

# 01 Series Modular Valves

## Type of Modular Valve

Class	Name and Model Numbers	Graphic Symbols	Page	Class	Name and Model Numbers	Graphic Symbols	Page	
Solenoid Operated Directional Valve	(S-) DSG-01-**-**-70 E-DSG-01-**-**-D**-70 T-DSG-01-**-**-D24**-70 G-DSG-01-**-**-**-51		★	Flow Control Valves	Throttle Valves (for "P-Line") MSP-01-50		F-29	
	Throttle Valves (for "T-Line") MST-01-50		F-29					
Pressure Control Valves	Relief Valves (for "P-Line") MBP-01-**-**-70		F-12		Check and Throttle Valves (for "P-Line") MSCP-01-30		F-30	
	Relief Valves (for "A-Line") MBA-01-**-**-70		F-12		Throttle and Check Valves (for "A-Line", Meter-out) MSA-01-X-70		F-31	
	Relief Valves (for "B-Line") MBB-01-**-**-70		F-12		Throttle and Check Valves (for "A-Line", Meter-in) MSA-01-Y-70		F-31	
	Reducing Valves (for "P-Line") MRP-01-**-**-70		F-14		Throttle and Check Valves (for "B-Line", Meter-out) MSB-01-X-70		F-31	
	Reducing Valves (for "A-Line") MRA-01-**-**-70		F-14		Throttle and Check Valves (for "B-Line", Meter-in) MSB-01-Y-70		F-31	
	Reducing Valves (for "B-Line") MRB-01-**-**-70		F-14		Throttle and Check Valves (for "A&B-Lines", Meter-out) MSW-01-X-70		F-31	
	Two Pressure Reducing Valves (for "P-Line") MRDP-01-**-**-10		F-16		Throttle and Check Valves (for "A&B-Lines", Meter-in) MSW-01-Y-70		F-31	
	Brake Valves MBR-01-**-30		F-18		Throttle and Check Valves (for "A&B-Lines", Meter-out, Meter-in) MSW-01-XY-70		F-31	
	Sequence Valves (for "P-Line") MHP-01-**-70		F-19		Directional Control Valves	Check Valves (for "P-Line") MCP-01-**-70		F-33
	Counterbalance Valves (for "A-Line") MHA-01-**-70		F-19			Check Valves (for "A-Line") MCA-01-**-70		F-33
	Counterbalance Valves (for "B-Line") MHB-01-**-70		F-19	Check Valves (for "B-Line") MCB-01-**-70			F-33	
	Pressure Switch Valves (for "P-Line") MJP-01-**-**-10		F-22	Check Valves (for "T-Line") MCT-01-**-70			F-33	
Pressure Switch Valves (for "A-Line") MJA-01-**-**-10		F-22	Check Valves (for "A&B-Line") MCW-01-**-70			F-33		
Pressure Switch Valves (for "B-Line") MJB-01-**-**-10		F-22	Anti-Cavitation Valves MAC-01-30			F-35		
Pressure Switch Valves (for "A&B-Line") MJW-01-J-**-10		F-22	Pilot Operated Check Valves (for "A-Line") MPA-01-**-**-70			F-36		
Flow Control Valves (for "P-Line") MFP-01-10		F-25	Pilot Operated Check Valves (for "B-Line") MPB-01-**-**-70			F-36		
Flow Control and Check Valves (for "A-Line", Meter-out) MFA-01-X-10		F-25	Pilot Operated Check Valves (for "A&B-Lines") MPW-01-**-**-70			F-36		
Flow Control and Check Valves (for "A-Line", Meter-in) MFA-01-Y-10		F-25	Modular Plates and Mounting Bolts	End Plates (Blocking Plates) MDC-01-A-30			F-38	
Flow Control and Check Valves (for "B-Line", Meter-out) MFB-01-X-10		F-25		End Plates (Bypass plates) MDC-01-B-30			F-38	
Flow Control and Check Valves (for "B-Line", Meter-in) MFB-01-Y-10		F-25		Connecting Plates (for "P&A-Lines") MDS-01-PA-30			F-38	
Flow Control and Check Valves (for "A&B-Lines", Meter-out) MFW-01-X-10		F-25		Connecting Plates (for "P&B-Lines") MDS-01-PB-30		F-38		
Flow Control and Check Valves (for "A&B-Lines", Meter-in) MFW-01-Y-10		F-25		Connecting Plates (for "A&T-Lines") MDS-01-AT-30		F-38		
Temperature Compensated Throttle and Check Valves (for "A-Line", Meter-out) MSTA-01-X-10		F-27		Base Plates MMC-01-**-40		F-39		
Temperature Compensated Throttle and Check Valves (for "B-Line", Meter-out) MSTB-01-X-10		F-27		Bolt Kits MBK-01-**-70		F-41		
Temperature Compensated Throttle and Check Valves (for "A&B-Lines", Meter-out) MSTW-01-X-10		F-27						

