

## Direct Acting Pressure Reducing valve Model: BC-CAP-P

The BC-CAP-P is a direct acting pressure reducing valve that reduces a high upstream pressure to a lower downstream pressure, regardless of fluctuating demand or varying upstream pressure. BC-CAP-P valves are ideal for residential and commercial applications, feature a dial indicator with direct readout allowing easy pressure pre-adjustment. The valve incorporates a unique noise reducing and high flow seat design, easy inline servicing with a replaceable cartridge and an integral stainless steel filter (35 mesh), suitable for water systems that may contain sediment and debris.



### 1.0 General Information:

Valve Type: Direct acting (DPRV)

Valve Pattern: Straight flow

Available Sizes: 1/2"-2"/DN15-50

Maximum Working Pressure: 300 psi/20 bar

End Connections: Threaded: NPT Female Union connections

Working Temperature: Water up to 180°F/80°C

### 2.0 Certificates:

- ICC-ES to ASSE 1003
- NSF 61
- NSF 372
- CSA B356
- Meets codes IPC, IRC and UPC for use in accordance with the US and Canadian plumbing codes
- Designed to comply with the requirements of UL 2043

#### Job/Owner

System No.	
Location	

#### Contractor

Submitted by	
Date	

#### Engineer

Spec Section	
Paragraph	
Approved	
Date	

### 3.0 Construction Materials:

Body: DZR low-lead forged brass EN 12165 CW724R  
 Cover: glass reinforced nylon PA66M40/1l  
 Control stem: stainless steel AISI 303/EN 10088-3  
 Moving parts: DZR low-lead brass EN 12165 CW724R  
 Diaphragm: peroxide-cured EPDM  
 Seals: peroxide-cured EPDM  
 Compensation piston rings: PTFE  
 Filter: stainless steel AISI 304/EN 10088-2  
 Seat: stainless steel AISI 303/EN 10088-3  
 Shuttle: PPSG40

### 4.0 Control Information

Pressure setting range: 15-90 psi/1-6 bar; Factory setting: 45 psi/3 bar

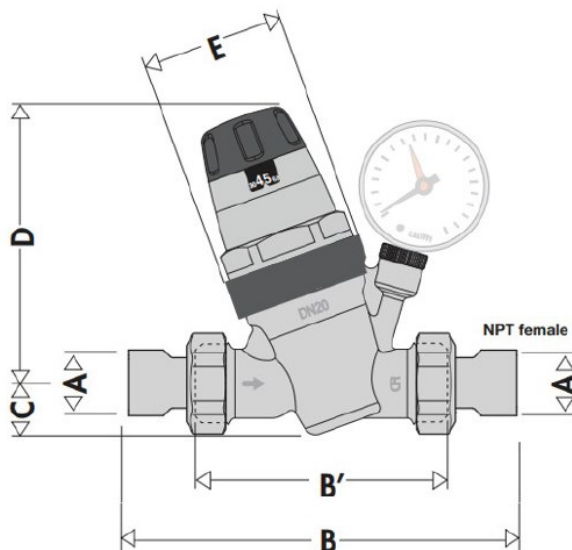
### 5.0 General Notes:

Can be installed in any direction/orientation  
 Pressure gauge connection: 1/8" NPT

### 6.0 Specify When Ordering:

- Minimum and maximum flow rate (gpm/m<sup>3</sup>/h)
- Inlet pressure (psi/bar)
- Outlet pressure settings (psi/bar)

### 7.0 Dimensions & Weights:



A Inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
B (inch)	5.5	6.3	6.9	7.9	8.0	8.4
B (mm)	140	160	175	200	203	214
B' (inch)	3.0	3.56	3.75	4.31	4.75	5.12
B' (mm)	76	90	95	110	120	130
C (inch)	0.81	0.81	0.81	1.37	1.5	1.5
C (mm)	20.5	20.5	20.5	40	40	40
D (inch)	4.5	4.5	4.5	7.0	7.0	7.0
D (mm)	115	115	115	178	178	178
E (inch)	2.37	2.37	2.37	3.06	3.06	3.06
E (mm)	60	60	60	78	78	78
Weight (lb.)	2.1	2.4	3.1	5.8	7.4	9.8
Weight (Kg)	0.91	1.07	1.36	2.83	3.35	4.46

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**8.0 Performance**

**8.1 Maximum Design Flow Rate**

Diameter	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
gpm	7.3	12.5	19	34	44	70
m <sup>3</sup> /h	1.7	2.8	4.3	7.7	10	15.9
l/sec	0.5	0.8	1.2	2.1	2.8	4.4

**8.2 Minimum Flow Rate**

Diameter	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
gpm	1	1	1	1	1	1
m <sup>3</sup> /h	0.23	0.23	0.23	0.23	0.23	0.23
l/sec	0.06	0.06	0.06	0.06	0.06	0.06

**8.3 Pressure Fall Off**

The pressure drop is taken from the below graph on the basis of where the design flow rate intersects the curve for the valve size already selected (the downstream pressure falls by an amount equal to the pressure drop, with respect to the set pressure at no flow condition).

Example: For 8 gpm and size 3/4" the droop = 7.3 psi (see arrows on graph).

