

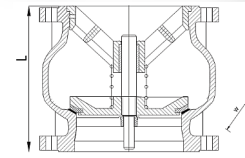
NON-RETURN CHECK VALVE



Description: Silent check valves, also known as non-return valves, are vital components in industrial fluid systems. They allow unidirectional flow, prevent backflow, and operate quietly to minimize water hammer and system damage. With a spring-assisted design, they ensure reliability, easy installation, and low maintenance, optimizing industrial efficiency.

Material Specification

Parts	Main Materials	Optional Materials
Body	Ductile Iron	Carbon Steel
Guiding Body		Stainless Steel
Disc		Nickel Aluminum Bronze
Shaft	X20Cr13	SS 304, SS 316, NAB
Nuts	Bronze	Brass, SS 304, SS 316, NAB
Rings	SS Weld Overlay	Brass, SS 304, SS 316, NAB
Seals	EPDM	NBR
Fasteners	8:8 (Galvanized)	SS 304, SS 316
Spring	SS 304	SS 316



Notes:

1. Different flange drillings are available, including ISO, EN, ANSI, and others.
2. The standard operating temperature range is -10°C to +80°C.
3. All RAL Colors are available.
4. Potable water certified coating is available.
5. Both thermoset and thermoplastic coatings are available.

Application:

Silent Type Check Valves are designed to have minimum head loss in normal operation and to have drip tight sealing in case of backflow. These check valves are commonly used in the downstream of pump stations, protecting crucial devices.

Features:

- **Installation Flexibility:** Tailored for horizontal installations, enhancing system compatibility.
- **Swift Closure:** Spring-driven mechanism enables rapid valve closure, ensuring system stability.
- **Easy Maintenance:** Top flange design simplifies routine upkeep, improving operational efficiency.
- **SCADA Integration:** Optional limit switch accessory aids system monitoring and control.
- **Flow Control:** Optional bypass valve available for efficient control in larger systems



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Superior Sealing Surface Construction

Advanced Automated Welding Robots are employed to attach the stainless steel sealing surface to the valve body, ensuring a flawless and seamless construction. Through penetration testing, the integrity of the sealing material is confirmed, enhancing its wear resistance and preventing any damage. Additionally, the absence of uncoated threads on the body improves corrosion resistance.

Efficient Disc Mechanism

The check valves incorporate a highly efficient spring-driven disc mechanism that enables rapid response. The short disc stroke ensures minimal travel distance, resulting in a smooth and non-slam operation. The inclusion of two supportive bearings enhances the valve's robustness, and by isolating them from the sealing seat, the sealing quality is maintained over time.

Optimized Flow Control and Compact Design

To optimize flow control, the disc opens in the direction of normal fluid flow, allowing uninterrupted movement. In the event of backflow, the spring-driven disc swiftly closes the valve, preventing slamming. The disc is guided by a shaft supported on two bearings and aligns with the body's weld overlay seat for effective sealing. The valve's compact and globe-type body design makes it well-suited for small pump rooms, while its circular shape promotes minimal head loss.

Dimension (mm) & Weight

DN		50	65	80	100	125	150	200	250	300	350	400	450	500	600	800	1000
Height	-	125	145	155	175	200	225	275	325	375	425	475	500	587	710	700	1100
Length	-	165	185	200	220	250	285	340	405	460	520	580	650	715	840	1160	1255
Weight (Kg)	-	6	8	12	17	23	35	60	95	130	180	240	264	380	590	830	-