

Unique.

Precise.

Quality.

Reliable.



MDA / MDAS SERIES CHOKE VALVES

FEATURES & Benefits

Taylor Valve MDA / MDAS Series Chokes are made with wear resistant material to extend service life, with redundant O-Rings on the Bonnet Seals and Stem Seals that help prevent leakage. Fully Guided Stems reduce imbalance and vibration. Control Discs provide ANSI Class III/IV Shut off.

Available sizes are the 1 Inch, 2 Inch, and the 3 Inch chokes.

- **Accurate Control** - 90 degree rotation from Full Off to Full On.
- **Bolted Bonnet** - Safety Bonnet is bolted into the body, it avoids the well-known risks of corrosion, cross threading, galling of threaded type connection in production environments.
- **Extended Mean Time Between Service** - Robust design and liberal application of hardened materials, efficient flow-geometry means the valves offer maximum production potential and minimum service requirements.
- **Easy Maintenance** - Repair parts can be installed in the field without removing the valve from the line.
- **Optional Features** - Choke Valves can have trims and actuators custom designed for specific requirements. Such as special noise reduction trims, reduced port and maximum orifice trims, and for very high pressure or minimum pressure loss for a declining field.

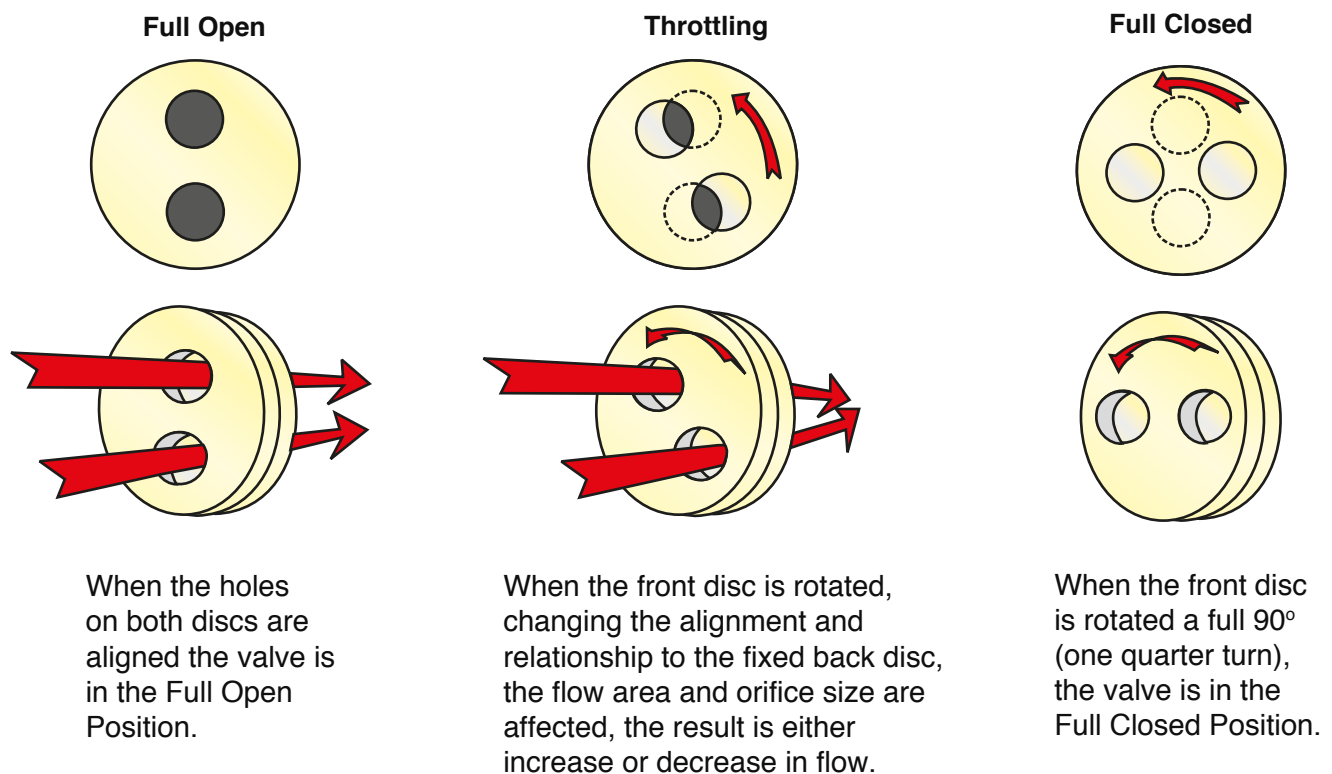
Applications:

