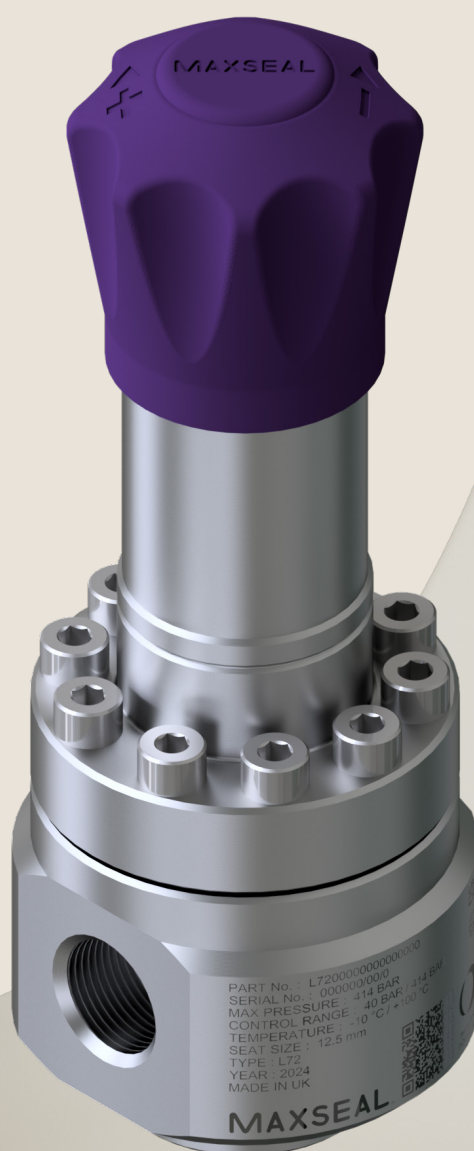




Process
Automation

Our product brand:
IMI Maxseal

L72 Series 3/4" Back Pressure Regulator



Breakthrough
engineering for
a better world

L72 Series
3/4" Back Pressure Regulator

- Port size: 3/4" NPT/BSPP

– High pressure regulation providing a wide range of back pressure control

– Up to 414 bar inlet pressure

– Heavy duty construction, accurate and reliable, ideal for high and low pressure applications

– 12.5 mm valve seat provides stable upstream pressure control

– Low friction piston for increased sensitivity at high pressure and diaphragm-sensed version for better performance at lower pressures

– Temperature rating down to -50 °C

– Certifications: ATEX 94/9/EC, PED 2014/68/EU



Technical features

Medium: Gas or liquid (for liquid applications contact Sales)	Port Size: 3/4" NPT/BSPP	Temperature Range: °C °F NBR -10 ... +100 +14 ... +212 FKM -20 ... +100 -4 ... +212 EPDM -30 ... +100 -22... +212 Low temp. NBR -50 ... +100 -58... +212 Extended temperature ranges available - contact Sales	Features: 1/8" NPT vent to monitor seal integrity Panel mounting - optional kit
Flow: Cv Kv 2.4 2.1 Cv is USgpm for 1 psi Δp Kv is m³/hr for 1 bar Δp	Gauge Port: 1/4" NPT inlet & outlet gauge ports	Materials: Valve body: SS 316L Trim: SS 316L Valve spring: SS 316 Set spring: Powder coated chrome silicon Seals: NBR, FKM, EPDM, Low temperature NBR Seat: PEEK	Options: Tamper-proof stem cap NACE MR0175/ISO 15156 compliant Clean to ASTM G93 level C Limit stop for pressure control range
Leakage: ANSI/FCI 70-3 Class VI and API 598	Pressure Range: bar psi 0.3 ... 3 4 ... 44 1 ... 10 15 ... 145 2 ... 20 29 ... 290 5 ... 50 73 ... 725 10 ... 100 145 ... 1450 20 ... 200 290 ... 2900 40 ... 414 600 ... 6000		
Envelope (LxWxH): 89 x 89 x 251			

Technical data

Maximum Inlet Pressure bar (psi):	414 (6000) SP version 20 (290) LP version
Maximum Outlet Control Pressure bar (psi):	414 (6000) SP version 20 (290) LP version
Sensing Type:	Piston (SP version only) Diaphragm (LP version only)
Seat Diameter mm (in):	12.5 (1/2")
Connection Options:	3/4" NPT 3/4" BSPP
Gauge / Vent Connections:	Gauge: 1/4" NPT Vent: 1/8" NPT
Weight kg (lb):	4.3 (9.5)

Option selector

Build an L72 series regulator ordering number by combining the designators in the sequence shown below.

