

BA295D-3/4WHD

Retrofit Backflow Preventer

for tap fittings and armatures

APPLICATION

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

They are used to protect the water tapping of household taps, outside garden taps or filling taps.

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

SPECIAL FEATURES


- Integrated pressure reducing valve ensures constant outlet pressure
- Rotatable housing - connection always in the right position
- High speed maintenance: replacement kit, all BA functional parts in one housing, replacement/maintenance without time consuming test procedure for the backflow preventer
- High speed installation: easy and quick installation/retrofit
- Optimized outlet position, thereby bending of the connected flexible tube is prevented
- Integrated inlet strainer
- Optimal protection of the drinking water supply system
- Inlet check valve and discharge valve are combined in one cartridge
- Strainer and the valve cartridge are completely replaceable without draining the system
- Optimized design prevents water stagnation in normal operation
- Compact construction
- Low pressure loss and high flow rate
- Meets KTW regulations for drinking water
- Each tapping can be protected separately
- Pivoted top connection



TECHNICAL DATA

Media	
Medium:	Drinking water
Connections/Sizes	
Connection sizes:	3/4"
Discharge pipe connection:	DN40
Pressure values	
Max. inlet pressure:	10 bar
Min. pressure drop:	1.5 bar
Outlet pressure:	1 - 4 bar adjustable
Preset outlet pressure:	1.5 bar ± 0.3 bar
Operating temperatures	
Max. operating temperature medium:	65 °C
Specifications	
Installation position:	Vertical with discharge valve downwards

CONSTRUCTION

Overview	Components	Materials	
	1	Pressure reducing valve insert with adjustment knob	High-quality synthetic material
	2	Upper housing part with test socket incl. plug	Dezincification-resistant brass
	3	Pressure gauge	High-quality synthetic material
	4	Lower housing part with <ul style="list-style-type: none"> • Test socket incl. plug • Pressure gauge • Strainer (mesh size 0.5 mm) • Valve cartridge with integral check valve and discharge valve • Outlet check valve • Retaining clip • Seal brackets 	High-quality synthetic material BA cartridge and check valve, housing dezincification-resistant brass
	5	Threaded adapter G ³ / ₄ to G1	Dezincification-resistant brass

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 drops to 0.14 bar. The water from zone 2 discharges to atmosphere, both check valves close and therefore separate zone 2 from zone 1 and 3. 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.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	-15 °C
Max. ambient temperature:	70 °C
Min. ambient relative humidity:	15 % *
Max. ambient relative humidity:	95 % *

*non condensing

INSTALLATION GUIDELINES

Setup requirements

- Direct installation under distributor or water tap with discharge connection downwards
- Backflow preventers of this type have an integral strainer which protects the device from the ingress of dirt. With highly polluted water a fine filter should be installed upstream to ensure the correct function of the device
- The installation location should be protected against frost. For use on outside taps, the backflow preventer has to be dismantled if there may be danger of frost
- Do not install in places where flooding can occur
- Install discharge pipework which has adequate capacity
- Requires regular maintenance in accordance with EN 806-5

