



Taylor Valve
Technology

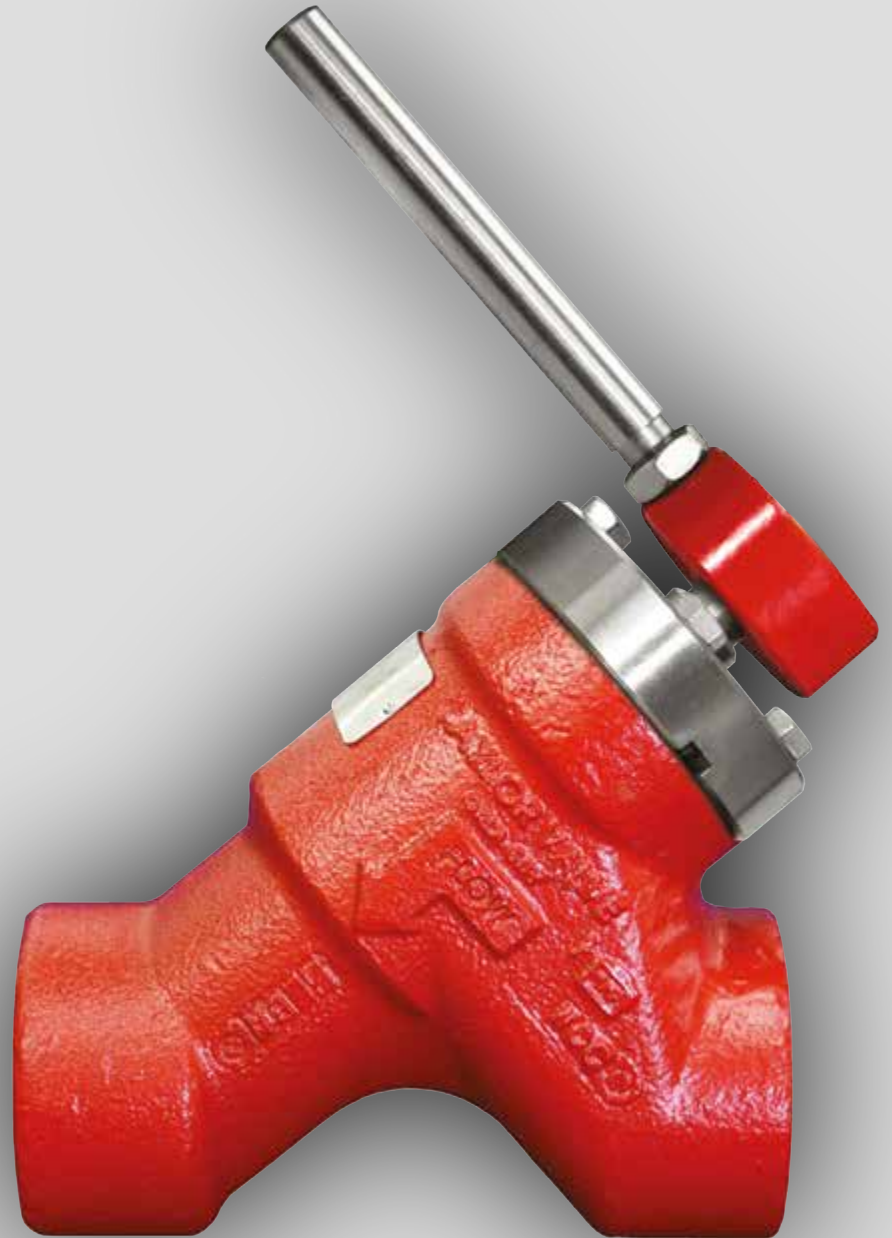
MDI / MDIS Choke Valves



Precise.

Quality.

Reliable.

