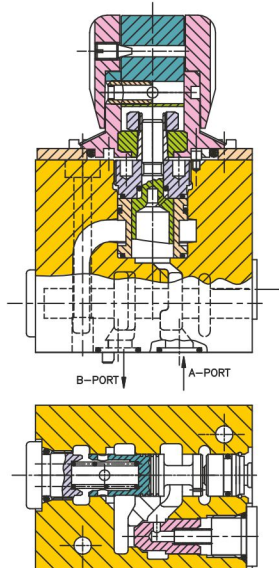


SERIES - FC5



Basic Characteristics

Operating Pressure (maximum) - 315 bar (4500 psi)

Rated Capacity (maximum) -
1.0 to 18 L/min (Dependent on model)

Function - In line, with or without reverse flow check
and anti-jump feature

Approx. Weights

FC5 - 3 = 1.1 kg

General Description

These pressure compensated valves are designed to provide adjustable controlled flow rates independent of changes in inlet and/or outlet pressures above a minimum pressure differential. Models are available with or without integral reverse flow Check Valves. Those with Check Valves are optionally available with an anti-jump feature designed to eliminate transient surges above the controlled flow rate setting whenever flow is first directed to the inlet port A.

All models have rotary adjustment of controlled flow and can be supplied with or without an integral key-lock feature.

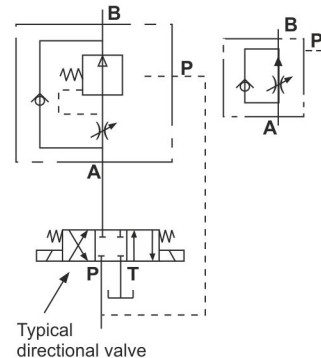
Applications

FC5-3 - * - * - 11-IN models are for general use in meter-in or meter-out applications in which high reverse flow rates can occur.

FC5-3 - * - (A) - * - 11-IN models are for similar use in those meter-in applications where the possibility of transient surges above the controlled flow rate setting. Whenever flow is first directed to the inlet port, are undesirable, e.g.

- for feed speed control
- for successive fast approach/feed sequences (fine machining of interrupted bores.)

FC5-3 - * - (A) - * - 11-IN models, with reverse flow check and anti-jump feature



ORDERING INFORMATION

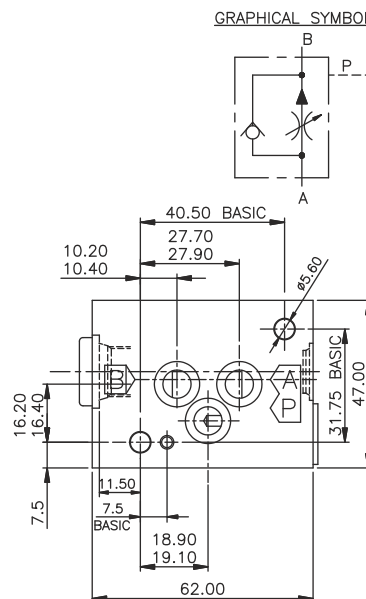
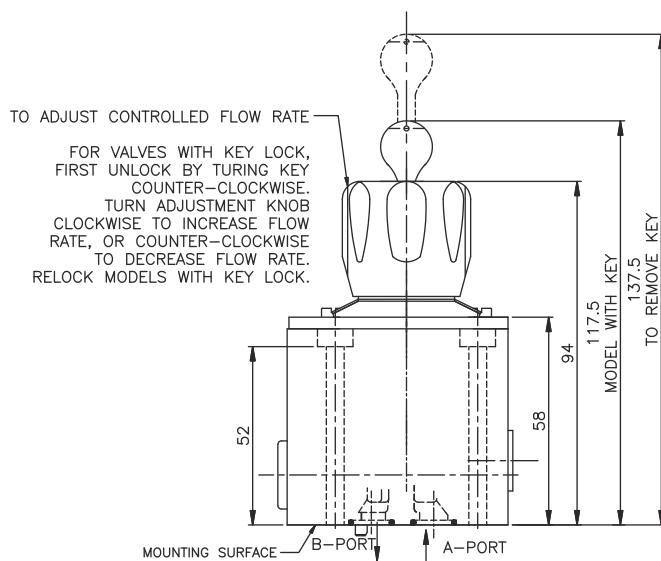
FC 5 - 3 - * - (*) - * - 11-IN

