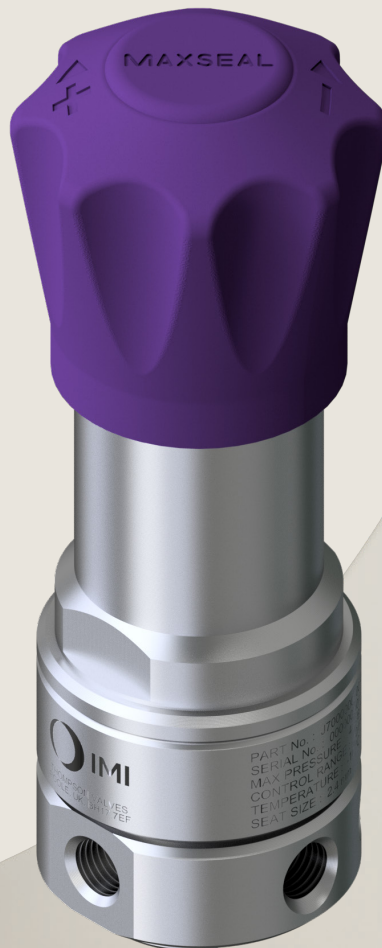




Process
Automation

Our product brand:
IMI Maxseal

J70 Series 1/4" Spring Loaded Regulator



Breakthrough
engineering for
a better world



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.

J70 Series 1/4" Spring Loaded Regulator



- Port size: 1/4" NPT
- High pressure regulation with a wide range of delivery pressure
- Up to 700 bar inlet pressure
- Heavy duty construction, accurate and reliable, ideal for high and low pressure applications
- 2.4 mm valve seat provides stable delivery pressure with varying inlet pressure
- Low friction piston for increased sensitivity and better control at lower pressure ranges
- 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)

Flow:
Cv Kv
0.12 0.1
Cv is USgpm for 1 psi Δp
Kv is m³/hr for 1 bar Δp

Leakage:
ANSI/FCI 70-3 Class VI and API 598

Envelope (LxWxH):
69 x 69 x 196

Port Size:
1/4" NPT

Gauge Port:
3 x 1/4" NPT - optional configurations

Pressure Range:

bar	psi
2 ... 20	29 ... 290
5 ... 50	72 ... 725
10 ... 100	145 ... 1450
20 ... 200	290 ... 2900
40 ... 414	600 ... 6000
70 ... 700	1015 ... 10150

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

Materials:
Valve body: SS 316L
Trim: SS 316L
Valve spring: SS 316, Inconel X750
Set spring: SS 302
Seals: NBR, FKM, EPDM, Low temperature NBR
Seat: Polyamide

Features:
1/8" NPT ported vent
Panel mounting - optional kit

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

Technical data

Maximum Inlet Pressure: bar (psi)	414 (6000) SP version 700 (10150) HP version
Maximum Outlet Control Pressure: bar (psi)	414 (6000) SP version 700 (10150) HP version
Sensing Type:	Piston
Seat Diameter: mm (in)	2.4 (3/32")
Connection Options:	1/4" NPT
Gauge / Vent Connections:	Gauge: 1/4" NPT Vent: 1/8" NPT
Weight: kg (lb)	1.8 (4)



Option selector

Build a J70 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
J70	A9	A1	S	W	R	N	A	H	F	O	P	O

1 Model	1/4" Spring Loaded Regulator	J70	5 Outlet Pressure Range	bar	psi	7 Elastomers	NBR	N	9 Handwheel	Standard	H	11 NACE	None	0
2 Body Material	Stainless Steel	A9	2 ... 20	29 ... 290	R	FKM	V	Handwheel with limit stop	L	NACE (non-relieving)	N	12 Panel Mounting	None	0
3 Port Size	1/4" NPT	A1	5 ... 50	72 ... 725	W	EPDM	E	Tamper proof	T	10 Filter	None	0	With panel mounting	P
4 Max Inlet Pressure	bar	psi	10 ... 100	145 ... 1450	Y	Low temp NBR	Q	Filter (25µm) - gases only	F	13 Cleanliness	Standard	0	ASTM G93 level C ¹	C
	414	6000	20 ... 200	290 ... 2900	3						Hydrogen ¹	H		
	700*	10150*	40 ... 414	600 ... 6000	6	8 Port Locations**	A							
			70 ... 700*	1015 ... 10150*	9		B							
							C							
							D							