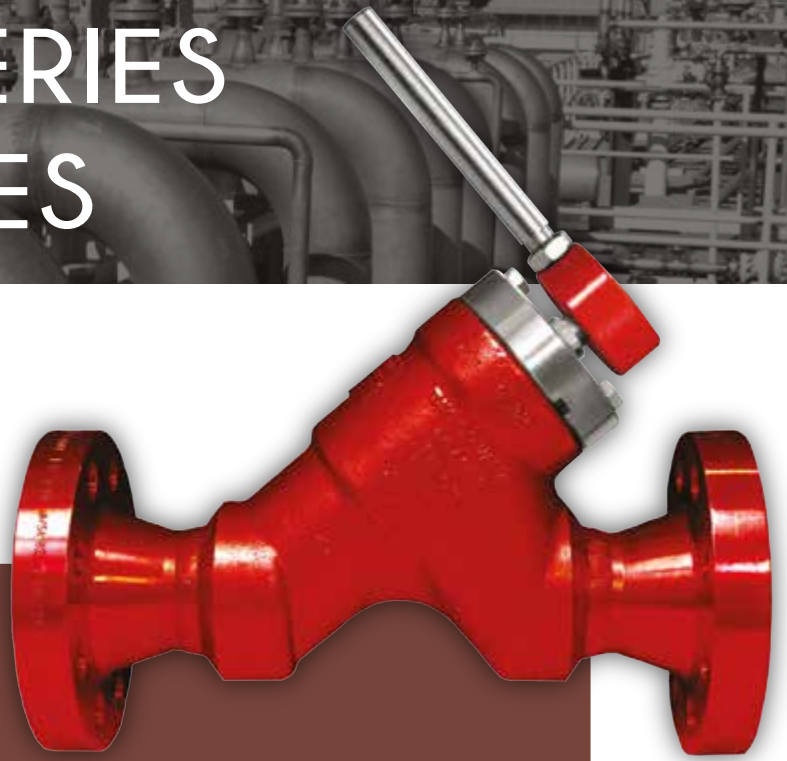


SINCE 1958



MDI / MDIS SERIES CHOKE VALVES

FEATURES & Benefits



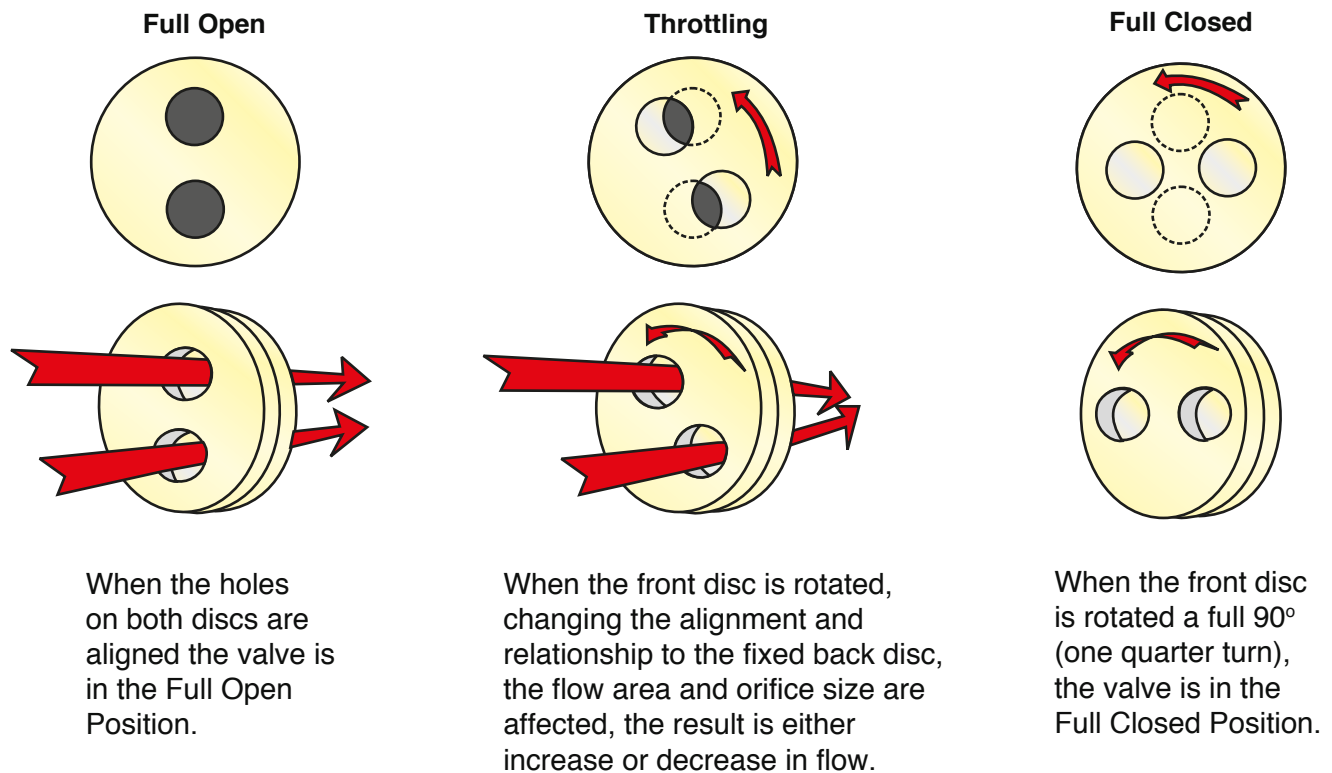
Taylor Valve MDI / MDIS Series Chokes are made with wear resistant material to extend service life, with redundant O-Rings on the Bonnet Seals and Stem Seals that help prevent leakage. Fully Guided Stems reduce imbalance and vibration. Control Discs provide ANSI Class III/IV Shut off. Available sizes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

