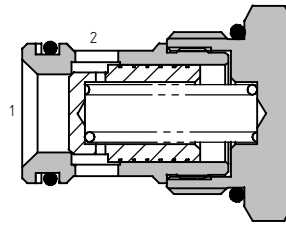
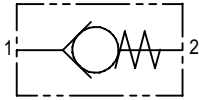




# 3CA SERIES CHECK VALVE

## POPPET STYLE

### 3CA30/3CA50/3CA200



## APPLICATION

These cartridge check valves allow flow at a low pressure drop, with cracking pressure from 0.2 to 3 bar (3 to 43.5 psi) in the free flow direction and close to prevent flow in the reverse direction.

Three sizes of check cartridge are available with nominal flow rating up to 200 litres/ minute (50 US GPM). They fit into simply machined cavities and are therefore ideal for installation into custom designed Hydraulic Integrated Circuits, manifold blocks and other hydraulic equipment.

# 7

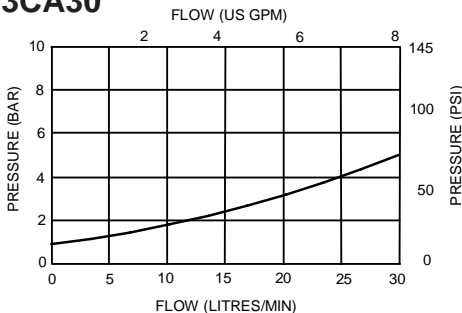
## FEATURES

Cartridge design with machined seats and precision poppet gives excellent flow and seating characteristics.

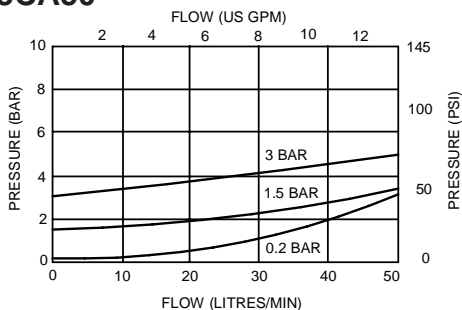
Installation into the 2-port 3/4" UNF, 7/8" UNF or 1 5/16 UN cavities gives easy fitment and serviceability.

## PRESSURE DROP

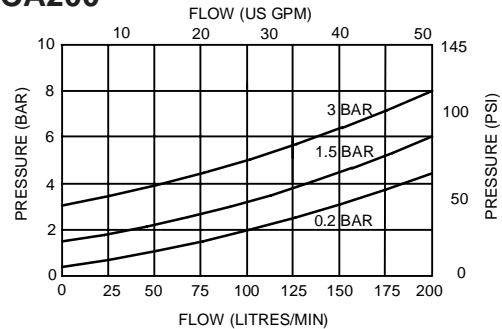
### 3CA30



### 3CA50



### 3CA200



## SPECIFICATIONS

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

<b>Rated Flow</b>	3CA30 30 litres/min (8.0 US GPM) 3CA50 50 litres/min (12.5 US GPM) 3CA200 200 litres/min (50 US GPM)
<b>Max Working Pressure</b>	3CA30/50 350 bar (5000 psi) 3CA200 140 bar (2000 psi)
<b>Cracking Pressure</b>	See ordering code
<b>Cartridge Material</b>	All steel construction. External parts electroless zinc plated.
<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>	3CA30 A879 3CA50 A12370 3CA200 A21616
<b>Torque Cartridge into Cavity</b>	3CA30/50 45 Nm (33 lbs ft) 3CA200 60 Nm (44 lbs ft)
<b>Weight</b>	3CA30/50 0.05 kg (0.11 lbs) 3CA200 0.08 kg (0.17 lbs)
<b>Seal Kit Number</b>	3CA30: SK396 (Nitrile) SK396V (Viton) 3CA50: SK1145 (Nitrile) SK1145V (Viton) 3CA200: SK1158 (Nitrile) SK1158V (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>	0.2 millilitres/min nominal
<b>Nominal Viscosity Range</b>	5 to 500 cSt

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

## Integrated Hydraulics Ltd

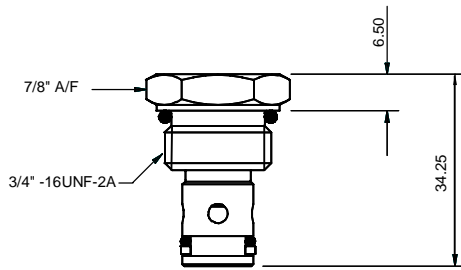
Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.  
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729  
Website: [www.integratedhydraulics.com](http://www.integratedhydraulics.com)