Installation Example

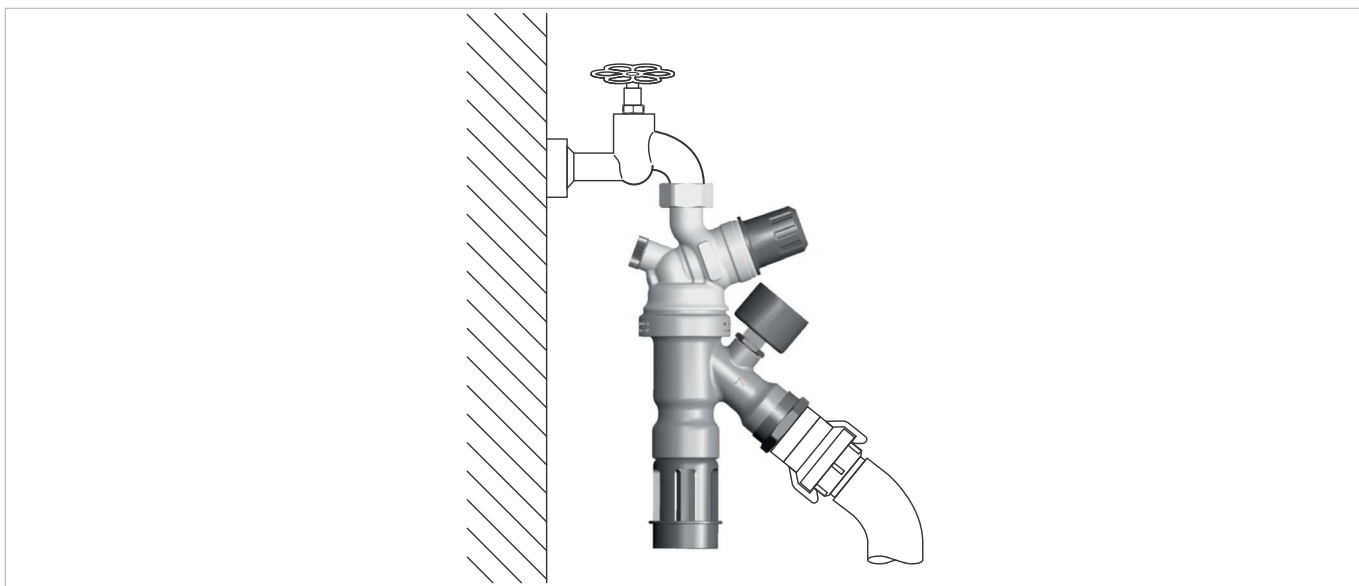


Fig. 1 Standard installation example for the backflow preventers

TECHNICAL CHARACTERISTICS

Pressure drop characteristics

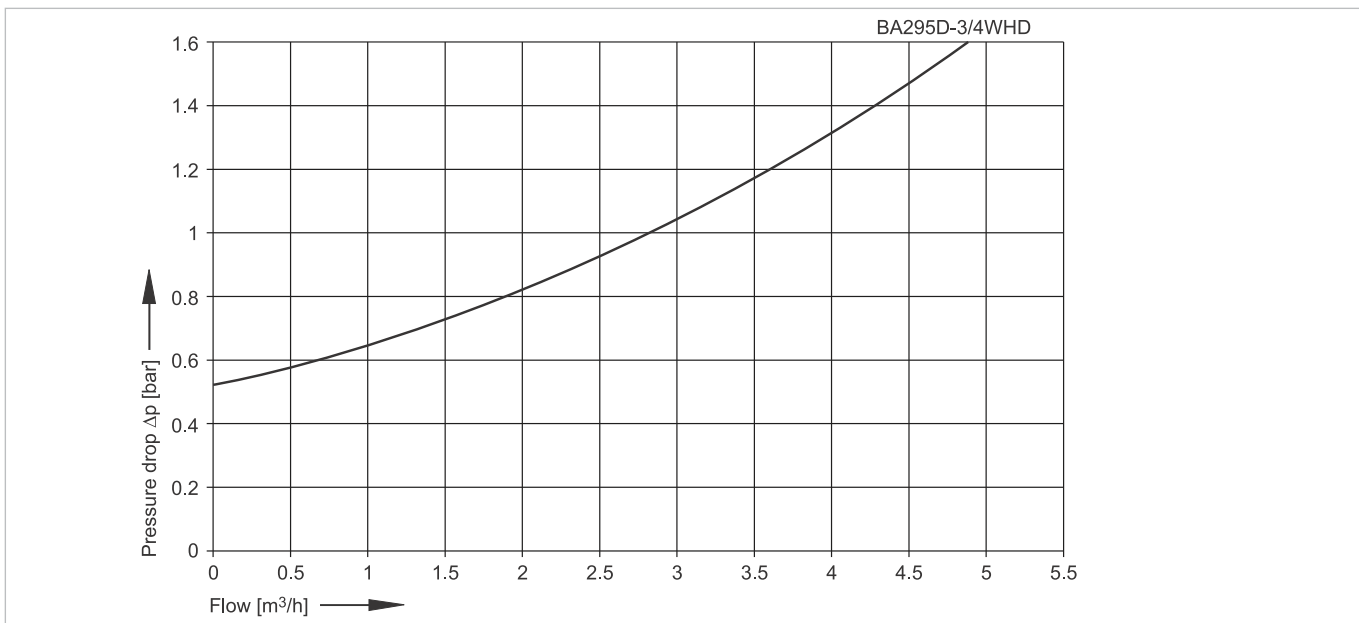
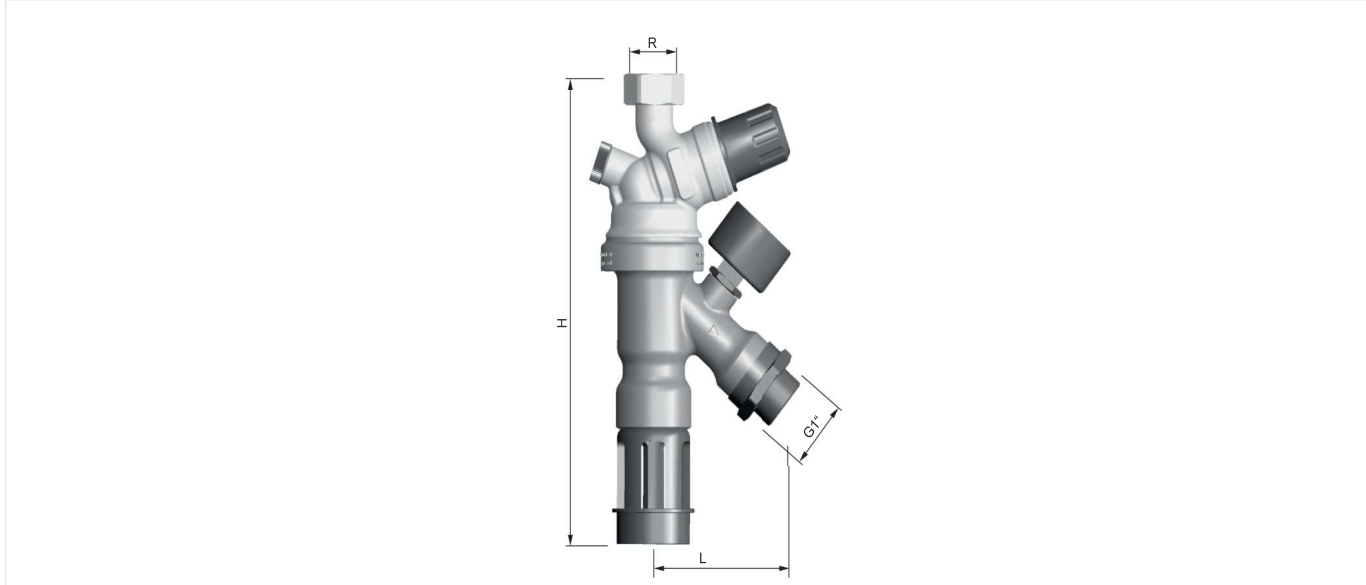


