

# Manual Throttling & Check Valve

## Model MN-700-M

Mechanically operated, "Y" pattern globe valve, which stroke can be adjusted in order to manually control any hydraulic parameter. In addition, it includes an unique inherent check feature to prevent backflow.

The valves hydrodynamic body is designed for unobstructed flow path and provides excellent and highly effective modulation capacity for high differential pressure applications.

### Features and Benefits

- Hydrodynamic wide globe valve body provides:
  - ✓ Higher flow (Kv;Cv) than standard globe valves
- Designed to - stand up to the toughest conditions
  - ✓ Tamper resistant, as valve position is locked to avoid unauthorized adjustment
  - ✓ Excellent anti-cavitation properties
  - ✓ Wide flow range
  - ✓ Drip tight sealing
- Double chamber actuator design
  - ✓ Protected diaphragm
  - ✓ Ability to add independent opening & closing speed control loops.
- Flexible design - Easy addition of optional features:
  - ✓ Tapping ports for easy installation of pressure gauges
  - ✓ Visual position indicator (side)
  - ✓ Limit switches (side)
  - ✓ V-Port Throttling Plug - Allows for low flow stability
  - ✓ Easily modified at later date to an automatic control valve if required.
- Obstacle free flow path
- In-line serviceable - Easy maintenance



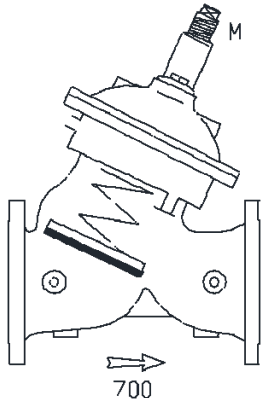
### Major Additional Features

- Opening and closing speed control
- 700-M-03**

### Typical Application

- As replacement of line size check valve
- One way zonal back-up

## List of Components (\*)



### Standard Configuration

700	Main Body
M	Flow Stem

### Additional Features (OPTIONAL)

6	Pressure Gauge
S	Limit Switch (side)
I	Position Indicator (side)

(\*) As a reference only. Components

## Operation:

- ✓ The main valve is equipped with a flow stem installed on the top of the valve.
- ✓ To close the main valve, turn the flow stem clockwise in order to reduce valve's stroke. Stop when desired pressure or flow is reached. Lock the flow stem locking nut when finished.
- ✓ To open the main valve, turn the flow stem counter clockwise in order to increase valve's stroke. Stop when desired pressure or flow is reached. Lock the flow stem locking nut when finished.

## Pressure Rating:

	Class 150			Class 300		
Max. Recommended Pressure	16 bar / 250 PSI			25 bar / 400 PSI		
Available End Connection	Flanged AS2129 Table E Flanged ANSI #150	Grooved ANSI/AWWA C606	Threaded	Flanged AS2129 Table F Flanged ANSI #300	Grooved ANSI/AWWA C606	Threaded

## Materials

Components		Water Applications	Base Solutions Applications	Thermal Shock Applications	Acid Solutions Applications (**)
<b>Main Valve</b>	Body & Cover	Ductile Iron	Ductile Iron	Carbon Steel	Stainless Steel 316
	Internals	Stainless Steel Brass/Coated Steel	Stainless Steel Coated Steel	Stainless Steel Brass/Coated Steel	Stainless Steel 316
	Elastomers	Synthetic rubber	Synthetic rubber	Synthetic rubber	Viton
	Coating	Fusion Bonded Epoxy	Fusion Bonded Epoxy	Fusion Bonded Epoxy	Uncoated
<b>Accessories</b>	Accessories	Brass/Bronze	Stainless Steel 316	Stainless Steel 316	Stainless Steel 316

(\*\*) For highly aggressive acid solutions: Super Duplex, Hastelloy C-276, SM0-254 6-MO. Others by request.

### Notes:

- Inlet pressure, back pressure (if any) and flow rate are required for optimal sizing and cavitation analysis.
- Recommended continuous flow velocity: 0.1-5m/sec; 0.3-15ft/sec