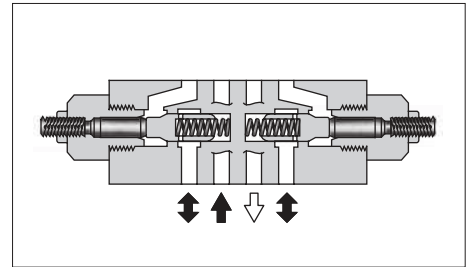
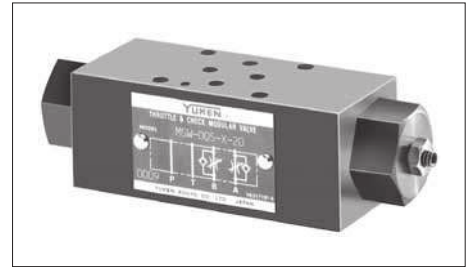


## Throttle and Check Modular Valves

### Specifications

Model Numbers	Max. Operating Pressure MPa (PSI)	Max. Flow L/min (U.S.GPM)
MSW-005-*-20 MSA-005-*-20 MSB-005-*-20	25 (3630)	15 (3.96)



### Model Number Designation

F-	MSW	-005	-X	-20	*
Special Seals	Series Number	Valve Size	Direction of Flow	Design Number	Design Standard
<b>F:</b> Special Seals for Phosphate Ester Type Fluids (Omit if not required)	<b>MSA:</b> Throttle and Check Valve for A-Line	<b>005</b>	<b>X:</b> Metre-out <b>Y:</b> Metre-in	<b>20</b>	Refer to ★
	<b>MSB:</b> Throttle and Check Valve for B-Line				
	<b>MSW:</b> Throttle and Check Valve for A&B-Lines				

★ Design Standards: None ..... Japanese Standard "JIS", European Design Standard and N. American Design Standard

### Flow Adjustment

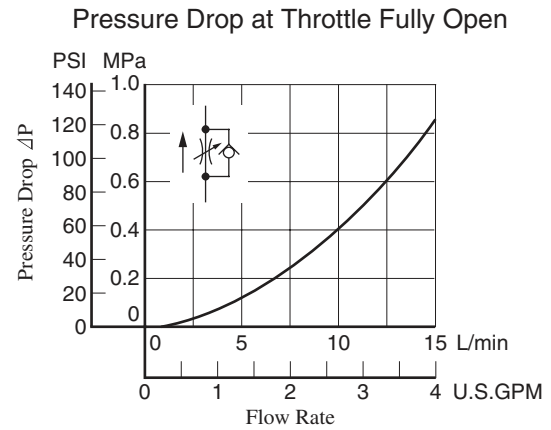
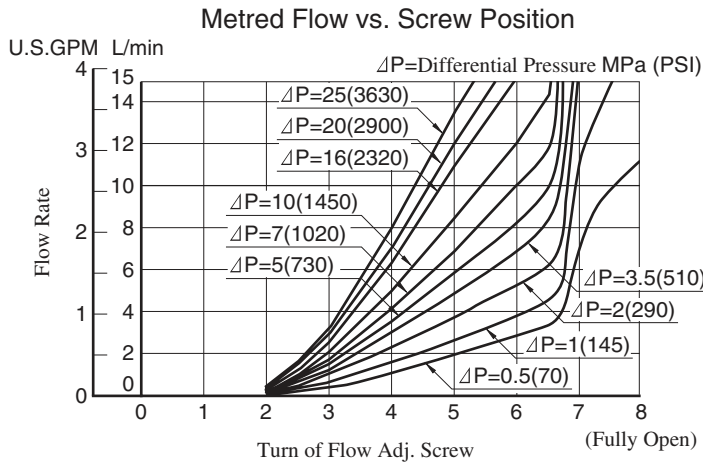
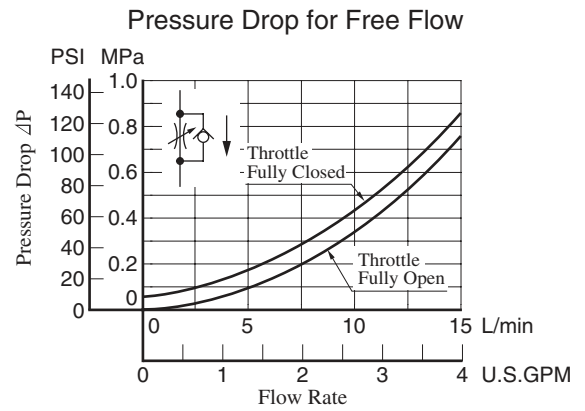
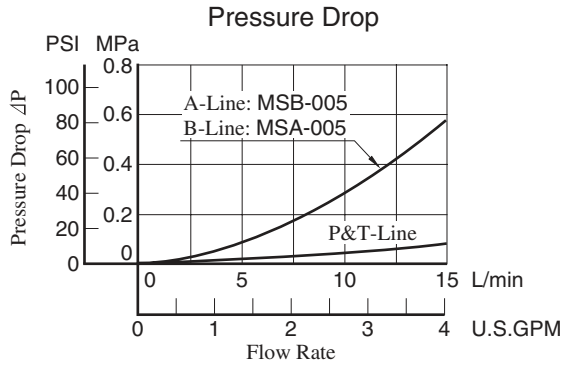
To make flow rate adjustment, loosen the lock nut and turn the flow adjustment screw clockwise or anti-clockwise. To throttle the flow, turn the screw clockwise. Be sure to re-tighten the lock nut firmly after the adjustment of the flow rate is completed.