- Well Site Automation
- Water Injection Control Valve
- CO2 Injection Control Valve
- Pump Bypass
- Pump Startup
- Gas Lift Injection Control
- High Temperature Protection
- Blow Down and Dump Valve
- Remote Control for directional drilling
- Steam Injection
- Steam Tracer Control
- Manual and Automated Application



MOV Valve Principle of Operation

Taylor Valve Technology Multi Orifice Valve Design Principle Provides Precision Control. The two adjacent internal discs each contain two precision orifices.



The discs are lapped to within two light bands of flatness (+/- .00002") to achieve positive shut off and maintain precise control. The fixed back disc is held perpendicular to the flow. The front disc floats against the back disc and seeks a mating surface promoting a positive seal. The differential pressure across the upstream disc and the downstream disc stabilizes the control surfaces. Vibration, noise or fatigues normally associated with loose or unsupported parts are eliminated. No control surfaces are introduced into the orifice, providing a clear center line for the flow. The valves are rated for shut-off at ANSI Class III or IV depending on the style of valve and trim used. The orifices of the standard disc expose a small control surface profile to the fluid steam reducing wear. The multi-orifice design produces near linear flow characteristics. The low torque and quarter-turn design of Taylor Valve Technology's Multi-orifice valves allows for a variety of actuation options: manual, pneumatic, hydraulic, or electric.

