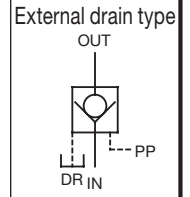


### Pilot Check Valves

320ℓ/min  
21MPa



### Features

- ① Normally, fluid is allowed to flow in a single direction, just as with a standard check valve. Reverse flow can be enabled, however, when the check valve is pushed upwards by external pilot pressure.
- ② Very compact configuration.

### Specifications

Model No		Nominal Diameter (Size)	Maximum Working Pressure MPa{kgf/cm <sup>2</sup> }	Maximum Flow Rate ℓ/min	Cracking Pressure MPa{kgf/cm <sup>2</sup> }	Weight kg		Area Ratio		
Screw Mounting	Gasket Mounting					T Type	G Type	Pilot Piston	Valve	Small Valve
CP-T03-1-* 2	CP-G03-1-* 2	3/8	21 {214}	40	0.2 {2.0} 0.5 {5.1}	3.8 ( 4.7)	4.3 ( 5.2)	1	0.35	0.05
CP-T06-1-* 2	CP-G06-1-* 2	3/4		110	0.2 {2.0} 0.5 {5.1}	7.0 ( 8.2)	6.6 ( 7.8)	1	0.37	0.03
CP-T10-1-* 2	CP-G10-1-* 2	1 1/4		320	0.2 {2.0} 0.5 {5.1}	12.0 (14.3)	12.5 (14.8)	1	0.36	0.03

Note) Weight values in parentheses are for the external drain type.

#### ● Handling

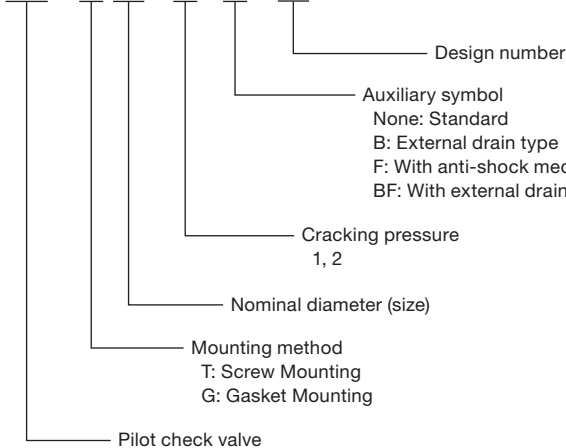
- ① The following explains how to use the external drain. Be sure to always use the external drain type when back pressure is applied to fluid outlet port side A during reverse flow as in the circuit illustrated below.
- ② Minimum pilot pressure is altered by input side B pressure during reverse flow. Because of this, operate the valve so pressure is at least twice as high as the required pilot pressure obtained using the minimum pilot pressure characteristics.
- ③ Use the following table for specification when a sub plate is required.

Model No.	Pipe Diameter	Recommended Flow Rate ℓ/min	Weight kg	Applicable Valve Type
MCP-03-20	3/8	40	1.1	CP-G03-* -20
MCP-06-21	3/4	110	1.7	CP-G06-* -20
MCP-10-20	1 1/4	320	3.6	CP-G10-* -20

- ④ The following are the bundled mounting bolts.

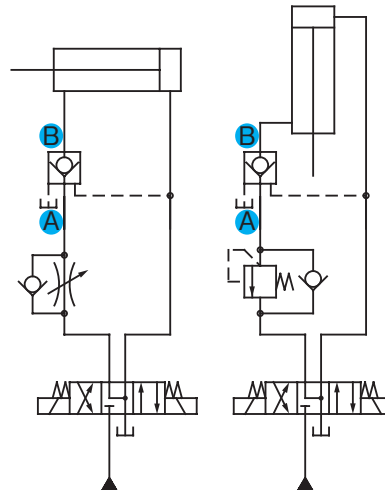
### Explanation of model No.

