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).

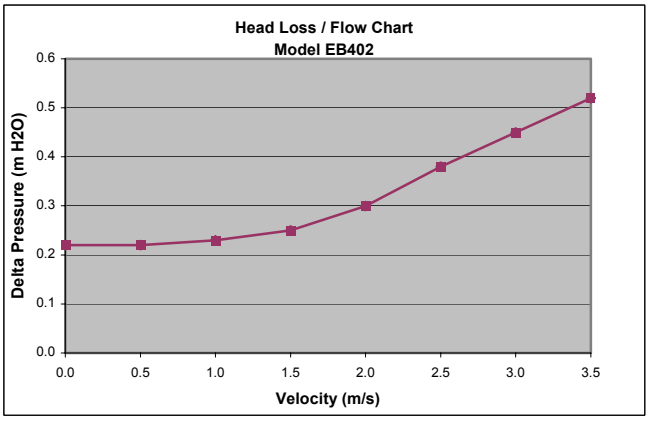
Female - DN65, 80 & 100 (2½", 3" & 4") with female screwed connections - model EB202.

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



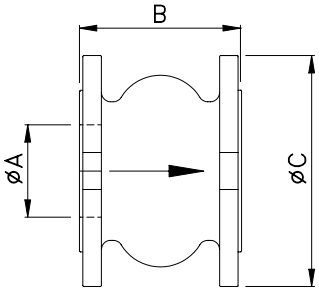
Notes
Data for DN100 flow down. Other sizes have similar characterists. Velocity based on flow of water through the bore of copper tube table X. See Flow Table to find the actual flow rate.

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_{Flange}	B_{Female}	ØC	K_V	Kg
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	EB*size*P402	402 Single Check Valve PN16
DN65-100	EB*size*FP202	202 Single Check Valve FBSPP

Note DN200 and above PN10 flanges

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Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice.
All unit-less dimensions in mm.
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