

Mark 501/502 Series

High Flow Back Pressure Regulators

The Mark 501 and 502 meet higher capacity requirements than standard back pressure regulators. The High Flow Mark 501 has Cv's as high as 50 (43Kv) and the Super High Flow Mark 502 has Cv's up to 70 (60,2 Kv). Each valve is standard with Jordan's Sliding Gate Seats, which helps to reduce the build-up commonly associated with high flow back pressure regulators.

Jordan's unique self-operated sliding gate back pressure regulator offers:

- Shorter stroke than a globe or plug-style valve
 - Faster response
 - Smaller and lighter weight than globe-style valves
 - Less build-up
- Straightthrough -flow
 - Less turbulence, erosion and noise
 - Improved rangeability
 - Longer seat life
- Ease of maintenance
 - Interchangeable seats and Cv's
 - Fewer spare parts
 - Self-cleaning seats
 - No gaskets or o-rings



Diaphragm Materials

- Stainless Steel — standard
- Buna-N — optional
- Jorlon — optional
- Viton — optional

Service: Steam, water, oil, gas, air and chemicals

Shutoff: ANSI Class IV

Reduced Pressure Control Ranges: Select a range to match your setpoint. For optimal performance, your setpoint should fall in the upper portion of the selected range.

SPECIFICATIONS

Sizes: 1-1/2" & 2" (DN40 & DN50)

End Connections

- Threaded (FNPT, BSPT, BSPP)
- ANSI Flanges (150#, 300#)
- DIN Flanges (PN10/16, PN25/40)

Body Materials

- Ductile Iron
- Bronze
- Carbon Steel (A216 WCB)
- Stainless Steel (A351/CF8M)

Trim Materials

- 303SST — Standard on Ductile Iron, Bronze, Carbon Steel valves
- 316SST — Standard on Stainless Steel Valves
- Monel, Hastelloy and other Alloys available

Seat Materials

- Jorcote on SST — Standard
- Jorcote/Jordanic on SST — For Severe Service

Model	Size (DN)	Spring Ranges	
		PSI	BAR
501 & 502	1-1/2" - 2" (DN40 - DN50)	8 - 20	0,55 - 1,38
		15 - 80	1,03 - 5,52
		45 - 150	3,10 - 10,34

Cv Values & Maximum Differential Pressures

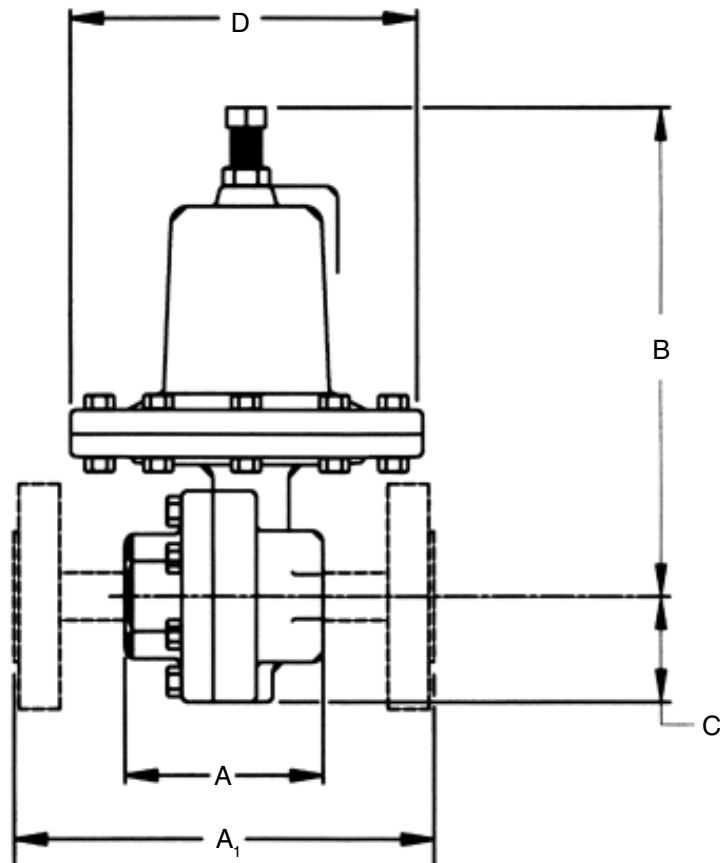
• Mark 501

Cv (Kv)	Size (DN)	Seat Material	Maximum ΔP PSI (bar)
25 (21,5)	1-1/2" & 2" (DN40 & DN50)	Jorcote	150 (10,34)
30 (25,8)	1-1/2" & 2" (DN40 & DN50)	Jorcote	150 (10,34)
35 (30,1)	1-1/2" & 2" (DN40 & DN50)	Jorcote	150 (10,34)
45 (38,7)	1-1/2" (DN40)	Jorcote	150 (10,34)
50 (43,0)	2" (DN50)	Jorcote	150 (10,34)