## Integrated Hydraulics Inc

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

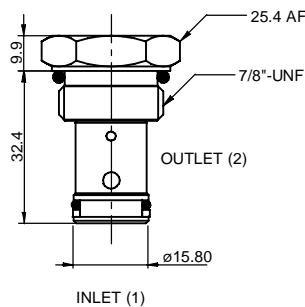
## CARTRIDGE ONLY

**BASIC CODE: 3CA30**



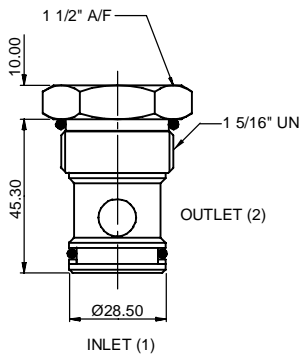
## CARTRIDGE ONLY

**BASIC CODE: 3CA50**



## CARTRIDGE ONLY

**BASIC CODE: 3CA200**



## COMPLETE VALVE 1/4\"/>

**BASIC CODE: 3CA35**

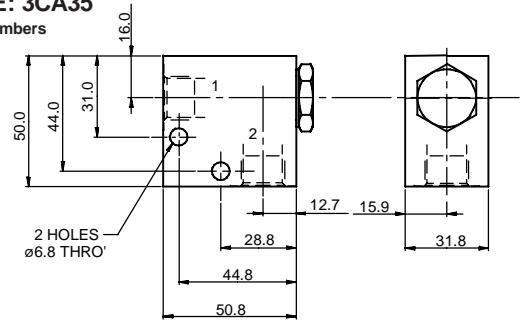
**Body ONLY part numbers**

*BSP, aluminium*  
1/4" A1485  
3/8" A1043

*SAE, aluminium*  
3/8" A15676

*BSP, steel*  
3/8" A14175

*SAE, steel*  
3/8" A14843



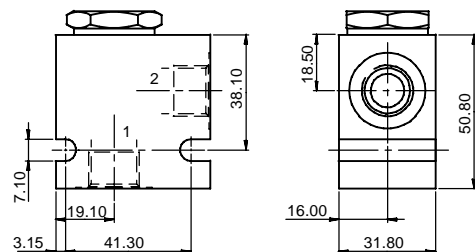
## COMPLETE VALVE 3/8\"/>

**BASIC CODE: 3CA55**

**Body ONLY part numbers**

*BSP, aluminium*  
3/8" B19053  
1/2" B19356

*SAE, aluminium*  
1/2" B19402



## COMPLETE VALVE 3/4\"/>

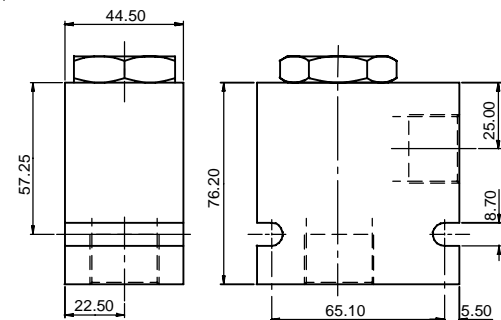
**BASIC CODE: 3CA255**

**Body ONLY part numbers**

*BSP, aluminium*  
3/4" B19853  
1" B19854

*SAE, aluminium*  
1" B23519

*SAE, steel*  
1" B23521



Where measurements are critical request certified drawings

## ORDERING CODE EXAMPLE

**3CA\*\*\* - 3W - 3.0 - S**

### Basic Code

**3CA30** = Cartridge Only  
**3CA35** = Cartridge and Body  
**3CA50** = Cartridge Only  
**3CA55** = Cartridge and Body  
**3CA200** = Cartridge Only  
**3CA255** = Cartridge and Body

### Port Sizes - Bodied Valves Only

**2W** = 1/4" BSP  
**3W** = 3/8" BSP  
**4W** = 1/2" BSP  
**6W** = 3/4" BSP  
**8T** = 1/2" SAE  
**16T** = 1" SAE

### Seals

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

### Cracking Pressure

**0.2** = 0.2 bar 3CA50 & 3CA200  
**0.6** = 0.6 bar 3CA200  
**1.0** = 1.0 bar 3CA30 & 3CA200  
**1.4** = 1.4 bar 3CA200  
**1.5** = 1.5 bar 3CA50  
**3.0** = 3.0 bar 3CA50 & 3CA200  
**4.5** = 4.5 bar 3CA50  
**5.0** = 5.0 bar 3CA200  
**7.0** = 7.0 bar 3CA50 & 3CA200  
**10.0** = 10.0 bar 3CA200  
**15.0** = 15.0 bar 3CA200

We reserve the right to change specifications without notice