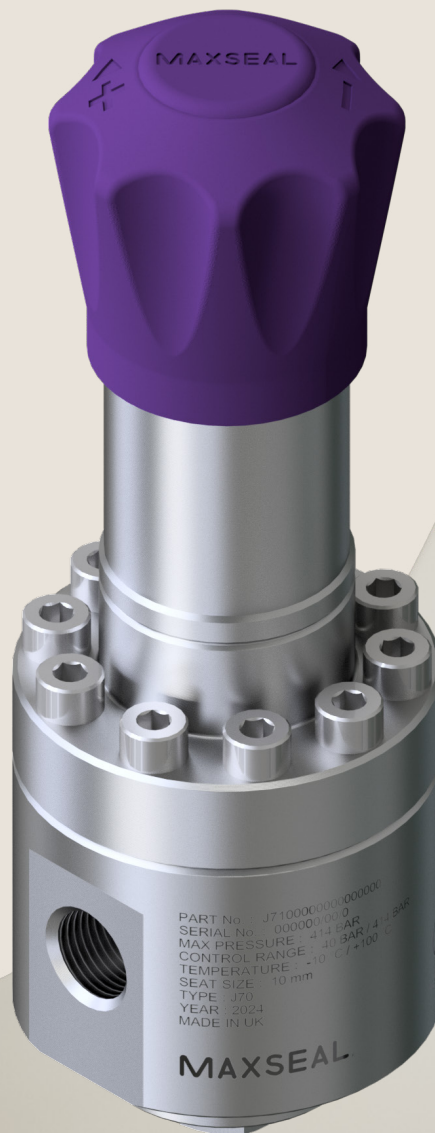




Process
Automation

Our product brand:
IMI Maxseal

J71 Series 1/2" Spring Loaded Regulator



Breakthrough
engineering for
a better world

J71 Series 1/2" Spring Loaded Regulator



- Port size: 1/2" NPT/BSPP
Flanged available on request
- High pressure regulation with a wide range of delivery pressure
- Up to 414 bar inlet pressure
- Heavy duty construction, accurate and reliable, ideal for high and low pressure applications
- 10 mm valve seat provides stable delivery pressure with varying inlet pressure
- Elastomer seat for better resistance to ingress (low pressure version) / Polymer seat for high pressure performance (standard pressure version)
- 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, EN 12266-1

Technical features

Medium: Gas or liquid (for liquid applications contact Sales)	Port Size: 1/2" NPT/BSPP or flanged	Temperature Range:	Features:
Flow: Cv Kv 1.8 1.6 Cv is USgpm for 1 psi Δp Kv is m ³ /hr for 1 bar Δp	Gauge Port: 1/4" NPT inlet & outlet gauge ports	NBR -10 ... +100 +14 ... +212 °C °F FKM -20 ... +100 -4 ... +212 EPDM -30 ... +100 -22... +212 Low temp. NBR -50 ... +100 -58... +212 Extended temperature ranges available - contact Sales	1/8" NPT ported vent Panel mounting - optional kit
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	Materials: Valve body: SS 316L Trim: SS 316L Valve spring: SS 302 or Inconel® X-750 Set spring: Powder coated chrome silicon Seals: NBR, FKM, EPDM, Low temperature NBR Seats: Devlon® V-API, NBR, FKM, EPDM, Low temperature NBR	Options: Tamper-proof stem cap NACE MR0175/ISO 15156 compliant (non-relieving only) Clean to ASTM G93 level C Limit stop for pressure control range
Envelope (LxWxH): 82 x 82 x 253			

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
Seat Diameter mm (in):	10 (13/32")
Connection Options:	1/2" NPT 1/2" BSPP Flanged
Gauge / Vent Connections:	Gauge: 1/4" NPT Vent: 1/8" NPT
Weight kg (lb):	3.6 (8)

Option selector

Build a J71 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
J71	A9	A3	S	W	R	N	A	H	0	0	0	C

