Operation

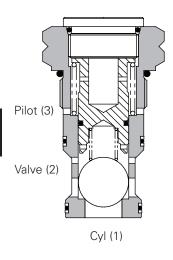
Pressure on the cylinder port causes the ball to lift against the spring force, allowing flow through to the valve port. Reverse flow is prevented by the ball reseating. Pressure applied to the pilot port will hold the ball against its seat, preventing flow from cylinder to valve.

Features

Easy flow path gives good pressure to flow characteristics and hardened components ensure a long working life. Cartridge construction allows installation in actuators, manifold blocks and Hydraulic Integrated Circuits. They fit the same cavities as the 4CK pilotto-open check valves, so care should be taken when selecting the valve.

Sectional View

G



Performance Data

Ratings and Specifications

Figures based on oil temperature of 40° C and viscosity of 3.	2 cSt (150 SUS)
Rated flow	30 L/min (8 USgpm)
Maximum pressure	350 bar (5000 psi)
Pilot ratio	2:1
Cartridge material	Working parts hardened and ground steel. Zinc nickel plated body.
Standard housing material	Standard aluminum (up to 210 bar). Add suffix"377" for steel option
Mounting position	Unrestricted
Cavity number	A6610 (See Section M)
Torque cartridge into cavity	45 Nm (33 lbs. ft.)
Weight	0.08 kg (0.18 lbs)
Seal kit number	SK829 (Nitrile SK829V (Viton*)
Recommended Filtration level	BS5540/4 Class 18/13 (25 micron nominal)
Operating temperature	-30° to +90°C (-22° to +194°F)
Leakage	0.3 ml/min nominal (5 dpm)
Nominal viscosity range	5 to 500 cSt

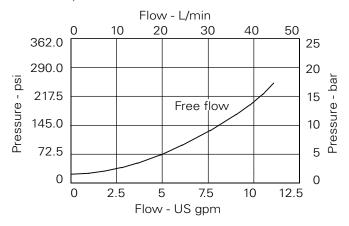
Viton is a registered trademark of E. I. DuPont

Description

Pilot to close check valves allow flow to pass in one direction, with a low pressure drop to prevent reverse flow. When the pilot pressure is applied, flow is prevented in either direction. The pilot ratio of 2:1 allows a lower pressure in the pilot line to hold the valve closed.

The 5CK series are check cartridges ideally suited for fitting directly onto a cylinder. They are ideal for use in regenerative circuits, accumulator dump circuits and in control of cylinders or motors.

Pressure Drop





5CK30 - Check Valve

Pilot-to-close. ball type 30 L/min (8 USgpm) • 350 bar (5000 psi)

Model Code

5CK*** 1 - 3W - S 2

1 Basic Code

5CK30 - Cartridge only 5CK35 - Cartridge & body

2 Pilot Port Size

1 - Internal Omit for line valves 3 Port Size - Bodied Valves Only

Code	Port Size	Housing Number	
		Aluminum Ste	el
3W	3/8" BSP 1/4" BSP Pilot Port	B6743 B12	2823
6T	3/8" SAE 1/4" SAE Pilot Port	B10536	
8T	1/2" SAE 1/4" Pilot Port	B11	811

4 Seals

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

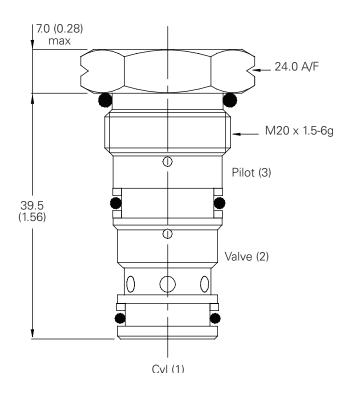
5 Pilot Ratio

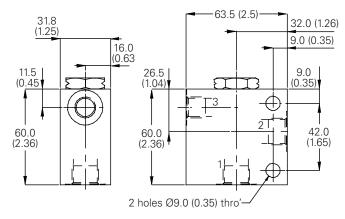
2 - 2:1

Dimensions

mm (inch)

Cartridge Only Basic Code 5CK30 Single Valve 3/8", 1/2" Ports Basic Code 5CK35





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



