

03 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 Valves							
(S-) DSG-03-*-*-*-50 E-DSG-03-*-*-*-D*-50 T-DSG-03-*-*-*-D24*-50 G-DSG-03-*-*-*-*-51							
Pressure Control Valves	Relief Valves (for "P-Line") MBP-03-*-*-70		F-48	Flow Control Valves	Temperature Compensated Throttle and Check Valves (for "A&B-Lines", Meter-out) MSTW-03-X-20		F-58
	Relief Valves (for "A-Line") MBA-03-*-*-70		F-48		Throttle Valves (for "P-Line") MSP-03-30		F-60
	Relief Valves (for "B-Line") MBB-03-*-*-70		F-48		Check and Throttle Valves (for "P-Line") MSCP-03-20		F-61
	Relief Valves (for "A&B-Lines") MBW-03-*-*-70		F-48		Throttle and Check Valves (for "A-Line", Meter-out) MSA-03-X-70		F-62
	Reducing Valves (for "P-Line") MRP-03-*-*-70		F-50		Throttle and Check Valves (for "A-Line", Meter-in) MSA-03-Y-70		F-62
	Reducing Valves (for "A-Line") MRA-03-*-*-70		F-50		Throttle and Check Valves (for "B-Line", Meter-out) MSB-03-X-70		F-62
	Reducing Valves (for "B-Line") MRB-03-*-*-70		F-50		Throttle and Check Valves (for "B-Line", Meter-in) MSB-03-Y-70		F-62
	Reducing Valves for Low Pressure Setting (for "P-Line") MRLP-03-10		F-52		Throttle and Check Valves (for "A&B-Lines", Meter-out) MSW-03-X-70		F-62
	Reducing Valves for Low Pressure Setting (for "A-Line") MRLA-03-10		F-52	Directional Control Valves	Throttle and Check Valves (for "A&B-Lines", Meter-in) MSW-03-Y-70		F-62
	Reducing Valves for Low Pressure Setting (for "B-Line") MRLB-03-10		F-52		Check Valves (for "P-Line") MCP-03-*-*-70		F-64
	Sequence Valves (for "P-Line") MHP-03-*-*-20		F-54		Check Valves (for "A-Line") MCA-03-*-*-70		F-64
	Counterbalance Valves (for "A-Line") MHA-03-*-*-20		F-54		Check Valves (for "B-Line") MCB-03-*-*-70		F-64
	Counterbalance Valves (for "B-Line") MHB-03-*-*-20		F-54		Check Valves (for "T-Line") MCT-03-*-*-70		F-64
Flow Control Valves	Flow Control Valves (for "P-Line") MFP-03-11		F-56		Check Valves (for "A&B-Lines") MCW-03-*-*-70		F-64
	Flow Control and Check Valves (for "A-Line", Meter-in) MFA-03-X-11		F-56		Check Valves (for "P&T-Lines") MCPT-03-P*-T*-10		F-66
	Flow Control and Check Valves (for "A-Line", Meter-in) MFA-03-Y-11		F-56		Anti-Cavitation Valves MAC-03-10		F-67
	Flow Control and Check Valves (for "B-Line", Meter-out) MFB-03-X-11		F-56		Pilot Operated Check Valves (for "A-Line") MPA-03-*-*-70		F-68
	Flow Control and Check Valves (for "B-Line", Meter-in) MFB-03-Y-11		F-56		Pilot Operated Check Valves (for "B-Line") MPB-03-*-*-70		F-68
	Flow Control and Check Valves (for "A&B-Lines", Meter-out) MFW-03-X-11		F-56	Modular Plates and Mounting Bolts	Pilot Operated Check Valves (for "A&B-Lines") MPW-03-*-*-70		F-68
	Flow Control and Check Valves (for "A&B-Lines", Meter-in) MFW-03-Y-11		F-56		End Plates (Blocking Plates) MDC-03-A-10		F-70
	Temperature Compensated Throttle and Check Valves (for "A-Line", Meter-out) MSTA-03-X-20		F-58		End Plates (Bypass Plates) MDC-03-B-10		F-70
	Temperature Compensated Throttle and Check Valves (for "B-Line", Meter-out) MSTB-03-X-20		F-58		Connecting Plates MDS-03-10		F-70
					Base Plates MMC-03-T-*-*-21		F-71
					Bolt Kits MBK-03-*-*-10		F-73

