

# MCX SERIES Choke Valves



# SINCE 1958



## 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 downsteam 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 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.



www.taylorvalve.com

## MCX Specifications and Cutaway View

MCX CHOKE STA	NDARD DIMENSIC	NS (IN. +/10)
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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	-	-	-

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

#### MCX Inline Choke

3" & 4" Configurations 316 SS ¼ Turn Actuated Body Rating = 3,000 PSI CV Range = 11.2 – 279.83





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

# MCX SERIES CHOKE VALVES



- 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 from 3" to 4" Flanged





### **Control Element Disc**

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





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# MCX Actuation Packages



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"



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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 Actuation Packages



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 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"



\*See back page of actual choke product brochure for a more detailed order number example. \*For more options, contact Taylor Valve.

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WEB

2/17/2023

38 4" 2500

39 6" 150

40 6" 300

#### **Taylor Valve Technology** 8300 S.W. 8th Street Oklahoma City, Oklahoma 73128

84 2-9/16" 15000

87 1.5" 1500

85

6" Butt Weld

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