1 Model	4 Max Inlet Pressure*	6 Relieving	9 Handwheel	11 NACE
1/2" Spring Loaded Regulator J71	bar psi	Relieving R	Standard H	None 0
	414 6000 S	Non-relieving N	Handwheel with limit stop L	NACE (non-relieving) N
2 Body Material	20 290 L		Tamper proof T	
Stainless Steel A9		7 Elastomers		12 Panel Mounting
	5 Outlet Pressure Range	NBR N	10 Filter	None 0
	bar psi	FKM V	None 0	With panel mounting P
3 Port Size	0.3 ... 3 4 ... 44 K	EPDM E		
1/2" NPT A3	1 ... 10 15 ... 145 P	Low temp NBR Q		13 Cleanliness
1/2" BSPP E3	2 ... 20 29 ... 290 R		8 Port Locations**	Standard 0
	5 ... 50 [†] 72 ... 725 ^{***} W		A	ASTM G93 Level C [†] C
	10 ... 100 ^{***} 145 ... 1450 ^{***} Y			Hydrogen [†] H
	20 ... 200 ^{***} 290 ... 2900 ^{***} 3			
	40 ... 414 ^{***} 600 ... 6000 ^{***} 6			

* S - Plastic seat, L - Elastomer seat

** See port configurations

*** SP version only

[†] 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
J71	S	S	W	R	N	H	0	0	0

1 Model	4 Outlet Pressure Range	6 Elastomers	8 Filter
1/2" Spring Loaded Regulator J71	bar psi	NBR N	None 0
	0.3 ... 3 4 ... 44 K	FKM V	
2 Type	1 ... 10 15 ... 145 P	EPDM E	9 NACE
Spares S	2 ... 20 29 ... 290 R	Low temp NBR Q	None 0
	5 ... 50 ^{***} 72 ... 725 ^{***} W		NACE (non-relieving) N
3 Max Inlet Pressure*	10 ... 100 ^{***} 145 ... 1450 ^{***} Y	7 Handwheel	
bar psi	20 ... 200 ^{***} 290 ... 2900 ^{***} 3	Standard H	10 Cleanliness
414 6000 S	40 ... 414 ^{***} 600 ... 6000 ^{***} 6	Handwheel with limit stop L	Standard 0
20 290 L		Tamper proof T	ASTM G93 Level C [†] C
	5 Relieving		Hydrogen [†] H
	Relieving R		
	Non-relieving N		

