

## Product information

Protective module type BA with flanged connection for liquid category 4 according to SS-EN 1717.

Dimension range (DN)	65 - 200
PN	10
Temperature (°C)	0 - 65
Material	Cast iron

## Area of use

Backflow preventers are used to protect internal and external plumbing systems from backflow and pressure backflow. The protective covering is suitable for liquids up to category 4. The backflow preventer is of type BA in accordance with SS-EN 1717.

## Tender text

### **PSG.260 Composite backflow prevention devices**

Backflow prevention device AT 1167-...M (or 1167R...M for stainless steel construction) DN.... Complete protection module consisting of BA type protection devices with double check valves and an intermediate pressure-controlled chamber with drainage, inlet and outlet valves, and a dirt filter with a drain valve. PN 10 in flanged design. For maximum protection coverage of liquid category 4 according to SS-EN 1717. AT 1167B is powder-coated inside and out.

## Quality assurance

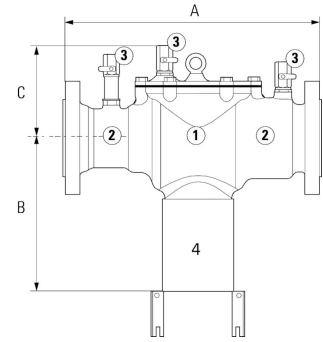
Fluid category 4, SS-EN 1717

Protective covering for liquids up to category 4. The backflow prevention device is of type BA in accordance with SS-EN 1717.

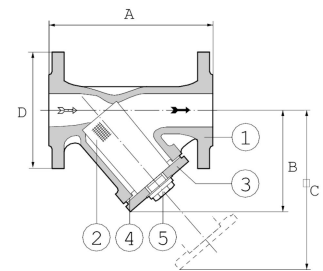
**Product marking:** Manufacturer, DN, PN, flow direction, manufacturer and manufacturing number.

Separate inspection nameplate.

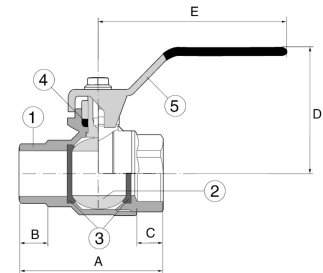
Pos	Component	Material
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Pos	Component	Material
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Pos	Component	Material
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### Measurements and weight

**Dimension range (DN):** 65 - 200

DN	65	80	100	150	200
A	738	842	984	1222	1483

### Function and design

Backflow preventer type BA covers the risks up to liquid category 4 when connecting to tap water, i.e. "Liquid that poses a health risk due to the presence of one or more toxic or highly toxic substances or one or more radioactive, mutagenic or carcinogenic substances".

The protective device has double check valves and an intermediate chamber with drainage. The protective devices work with three different pressure zones. The pressure in zone 1 is higher than in zone 2, which is higher than in zone 3. A drainage valve is connected in zone 2 and opens when the pressure difference between zone 1 and zone 2 drops to 0.14 bar. The water in zone 2 is drained to the atmosphere. This prevents siphonage or overpressure backflow into the system.

The backflow preventer must be installed as a complete protection module. The protection module includes a protective device type BA together with a separate dirt filter. Shut-off valves are included for inlet and outlet. It is an absolute requirement that the backflow preventer is installed as a protection module.

### Technical data

**Material:** Cast iron

**Included materials:** Cast iron, Stainless steel

**Temperature (°C):** 0 - 65

**PN:** 10

**Connection:** Flanged EN1092

**ETIM classification:** EC004501 - Backflow preventer

DN	KVS	Connection according to ISO 5211	Stem type	Stem measurements
40		F07	Parallel square	10x10mm
50		F07	Parallel square	10x10mm
65		F07	Parallel square	10x10mm
80		F07	Parallel square	10x10mm
100		F07	Parallel square	12x12mm
125		F07	Parallel square	12x12mm
150		F07	Parallel square	16x16mm
200		F07	Diagonal square	17x17mm
300		F10	Diagonal square	22x22mm
250		F10	Diagonal square	22x22mm
350		F10	Diagonal square	22x22mm
400				
450				
500				
600				

## Installation and maintenance

**Flowdirection:** Uni-directional

**Possible mounting position:** Horizontal

A backflow preventer should never be installed alone (as a protective device) but should always be installed as a protection module to enable control according to the SS-EN 1717 standard. The installation drawing shows a protection module with two shut-off valves placed on either side of the protective device. These are needed for maintenance of the unit. A dirt filter must be installed between the shut-off valve on the upstream side (inlet side) and the backflow preventer (for 1168C, the dirt filter is integrated). The filter's cleaning plug should be replaced with a valve for draining.

- The protection module should be installed in a suitable location in the drinking water installation, as close to the potential source of risk as possible.
- The protection module should be mounted horizontally with the drainage opening downwards.
- Ensure that the flow arrow corresponds to the flow direction.
- The protection module must not be installed where flooding is possible.
- The protection module should be installed in a ventilated environment (not contaminated air).
- The protection module should be protected against frost and high temperatures.
- All backflow preventers will drain at some point. The drainage valve outlet is connected with an air gap to a drain with the same dimension as the backflow preventer's pipe holder. The connection dimension for the protective device's drainage is indicated under dimensions and weight.
- The drain should have a capacity that can accommodate the drainage flow.
- The protection module can only be installed for expected backflows that do not exceed the device's drainage capacity.
- The protection module should be installed so that it is not subjected to external tensile or compressive forces.
- The protection module should be easily accessible and should be mounted between 0.5 to 1.5 m above the floor to facilitate inspection and service.
- The installation drawing's H dimension indicates the minimum free dimension of space above the protection that is required for accessibility for service and easy access to the pressure measurement outlets on the protective device's top. The H dimension is the total height of the protection module.
- Tap points after the backflow preventer should be marked with "NOT DRINKING WATER" to prevent consumption of drinking water in a contaminated zone. Note that a solenoid valve or a quick-closing valve before or after the backflow preventer or a weak pipe layout in connection with a long stretch can create an imbalance in the system with resulting pressure surges. An additional check valve installed before or after the backflow preventer may possibly eliminate the problem. After installation, a functional check is performed. The property owner has an obligation to notify the water supplier when connecting a backflow preventer of type BA.

Please feel free to contact us

We answer your questions by e-mail and telephone. No question is too small, no challenge is too big. You are always welcome at Armatec.

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