

# BA300

## Backflow Preventer

with flanged connections

### APPLICATION

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

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

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

The powder-coated ductile iron housing provides increased corrosion protection.

### APPROVALS

- DVGW
- BELGAQUA
- NF
- KIWA
- WRAS
- SVGW
- VdS (BA300-80ZVDS)
- VA-ETA

### SPECIAL FEATURES

- Optimal protection of the drinking water supply system
- Easy access to all internal components
- Powder-coated inside and outside - Powder used is physiologically and toxicologically safe
- Easy Maintenance due to optimized construction
- Triple security - two check valves and a discharge valve separate the backflow preventer into three pressure zones
- Few individual parts
- Light weight
- Standardised discharge connection
- All materials are ACS approved
- All materials are KTW approved
- Approved by OTH (Hungary)



### TECHNICAL DATA

<b>Media</b>	
Medium:	Drinking water
<b>Connections/Sizes</b>	
Connection size:	DN65 - DN200
Discharge pipe connection:	DN150
<b>Pressure values</b>	
Min. inlet pressure:	1.5 bar
Max. operating pressure:	10.0 bar
<b>Operating temperatures</b>	
Max. operating temperature medium:	65 °C (WRAS 60 °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	Brass
	<b>2</b>	Inlet/Outlet check valves	Stainless Steel
	<b>3</b>	Housing	Ductile iron, powder-coated with polyamide
	<b>4</b>	Discharge valve	CW626N with stainless steel seat
	<b>5</b>	Pressure control line	Polyethylene with stainless steel braid (BA300-80ZVDS stainless steel)
<b>Not depicted components:</b>			
	Diaphragm	EPDM	
	Sealing washers	EPDM	

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

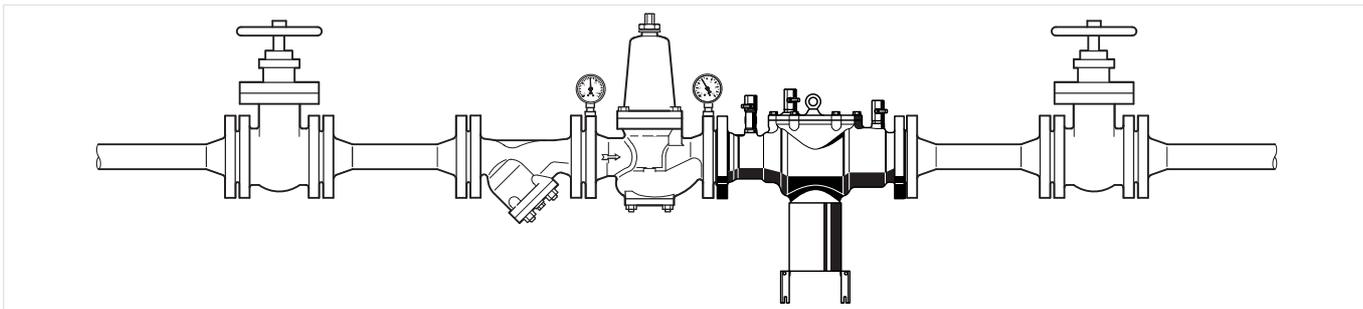
\*non condensing

### INSTALLATION GUIDELINES

#### Setup requirements

- Install shut-off valves before and after backflow preventer
- Install backflow preventer downstream of the filter or strainer
  - This protects the appliance against dirt
- Install in horizontal pipework with the discharge valve downwards
- Ensure good access
  - Simplifies maintenance and inspection
- In order to avoid flooding, it is recommended to arrange a permanent, professionally dimensioned wastewater connection
- The installation environment should be protected against frost and ventilated well
- Install discharge pipework which has adequate capacity
- These armatures need to be maintained regularly

**Installation Example**



Connection sizes:					
DN:	65	80	100	150	200
inch:	2½"	3"	4"	6"	8"
Min. clearance above backflow preventer:	650 mm				
Clearance from wall:	160 mm	160 mm	160 mm	200 mm	200 mm

