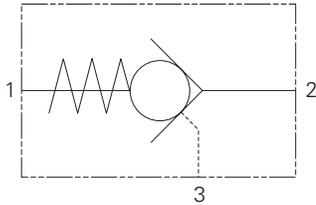


4CK300 - Check Valve

Pilot-to-open, poppet type

300 L/min (80 USgpm) • 350 bar (5000 psi)



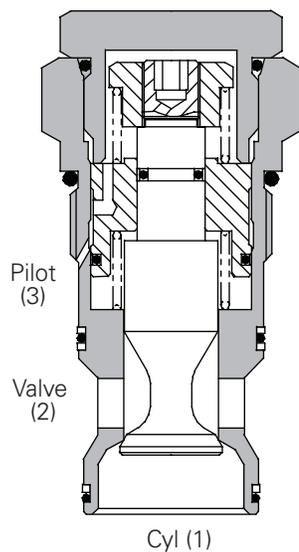
Operation

Pressure on the valve port 2 causes the poppet to lift against the spring force, allowing the flow to the cylinder port 1. Reverse flow is prevented by the poppet reseating. Pressure applied to the pilot port 3 will overcome the cylinder port pressure and lift the poppet from its seat, allowing flow from the cylinder to valve port.

Features

Hardened and ground poppet gives excellent flow capability for valve size, positive sealing and long working life. Cartridge construction allows installation in actuators, manifold blocks and Hydraulic Integrated Circuits. Fits the same cavity as the overcenter valves of a similar size.

Sectional View



Performance Data

Ratings and Specifications

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

Rated flow	300 L/min (80 USgpm)	
Max pressure	350 bar (5000 psi)	
Pilot ratio	3:1	
Cartridge material	Working parts hardened and ground steel. Zinc nickel plated body.	
Standard housing material	Standard aluminium (up to 210 bar). Add suffix "377" for steel option.	
Mounting position	Unrestricted	
Cavity number	A6935 (See Section M)	
Torque cartridge into cavity	150 Nm (110 lbs ft)	
Weight	4CK300	0.28 kg (0.62 lbs)
	4CK350	1.15 kg (2.54 lbs)
	4CKK350	1.96 kg (4.32 lbs)
Seal kit number	SK683 (Nitrile) SK683V (Viton®)	
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)	
Operating temperature	-30°C to +90°C (-22° to +194°F)	
Leakage	0.5 milliliters/min nominal (5 dpm)	
Nominal viscosity range	5 to 500 cSt	

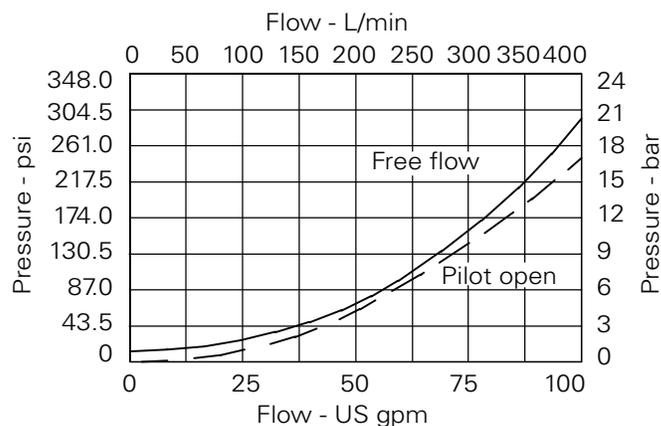
Viton is a registered trademark of E.I. DuPont

Description

Pilot check valves allow flow to pass in one direction, with a low pressure drop, then prevent reverse flow until pilot pressure is applied. There are many applications for this valve type, the most common being to lock and hold a cylinder, or another hydraulic actuator, in position.

These valves are ideally suited for fitting directly into a cylinder, giving economy of installation, direct control of cylinder movement and ease of servicing.

