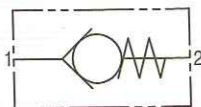




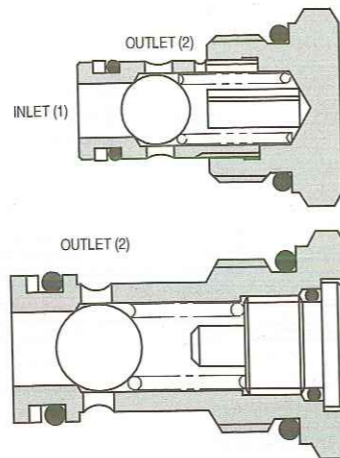
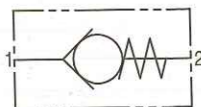
# 3CA SERIES CHECK VALVE

## BALL TYPE

### 3CA20



### 3CA80



### APPLICATION

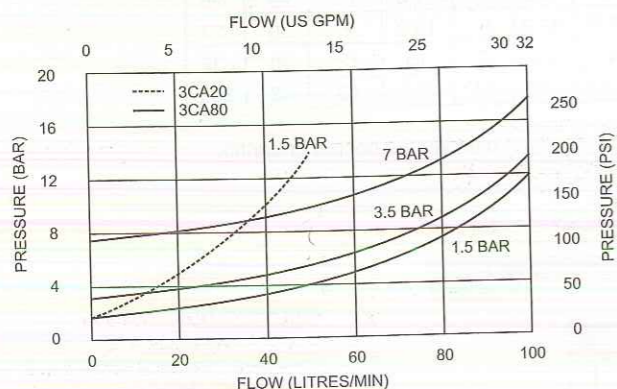
These cartridge check valves allow flow at a low pressure drop, with cracking pressure from 0.5 to 7 bar (7 to 100 psi) in the free flow direction and close to prevent flow in the reverse direction.

Two sizes of check cartridge are available with nominal flow rating up to 80 litres/minute (20 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.

### FEATURES

Cartridge design with machined seats and precision ground balls gives excellent flow reset characteristics. Installation into the 2-port 3/4" UNF or 7/8" UNF cavities gives easy fitment and serviceability.

### PRESSURE DROP



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

### SPECIFICATIONS

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

Rated Flow	3CA20	40 litres/min (10 US GPM)
	3CA80	80 litres/min (20 US GPM)
Max Setting	3CA20/3CA80	350 bar (5000 psi)
Cracking Pressure	0.5 bar ( 7 psi)	Other options available on request
	1.5 bar ( 22 psi)	
	3.5 bar ( 50 psi)	
	7.0 bar (100 psi)	
Cartridge Material	All steel construction. External parts electroless zinc plated. Delrin seat option available on request.	
Body Material	Standard aluminium (up to 210 bar*) Add suffix '377' for steel option.	
Mounting Position	Unrestricted	
Cavity Number	3CA20	A879 (See Section 17)
	3CA80	A3973
Torque Cavity into Cartridge	3CA20	45 Nm (33 lbs ft)
	3CA80	60 Nm (44 lbs ft)
Weight	3CA20	0.05 kg (0.11 lbs)
	3CA80	0.08 kg (0.17 lbs)
Seal Kit Number	3CA20:	SK396 (Nitrile) SK396V (Viton)
	3CA80:	SK226 (Nitrile) SK226V (Viton)
Recommended Filtration Level	BS5540/4 Class 18/13 (25 micron nominal)	
Operating Temp	-20°C to +90°C	
Leakage	0.2 millilitres/min nominal	
Nominal Viscosity Range	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

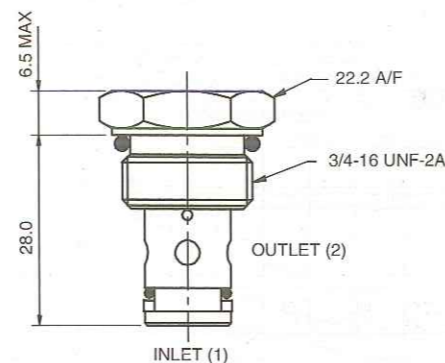
7047 Spinach Drive, Mentor, Ohio 44060, USA  
Tel: (440) 974 3171 Fax: (440) 974 3170  
Website: www.integratedhydraulics.com

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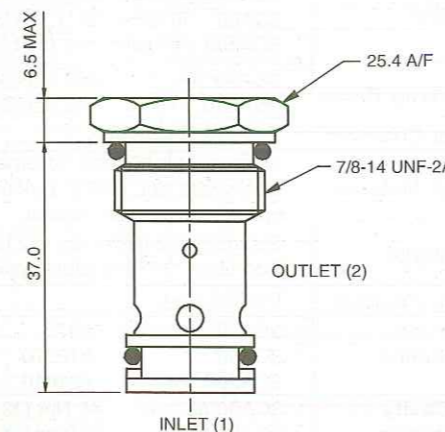
### CARTRIDGE ONLY

BASIC CODE: 3CA20



### CARTRIDGE ONLY

BASIC CODE: 3CA80

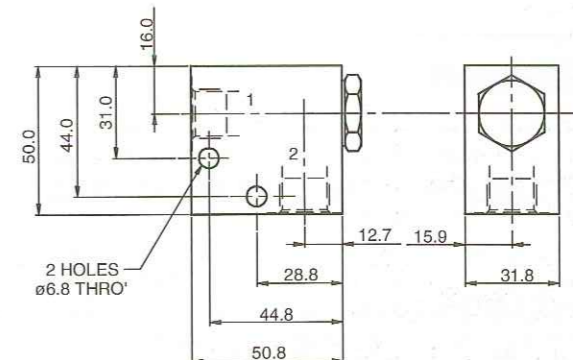


### COMPLETE VALVE 1/4" 3/8" PORTS

BASIC CODE: 3CA25

Body ONLY part numbers

BSP, aluminium	SAE, aluminium	BSP, steel	SAE, steel
1/4" A1485	3/8" A15676	3/8" A14175	3/8" A14843
3/8" A1043			

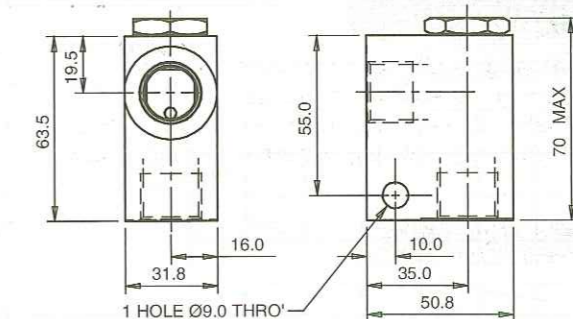


### COMPLETE VALVE 1/2" PORTS

BASIC CODE: 3CA85

Body ONLY part numbers

BSP, aluminium	SAE, aluminium	SAE, steel
1/2" B20868	1/2" B20870	1/2" B20869



Where measurements are critical request certified drawings

### ORDERING CODE EXAMPLE

3CA\*\*\* - 3W - 1.5 - S

#### Basic Code

3CA20 = Cartridge Only  
3CA25 = Cartridge and Body  
3CA80 = Cartridge Only  
3CA85 = Cartridge and Body

#### Port Sizes - Bodied Valves Only

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

#### Seals

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

#### Cracking Pressure

0.5 = 0.5 bar  
1.5 = 1.5 bar  
3.5 = 3.5 bar  
7.0 = 7.0 bar

We reserve the right to change specifications without notice

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