



# Braukmann BA295I

## Stainless Steel Backflow Preventer

### APPLICATION

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

### APPROVALS

- DVGW
- KIWA
- BELGAQUA
- SVGW

### SPECIAL FEATURES

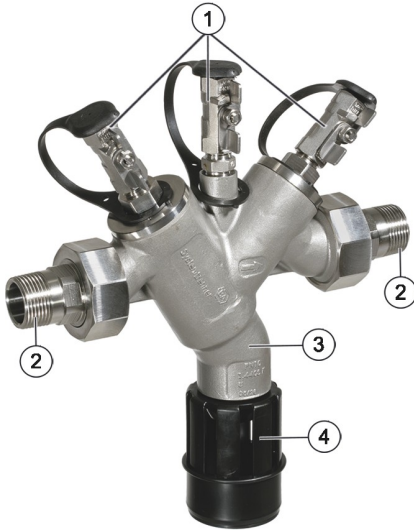
- Stainless steel construction
- Optimal protection of the drinking water supply system
- Integrated inlet strainer
- Inlet check valve and discharge valve are combined in one cartridge
- Minimal maintenance required, because the valve cartridge is completely replaceable
- Optimized design prevents water stagnation in normal operation
- Easy access to all internal components
- Low pressure loss and high flow rate
- ACS certified
- All materials are KTW approved
- Approved by TÜV LGA for low noise, Group 1 without limitations



### TECHNICAL DATA

<b>Media</b>	
Medium:	Drinking water
<b>Connections/Sizes</b>	
Connection size:	1/2" - 2"
Discharge pipe connection:	DN50 for connection sizes 1/2" - 1" DN70 for connection sizes 1 1/4" - 2"
<b>Pressure values</b>	
Inlet pressure:	1.5 bar - 10 bar
<b>Operating temperatures</b>	
Max. operating temperature medium:	65 °C
<b>Specifications</b>	
Installation position:	Horizontal with discharge valve downwards

## CONSTRUCTION

Overview	Components	Materials	
	<b>1</b>	Three ball valves for the connection of a differential pressure gauge	Stainless steel
	<b>2</b>	Connection fittings	Stainless steel
	<b>3</b>	Housing	Stainless steel
	<b>4</b>	Discharge connection	DN15 - 25 High-quality synthetic material DN32 - 50 Red bronze
<b>Not depicted components:</b>			
	Integral strainer, mesh size approx. 200 µm	Stainless steel	
	Valve cartridge with integral check valve and discharge valve	High-quality synthetic material	
	Seals	NBR, EPDM	
	Outlet check valve	High-quality synthetic material or stainless steel	

## 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 siphonage 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:	5 °C
Max. ambient temperature:	55 °C
Min. ambient relative humidity:	25 % *
Max. ambient relative humidity:	85 % *

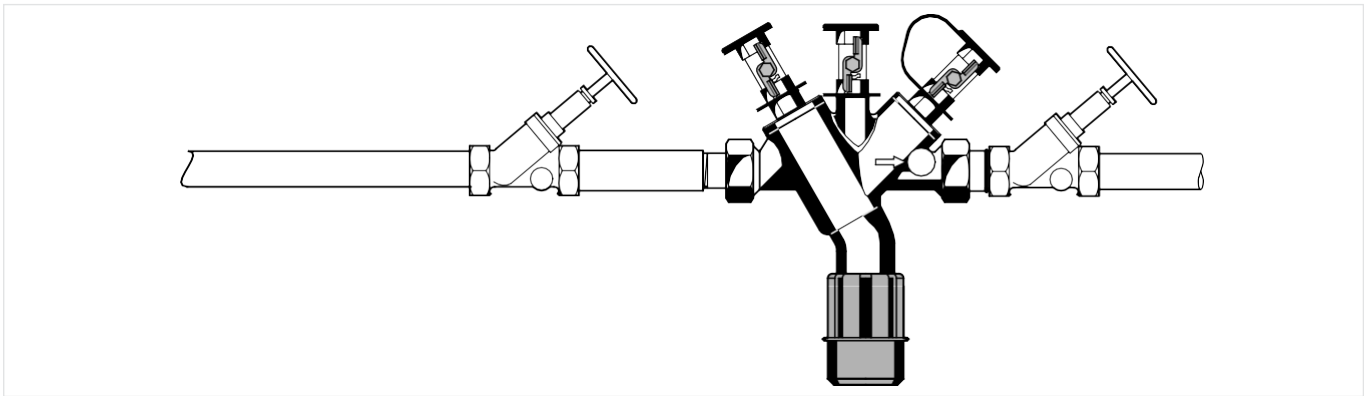
\*non condensing

## INSTALLATION GUIDELINES

### Setup requirements

- Install shut-off 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
- In order to avoid flooding, it is recommended to arrange a permanent, professionally dimensioned wastewater connection
- These armatures need to be maintained regularly