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.

MDI CHOKE STANDARD DIMENSIONS (IN. +/- .10)

CONNECTION	SIZE		
	1"	2"	3"
FNPT	8.00	8.00	19.64
BUTT-WELD	8.00	8.00	19.15
150 # RFF	12.56	13.18	18.61
150 # RTJ	12.93	13.55	18.63
300 # RFF	13.06	13.68	19.11
300 # RTJ	13.43	14.18	19.61
600 # RFF	13.56	14.43	20.39
600 # RTJ	13.56	14.56	20.52
900 # RFF	14.43	16.68	20.39
900 # RTJ	14.43	16.81	20.52
1500 # RFF	14.43	16.68	21.89
1500 # RTJ	14.43	16.81	22.02
2500 # RFF	15.68	18.68	-
2500 # RTJ	15.68	18.81	-

MDI Inline Choke

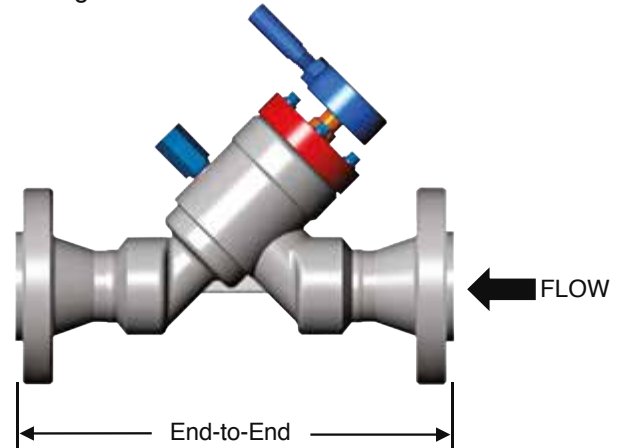
1" & 2" Configurations

316 SS or 1018/1020 CS

¼ Turn Actuated

Body Rating = 5,000 PSI

CV Range= 0.7 – 23.86

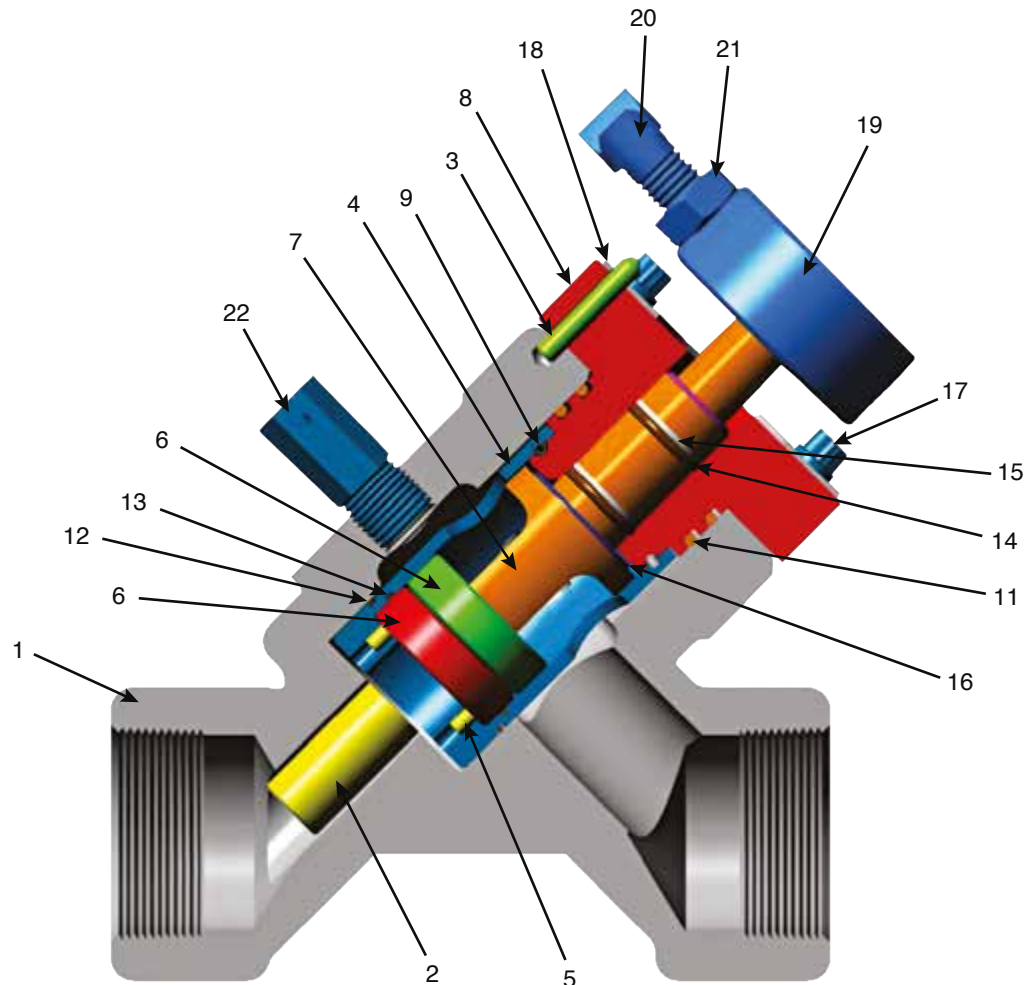


No.	Description	Qty
1	Body	1
2	Wear Sleeve	1
3	Pointer	1
4	Cage	1
5	Dowel Pin	4
6	Disc	2
7	Fork	1
8	Bonnet	1
9	Retainer Wire	1
10**	Dowel Pin	2
11	O-Ring	2
12	O-Ring	1
13	O-Ring	1
14	O-Ring	2
15	Backup Ring	2
16	Thrust Bearing	1
17	Cap Screw	6
18	Index Plate	1
19***	Turning Hub	1
20***	Turning Handle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