Example part number:

1	2	3	4	5	6	7	8	9	10	11	12	13
L72	A9	A5	S	W	N	N	A	H	0	0	0	0

1 Model 3/4" Spring Loaded Regulator L72	4 Max Inlet Pressure bar psi 414* 6000* S 20** 290** L	6 Relieving Non-relieving N	9 Handwheel Standard H Handwheel with limit stop L Tamper proof T	11 NACE None 0 NACE N
2 Body Material Stainless Steel A9	5 Outlet Pressure Range bar psi 0.3 ... 3** 4 ... 44** K 1 ... 10** 15 ... 145** P 2 ... 20** 29 ... 290** R 5 ... 50* 72 ... 725* W 10 ... 100* 145 ... 1450* Y 20 ... 200* 290 ... 2900* 3 40 ... 414* 600 ... 6000* 6	7 Elastomers NBR N FKM V EPDM E Low temp NBR Q	10 Filter None 0	12 Panel Mounting None 0 With panel mounting p
3 Port Size 3/4" NPT A5 3/4" BSPP E5		8 Port Locations*** A		13 Cleanliness Standard 0 ASTM G93 Level C' C Hydrogen† H

* SP version only
** LP version only
*** See port configurations
† Operating range for certain applications may be limited by assembly chemicals - details on request

Spares option selector

Example part number:

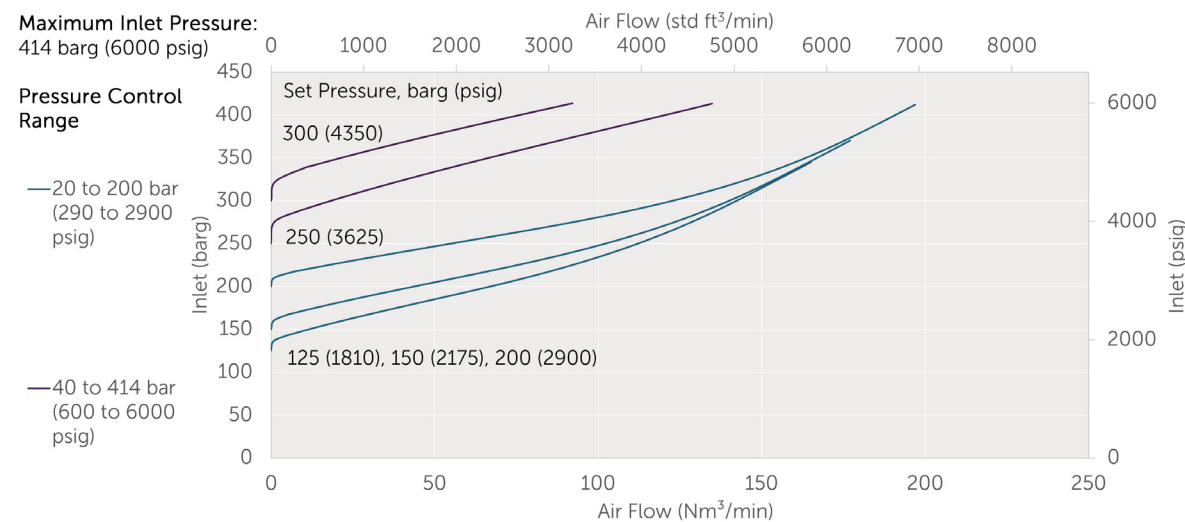
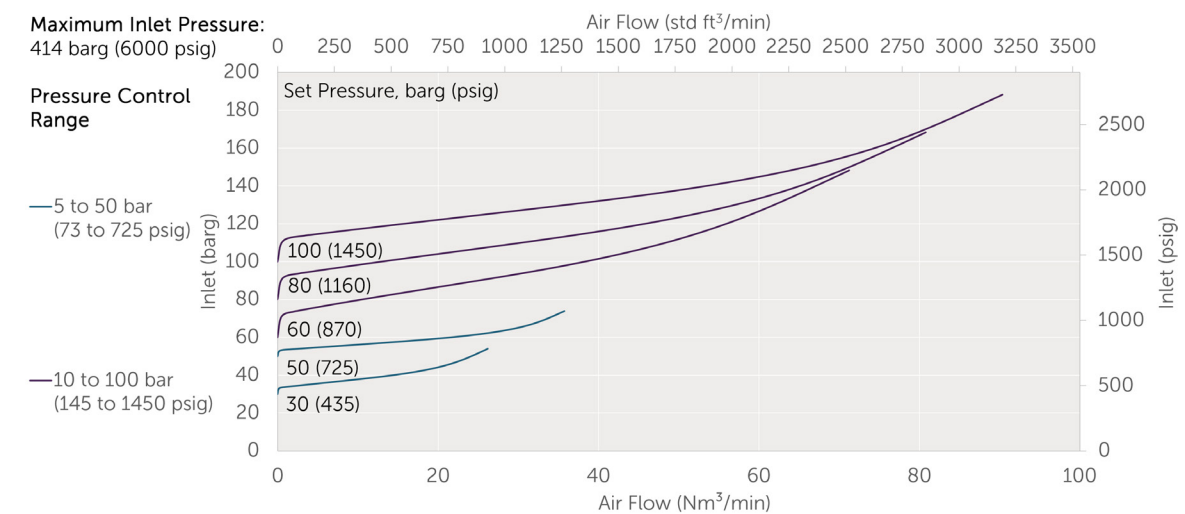
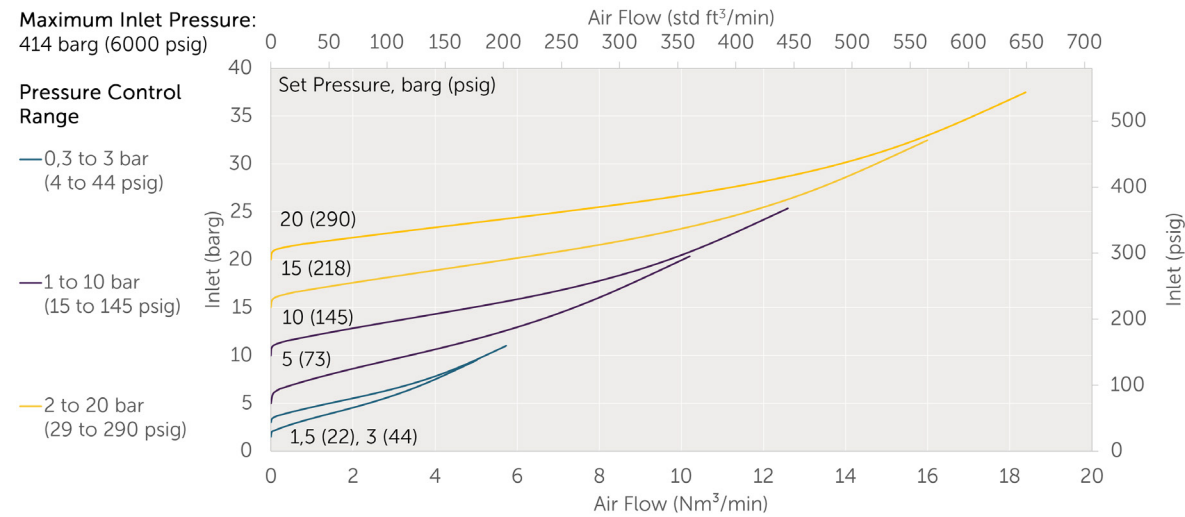
1	2	3	4	5	6	7	8	9	10
L72	S	S	W	N	N	H	0	0	0