★ Please refer to the catalog page of "E: Directional Control Valves"

# Temperature Compensated Throttle and Check Modular Valves

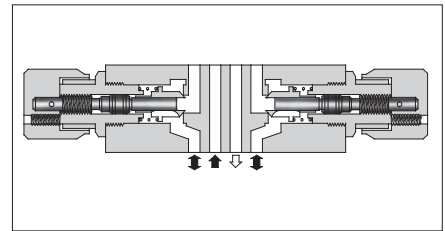
## Specifications

Model Numbers	Max. Operating Pressure MPa	Max. Differential Pressure MPa	Max. Metered Flow L/min	Min. Metered Flow L/min	Max. Free Flow L/min
MST*-01-X-10	31.5	14	35	0.5	35

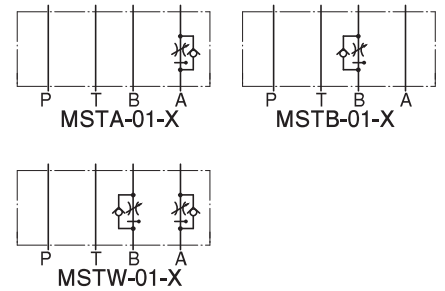


## Model Number Designation

MSTA	-01	-X	-10
Series Number	Valve Size	Direction of Flow	Design Number
<b>MSTA:</b> for A-Line <b>MSTB:</b> for B-Line <b>MSTW:</b> for A&B-Lines	01	X: Meter-out	10
Temperature Compensated Throttle and Check Valve			

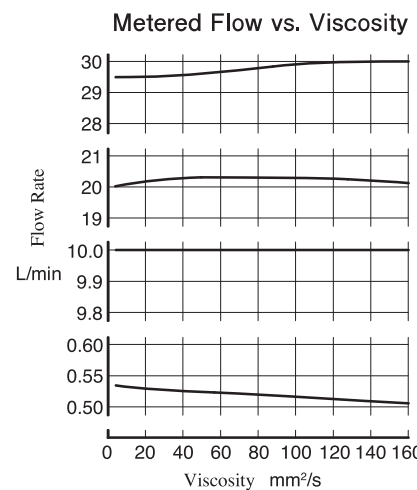
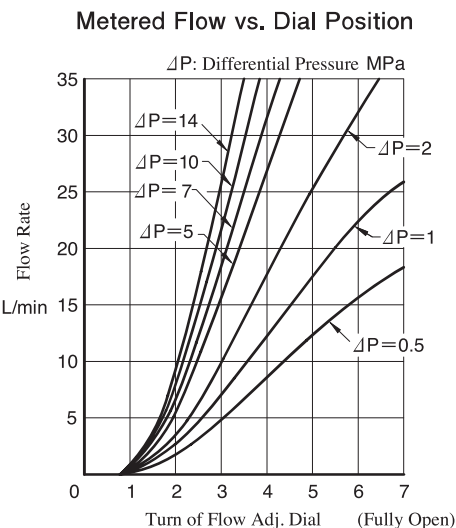
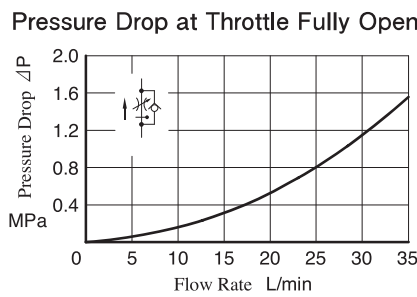
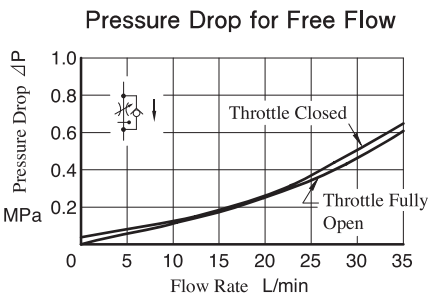
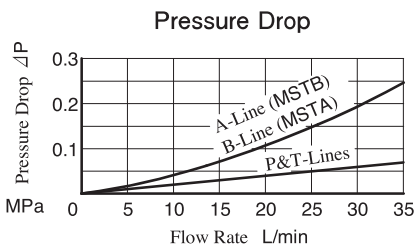