* HP version only

** See port configurations

¹ 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
J70	S	S	W	R	N	H	F	O	O

1 Model	1/4" Spring Loaded Regulator	J70	4 Outlet Pressure Range	bar	psi	6 Elastomers	NBR	N	8 Filter	None	0	
2 Type	Spares	S	2 ... 20	29 ... 290	R	FKM	V	Filter (25µm) - gases only	F	9 NACE	None	0
3 Max Inlet Pressure	bar	psi	5 ... 50	72 ... 725	W	EPDM	E	NACE (non-relieving)	N	10 Cleanliness	Standard	0
	414	6000	10 ... 100	145 ... 1450	Y	Low temp NBR	Q	ASTM G93 level C ¹	C		Hydrogen ¹	H
	700*	10150*	20 ... 200	290 ... 2900	3							
			40 ... 414	600 ... 6000	6	7 Handwheel	Standard	H				
			70 ... 700*	1015 ... 10150*	9		Handwheel with limit stop	L				
						5 Relieving	Tamper proof	T				
							Relieving	R				
							Non-relieving	N				

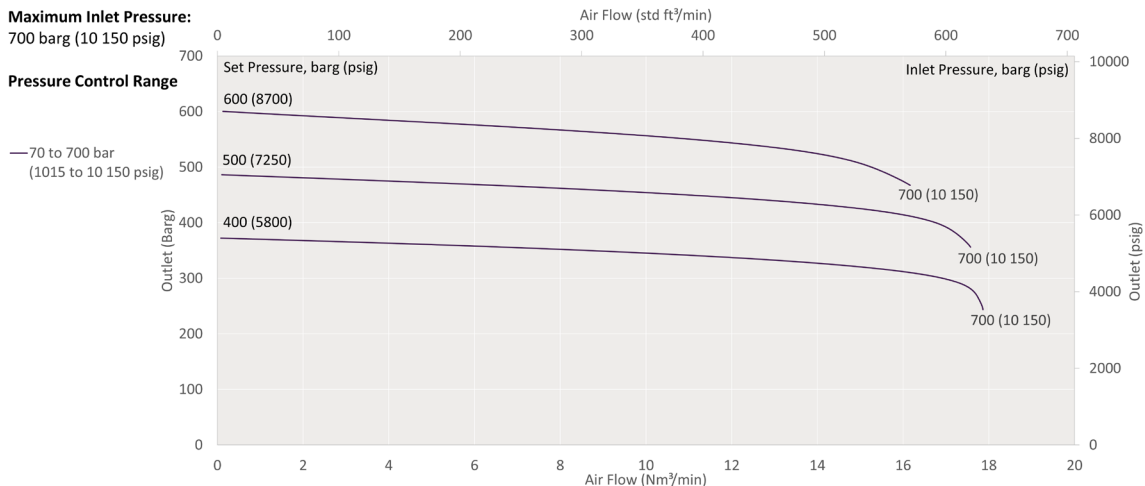
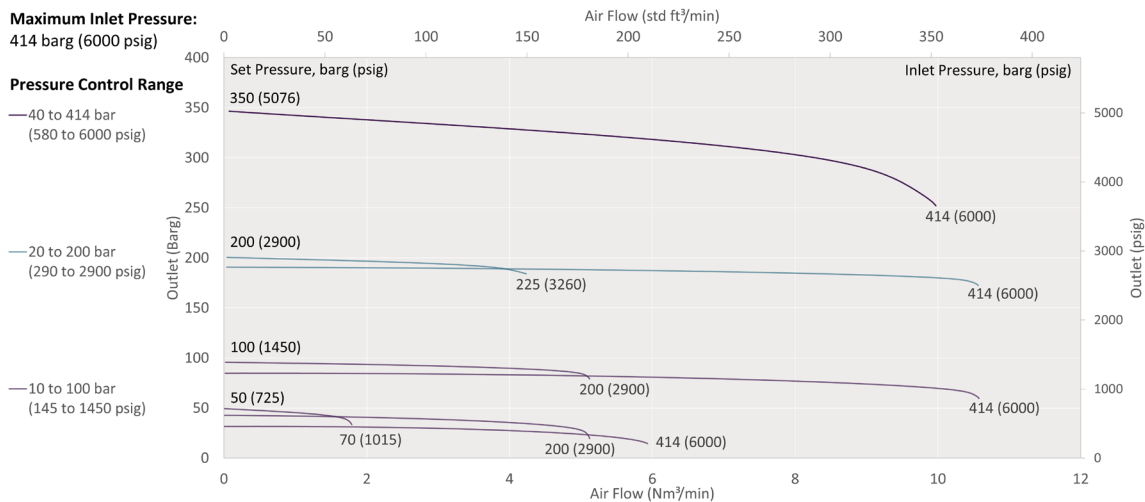
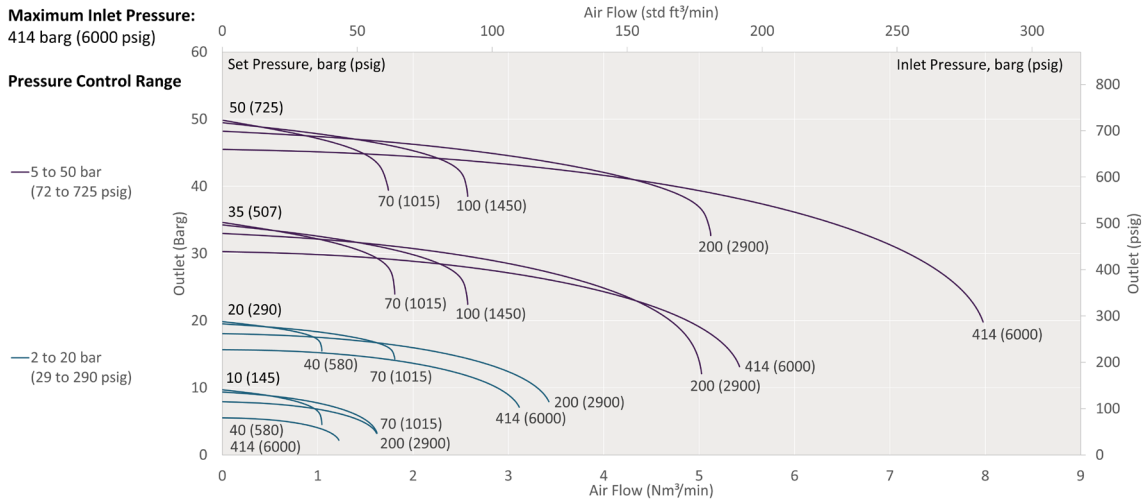
* HP version only