1 Model 3/4" Spring Loaded Regulator L72	4 Outlet Pressure Range bar psi 0.3 ... 3** 4 ... 44** K 1 ... 10** 15 ... 145** P 2 ... 20** 29 ... 290** R 5 ... 50* 72 ... 725* W 10 ... 100* 145 ... 1450* Y 20 ... 200* 290 ... 2900* 3 40 ... 414* 600 ... 6000* 6	6 Elastomers NBR N FKM V EPDM E Low temp NBR Q	8 Filter None 0
2 Type Spares S			9 NACE None 0 NACE N
3 Max Inlet Pressure bar psi 414* 6000* S 20** 290** L		7 Handwheel Standard H Handwheel with limit stop L Tamper proof T	10 Cleanliness Standard 0 ASTM G93 Level C' C Hydrogen† H
	5 Relieving Non-relieving N		

* SP version only
** LP version only
† Operating range for certain applications may be limited by assembly chemicals - details on request

Flow data

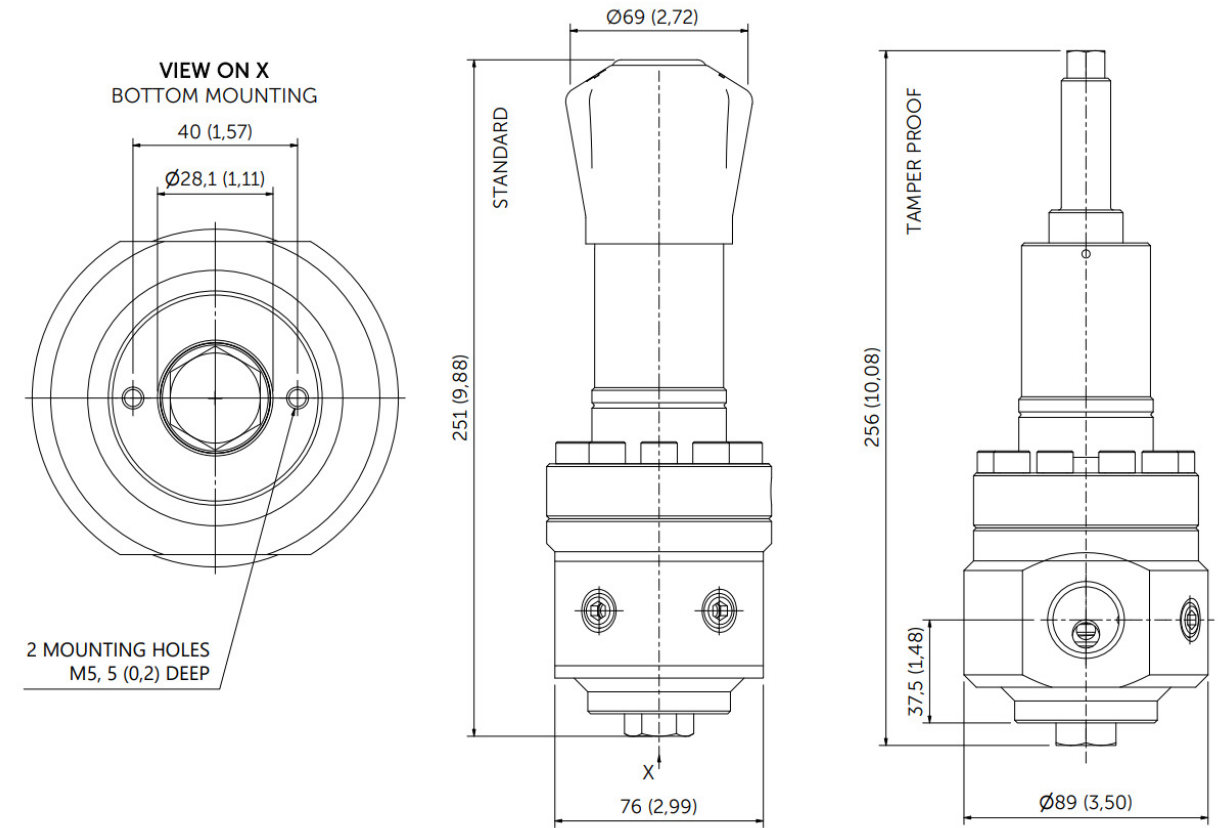
The graphs are representations of the change in outlet pressure as the flow rate increases.
For more flow curves - see flow curve tool or contact sales.