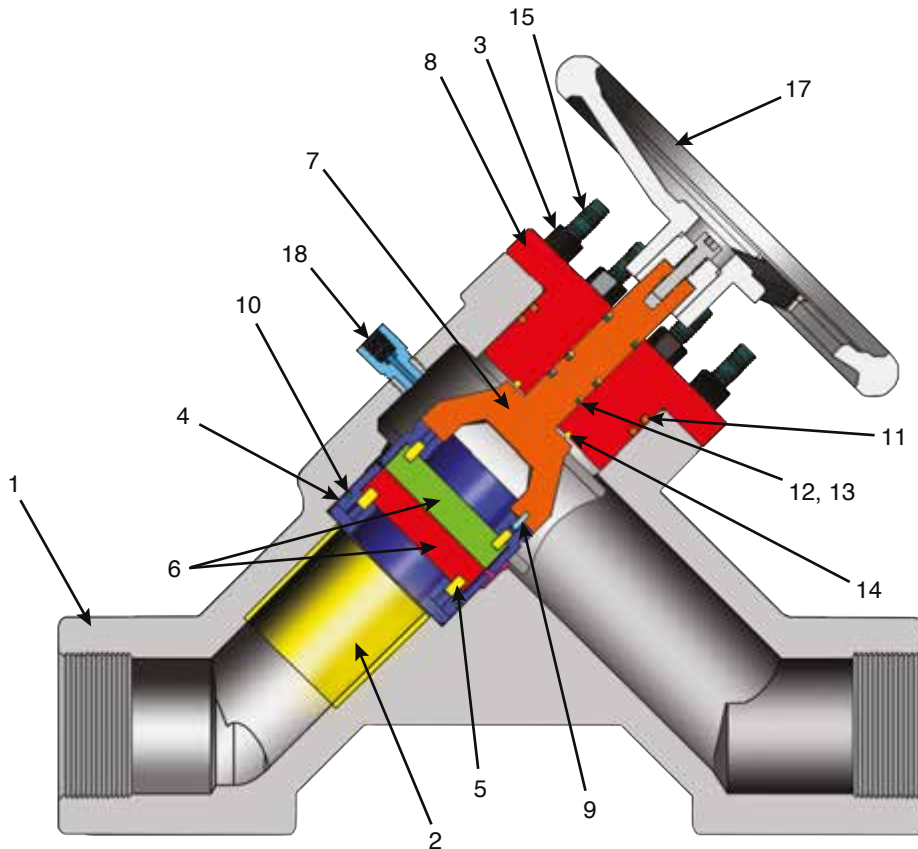
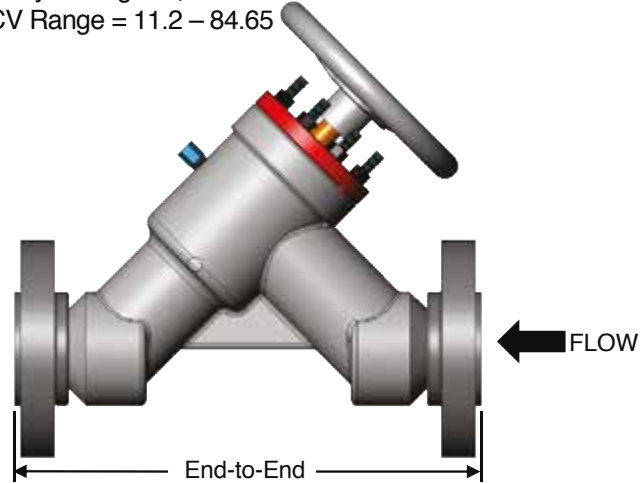




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600 # RTJ	13.56	14.56	20.52
900 # RFF	14.43	16.68	20.39
900 # RTJ	14.43	16.81	20.52
1500 # RFF	14.43	16.68	21.89
1500 # RTJ	14.43	16.81	22.02
2500 # RFF	15.68	18.68	-
2500 # RTJ	15.68	18.81	-

MDI Inline Choke

3" Configuration
 316 SS
 ¼ Turn Actuated
 Body Rating = 3,000 PSI
 CV Range = 11.2 – 84.65



