resideo Backflow Preventers

Braukmann R295P-F

Mechanical disconnector with flanges direct actuated GA type according to EN 1717

APPLICATION

Mechanical disconnectors of this type are suitable for the protection of drinking water systems as required by EN 1717 "The technical regulation of drinking water systems".

Their purpose is to protect systems against back pressure, back flow and back syphonage of non-potable water into the public water supply network.

Mechanical disconnectors can be used to provide protection up to and including liquid category 3 (slightly toxic substances) and therefore offer better protection than check valves.

SPECIAL FEATURES

- Optimal protection of the drinking water supply system
- Enhanced protection against back pressure, back flow and back syphonage into the water supply network
- Shut-off position visually indicated on the spring bonnet
- Compact construction
- Powder-coated inside and outside Powder used is physiologically and toxicologically safe
- All materials are KTW approved
- Low pressure loss and high flow rate



TECHNICAL DATA

Media	
Medium:	Cold drinking water
Connections/Sizes	
Connection size:	DN65 - DN200
Pressure values	
Max. inlet pressure:	10 bar
Opening pressure:	DN65 - DN100:
	0.5, 1 or 1.5 bar as required
	DN125 - DN200:
	0.5, 1 bar as required
Min. inlet pressure:	Opening pressure + 1 bar
Operating temperatures	
Max. operating temperature	40 °C
medium:	
Specifications	
Installation position:	Horizontal with spring
	bonnet upwards

CONSTRUCTION



	Components	Materials
1	Spring bonnet	Steel
2	Housing with pressure gauge	Grey cast iron housing, powder-coated inside and outside
	Not depicted components:	
	Outlet check valve	-
	PN16 flanged connections to ISO 7005-2, DIN EN 1092-2	-
	Drain connector	Red bronze drain connector up to DN100
	Valve insert with spring	Stainless steel valve stem and spring
	Spindle guide with double O-ring seal	-
	Balanced-seat piston	Stainless steel
	Seals	NBR
	Bearing surfaces for sliding internal parts	High-grade synthetic material
	Internal parts	Red bronze

METHOD OF OPERATION

Type 1 mechanical disconnectors remain in the flow position and change to the shut-off position only when the inlet pressure falls below the design opening pressure.

The inlet pressure operates on the annular surface of the valve piston and pushes it against the force of the spring bringing the piston to the open position. If the supply pressure falls below the opening pressure needed to overcome the spring force (for example because of a broken pipe or during service work by the supply undertaking) then the integral spring pushes the valve into the closed position.

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 % *

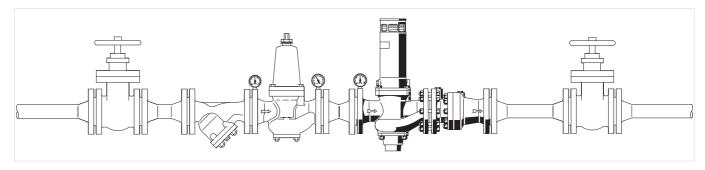
^{*}non condensing

INSTALLATION GUIDELINES

Setup requirements

- Install shut-off valves
- Install in horizontal pipework with spring bonnet directed upwards
- Ensure good access
 - Pressure gauge can be read off easily
 - Simplifies maintenance and inspection
- Mechanical disconnectors must not be fitted in any areas or ducts where poisonous gases or vapours may be present or where flooding can occur
- 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

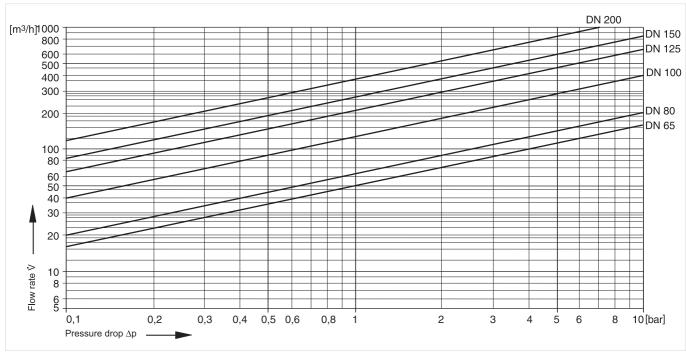


TECHNICAL CHARACTERISTICS

kvs-Values

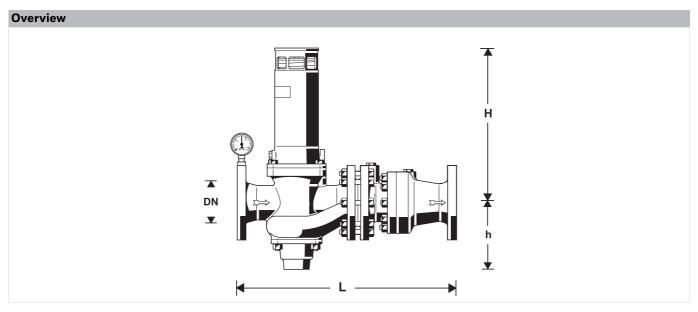
Connection sizes:	65	80	100	125	150	200	
k _{vs} -value:	50	62	125	208	274	362	
ξ -value:	10	17	10	9	10	19	

