



**OPERATION AND MAINTENANCE MANUAL FOR
BOSS™ FIG. 114SS STAINLESS STEEL SWING
CHECK VALVE**

CONTENTS

Purpose, Features & Scope of Application

Standards Met

Performance

Specifications

Dimensions

Materials of Construction

Transportation and Storage

Maintenance

Installation and Use

Warranty

PURPOSE, FEATURES AND SCOPE OF APPLICATION

The Fig. 114SS stainless steel swing check valve is suitable for use with water, non corrosive gases, oil and steam to a maximum temperature of 160 °C. Minimum liquid temperature must be no lower than -20 °C . It is rated for a maximum working pressure of 13.8 bar at 38 °C and 6.9 bar at 160 °C.

STANDARDS MET

BS21

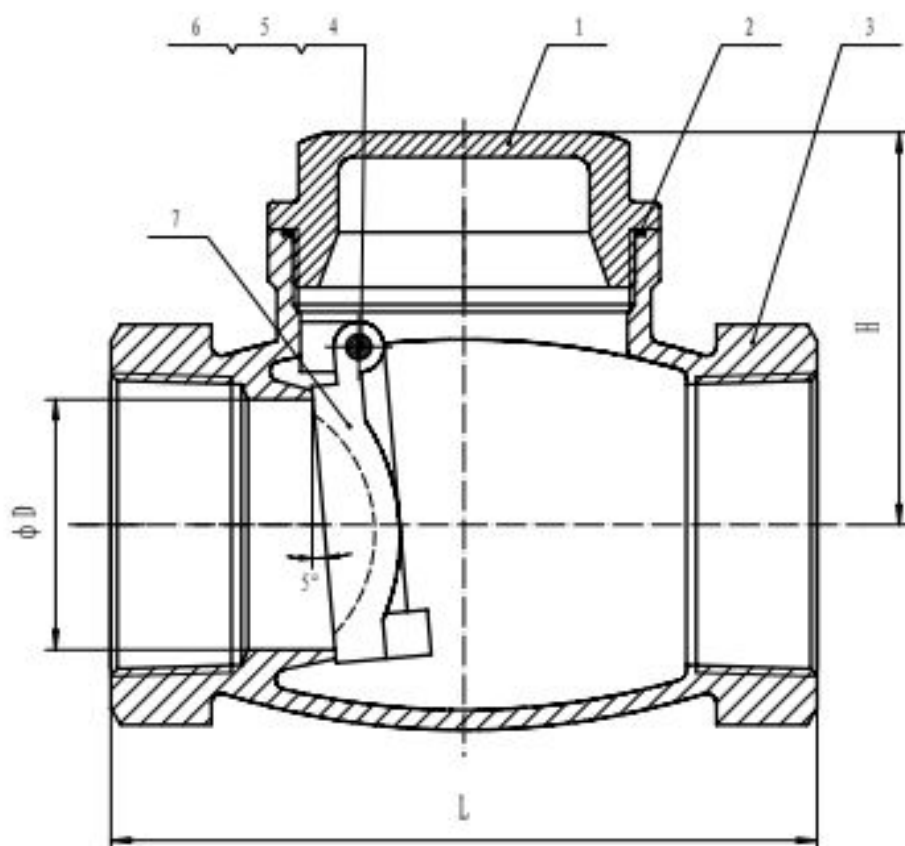
ISO 7-1

REACH (EC No. 1907/206)

PERFORMANCE

Connection Type	Maximum Pressure Rating	Operating Temperature Range
Screwed BSPT inlet and outlet to ISO 7-1	13.8 barg @ 38 °C 6.9 barg @ 160 °C	-20 to +160 °c

SPECIFICATION



DIMENSIONS (mm unless otherwise stated)

DN	L	H	ØD	Weight (kg)	Kv Value
15	65	43	15	0.32	6.0
20	80	53	20	0.49	16.7
25	90	60	25	0.74	26.0
32	105	60	32	1.14	42.4
40	120	75	38	1.50	62.3
50	140	79	50	2.32	112.5

MATERIALS OF CONSTRUCTION

No.	Part	Material	Grade
1	Bonnet	Stainless Steel	CF8M
2	Gasket	PTFE	
3	Body	Stainless Steel	CF8M
4	Hanger Pin	Stainless Steel	304
5	Plug Gasket	PTFE	
6	Plug	Stainless Steel	304
7	Disc	Stainless Steel	

TRANSPORTATION AND STORAGE

All valves should be inspected at the time of delivery for shipping damage, missing parts, and conformance with the specifications

The valves should be stored in a dust free, low humidity, dry and ventilated environment. End cap protectors should be in place when the valves are in storage.

MAINTENANCE

Fault	Cause	Action
Leakage at the junction of the valve and the bonnet	The connection is loose	Tighten connection
	The gasket is broken or missing	Replace the gasket
Sealing surface leakage	The sealing surface has contaminant adhesion	Remove dirt
	Sealing surface is damaged	Rework trimming or replacement

The valve should be inspected regularly paying particular attention to the following items:

1. Whether the sealing surface is damaged or severely worn.
2. Whether the flap rotation is free and there is no barrier.
3. Whether the body is severely corroded or worn.

Once these checks have been made and the valve reassembled, a pressure test must be carried out and the inspection recorded.

INSTALLATION AND USE

Installation should be carried out by appropriately trained personnel.

The swing check valve can be installed in a horizontal or vertical position with the arrow on the side of the valve pointing vertically upwards when installing the valve in a vertical position. The flow of the product in the piping system should be in the direction of the arrow on the side of the valve body.

Before installation, the inner cavity should be inspected, the valve end caps should be removed, the valve flap inspected and the sealing surface inspected and cleaned.

Seals such as PTFE tape should be used between the internal threads of the check valve during installation

The working condition of the valve should be consistent with the specification of the data sheet.

When the valve is closed, water hammer pressure will be generated in the pipeline, which will cause damage to the valve. The operator should check this regularly to find the problem and rectify the fault.

WARRANTY

12 months