No.	Description	Qty
1	Body	1
2*	Wear Sleeve	1
3	Nut	8
4	Disc Carrier	2
5	Dowel Pin	4
6	Disc	2
7	Fork	1
8	Bonnet	1
9	Dowel Pin	1
10	O-Ring	1
11	O-Ring	2
12	O-Ring	3
13	Backup Ring	3
14	Thrust Bearing	1
15	Stud	8
16**	Index Plate	1
17***	Hand Wheel	1
18	Fitting Vent	1
19**	Lock Bracket	1
20**	Screw	2
21**	Data Label	1

*Item Optional

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MDIS CHOKE STANDARD DIMENSIONS (IN. +/- .10)

CONNECTION	SIZE		
	1"	2"	3"
FNPT	8.00	8.00	19.64
BUTT-WELD	8.00	8.00	19.15
150 # RFF	12.56	13.18	18.61
150 # RTJ	12.93	13.55	18.63
300 # RFF	13.06	13.68	19.11
300 # RTJ	13.43	14.18	19.61
600 # RFF	13.56	14.43	20.39
600 # RTJ	13.56	14.56	20.52
900 # RFF	14.43	16.68	20.39
900 # RTJ	14.43	16.81	20.52
1500 # RFF	14.43	16.68	21.89
1500 # RTJ	14.43	16.81	22.02
2500 # RFF	15.68	18.68	-
2500 # RTJ	15.68	18.81	-

MDIS Inline Choke

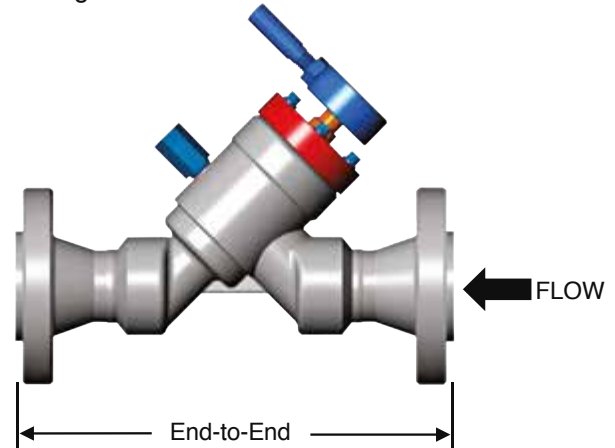
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316 SS or 1018/1020 CS

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Body Rating = 5,000 PSI / MAWP 1333 PSI for steam

