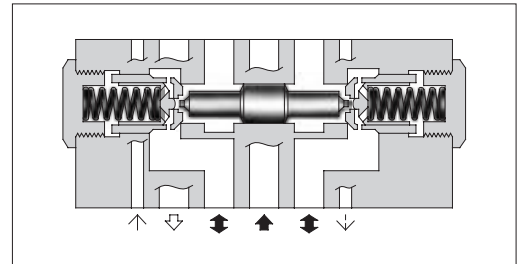


## Pilot Operated Check Modular Valves

### Specifications

Model Numbers	Max. Operating Pressure MPa (PSI)	Max. Flow L/min (U.S.GPM)
MPA-10*-**-30/3090 MPB-10*-**-30/3090 MPW-10*-**-30/3090	25 (3630)	800 (211)



### Model Number Designation

F-	MPA	-10	S	-2	-X	-30	*
Special Seals	Series Number	Valve Size	Port Tapping Feature of Pilot-Drain Port <sup>★1</sup>	Cracking Pressure MPa (PSI)	Pilot-Drain <sup>★2</sup> Connection	Design Number	Design Standard
<b>F:</b> Special Seals for Phosphate Ester Type Fluids (Omit if not required)	<b>MPA :</b> Pilot Operated Check Valve for A-Line <b>MPB :</b> Pilot Operated Check Valve for B-Line <b>MPW :</b> Pilot Operated Check Valve for A&B-Lines	<b>10</b>	<b>None :</b> Taper Thread <b>S :</b> Straight Thread (Applicable only for Japanese Std. "JIS")	<b>2 :</b> 0.2 (29) <b>4 :</b> 0.4 (58)	<b>None:</b> Internal Pilot-Internal Drain <b>X :</b> External Pilot-External Drain <b>Y :</b> External Pilot-Internal Drain	<b>30</b>	Refer to <sup>★3</sup>

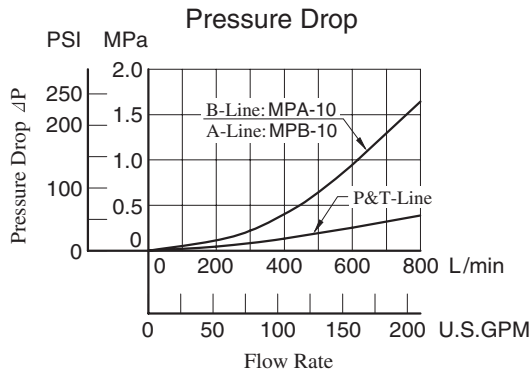
- ★1. This item applies only to External Pilot or External Drain Type.
- ★2. Only "None: Internal Pilot-Internal Drain Type" is available for MPW (for "A&B-Lines").
- ★3. Design Standards: None ..... Japanese Standard "JIS" and European Design Standard 90 ..... N. American Design Standard

### Graphic Symbols

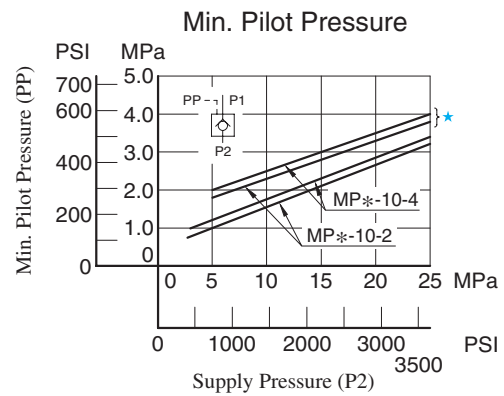
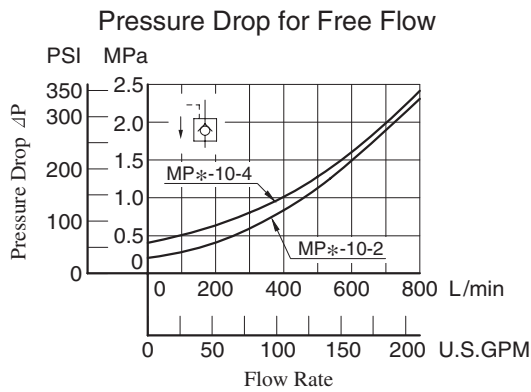
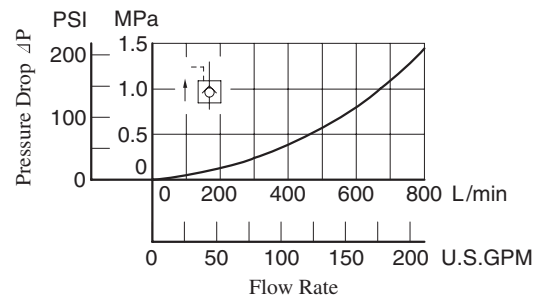
Pilot-Drain type Model No.	Internal Pilot-Internal Drain Type	External Pilot-External Drain Type	External Pilot-Internal Drain Type
MPA-10	 MPA-10-*	 MPA-10*-*-X	 MPA-10*-*-Y
MPB-10	 MPB-10-*	 MPB-10*-*-X	 MPB-10*-*-Y
MPW-10	 MPW-10-*	—	—

