

# Double Check Valve (DCV)

## Model ED316 - Stainless Steel - Low Loss - Flat-Faced - Datasheet

### Description

Double Check Valves with 316 stainless steel valve bodies suitable for all pipe materials - no risk of galvanic corrosion. Flat-faced connectors allow direct connection to the pipe without the need for sealants or additional adapters.

Oversize, high-flow Cartridges provide **exceptionally** low head-loss characteristics. E.g. pressure drop for the 15 mm DCV at 3 m/s pipe velocity is just 0.1 bar compared with 0.5 bar for conventional valves.

Flat-faced union connectors with soft washers allow valves to be easily installed to new or existing pipes without the need to spring pipes apart. Valves are demountable.

Sprung-loaded Cartridges with resilient seats provide positive closure, no water hammer and low opening pressure.

### Pipe Connectors

The ED316 is designed primarily for the stainless press-fit (Mapress) system. Refer to the Pipe Connectors – Flat-Faced Data Sheet. These are available from Arrow Valves - Copper – Solder Unions or Press-Fit (Mapress/Yorkshire) Stainless – Use Press-Fit Unions (Mapress/Yorkshire) Friatherm – Use C-PVC Unions Stainless – For schedule 80, use socket or unions For copper use model ED132.

### Specification

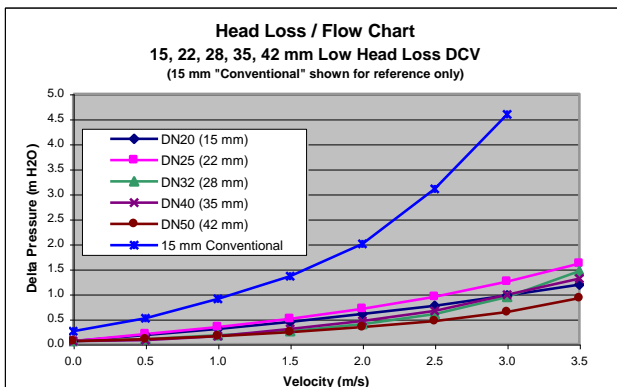
Pressure 16 bar max.  
 Test Pressure 16 bar (reverse)  
 Temperature max. Continuous - 65° C Intermittent - 90° C  
 Approval KIWA UK A030560 (complete)

### Materials

Body Stainless steel 316L  
 Circlips, Springs Stainless steel  
 Cartridges POM  
 Elastomers NBR

### Applications

Backflow prevention for fluids in categories 1 – 3 (refer to Schedule 1 of Water Regulations July 1999)  
 Supply to flats and apartments  
 Domestic Washbasins, Baths and Showers  
 Domestic Clothes and Dishwashing machines (houses only)  
 CWF Primary and Heating circuits (houses only)  
 Hose Union taps (house gardens only)



### Notes

Velocity based on flow of water through the bore of copper tube table X. "Conventional" is 15 mm compression valve with Watts CO015 cartridges. See Flow Table to find the actual flow rate.



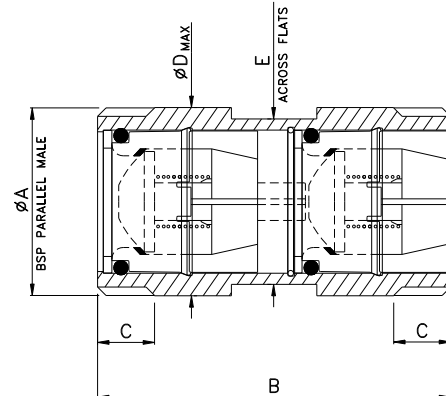
Model ED20MP316. Low head-loss 316 stainless DCV

### Water Regulations

Double Check Valves are suitable for backflow protection of Fluid Category 3 risks as defined in the new Water Regulations – July 1999. A DCV should be fitted as whole site protection to the supply of separately occupied premises (whether or not they are separately chargeable). In other cases, a DCV should be fitted at points of use – i.e. one DCV per appliance (Schedule 2, paragraph 15).

DCVs should not be buried. Test Points between the check valves are no longer required. Hose union taps with integral check valves are no longer acceptable for new installations. The DCV must now be fitted inside and frost protected.

Many applications listed as Fluid Category 3 (requiring DCV) become Fluid Category 4 (requiring RPZ – available from Arrow Valves) when used for commercial (non house) situations – e.g. heating systems.



Pipe Size	ØA	B	C	ØD	E
15	3/4"	48	9	27	23
22	1"	67	12	33	29
28	1 1/4"	90	14	42	38

Larger sizes available to order

### Codes and Descriptions

Size	Code	Description
DN20	ED20MP316	316 Double Check Stainless Flat-Face
DN25	ED25MP316	316 Double Check Stainless Flat-Face
DN32	ED32MP316	316 Double Check Stainless Flat-Face

### Notes

Other pipe connectors available – see Pipe Connectors Data Sheet.

### Arrow Valves Ltd

Tel: 01442 823123 Fax: 01442 823234  
 www.arrowvalves.co.uk

Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice. All unit-less dimensions in mm. © Copyright Arrow Valves Ltd 2001-2019