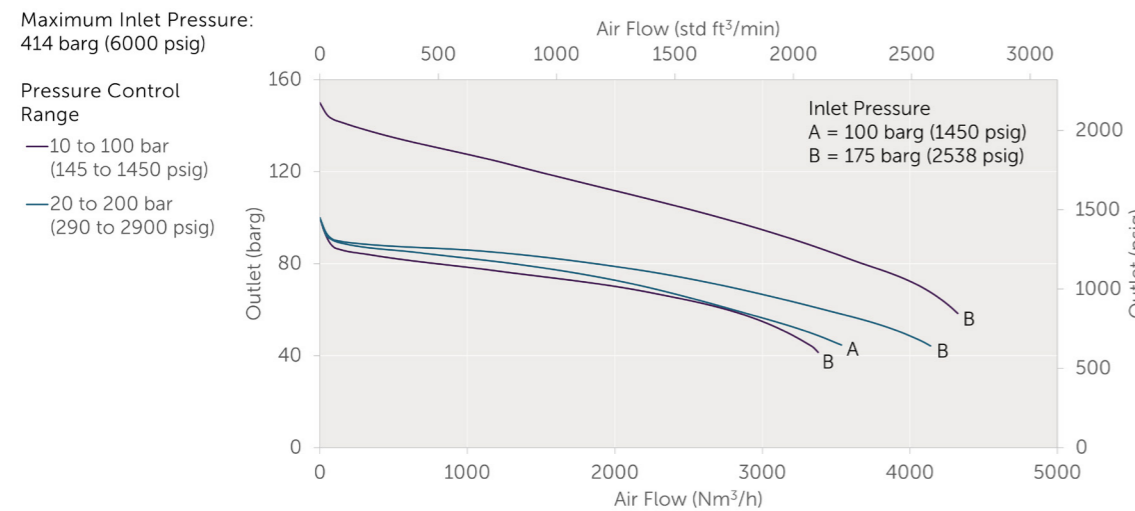
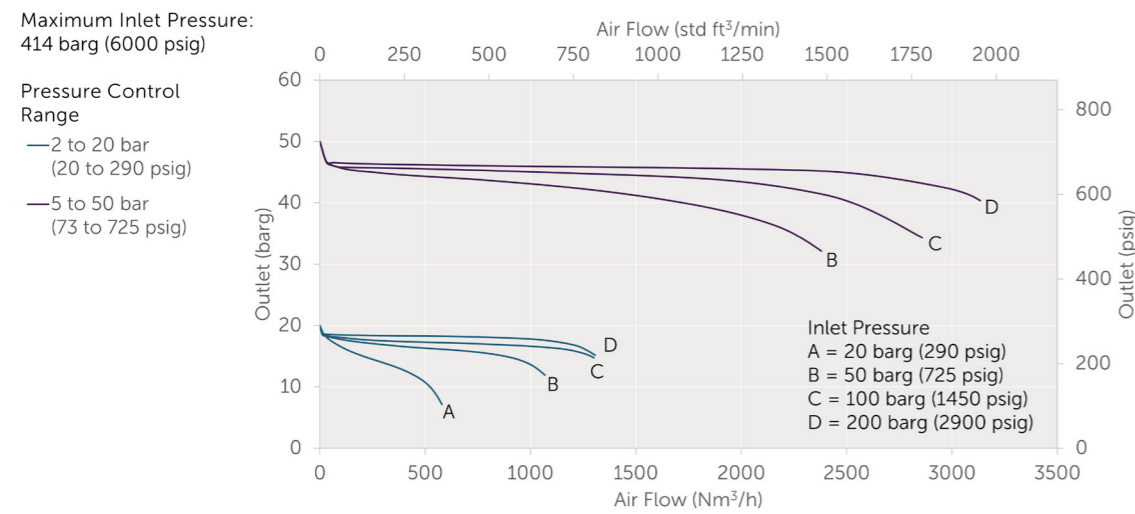
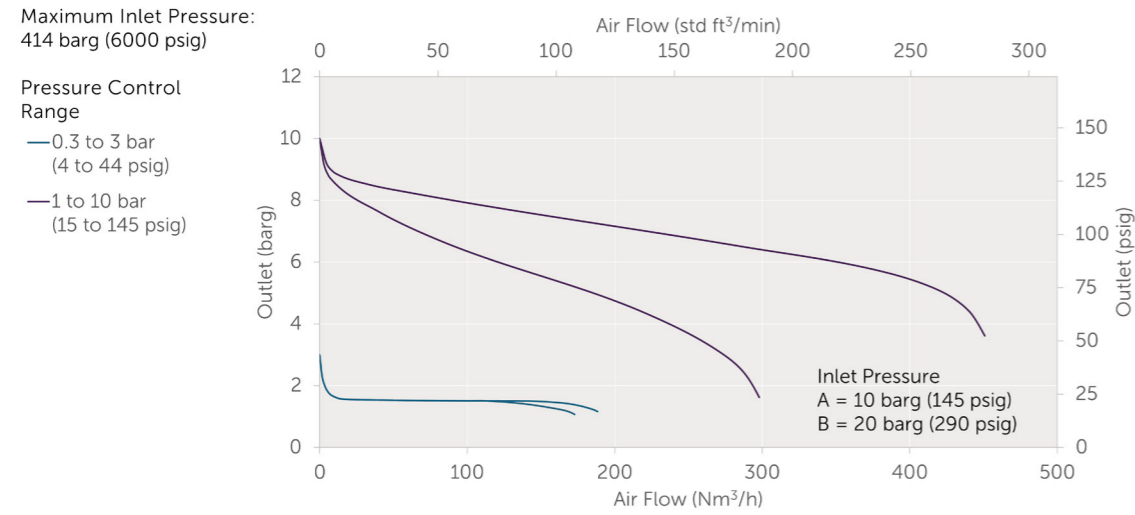
* S - Plastic seat, L - Elastomer seat

*** SP version only

[†] Operating range for certain applications may be limited by assembly chemicals - details on request

