# Double Check (Non Return) Valve Model ED402 / ED202 — Flanged or Female - Datasheet

### **Description**

Double 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 commercial water softeners of the common salt type.

## **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 ED202.

## **Specification**

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

10 bar DN200 and above

Opening pressure (DN100) *larger sizes more, smaller less* 0.048 bar (flow down), 0.074 bar (horizontal), 0.1 bar (up) Temperature -10° C min. to 100° C max.

#### **Materials**

Body Cast iron – epoxy coated (Blue)

Springs Stainless steel

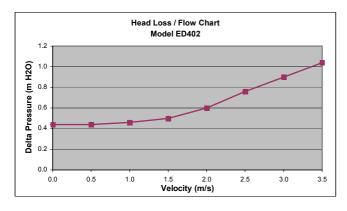
Mechanism Bronze Elastomers EPDM

Fasteners Stainless steel

#### **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



#### 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.



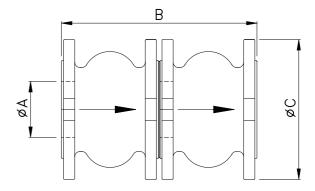
Model ED100P402

## **Water Regulations**

Double Check Valves are suitable for backflow protection of Fluid Category 3 risks as defined in the new Water Regulations – July 1999.

Test points between the check valves (on DCV) are no longer required by the Water Regulations. Each check valve operates independently – viz the spindle of the upstream unit will not open the second valve.

Double 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  | Kg |
|-----|---------------------|---------------------|-----|----|
| 40  | 172                 | -                   | 150 | 10 |
| 50  | 202                 | -                   | 165 | 13 |
| 65  | 242                 | 340                 | 185 | 18 |
| 80  | 282                 | 400                 | 200 | 22 |
| 100 | 342                 | 480                 | 220 | 31 |
| 150 | 462                 | -                   | 285 | 68 |

Note the flanged valves are supplied as a single unit (except DN150), with stainless fasteners and EPDM gasket. The female valves have a galvanised tapered nipple.

#### **Codes and Descriptions**

| Size     | Code        | Description                  |
|----------|-------------|------------------------------|
| DN40-500 | EDsizeP402  | 402 Double Check Valve PN16  |
| DN65-100 | EdsizeFP202 | 202 Double Check Valve FBSPP |

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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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