GC SUPPLIES UK LTD

Installation, Operating and Maintenance Instructions:

ETG-CK1

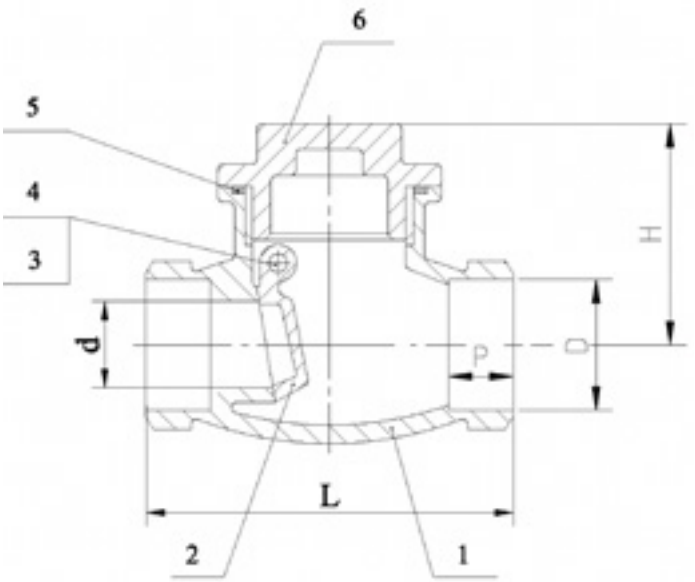
Screwed Swing Pattern Check Valve

Contents

Valve Information

ETG-CK1

Screwed Swing Pattern Check Valve



Item	Part	Material	Qty.
1	Body	CF8M	1
2	Disc	CF8M	1
3	Plug	SS316	1
4	Plug Gasket	PTFE	1
5	Body Gasket	PTFE	1
6	Cap	CF8M	1

SIZE	d	L	H	D	P	Kgs
1/4”	10	65	42	14	10	0.32
3/8”	12	65	42	17.6	10	0.31
1/2”	15	65	42	21.7	10	0.3
3/4”	20	80	50	27.3	13	0.43
1”	25	90	58	34.1	13	0.68
1-1/4”	32	105	62	42.8	13	1.05
1-1/2”	40	120	72	48.7	13	1.38
2”	50	140	81	61.1	16	1.98
2-1/2”	64	164	94	77	16	2.82
3”	73	190	103	90	16	3.9
4”	94	240	136	115.2	20	9.1

• ASTM A351 CF8M 316 Stainless Steel construction, 316 Trim.

• PTFE Cap and Hinge Pin Seal.

• 600 psi pressure rated.

• -20 / +180 deg C Temp rated.

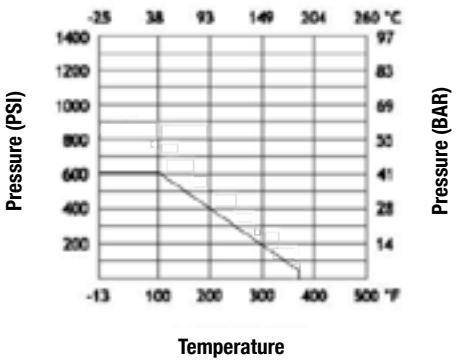
• BSP Screwed end connections to ISO 7/1 Rp (sizes 1/4”- 4”) NPT to ASME B1.20.1 (sizes 1/2” - 2”).

• CE marked in accordance with PED 2014/68/EU (from 1.1/4”).

A good all round general purpose Check Valve most suited to Liquid and Steam duties. The 600 psi Pressure Rating is relatively unique as most companies are only able to offer a 200 psi unit.

Available size range: 1/4” - 4”

Pressure-Temp. Rating



Introduction

G.C. Supplies offers a wide range of valves, designed and assembled to handle and drive fluids in industrial procedures.

The compatibility of materials used to build the valves (see technical specifications) and the application of valves to the different industrial processes is at the user's risk. Valves will have an optimal behaviour when working conditions do not exceed the recommended pressure and temperature limits for which they have been designed.

Transport and Storage Conditions

Visual Inspection

It is important to conduct a visual inspection to check for any damage on the product that could have occurred during transport, unloading or placement. If you notice any kind of anomaly upon receiving the goods, please contact GC Supplies in order to resolve the issue. During storage it is recommended to keep valves in a dry and clean environment within the included protective wrapping to avoid damage or dirt accumulation. The protective wrap should not be removed until the valve is ready to be installed.

Installation Instructions

Preparation

Firstly, separate the valve from the valve wrapping. Serious problems may arise with the installation of a valve into an unclean pipe, make sure the pipe is not dirty before installing it.

Check the valve is operating correctly by pushing the disc (refer to the diagram) in the direction of the flow and ensuring it goes back to the original position once it's released. If this is not the case, check if there are any foreign particles inside the valve and repeat until desired outcome is achieved. If the disc does not move smoothly, the valve must not be installed.

Assembling

Disc check valves can only be installed in two different positions:
A. Horizontal or **B.** Vertical (ascendant fluid).

Make sure the valve's pipe and threaded ends are clean and are compatible one with another. Apply an appropriate jointing material onto the pipes' threaded ends and thread the valve on, being careful not to excessively tighten the threaded ends. When tightening the valve, it is recommended to use a spanner or monkey wrench on the hexagonal area of the valves edges only; the force applied being less than 30 Nm.

IMPORTANT:
This valve must never be assembled adjacent to an elbow, reducer, valve or pump in order to avoid turbulence. Minimum distance recommended between these elements is 10 the times pipe's diameter -water up- and 3 times the pipe's diameter -water down according to CR 13932:2000.

Operating Instructions

Usage

Check valves are usually used to prevent fluid from coming back into the system and they provide a leakproof lock when used adjusted to the pressure and temperature values for which they have been designed for. Body materials for the valve, seat and the rest of the components must be fully compatible with the fluid circulating through the pipe, otherwise, the valve could be seriously damaged.

Operation

By default, this kind of valve does not need to be operated. Opening and closing are automatic, depending on pressure and direction of the flow. For more information on opening pressure for the valve, please consult the technical specifications for the product.

Maintenance Instructions

Check valves with metal seats are designed so that they do not need any lubrication and/or periodical maintenance during their life cycle. It is advised to regularly inspect the valve and surrounding areas to check for any leaks throughout its lifecycle.

Reparation Instructions

Repairing this type of valve is simply not cost-effective, due to their easy assembly and reduced production cost. We recommend complete replacement.

Before disassembling the pipework surrounding the valve to clean or replace it, make sure that line has been isolated and depressurised to prevent a serious accident to staff or damage to the system. Before installing a new valve, check if it meets the same requirements of the valve being replaced.

Pressure for Opening

The Screwed Swing Pattern Check Valve has been made to work with minimal operational pressures (to obtain more information, please consult the technical specifications).

Hygiene and Safety

The fluids that go through the valve can be corrosive, toxic, flammable or pollutant. When operating valves, you must follow the operation instructions.

It is recommended that you:

- Protect your eyes.
- Wear gloves and appropriate working clothes.
- Wear safety footwear.
- Wear a helmet.
- Have running water to hand.
- Have an extinguisher to hand when work with flammable fluids.

Before removing a valve from a pipe, check always if the line is completely cold, drained and depressurised.