

## BA295I

### Stainless Steel Backflow Preventer

#### Product specification sheet



#### Construction

The backflow preventer consists of:

- Housing
- Integral strainer, mesh size approx. 0.6 mm
- Valve cartridge with integral check valve and discharge valve
- Outlet check valve
- Three ball valves for the connection of a differential pressure gauge
- Discharge connection

#### Materials

- Stainless steel housing
- High-quality synthetic material valve cartridge
- High-quality synthetic material or stainless steel check valves
- Stainless steel ball valves
- Seals in NBR and EPDM
- High quality synthetic material discharge connection

#### Application

Backflow preventers of this type are suitable for the protection of drinking water systems against back pressure, back flow and back syphonage.

They can be used for residential buildings, industrial and commercial purposes within the scope of their specification.

Fluids up to and including liquid category 4 to EN 1717 are protected.

#### Special Features

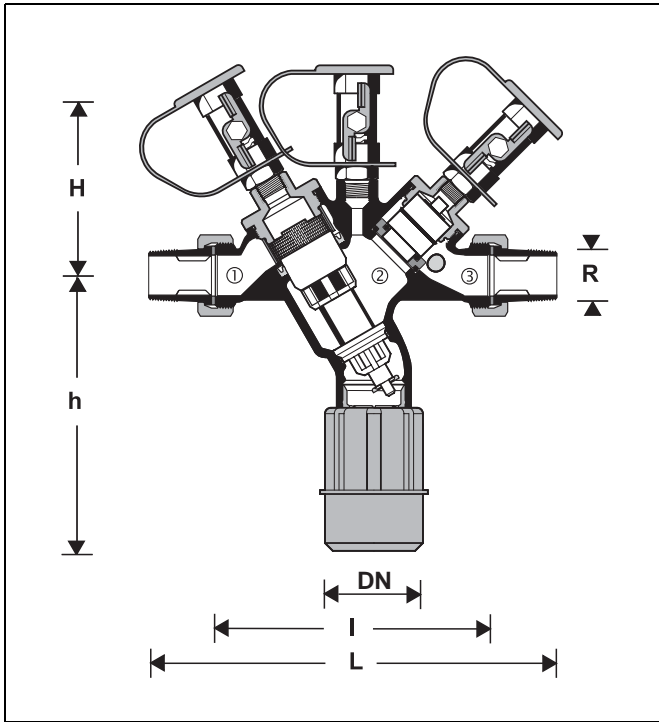
- DVGW-approval requested
- Stainless steel construction
- Optimal protection of the drinking water supply system
- Integral inlet strainer
- Inlet check valve and discharge valve are combined in one cartridge
- Minimal maintenance required, because the valve cartridge is completely replaceable
- Optimized design prevents water stagnation
- Easy access to all internal components
- Low pressure loss and high flow rate
- Triple security - two check valves and a discharge valve separate the backflow preventer into three pressure zones
- Noise tested to class 2
- Meets KTW recommendations for potable water

#### Range of Application

|                        |          |
|------------------------|----------|
| Medium                 | Water    |
| Maximum inlet pressure | 10.0 bar |
| Minimum inlet pressure | 1.5 bar  |

#### Technical Data

|                            |   |
|----------------------------|---|
| Installation position      | Horizontal with discharge valve downwards |
| Max. operating temperature | 65°C                                      |
| Discharge pipe connection  | DN50 for connection sizes 1/2" - 1"       |
|                            | DN70 for connection sizes 1 1/4" - 2"     |
| Connection size            | 1/2" - 2"                                 |



