

MCX SERIES Choke Valves



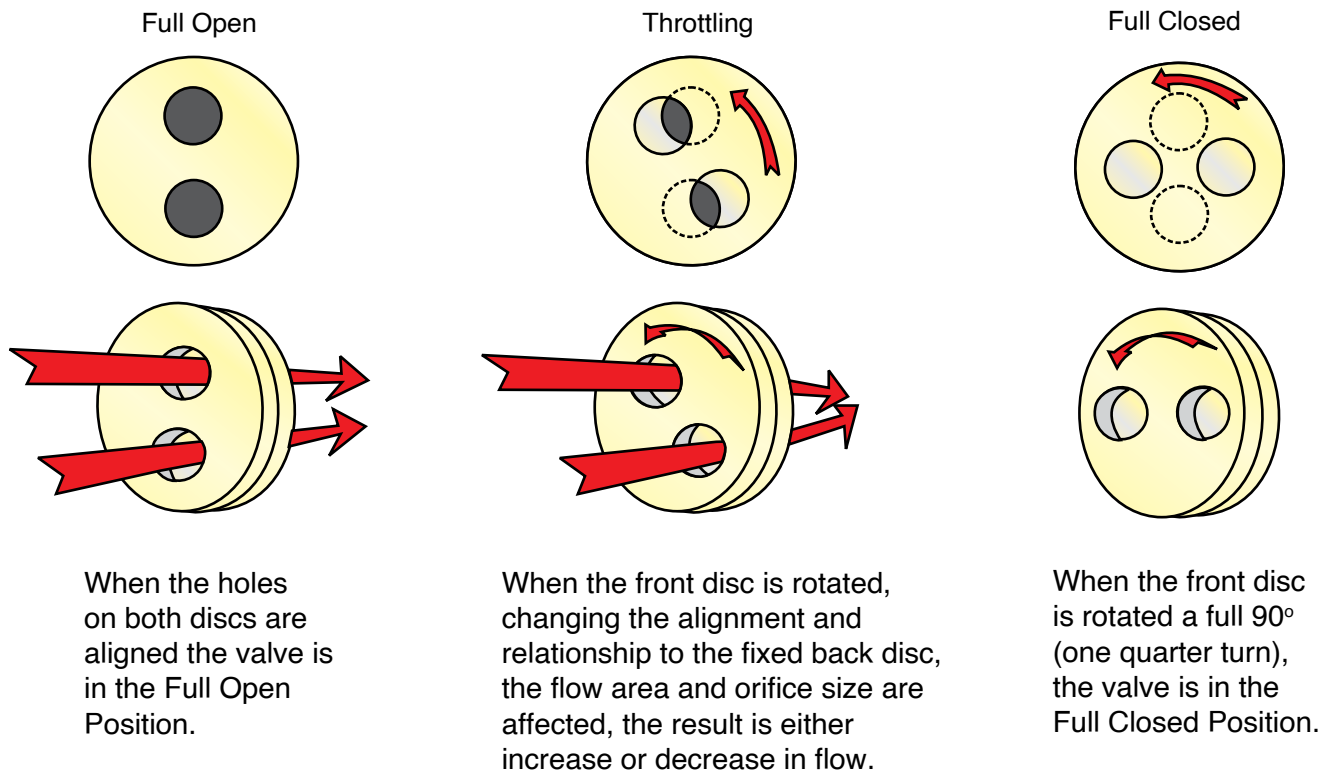
Precise.

Quality.

Reliable.



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 stream 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.

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

CONNECTION	SIZE		
	3"	4"	6"
FNPT	9.00	12.50	-
BUTT-WELD	-	-	-
150 # RFF	9.00	13.25	15.07
150 # RTJ	9.00	13.25	15.07
300 # RFF	9.50	13.25	15.07
300 # RTJ	9.50	13.25	15.07
600 # RFF	9.50	13.25	15.07
600 # RTJ	9.50	13.25	15.07
900 # RFF	9.50	13.25	-
900 # RTJ	9.50	13.25	-
1500 # RFF	9.50	13.25	-
1500 # RTJ	9.50	13.25	-
2500 # RFF	-	-	-
2500 # RTJ	-	-	-