Flow data

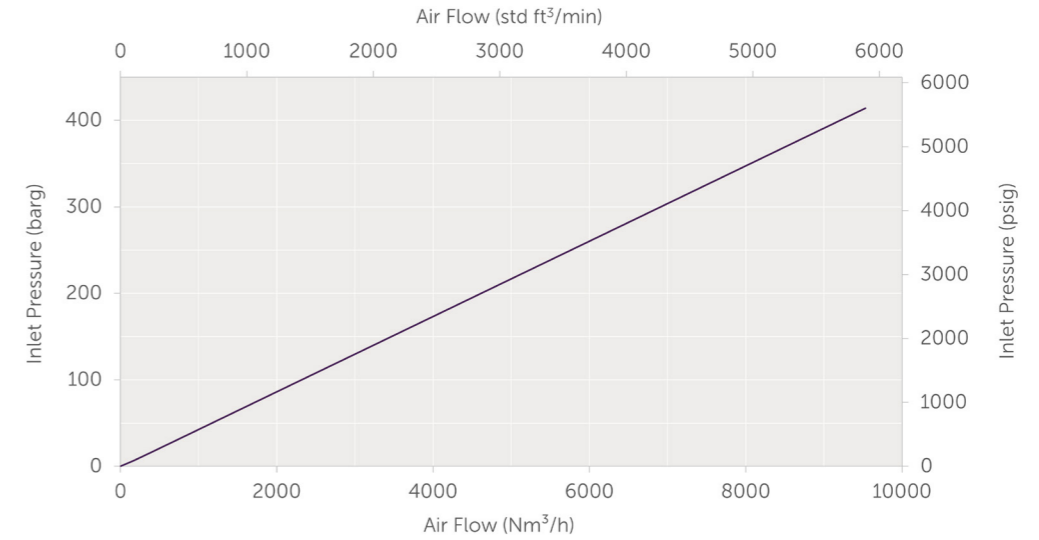
The graphs are representations of the change in outlet pressure as the flow rate increases. For more flow curves - see flow curve tool or contact sales.



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.

Failure flow

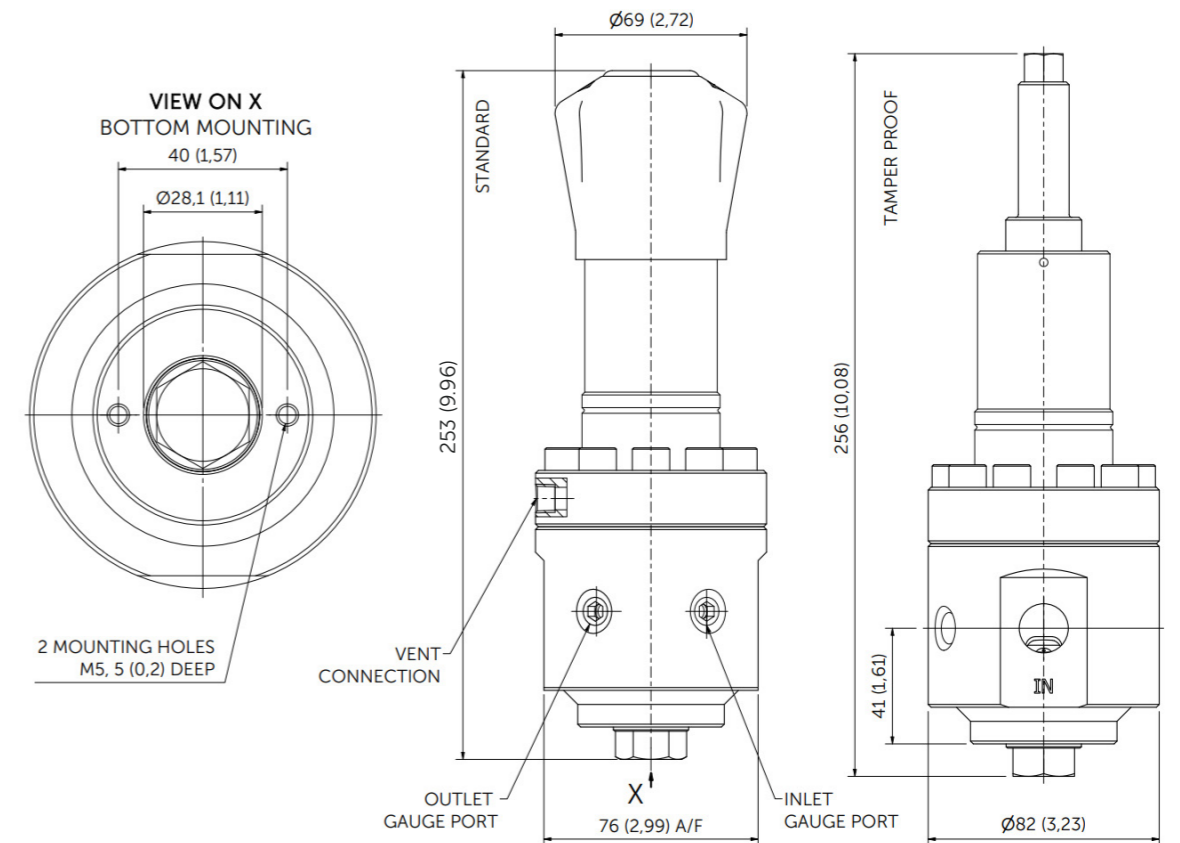
Failure flow for a range of inlet pressures.



