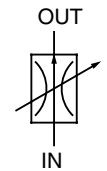




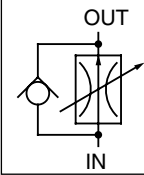
F-G***-20



F Type Flow Control (and Check) Valve (With Pressure Compensation)

9 to 373 ℓ /min
21MPa

CF-G***-20



Features

- ① Wide control flow rate range. there is pressure fluctuation.
- ② A pressure compensation mechanism ensures that the control flow rate does not change, even when

Specifications

| Model No. | Nominal Diameter (Size) | Volume control flow rate ℓ /min | Maximum Working Pressure MPa{kgf/cm ² } | Cracking pressure MPa{kgf/cm ² } | Weight kg | Gasket Surface Dimensions |
|-----------------|-------------------------|---------------------------------|--|---|-----------|---------------------------|
| (C)F-G06-170-20 | 3/4 | 9 to 170 | 21{214} | 0.1{1.0} | 20.5 | ISO 6263-AP-08-2-A |
| (C)F-G10-373-20 | 1 1/4 | 20 to 373 | | | 43.1 | — |

● Handling

- ① In the pressure range of 1.0 to 21MPa {10.2 to 214kgf/cm²}, flow rate fluctuation is within ±5% of the setting flow rate.
- ② For flow rate control, make sure that the pressure differential between the input port and output port is at least 1MPa {10.2kgf/cm²}.
- ③ The control flow rate is increased by clockwise (rightward) rotation of the control handle.

④ See the table below for installation hex socket bolts.

⑤ Use the following table for specification when a sub plate is required.

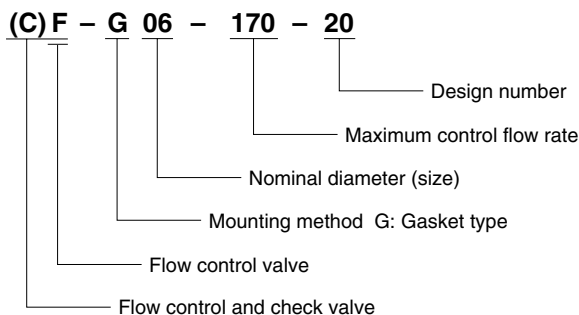
Sub Plate Application Table

| Model No. | Pipe Diameter | Recommended Flow Rate ℓ /min | Weight kg | Applicable Valve Type |
|----------------------|---------------|------------------------------|-----------------|-----------------------|
| MF-06-10 | 3/4 | 106 | 6.3 | (C)F-G06-170-20 |
| MF-06X-20 | 1 | 170 | 9.7 | |
| MF-10-10 | 1 1/4 | 246 | 21.1 | (C)F-G10-373-20 |
| MF-10X-20 | 2 | 373 | 28.0 | |
| MF-10Y-20 | 2 | 373 | 28.0 | |

| Applicable Model | Bolt Size | Q'ty | Tightening Torque N·m{kgf·cm} |
|------------------|-------------|------|-------------------------------|
| (C)F-G06 | M16 × 100 ℓ | 4 | 190 to 235{1940 to 2400} |
| (C)F-G10 | M20 × 115 ℓ | 4 | 370 to 460{3770 to 4690} |

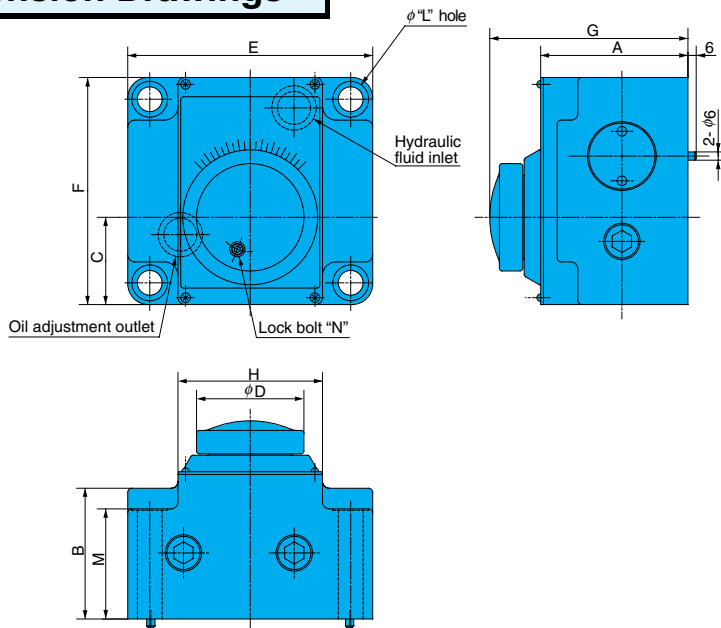
Note) For mounting bolts, use 12T or equivalent.

