

# Single Check (Non Return) Valve

## Model EB402 / EB202 – Flanged or Female - Datasheet

### Description

Single Check Valve with cast iron body - epoxy coated for protection of drinking water systems.

A stainless steel spring closing mechanism allows the valve to operate in any orientation and is immune to water hammer. Water tight closure is achieved by an EPDM seal.

The most common application is fire protection systems without additives.

The low headloss characteristics are ideal for non return valve applications such as on the inlet or outlet from a pump.

### Pipe Connections

Flanged - PN16 (DN40 – DN150) then PN10 (DN200+) (raised spigot with notch for cable).

Female - DN65, 80 & 100 (2½", 3" & 4") with female screwed connections - model EB202.

### Specification

Pressure (working) 16 bar max up to and inc. DN150  
10 bar DN200 and above

Opening pressure (DN100) *larger sizes more, smaller less*  
0.024 bar (flow down), 0.037 bar (horizontal), 0.05 bar (up)  
Temperature -10° C min. to 100° C max.

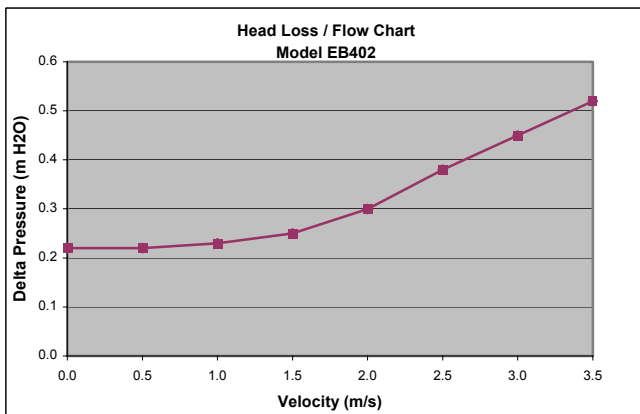
### Materials

Body Cast iron – epoxy coated (Blue)  
Springs Stainless steel  
Mechanism Bronze  
Elastomers EPDM

### Applications

Backflow prevention for fluids in categories 1 – 2 (refer to Schedule 1 of Water Regulations July 1999). Fluid Category 2 includes -

- Fire Sprinkler systems without additives
- Hot water
- Water cooled air conditioning without additives.
- Whole site protection
- Non return valve for pumps



#### Notes

Data for DN100 flow down. Other sizes have similar characteristics. Velocity based on flow of water through the bore of copper tube table X. See Flow Table to find the actual flow rate.



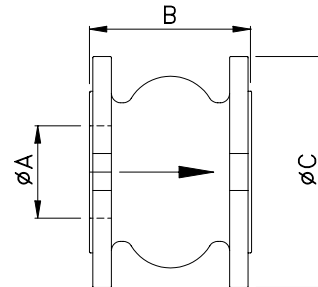
Model EB100P402

### Water Regulations

Single Check Valves are suitable for backflow protection of Fluid Category 2 risks as defined in the new Water Regulations – July 1999.

Test points across a single check valve are no longer required by the Water Regulations for EB devices.

Check valves must not be buried. However they can be installed in a chamber below ground. The Water Regulations generally require "Point of Use" protection but whole site and zone are also recognised. The local water company can advise.



ØA	B <sub>Flange</sub>	B <sub>Female</sub>	ØC	K <sub>v</sub>	K <sub>g</sub>
40	85	-	150	47	4.2
50	100	-	165	99	5.8
65	120	148	185	159	8.1
80	140	174	200	222	10.2
100	170	203	220	396	14.5
150	230	-	285	890	32
200	289	-	340	1120	53
250	354	-	405	2010	94
300	396	-	460	2459	140
350	473	-	520	2843	225
400	560	-	597	4370	312
500	750	-	670	6914	540

### Codes and Descriptions

Size	Code	Description
DN40-500	EBsizeP402	402 Single Check Valve PN16
DN65-100	EBsizeFP202	202 Single Check Valve FBSP

Note DN200 and above PN10 flanges

### Arrow Valves Ltd

Tel: 01442 823123 Fax: 01442 823234

arrowvalves.co.uk

info@arrowvalves.co.uk

Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice.

All unit-less dimensions in mm.

© Copyright Arrow Valves Ltd 2001-2011