CV Range= 0.7 – 23.86

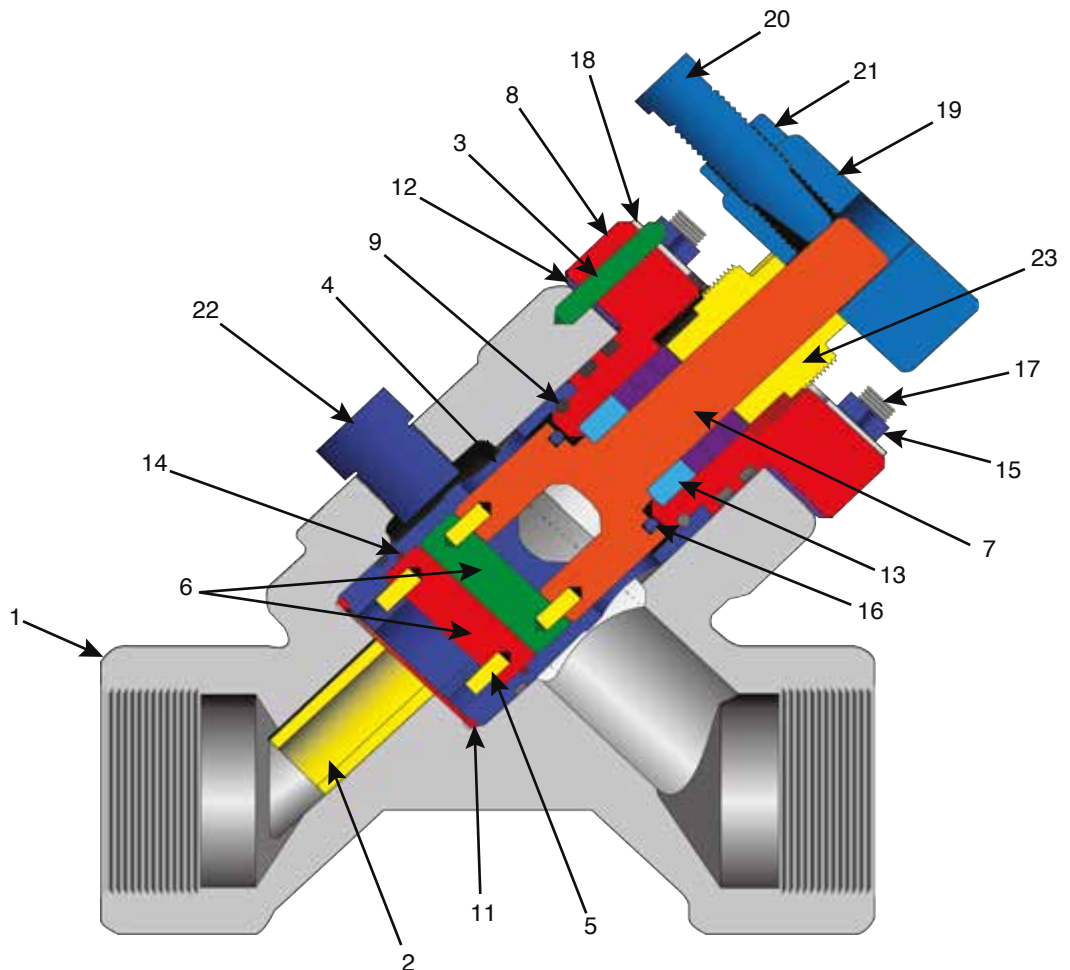


No.	Description	Qty
1	Body	1
2	Wear Sleeve	1
3	Pointer	1
4	Cage	1
5	Dowel Pin	4
6	Disc	2
7	Fork	1
8	Bonnet	1
9	Retainer Wire	1
10**	Dowel Pin	2
11	Crush Seal	1
12	Gasket	1
13	Hi-Temp Packing	1
14	O-Ring	1
15	Nut	6
16	Thrust Bearing	1
17	Stud	6
18	Index Plate	1
19***	Turning Hub	1
20***	Turning Handle	1
21***	Jam Nut	1
22	Pipe Plug	1
23	Hex Gland Nut	1
24**	Screw	2
25**	Data Label	1
26**	Thumb Screw	1

