LW351 Datasheet

PRESSURE REGULATOR FOR
HYDROGEN DRONE & LIGHT VEHICLE APPLICATIONS

Gas | Liquid | Diaphragm | Piston | Self-Venting | Non-Venting | Max Inlet: 350 bar (5,075 psi) | Max Outlet: 1 bar (14.5 psi) | Cv 0.06

INTRODUCING THE LW351...

The LW351 is a piston-sensed pressure regulator, designed specifically to provide constant pressure supply to the Hydrogen Fuel Cell. With a low 0.15% decaying pressure effect, it offers accurate control in a single-stage pressure reduction.

When weight is a critical consideration for your application, the LW351 is the perfect solution. It's compact size and lightweight design (down to 0.2kg) fits the bill, and additionally offers direct mounting to the Hydrogen cylinder.

SPECIFICATION

Max. Rated Inlet Pressure	350 bar (5,075 psi)
Outlet Ranges	Up to 1 bar (14.5 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	0.2kg (min.)

STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	Aluminium Alloy (AW6082)
Main Valve Pin	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Seat	PCTFE
Valve Spring	Inconel® X750
Piston	Aluminium Alloy (AW6082)
'O'-Ring Seals	FKM / FPM
Loading Spring	AISI 17-7 PH Stainless Steel (UNS S17700)
Filter	40 Microns

FEATURES AND BENEFITS

1 LIGHTWEIGHT & COMPACT

Weighs as little as 200g - perfect if application would benefit from a lightweight solution.

2 PISTON SENSING ELEMENT

Perfect for use in challenging conditions.

3 0.15% DECAYING PRESSURE EFFECT

For stable pressure control, even under depleting gas supply conditions.

4 DIRECT MOUNTING TO CYLINDER

Quick and convenient design.

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

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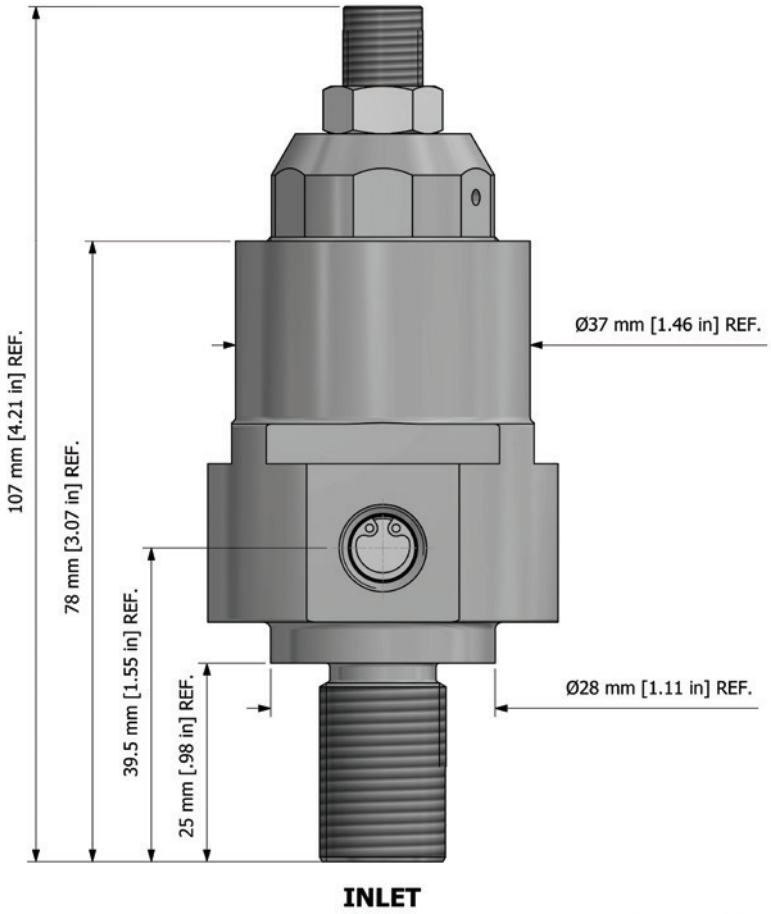
●	○	○	●	○	●			