**TECHNICAL CHARACTERISTICS**

**Pressure drop characteristics**

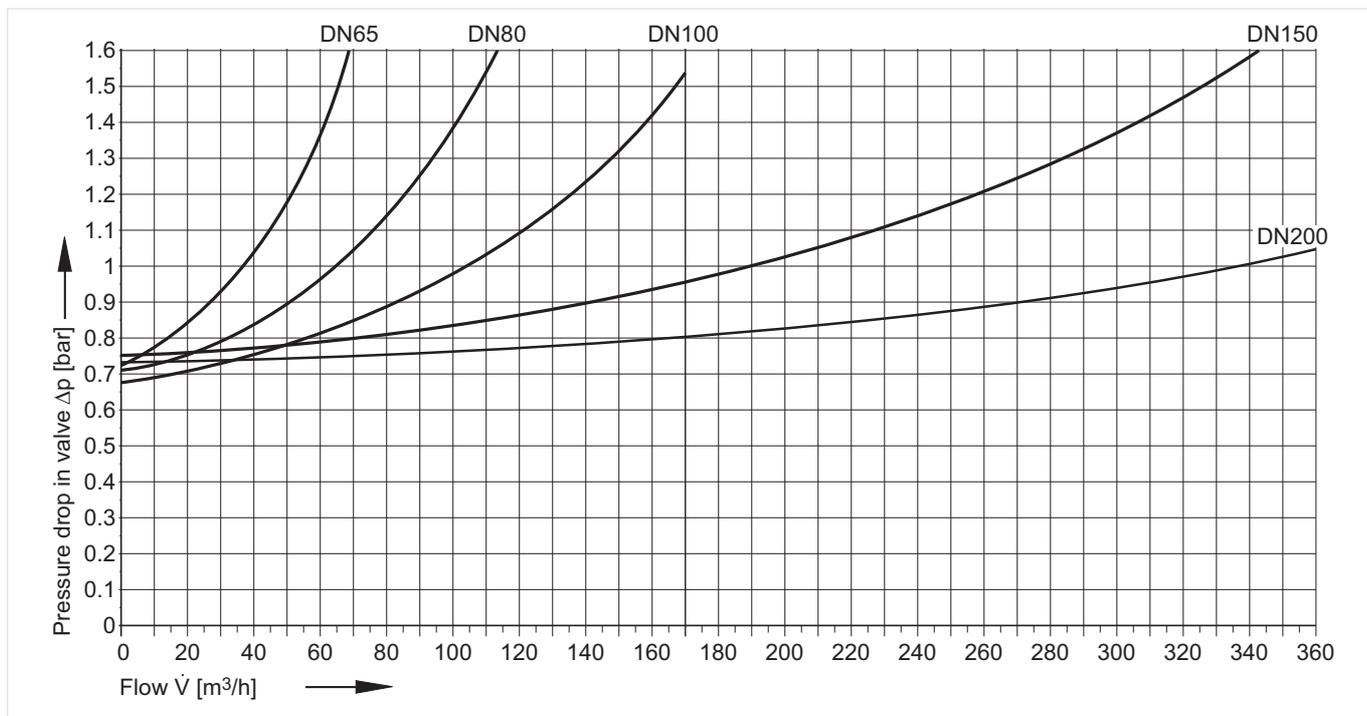
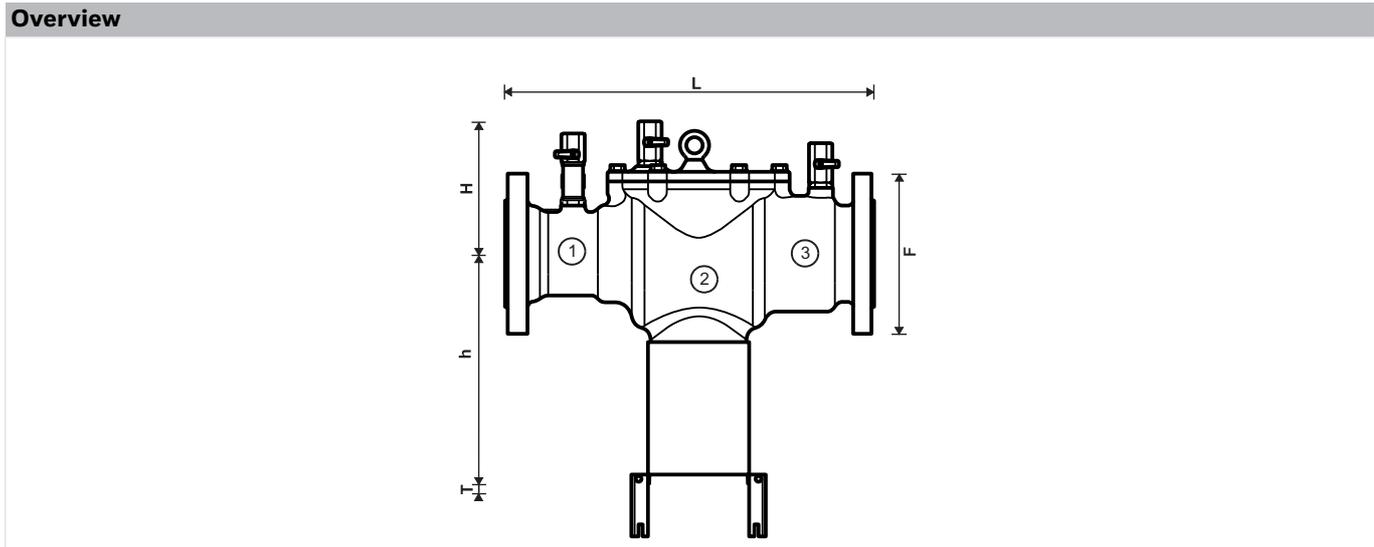


