

LW-TS414 Datasheet

LIGHTWEIGHT TWO-STAGE PRESSURE REGULATOR



Gas
 Liquid
 Diaphragm
 Piston
 Self-Venting
 Non-Venting
 Max Inlet: 414 bar (6,000 psi)
 Max Outlet: 1 bar (14.5 psi)
 Cv 0.06



INTRODUCING THE LW-TS414...

The LW-TS414 is a lightweight, two-stage piston-sensed regulator, providing stable pressure control under decaying inlet conditions.

The first stage of the regulator uses a PCTFE seat for up to 300 bar (4,350 psi) inlet pressure or a PEEK™ for up to 414 bar (6,000 psi) inlet pressure and 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 with the selected range.

SPECIFICATION

Max. Rated Inlet Pressure	414 bar (6,000 psi)
Outlet Ranges	Up to 1 bar (14.5 psi)
Design Proof Pressure	150% max. working pressure

* Pressure regulator rating may be limited by connection type, Cv and/or seat material

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	Aluminium Alloy (AW6082)
Main Valve Pin	AISI 316/316L Stainless Steel (UNS S31600/S31603)
First-Stage Seat	PCTFE (max. inlet 300 bar (4,350 psi)) PEEK™ (max. inlet 414 bar (6,000 psi))
Second-Stage Seat	PCTFE
Valve Spring	Inconel® X750
Piston	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
O-Rings	FKM/FPM
Loading Spring	AISI 302 Stainless Steel (UNS S30200)

Seat Leakage	In accordance with ANSI/FCI 70-3
Operating Temperatures	-20°C to +150°C
Weight	0.54kg (1.2lbs)

* Operating temperature range is provided as a guide only

FEATURES AND BENEFITS

1 TWO-STAGE DESIGN

Accurate pressure control through two-stages of pressure reduction.

2 0.04% DECAYING PRESSURE EFFECT

Stable pressure control under varying inlet conditions.

3 SOLID DISK SEAT DESIGN

Perfect for use in aggressive or harsh conditions challenging conditions.

4 LIGHTWEIGHT DESIGN

Aluminium body provides users with a lightweight pressure control solution.

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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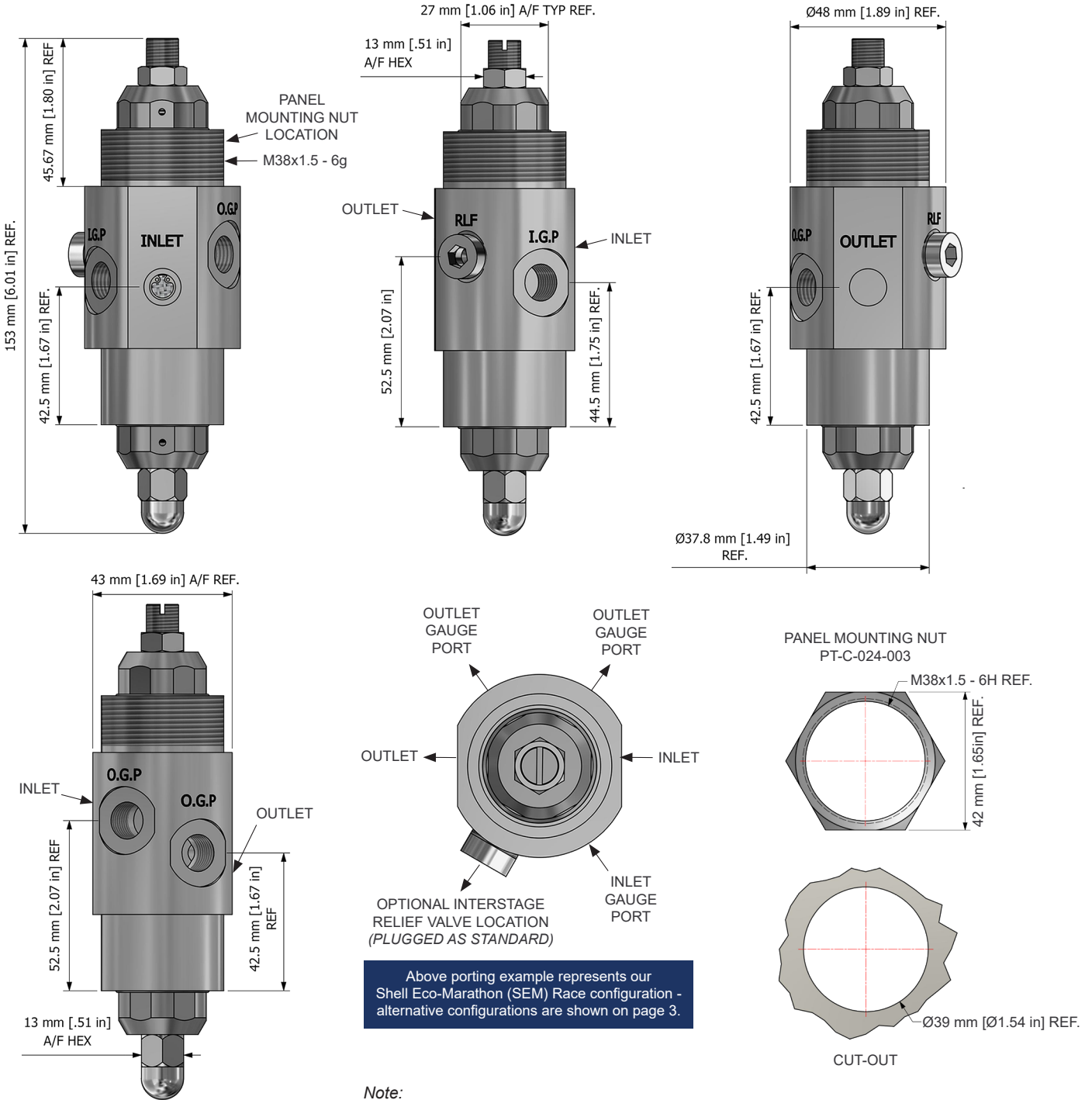
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● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 414 bar (6,000 psi) | Max Outlet: 1 bar (14.5 psi) | Cv 0.06

DRAWINGS AND INSTALLATION DIMENSIONS

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



Above porting example represents our Shell Eco-Marathon (SEM) Race configuration - alternative configurations are shown on page 3.

