



Braukmann BA298I-F

Reduced-pressure-zone backflow preventers with flanged connections - Industrial model

APPLICATION

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

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 stainless steel housing provides increased corrosion protection.

APPROVALS

- DVGW
- SVGW
- BELGAQUA

SPECIAL FEATURES

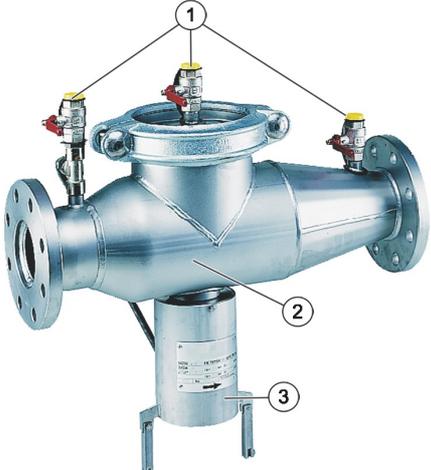
- Optimal protection of the drinking water supply system
- Easy access to all internal components
- Easy Maintenance due to optimized construction
- Triple security - two check valves and a discharge valve separate the backflow preventer into three pressure zones
- Few individual parts
- Light weight
- Standardised discharge connection
- All materials are KTW approved



TECHNICAL DATA

Media	
Medium:	Drinking water
Connections/Sizes	
Nominal size diameter:	DN65 - DN150
Discharge pipe connection:	DN150
Pressure values	
Min. inlet pressure:	1.5 bar
Max. operating pressure:	10 bar
Operating temperatures	
Max. operating temperature medium:	65 °C (WRAS 60 °C)
Specifications	
Installation position:	Horizontal with discharge valve downwards

CONSTRUCTION

Overview	Components	Materials	
	1	Three ball valves for the connection of a differential pressure gauge	Stainless steel
	2	Housing	Stainless steel
	3	Discharge connection	Stainless steel
	Not depicted components:		
	Inlet/Outlet check valves	Stainless steel	Stainless steel
	Diaphragm	EPDM	EPDM
	Sealing washers	EPDM	EPDM
	Pressure control line	Stainless steel	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 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 % *

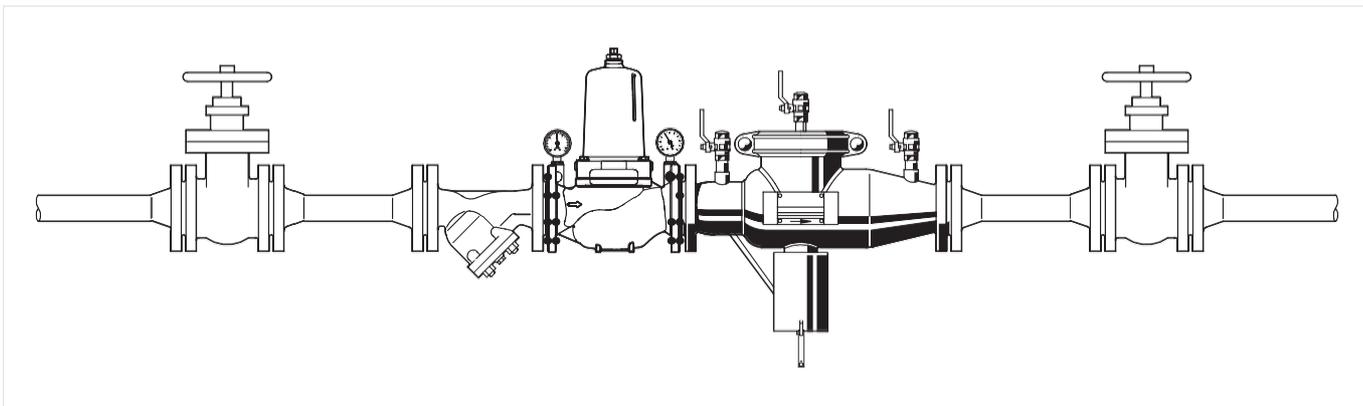
*non condensing

INSTALLATION GUIDELINES

Setup requirements

- Install shut-off valves before and after backflow preventer
- Install 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
Min. clearance above the middle of the piping:	650 mm	650 mm	650 mm	670 mm
Clearance from wall:	160 mm	160 mm	160 mm	200 mm

