

Thin wafer check valve



Fig.614 : without spring

English

Fig.615 : with spring



Introduction

This instruction manual contains important information regarding the installation, operation, maintenance and storage for Coreline Fig.614/615 thin wafer check valves. For errors resulting from improper installation, the manufacturer or distributors can not be held responsible. Please read these instructions carefully and save them for future reference. Other information can be found in our latest product catalogue from our website - www.coreline.dk .

Requirements for the maintenance staff

The staff assigned to assembly, operating and maintenance tasks, should be qualified to carry out such jobs and in any circumstance, ensure personal safety.

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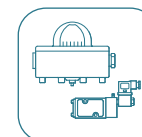
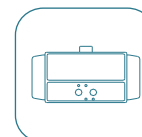
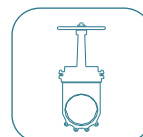
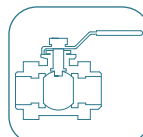
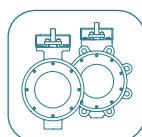
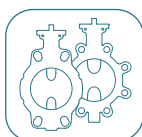




Fig.614 without spring






Fig.615 with spring

A) General

A1 Explanation of Symbols

Notes in these instructions are indicated by symbols:

 XXXXX	Hazard /Caution /Warning ... draws attention to a dangerous situation which may cause death or serious injuries to people and/or damage to the piping system.
	Attention ... draws attention to an imperative instruction.
	Information ... provides useful tips and recommendations.



If these notes, cautions and warnings are not followed, hazards may result and the manufacturer's guarantee may become void.

A2 Intended Use


After fitting between flanges of a piping system, check valves belonging to Fig.614 ,615 are designed to allow the media just flow in one direction and prevent backflow of media.

A3 Valve Labelling

Each valve carries the following information on the label sticking on the valve body (Take Fig.614 as example):

 FLOW ↑	TYPE: 614	BAR MAX: 16bar	BODY: Steel	
	DN: 50	TEMP.MAX: +85 C	DISC: SS201	
	FLANGES: PN10-16	TEMP.MIN: -20 C	SEAT: NBR	


The name plate should not be covered, in order that the fitted valve remains identifiable.

	Protect valve discs and flange mounting surfaces against possible damage.
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A4 Transportation and storage

To transport correctly


1. Leave the valve in the factory packaging until use (assembly).
2. Store the valve in a secure area and protect against dirt and damp.
3. Lift the thin wafer check valve by eye bolt on top of valves.

	Protect valve discs and flange mounting surfaces against possible damage.
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B) Fitting the valve into the pipe system / Pressure test



To transport correctly:

1. Leave the valve in the factory packaging until use (assembly).
2. Store the valve in a secure area and protect against dirt and damp.
3. Lift the thin wafer check valve by eye bolt on top of valves.

	<p>This instruction includes safety advice relating to foreseeable risks when fitting the valve into a pipe system.</p> <p>It is the responsibility of the user to follow this advice with regard to other risks, in particular those relating to local conditions. All preconditions for the system should already be in place.</p>
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B1 Safety advice for fitting of valves

Notes in these instructions are indicated by symbols:


  XXXXX	<p>Valves may only be fitted into the system by qualified persons. "Qualified" in the context of this manual means persons who can correctly assess and carry out the tasks assigned to them and can recognise and eliminate any risk on the basis of their training, specialist knowledge and professional experience.</p> <p>The intended function of a valve after fitting must correspond to the <intended use> described in Section A2.</p> <p>Pressure may not be applied to a valve which is not locked into a (any) position on actuation.</p>
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B2 Requirements for fitting into the pipe system

Ensure that only check valves whose pressure classification and materials correspond to the operating conditions are fitted. See corresponding information on the name plate (Section A3).

The check valve should be left in the factory packaging for storage and transport and only unpacked immediately before fitting into the pipe section.

Flanged valves must be fitted on or between flanges according to EN 1092-1 or EN 1759-1, with mating surfaces according to form A or B which must be machined plane-parallel and must be aligned. The use of other flanges and/or other forms of sealing faces must have been verified in the order confirmation from Coreline.

	Minimum required inner diameter Di of the counter flange														
	DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
	ΦDi	51	51	80	103	124	151	196	245	296	334	385	438	484	560

All interior surfaces of the valve must be free of dirt - especially hard/sharp particles.


The pipe sections on both sides must be also be clean: Follow the advice in Section B3 to flush out a pipe with a fitted valve.

The ends of the pipes must be aligned and have plane-parallel joint planes.

B3 Fitting process

The direction of medium shall be same with the flow arrow on the valve lable.

Arrow on the valve can not be downward. When arrow direction horizontal, eyebolt must be in the most top of the valve.

	<p>Before the first operating time, hard/abrasive dirt (welding beads, rust particles etc.) must be removed from the pipe section.</p>
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B4 Pressure testing before/during operation

All valves have undergone a final inspection by the manufacturer ex factory in accordance with EN12266-1.

The test conditions for the pipe section apply when pressure testing a valve in the system - with the following provisions :

- The test pressure of a valve may not exceed 1.5x design pressure (according to the label on the valve body). The valve disc must also be open at this test pressure.

- If working pressure exceeding 1.1x design pressure is applied to a closed valve, there is a risk of the interior sections of the valve being overstressed. This must be avoided at all costs.


B5 Supplementary Info: Dismantling the valve

Follow the same safety rules as for the (pipe) system and valve (see section B1).

Check whether the pipe is disconnected, empty and at normal pressure. Remove the flange bolts, prise apart the flange with a tool.

Remove the valve (do not damage the flange mating surface when removing the valve) and store away in a well-protected place. Protect the mating surfaces.


Refer to Section A4 for attaching lifting straps.

 Danger	<p>If a valve is dismantled from pipes containing dangerous substances and needs to be removed from the system:</p> <p>The sections of the valve which come into contact with the product (disc, shaft and seat ring) must be properly decontaminated before repair.</p>
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C) Installation Operating Manual

Under the provisions of MRL 2006/42/EG, the pipe system planner must conduct a full risk analysis. For this purpose, Coreline provide the following documentation:

- This installation operating manual.

	<p>This manual contains safety instructions for foreseeable risks when using the valve for industrial applications.</p> <p>The planner /operator is responsible for supplementing these instructions for other risks specific to the machinery used.</p>
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