CP - G 03 - 1 - B - 20



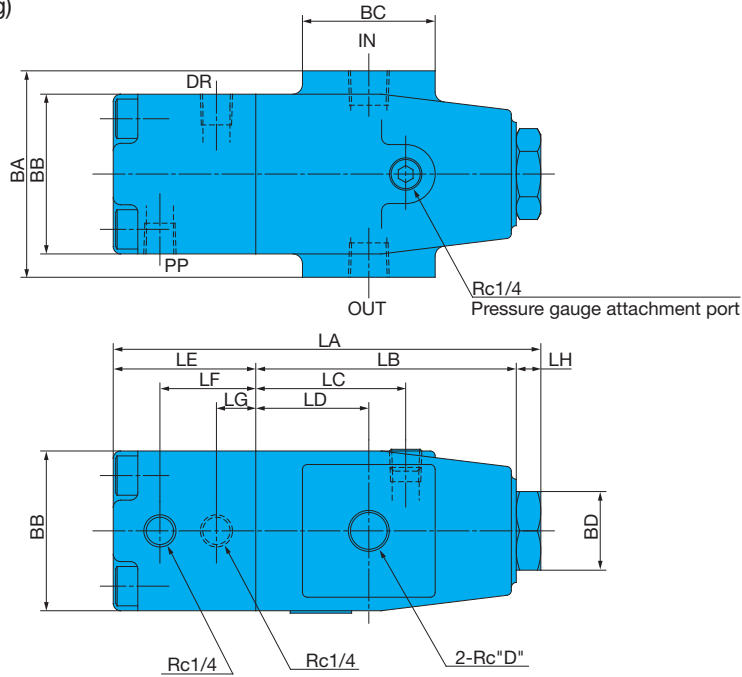
Model No.	Bolt Dimensions	Q'ty	Tightening Torque N·m(kgf·cm)
CP-G03-* -20	M8×45ℓ	4	20 to 25 {205 to 255}
-G06-	M10×55ℓ	4	45 to 55 {460 to 560}
-G10-	M10×65ℓ	6	45 to 55 {460 to 560}

Note) For mounting bolts, use bolts of 12.9 strength classification or equivalent.



# Installation Dimension Drawings

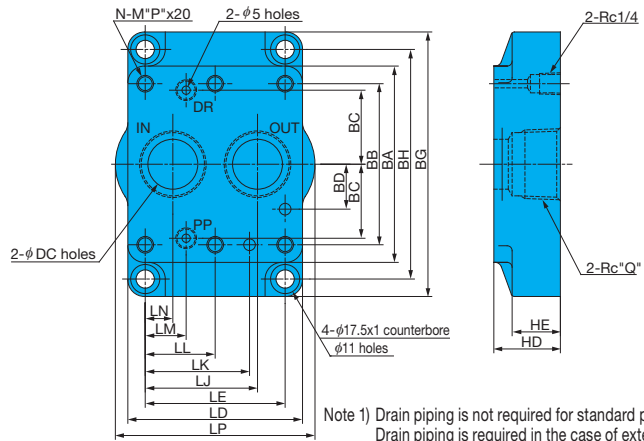
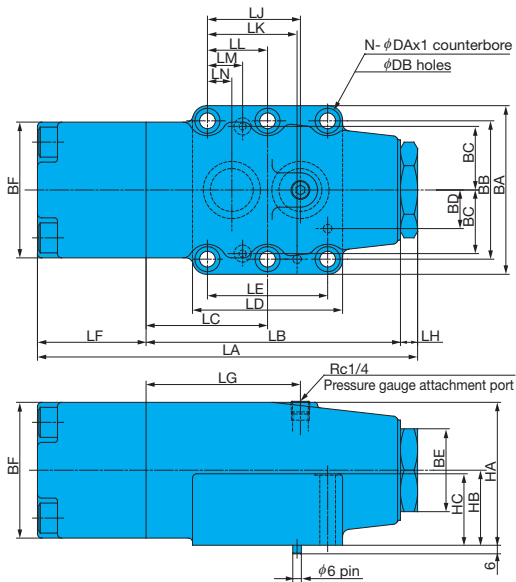
CP-T\*\*-\*-20 (Screw Mounting)