TECHNICAL CHARACTERISTICS

Pressure drop characteristics

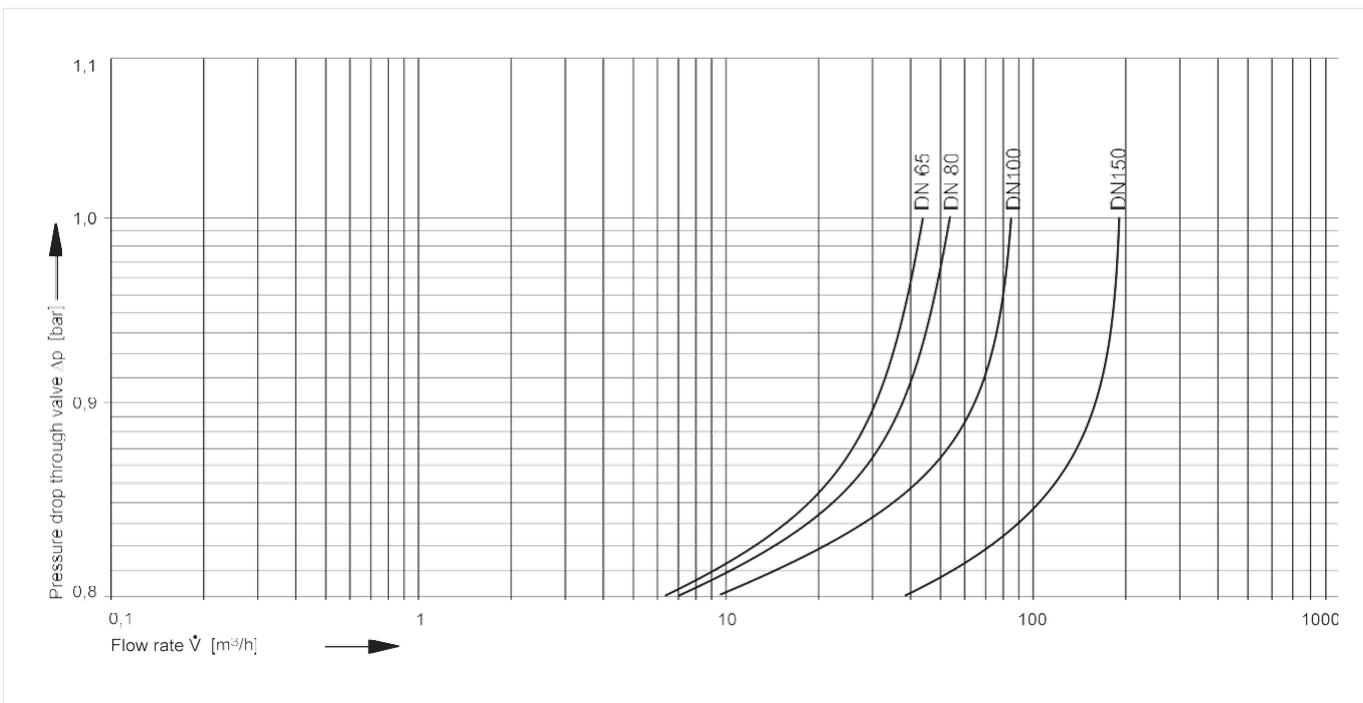
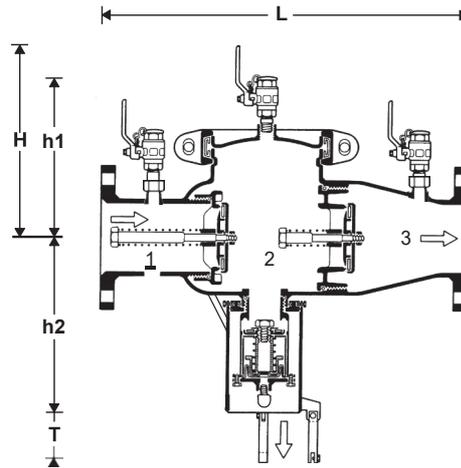


