

# Verifiable Single Check Valve

## Model EC453 – Flanged - Datasheet

### Description

The Socla EC453 Verifiable Double Check Valve is approved for backflow protection. The valve is serviceable allowing the cartridges to be changed in-situ via the inspection covers on the top of the valve. The ductile iron body is epoxy coated and suitable for wholesome water.

To comply with WRAS regulations and fluid category 2 backflow protection the **VALVE MUST BE INSTALLED HORIZONTALLY**.

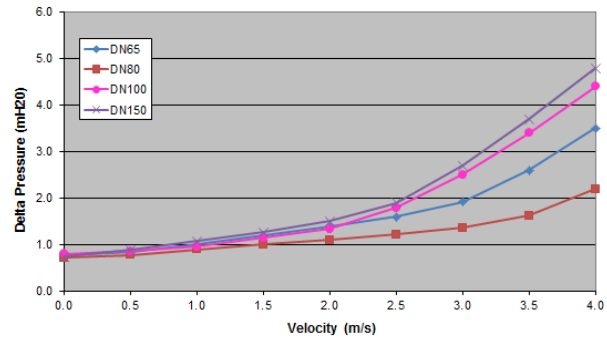
| Pipe connections (Flanged) |                   |                                                   |                                 |
|----------------------------|-------------------|---------------------------------------------------|---------------------------------|
| PN10 (DN40 / DN50)         | Flange Diameter   | mm                                                | 150 (for DN40) / 165 (for DN50) |
|                            | PCD               | mm                                                | 110 (for DN40) / 125 (for DN50) |
|                            | No. of bolt holes | #                                                 | 4                               |
|                            | Diameter of bolts |                                                   | M16                             |
| PN10 (DN65)                | Flange Diameter   | mm                                                | 185                             |
|                            | PCD               | mm                                                | 145                             |
|                            | No. of bolt holes | #                                                 | 4                               |
|                            | Diameter of bolts |                                                   | M18                             |
| PN10 (DN80)                | Flange Diameter   | mm                                                | 200                             |
|                            | PCD               | mm                                                | 160                             |
|                            | No. of bolt holes | #                                                 | 8                               |
|                            | Diameter of bolts |                                                   | M16                             |
| PN10 (DN100)               | Flange Diameter   | mm                                                | 220                             |
|                            | PCD               | mm                                                | 180                             |
|                            | No. of bolt holes | #                                                 | 8                               |
|                            | Diameter of bolts |                                                   | M16                             |
| PN10 (DN150)               | Flange Diameter   | mm                                                | 285                             |
|                            | PCD               | mm                                                | 240                             |
|                            | No. of bolt holes | #                                                 | 8                               |
|                            | Diameter of bolts |                                                   | M20                             |
| PN10 (DN200)               | Flange Diameter   | mm                                                | 340                             |
|                            | PCD               | mm                                                | 295                             |
|                            | No. of bolt holes | #                                                 | 8                               |
|                            | Diameter of bolts |                                                   | M20                             |
| PN10 (DN250)               | Flange Diameter   | mm                                                | 395                             |
|                            | PCD               | mm                                                | 350                             |
|                            | No. of bolt holes | #                                                 | 12                              |
|                            | Diameter of bolts |                                                   | M20                             |
| Specification              |                   |                                                   |                                 |
| Working Pressure           | bar               | 16 (up to and inc. DN150)<br>10 (DN200 and above) |                                 |
| Opening Pressure           | bar               | 0.1                                               |                                 |
| Temperature                | °C                | -10 (min.) to 95 (max.)                           |                                 |
| Materials                  |                   |                                                   |                                 |
| Body                       |                   | Ductile iron - epoxy coated (blue)                |                                 |
| Springs                    |                   | Stainless Steel 316                               |                                 |
| Closing System             |                   | DZR Brass                                         |                                 |
| Elastomers                 |                   | EPDM                                              |                                 |
| Fasteners                  |                   | Stainless Steel                                   |                                 |
| Water Reg. Approval Status |                   | 2004711                                           |                                 |

### Applications

Backflow prevention for fluids in categories 1 – 3 (refer to Schedule 1 of Water Regulations July 1999). Fluid Category 3 includes -

- Water softening – commercial (common salt)
- Whole site protection – where Fluid Category 3 required
- Application deemed category 3 by the water company

Head Loss / Flow Chart  
Model EC453



#### 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.

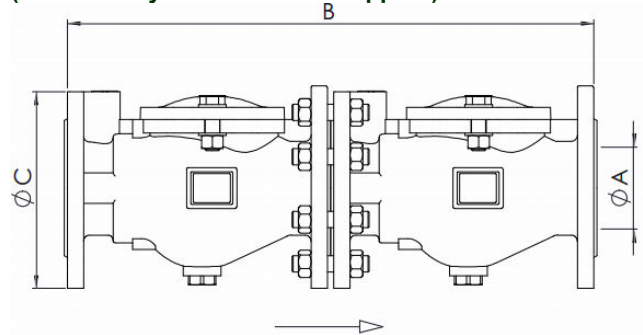


Model EC100P453

### Water Regulations

Double Check Valves provide backflow protection for Fluid Category 3 risks under the July 1999 Water Regulations.

They must not be buried but can be installed in below-ground chambers. While "Point of Use" protection is standard, whole site or zone protection is also acceptable (**check with your local water supplier**).



| ØA (DN) | B (mm) | ØC (mm) | Kg  |
|---------|--------|---------|-----|
| 40/50   | 402    | 165     | 17  |
| 60/65   | 482    | 185     | 25  |
| 80      | 522    | 200     | 31  |
| 100     | 602    | 222     | 43  |
| 150     | 802    | 285     | 86  |
| 200     | 1002   | 340     | 132 |
| 250     | 1202   | 400     | 190 |

### Codes and Descriptions

| Size      | Code       | Description                   |
|-----------|------------|-------------------------------|
| DN65-150  | ECsizeP453 | EC453 Double Check Valve PN16 |
| DN200-250 | ECsizeP453 | EC453 Double Check Valve PN10 |



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All unit-less dimensions in mm.  
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