Model No.	LA	LB	LC	LD	LE	LF	LG	LH	BA	BB	BC	BD	D
CP-T03-*(F)-20	146	106	61	46	30	15	-	10	84	65	54	32	3/8
CP-T03-*(B)(F)-20	174				58	39	16						
CP-T06-*(F)-20	180	140	85	66	30	15	-	10	122	76	64	41	3/4
CP-T06-*(B)(F)-20	212				62	43	16						
CP-T10-*(F)-20	225	178	108	85	35	15	-	12	150	95	85	58	1 1/4
CP-T10-*(B)(F)-20	266				76	57	16						

CP-G\*\*-\*-20 (Gasket Mounting)

Sub Plate MCP-03-20  
MCP-06-21  
MCP-10-20



Note 1) Drain piping is not required for standard products.  
Drain piping is required in the case of external drain type (B).  
Note 2) External appearance of the sub-plate is slightly different from the drawing depending on the size.  
Installation dimensions are as shown in the dimension tables.

BH	HA	HB	HC	HD	HE	DA	DB	DC	N	P	Q
106	68	35.5	33	30	19	14	9	14.7	4	8	3/8
124	79	41	38	30	19	17.5	11	22	4	10	3/4
138	100	52.5	50	40	29	17.5	11	30	6	10	1 1/4

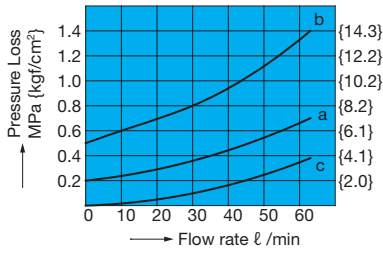
Model No.	LA	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LL	LM	LN	LP	BA	BB	BC	BD	BE	BF	BG
CP-G03-*(F)-20	146	106	51	64	44	30	61	10	37	-	-	16	7	-	82	64	23	18	32	65	126
CP-G03-*(B)(F)-20	174					58															
CP-G06-*(F)-20	180	140	66	83	60.3	30	85	10	49.2	44.5	-	20.6	11.1	-	102	79.4	33.3	-	41	76	146
CP-G06-*(B)(F)-20	212					62															
CP-G10-*(F)-20	225	178	85	105	84.1	35	108	12	67.5	62.7	42.05	24.6	16.6	120	118	96.8	44.5	-	58	95	159
CP-G10-*(B)(F)-20	266					76															

# Performance Curves

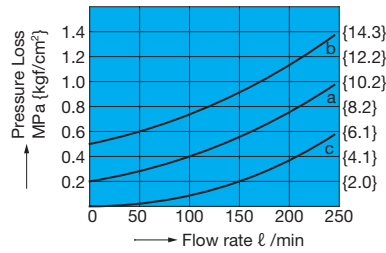
Hydraulic Operating Fluid Kinematic Viscosity 32mm<sup>2</sup>/s

## Pressure Loss Characteristics

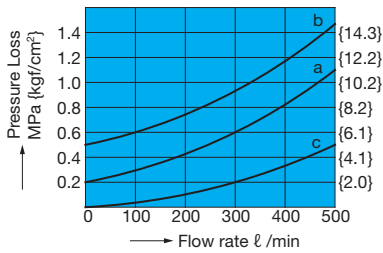
**CP-\*03** Applicable Valve Type  
 a. CP-\*03-1-\* -20 Free Flow  
 b. CP-\*03-2-\* -20 "  
 c. CP-\*03-\*-\* -20 Reverse Flow



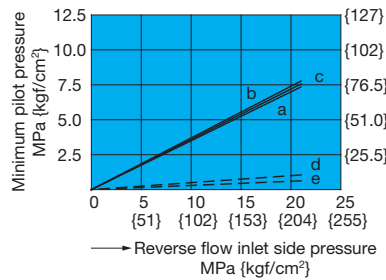
**CP-\*06** Applicable Valve Type  
 a. CP-\*06-1-\* -20 Free Flow  
 b. CP-\*06-2-\* -20 "  
 c. CP-\*06-\*-\* -20 Reverse Flow