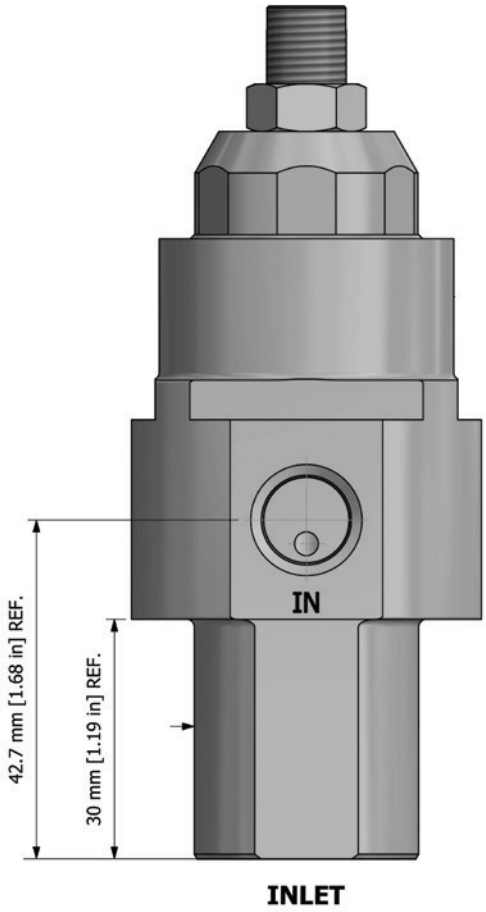
DRAWING AND INSTALLATION DIMENSIONS

Please contact the office for further information.

CYLINDER VERSION



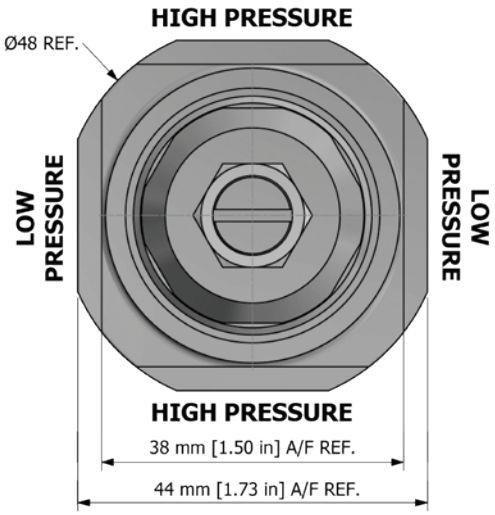
STANDARD VERSION



CONNECTION SIZE EXAMPLE OF '1' & '2' (SEE RIGHT):

