BA 4760

Backflow preventer with controllable reduced pressure zone

Technical Data Sheet



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Description

The BA 4760 backflow preventer with controllable reduced pressure zone is designed to protect drinking water networks. It prevents from polluted water backflows in the public and the private networks. This sanitary safety device is compliant with the EN12729 standard. It is composed of:

- Three pressure areas: upstream, intermediate and downstream chamber
- Two independent non-return devices separating the intermediate zone from each other areas, normally closed when there is no water
- A discharge device (in open air) in the intermediate zone, normally open in water off position.



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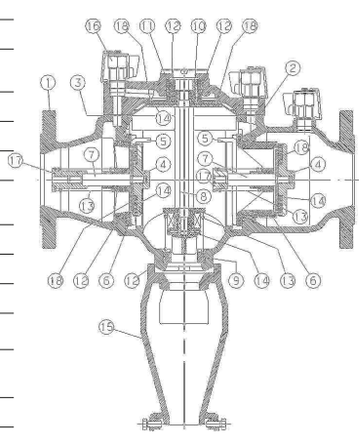
DN		PN	PFA in bar	Ref.	Weight Kg
"	mm				
2 1/2*	65	10	10	**149B3486**	25,0
3	80	10	10	**149B3097**	29,5
4	100	10	10	**149B3098**	58,0
6	150	10	10	**149B3400**	83,5
8	200	10	10	**149B3401**	141,0
10	250	10	10	**149B3402**	151,0

* Double drilling : DN65/DN60
Double drilling : 4 and 8 holes

Technical features	
Operating temperature	Maxi. 65 °C
Permissible operating pressure (PFA) in water	10 bar
Connection	With flanges - PN (see table)
Mediums	Clear water

Nomenclature and materials

N°	Description		Materials	EURO	ANSI
1	Body	DN 65 to 80	Cast iron	EN1561EN-GJL-250	ASTM A 48 35 B
		DN 100 to 250	Ductile iron	EN-GJS-400-15	ASTM A 536 65-45-12
2	Cap	DN 65 to 80	Cast iron	EN1563EN-GJS-400-15	ASTM A 536 65-45-12
		DN 100 to 250	Ductile iron	EN-GJS-400-15	ASTM A 536 65-45-12
3	Membrane		EPDM		
4	Closing system	DN 65 to 150	Brass	EN12165CuZn35Pb1.5AlAs	
		DN 250	Bronze	EN1982CuSn5Zn5Pb2-C	CC499K
5	Rings		Stainless steels	EN10270-3X10CrNi18-8	AISI 302
6	Closing system seat	DN 65 to 80	PPO	NORYL FE1520PW NOIR 73701	
		DN 100 to 250	Bronze	EN1982 CuSn5Zn5Pb2-C	CC499K
7	Closing system stem	DN 65	Stainless steels	EN10088-3 X2CrNi18-9	AISI 304L
		DN 80 to 250		EN10088-3 X5CrNi18-10	AISI 304
8	Drain valve stem		Brass	EN12164 CW625N R320mini 4MS	
9	Drain valve seat	DN 65 to 100	Stainless steels	EN10088-3 X5CrNi18-10	AISI 304
		DN 150 to 250	Stainless steels	X2CrNi19-11	
10	Drain valve head	DN 65	Bronze	EN1982 CuSn5Zn5Pb2-C	CC499K
		DN 80 to 250	PPO	NORYL FE1520PW NOIR 73701	
11	Drain valve guide	DN 65	Brass	EN12164 CW625N R320mini 4MS	
		DN 80	POM	Hostaform C 9021 naturel	
		DN 100 to 250	Bronze	EN1982 CuSn5Zn5Pb2-C	CC499K
12	O-ring		EPDM		
13	Spring		Stainless steels	EN10270-3 X10CrNi18-8	AISI 302
14	Flat seal		EPDM		
15	Funnel		Ductile iron	EN1563 EN-GJS-400-15	ASTM A 536 65-45
16	Ball valve		Brass	EN12165-CuZn40Pb2-H080 4MS	
17	Stop guide		Brass	EN12164 CW625N R320mini 4MS	
18	Disc		Stainless steels	EN10088-3 X5CrNi18-10	AISI 304



Approvals

ACS NF BUREAU VERITAS BELGAQUA kiwa UNI Kiwa UK-REG 4

International construction Standards :
NF EN12729 - EN 1717
Flange connection according to EN 1092-1/2

Application

The BA 4760 backflow preventer is designed to protect drinking water networks against risky fluids (up to category 4) according to NF EN1717.

The device is designed to prevent any backflow of polluted water into the drinking water supply network as a result of back pressure or back siphonage when the pressure upstream of the device is lower than the pressure downstream of it.

For systems liable to generate pollution risks such as:
- Professional networks: industrial facilities, surface treatment, chemical industry
- Sanitary networks: hospitals, laboratories, dialysis centers, water treatment
- Technical networks: heating, air conditioning, irrigation, water dispensers, sprinklers

Installation

Directions for installation:

- total accessibility
- non-submersible installation
- purge carefully all air from the installation (non-polluted atmosphere)
- the discharge valve must be able to cope with the discharge flow rate
- protection against frost or extreme temperatures
- in the case of an upstream diversion in the area right in front of the RPZ, it is necessary to install a check valve between the diversion and the RPZ.
- always manipulate the upstream valve slowly for a progressive pressurization of the RPZ.