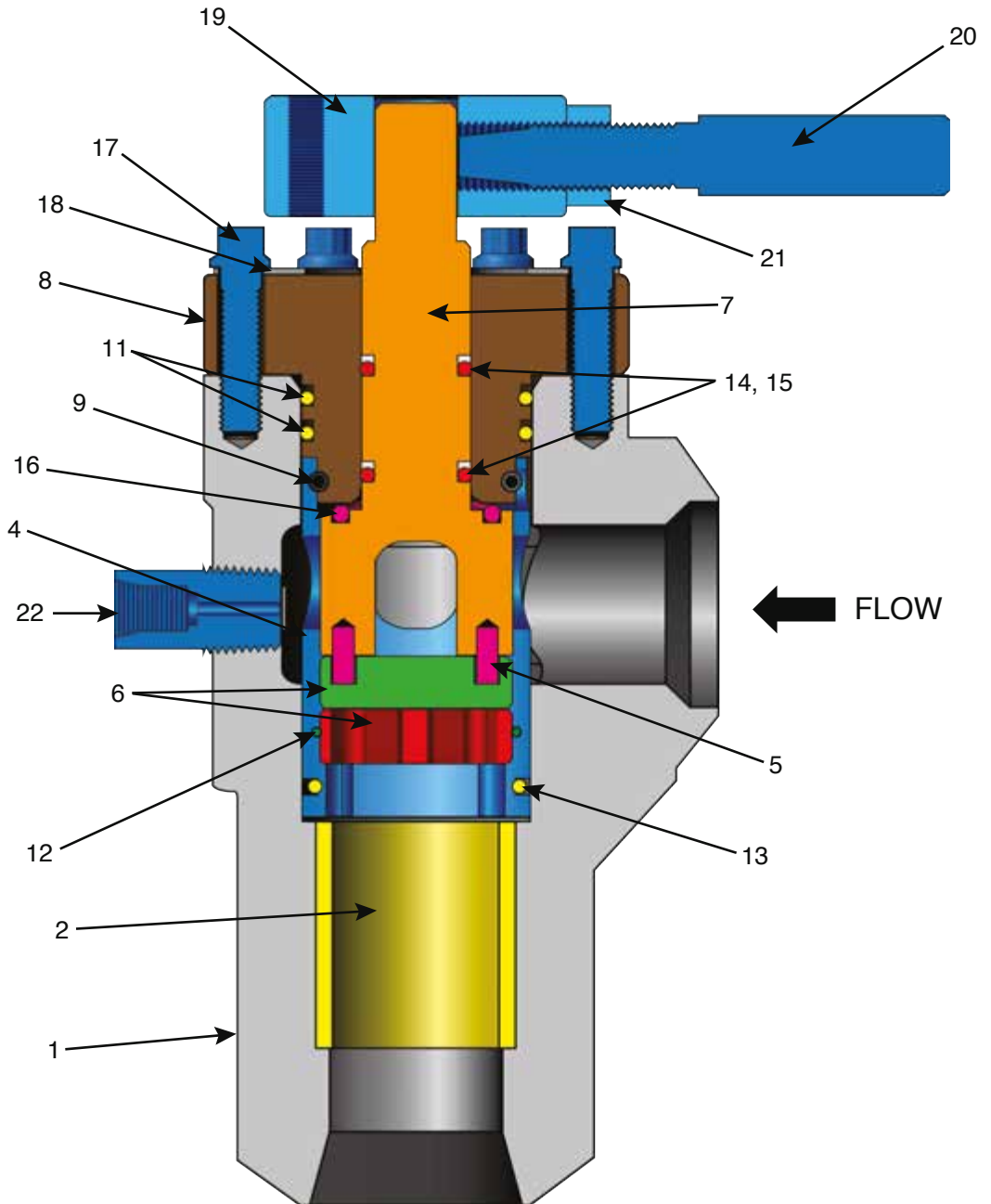
MDA Cutaway View

No.	Description	Qty
1	Body	1
2*	Wear Sleeve	1
3**	Pointer	1
4	Cage	1
5	Dowel Pin	4
6	Disc	2
7	Fork	1
8	Bonnet	1
9	Retainer Wire	1
10**	Dowel Pin	2
11	O-Ring	2
12	O-Ring	1
13	O-Ring	1
14	O-Ring	2
15	Backup Ring	2
16	Thrust Bearing	1
17	Cap Screw	6
18	Index Plate	1
19***	Turning Hub	1
20***	Turning Handle	1
21***	Jam Nut	1
22	Fitting Vent	1
23**	Screw	2
24**	Data Label	1
25**	Thumb Screw	1

*Item Optional

**Items not shown in section view

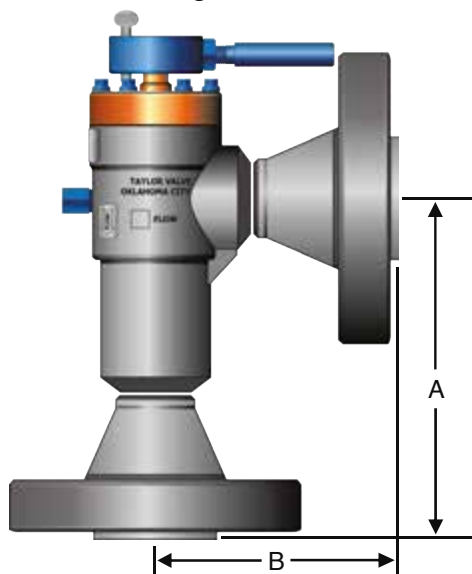
***Items not included on actuated version



MDA Specifications

MDA Angle Choke

1" & 2" Configurations
 1018/1020 CS, 316 SS
 ¼ Turn Actuated
 Body Rating = 5,000 PSI
 CV Range = 0.7 – 23.86



