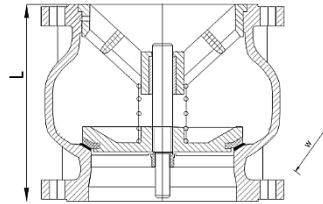


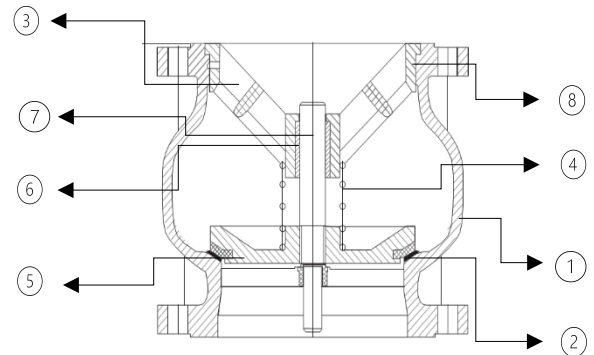
**Description:** Silent check valves, also known as non-return valves, are essential components in various industrial fluid systems, allowing unidirectional flow while preventing backflow. These valves operate quietly and swiftly to minimize water hammer and system damage. With a spring-assisted design for quick closure, they ensure reliability, easy installation, and low maintenance, optimizing industrial process efficiency.



PART NO.	PART
1	Body
2	Resilient Seat
3	Guided Disc
4	Spring
5	Metal to Metal Seating
6	Bushing
7	Stem
8	Guide

### Material Specification

Parts	Main Materials	Optional Materials
Body	Ductile Iron	Carbon Steel
Guiding Body		Stainless Steel
Disc		Nickel Aluminum Bronze
Shaft	Steel + EPDM (Ø 40-400), Ductile Iron (Ø 450-1000)	Carbon Steel, Stainless Steel, Nickel Aluminum Bronze
Nuts	X20Cr13	SS 304, SS 316, Nickel Aluminum Bronze
Ring	Bronze	Brass, SS 304, SS 316, Nickel Aluminum Bronze
Seals	Bronze	Brass, SS 304, SS 316, Nickel Aluminum Bronze
<b>Fasteners</b>	EPDM	NBR
<b>Spring</b>	8:8 (Galvanized)	SS 304, SS 316



Phone  
+90 216 306 40 44



Email  
export@corvalve.net



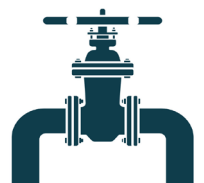
Mobile/Whatsapp  
+90 542 306 40 43



Fax  
+90 216 306 40 44



Address  
Soğanlık Yeni Mah.  
Atatürk Cad.No:5/1  
Else Apt.Daire:9,34880  
Kartal/Istanbul



### 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.

### Operating Principles

Silent check valves, or non-return valves, operate automatically, opening and closing in response to fluid flow direction. As fluid moves forward, the valve opens. Upon a flow reversal, the valve swiftly shuts, preventing backflow. This efficient operation protects system components like pumps and motors, making these valves ideal for various fluid systems.

### Swing Check Valve Installation: An Essential Overview

The installation of silent check valves is crucial in fluid systems to prevent backflow. They must be aligned with the pipeline flow direction and can be installed vertically or horizontally, considering the valve design. Pre-installation flushing, proper sealing, and post-installation system checks are necessary for optimal operation and maintenance.

### Preliminary Steps for Swing Check Valve Installation

The initial steps involve ensuring the silent check valve is free of any foreign substances that could hinder its operation. Check the valve disc by pushing it away from the seat and orient the valve in the piping system correctly, aligning the flow direction arrow with the actual fluid movement.



Phone  
+90 216 306 40 44



Email  
export@corvalve.net



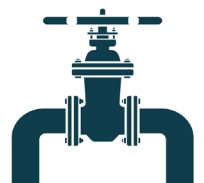
Mobile/Whatsapp  
+90 542 306 40 43



Fax  
+90 216 306 40 44



Address  
Soğanlık Yeni Mah.  
Atatürk Cad.No:5/1  
Else Apt.Daire:9,34880  
Kartal/Istanbul



### Installation Procedures for Threaded Connection

For threaded connections, the valve ends are screwed into the piping until hand-tight, then further tightened by a half-turn using a suitable wrench. Over-tightening should be avoided to prevent damage, and proper alignment is critical to avoid cross threading.

