

Mark 62 Series

Internally Piloted Pressure Regulators

The Mark 62 internally piloted pressure regulator is designed for critical applications where space is limited, but highly accurate regulation is required. It features the Sliding Gate design in the main valve trim for superior performance and life when installed in clean gas and steam systems.

Due to the internally piloted design, the MK62 will accurately control pressure with minimal deviation from the set point. The accuracy levels approach that provided by control valves but with much quicker response, therefore, the MK62 should be considered before more expensive control valve loops.

The compact design and simple construction allows fast, simple installation and easy servicing. The sliding gate design provides excellent turndown capability, up to 100:1, and models are available with setpoints ranging from 2 psi to 200 psi (0,14 to 13,8 bar).



OPERATION

The main valve is normally closed; the pilot valve is held normally open by an adjusting spring. The line fluid passes through the inlet pilot tube and the pilot valve to the main valve diaphragm. The pressure of the fluid forces the main diaphragm down to open the main valve seats. As the setpoint is reached, the downstream pressure acts beneath the pilot valve diaphragm to close the pilot valve, starving supply to the top of the main diaphragm causing the lower return spring to close the main valve. Due to precision manufacturing required for this internally piloted regulator, it is well suited for filtered media free of entrained particles or dirt.

FEATURES

- Internal pilot — provides highly accurate performance in a compact, lightweight assembly.
- Sliding Gate Seats — all of Jordan Valve's piloted regulators feature advanced sliding gate seat technology.
 - Straight-through flow for reduced turbulence and quiet operation
 - Short stroke for fast response and accurate regulation.
 - Easily interchangeable Cv's
 - Tight Shutoff



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SPECIFICATIONS

Sizes: 1/2" through 2" (DN15 to DN50)

End Connections:

- Threaded
- Flanged

Body Materials:

- Ductile Iron
- Bronze

Trim Materials:

- Stainless Steel
- 316SST

Seat Materials:

- Jorcote on SST – Standard
- Other materials available – Consult factory

Diaphragm Materials: Stainless Steel

Spring Housing Materials: Steel

Service: Steam, oil, gas, air, chemicals (not recommended for water service)

Shutoff: ANSI Class IV

Body Rating: Ductile Iron up to 700 psi (48 bar) and 400°F (204°C); Bronze up to 500 psi (34 bar) and 400°F (204°C) depending upon specific construction. -20°F (-29°C) temperature limit on all materials. For other temperatures, consult factory.

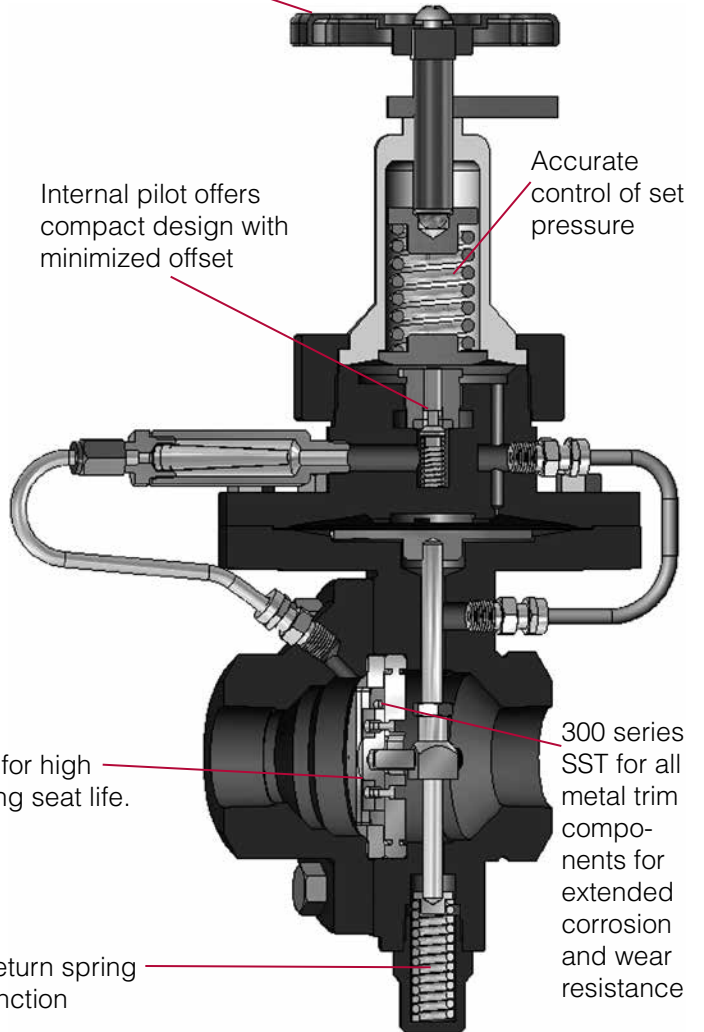
Reduced Pressure Setpoint Ranges: 2 - 50 psig (0,14 - 3,45 bar). Note: a minimum pressure differential of 25 psig/1,72 bar (1-1/2" & 2"/DN40 & DN50), 20 psig/1,38 bar (1" & 1-1/4"/DN25 & DN32), or 15 psig/1,03 bar (1/2" & 3/4"/DN15 & DN20) from valve inlet to valve outlet is required for the valve to operate properly.