¹ Operating range for certain applications may be limited by assembly chemicals - details on request



Flow data

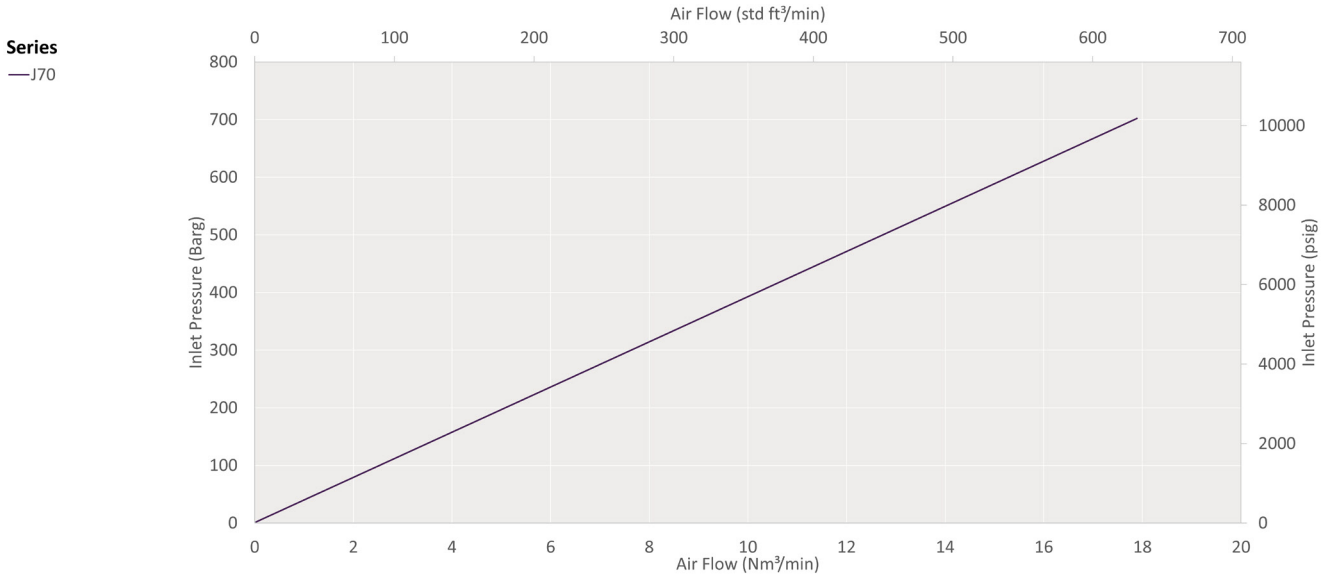
The graphs are representations of the change in outlet pressure as the flow rate increases. For more flow curves - see flow curve tool or contact sales.



