# **Reducing Modular Valves**

# Specifications

Model Numbers	Max. Operating Pressure MPa	Max.Flow L/min
MR * -03-A-70*	35	80
MR * -03-B/C/H-70	33	120

★If the pressure is set below 1.2 MPa, the maximum flow is limited. See the "Min. Adjustment Pressure vs. Max. Flow" of this page.

# Model Number Designation

MRP	-03	<b>–</b> B	<b>–</b> 70
Series Number	Valve Size	Pres. Adj. Range MPa	Design Number
MRP: Reducing Valve for P-Line MRA: Reducing Valve for A-Line MRB: Reducing Valve for B-Line	03	A: ★-3.5 B: 1-7 C: 3.5-14 H: 7-31.5	70

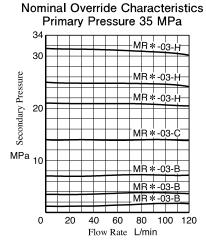
★See the "Min. Adjustment Pressure vs. Max. Flow" of this page.

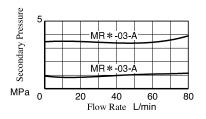
### Instructions

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 anticlockwise. For an increase of pressure, turn the screw clockwise. Be sure to re-tighten the lock nut firmly after making adjustment to the pressure.

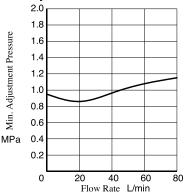
## Typical Performance Characteristics

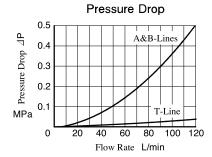
Hydraulic Fluid: Viscosity 35 mm<sup>2</sup>/s, Specific Gravity 0.850

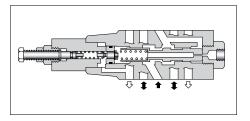




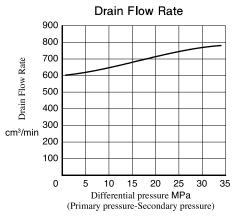
# Min. Adjustment Pressure vs. Max. Flow

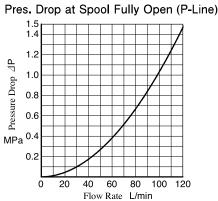






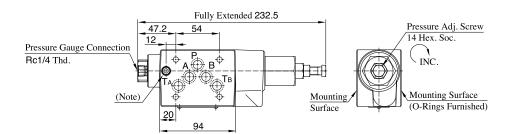
Model Numbers	Graphic Symbols	Graphic Symbols	
MRP-03	P T B A	TA A P B TB	
MRA-03	P T B A	Ta A P B Ts	
MRB-03	P T B A	T <sub>A</sub> A P B T <sub>B</sub>	





### **MRP-03** Fully Extended 232.5 **MRB-03** 106 20 54 Pressure Port "P" 50.8 6.6 Dia. Through 4 Places 37.3 Pressure Gauge Connection 27 Rc1/4 Thd. Pressure Adj. Screw Lock Nut 27.5 14 Hex. Soc. 14 Hex. Soc. 3.2 ( ) Mounting Surface Mounting (O-Rings Furnished) Surface Tank Port "TA" Tank Port "TB" Cylinder Port "A" Cylinder Port "B" Fully Extended 131.3 Approx. Mass......3.8 kg

### MRA-03



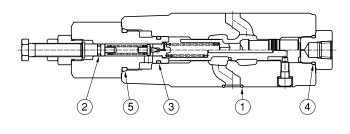
For other dimensions, refer to "MRP-03" in the drawing abobe.

Approx. Mass......3.8 kg

Note: If mounting surface dimension equipped with the valves based on ISO 4401-05-05-0-05, pilot port of stacking valves will interfere with bolt hole of MRA-03, so check gasket surface of the stacking valves.

### List of Seals

# MRP-03 MRA-03 MRB-03



Item	Name of Parts	Part Numbers	Qty.
1	O-Ring	AS568-014 (NBR-90)	5
2	O-Ring	OR NBR-70-1 P6-N	1
3	O-Ring	OR NBR-90 P16-N	1
4	O-Ring	OR NBR-90 P18-N	1
5	O-Ring	OR NBR-90 P26-N	1

•MRA-03:The pressure adjustment part is assembled on the right side.

**MRP-03** 

• MRB-03:The pressure adjustment part is assembled on the left side.