# resideo Backflow preventers

# Braukmann BA295S

# **Backflow Preventer**

Compact construction with threaded connectors

### **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
- NF
- WRAS
- KIWA
- BELGAQUA
- VR

### **SPECIAL FEATURES**

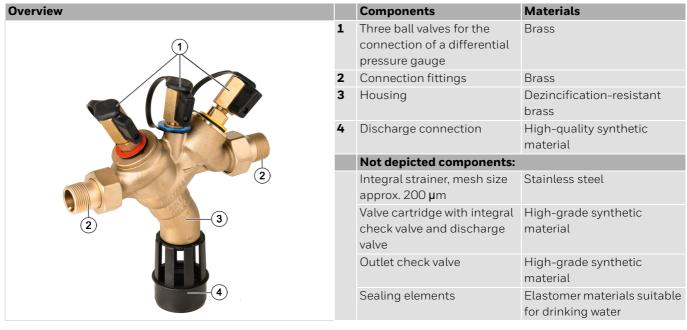
- Approved according to EN 12729 except BA295S-1B
- Optimal protection of the drinking water supply system
- Integrated inlet strainer
- Inlet check valve and discharge valve are combined in one cartridge
- Low maintenance effort cartridge insert and valve insert are completely replaceable
- Optimized design prevents water stagnation in normal operation
- Compact construction
- 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 limitation



### **TECHNICAL DATA**

Media						
Medium:	Drinking water					
Connections/Sizes						
Connection size:	1/2" - 2"					
Discharge pipe connection:	DN50 for connection sizes $^{1}/_{2}$ " - $1^{1}/_{4}$ " DN70 for connection sizes $1^{1}/_{2}$ " - $2$ "					
Pressure values						
Inlet pressure:	1.5 bar - 10.0 bar					
Operating temperatures						
Max. operating temperature medium:	65 °C					
Specifications						
Installation position:	Horizontal with discharge valve downwards					

#### CONSTRUCTION



#### **METHOD OF OPERATION**

BA type backflow preventers are divided into three pressure zones. The pressure in zone① is higher than in zone② , which in turn is higher than in zone③ . A discharge valve is connected to zone② which opens at the latest when the differential pressure between zones① and② drops to 0.14 bar. The water from zone② discharges to atmosphere, both check valves close and therefore separate zone② from zone① and③ . 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:	5°C
Max. ambient temperature:	55 °C
Min. ambient relative humidity:	25 % *
Max. ambient relative humidity:	85 % *

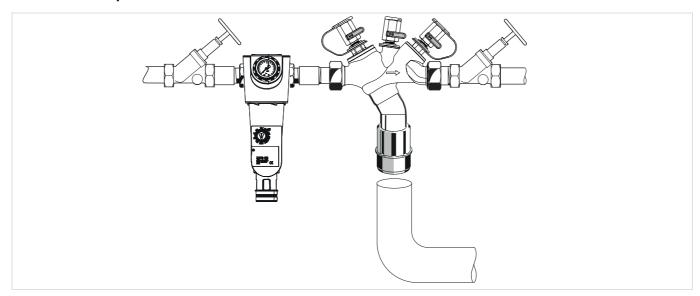
<sup>\*</sup>non condensing

#### **INSTALLATION GUIDELINES**

#### **Setup requirements**

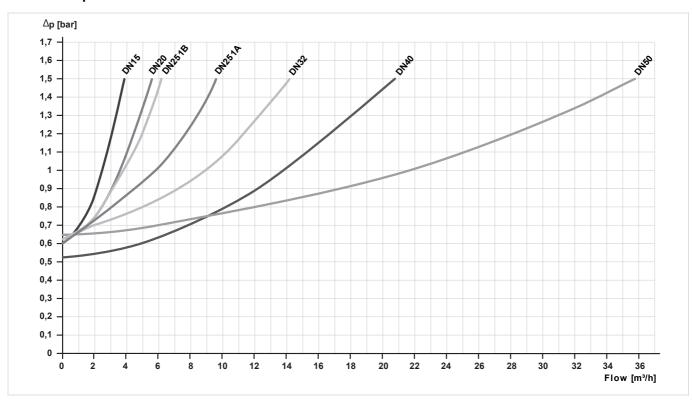
- Install shut-off valves before and after backflow preventer
- Install in horizontal pipework with the discharge valve downwards
- Ensure good access
  - Simplifies maintenance and inspection
- If a fine filter is not installed in the drinking water system, the installation of a filter with a mesh width of 100  $\mu\text{m}$  is recommended in front of the backflow preventer
- In case of inlet-pressure fluctuations or a inlet pressure over 10 bar, we recommend to install a pressure reducing valve upstream of the backflow preventer
- 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**



