OPERATING INSTRUCTION

Swing Check Valve DN65 -600

1. **Definition And Scope Of The Product**
2. **Design And Features**
3. **Flange Details**
4. **Installation Procedure**
5. **Operation And Implementation**
6. **Maintenance And Repair**
7. **Drawing, Spare Parts Lists**

Non-return valves in connection with the operating instruction to always use!

1. Definition And Scope Of The Product

- TSEK Certificated
- Working without drop-weight
- Rubber sealing (EPDM)

2. Design Specifications for Check Valve

- Body Ductile Iron EN-JS 1030(GGG-40)
- **Opt:** Body stainless steel casting (AISI304)
- Disk of ductile cast iron EN-JS 1030(GGG-40)
- **Opt:** Disc stainless steel casting (AISI 304)
- Shaft bearing bushes of bronze
- Epoxy coated acc to fresh water
  Opt: Epoxy coated acc to waste water

3. Flange Details

- Face to face length EN 558-1 serial 48(2DN+100)
- Flanges are suitable to DIN EN 1092

4. Installation

Remove any packing material from the valve. Prior to installation, check the pipeline for impurities and foreign matters and clean it if necessary.

Observe direction of installation according to arrow pointing in flow direction!

Warning !

At the manufacturer's plant the valves have been tested for tightness and strength to DIN EN12 266.

Max. admissible working temperature 40°C

NOMINAL DIAMETER	NOMINAL PRESSURE PN	WATER PRESSURE FOR INSPECTION	
(DN)	KG / CM^2	BODY	SEAT
40.....300	10	15	10
350.....600	10	12	8
40.....300	16	24	16
350.....600	16	24	16

5. Operation And Implementation

5.1 Admissible mode of operation

The Check Valves can be installed into horizontal or vertical pipeline (in the latter case only for upward flow). When installing the valve equipped with weight-loaded lever, there must be sufficient space for free movement of the lever. When installing into horizontal pipeline, the weight-loaded lever must form a horizontal line in closed position of the valve disc. When installing into a vertical pipeline (upward flow), in closed position the weight-loaded lever must also form a horizontal line

5.2 Inadmissible mode of operation

The known limit values of pressure, temperature and flow velocity must not be exceeded.

Blows of the valve disc, e.g. due to excessively fast flow reversal after shutting-off the pump, must be avoided.

6. Maintenance

Check Valves are equipped with maintenance-free plain bearings and maintenance-free shaft sealing.

The elastomer gasket on the valve disc is exchangeable.

Under pressureless conditions the mobile parts are accessible after dismantling the cover and the blind flanges. Clean these parts if they are dirty.

Elastomer gaskets and complete set of shaft sealing are spare parts. For proper replacement refer to separate repair instructions.

The Check valves are maintenance-free.

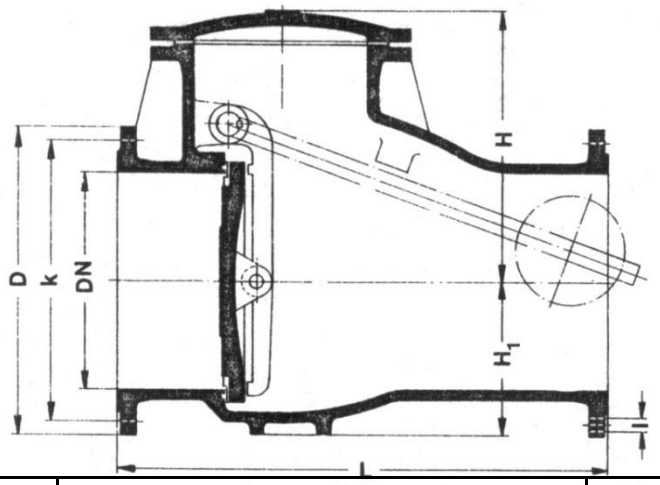
Reduction of the pressure on the valve before the planned revision procedures and processes that will be more convenient to be done.

Danger	Danger **In case of penetration of dangerous liquids, substances, gases, and steams, immediately the plant has to be shut down, the responsible supervisor must be informed and appropriate repair work has to be carried out.** **The personal protective equipment according to the rules of the employer's liability insurance association must be used. Depending on the flow medium, there is the risk of poisoning, causticization, scalding, and danger due to biological and microbiological substances as well as the risk of fire and explosion!**	
DİKKAT	**WARNING** **Before carrying out maintenance work on the valve, any presurised pipeline has to be made pressureless and to be secured against re- starting!** **After finishing the maintenance work, any connection has to be checked for tightness and close fit.**	

7. Drawings, Spare Parts List

With internal valve shaft Spare parts list	DN65 - DN600
With weight-loaded lever Spare parts list	DN65 - DN600

SPARE PARTS	
18- Spacer	18- Spacer
17- Hex Bolt	17- Hex Bolt
16- Gasket	16- Gasket
15- Body cover	15- Body cover
14- Hex nut	14- Hex nut
13- Blind flange	13- Blind flange
12- Gasket	12- Gasket
11- Stud bolt	11- Stud bolt
10- Avjusting ring	10- Avjusting ring
9- Threaded Bold	9- Threaded Bold
8- Shaft	8- Shaft
7- Cotter Pin	7- Cotter Pin
6- Waster	6- Waster
5- Bolt	5- Bolt
4- Valve Lever	4- Valve Lever
3- Valve disk	3- Valve disk
2- Bush	2- Bush
1- Body	1- Body



PN10	BODY DIMENSIONS		FLANGE DIMENSIONS					WEIGHT		
NOMINAL DIAMETER (DN)	H	H1	D	NOMINAL DIAMETER (DN)	H	H1	D	NOMINAL DIAMETER (DN)	H	H1
50	125		165	200	125	19	4	13	13	14
65	140		185	230	145	19	4	19,5	20	22,5
80	165		200	260	160	19	8	26	26	29
100	200		220	300	180	19	8	36	37,5	44
125	220		250	350	210	19	8	52,5	54,5	60
150	240		285	400	240	23	8	68	72	76
200	285		340	500	295	23	8	115	118	130
250	315		400	600	350	23	12	155	165	185
300	365	245	455	700	400	23	12	230	230	270
350	400	285	505	800	460	23	16	320	326	355
400	455	310	565	900	515	28	16	430	442	480
500	560	380	670	1100	620	28	20	710	710	750
600	630	450	780	1300	725	31	20	980	980	1025
700	795	525	895	1500	840	31	24	1490	1490	1565
800	855	610	1015	1700	950	34	24	2100	2100	2175
900	925	680	1115	1900	1050	34	28	2900	2900	2980
1000	980	730	1230	2100	1160	37	28	3700	3700	3780
PN16	**BODY DIMENSIONS**		**FLANGE DIMENSIONS**					**WEIGHT**		
NOMINAL DIAMETER (DN)	H	H1	D	NOMINAL DIAMETER (DN)	H	H1	D	NOMINAL DIAMETER (DN)	H	H1
50	125		165	200	125	19	4	13	13	14
65	140		185	230	145	19	4	19,5	20	22,5
80	165		200	260	160	19	8	26	26	29
100	200		220	300	180	19	8	36	37,5	44
125	220		250	350	210	19	8	52,5	54,5	60
150	240		285	400	240	23	8	58	72	76
200	285		340	500	295	23	12	115	118	130
250	315		400	600	355	28	12			
300	365	245	455	700	410	28	12			