

# Verifiable Single Check Valve

## Model EA453 – Flanged - Datasheet

### Description

Verifiable Single Check Valve approved for backflow protection. The valve is servicable allowing the cartridge to be changed in-situ via the inspection cover on the top of the valve. The ductile iron body is epoxy coated and suitable for wholesome water.

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 at high as well as low pressure by an EPDM seal.

Two test cocks enable the valve to be tested and verified in service.

### Pipe Connections

Flanged - PN16 (DN65-DN150)  
PN10 (DN200-DN250)

### Specification

Pressure (working) 16 bar max up to and inc. DN150  
10 bar DN200 and above  
Opening pressure 0.1 bar  
Temperature -10° C min. to 100° C max.

### Materials

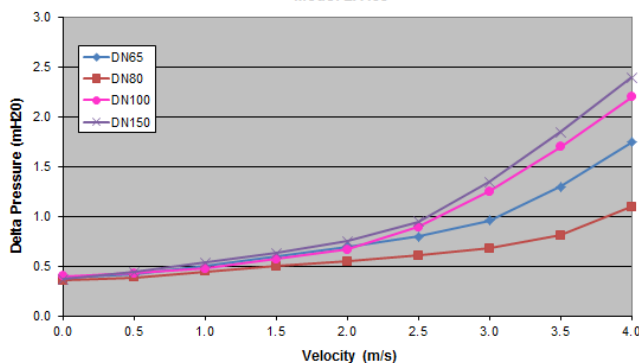
Body Ductile iron – epoxy coated (Blue)  
Springs Stainless steel 316  
Closing System DZR brass  
Elastomers EPDM  
Fasteners Stainless steel  
Water Regulations Approval 0904022

### 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 pipe
- Domestic softening plant (common salt regeneration)
- Whole site protection as specified by water company.

Head Loss / Flow Chart  
Model EA453



### Notes

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.

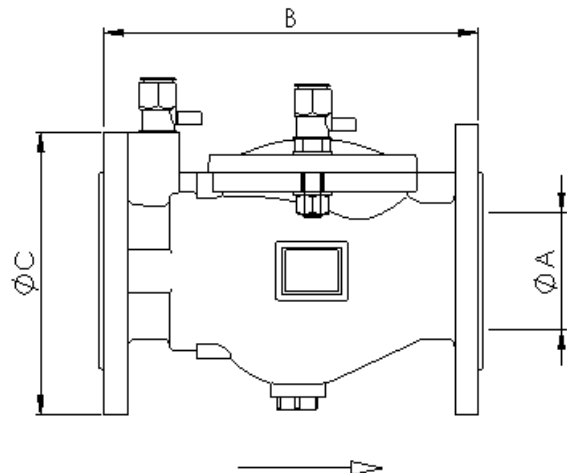


Model EA100P453

### Water Regulations

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

Single 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   | ØC  | Kg    |
|-----|-----|-----|-------|
| 65  | 240 | 185 | 11.45 |
| 80  | 260 | 200 | 14.36 |
| 100 | 300 | 222 | 20.2  |
| 150 | 400 | 285 | 42    |
| 200 | 500 | 340 | 65    |
| 250 | 600 | 400 | 94    |

### Codes and Descriptions

| Size      | Code       | Description                   |
|-----------|------------|-------------------------------|
| DN65-150  | EAsizeP453 | EA453 Single Check Valve PN16 |
| DN200-250 | EAsizeP453 | EA453 Single Check Valve PN10 |

### Arrow Valves Ltd

Tel: 01442 823123

Fax: 01442 823234

[www.arrowvalves.co.uk](http://www.arrowvalves.co.uk)

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All unit-less dimensions in mm.  
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