Pressure Drop

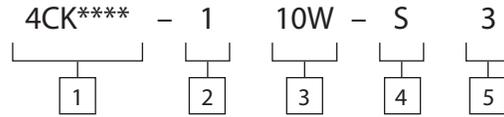


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

4CK300 - Check Valve

Pilot-to-open, poppet type
300 L/min (80 USgpm) • 350 bar (5000 psi)

Model Code



1 Basic Code
4CK300 - Cartridge Only
4CK350 - Cartridge and Body
4CKK350 - Cartridges and Dual Body

2 Pilot Port Size
1 - Internal

3 Port Sizes

Code	Port Size	Housing Number - Body Only			
		Aluminium Single	Steel Single	Aluminium Double	Steel Double
10W	1 1/4" BSP 1/4" BSP Pilot Port	B6814	B8610	C8704	C8705
20T	1 1/4" SAE 1/4" SAE Pilot Port	B10630	B11474	C10811	C11564

4 Seals
S - Nitrile (For use with most industrial hydraulic oils)

SV - Viton (For high temperature and most special fluid applications)

5 Optional Pilot Seal
Omit if not required

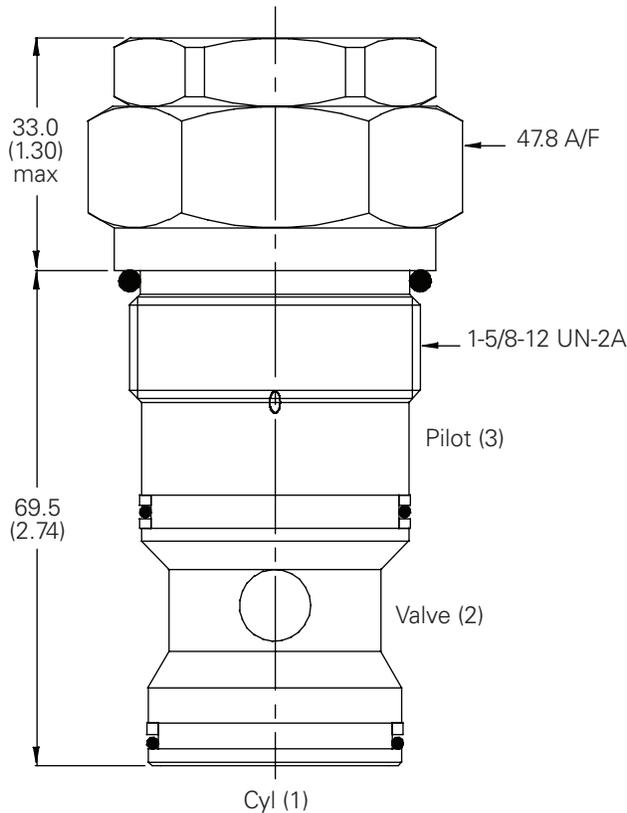
Dimensions

mm (inch)

Cartridge Only

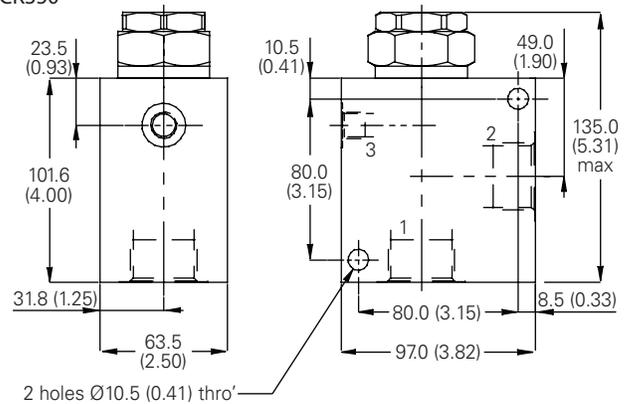
Basic Code

4CK300



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

Single Valve
1 1/4" Ports
Basic Code
4CK350



Dual Valve
1 1/4" Ports
Basic Code 4CKK350
Internally Cross Piloted