★ Refer to the relevant pages of catalog "E: DIRECTIONAL CONTROLS"

Sequence Modular Valves / Counterbalance Modular

Specifications

Model Numbers	Max. Operating Pressure MPa	Max. Flow L/min	Free Flow L/min
MHP-03- *-20	25	50	—
MH *-03- *-20			70

Model Number Designation

MHP	-03	-C	-20
Series Number	Valve Size	Pres. Adj. Range MPa	Design Number
MHP: Sequence Valve for P-Line	03	N: ★-1.8 A: 1.8-3.5 B: 3.5-7 C: 7-14	20
MHA: Counterbalance Valve for A-Line			20
MHB: Counterbalance Valve for B-Line			

★ See the "Min. Adjustment Pressure vs. Max. Flow" of this page.

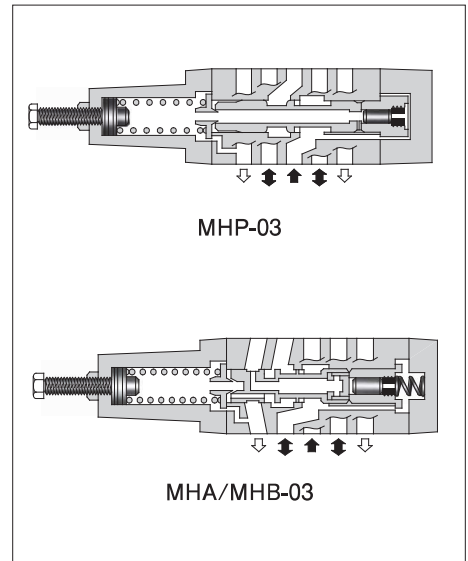
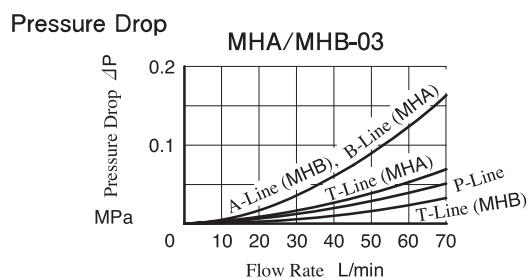
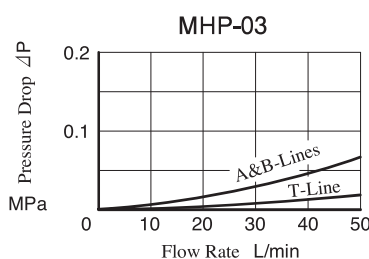
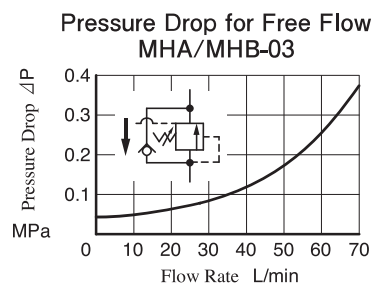
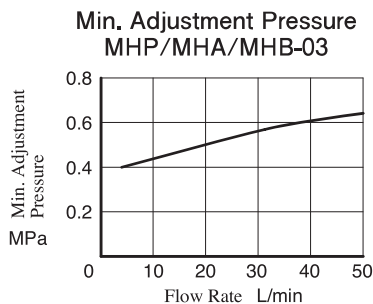
Instructions

The minimum adjustment pressure equals the value obtained from the minimum adjustment pressure characteristics plus the tank line back pressure of this page. This back pressure should include the value of the T-line pressure drop characteristics of the valves stacked to the base plate side of the modular valve.

To make pressure adjustment, loosen the lock nut and turn the pressure adjustment screw clockwise or anti-clockwise. For an increase of pressure, turn the screw clockwise. Be sure to re-tighten the lock nut firmly after making adjustment to the pressure.