*Item Optional

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MDIS Inline Choke

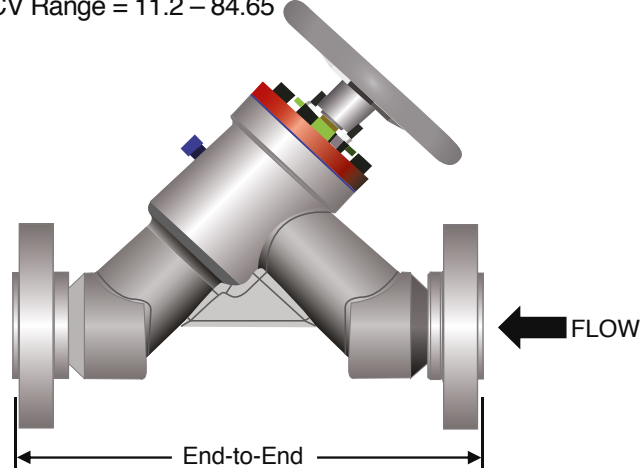
3" Configuration

316 SS

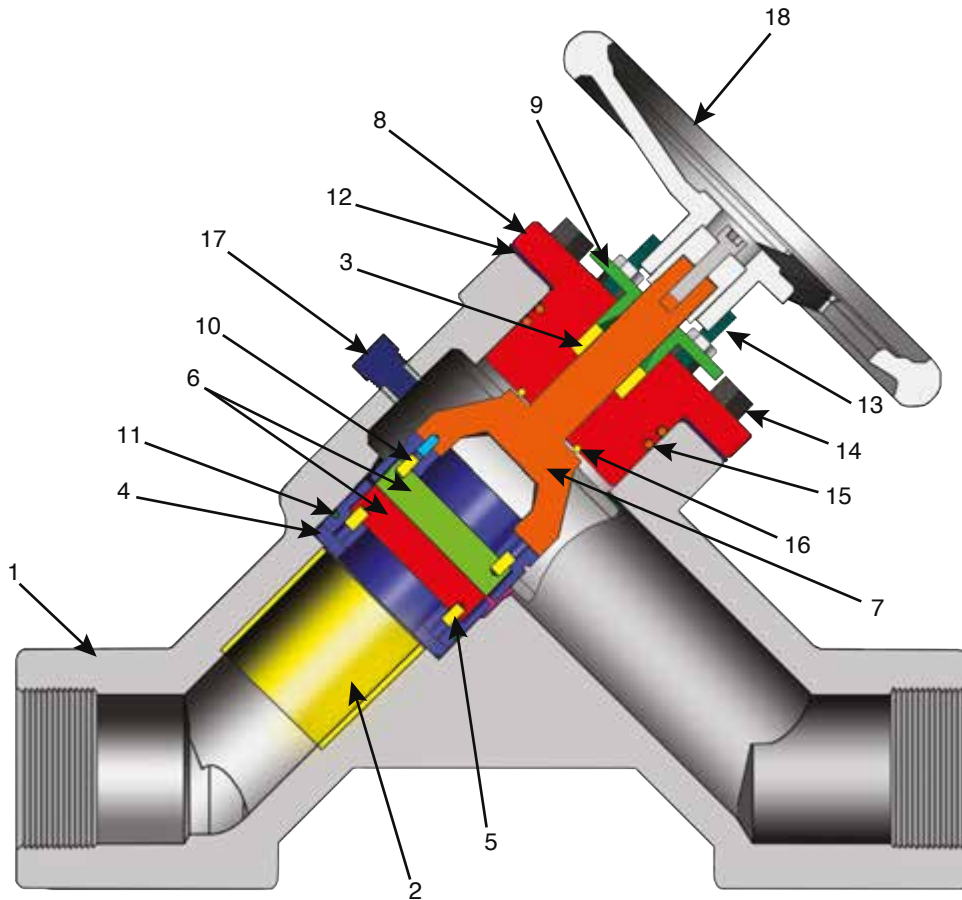
¼ Turn Actuated

Body Rating = 3,000 PSI / MAWP 1333 PSI for steam

CV Range = 11.2 – 84.65



The MDIS Steam valve is designed for high pressure throttling of steam. The multiple orifice system is designed for long life in difficult applications. The standard valve has 1", 2", or 3" female NPT ends, with flanged or special ends readily available. Standard trim is Tungsten Carbide and designed for linear flow characteristics. Manual or electric actuation is standard.



No.	Description	Qty
1	Body	1
2*	Wear Sleeve	1
3	Hi-Temp Packing	1
4	Disc Carrier	2
5	Dowel Pin	4
6	Disc	2
7	Fork	1
8	Bonnet	1
9	Compression Plate	1
10	Dowel Pin	1
11	O-Ring	1
12	Gasket	1
13	Stud	8
14	Nut	8
15	O-Ring	2
16	Thrust Bearing	1
17	Pipe Plug	1
18***	Hand Wheel	1
19**	Screw	2
20**	Data Label	1
21*	Calibration Label	1
22**	Lock Bracket	1

*Item Optional

**Items not shown in section view

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