Understanding Model Numbers



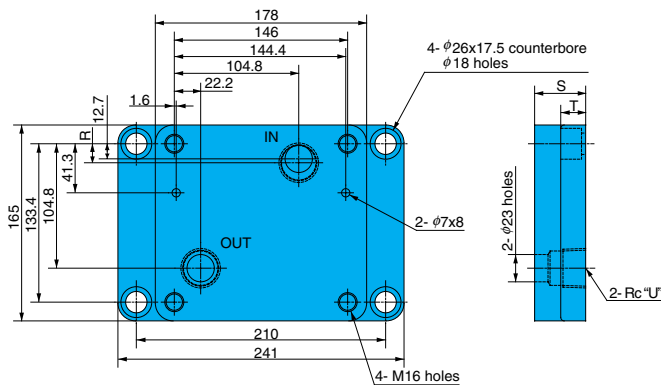
Installation Dimension Drawings

(C)F-G**-*-20



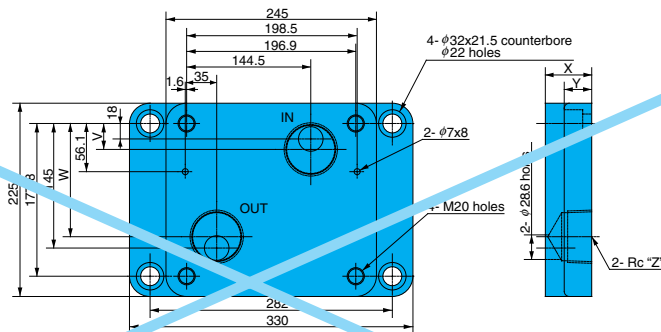
| Model No. | Dimensions mm | | | | | | | | | | | | |
|---------------|---------------|-----|------|----|-----|-----|-------|-----|----|---|----|----|----|
| | A | B | C | D | E | F | G | H | J | K | L | M | N |
| (C)F-G06-*-20 | 107 | 95 | 63.4 | 80 | 178 | 165 | 144.5 | 105 | 26 | 1 | 18 | 80 | M5 |
| (C)F-G10-*-20 | 124 | 108 | 81.8 | 90 | 245 | 225 | 169.5 | 140 | 32 | 1 | 22 | 89 | M6 |

Sub Plate MF-06*-20



| Sub Plate | Dimensions mm | | | |
|-----------|---------------|----|----|-----|
| | R | S | T | U |
| MF-06-20 | 12.7 | 25 | 22 | 3/4 |
| MF-06X-20 | 16 | 43 | 21 | 1 |

~~Sub Plate MF-10*-*-20~~

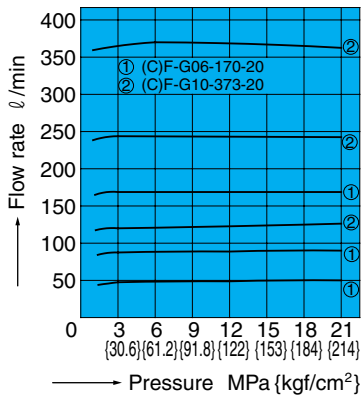


| Sub Plate | Dimensions mm | | | | |
|-----------|---------------|-------|----|----|-------|
| | V | W | X | Y | Z |
| MF-10-10 | 18 | 145 | 46 | 40 | 1 1/4 |
| MF-10X-20 | 24 | 145 | 54 | 32 | 1 1/4 |
| MF-10Y-20 | 30.2 | 131.8 | 54 | 32 | 2 |

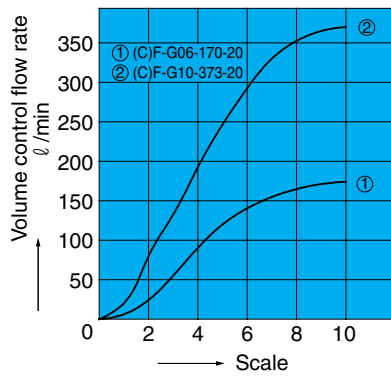
Performance Curves

Hydraulic Operating Fluid Viscosity 32mm²/s

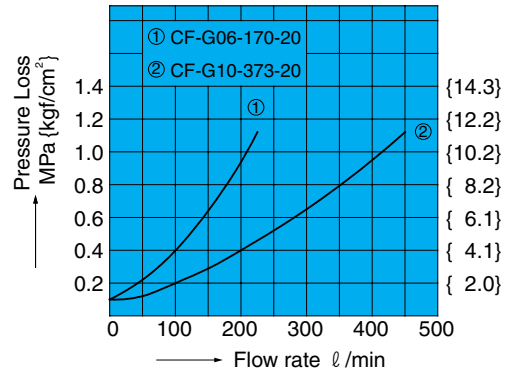
Pressure – Control Flow Rate Characteristics