Cv (Kv) Values & Maximum Differential Pressures

Cv (Kv)	Valve Size	Seat Material	Max. ΔP, psi (bar)
2.5 (2,15)	1/4" to 3/4" (DN8 to 20)	SST	125 (8,6)
4.4 (3,78)		Jorcote	250 (17,2)
6.4 (5,50)	1" & 1-1/4" (DN25 & 32)	SST	125 (8,6)
9.5 (8,17)		Jorcote	250 (17,2)
15 (12,9)	1-1/2" (DN40)	SST	75 (5,2)
		Jorcote	250 (17,2)
25 (21,5)	2" (DN50)	SST	75 (5,2)
30 (25,8)		Jorcote	250 (17,2)

Low Flow Trim: reduced Cv's (Kv's) can be placed in any size valve as long as it is a smaller value than the standard Cv (Kv), with the lowest permissible value being 2.5 (2,15).

Easily adjustable set points



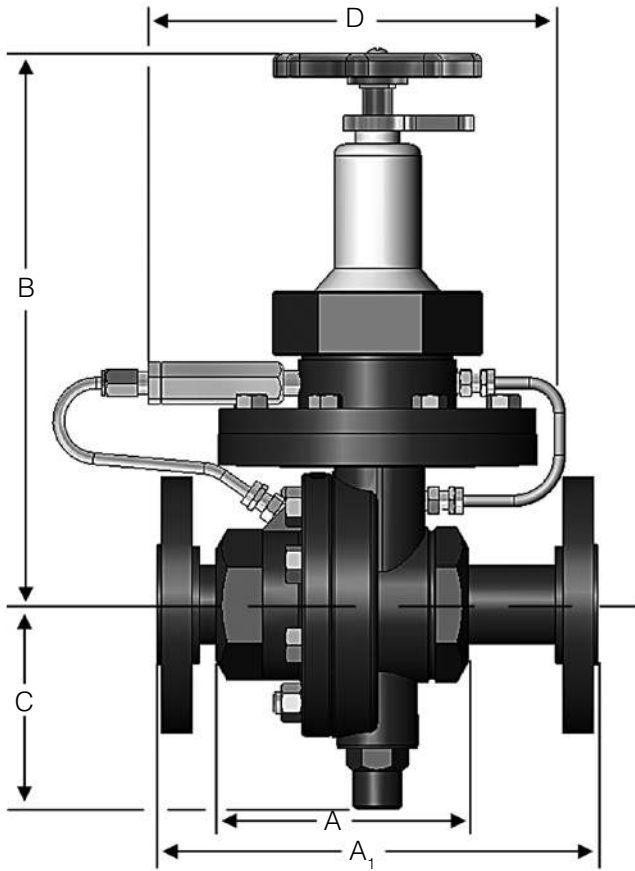
Jorcote Sliding Gate Seats for high turndown and extremely long seat life.