According to the national recommendations, the backflow preventer 4760:

- have to be installed by a qualified technician.
- have to be subject to a commissioning notice in accordance with the installation rules of BA set of protection.

Implantation, it is mandatory to install:

To make a BA set of protection as described in NF EN 1717, the BA 4760 backflow preventer must be installed with the following accessories:

Upstream:

- shut-off valve (butterfly valve)
- A strainer with flushing valve type Y333P

Downstream:

- shut-off valve (butterfly valve)

Maintenance

In accordance with the regulations, maintenance must be done on site. Only an approved maintainer (with an authorization number) can work on the backflow preventer.

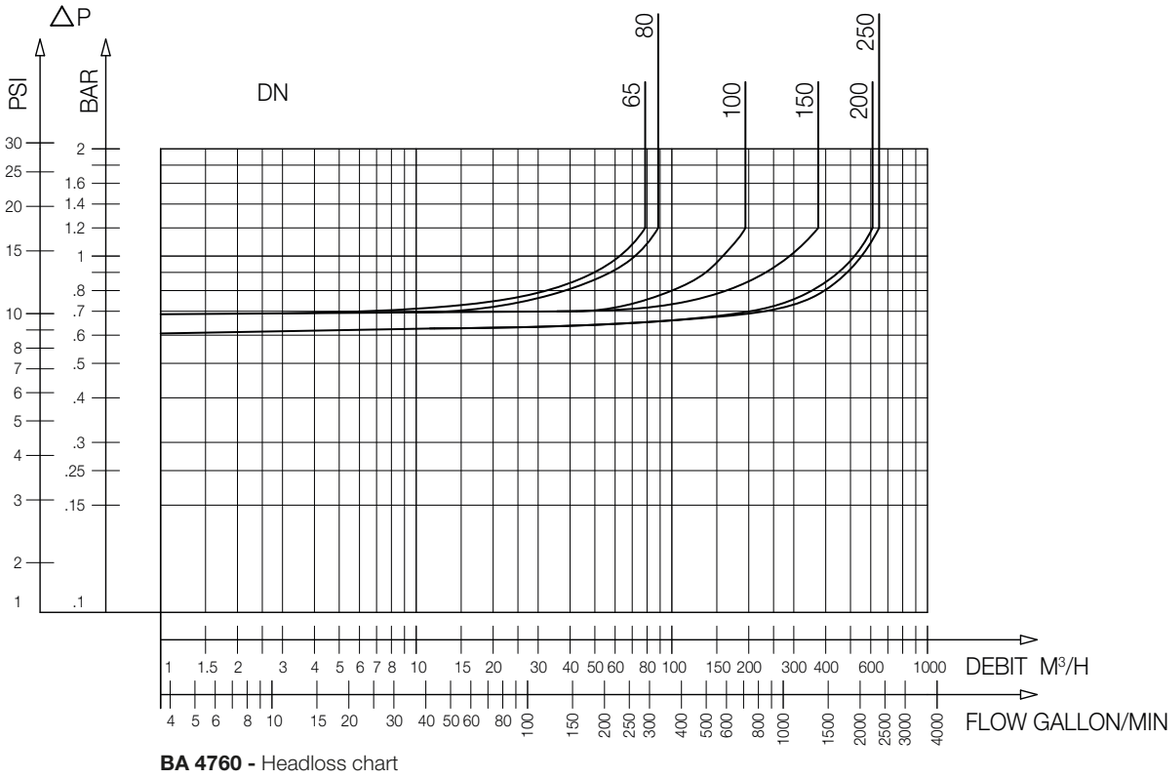
The mandatory annual operating check of the BA backflow preventer have to be done with a control device compliant with the NF P43-018 standard (WATTS 2234900M2 type). This equipment must be regularly checked at least once every two years.

Repair kits: Spare parts are available and allow the replacement of each specific defective parts of BA 4760 backflow preventer (see technical manual).

Operation

Direction for use :

• Solid line: Valve completely open

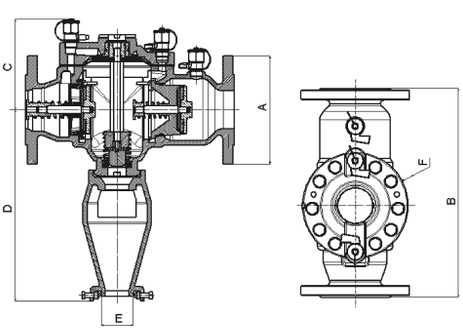


BA 4760 - Headloss chart

Sizing

DN		A	B	C	D	E	F	Max. acceptable torques *
"	mm	mm	mm	mm	mm	mm	mm	Nm
2 1/2	65	185	356	155	326	63	180	40
3	80	200	440	173	337	63	200	40
4	100	220	530	201	434	80	255	40
6	150	285	630	230	456	80	310	110
8	200	340	763	272	499	80	390	300
10	250	395	763	272	499	80	390	300

* Maximum torque for tightening bolts of the backflow preventer cover



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