Scale – Control Flow Rate Characteristics

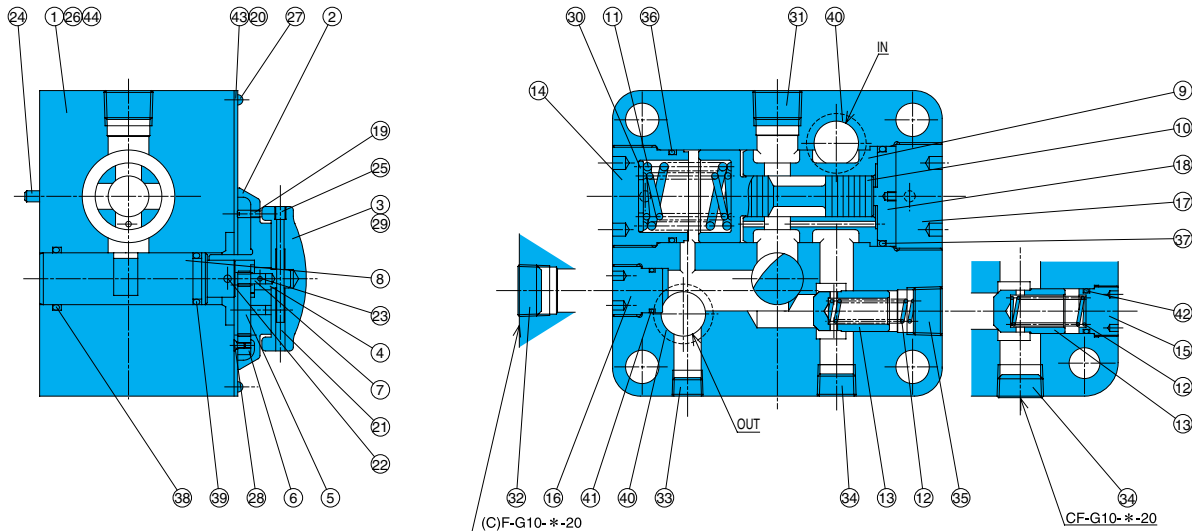


Pressure Loss Characteristics



Cross-sectional Drawing

CF-G**-**-20



| Part No. | Part Name | Part No. | Part Name | Part No. | Part Name |
|----------|-----------|----------|-----------|----------|-----------|
| 1 | Body | 16 | Plug | 31 | Plug |
| 2 | Cover | 17 | Plug | 32 | Plug |
| 3 | Knob | 18 | Retainer | 33 | Plug |
| 4 | Gear | 19 | Stopper | 34 | Plug |
| 5 | Gea | 20 | Pin | 35 | Plug |
| 6 | Gear | 21 | Pin | 36 | O-ring |
| 7 | Bushing | 22 | Pin | 37 | O-ring |
| 8 | Throttle | 23 | Pin | 38 | O-ring |
| 9 | Sleeve | 24 | Pin | 39 | O-ring |
| 10 | Piston | 25 | Screw | 40 | O-ring |
| 11 | Spring | 26 | Screw | 41 | O-ring |
| 12 | Spring | 27 | Screw | 42 | O-ring |
| 13 | Poppet | 28 | Screw | 43 | Plate |
| 14 | Plug | 29 | Screw | 44 | Screw |
| 15 | Plug | 30 | Washer | | |

Seal Part List (Kit Model Number FBBS-***)

| Part No. | Part Name | CF-G06-170-20 | | CF-G10-373-20 | |
|----------|-----------|---------------|------|---------------|------|
| | | Part Number | Q'ty | Part Number | Q'ty |
| 36 | O-ring | IB-G45 | 1 | IB-G60 | 1 |
| 37 | O-ring | IB-P48 | 1 | IB-G65 | 1 |
| 38 | O-ring | IB-P28 | 1 | IB-P45 | 1 |
| 39 | O-ring | IB-P22A | 1 | IB-P39 | 1 |
| 40 | O-ring | IB-P29 | 2 | IB-P32 | 2 |
| 41 | O-ring | IB-P20 | 1 | - | - |
| 42 | O-ring | - | - | IB-P26 | 1 |

Note) O-ring 1B-** refers to JIS B2401-1B-**. For the *** part of the kit number, specify the valve size (G06, G10).