

# TS311 Datasheet

## TWO-STAGE PRESSURE REGULATOR



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	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
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Handwheel	Nylon
'O'-Ring Seals	FKM / FPM
Loading Spring	AISI 302 Stainless Steel (UNS S30200)

### 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.

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

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PAGE:  
1 OF 4

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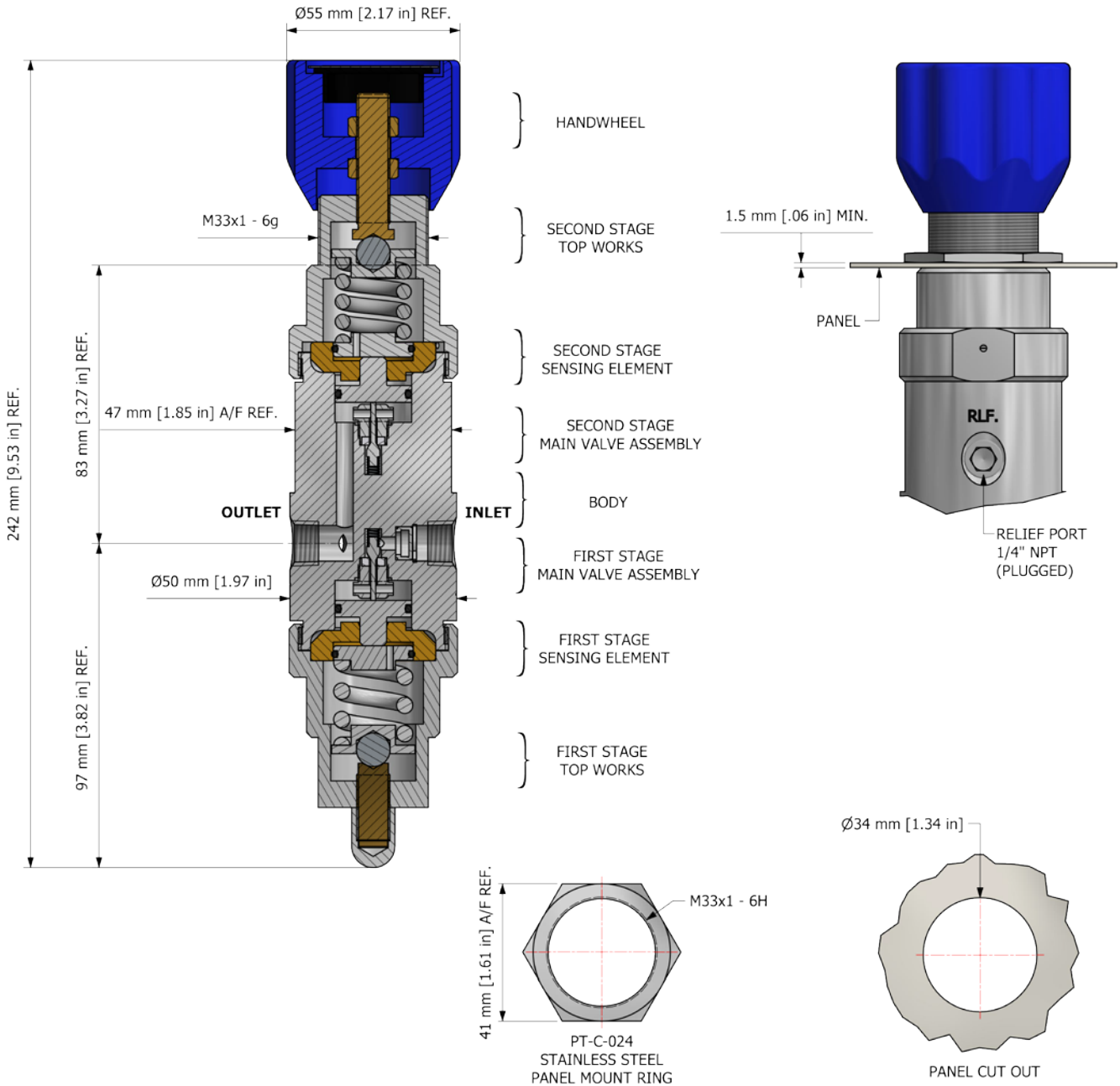
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## DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1/4" NPT option - please contact the office for additional connection options.



