

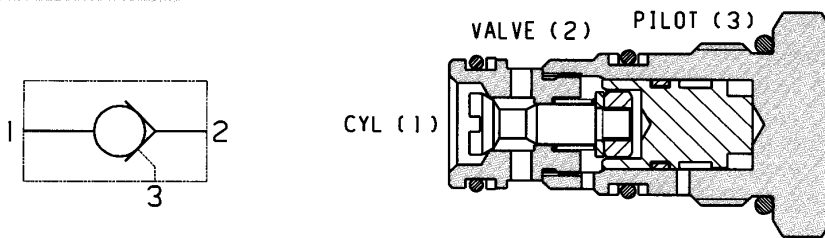
## Check Valves

Type 4CK30; 4CK35; 4CKK35

# 4CK SERIES CHECK VALVES

## PILOT TO OPEN

### 4CK30



### APPLICATION

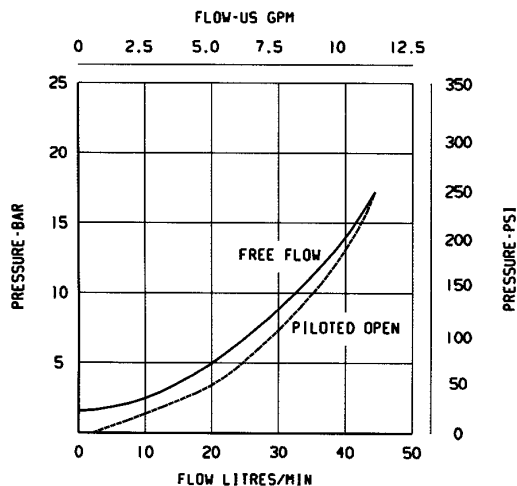
Pilot check valves allow flow to pass in one direction, with a low pressure drop, then prevent reverse flow until pilot pressure is applied. There are many applications for this valve type, the most common being to lock and hold a cylinder, or other hydraulic actuator, in position.

The 4CK30 is a small cartridge valve and is ideally suited for fitting directly into a cylinder, giving economy of installation, direct control of cylinder movement and ease of servicing.

### OPERATION

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

### PRESSURE DROP



### 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 1CE30 overcentre valve. See page 6-111.

### SPECIFICATIONS

Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

<b>Rated Flow</b>	30 litres/min (8 US GPM)
<b>Max Pressure</b>	350 bar (5000 psi)
<b>Pilot Ratio</b>	3:1
<b>Cartridge Material</b>	Working parts hardened and ground steel. Electroless nickel plated body
<b>Body Material</b>	Standard aluminium Add suffix '377' for steel option
<b>Mounting Position</b>	Unrestricted
<b>Cavity Number</b>	A6610 (See Section 17)
<b>Torque Cartridge into Cavity</b>	45 Nm (33 lbs ft)
<b>Weight</b>	4CK30 0.08 kg (0.18 lbs) 4CK35 0.34 kg (0.75 lbs) 4CKK35 0.76 kg (1.67 lbs)
<b>Seal Kit Number</b>	SK430 (Nitrile) SK430V (Viton)
<b>Recommended Filtration Level</b>	BS5540/4 Class 18/13 (25 micron nominal)
<b>Operating Temp</b>	-20°C to +90°C
<b>Leakage</b>	0.3 millilitres/min nominal
<b>Nominal Viscosity Range</b>	5 to 500 cSt

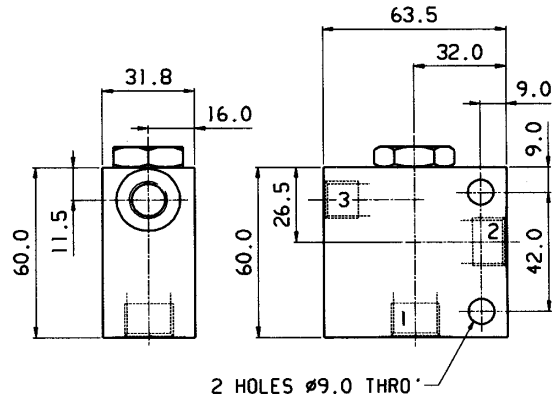
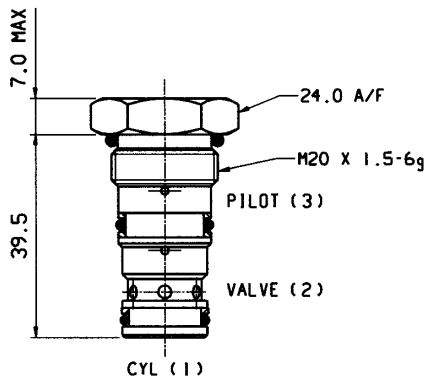
Änderungen vorbehalten

# Check Valves

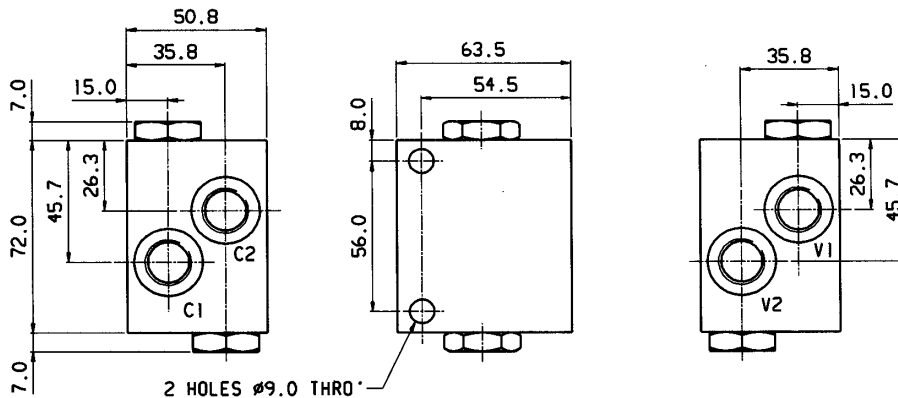
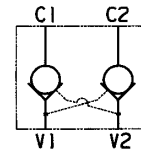
## Type 4CK30; 4CK35; 4CKK35

**CARTRIDGE ONLY**  
BASIC CODE: 4CK30

**SINGLE VALVE** 3/8" PORTS  
BASIC CODE: 4CK35



**DUAL VALVE** 3/8" PORTS  
BASIC CODE: 4CKK35 (INTERNALLY CROSS PILOTED)



Where measurements are critical request certified drawings

### ORDERING CODE EXAMPLE

**4CK\*\*\* 1 3W S 3**

**Basic Code**

**Pilot Port Sizes**

- 1 - Internal
- 2W - 1/4" BSP (External Pilot). Omit for bodied valves
- 4T - 1/4" SAE (External Pilot). Omit for bodied valves

**Port Sizes - Bodied Valves Only**

- 3W - 3/8" BSP. 1/4" BSP Pilot Port
- 6T - 3/8" SAE. 1/4" SAE Pilot Port

**Optional Pilot Seal**  
Omit if not required

**Seals**

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

We reserve the right to change specifications without notice