MCX Inline Choke

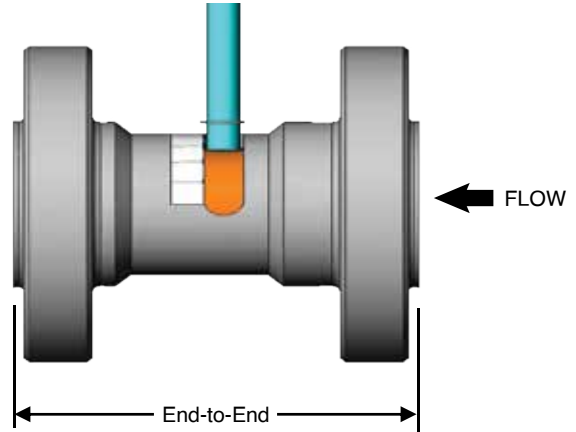
3" & 4" Configurations

316 SS

¼ Turn Actuated

Body Rating = 3,000 PSI

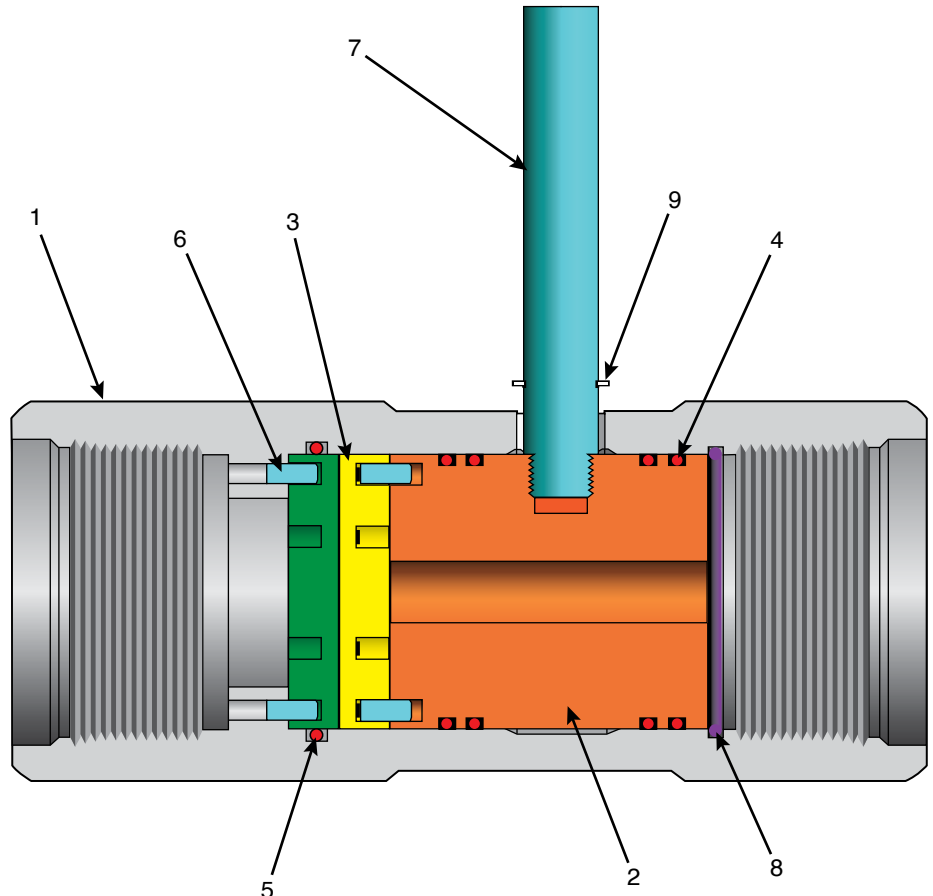
CV Range = 11.2 – 279.83



No.	Description	Qty
1	Body	1
2	Rotator	1
3	Disc	2
4	O-Ring	4
5	O Ring	1
6	Dowel Pin	4
7	Handle	1
8	Spiral Retaining Ring	1
9	Retaining Ring	4
**10*	Wear Sleeve	1

*Not available in threaded configuration

** Not shown in section view



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

MCX SERIES CHOKE VALVES

FEATURES & *Benefits*

- **Accurate Control** - Superior design is unequalled for throttling control and accuracy. Unique sealing and fluid flow dynamics permit compliance with current environmental requirements.
- **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** - Choke valves are designed to provide simple straightforward disassembly with no special tooling or fixtures.
- **Optional Features** - Choke valves can have trims and actuators custom designed for specific requirements, such as, special trims for noise reduction and sand control, several trims are available to accommodate high pressure flows or minimum pressure loss applications.

