Flange Backflow Preventer type BA 6600

Controllable Backflow Preventer

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Field of application

The SYR Backflow Preventer type BA is a compact safety valve in compliance with the European standard EN 1717 (Protection against pollution of potable water installa-tions and general require-ments for devices to prevent pollution by back-flow), group B (three pressure zones system). It is in con-formity with type BA described in EN 1717 and therefore it can be used as a protective device up to fluid category 4 (included). Its task is to prevent back-siphonage or backflow of non-drinking water into the public potable water system. The Backflow Preventer type BA covers numerous application possibilities (for instance printing, chemical and food industry, laboratories and medical technology).

Design

The Backflow Preventer type BA includes all components determined in the European standard EN 1717 and is designed as 3-pressure zones-system with controllable upstream/ intermediate and downstream pressure zones. In addition, it includes an integral strainer. The ball valves on top of each of the three pressure zones are used in combination with a test kit to verify functionality by pressure measurement. The Backflow Preventer is composed of 2 consecutive check valves with an intermediate pressure zone that can be vented to the atmosphere. When no water is drawn off, both check valves are open and the discharge valve is closed. In case of back-siphonage, the inlet pressure drops. The discharge valve opens at the latest when the differential pressure between upstream and intermediate pressure zone has dropped to 0.14 bar.

Materials

The body is made of low-lead dezincification resistant gunmetal alloy. The internal parts are made of high-quality corrosion resistant synthetic materials or stainless steel. All materials are tested and approved by DVGW. All synthetic parts getting in contact with drinking water intended for human consumption are approved by the German Public Health Office (KTW). The discharge outlet on the valve is made of high-quality synthetic material.

Installation

Permanent access to the valve has to be provided and it shall not be mounted in rooms liable to flooding, frost or high temperatures. The installation should only be carried out in an well-ventilated environment. The connected discharge device must be able to collect the discharge volume. The Backflow Preventer type BA has to be installed in horizontal position with the discharge valve (tundish connection) facing downwards. The test ports should be easily accessible. For a perfect function, it is recommended to locate a drinking water filter upstream. Thoroughly rinse the pipe prior to the installation. Install the Backflow Preventer type BA in horizontal position in the pipe under consideration of the flow direction without applying stresses.

Technical data

Operating pressure:	max. 10 bar
Operating temperature:	max. 65°C
Mounting position:	horizontal, tundish facing downwards
Fluid:	Drinking water
Flow rate capacity:	DN 65: 80,0 m^3/h at 1.5 bar Δp
	DN 80: 110,0 m^3/h at 1.5 bar Δp
	DN 100: 125,0 m^3/h at 1.5 bar Δp
Serial number:	6600 ...

Maintenance

According to EN 1717, the Backflow Preven-ter type BA has to be serviced on a regular basis. Therefore maintenance agreements between user and installer are useful. The proper function has to be verified after the first service year and then periodically in accordance with the operating conditions, but every two years at the latest. The ball valves on top of each pressure zone are used in combination with a test kit to verify functionality. This Backflow Preventer type BA is designed with a cartridge system which makes the maintenance easy and unproblematic.

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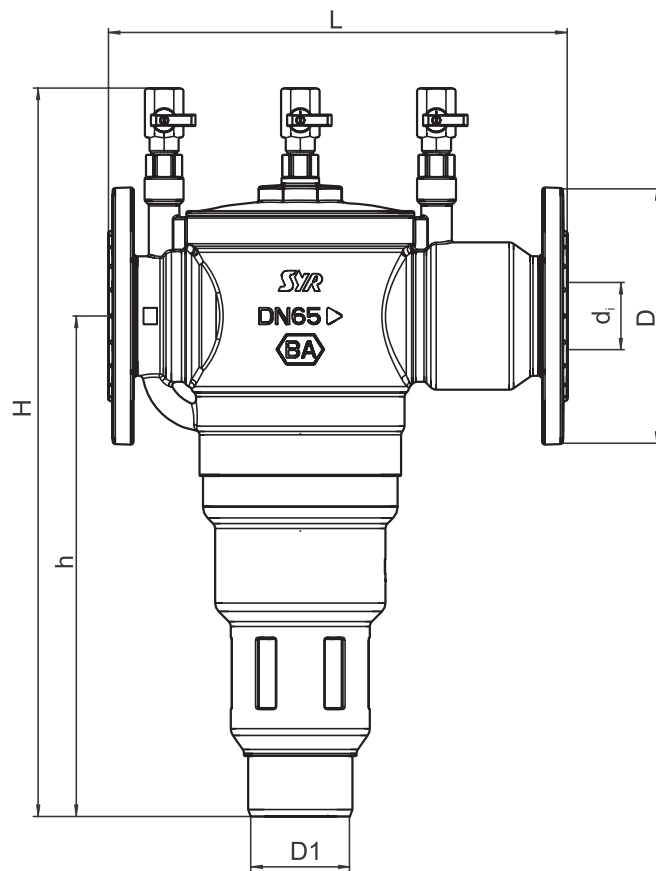
Nominal size		DN 65	DN 80	DN 100
Dimensions	L (mm)	330	350	350
	H (mm)	496,5	513,5	537,5
	h (mm)	365	370	382,5
	d_i (mm)	65	80	100
	D (mm)	185	200	220
	D1 (mm)	75	75	75

Accessories   Test kit: electronic pressure measurement device
for inspection and maintenance.
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Components / Order numbers

①
Check valve (Inlet)
DN 65:   6600.65.900
DN 80:   6600.80.900
DN 100:   6600.100.900

②
Check valve (Outlet)
DN 65:   6600.65.901
DN 80:   6600.80.901
DN 100:   6600.100.901

③
Control unit
6600.00.980

④
Tundish
6600.00.981

no picture
 Assembly tools
 6600.65.904