Fig. 1 Pressure drop within the valve in dependency of the flow rate and the used connection size

## DIMENSIONS



Parameter		Values				
Connection size::	DN	65	80	100	150	200
Weight:	kg	23.9	32.7	44.6	70.9	114.1
Dimensions:	L	356	440	530	630	763
	H	152	167	185	219	254
	h	246	275	296	314	346
	T	77	77	77	77	77
	F*	185	200	220	285	340
Nominal flow rate at $\Delta p = 1.0$ bar:	m <sup>3</sup> /h	35.8	54.3	108	190.9	339.3
Discharge flow rates in the event of failure:	m <sup>3</sup> /h	35	35	35	35	35

Note: 1 to 3 see chapter Method of operation  
 Note: All dimensions in mm unless stated otherwise.  
 Note: \* F = width

## 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

These backflow preventers are available in the following sizes: DN65, DN80, DN100, DN150, DN200.

- standard
- not available

		BA300-...A	BA300-80ZVDS
Connection type:	Standard version, connection sizes DN65 - DN200	•	
	Connection with flanges, PN10		
	with VdS certificate VdS No.: G417057 DN80		•

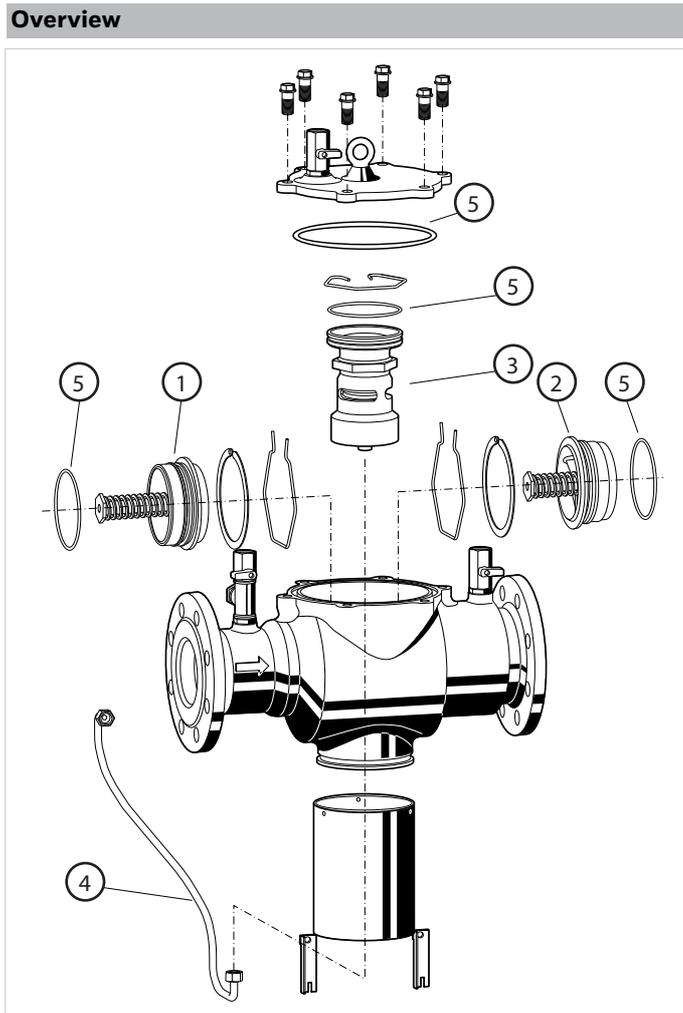
Note: ... = space holder for connection size

### 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 BA300, from 2011 onwards



Description	Dimension	Part No.
<b>1 Inlet check valve</b>		
	DN65	0904052
	DN80	0904053
	DN100	0904054
	DN150	0904055
<b>2 Outlet check valve</b>		
	DN65	0904057
	DN80	0904058
	DN100	0904059
	DN150	0904060
	DN200	0904061
<b>3 Discharge valve</b>		
	DN65 - DN200	0904062
<b>4 Pressure control line</b>		
	DN65	0904063
	DN80	0904064
	DN80*	0904073
	DN100	0904065
	DN150	0904066
	DN200	0904067
<b>5 Sealing set</b>		
	DN65	0904068
	DN80	0904069
	DN100	0904070
	DN150	0904071
	DN200	0904072

\* VdS Version

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