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

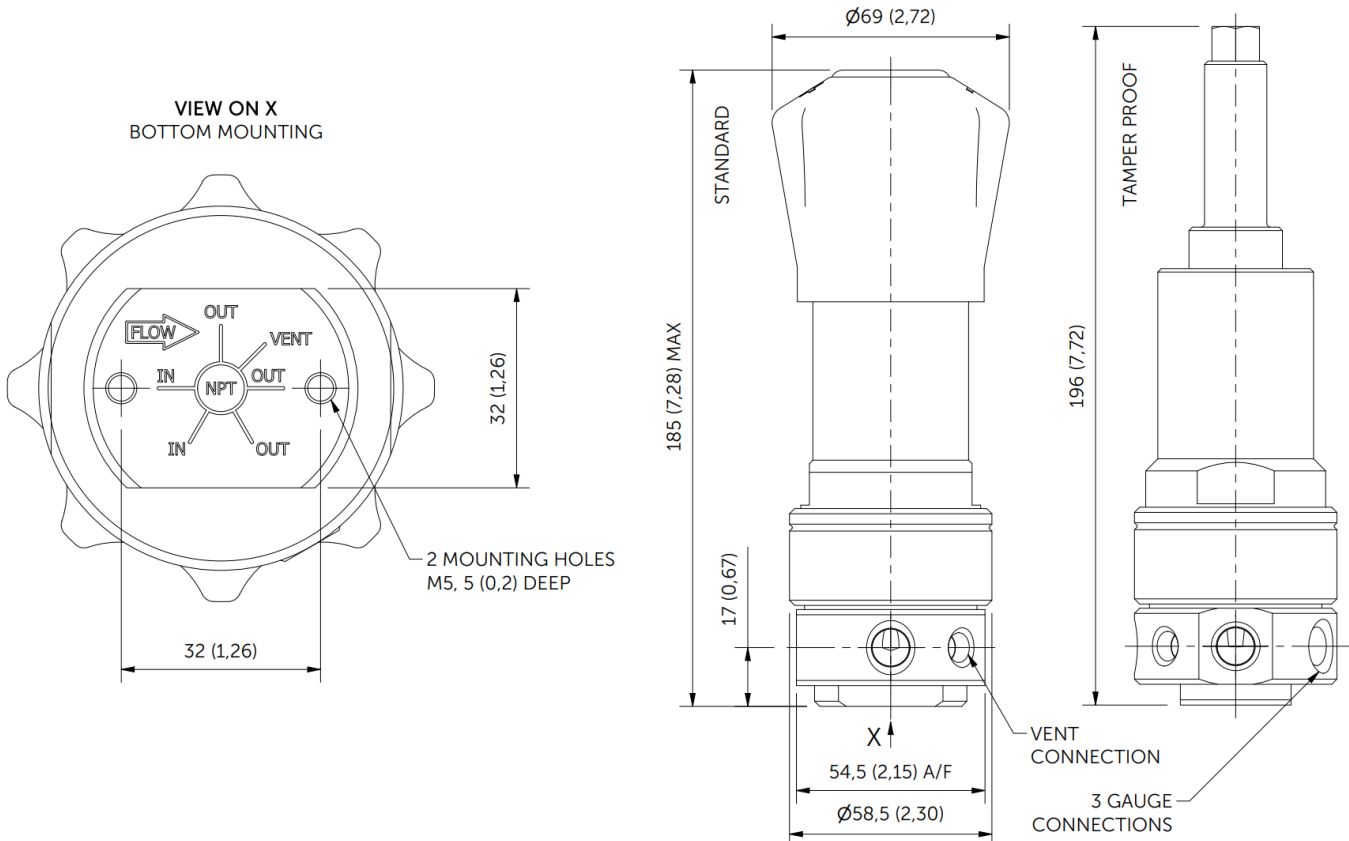
Failure flow for a range of inlet pressures.