**Installation Example**



**TECHNICAL CHARACTERISTICS**

**Pressure drop characteristics**

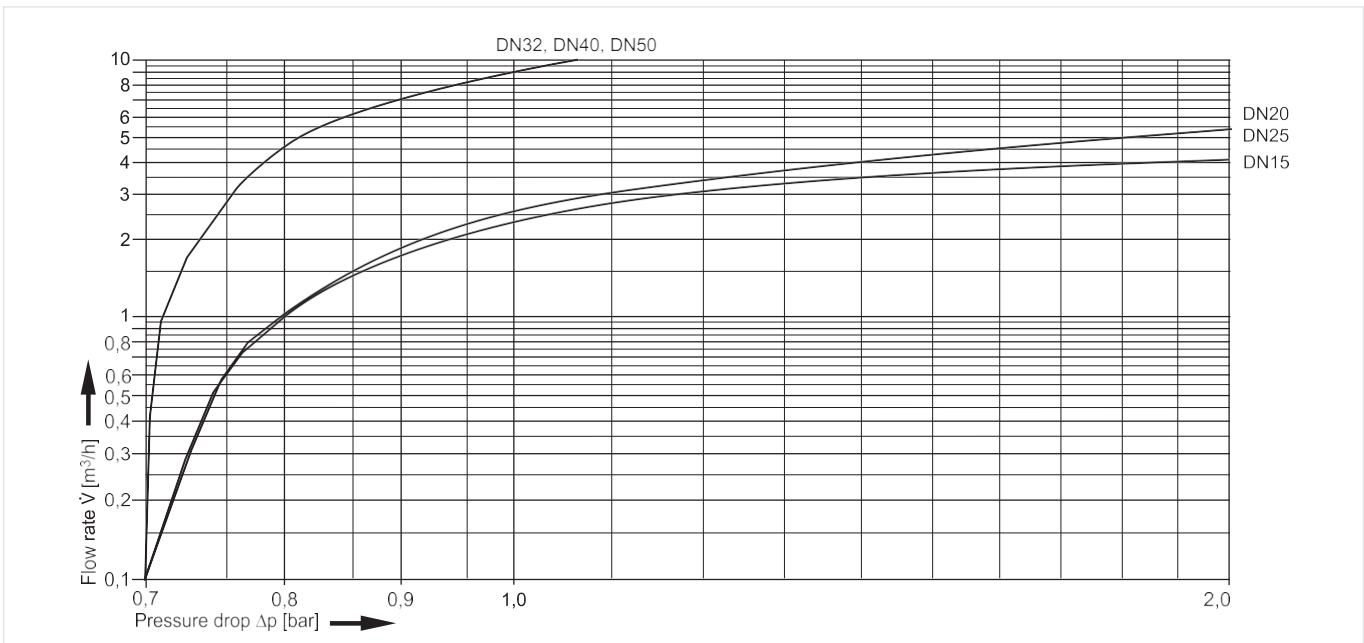
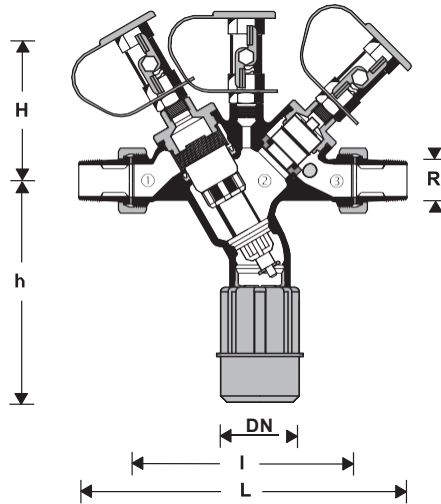


Fig. 1 Pressure drop within the valve in dependency of the flow rate and the used connection size

## DIMENSIONS

### Overview



Parameter		Values					
Connection size: (with connection set)	R	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Nominal size: (without connection set)	R <sub>BA</sub>	1"			2"		
Nominal size diameter:	DN	50	50	50	70	70	70
Weight:	kg	1.6			5.0		
Dimensions:	L	225	225	225	327	348	348
	l	146	146	146	231	231	231
	H	99	99	99	153	153	153
	h	137	137	137	172	172	172
DVGW registration number:	NW-6305 BN 0290						

Note: All dimensions in mm unless stated otherwise.

Note: 1 to 3 see chapter Method of operation

## 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 backflow preventer is available in the following sizes: 1/2", 3/4", 1", 1 1/4" 1 1/2" and 2".


- standard
- not available

		BA295I-...A
Connection type:	Standard version with threaded male connections	•

Note: ... = space holder for connection size

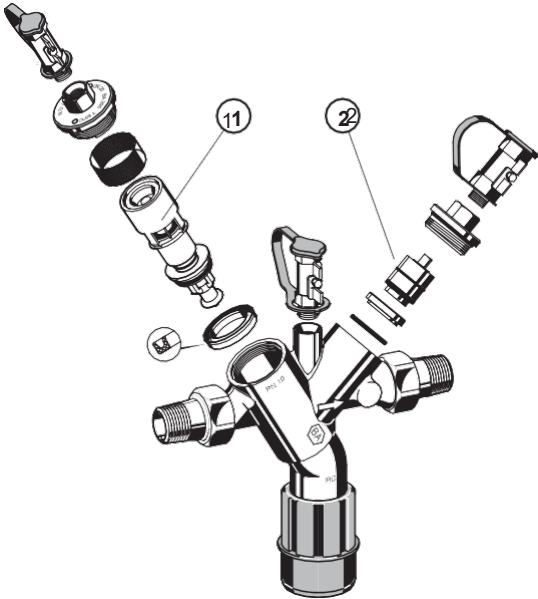
Note: Ordering number example for 1" and type A valve: BA295I-1A

**Accessories**

	Description	Dimension	Part No.
	<b>TKA295 Test kit</b> Analogue pressure measuring device with differential pressure display. With case and accessories, ideal for inspection and maintenance of backflow preventer type BA.		
			TKA295

**Spare Parts**

Backflow preventer BA295I, from 2006 onwards

Overview	Description	Dimension	Part No.
	<b>1 Cartridge insert complete</b>		
		1/2" - 1"	KE295I-1/2
		1 1/4" - 2"	KE295I-11/4
	<b>2 Check valve insert complete</b>		
		1/2" - 1"	RV295I-1/2
		1 1/4" - 2"	RV295I-11/4