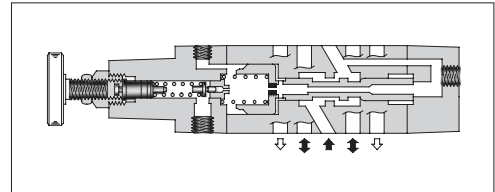
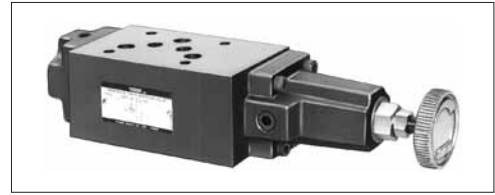


## Reducing Modular Valves For Low Pressure Setting

### Specifications

Model Numbers	Max. Operating Pressure MPa (PSI)	Pres. Adj. Range MPa (PSI)	Max. Flow L/min (U.S.GPM)
MRLP-03-10/1080/1090 MRLA-03-10/1080/1090 MRLB-03-10/1080/1090	7 (1020)	0.2-6.5 (29-940)	50 (13.2) *

★ When pressure setting is less than 0.8 MPa (116 PSI), maximum flow decreases. See "Min. Adjustment Pressure vs. Max. Flow" on the [next page](#) for the appropriate range.



### Model Number Designation

F-	MRLP	-03	-10	*
Special Seals	Series Number	Valve Size	Design Number	Design Standard
<b>F:</b> Special Seals for Phosphate Ester Type Fluids (Omit if not required)	<b>MRLP</b> : Low Pressure Setting Type Reducing Valve for P-Line <b>MRLA</b> : Low Pressure Setting Type Reducing Valve for A-Line <b>MRLB</b> : Low Pressure Setting Type Reducing Valve for B-Line	<b>03</b>	<b>10</b>	Refer to ★

★ Design Standards: None ..... Japanese Standard "JIS"  
80 ..... European Design Standard  
90 ..... N. American Design Standard

### Instructions

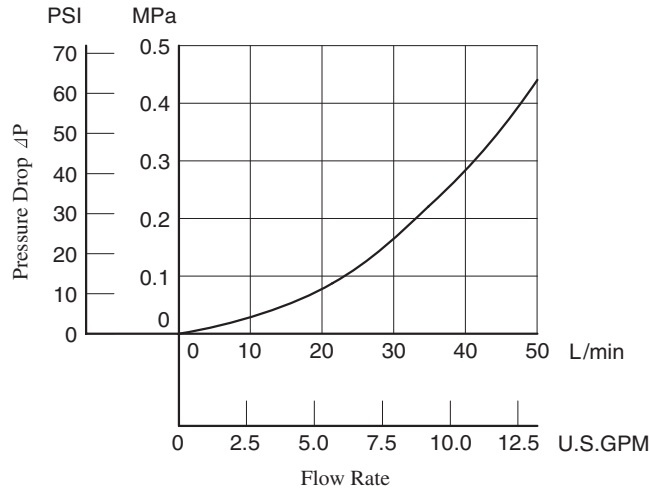
- If there is a pressure in drain line, it is added to the secondary setting pressure. Hence, drain line must be connected to tank directly with a low back pressure close to atmospheric pressure.
- To make pressure adjustment, loosen the lock nut and turn the pressure adjustment handle clockwise or anti-clockwise. For an increase of pressure, turn the handle clockwise. Be sure to re-tighten the lock nut firmly after making adjustment to the pressure.

Model Numbers	Graphic Symbols	Detailed Graphic Symbols
MRLP-03		
MRLA-03		
MRLB-03		

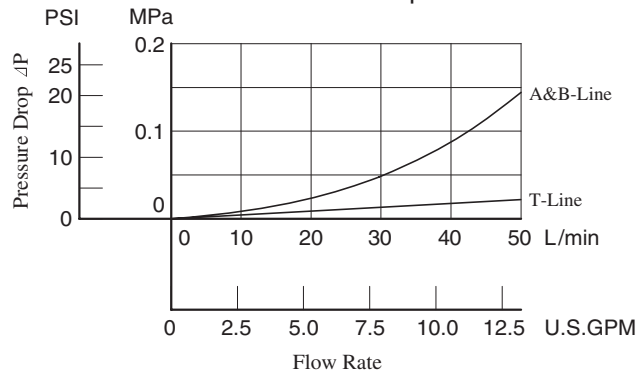
## Typical Performance Characteristics

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

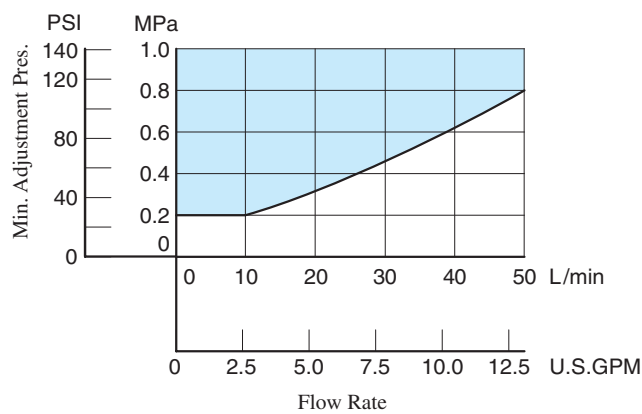
Pres. Drop at Spool Fully Open (P-Line)