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	125	150	200
Weight:	kg	48	67	89	145	206	408
Dimensions:	L	532	572	652	752	882	1102
	Н	380	495	475	528	563	851
	h	165	208	232	280	313	438
Nominal flow rate at $\Delta p = 0.3$ bar:	m ³ /h	27	34	68	114	150	198
Opening pressure:		0.5, 1.0	or 1.5 bar as	required	0.5 or	1.0 bar as re	quired

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 armatures are available in the following sizes: DN65, DN80, DN100, DN125, DN150 and DN200.

- standard
- not available

		R295PFA	R295PFB	R295PFC
Connection type:	With flanges, 0.5 bar set pressure	•	-	-
	With flanges, 1.0 bar set pressure (standard pattern)	-	•	-
	With flanges, 1.5 bar set pressure (DN65 - DN100	-	-	•
	only)			

Note: Special Versions available on request

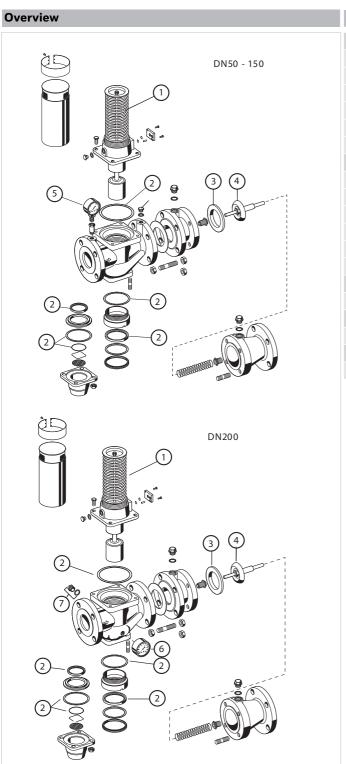
Note: ... = space holder for connection size

Note: Ordering number example for DN80 and type A valve: R295P-80FA

Spare PartsMechanical disconnector R295P-F

Overview	
DN50 - 150	
3 4	
DN200	

	Description	Dimension	Part No.			
1	Valve insert complete					
	0.5 bar	DN65	R295AP-65FA			
	0.5 bar	DN80	R295AP-80FA			
	0.5 bar	DN100	R295AP-100FA			
	0.5 bar	DN125	R295AP-125FA			
	0.5 bar	DN150	R295AP-150FA			
	0.5 bar	DN200	R295AP-200FA			
	1.0 bar	DN65	R295AP-65FB			
	1.0 bar	DN80	R295AP-80FB			
	1.0 bar	DN100	R295AP-100FB			
	1.0 bar	DN125	R295AP-125FB			
	1.0 bar	DN150	R295AP-150FB			
	1.0 bar	DN200	R295AP-200FB			
	1.5 bar	DN65	R295AP-65FC			
	1.5 bar	DN80	R295AP-80FC			
	1.5 bar	DN100	R295AP-100FC			
2	Set of seals					
		DN65	0901093			
		DN80	0901094			
		DN100	0901095			
		DN125	0901143			
		DN150	0901145			
		DN200	0901147			



	Description	Dimension	Part No.
3	Lip seal ring		
		DN65	5350000
		DN80	5350300
		DN100	5350400
		DN125	2070300
		DN150	2067300
		DN200	2238900
4	Valve disc guide		
		DN65	0900376
		DN80	0900377
		DN100	0900378
		DN125	0900379
		DN150	0900380
		DN200	0900381
5	Pressure gauge		
		0 - 16 bar	M39M-A16
6	Pressure gauge		
		0 - 16 bar	M07M-A16
7	Hexagon-plug with cop	per sealing-rin	g R ¹ /4" (5 pcs.)
			S06M-1/4



Manufactured for and on behalf of Pittway Sàrl, Z.A., La Pièce 4, 1180 Rolle, Switzerland by its authorised representative Ademco 1 GmbH For more information homecomfort.resideo.com/europe

Ademco 1 GmbH, Hardhofweg 40, 74821 MOSBACH, GERMANY

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