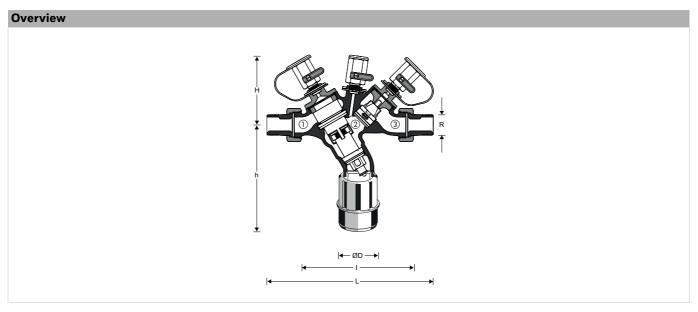
# **TECHNICAL CHARACTERISTICS**

## **Pressure drop characteristics**



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

### **DIMENSIONS**



Parameter		Values						
Connection size:	R	1/2"	3/4"	1", B-version	1", A-version	1 <sup>1</sup> /4"	11/2"	2"
k <sub>vs</sub> -value:	m <sup>3</sup> /h	2.4	3.5	3.5	5.8	8.5	13.5	21.0
Weight:	kg	1.6	1.8	2.1	2.8	3.3	5.9	7.2
Dimensions:	L	195	208	225	247	272	322	348
	1	135	140	146	168	180	226	231
	Н	88	88	88	103	103	126	126
	h	143	143	143	174	174	217	217
	ØD	50	50	50	50	50	70	70

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 backflow preventer is available in the following sizes:  $^{1}/_{2}$ ",  $^{3}/_{4}$ ",  $^{1}$ ",  $^{1}/_{4}$ "  $^{1}/_{2}$ " and  $^{2}$ ".

- standard
- not available

		BA295SA	BA295S-1B	BA295SAGB
Connection type:	Standard version acc. EN 12729 with threaded connections $^{1}/_{2}$ " - 2"	•	-	-
	Special version with threaded connections 1"	-	•	-
	Standard version acc. EN 12729, all materials acc. WRAS, with threaded connections $^1/_2\hbox{{\tiny "}}$ - $2\hbox{{\tiny "}}$	-	-	•

Note: ... = space holder for connection size

Note: Ordering number example for 1" and type A valve: BA295SLFA-1A

#### **Accessories**

	Description	n	Dimension	Part No.
TK295		<b>Test kit</b> Electronic pressure measuring device with digital indicator, battery-operated. With case and accessories, ideal for inspection and maintenance of backflow preventer type BA.		
				TK295

#### **Spare Parts**

Backflow preventer BA295S



	Description	Dimension	OSNo.				
1	Cartridge insert complete						
		<sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1" B-Version	0904141				
		1" A-Version, 1 <sup>1</sup> / <sub>4</sub> "	0904142				
		1 <sup>1</sup> / <sub>2</sub> ", 2"	0904143				
2	Check valve						
		<sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1" B-Version	0904144				
		1" A-Version	0904145				
		11/4"	0904146				
		11/2"	0904147				
		2"	0904148				



Manufactured for and on behalf of Pittway 3 Sàrl, Z.A., La Pièce 4, 1180 Rolle, Switzerland For more information homecomfort.resideo.com/europe

Ademco 1 GmbH, Hardhofweg 40, 74821 MOSBACH, GERMANY

Phone: +49 6261 810 Fax: +49 6261 81309

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