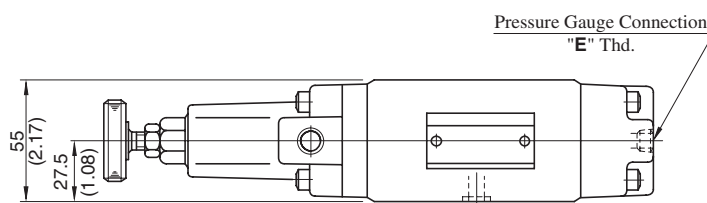
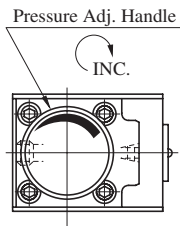
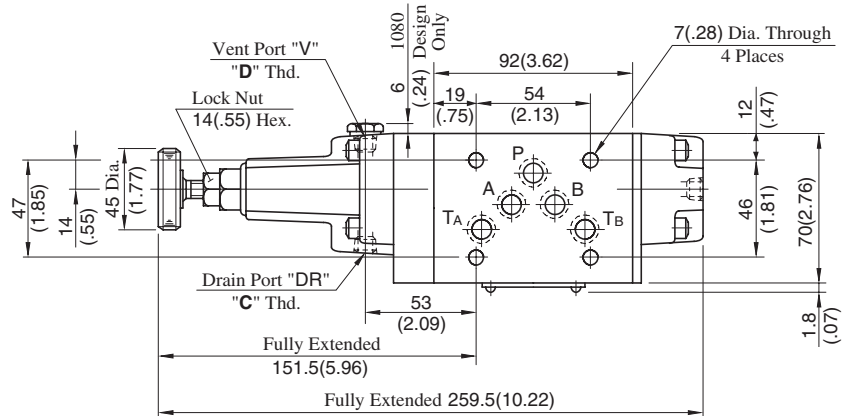
Pressure Drop



Min. Adjustment Pressure vs. Max. Flow



MRLP-03-10/1080/1090  
MRLB-03-10/1080/1090

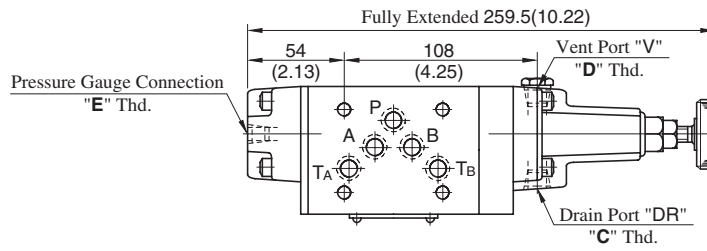


Approx. Mass.....4.5 kg (9.9 lbs.)

Model Numbers	Thread Size		
	"C" Thd.	"D" Thd.	"E" Thd.
MRL*-03-10	Rc 1/4	Rc 1/8	Rc 1/4
MRL*-03-1080	1/4 BSP.F	1/8 BSP.F	1/4 BSP.Tr
MRL*-03-1090	1/4 NPT	1/8 NPT	1/4 NPT

DIMENSIONS IN MILLIMETRES (INCHES)

MRLA-03-10/1080/1090

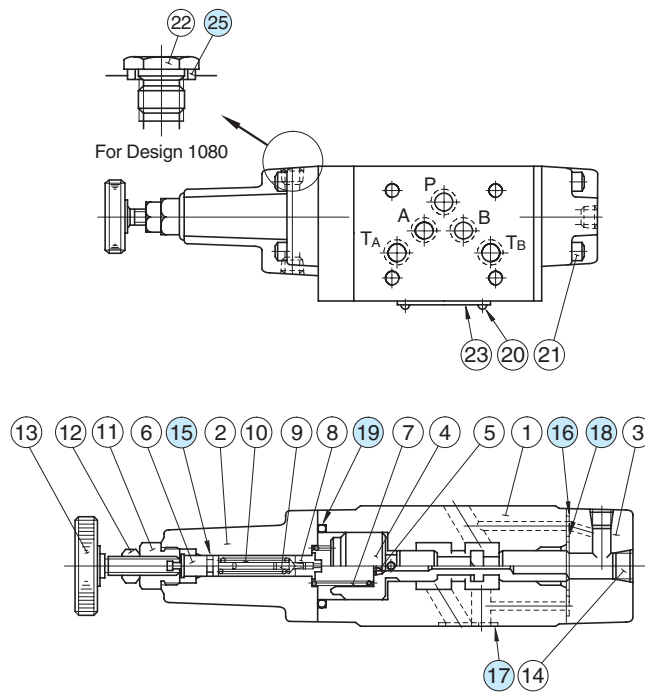


Approx. Mass.....4.5 kg (9.9 lbs.)

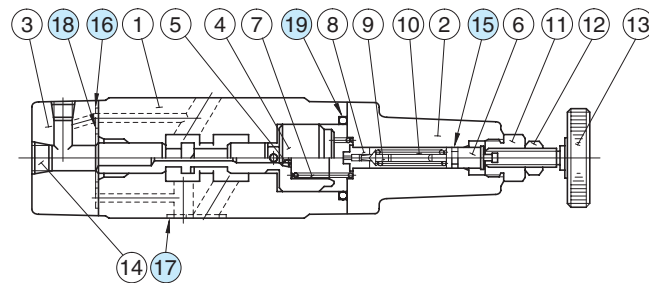
- For other dimensions, refer to "MRLP-03" drawing above.

## Spare Parts List

MRLP-03-10/1080/1090  
MRLB-03-10/1080/1090



MRLA-03-10/1080/1090



### List of Seals

Item	Name of Parts	Part Numbers	Qty.	Remarks
15	O-Ring	SO-NA-P6	1	Included in Seal Kit Kit No.:KS-MRLP-03-10
16	O-Ring	SO-NB-P6	2	
17	O-Ring	SO-NB-A014	5	
18	O-Ring	SO-NB-P22	1	
19	O-Ring	SO-NB-P32	1	
25	Bonded Seal	SG-FB-1/8	1	

Note: No bonded seal are included in seal kits.