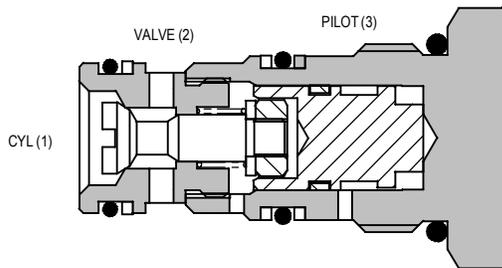
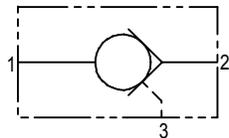




# 4CK SERIES CHECK VALVE

## PILOT TO OPEN

### 4CK30



### APPLICATION

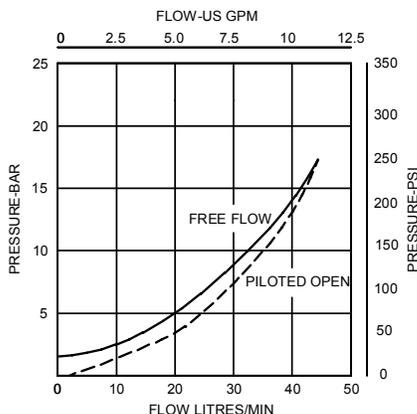
Pilot check valves allow flow to pass in one direction, with a low pressure drop, then prevent reverse flow until pilot pressure is applied. There are many applications for this valve type, the most common being to lock and hold a cylinder, or another hydraulic actuator, in position.

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 the 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



\*For applications above 210 bar please consult our technical department or use the steel body option.

### 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 zinc plated body
<b>Body Material</b>	Standard aluminium (up to 210 bar*) 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

### Integrated Hydraulics Ltd

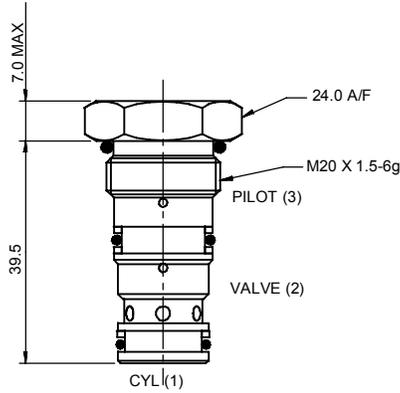
Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.  
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729  
Website: www.integratedhydraulics.com

### Integrated Hydraulics Inc

7047 Spinach Drive, Mentor, Ohio 44060, USA  
Tel: (440) 974 3171 Fax: (440) 974 3170  
Website: www.integratedhydraulics.com

## CARTRIDGE ONLY

**BASIC CODE: 4CK30**



## SINGLE VALVE

**3/8" 1/2" PORTS**

**BASIC CODE: 4CK35**

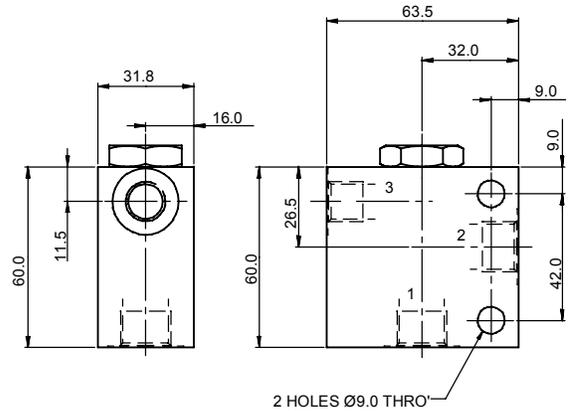
Body ONLY part numbers

BSP, aluminium  
3/8" B6743

SAE, aluminium  
3/8" B10536  
1/2" B7884

BSP, steel  
3/8" B12823

SAE, steel  
1/2" B11811



## DUAL VALVE

**3/8" 1/2" PORTS**

**BASIC CODE: 4CKK34**

DUAL CHECK VALVE (INTERNALLY CROSSED PILOTED)

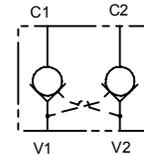
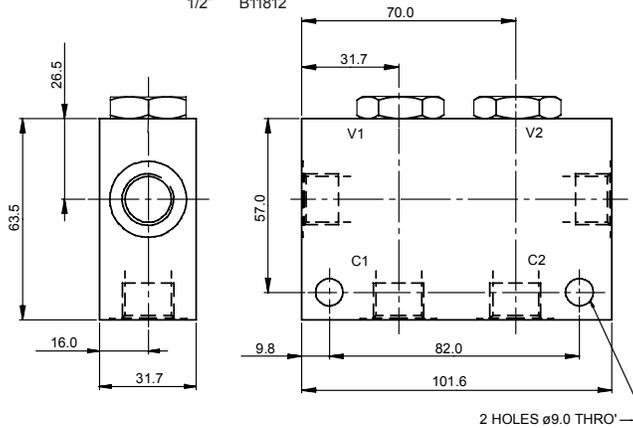
Body ONLY part numbers

BSP, aluminium  
3/8" B6836

SAE, aluminium  
3/8" B10805  
1/2" B30237

BSP, steel  
3/8" B13803

SAE, steel  
1/2" B11812



Where measurements are critical request certified drawings

## ORDERING CODE EXAMPLE

**4CK\*\***

**1**

**3W**

**S**

**3**

**Basic Code**

4CK30 = Cartridge Only

4CK35 = Cartridge and Body

4CKK34 = Cartridges and Dual Body

**Pilot Port Sizes**

1 = Internal

**Port Sizes - Bodied Valves Only**

3W = 3/8" BSP. 1/4" BSP Pilot Port

6T = 3/8" SAE. 1/4" SAE Pilot Port

8T = 1/2" 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