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.

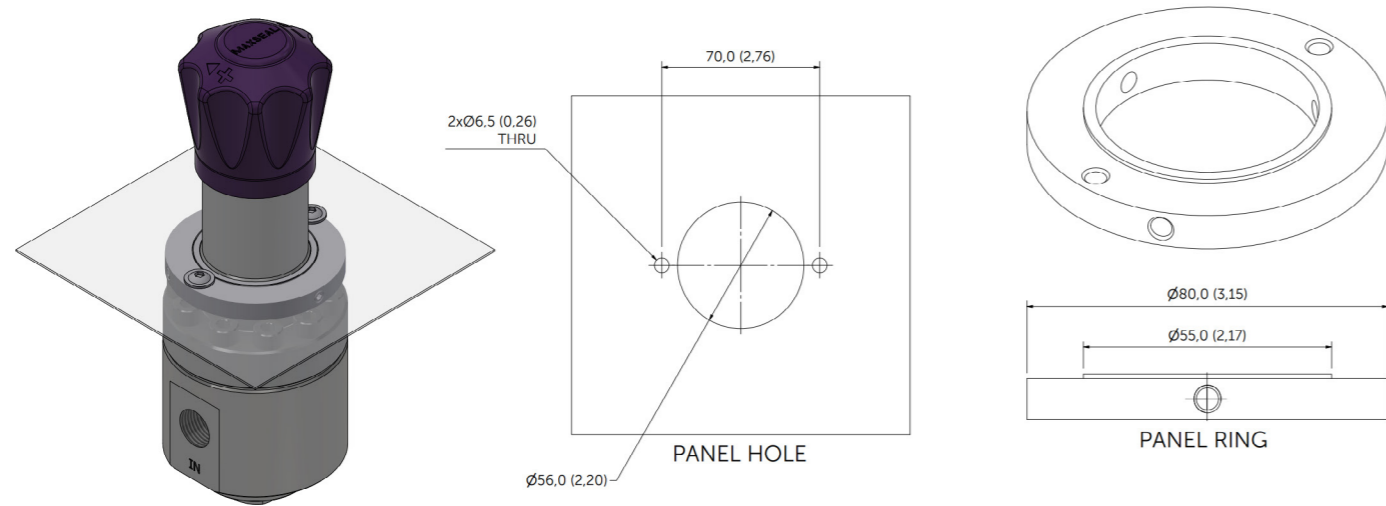
Dimensions

Dimensions in mm (inches) projection/third angle



Dimensions are for reference only and are subject to change.

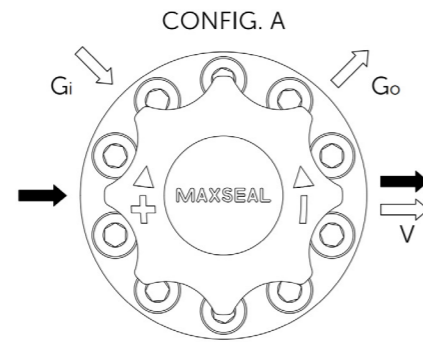
Panel mounting



Port configurations

PORT CONFIGURATIONS

- - INLET/OUTLET
- G_i - INLET GAUGE CONN.
- G_o - OUTLET GAUGE CONN.
- V - THREADED VENT CONN.



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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