WARNING: Flow curves are generated from data collected under laboratory conditions which may not be fully representative of real-world applications. Real-world valve performance may vary from the curve presented. Tests are conducted using air at 20°C with an assumed fixed density of 1.2 kg/m³.

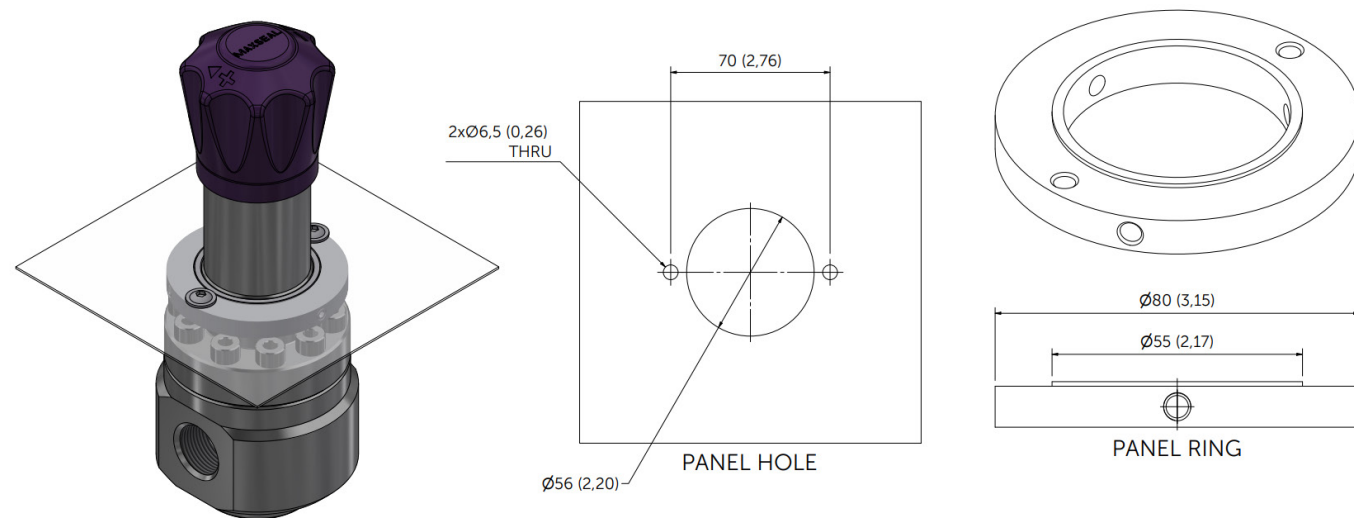
Dimensions

Dimensions in mm (inches)
projection/third angle

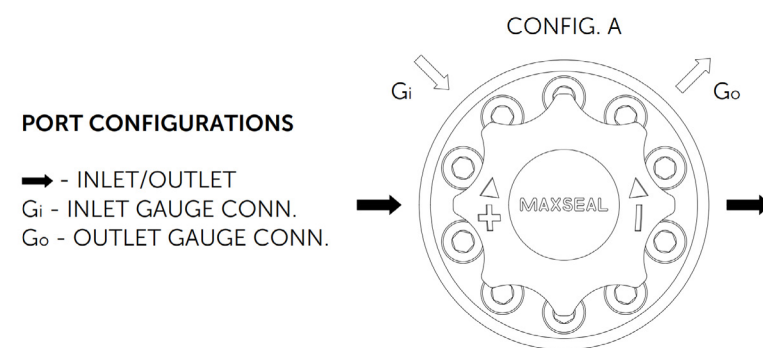


Dimensions are for reference only and are subject to change.

Panel mounting



Port configurations



Warning

Do not use these products where pressures and temperatures can exceed those listed under [Technical Features](#) and [Technical Data](#).

The end user is responsible for ensuring media compatibility with the product. If in doubt, consult Thompson Valves Ltd.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Thompson Valves Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

IMI manufactures high-performance pneumatic and hydraulic technology for both valve automation and direct control of process media.

Our range of actuators, instrumentation, and smart positioners are complimented by wireless IoT sensors and asset monitoring software. Renowned for faultless reliability in arduous conditions, our solutions are depended upon to deliver safe and efficient automation while delivering breakthrough engineering for a better world.

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