**Method of Operation**

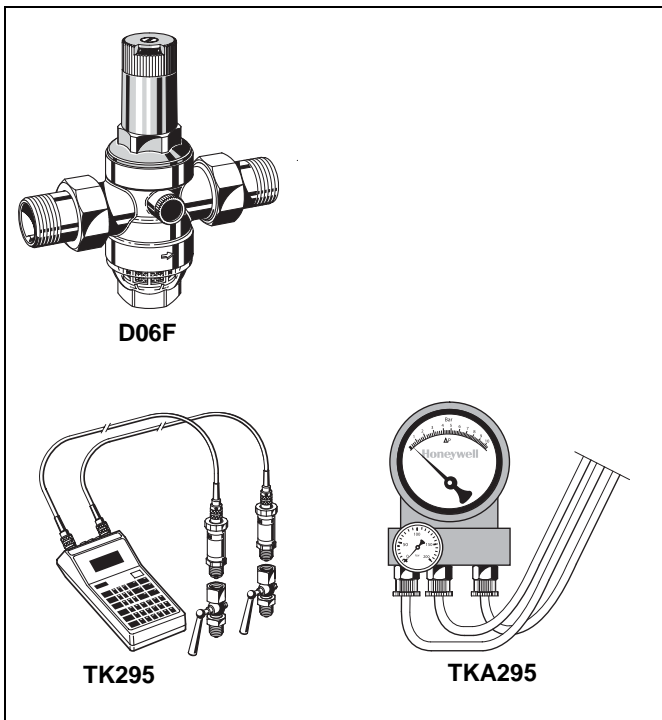
BA type backflow preventers are divided into three pressure zones. The pressure in zone ① is higher than in zone ②, which in turn is higher than in zone ③. A discharge valve is connected to zone ② which opens at the latest when the differential pressure between zones ① and ② falls to 0.14 bar. The water from zone ② discharges to atmosphere. In this way the danger of back pressure or back syphonage into the supply network is prevented. The pipework connection is interrupted and the drinking water network is protected.

**Options**

BA295-... A = Standard version with connections



|                       |            |           |      |     |        |        |     |
|-----------------------|------------|-----------|------|-----|--------|--------|-----|
| Connection size       | R          | 1/2"      | 3/4" | 1"  | 1 1/4" | 1 1/2" | 2"  |
| Weight                | approx. kg | 1.8       | 1.8  | 1.8 | 5.7    | 5.8    | 5.9 |
| Dimensions            | mm         |           |      |     |        |        |     |
|                       | L          | 225       | 225  | 225 | 327    | 348    | 348 |
|                       | I          | 146       | 146  | 146 | 231    | 231    | 231 |
|                       | H          | 99        | 99   | 99  | 153    | 153    | 153 |
|                       | I          | 137       | 137  | 137 | 172    | 172    | 172 |
|                       | DN         | 50        | 50   | 50  | 70     | 70     | 70  |
| DIN/DVGW Approval No. |            | requested |      |     |        |        |     |



**Accessories**

**D06F Pressure reducing valve**

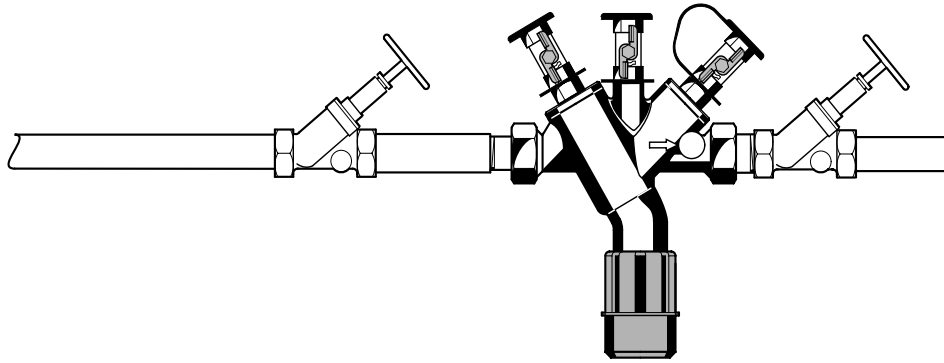
Noise protected pressure reducing valve with setting scale. Maximum inlet pressure 16 bar, with brass filter bowl 25 bar, outlet pressure range 1.5 - 6.0 bar  
 A = With clear filter bowl up to 40 °C / 16 bar  
 B = With brass filter bowl up to 70 °C / 25 bar

**TK295 Test kit**

Electronic pressure measuring device with digital indicator, runs by a battery. With case and accessories, ideal for inspection and maintenance of backflow preventer type BA.

