

Single Check Valve (SCV)

Model EB420 - Female BSPP – Datasheet – Page 1 of 2

Description

Single Check Valves with DZR brass Valve Bodies and compression or female BSP connections.

Spring-loaded Cartridge with resilient seat provides positive closure, no water hammer and low opening pressure.



Model EB15FP420
DN15 Single Check Valve Brass Female

Pipe Connectors

Model EB420 with compression ends is designed for copper tube. EB420 with Female BSP Parallel ends is suitable for steel pipes but can be used for a range of plastic pipes with adapters.

For protection of flexible hoses (e.g. washing machine hoses) refer to model EB235. For large check valves DN65+ (flanged and female BSPP) refer to EB402.

Specification

Pressure 16 bar max.

Temperature max.
Continuous 65° C
Intermittent 90° C

Water Regulations Approvals
Kiwa 1910705



Materials

Body DZR Brass CZ132
Spring Stainless steel
Cartridges POM
Elastomers NBR

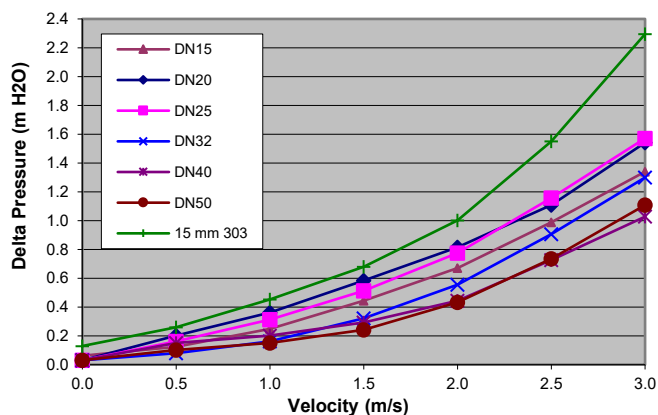


Applications

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
- Branch to steel pipes (black & galv. from supply pipe)
- Non return valve for pumps
- Domestic softening plant (common salt regeneration)

Head Loss / Flow Chart
Model EB420 (EB303 15 mm)



Notes

Velocity based on flow of water through the bore of copper tube table X. See Flow Table to find the actual flow rate.

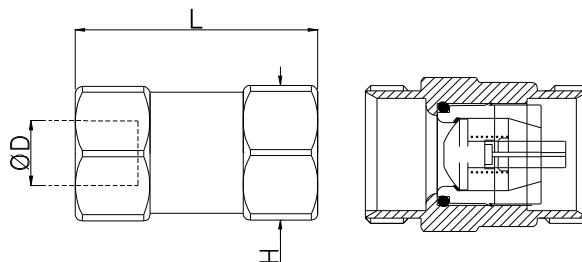
Water Regulations

Single Check Valves are suitable for backflow protection of Fluid Category 2 risks as defined in the new Water Regulations – July 1999. Non-verifiable single check valves should be replaced every 10 years.

Test points across a single check valve (EB device) are not required by the new Water Regulations.

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.

Dimensions



Size ØD	H (AF) (Hexagon)	L FBSP
15	24	45
20	32	54
25	38	64
32	46	70
40	52	76
50	65	88

Codes and Descriptions

Sizes	Code	Description
15	EB15FP420	DN15 Single Check Valve Brass Female
20	EB20FP420	DN20 Single Check Valve Brass Female
25	EB25FP420	DN25 Single Check Valve Brass Female
32	EB32FP420	DN32 Single Check Valve Brass Female
40	EB40FP420	DN40 Single Check Valve Brass Female
50	EB50FP420	DN50 Single Check Valve Brass Female

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Arrow Valves

Single Check Valve (SCV)

Model EB420 - DZR Brass Compression – Datasheet – Page 2 of 2

Description

Single Check Valves with DZR brass Valve Bodies and compression or female BSP connections.

Spring-loaded Cartridge with resilient seat provides positive closure, no water hammer and low opening pressure. Hot-stamped DZR compression nuts with fine thread minimises the torque required to make the joint.

Model 303 is an economy WRAS approved Single Check Valve available in 15 mm compression only.

Pipe Connectors

Model EB420 with compression ends is designed for copper tube. EB420 with Female BSP Parallel ends is suitable for steel pipes but can be used for a range of plastic pipes with adapters.

For protection of flexible hoses (e.g. washing machine hoses) refer to model EB235. For large check valves DN65+ (flanged and female BSPP) refer to EB402.

Specification

Pressure	16 bar max. 10 bar max (Model 303)
Temperature max. Continuous	65° C 85° C (Model 303 ONLY)
Intermittent	90° C
Water Regulations Approvals	Kiwa 1910705 WRAS 2208800 (Model 303 ONLY)



Materials

Body	DZR Brass CZ132
Spring	Stainless steel
Cartridges	POM
Elastomers	NBR

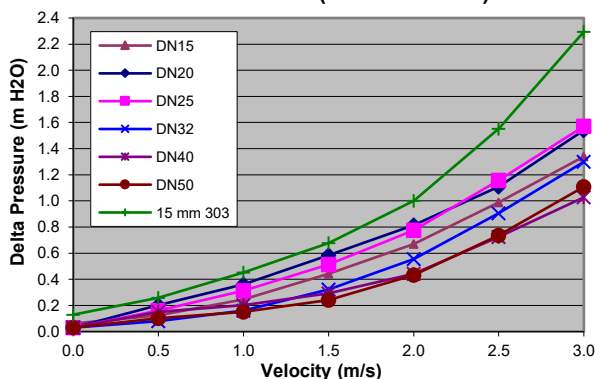


Applications

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
- Branch to steel pipes (black & galv. from supply pipe)
- Non return valve for pumps
- Domestic softening plant (common salt regeneration)

Head Loss / Flow Chart
Model EB420 (EB303 15 mm)



Notes
Velocity based on flow of water through the bore of copper tube table X. See Flow Table to find the actual flow rate.



Model EB22C420
22 mm Single Check Valve with Compression ends.

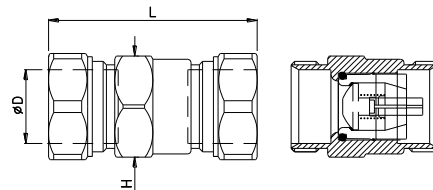
Water Regulations

Single Check Valves are suitable for backflow protection of Fluid Category 2 risks as defined in the new Water Regulations – July 1999. Non-verifiable single check valves should be replaced every 10 years.

Test points across a single check valve (EB device) are not required by the new Water Regulations.

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.

Dimensions



Model EB15C303 – 15 mm compression only - Nickel

Size ØD	H (AF) (Hexagon)	L Comp
15 mm Model 303	22	63
15 mm	22	55
22 mm	28	60
28 mm	32	67
35 mm	46	163
42 mm	52	178
54 mm	65	201

Codes and Descriptions

Sizes	Code	Description
15 (Model 303)	EB15C303	15mm Single Check Valve Nickel Comp
15	EB15C420	15mm Single Check Valve Brass Comp
22	EB22C420	22mm Single Check Valve Brass Comp
28	EB28C420	28mm Single Check Valve Brass Comp
35	EB35C420	35mm Single Check Valve Brass Comp
42	EB42C420	42mm Single Check Valve Brass Comp
54	EB54C420	54mm Single Check Valve Brass Comp

Note

Valves with compression ends from 35 mm and larger are manufactured with compression adapters (DZR brass). The BSP threads are locked and sealed with a WRAS approved anaerobic adhesive.

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