Graphic Symbols



## Typical Performance Characteristics

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

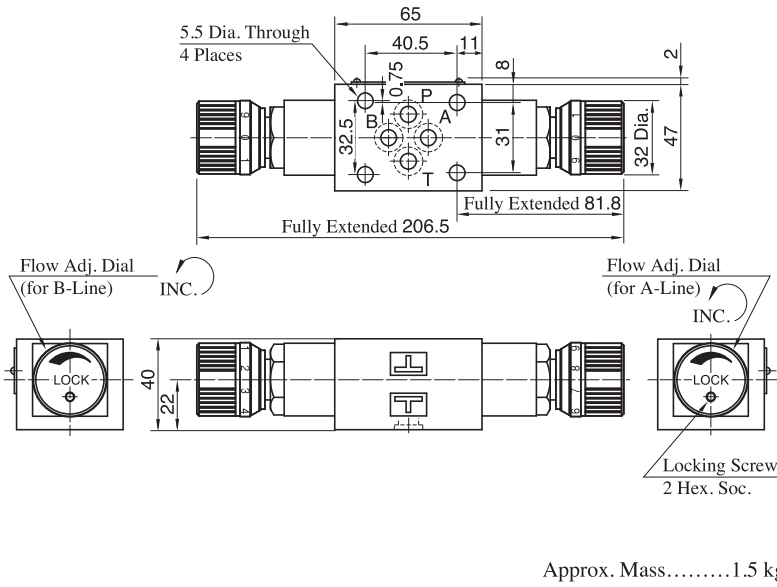


## Instructions

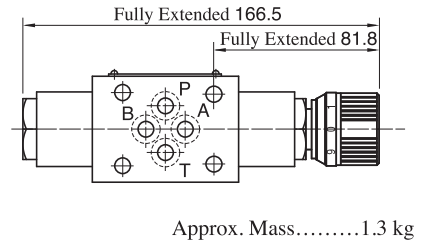
- To make flow rate adjustment, loosen locking screw for the dial and turn the flow adjustment dial clockwise or anti-clockwise. For a decrease of flow, turn the dial clockwise. Be sure to re-tighten the locking screw firmly after the adjustment of the flow rate.

F  
01 Series Modular Valves

**MSTW-01-X**

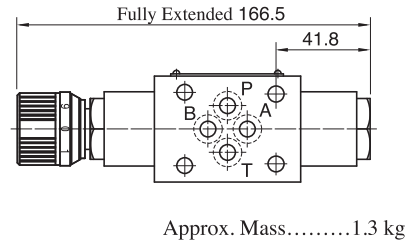


**MSTA-01-X**



For other dimensions, refer to "MSTW-01" in the drawing left.

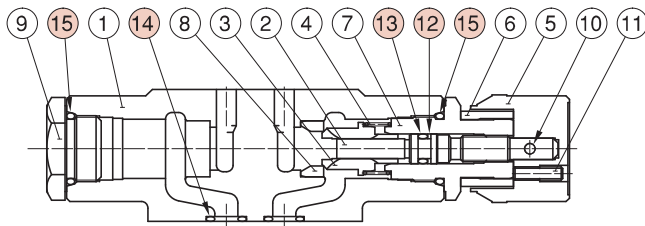
**MSTB-01-X**



For other dimensions, refer to "MSTW-01" in the drawing left.

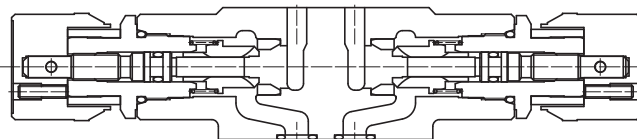
**List of Seals**

**MSTA-01**  
**MSTB-01**  
**MSTW-01**



**MSTA-01-X**

● MSTB-01-X: Flow control part is built in the left side.



**MSTW-01-X**

Item	Name of Parts	Part Numbers	Qty.		
			MSTA	MSTB	MSTW
12	Back-up Ring	BR JIS B 2401 -4-T2-P6	1	1	2
13	O-Ring	OR NBR-70-1 P6-N	1	1	2
14	O-Ring	OR NBR-90 P9-N	4	4	4
15	O-Ring	OR NBR-90 P18-N	2	2	2