Corrosion resistance return spring provides fail-closed function

300 series SST for all metal trim components for extended corrosion and wear resistance

MARK 62 INTERNALLY PILOTED PRESSURE REGULATORS

DIMENSIONS



- Flanged Ends

Size	ANSI Flange	Dimensions (inches)				Weight (lbs.)
		A	B	C	D	
1/2"	150#	7.25	10.37	3.00	5.87	19
	300#	7.50	10.37	3.00	5.87	21
3/4"	150#	7.25	10.37	3.00	5.87	19
	300#	7.62	10.37	3.00	5.87	23
1"	150#	7.25	10.62	3.37	5.87	26
	300#	7.75	10.62	3.37	5.87	28
1-1/4"	150#	7.88	10.62	3.37	5.87	26
	300#	8.37	10.62	3.37	5.87	28
1-1/2"	150#	8.75	11.00	3.50	5.87	31
	300#	9.25	11.00	3.50	5.87	32
2"	150#	10.00	11.12	3.62	5.87	35
	300#	10.50	11.12	3.62	5.87	37

- Flanged Ends, DIN

Size (DN)	Flange (PN)	Dimensions (mm)				Weight (kg)
		A	B	C	D	
15	10/16	184	263	76	149	8,6
	25/40	190	263	76	149	9,5
20	10/16	184	263	76	149	8,6
	25/40	194	263	76	149	10,4
25	10/16	184	270	86	149	11,8
	25/40	197	270	86	149	12,7
32	10/16	200	270	86	149	11,8
	25/40	213	270	86	149	12,7
40	10/16	222	279	89	149	14,1
	25/40	235	279	89	149	14,5
50	10/16	254	282	92	149	15,8
	25/40	267	282	92	149	16,8

- Threaded Ends

Size	Dimensions (inches)				Weight (lbs.)
	A	B	C	D	
1/2" & 3/4"	3.75	10.37	3.00	5.87	15
1"	4.12	10.62	3.37	5.87	20
1-1/4"	4.12	10.62	3.37	5.87	20
1-1/2"	4.50	11.00	3.50	5.87	22
2"	4.50	11.12	3.62	5.87	23

- Threaded Ends, DIN

Size (DN)	Dimensions (mm)				Weight (kg)
	A	B	C	D	
15 & 20	95	263	76	149	6,8
25	105	270	86	149	9,1
32	105	270	86	149	9,1
40	114	279	89	149	10,0
50	114	282	92	149	10,4

ORDERING SCHEMATIC

To specify a MK62 Internally Piloted Pressure Regulator, build a model number by making a selection from each category in the Product Designator Coding System below.

1	—	2	—	3	/	4	5	6	7	8	9	10

1	Model	
62	Standard	

2	Size	
050	1/2" (DN15)	
075	3/4" (DN20)	
100	1" (DN25)	
125	1-1/4" (DN32)	
150	1-1/2" (DN40)	
200	2" (DN50)	

3	Body Material	
DI	Ductile Iron	
BR	Bronze	

4	End Connections	
PT	NPT	
BT	BSPT	
BP	BSPP	
F5	150#FE	
F3	300#FE	
ZZ	Non-Standard	

5	Trim	
S3	303SS	
S6	316SS	
L1	303SS/LO DP 5-10 (1" – 1-1/4" only)	
L2	316SS/LO DP 5-10 (1" – 1-1/4" only)	
L3	303SS/LO DP 10-15 (1-1/2" – 2" only)	
L4	316SS/LO DP 10-15 (1-1/2" – 2" only)	
L5	303SS/LO DP 15-20	
L6	316SS/LO DP 15-20	
ZZ	Non-Standard	

6	Seat Material	
A	303SST	
B	316SST	
Q	303SST/Teflon Coated	
R	316SST/Teflon Coated	
V	303SS/Jorcote	
W	316SS/Jorcote	

7	Cv	Kv
5	2.5	2,15
6	4.4	3,78
7	6.4	5,50
8	9.5	8,17
9	15	12,9
A	25	21,5
B	30	25,8

8	Range	
19	2-50	
38	10-200	
ZZ	Non-Standard	

9	Diaphragm	
S6	316SST	
ZZ	Non-Standard	

10	Actuator	
MD	Standard	
ZZ	Non-Standard	

