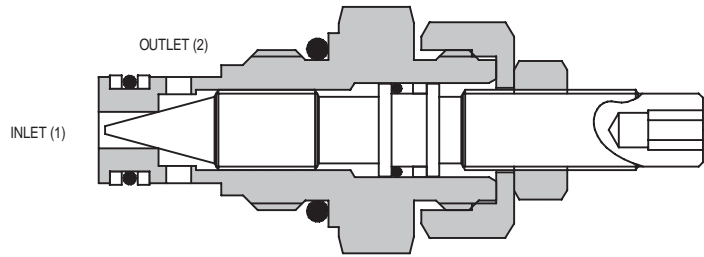
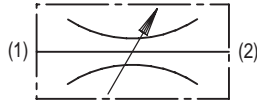




# 2CN SERIES NEEDLE VALVE

## FINE ADJUSTMENT - POSITIVE SHUT OFF

### 2CN20



### APPLICATION

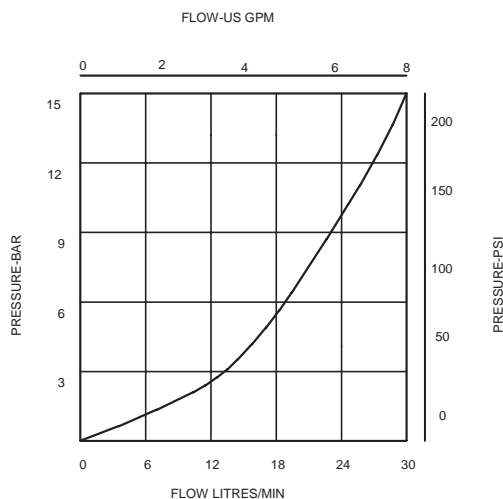
The cartridge needle valves can be set and locked to restrict flow in both directions. A typical use is the speed control of cylinders or other actuators. (For pressure compensated flow control valves see Section 9). The fine adjustment and complete shut-off allow the valves to be used for snubbing pressure gauges and for use as shut-off valves.

## 8

### OPERATION

Rotation of the adjustment screw varies the valve opening to give a flow path approximately proportional to the turns of the screw.

### PRESSURE DROP



### FEATURES

All steel construction with hardened and ground adjustment needle. Cartridge construction for versatility in applications. Sealed adjuster for leak-free adjustment.

### SPECIFICATIONS

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

<b>Rated Flow</b>	20 litres/min (5 US GPM)
<b>Max Pressure</b>	350 bar (5000 psi)
<b>Cartridge Material</b>	External parts 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>	A879 (See Section 17)
<b>Torque Cartridge into Cavity</b>	30 Nm (22 lbs ft)
<b>Weight</b>	2CN20      0.12 kg (0.26 lbs) 2CN25      0.40 kg (0.87 lbs)
<b>Seal Kit Number</b>	SK446 (Nitrile)      SK446V (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 (closed)
<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

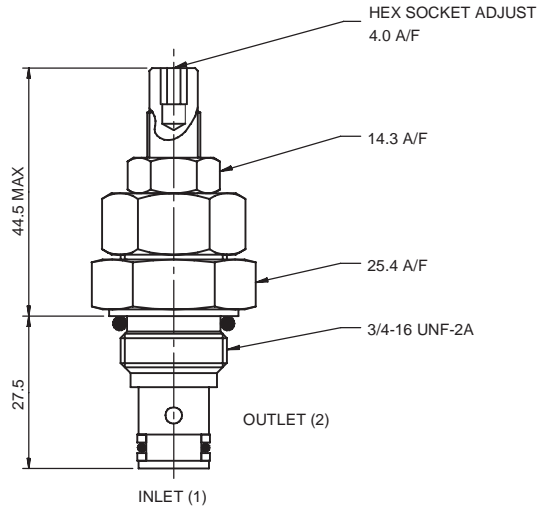
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## CARTRIDGE ONLY

**BASIC CODE: 2CN20**



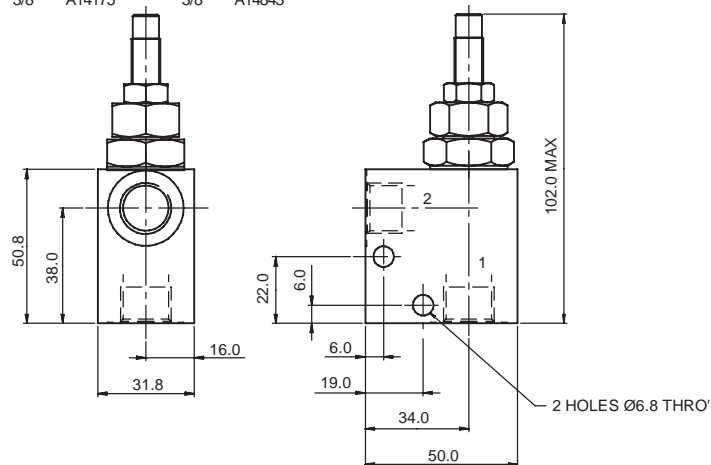
## COMPLETE VALVE 1/4" 3/8" PORTS

**BASIC CODE: 2CN25**

Body ONLY part numbers

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

BSP, steel		SAE, steel	
3/8"	A14175	3/8"	A14843



Where measurements are critical request certified drawings

## ORDERING CODE EXAMPLE

**2CN\*\* P 2W S**

### Basic Code

2CN20 = Cartridge Only  
2CN25 = Cartridge and Body

### Adjustment Means

P = Leakproof Screw Adjustment  
R = Handknob Adjustment  
(See page 8-102 for dimensions)

### Port Sizes - Bodied Valves Only

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

### 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