1 2 3 4 5 6 7

1. Model Code - FC
2. Model Series - 5
3. Type - 3 - Flow Control with reverse flow check
4. Max Controlled Flow Rate 10 = 1.0 L/min 16 = 1.6 L/min 32 = 3.2 L/min 63 = 6.3 L/min 120 = 12.0 L/min 180 = 18.0 L/min

5. A = Anti Jump feature (Omit if not required)
6. Controlled Flow Adjustment H = Manual without key lock K = Manual with key lock
7. Design No - 11 - IN (Subject to change)

Typical Model Code :- **FC5-3-16-(A)H-11-IN**



Operating Data

Pressure Limits

Max. pressure, all ports: FC5 - 3 - * - (A) models All other models	160 bar (2320 psi) 315 bar (4500 psi)
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Min. pressure differential for effective controlled flow (port A pressure > port B pressure): FC5-3-10/16/32 models FC5-3-63/120/180 models	5 bar (75 psi) 8,5 bar (125 psi)
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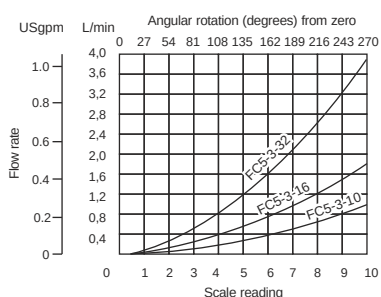
Flow Limits

Recommended controlled flow ranges: FC5-3-10 FC5-3-16 FC5-3-32 FC5-3-63 FC5-3-120 FC5-3-180	0,015 to 1,0 L/min 0,015 to 1,6 L/min 0,025 to 3,2 L/min 0,025 to 6,3 L/min 0,08 to 12,0 L/min 0,08 to 18,0 L/min
Max. recommended reverse flow (FC5 model)	30 L/min

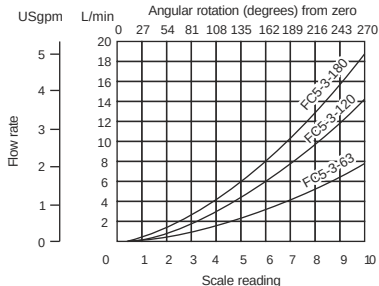
Performance Data

Typical with mineral oil at 36 cSt (170 SUS) and at 50°C (122°F)

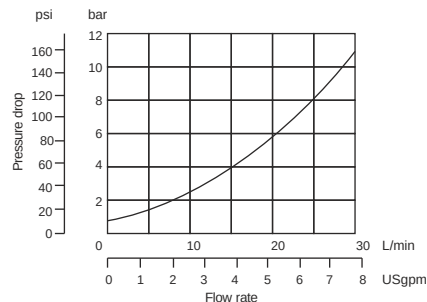
Controlled Flow, FC5-3-16/32 Models



Controlled Flow, FC5-3-63/120/180 Models



Reverse Flow Pressure Drop, FC5 Models



Thermal stability of controlled flow, typical example: Flow set at 20°C (68°F) ...0,25 L/min

Flow increase at
70°C (158°F)+12%

Hydraulic Fluids

All valves can be used with antiwear or other hydraulic mineral oils. If fire-resistant fluids are required to be used, consult your Microtact representative. The extreme operating viscosity range is from 300 to 10 cSt (1460 to 54 SUS) but the recommended running range is from 54 to 13 cSt (245 to 70 SUS).

Temperature Limits

Min.-20°C (-4°F)
Max.*+80°C (176°F)

* To obtain optimum service life from both fluid and hydraulic system, 65°C (150°F) is hydraulic mineral oils.

Whatever the actual temperature range, ensure that the viscosities stay within the limits specified in the "Hydraulic Fluids" section.