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

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PAGE:  
2 OF 4

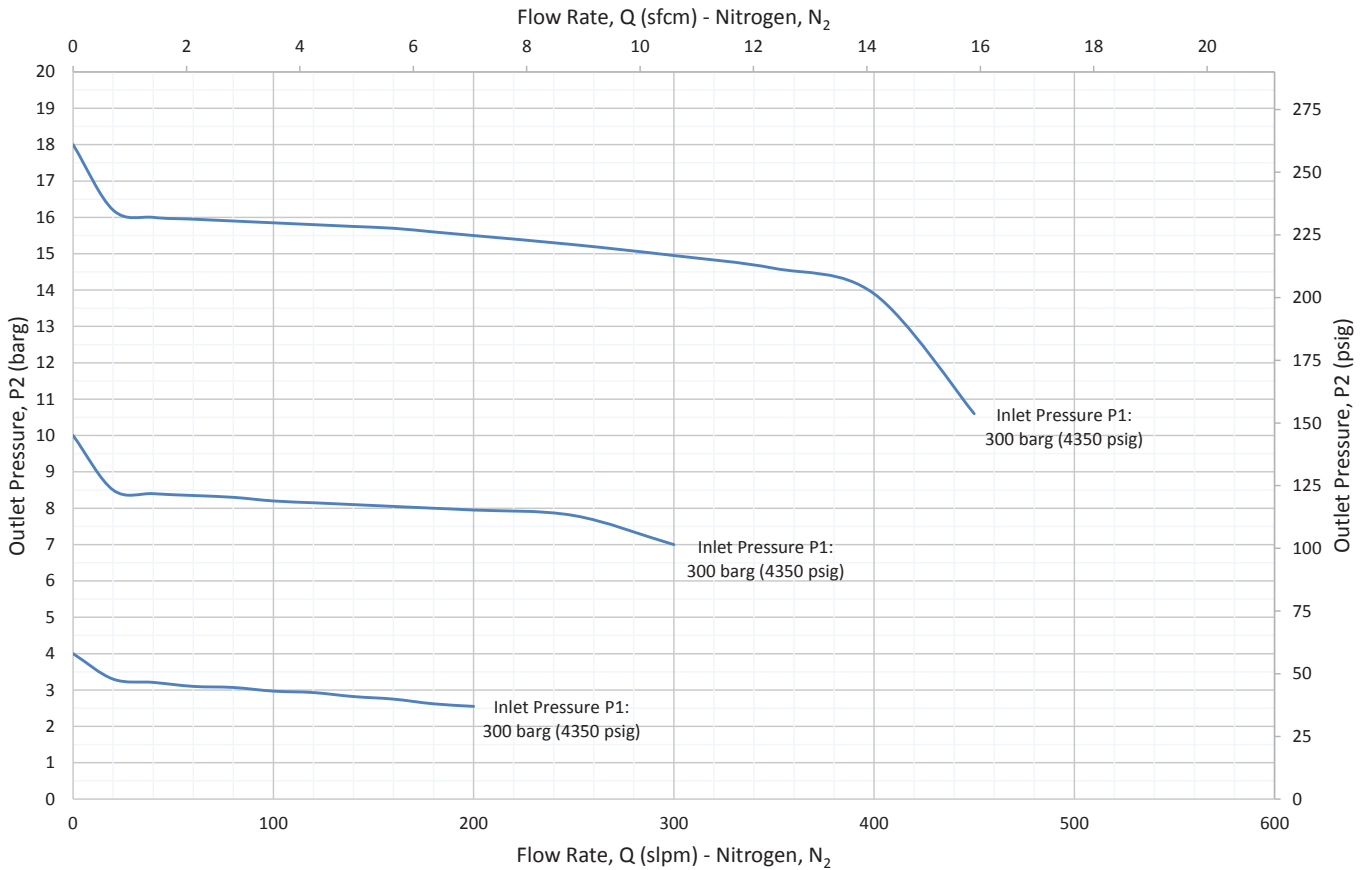
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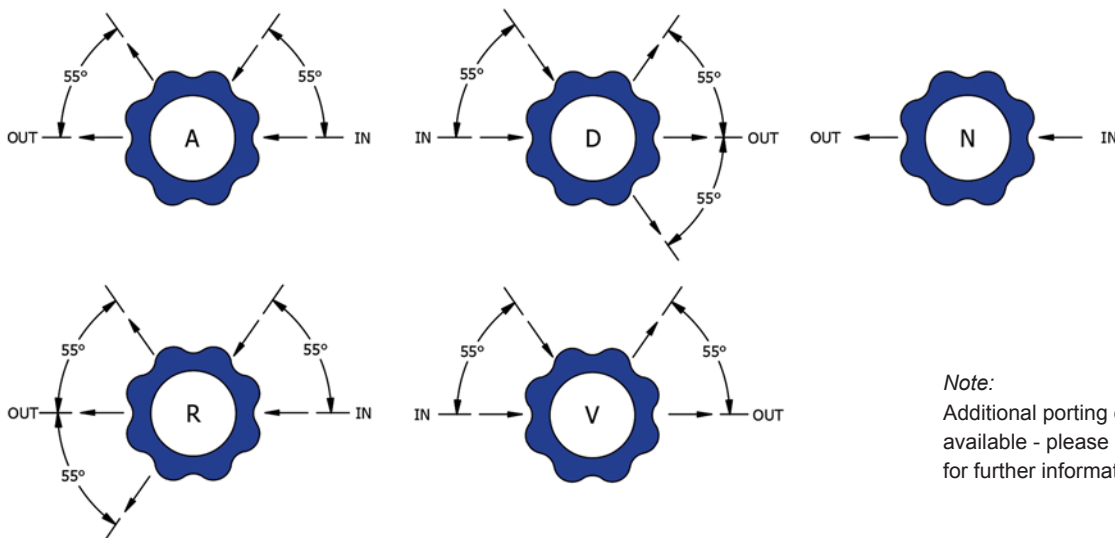