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.

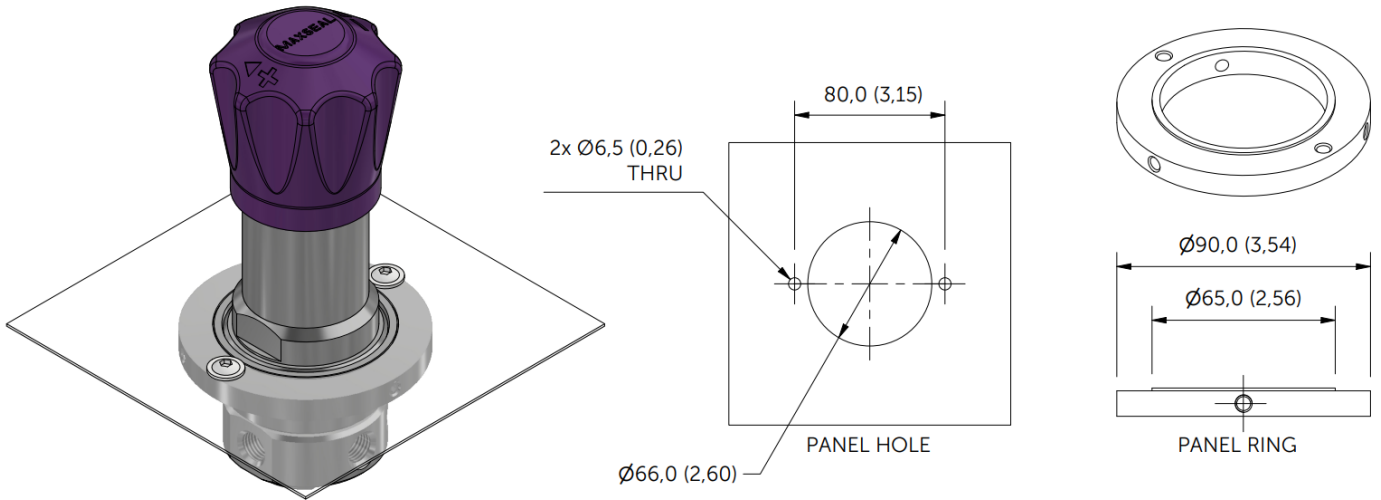
Dimensions

Dimensions in mm (inches)
projection/third angle

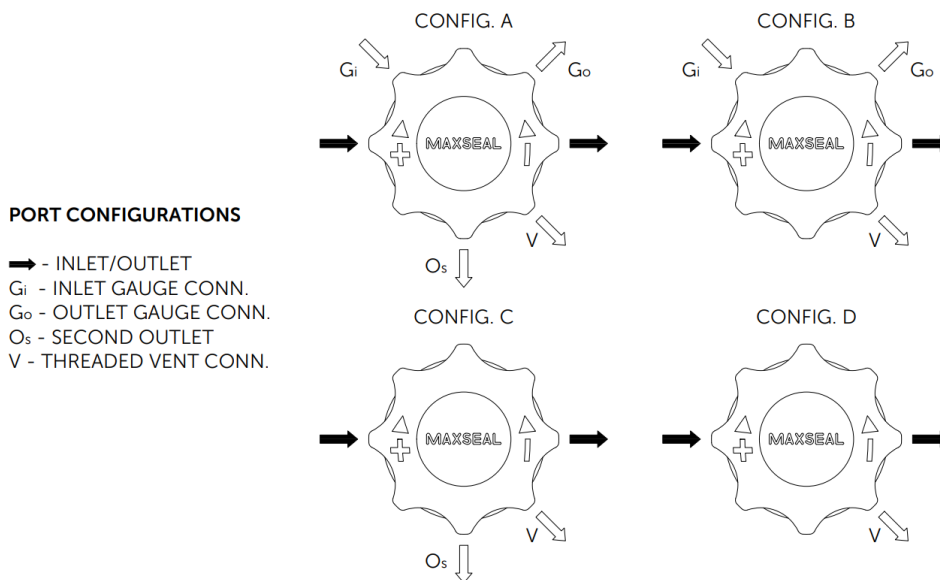


Dimensions are for reference only and are subject to change.

Panel mounting



Port configurations



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.

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Process Automation

Our product brand:
IMI Maxseal

17 Balena Cl, Creekmoor,
Poole BH17 7EF
United Kingdom

www.imiplc.com/process-automation

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