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

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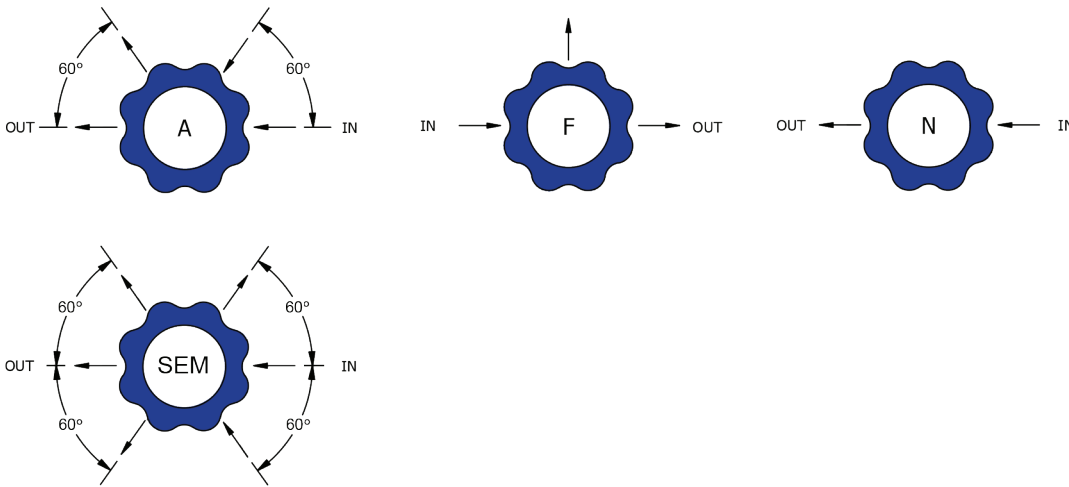


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FLOW CURVE

Please contact the office for further information.

PORTING CONFIGURATIONS



Note:

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

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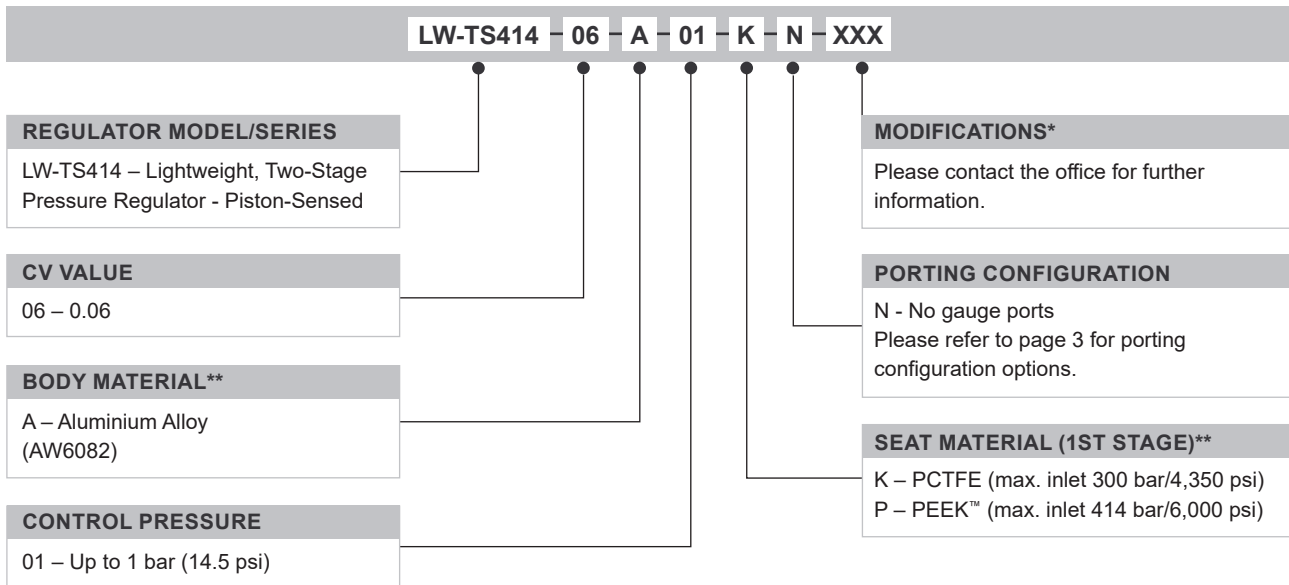
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ORDERING INFORMATION

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



OPTIONAL EXTRAS		
	PART NUMBER	DESCRIPTION
Service Kit	SRK-LW-TS414-06-K	PCTFE SEAT and FKM/FPM seals

Note:
Ancillary equipment also available

TRADEMARKS: Inconel® is a registered trademark of Inco Alloys International

* Where applicable

** Other materials may be available - please contact the office

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