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### FLOW CURVE



### PORTING CONFIGURATIONS



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

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PAGE:  
3 OF 4

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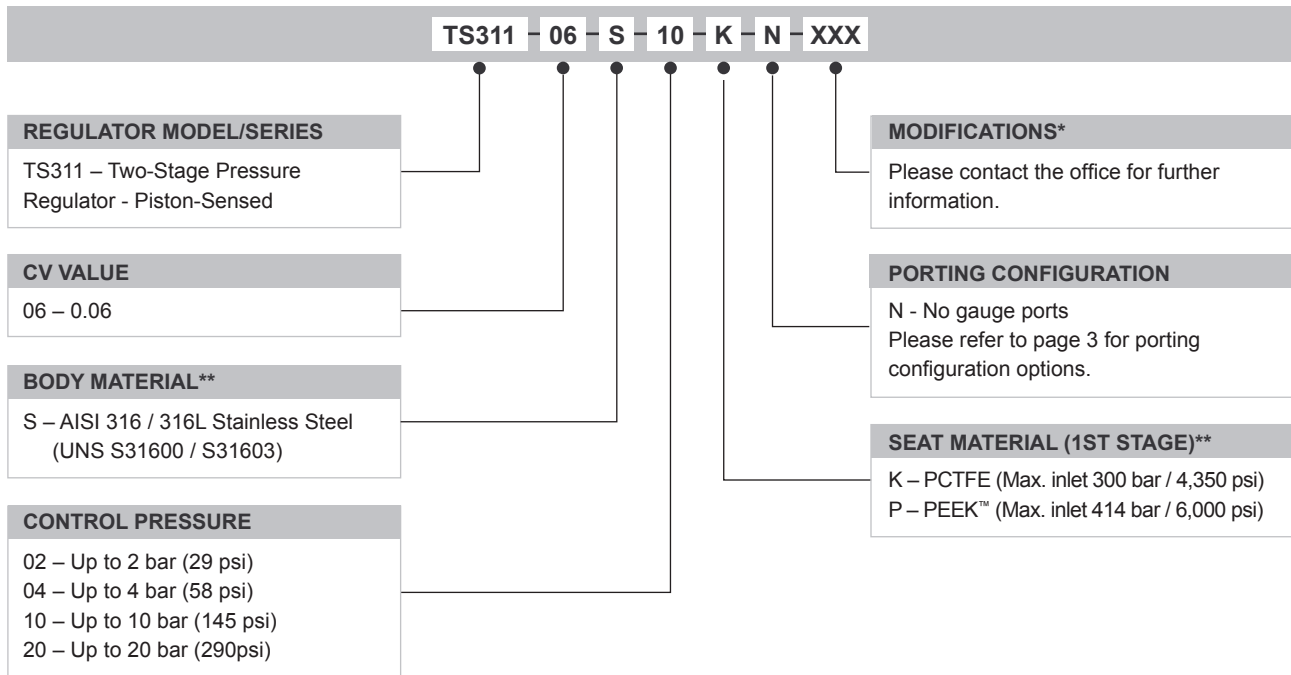
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### ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-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

\* Where applicable  
\*\* Other materials may be available - please contact the office

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PAGE:  
4 OF 4