Operation

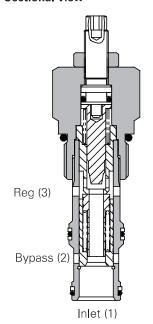
Inlet flow passes through the adjustable orifice and the radial holes in the spool/ sleeve assembly then out of the regulated port. The pressure drop across the orifice is sensed at each end of the spool, producing a force which, at the required flow rate, overcomes the spring force. The resultant movement of the spool regulates the flow by opening the radial valve ports to the bypass port and closing the regulated flow ports.

The valve will pass flow in the return direction but this is restricted by the flow path through the control orifice.

Features

Cartridge construction gives versatility of application. A valve may be fitted into a line body, a custom designed Hydraulic Integrated Circuit or directly into a cylinder or other actuator. Leakproof adjust screw gives easy, accurate adjustment to required flow setting. Hardened and ground working parts give accurate flow control and long working life.

Sectional view



Performance data

Ratings and specifications

Figures based on Oil Temp of 40°C and of 32 cST ('150 SUS)
Rated flow	Inlet: 90 L/min (24 USgpm) Reg: 4-60 L/min (1-16 USgpm)
Maximum pressure	350 bar (5000 psi)
Cartridge material	Working parts hardened & ground steel. Zinc plated body
Standard housing material	Aluminum (up to 210 bar*) Add suffix "377" for steel option
Mounting position	Unrestricted
Cavity Number	CVA-27-04-0 (See Section M)
Torque cartridge into cavity	75 Nm (55 ft lbs)
Weight	2CFP60: 0,16 kg (0.35 lbs) 2CFP65: 1,80 kg (3.76 lbs)
Seal kit number	SK579 (Nitrile), SK579V (Viton®)
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)
Operating temperature	-30° to +90° C (-22° to +194° F)
Nominal range	5 to 500 cSt

Viton is a registered trademark of E.I. DuPont

Description

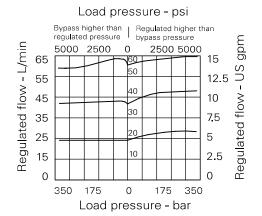
These valves are priority flow regulators. The flow (and actuator speed) will be largely independent of the load and the pressure conditions.

If used to regulate flow from a fixed supply, for example a standard gear or piston pump, the valve will pass the required flow and any surplus flow will be diverted to the bypass port. The bypass flow may be used for a secondary circuit whether the secondary pressure requirement is higher or lower than the regulated pressure.

The valve inlet pressure will be approximately 7 bar (100 psi) more than the regulated or bypass pressure, whichever is higher.

Pressure drop

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.



1 Basic code

2CFP60 - Cartridge only **2CFP65** - Cartridge & body

2 Adjustment means

P - Leakproof screw adjustment

R - Handknob adjustment (See page H-6 for dimensions)

3 Port size

Code	Port size	Housing number	
		Aluminium	Steel
4W	1/2" BSP	B12631	B13664
8T	1/2" BSP	B10820	B11566

4 Adjustable flow range

- **4** 4-40 L/min Standard setting 30 L/min
- **6** 6-60 L/min Standard setting 40 L/min

5 Seals

- **S** Nitrile (for use with most industrial hydraulic oils)
- **SV** Viton (for high temperature & most special fluid applications)

Dimensions

mm (inch)

Note: For applications above 210 bar (3000 psi) please consult our technical department or use the steel body option.

Cartridge only

Basic code 2CFP60

Hex socket adjust 4.0 A/F

17.0 A/F

49.5
(1.95)
max

M27 x 2.0-6g

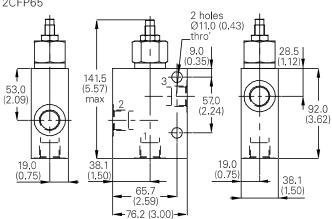
Reg (3)

70.0
(2.76)

Bypass (2)

Complete valve

1/2" Ports Basic code 2CFP65



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.