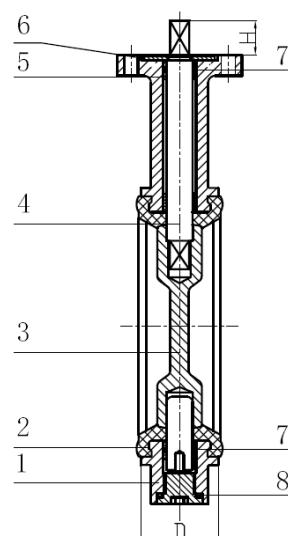
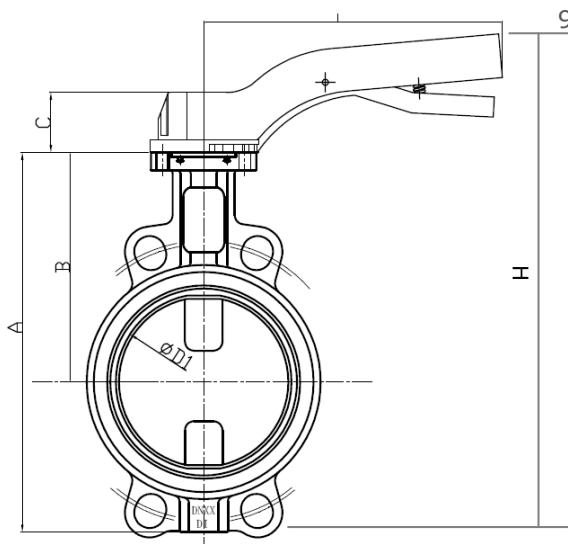


# HERZ Semi Lugged Butterfly Valve PN16

Standard sheet for  
HV-BF-SLL  
(0114)



**WRAS**  
APPROVED  
PRODUCT

Size	H	A	B	C	D	L	H	Weight
	mm	mm	mm	mm	mm	mm	mm	kg
DN50	32	189	126	35	43	200	255	2.4
DN65	32	202	133	35	46	200	268	2.9
DN80	32	238	152	35	46	200	308	3.2
DN100	41	276	170	45	52	280	355	5.2
DN125	41	296	181	45	56	280	388	6.9
DN150	41	324	196	45	56	280	412	7.8

Dimensions

No	Item	Material	Specification	Operator
1	Body	Cast Iron	BS EN1561 EN-JL1040	
2	Seat	EPDM	WRAS 0504515EPDM	
3	Disc	Stainless Steel	CF8	
4	Shaft	Stainless Steel	SS416	
5	Bearing	PTFE	PTFE	
6	Plate	Steel	ASTM A283	
7	O Ring	Elastomer	EPDM	
8	Gasket	Elastomer	EPDM	
9	Lever	Die cast Aluminium		Lever

Materials

WRAS Approved  
EN593  
EN558-1  
End Flange: BS EN 1092-2 PN16  
Top Flange: ISO5211

Specification

Working Temperature: -10 to 120°C  
Test pressure  
Shell 24 bar  
Seat 17.6 bar



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# Installation Operation & Maintenance Instructions

## **PRESSURE/TEMPERATURE RATING**

The butterfly valves must be installed in a piping system whose normal pressure and temperature do not exceed the above ratings.

If system testing will subject the valve to pressures in excess of the working pressure rating, this should be within the test pressure for the body with the valve open.

The maximum allowable pressure in valves as specified in the standards is for non-shock conditions. Water hammer and impact for example, should be avoided.

If the limits of use specified in these instructions are exceeded or if the valve is used on applications for which it was not designed, a potential hazard could result.

## **LAYOUT AND SITING**

Butterfly valves can be fitted in either horizontal or vertical pipework. When installed in a horizontal pipeline, the valve stem should be preferably horizontal. This enables the butterfly valve to be self-cleaning and also enables the weight of the disk to be equally borne by the bearings.

It should be considered at the design stage where valves will be located to give access for operation, adjustment, maintenance and repair.

Valves must be provided with adequate support. Adjoining pipework must be supported to avoid the imposition of pipeline strains on the valve body, which would impair its performance.

Heavy valves may need independent support or anchorage.

In the interests of safety, valves installed on end-of-line service in the closed position with infrequent opening should be fitted with a blanking flange on the downstream flange of the valve.

## **INSTALLATION**

HV-BF-SLL are semi-lugged valves with combined location between the bolt circle diameter and flange drilling.

The flange bolts or studs should be tightened diagonally until the body touches the flange face with metal to metal contact.

Prior to installation, a check of the identification plate and body marking must be made to ensure that the correct valve is being installed.

Valves are precision manufactured items and as such, should not be subjected to misuse such as careless handling, allowing dirt to enter the valve through the end ports, lack of cleaning both valve and system before operation and excessive force during bolting and handwheel/lever operation.

All special packaging material must be removed.

Valves must be provided with adequate support. Adjoining pipework must be supported to avoid the imposition of pipeline strains on the valve body, which would impair its performance.

Immediately prior to valve installation, the pipework to which the valve is to be fastened should be checked for cleanliness and freedom from debris.

Valve packaging should only be permanently removed immediately before installation. The valve interior should be inspected through the end ports to determine whether it is clean and free from foreign matter.

The mating flanges (both valve and pipework flanges) should be checked for correct gasket contact face, surface finish and condition. If a condition is found which might cause leakage, no attempt to assemble should be made until the condition has been corrected.

The butterfly valves are suitable for connection to steel flanges in accordance with BS EN 1092-1:2007 – PN16. The use of Type 11 weld-neck flanges is recommended.

If alternative flange types are used the installer is reminded to ensure that the raised face of the flange is flat with no weld metal protruding and that the integral rubber sealing faces on the butterfly valve have full contact with the raised face of the flange.

These Butterfly valves have integral rubber sealing faces and gaskets must not be used.

Care should be taken to provide correct alignment of the flanges being assembled. Suitable lubricant on bolt threads should be used. In assembly, bolts are tightened sequentially to make the initial contact of flanges flat and parallel followed by gradual and uniform tightening in an opposite bolting sequence to avoid bending one flange relative to the other, particularly on flanges with raised faces.

Parallel alignment of flanges is especially important in the case of the assembly of a valve into an existing system.

Flanged joints depend on compressive deformation of the integral rubber sealing faces between the flange surfaces until metal to metal contact is achieved.

The bolting must be checked for correct size, length, material and that all connection flange bolt holes are utilized.

## **OPERATING**

### Hydrodynamic Torque

Care must be taken when operating the valve by the lever as high rates of flow induce a hydrodynamic torque on the disk which may cause it to move position rapidly, either more open or slamming shut, depending on its initial position. The sudden movement on the lever can cause injury and if closing, water hammer on liquid service may result in system damage.

Valve closing is by clockwise motion of the lever. After disengaging the lever by depressing the trigger pad under the lever, the lever can be rotated to the closed position (See note on Hydrodynamic force above).

No excessive force is required to effect tight shut off and under no circumstance should additional wrenches be used.

After depressing the trigger pad and disengaging, counter clockwise rotation of the lever will open the valve from the closed notch to the fully open position (See note on Hydrodynamic force above).

## **MAINTENANCE**

These butterfly valves are maintenance free.

The valve should be at zero pressure and ambient temperature prior to any maintenance inspection.

Maintenance Engineers & Operators are reminded to use correct fitting tools and equipment.



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