Fig. 1 Pressure drop within the valve in dependency of the flow rate and the used connection size

DIMENSIONS

Overview



Parameter		Values			
Connection size:	DN	65	80	100	150
Weight:	kg	32	32.5	33	57
Dimensions:	L	559	559	559	695
	H	310	310	310	350
	h1	245	245	245	270
	h2	265	265	265	280
	T	75	75	75	75
Nominal flow rate at $\Delta p = 1.0$ bar:	m ³ /h	45	54	85	191
Discharge flow rates in the event of failure:	m ³ /h	35	35	35	35
DIN/DVGW Registration No.:		NW-6305CO0318			

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 preventers are available in the following sizes: DN65, DN80, DN100 and DN150.

- standard
- not available

		BA298I-...FA	BA298I-...FZ
Connection type:	Standard version with PN10 flanges, connection sizes DN65 - DN150	•	-
	Special version, drill pattern on flanges according to ANSI150, connection sizes DN65 - DN150	-	•

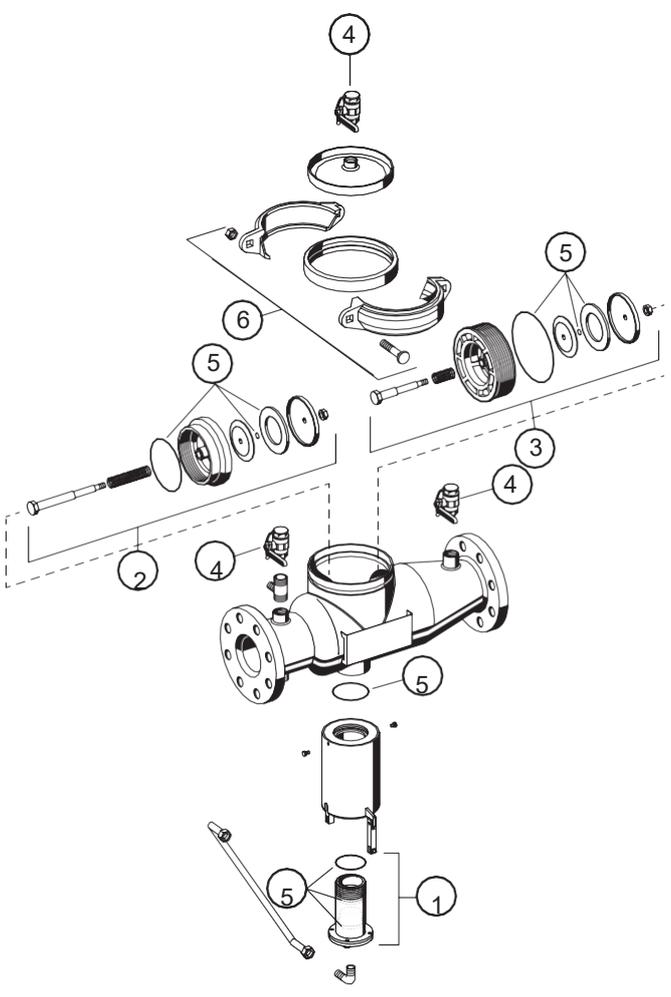
Note: ... = space holder for connection size

Accessories

	Description	Dimension	Part No.
	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
	WBA298 Check valve replacement tool WBA298-100 for connection sizes DN65 - DN100 WBA298-150 for connection size DN150		WBA298

Spare Parts

Backflow Preventer BA298I-F, from 2008 onwards

Overview	Description	Dimension	Part No.
	1 Discharge valve	DN65 - DN150	0901855
	2 Inlet check valve	DN65 - DN100 DN150	0901652 0901656
	3 Outlet check valve	DN65 - DN100 DN150	0901653 0901657
	4 Ball valve	DN65 - DN150	0901662
	5 Sealing set	DN65 - DN100 DN150	0904031 0904032
	6 Clamp complete	DN65 - DN100 DN150	0904033 0904034