Fig. 2 Pressure drop within the valve in dependency of the flow rate and the used connection size

DIMENSIONS

Overview



Parameter		Values
Connection sizes:	R	3/4"
Nominal size diameter:	DN	20
Weight:	kg	1.2
Dimensions:	L	52
	H	232
DVGW registration number:		requested

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.




Options

The valve is available in the following sizes: 3/4".

- standard
- not available

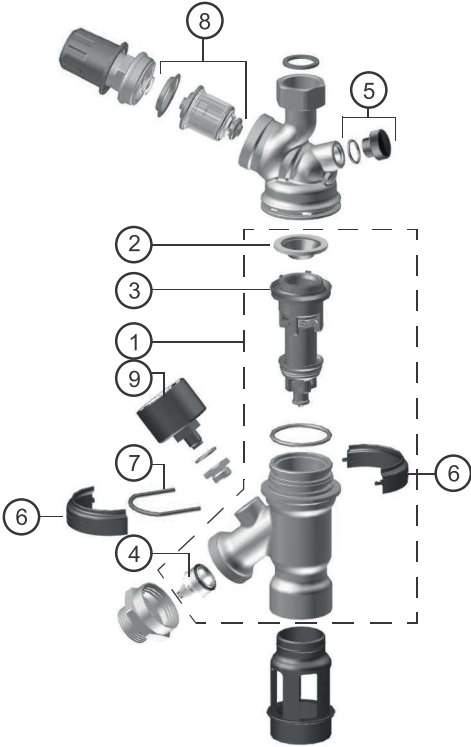
		BA295D-3/4WHD
Connection type:	Standard version with G 3/4" (ISO 228-1) threaded connection on inlet and G 1" (ISO 228-1) threaded connection on outlet, 1" IG to 3/4" AG threaded adapter included, chrome plated housing, with discharge pipe connection	•

Accessories

	Description	Dimension	Part No.
	TK295 Test kit Electronic pressure measuring device with digital indicator, battery-operated. With case and accessories, ideal for inspection and maintenance of backflow preventer type BA.		
			TK295
	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.		
			TKA295
	WS295xxx Maintenance Set Maintenance-set for BA295STN and BA295D type backflow preventers for use with Test kit TK295 resp. TKA295		
			WS295STN

Spare Parts

Backflow preventer BA295D-3/4WHD, from 2016 onwards

Overview	Description	Dimension	Part No.
	1 Replacement unit		AE295D-C
	2 Strainer		S295D
	3 Cartridge insert complete		0903733
	4 Check valve insert	3/4"	2110200
	5 Set of blanking plugs (5 pcs.)		S06K-1/4
	6 Seal brackets (10pcs.)		PS295D
	7 Retaining clip (10 pcs.)		HK295D
	8 Valve insert complete	1/2"	0904177
	9 Pressure gauge		M18K-A04