## Typical Performance Characteristics

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



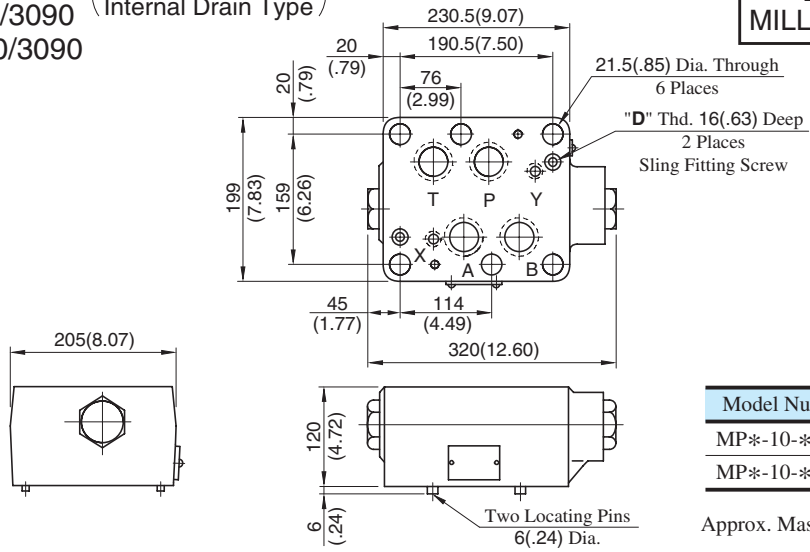
### Pressure Drop for Reversed Controlled Flow



★ In case of 500 L/min (132 U.S.GPM) or more.

MPA-10-\*-30/3090 (Internal Pilot-  
MPB-10-\*-30/3090 Internal Drain Type)  
MPW-10-\*-30/3090

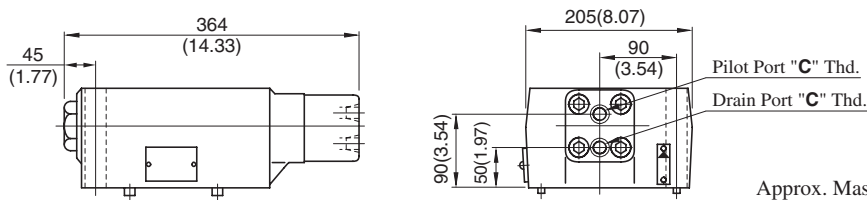
**DIMENSIONS IN  
MILLIMETRES (INCHES)**



Model Numbers	"D" Thd.
MP*-10-*-30	M8
MP*-10-*-3090	5/16-18 UNC

Approx. Mass.....36.5 kg (80.5 lbs.)

MPA-10-\*-X-30/3090 (External Pilot-  
External Drain Type)

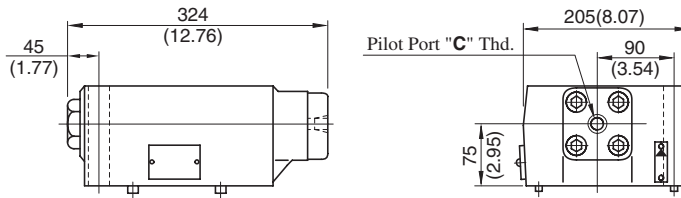


Approx. Mass.....38 kg (83.8 lbs.)

Model Numbers	Thread Size "C" Thd.
MPA-10-*-X-30	Rc 3/8 = 3/8 BSP. Tr
MPA-10-*-X-3090	3/8 NPT
MPA-10S-*-X-30	G 3/8

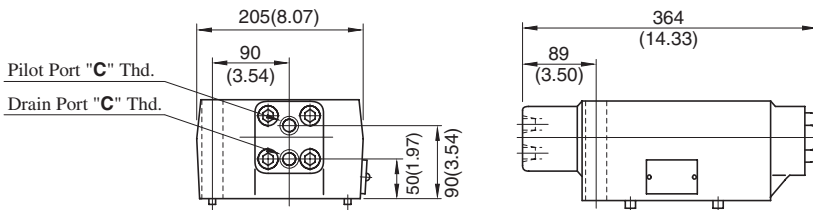
Approx. Mass.....36.5 kg (80.5 lbs.)