1" BODY STANDARD DIMENSIONS AND WEIGHTS					
CONNECTIONS		DIM. END-to-END IN. (MM.) +/- .10		WEIGHT	
INLET	OUTLET	A	B	LB.	KG.
1" FNPT	1" FNPT	5.53 (140)	2.80 (71)	23	10.44
1" FNPT	1" FNPT	5.58 (142)	2.74 (70)	23	10.44
1" BUTT WELD	1" BUTT WELD	5.58 (142)	2.74 (70)	22	9.99
1" 150 RFJ	1" 150 RFJ	7.86 (200)	5.02 (128)	28	12.71
1" 150 RTJ	1" 150 RTJ	8.05 (204)	5.21 (132)	28	12.71
1" 300 RFF	1" 300 RFF	8.11 (206)	5.27 (134)	30	13.62
1" 300 RTJ	1" 300 RTJ	8.30 (211)	5.46 (139)	30	13.62
1" 600 RFF	1" 600 RFF	8.36 (212)	5.52 (140)	30	13.62
1" 600 RTJ	1" 600 RTJ	8.36 (212)	5.52 (140)	30	13.62
1" 900/1500 RFF	1" 900/1500 RFF	8.80 (224)	5.96 (151)	40	18.16
1" 900/1500 RTJ	1" 900/1500 RTJ	8.80 (224)	5.96 (151)	40	18.16
1" 2500 RFF	1" 2500 RFF	9.42 (239)	6.58 (167)	46	20.88
1" 2500 RTJ	1" 2500 RTJ	9.42 (239)	6.58 (167)	46	20.88

2" BODY STANDARD DIMENSIONS AND WEIGHTS					
CONNECTIONS		DIM. END-to-END IN. (MM.) +/- .10		WEIGHT	
INLET	OUTLET	A	B	LB.	KG.
2" FNPT	2" FNPT	5.58 (142)	2.74 (70)	22	9.99
2" BUTT WELD	2" BUTT WELD	5.58 (142)	2.74 (70)	22	9.99
2" 150 RFJ	2" 150 RFJ	8.17 (208)	5.33 (135)	33	14.98
2" 150 RTJ	2" 150 RTJ	8.36 (212)	5.52 (140)	33	14.98
2" 300 RFF	2" 300 RFF	8.42 (214)	5.58 (142)	39	17.71
2" 300 RTJ	2" 300 RTJ	8.67 (220)	5.83 (148)	39	17.71
2" 600 RFF	2" 600 RFF	8.80 (224)	5.96 (151)	45	20.43
2" 600 RTJ	2" 600 RTJ	8.86 (225)	6.02 (153)	45	20.43
2" 900/1500 RFF	2" 900/1500 RFF	9.92 (252)	7.08 (180)	72	32.69
2" 900/1500 RTJ	2" 900/1500 RTJ	9.98 (253)	7.14 (181)	72	32.69
2" 2500 RFF	2" 2500 RFF	10.92 (277)	8.08 (205)	106	48.12
2" 2500 RTJ	2" 2500 RTJ	10.98 (279)	8.14 (207)	106	48.12
2-1/16" 3000 API	2-1/16" 3000 API	9.98 (253)	7.14 (181)	74	33.60
2-1/16" 5000 API	2-1/16" 5000 API	9.98 (253)	7.14 (181)	76	34.50
2-9/16" 3000 API	2-9/16" 3000 API	10.11 (257)	7.27 (185)	94	42.68
2-9/16" 5000 API	2-9/16" 5000 API	10.11 (257)	7.27 (185)	96	43.58

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NOTE: Taylor Valve reserves the right to change product designs and specifications without notice.