• Mark 502

Cv (Kv)	Size (DN)	Seat Material	Maximum ΔP PSI (bar)
65 (55,9)	1-1/2" (DN40)	Jorcote	150 (10,34)
70 (60,2)	2" (DN50)	Jorcote	150 (10,34)

DIMENSIONS



■ Mark 501/502: Threaded & FSW Ends

Size	Material	A	B	C	D	Weight (lbs)
1-1/2" - 2"	DI/BRZ	4.50	10.25	2.75	7.09	26
	CS/SS	5.50	11.00	2.75	7.09	35

■ Mark 501/502: Threaded & FSW Ends, Metric

Size	Material	A	B	C	D	Weight (kg)
DN40- DN50	DI/BRZ	114,3	260,4	69,9	180,1	11,8
	CS/SS	139,7	279,4	69,9	180,1	15,9

■ Mark 501/502: Flanged Ends

Size	ANSI Flange	A1		B		C	D	Weight (lbs)	
		DI/BRZ	CS/SS	DI/BRZ	CS/SS	All	All	DI/BRZ	CS/SS
1-1/2"	150#	10.00*	10.00*	10.25	11.22	2.31	7.09	42	46
	300#	10.25*	10.25*	10.25	11.22	2.31	7.09	45	52
2"	150#	10.00	10.00	10.25	11.42	2.75	7.09	46	50
	300#	10.50	10.50	10.25	11.42	2.75	7.09	49	55

- Not IFE
- Not ANSI Standard

■ Mark 501/502: Flanged Ends, Metric

Size	Flange PN	A1 *		B		C	D	Weight (kg)	
		DI/BRZ	CS/SS	DI/BRZ	CS/SS	All	All	DI/BRZ	CS/SS
DN40	10/16	254,0	254,0*	279,0	285,0	58,7	180,1	19,1	20,9
	25/40	260,4	260,4*	279,0	285,0	58,7	180,1	20,4	23,6
DN50	10/16	254,0	230,0	279,0	290,1	69,9	180,1	20,9	22,7
	25/40	266,7	230,0	279,0	290,1	69,9	180,1	22,2	24,9

- Not IFE
- Not per DIN3202

ORDER SCHEMATIC

1	—	2	—	3	/	4	5	6	7	8	9	10	11	12

1	Model	
	501	High Flow
	502	Super High Flow

2	Size		
		Inches	DN
	150	1-1/2"	DN40
	200	2"	DN50

3	Body Material	
	DI	Ductile Iron
	BR	Bronze
	CS	Carbon Steel
	S6	Stainless Steel

4	End Connections	
	PT	NPT
	BT	BSPT
	I5	150# IFE CS or SST*
	F5	150# FE DI or BR
	I7	PN10 IFE, CS or SST*
	F7	PN10 FE DI or BR
	I6	PN16 IFE, CS or SST*
	F6	PN16 FE DI or BR
	BP	BSPP
	SW	FSW
	I3	300# IFE, CS or SST*
	F3	300# FE DI or BR
	I8	PN25 IFE, CS or SST*
	F8	PN25 FE DI or BR
	I4	PN40 IFE, CS or SST*
	F4	PN40 FE DI or BR

* IFE (integral flanged end) for 2" only
FE is threaded or weld flanges

5	Trim	
	S3	303SS
	S6	316SS
	I3	303SSF/IFE
	I6	316SSF/IFE

6	Seat Material	
	V	303SS/Jorcote
	W	316SS/Jorcote
	X	303SS/JOR/JIC
	Y	316SS/JOR/JIC

7	CV (Kv)	
	A	25 (22)
	B	30 (26)
	V	35 (30)
	W	45 (39)
	C	50 (43)
	Y	65 (56)
	E	70 (60)

8	Range	
	53	20-45 (1,38-3,01)
	75	30-95 (2,07-6,55)
	97	60-160 (4,14-11,03)

9	Diaphragm	
	S6	316 SST
	V1	Viton
	BN	Buna-N
	JL	Jorlon

10	Actuator	
	MD	for Metal Diaphragm
	ED	for Elastomer Diaphragm

11	Double Bolting	
	00	None
	ZZ	Non-Standard

12	Accessories	
	0	None
	6	316 SS Bolting
	7	Hi-temperature bolting
	Z	Non-standard