

Valve (2)


## 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.

## 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 pilot-to-open check valves, so care should be taken when selecting the valve.

Performance Data

Ratings and Specifications
Figures based on oil temperature of $40^{\circ} \mathrm{C}$ and viscosity of 32 cSt ( 150 SUS )

| Rated flow | $30 \mathrm{~L} / \mathrm{min}(8 \mathrm{USgpm})$ |
| :--- | ---: |
| Maximum pressure | $350 \mathrm{bar}(5000 \mathrm{psi})$ |
| Pilot ratio | $2: 1$ |

Cartridge material Working parts hardened and ground steel.

| Standard housing material | Standard aluminum (up to 210 bar$).$ <br> 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 <br> SK829V (Viton $)$ |
| Recommended Filtration level | BS5540/4 Class $18 / 13(25$ micron nominal) |
| Operating temperature | $-30^{\circ}$ to $+90^{\circ} \mathrm{C}\left(-22^{\circ}\right.$ to $\left.+194^{\circ} \mathrm{F}\right)$ |
| Leakage | $0.3 \mathrm{ml} / \mathrm{min} \mathrm{nominal} \mathrm{(5} \mathrm{dpm)}$ |
| Nominal viscosity range | 5 to 500 cSt |

Viton is a registered trademark of E. I. DuPont

Pressure Drop


## 5CK30 - Check Valve

Pilot-to-close. ball type
$30 \mathrm{~L} / \mathrm{min}(8 \mathrm{USgpm}) \cdot 350$ bar ( 5000 psi )

Model Code



Dimensions mm (inch)

| Cartridge Only | Single Valve |
| :--- | :--- |
| Basic Code | $3 / 8^{\prime \prime}, 1 / 2^{2 \prime}$ Ports |
| 5 CK30 | Basic Code |
|  | 5CK35 |



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