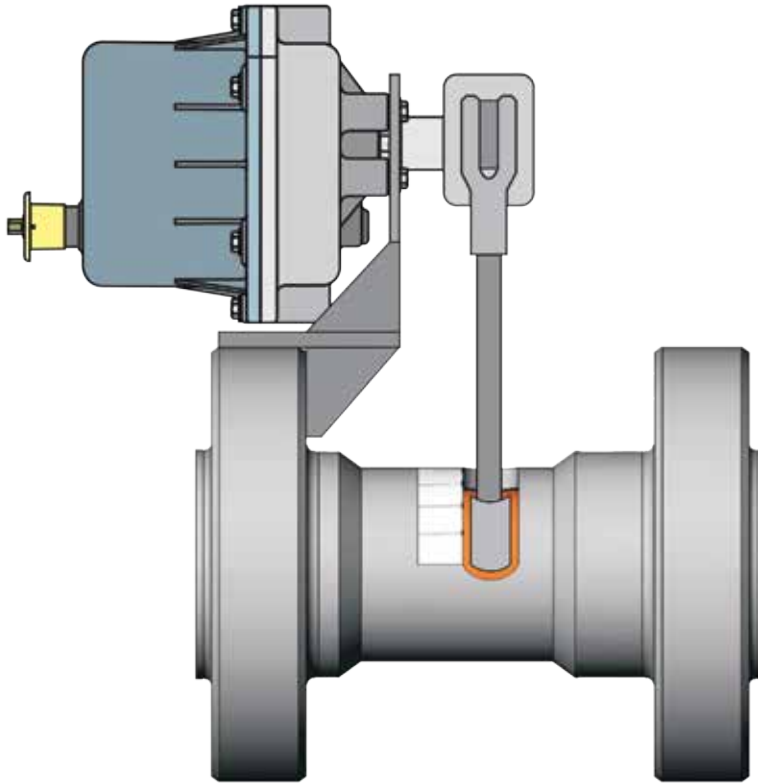
Applications:

- Water Injection Control Valve
- Gas Lift Injection Control
- Throttling Valve
- High DP Valve
- Motor Operated Valve
- Enhanced Oil Recovery



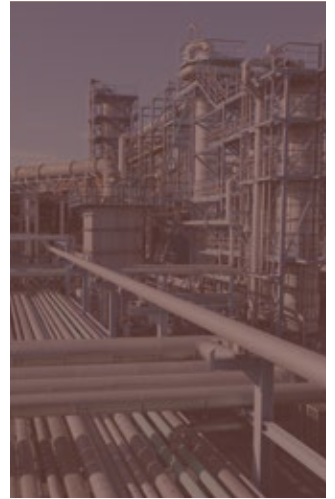
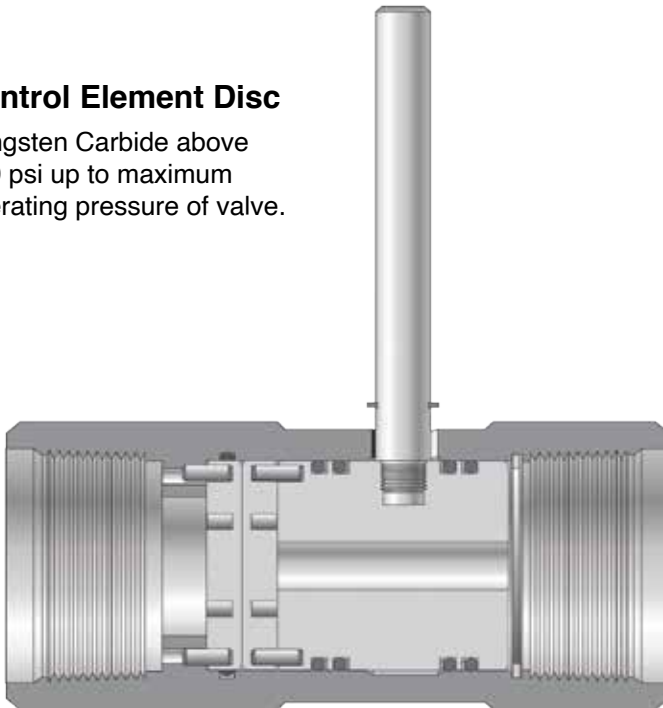
The MCX Series of Inline MOV Chokes Offer:

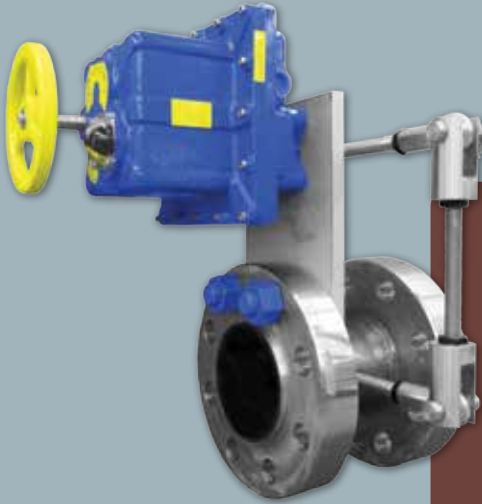
- ~ ANSI Class III Shut Off
- ~ Linear flow characteristics
- ~ Downstream Wear Resistant Flow Tube
- ~ Simple Design for easy field maintenance
- ~ Choice of materials for body standard is 316 SS
- ~ Threaded, Flanged
- ~ Sizes 3" (Threaded, Flanged) & 4" (Flanged)



Control Element Disc

Tungsten Carbide above
500 psi up to maximum
operating pressure of valve.



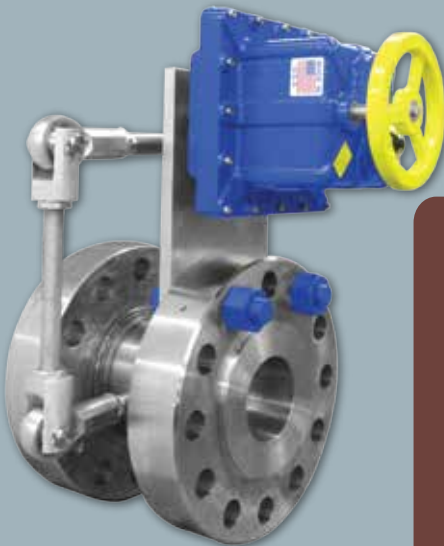


MCX 3" with 4" 900# RFF

MCX with Electric Actuator

Actuator Shown - Indelac Male LX-14

- 24 Volt DC Supply
- Max Torque 3840 in. lbs.
- NEMA 4 Enclosure
- Side Mounted Hand wheel (optional)
- Used on MCX 3" & 4"

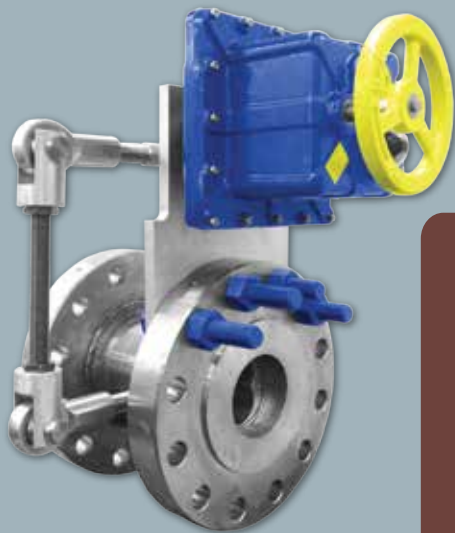


MCX 4" with 6" 900# RFF

MCX with Electric Actuator

Actuator Shown - Indelac Female LX-14

- 24 Volt DC Supply
- Max Torque 3840 in. lbs.
- NEMA 4 Enclosure
- Side Mounted Hand wheel (optional)
- Used on MCX 3" & 4"



