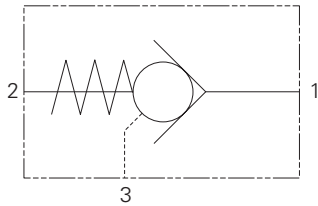


# 5CK120 - Check Valve

Pilot-to-close, ball type

120 L/min (32 USgpm) • 350 bar (5000 psi)



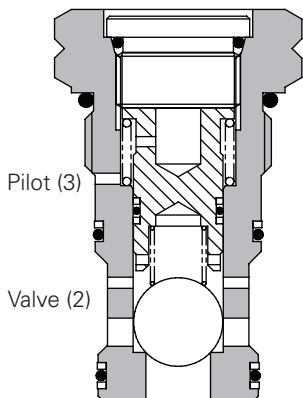
## Operation

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.

## Sectional View



Cyl (1)

## Performance Data

### Ratings and Specifications

Figures based on oil temperature of 40° C and viscosity of 32 cSt (150 SUS)

Rated flow	120 L/min (32 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	A877
Torque cartridge into cavity	100 Nm (74 lbs. ft.)
Weight	0.28 kg (0.62 lbs)
Seal kit number	SK833 (Nitrile) SK833 (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

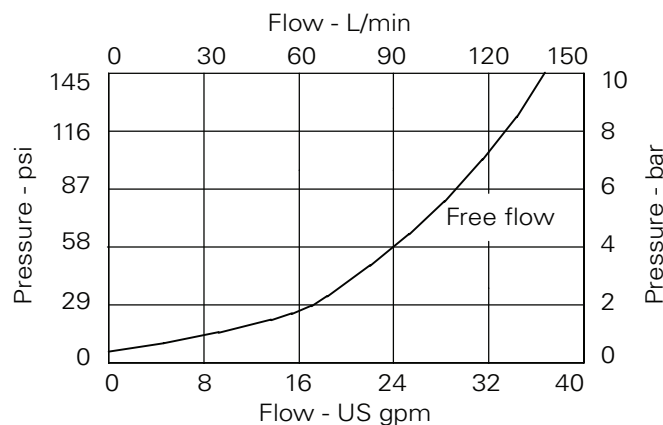
Viton is a registered trademark of E. I. DuPont

## 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



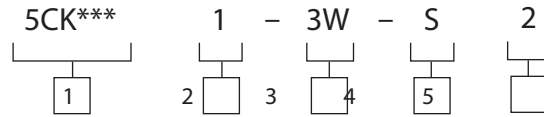
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# 5CK120 - Check Valve

Pilot-to-close, ball type

120 L/min (32 USgpm) • 350 bar (5000 psi)

## Model Code



### 1 Function

5CK120 - Cartridge only  
5CK125 - Cartridge and body

### 2 Pilot Port Size

1 - Internal  
Omit for line valves

### 3 Port Size

Code	Port Size	Housing Number	
		Aluminum	Steel
6W	3/4" BSP 1/4" BSP/SAE Pilot Port	B6898	B5544
12T	3/4" SAE 1/4" SAE Pilot Port	B8200	
16T	1" SAE 1/4" SAE Pilot Port	B10708	B11814

### 4 Seals

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

### 5 Pilot Ratio

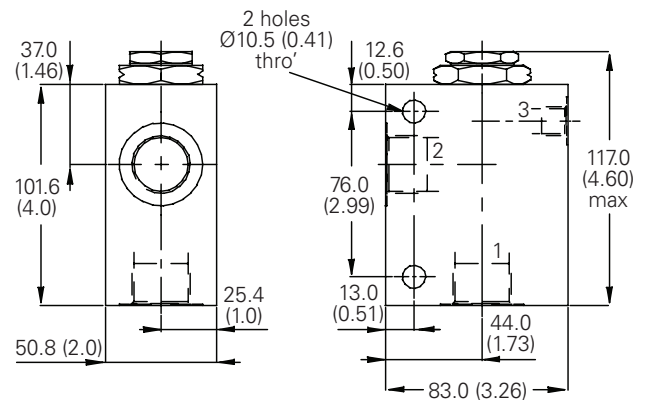
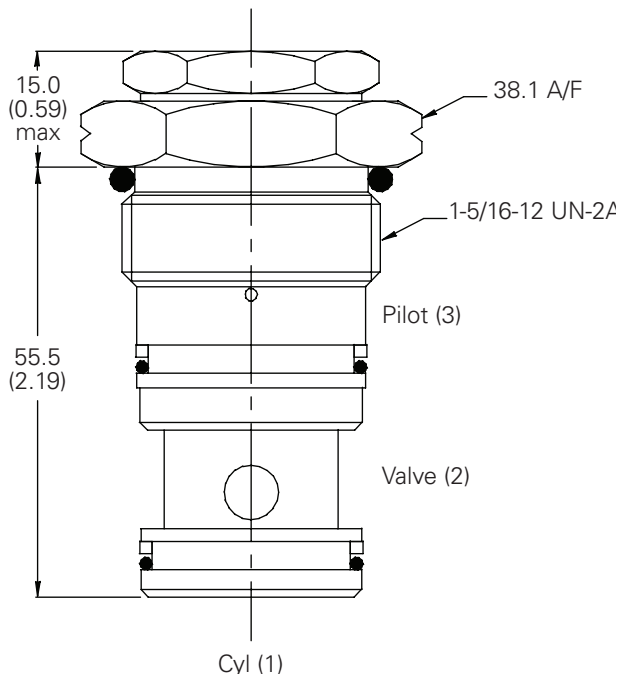
2 - 2:1

## Dimensions

mm (inch)

Cartridge Only  
Basic Code  
5CK120

Single Valve  
3/4", 1" Ports  
Basic Code  
5CK125



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