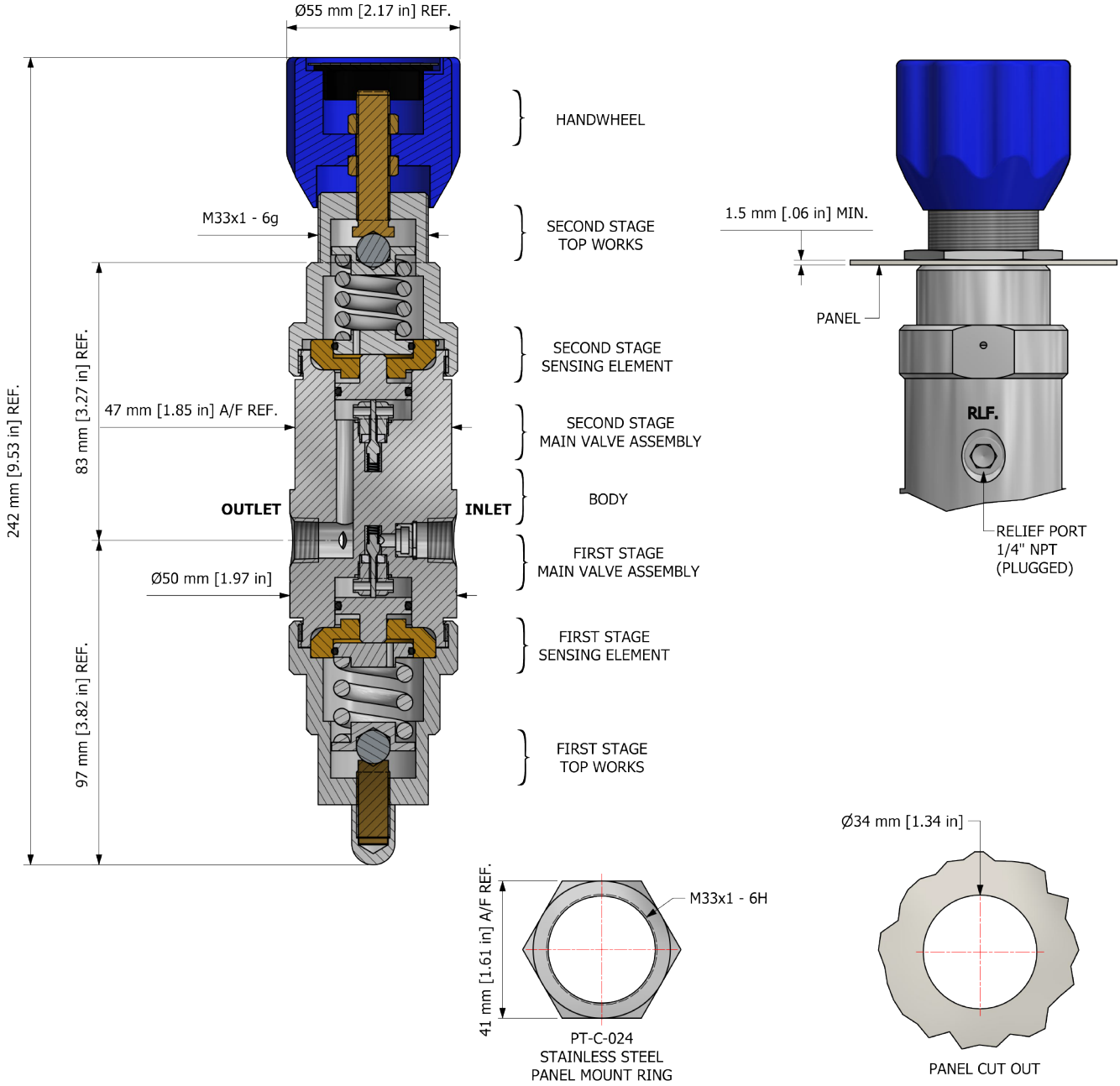
DRAWINGS AND INSTALLATION DIMENSIONS

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



Note:

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

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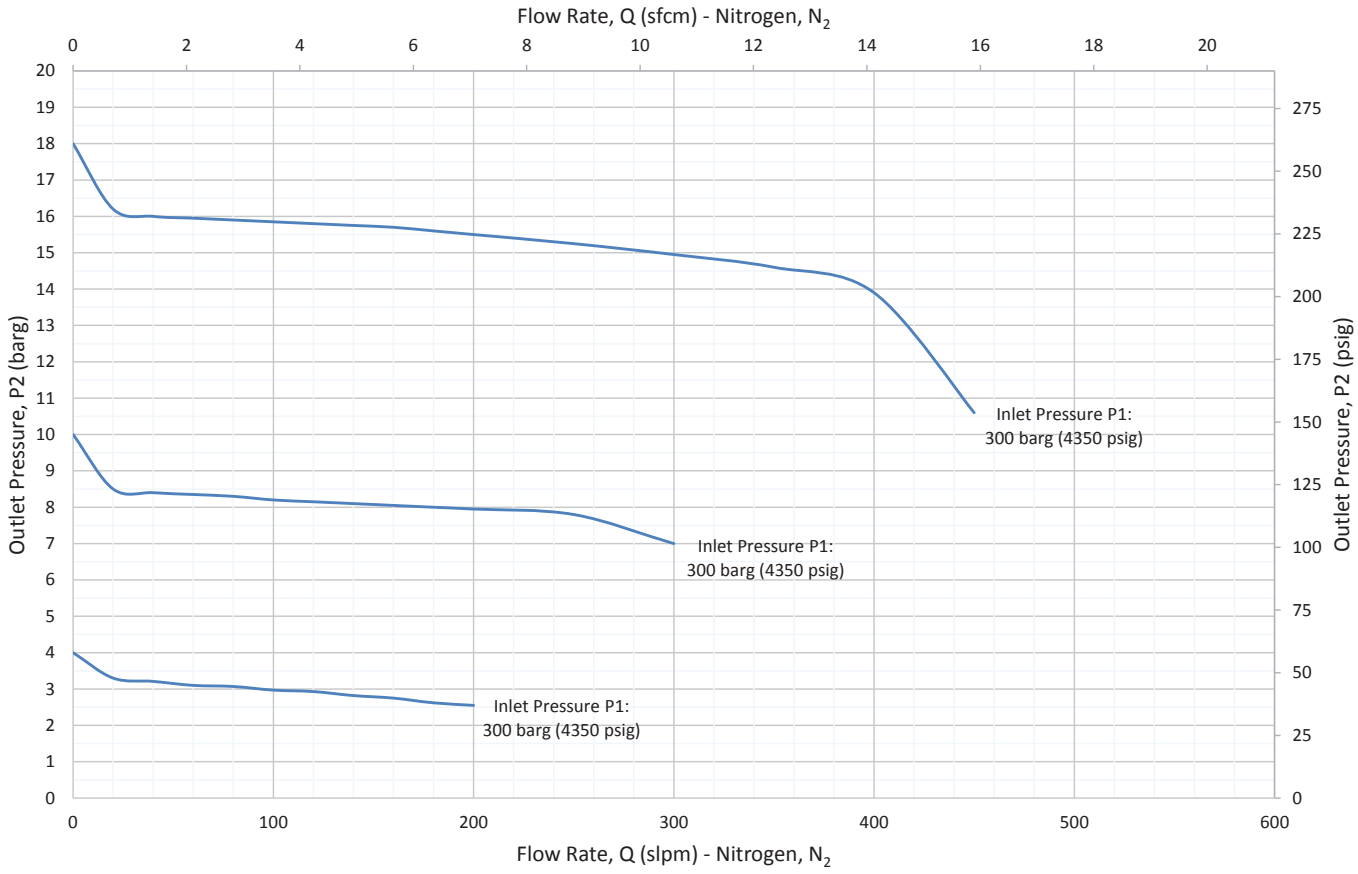
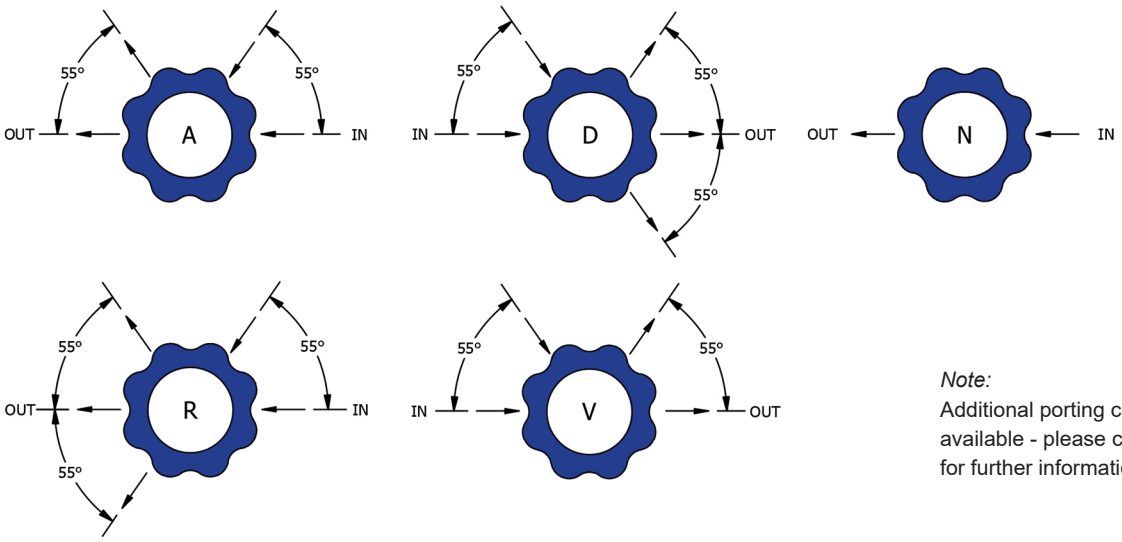
FLOW CURVE



PORTING CONFIGURATIONS



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

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ORDERING INFORMATION

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

TS311 – 06 – S – 10 – K – N – XXX

MODEL
TS311

CV VALUE
06 – 0.06

BODY MATERIAL**
S – ASTM A479 316/316L Stainless Steel

CONTROL PRESSURE
02 – Up to 2 bar (29 psi)
04 – Up to 4 bar (58 psi)
10 – Up to 10 bar (145 psi)
20 – Up to 20 bar (290 psi)

MODIFICATIONS*
Contact the office for information.

PORTING CONFIGURATION
N - No gauge ports
Refer to page 3 for porting options.

SEAT MATERIAL (1ST STAGE)**
K – PCTFE (max. inlet 300 bar/4,350 psi)
P – PEEK™ (max. inlet 414 bar/6,000 psi)

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.

* Where applicable
** Other materials may be available

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