**CP-\*10** Applicable Valve Type  
 a. CP-\*10-1-\* -20 Free Flow  
 b. CP-\*10-2-\* -20 "  
 c. CP-\*10-\*-\* -20 Reverse Flow



## Minimum Pilot Pressure Characteristics



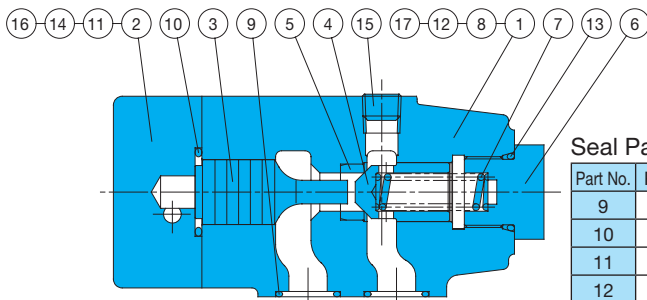
### Applicable Valve

Model No.	Valve Open	Small Valve Open
CP-*03	a	d
CP-*06	b	e
CP-*10	c	e

# Cross-sectional Drawings

Note) O-ring 1B-\*\* refers to JIS B2401-1B-\*\*.

CP-G\*\*-\* -20



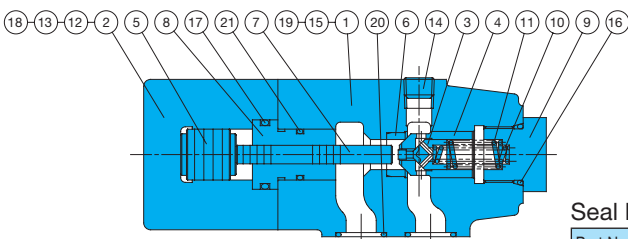
Part No.	Part Name	Part No.	Part Name
1	Body	10	O-ring
2	Cover	11	O-ring
3	Piston	12	O-ring
4	Poppet	13	O-ring
5	Seat	14	Screw
6	Plug	15	Plug
7	Spring	16	Plug
8	Pin	17	Plate
9	O-ring		

### Seal Part List (Kit Model Number DPS-\*\*\*)

Part No.	Part Name	CP-G03-* -20	CP-G06-* -20	CP-G10-* -20	Q'ty
9	O-ring	NBR-90 P18	NBR-90 G25	NBR-90 G35	2
10	O-ring	NBR-90 G25	NBR-90 G40	NBR-90 G55	1
11	O-ring	NBR-90 P7	NBR-90 P9	NBR-90 P9	2
12	O-ring	NBR-90 P9	NBR-90 P9	NBR-90 P9	2
13	O-ring	NBR-90 P22	NBR-90 P30	NBR-90 P42	1

\*\*\*in the kit number is used for specification of the valve size.

CP-G\*\*-\* -BF-20



Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
1	Body	9	Plug	17	O-ring
2	Cover	10	Spring	18	O-ring
3	Poppet	11	Spring	19	O-ring
4	Poppet	12	Screw	20	O-ring
5	Piston	13	Plug	21	O-ring
6	Seat	14	Plug	22	Plate
7	Rod	15	Pin		
8	Bushing	16	O-ring		

### Seal Part List (Kit Model Number DPS-\*\*\*R)

Part No.	Part Name	CP-G03-* -BF-20	CP-G06-* -BF-20	CP-G10-* -BF-20	Q'ty
16	O-ring	NBR-90 P22	NBR-90 P30	NBR-90 P42	1
17	O-ring	NBR-90 G25	NBR-90 G40	NBR-90 G55	1
18	O-ring	NBR-90 P7	NBR-90 P9	NBR-90 P9	2
19	O-ring	NBR-90 P9	NBR-90 P9	NBR-90 P9	2
20	O-ring	NBR-90 P18	NBR-90 G25	NBR-90 G35	2
21	O-ring	NBR-90 P18	NBR-90 P30	NBR-90 G45	1

\*\*\*in the kit number is used for specification of the valve size.



Direction Control Valve