

A8001/A8003-...Backflow Preventer Series



Backflow Preventer (Pollution Isolation Valve)
A8001/8003-...Series
Threaded/Flanged Connection
PN10, PN16, PN25

Performance & Features:

A backflow preventer can effectively stop media with poor water quality at the outlet end from flowing back to the high-quality water inlet end when siphon backflow or backpressure backflow occurs in the water supply system. It prevents pollution of domestic drinking water, guarantees the safety of domestic water supply, and achieves the goal of avoiding backflow contamination.

- ◆ Nominal diameter: DN15-DN50 (Threaded connection), DN40-DN400 (Flanged connection);
- ◆ Compact structure, and extremely low water head loss during normal operation under economic flow velocity.
- ◆ Proven reliability of key components, offering superior quality compared with conventional low-resistance backflow preventers.
- ◆ High-sensitivity and high-strength nylon fiber reinforced diaphragm, which has passed millions of opening and closing cycle tests and 5-times working pressure endurance tests, ensuring outstanding safety and reliability.
- ◆ Most components precisely processed by high-precision CNC machine tools.
- ◆ A unique flow passage design with double-stage check valves, which features low flow resistance and fast opening & closing speed, and effectively protects the valve and pipelines from damage caused by sudden backpressure surge, restricts pressure backflow and siphon backflow, delivers quiet operation, and greatly extends the service life of the valve.
- ◆ Adjustable drain valve precision and discharge pressure, minimizing interference from pipeline pressure fluctuations, and ensuring safe and reliable opening and closing without abnormal drainage.
- ◆ Horizontal or vertical installation available, and on-site testing and in-line maintenance.

Applications:

Diaphragm-type low-resistance backflow preventer is a hydraulically controlled combination device that strictly restricts one-way flow of pressurized water in pipelines for water supply of urban water utilities and general polluted industries. It is mainly installed on the municipal water intake manifolds of various projects including general buildings, fire protection systems, water plants, municipal engineering, iron and steel, electric power, petroleum, chemical industry, commercial complexes, data centers and industrial plants.

Model Designation:

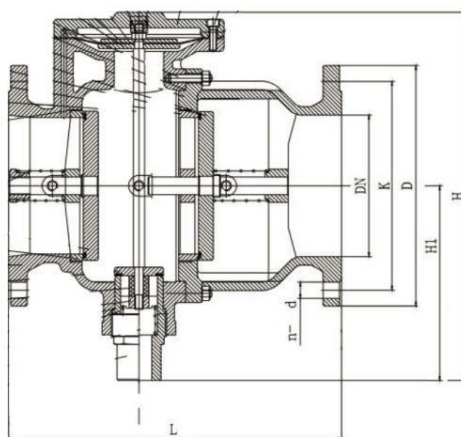
For example: A8001-100-16P

1. "A80": Check Valve;
2. "0": Backflow Preventer;
3. "1": Threaded Connection, "3": Flanged Connection;
4. "-100": Nominal Diameter DN100;
5. "-" separator;
6. "-25/16/10" Nominal Pressure, PN25/PN16/PN10;
7. "P": Stainless Steel; "Q" Ductile Iron

Technical Specification:

PN (Nominal Pressure)	PN10, PN16, PN25
Connection Standard	Threaded connection ISO228 Flanged connection EN1092-2
Working Temperature	-15°C ~130°C
Body, Bonnet	Ductile Iron, Stainless Steel
Bore, Stem, Spring	Stainless Steel
Drain Valve Seat, Drain Outlet	Stainless Steel
O-ring, Seal	EPDM

Dimension Chart



Model	DN	L	H	H1	D	K	n-d
A8003-50-16Q	DN50	230	250	131	165	125	4-19
A8003-65-16Q	DN65	236	286	136	185	145	4-19
A8003-80-16Q	DN80	276	300	168	200	168	8-19
A8003-100-16Q	DN100	298	347	181	220	180	8-19
A8003-125-16Q	DN125	303	365	190	250	210	8-19
A8003-150-16Q	DN150	364	404	212	285	240	8-19
A8003-200-16Q	DN200	470	520	275	340	295	12-23
A8003-250-16Q	DN250	530	596	310	405	355	12-28
A8003-300-16Q	DN300	580	602	360	460	410	12-28
A8003-350-16Q	DN350	690	730	430	520	470	16-28
A8003-400-16Q	DN400	770	785	485	580	525	16-32

Installation Instructions

1. Thoroughly flush all pipelines prior to formal installation.
2. The backflow preventer shall be installed horizontally as far as possible to facilitate commissioning and maintenance.
3. It is recommended to install maintenance gate valves at both ends of the backflow preventer, a strainer at the inlet side, and a flexible connector at least on one end.
4. The drain outlet of the relief valve shall not be directly and rigidly connected to the drainage pipeline, and shall be connected to the floor drainage ditch instead, with a minimum vertical distance of 300 mm between the bottom of the drain valve and the ground.
5. In principle, backflow preventers are not permitted to be installed in mine pits. If installation is indeed necessary, applicable local regulations must be followed, and the device shall be installed in an isolated and suitable space by qualified and authorized technicians to prevent flooding caused by drainage.
6. When maintenance of the backflow preventer is required without shutting down the water supply, two backflow preventers should be installed in parallel on the main pipeline.
7. After installation is completed for initial commissioning, close the outlet gate valve first, then slowly open the inlet gate valve to fill the backflow preventer with water gradually. Open the exhaust valve to exhaust air inside the valve cavity. Once the cavity is fully filled with water, slowly open the outlet gate valve to allow water to fill the entire pipeline.

Installation Diagram