### Graphic Symbols

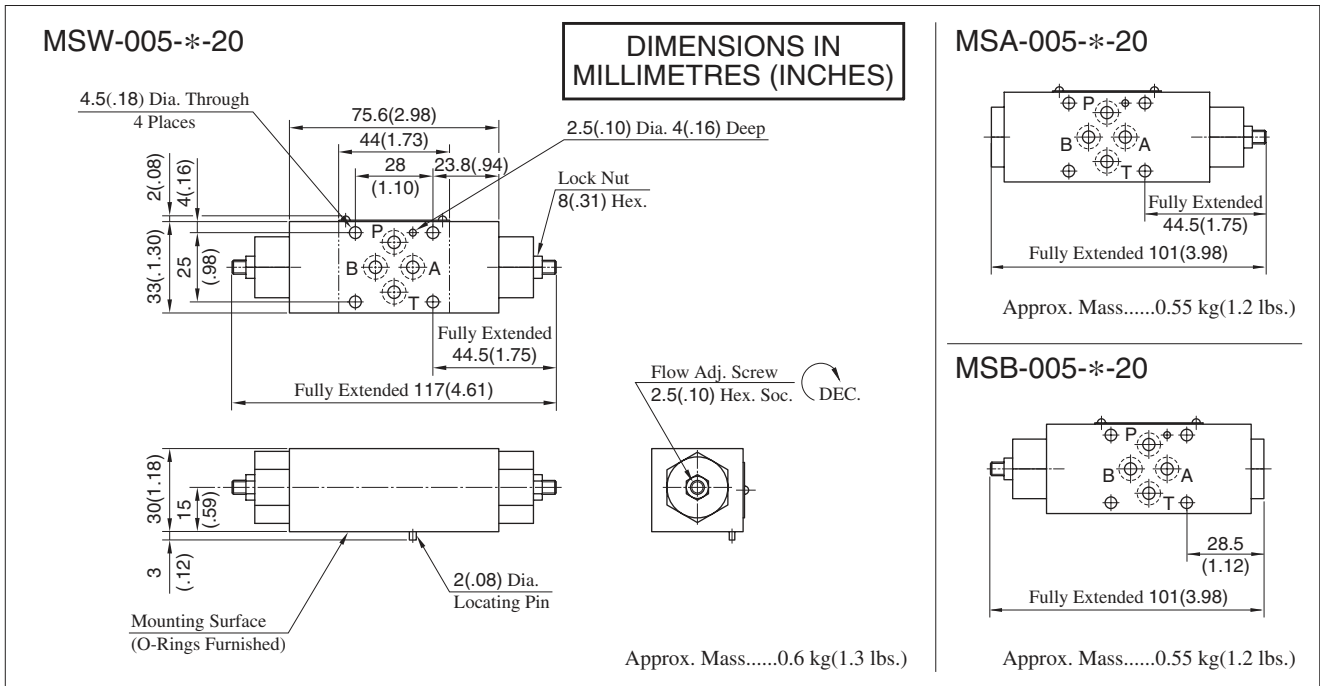
Metre-out	Metre-in
<p>MSA-005-X</p>	<p>MSA-005-Y</p>
<p>MSB-005-X</p>	<p>MSB-005-Y</p>
<p>MSW-005-X</p>	<p>MSW-005-Y</p>

## Typical Performance Characteristics

Hydraulic Fluid: Viscosity 35 mm<sup>2</sup>/s (164 SSU), Specific Gravity 0.850



F  
 005 Series Modular Valves



**■ Spare Parts List**

### MSA-005-X<sub>Y</sub>-20

### MSB-005-X<sub>Y</sub>-20

### MSW-005-X<sub>Y</sub>-20

#### ● List of Seals

Item	Name of Parts	Part Numbers	Qty.	
			MSA MSB	MSW
7	O-Ring	SO-NA-P3	1	2
8	O-Ring	SO-NB-P6	4	4
9	O-Ring	SO-NB-P14	2	2
10	Back Up Ring	SO-BB-P3	1	2

#### ● List of Seal Kits

Valve Model Numbers	Seal Kit Numbers
MSA-005	KS-MSA-005-20
MSB-005	
MSW-005	KS-MSW-005-20