1 – 2 x 1/8" NPT High Pressure &
2 x 1/8" NPT Low Pressure

2 – 2 x 1/8" BSPP High Pressure &
2 x 1/8" BSPP Low Pressure



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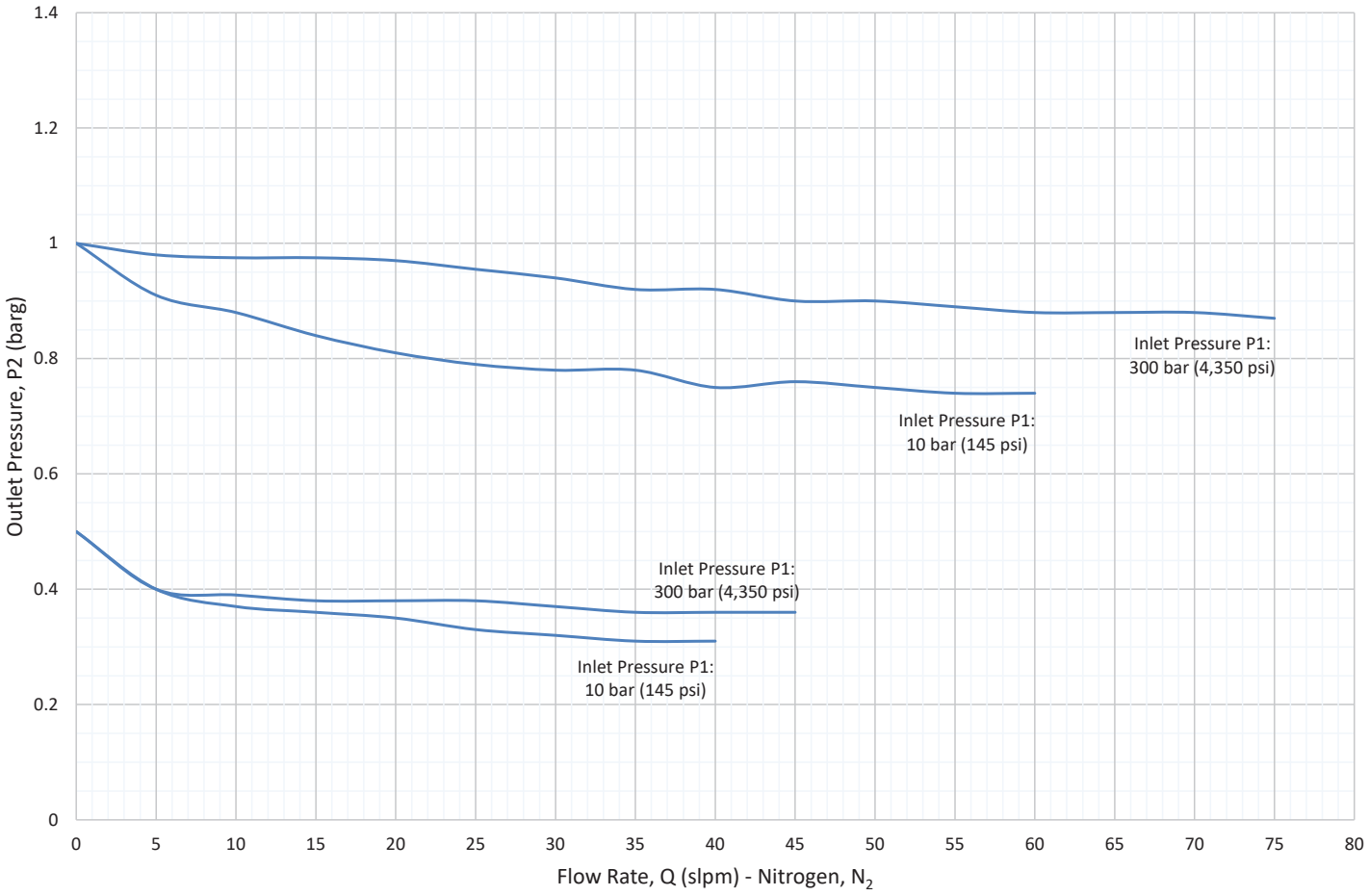
FLOW CURVES



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ORDERING INFORMATION

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

LW351 – 06 – A – 01 – V – K – 01C – 1 – XXX

REGULATOR MODEL/SERIES

LW351 – Pressure Regulator for Hydrogen Drone & Light Vehicles - Piston-Sensed

CV VALUE

06 – 0.06

BODY MATERIAL**

A – Aluminium Alloy (AW6082)

CONTROL PRESSURE

01 – Up to 1 bar (14.5psi)

O-RING MATERIAL**

E – EPDM
V – FKM / FPM

MODIFICATIONS*

Please contact the office for further information.

CONNECTION SIZE/TYPE**

1 – 2 x 1/8" NPT High Pressure & 2 x 1/8" NPT Low Pressure
2 – 2 x 1/8" BSPP High Pressure & 2 x 1/8" BSPP Low Pressure
3 – 1 x 1/4" NPT High Pressure & 3 x 1/4" NPT Low Pressure

INLET CONNECTION SIZE/TYPE**

01C – 5/8"-18 UNF Cylinder
02C – M18 x 1.5 Cylinder
02N – 1/4" NPT

SEAT MATERIAL**

K – PCTFE

OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-LW351-06-A-350-V-K...	PCTFE seat.

Note:
Ancillary equipment also available

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

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