**TKA295 Test kit**

Analogue pressure measuring device with differential pressure display. With case and accessories, ideal for inspection and maintenance of backflow preventer type BA.

**Installation Example****Installation Guidelines**

- Install shutoff valves before and after backflow preventer
- Install in horizontal pipework with the discharge valve downwards
- Ensure good access
  - Simplifies maintenance and inspection
- Backflow preventers of this type have an integral strainer which protects the device from the ingress of dirt
- Do not install in places where flooding can occur
- The installation environment should be protected against frost and ventilated well
- Install discharge pipework which has adequate capacity

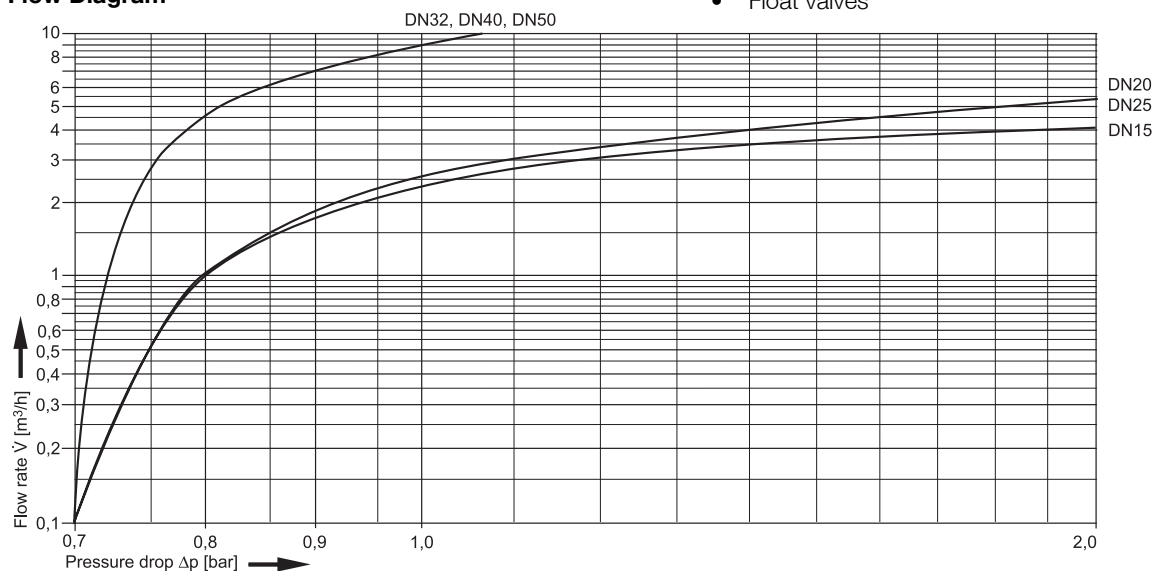
**Typical Applications**

Backflow preventers are ideally suited for industrial and commercial applications.

However they can also be used for supplies to residential buildings within the scope of their specification.

The following are some typical applications:

- Chemical mixing plant
- Chemical cleaning appliances
- Softening and deacidification plant without DVGW approval. Regeneration with and without acid and alkaline solutions. Disinfection with Formalin
- Film development plant without DVGW certification
- Galvanic bath
- Boilers and automatic pressure fermentation equipment
- Heating filling systems, water with inhibitors
- High pressure cleaners with chemical supplementation
- Laboratory workbenches
- Milking machines
- Float valves

**Flow Diagram**



**Spare Parts**

**Backflow preventer BA295I, from 2006 onwards**

| No. | Description        | Dimension   | Part No.     |
|-----|--------------------|-------------|--------------|
| 1   | Cartridge insert   | 1/2" - 1"   | KE295I-1/2   |
|     | complete           | 1 1/4" - 2" | KE295I-1 1/4 |
| 2   | Check valve insert | 1/2" - 1"   | RV295I-1/2   |
|     | complete           | 1 1/4" - 2" | RV295I-1 1/4 |

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