

Process Automation

Our product brand: IMI Maxseal

J70 Series 1/4" Spring Loaded Regulator

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 414 bar inlet pressure (standard pressure version) / up to 700 bar inlet pressure (high pressure version)
- Heavy duty construction, accurate and reliable, ideal for high and low pressure applications
- 2.4mm 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

 Flow:

 Cv
 Kv

 0.12
 0.1

 Cv is USgpm for 1 psi Δp

 Kv is l/min 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
*HP versio	n onlv

lemperature	Range:
	°C

	°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 tempera	ature ranges ava	ilable -
contact sales		

Materials:

Valve body: SS 316L Trim: SS 316L Stem: SS 316L Springs: SS 301 Seals: NBR, FKM, EPDM, low temperature NBR

Features:

1/8" NPT Ported vent Panel Mounting - optional kit

Options:

Tamper-proof stem cap NACE MR0175/ISO 15156 compliant (non-vented only) Clean to ASTM G93 level C and/or CGA G-4.1 Limit stop for pressure control range

Technical data

Maximum Inlet Pressure bar (psig):	414 (6000) SP version 700 (10150) HP version
Maximum Outlet Control Pressure bar (psig):	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 (lbs):	1.8 (4)

IMI

Option selector

Build a J70 series regulator ordering number by combining the designators in the sequence shown below.

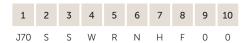
Exam	ole	part	num	ber:
LAUIT	pic	puic	nunn	DCI.

Exan	nple part nun	nber:			1	2	3	4	5	6	7	8	9	10	11	12	13				
					J70	A9	A1	S	W	R	Ν	A	Н	F	0	Ρ	0				
1	Model			5 O	utlet	Press	ure Ra	ange			7	Elas	stome	ers		9	Handwheel		11	NACE	
	1/4" Spring Lo Regulator	oaded	J70	ba	ar		psi					NB	۲		Ν		Standard	Н		None	0
	Regulator			2	20		29	. 290		R		FKN	1		V		Handwheel with limit stop	L		NACE (non-relieving)	N
2	Body Materia	al		5	50		72	725		W		EPD	M		Е		Tamper proof	Т			
	Stainless Stee	el	A9	10) 10	0	145 .	145	0	Y		Lov	/ tem	p NBF	R Q				12	Panel Mountir	ng
				20) 20	00	290	290	00	3						10	Filter			None	0
3	Port Size			4	D 41	4	600	60	00	6	8	Por	t Loca	ations	**		None	0		With panel mounting	Р
	1/4" NPT		A1	70) 70)0*	1015	10	150*	9					A		Filter (25µm) - gases only	F		mounting	
															В				13	Cleanliness	
4	Max Inlet Pre	essure		6 R	elievir	ng									С					Standard	0
	bar	psi		R	elievin	ıg				R					D					Oxygen Servic	e C
	414	6000	S	N	on-re	lievin	g			Ν										Hydrogen	Н
	700	10150	Н																		

*HP version only **See port configurations

Spares option selector

Example part number:



1	Model			4	Outlet Pressure Range			6	6 Elastomers			Filter		
	1/4" Spring Loaded Regulator J70			bar	psi			NBR	Ν		None	0		
					2 20	29 290	R		FKM	V		Filter (25µm) - gases only	F	
2	Туре				5 50	72 725	W		EPDM	E				
	Spares		S		10 100	145 1450	Y		Low temp NBR	Q	9	NACE		
					20 200	290 2900	3					None	0	
3	Max Inlet P	ressure			40 414	600 6000	6	7	Handwheel			NACE (non-relieving)	Ν	
	bar	psi			70 700*	1015 10150*	9		Standard	Н				
	414	6000	S						Handwheel with limit stop	L	10	Cleanliness		
	700	10150	Н	5	Relieving				Tamper proof	Т		Standard	0	
					Relieving		R					Oxygen Service	С	

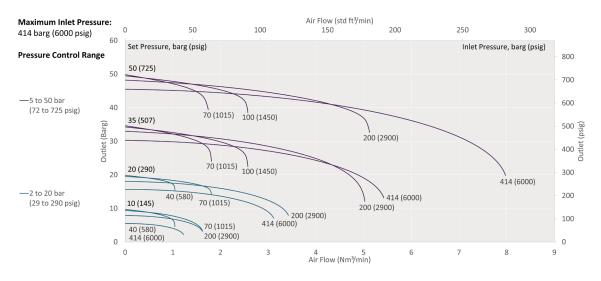
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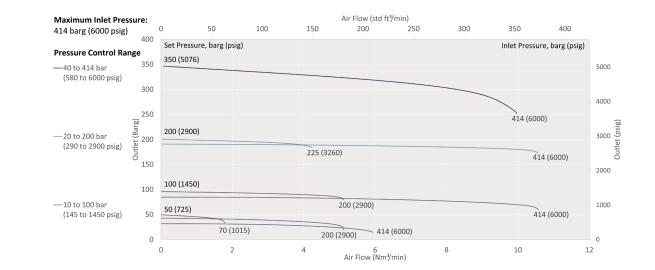
Hydrogen

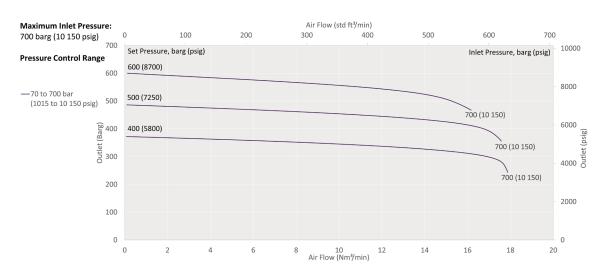
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Flow data

The graphs illustrate the change or "droop" in outlet pressures as the flow rate increases. Droop refers to the reduction in outlet pressure that arises from an increase in flow rate through the regulator.