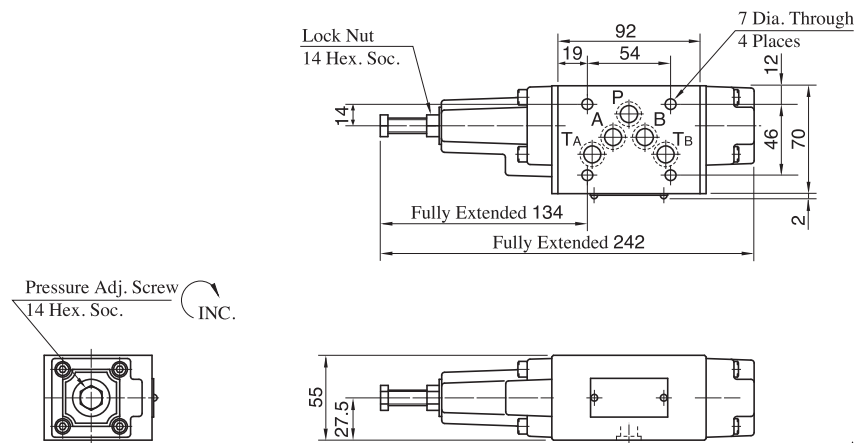
Typical Performance Characteristics

Hydraulic Fluid: Viscosity 35 mm²/s, Specific Gravity 0.850



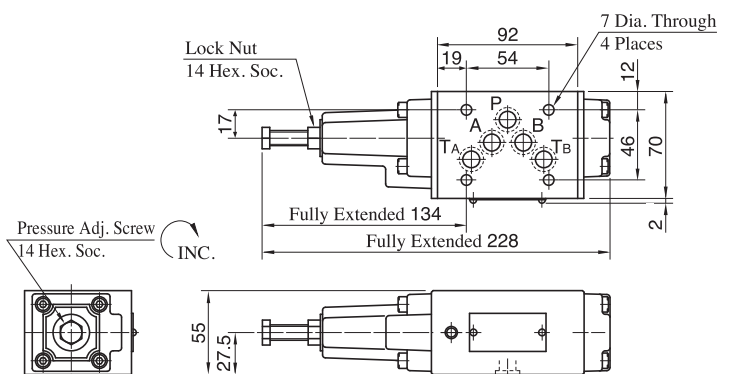
Model Numbers	Graphic Symbols	Graphic Symbols
MHP-03		
MHA-03		
MHB-03		

MHP-03



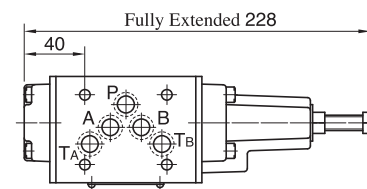
Approx. Mass.....3.5 kg

MHA-03



Approx. Mass.....3.5 kg

MHB-03

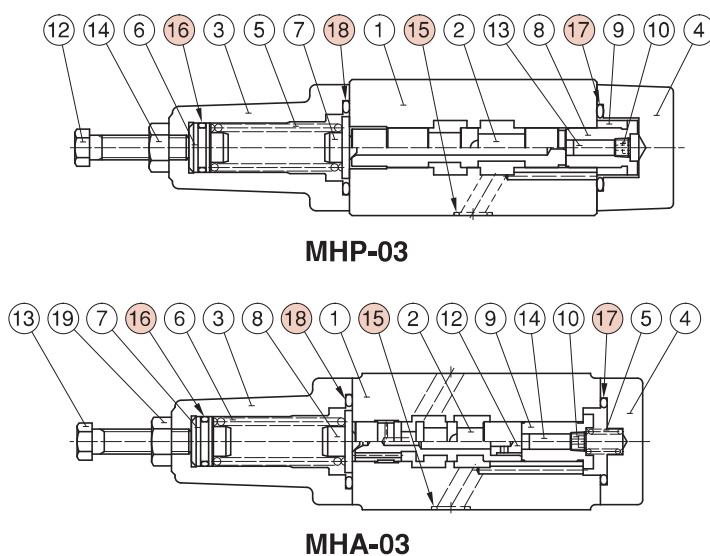


Approx. Mass.....3.5 kg

For other dimensions, refer to "MHA-03" in the drawing left..

List of Seals

MHP-03, MHA-03, MHB-03



Item	Name of Parts	Part Numbers	Qty.
15	O-Ring	AS568-014 (NBR-90)	5
16	O-Ring	OR NBR-90 P16-N (OR NBR-70-1 P16-N)*	1
17	O-Ring	OR NBR-90 P29-N	1
18	O-Ring	OR NBR-90 P32-N	1

★ If use MHP-03, the O-Ring of item 16 use the one within brackets.

● MHB-03: The pressure adjustment part is assembled on the right side.