MPA-10-\*-Y-30/3090 (External Pilot-  
Internal Drain Type)



• For other dimensions, refer to "Internal pilot-Internal drain type" drawing above.

MPB-10-\*-X-30/3090 (External Pilot-  
External Drain Type)

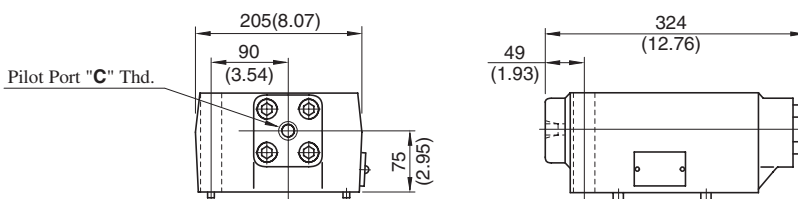


Approx. Mass.....38 kg (83.8 lbs.)

Model Numbers	Thread Size "C" Thd.
MPB-10-*-X-30	Rc 3/8 = 3/8 BSP. Tr
MPB-10-*-X-3090	3/8 NPT
MPB-10S-*-X-30	G 3/8

Approx. Mass.....36.5 kg (80.5 lbs.)

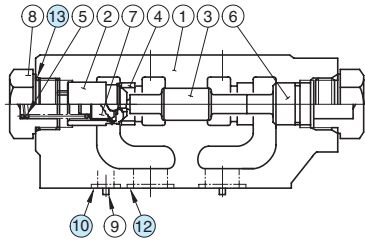
MPB-10-\*-Y-30/3090 (External Pilot-  
Internal Drain Type)



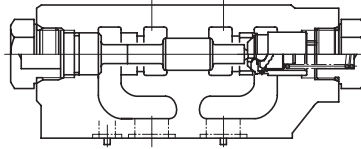
• For other dimensions, refer to "Internal pilot-Internal drain type" drawing above.

## Spare Parts List

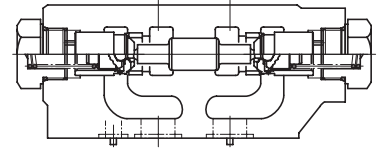
### Internal Pilot- Internal Drain Type



MPA-10\*-30/3090

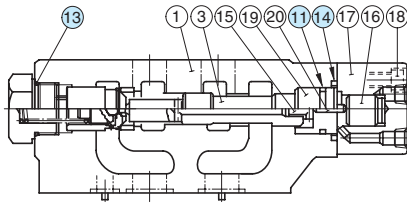


MPB-10\*-30/3090

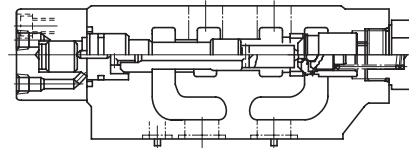


MPW-10\*-30/3090

### External Pilot- External Drain Type

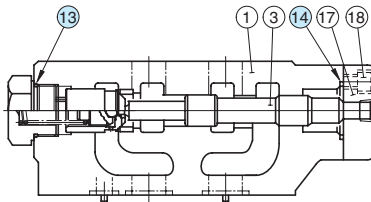


MPA-10\*-X-30/3090

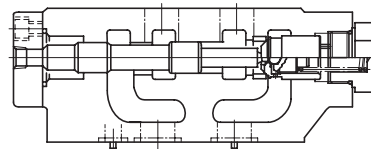


MPB-10\*-X-30/3090

### External Pilot- Internal Drain Type



MPA-10\*-Y-30/3090



MPB-10\*-Y-30/3090

### List of Seals

Item	Name of Parts	Part Numbers	Quantity		
			Internal Pilot- Internal Drain	External Pilot- External Drain	External Pilot- Internal Drain
10	O-Ring	SO-NB-P16	2	2	2
11	O-Ring	SO-NB-P34	—	1	—
12	O-Ring	SO-NB-P40	4	4	4
13	O-Ring	SO-NB-P44	2	1	1
14	O-Ring	SO-NB-P46	—	1	1

Note: When ordering seals, please specify the seal kit number from the table right.

### List of Seal Kits

Valve Model Numbers	Seal Kit Numbers	
MPA-10*- MPB-10*- MPW-10*-	KS-MPA-10-10	
MPA-10*-X- MPB-10*-X-		KS-MPA-10-X-10
MPA-10*-Y- MPB-10*-Y-		KS-MPA-10-Y-10