MCX 4" with 6" 1500# RFF

MCX with Electric Actuator

Actuator Shown - Indelac LX-5

- 24 Volt DC Supply
- Max Torque 1500 in. lbs.
- NEMA 4 Enclosure
- Side Mounted Hand wheel (optional)
- Used on MCX 3" & 4"



MCX 4" with 4" 1500# RFF

MCX with Electric Actuator

Actuator Shown - Rotork IQTM 500

- Single Phase 120 Volts supply
- Max 500Nm torque actuator
- NEMA 4 Enclosure
- Side Mounted Hand wheel
- Used on MCX 3" & 4"

Choke Nomenclature

Size	
1	1"
2	2"
3	3"
4	4"
6	6"

Actuation Type	
0	Manual Handle
1	Manual Gear
2	Electric
3	Pneumatic
4	Hydraulic
7	Positive Bean

Schedule	
0	Non-flanged
1	40
2	80
3	160
4	XS
5	XXS
6	SLIP-ON
7	API
8	120
9	XXH X S80
A	S80 X S40
B	NPT X API
C	S120 X S80

Body Material	
00	DUPLEX SS
03	CARBON STEEL
04	LOW ALLOY (4130 LACS)
05	316 SS (CF8M)
06	316 SS "L" (CF3M)
07	ALUMINUM BRONZE
08	A350 LF2
09	LCC
10	INCONEL
11	SUPER DUPLEX SS
12	440 SS
13	410 SS

EXAMPLE ONLY*

Orifice Size			
01	(2) 1/8" RND PORTS	29	48/64 BEAN
02	(2) 3/16" RND PORTS	34	32/64 BEAN
03	(2) 1/4" RND PORTS	43	40/64 BEAN
04	(2) 3/8" RND PORTS	44	34/64 BEAN
05	(2) 1/2" RND PORTS	45	28/64 BEAN
06	(2) 5/8" PIE PORTS	46	30/64 BEAN
07	(2) 3/4" RND PORTS	53	10/64 BEAN
08	(2) 7/8" RND PORTS	63	11/64 BEAN
10	(2) 1-3/16" RND PORTS	64	14/64 BEAN
11	(2) 1-1/4" RND PORTS	65	15/64 BEAN
14	(2) 1-1/2" RND PORTS	66	16/64 BEAN
30	(2) 3/4" PIE PORTS	67	19/64 BEAN
32	(2) 1-3/4" RND PORTS	68	20/64 BEAN
35	(1) 1" ROUND PORTS	69	24/64 BEAN
38	(2) 2" PIE PORTS	70	21/64 BEAN
40	(2) 1-1/4" PIE PORTS	71	22/64 BEAN
41	(2) 1-3/8" PIE PORTS	72	23/64 BEAN
42	(2) 1-1/8" RND PORTS	73	27/64 BEAN
47	(2) 1-1/2" PIE PORTS	74	29/64 BEAN
49	(2) 5/8" RND PORTS	75	25/64 BEAN
54	(2) 2.92 PIE HOLES	76	17/7" RND PORTS
55	3 CV	77	7/64 BEAN
56	12 CV	78	54/64 BEAN
57	164 CV	79	44/64 BEAN
58	420 CV	80	45/64 BEAN
59	64 CV	81	47/64 BEAN
60	35 CV	82	51/64 BEAN
22	17/64 BEAN	83	35/64 BEAN
23	18/64 BEAN	84	37/64 BEAN
24	8/64 BEAN	85	6 CV
25	13/64 BEAN	86	85 CV
26	4/64 BEAN	87	12/64 BEAN
27	38/64 BEAN	88	78 CV
28	36/64 BEAN	89	42/64 BEAN
		90	43/64 BEAN
		91	41/64 BEAN

PINS	
I	INCONEL (Optional)

API flange bore (SCHEDULE) is specified by API.

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*For more options, contact Taylor Valve.