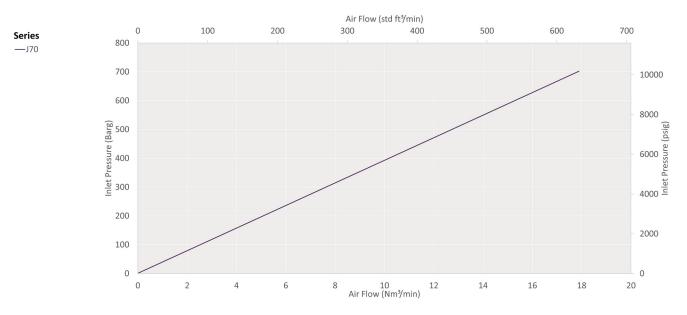


WARNING: Flow curves are generated from data collected under laboratory conditions which may not be fully representative of real-world applications. Real-world valve performance may vary from the curve presented. Tests are conducted using air at 20°C with an assumed fixed density of 1.2 kg/m³.



Failure flow

Failure flow for a range of inlet pressures.

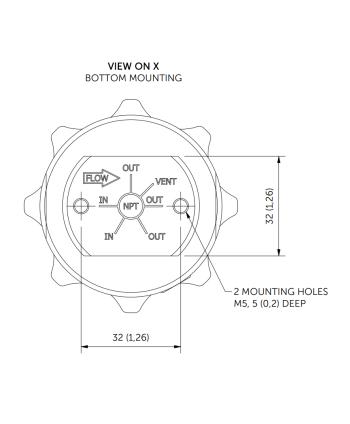


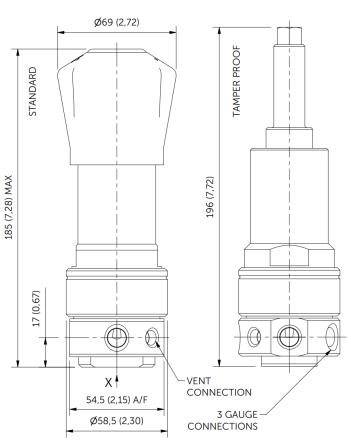
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Dimensions

Dimensions in mm (inches) projection/third angle

ΗÐ

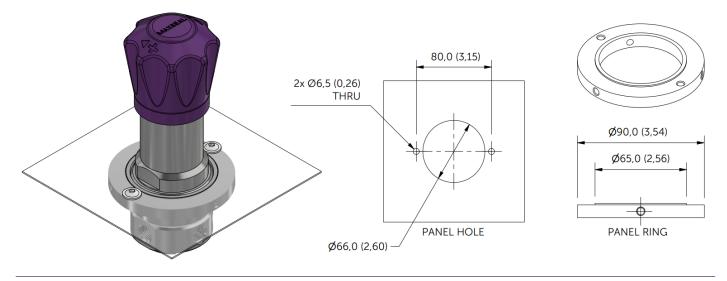




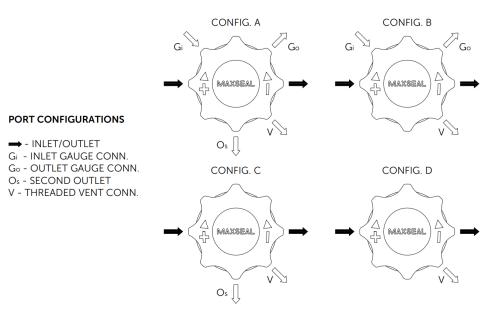
Dimensions are for reference only and are subject to change.



Panel mounting



Port configurations



Warning

Do not use these products where pressures and temperatures can exceed those listed under Technical Features and Technical Data.

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. The information in this brochure is provided for informational and promotional purposes only and is provided "as is" and without warranties of any kind, whether express or implied, including but not limited to implied warranties of satisfactory quality, fitness for a particular purpose and/ or correctness. Any specifications, features, pricing, or availability contained in this brochure are subject to change without priornotice. IMI plc does not represent or warrant that the information and/ or specification in this brochure are accurate, complete, or current and therefore make no warranties or representation regarding the use of the content. IMI plc or one of its subsidiaries own all images (unless credited otherwise), logos, product brands, and trademarks mentioned in this brochure. Unauthorized use, reproductions, or modification of this content is prohibited. © Copyright IMI plc. All rights reserved.

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Process Automation

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