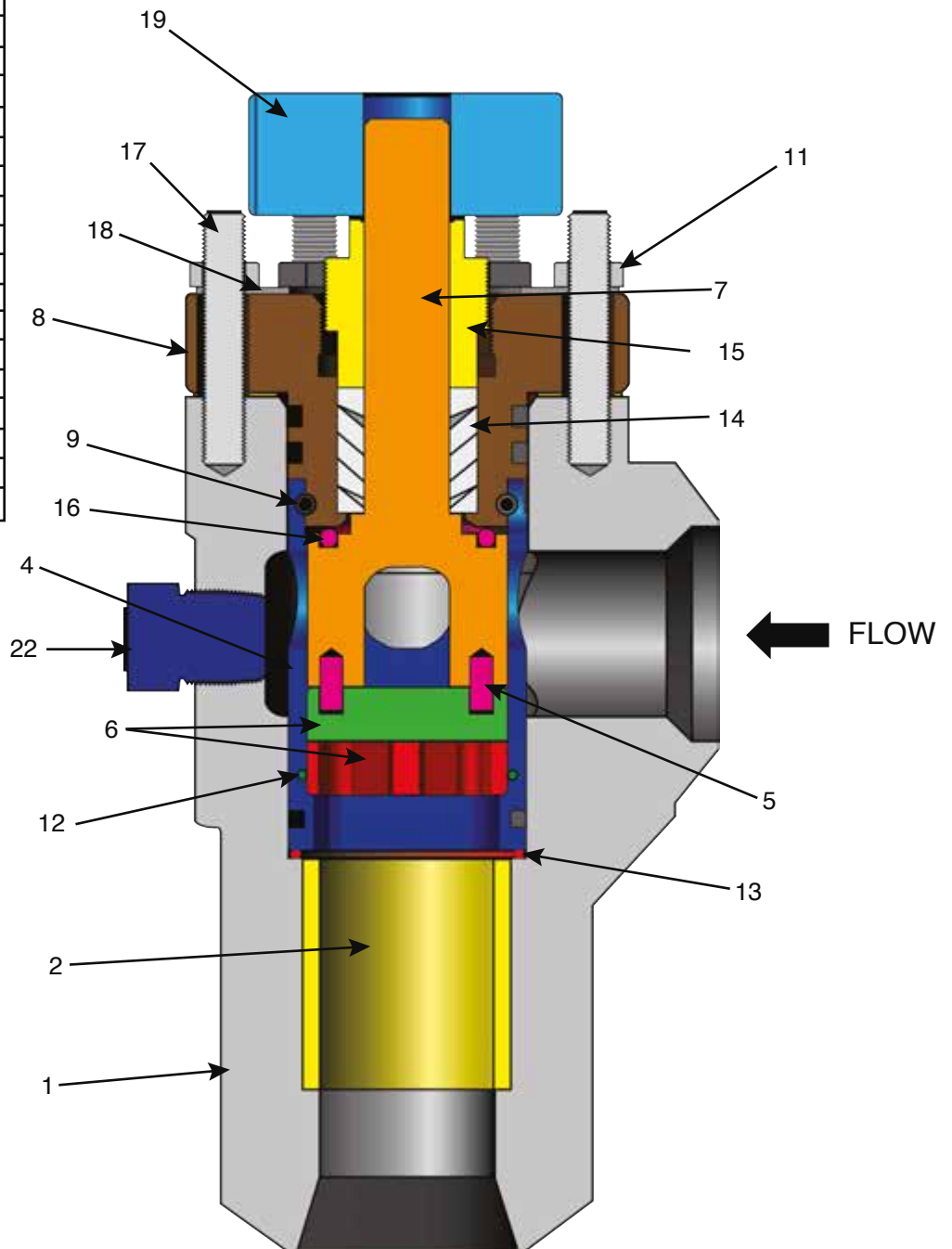
MDAS Cutaway View

No.	Description	Qty
1	Body	1
2*	Wear Sleeve	1
3**	Pointer	1
4	Cage	1
5	Dowel Pin	4
6	Disc	2
7	Fork	1
8	Bonnet	1
9	Retainer Wire	1
10**	Dowel Pin	2
11	Hex Nut	6
12	O-Ring	1
13	Crush Seal	1
14	Hi-Temp Packing	2
15	Hex Gland Nut	2
16	Thrust Bearing	1
17	Stud	6
18	Index Plate	1
19***	Turning Hub	1
20*	Turning Handle	1
21*	Jam Nut	1
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23**	Screw	2
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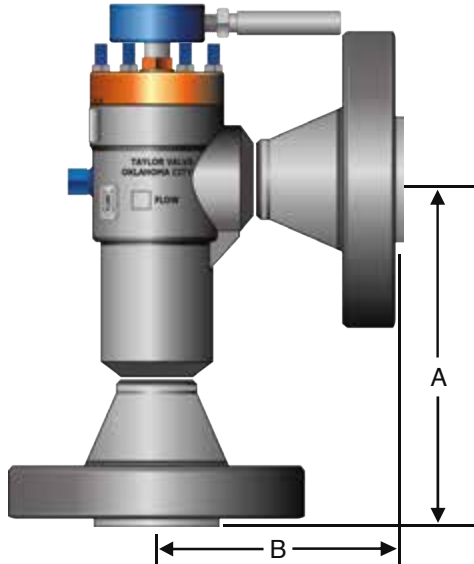
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 ¼ Turn Actuated
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 MAWP 1333 PSI for steam
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