### Guidelines for Flanged Connection Installation

For flanged connections, a dismantling joint simplifies installation and future maintenance. Before bolting, ensure pipe flanges are parallel to avoid undue stress on the valve. Use a crosswise pattern when bolting to evenly distribute stress across the valve.

### Welded Connection Installation Methodology

For welded connections, cut the piping squarely and deburr and clean pipe ends, both internally and externally. Additional cleaning is performed using solder flux. During operations, provide suitable support to the pipes to avoid stressing the valve. Direct the torch away from the valve body during soldering to protect it from excessive heat.

### Post-Installation Checks and Validation

After installation, run tests to confirm the valve's performance. Ensure the media flows correctly through the valve and meticulously check for any leakage points.

### Superior Sealing Surface Construction

The valve's stainless steel sealing surface is attached to the body using advanced Automated Welding Robots. This process provides a seamless surface, confirmed through penetration testing, thus enhancing the seat's wear resistance and ensuring that the sealing material remains intact. The corrosion resistance is also improved due to the absence of uncoated threads on the body.



Phone  
+90 216 306 40 44



Email  
export@corvalve.net



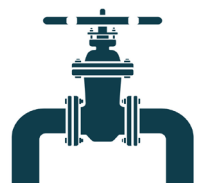
Mobile/Whatsapp  
+90 542 306 40 43



Fax  
+90 216 306 40 44



Address  
Soğanlık Yeni Mah.  
Atatürk Cad.No:5/1  
Else Apt.Daire:9,34880  
Kartal/İstanbul



### Efficient Disc Mechanism

Check valves feature a spring-driven disc mechanism, enabling swift disc response. The minimal disc stroke ensures a short travel distance, leading to a non-slam operation of the valve. The inclusion of two supportive bearings facilitates a robust construction. Separating these bearings from the sealing seat ensures no reduction in sealing quality over time.

### Optimized Flow Control and Compact Design

The disc opens in the direction of normal flow, allowing smooth, uninterrupted fluid movement. In cases of backflow, the disc closes the valve promptly, thanks to its spring-driven nature, resulting in a non-slam closure. The disc's movement is guided by the shaft supported on two bearings, and it aligns with the body weld overlay seat to provide sealing. The valve's compact, globe-type body design makes it suitable for small pump rooms, while its circular body design promotes low head loss.

#### 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.



Phone  
+90 216 306 40 44



Email  
export@corvalve.net



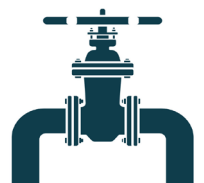
Mobile/Whatsapp  
+90 542 306 40 43

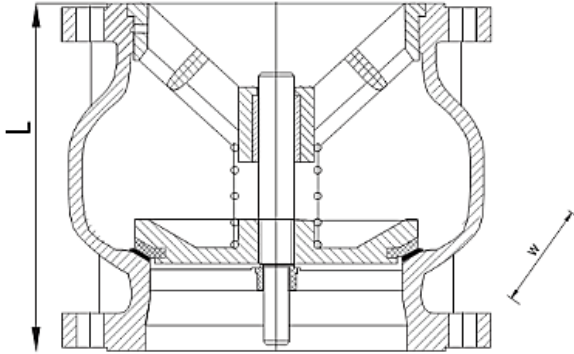


Fax  
+90 216 306 40 44



Address  
Soğanlık Yeni Mah.  
Atatürk Cad.No:5/1  
Else Apt.Daire:9,34880  
Kartal/İstanbul





### Dimension (mm) & Weight

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



**Phone**  
+90 216 306 40 44



**Email**  
export@corvalve.net



**Mobile/Whatsapp**  
+90 542 306 40 43



**Fax**  
+90 216 306 40 44



**Address**  
Soğanlık Yeni Mah.  
Atatürk Cad.No:5/1  
Elsen Apt.Daire:9,34880  
Kartal/İstanbul

