

On Top of your Pressure Tank

Access Tank Cover - Circular Type HLSD

Application

Outward opening manhole cover type HLSD is used on top of pressurized tanks and containers where closeable means of access to the interior of the vessel is required. HLSD is approved by the German TÜV authority, the Danish A.T. and the Dutch Stoomwezen for pressures up to 1000 kPa (10 bar).

Working principle

HLSD is secured in the closed position by springloaded swingbolts, which, together with the seal in the cover, ensure complete tightness. The cover is attached to the frame by a rigid hinge, giving exact location of the cover in the closed position and designed to stop the cover at an angle of 30° beyond the vertical position when opening.

Standard design

HLSD has from 4 up to 18 swingbolts subject to the size, pressure and temperature. The seal between cover and frame is located in the cover.

Materials

Product wetted

steel parts: 1.4404 (AISI 316L),
supplied with inspection certificate
3.1.B according to EN10204.

Other steel parts: 1.4301 (AISI 304).

Seal: EPDM (-10° C to 140° C).

Finish: Semi-bright.

Note! Weldings are not treated.

Sizes

Internal diameters of frame:

200 mm, 300 mm, 400 mm, 450 mm, 500 mm, 600 mm and
800 mm.

Technical Data

Working pressure: Up to 1000 kPa (10 bar), ø200.

Negative working

pressure: Full vacuum.

Test pressure: Max. 1.3 x working pressure.

Temperature range: -10°C to + 250°C.



Fig. 1. HLSD, Manhole cover.

Options

- A) Spring to assist opening.
 - B) Arrangement for securing cover in open and closed position.
 - C) Bracket for indication unit.
 - D) Handle in stainless steel.
 - E) Guide for cover for vertical installation.
 - F) Sight glass acc. to DIN 28120.
 - G) Union sight glass based on DIN 11851.
 - H) Safety grid.
 - I) Special surface finish.
 - J) Different frame heights (up to 800 mm).
 - K) Seal of Q (silicone), NBR (nitrile).
 - L) Seal of FPM or FEP covered Q.
- Note!** Extra screws required (see table 1.b. overleaf).

Ordering

Please state the following when ordering:

- Size.
- Max. pressure and corresponding temperature.
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- Optional extras.

Selection Table

Size (mm)	A (mm)	Number of screws	Working pressure (bar) at working temperature (°C)					SL (mm)	Weight (kg)
			50°	100°	150°	200°	250°		
200	206	4	10	10	10	10	10	3	15
300	306	4	7	6	6	6	6	3	19
300	306	5	9	8	7	7	9	3	20
400	406	4	4	3	3	3	3	4	24
400	406	5	5	4	4	4	4	4	25
400	406	6	6	5	5	5	5	4	26
400	406	7	7	6	6	6	6	4	27
400	406	8	8	7	7	7	6	4	28
450	456	5	4	3	3	3	3	4	28
450	456	6	5	4	4	4	4	4	29
450	456	7	6	5	5	5	4	4	30
450	456	8	7	6	5	5	5	4	31
450	456	9	7	6	6	6	6	4	32
450	456	10	8	7	7	7	6	4/5	33
500	506	5	3	3	3	2	2	4	31
500	506	6	4	3	3	3	3	4	32
500	506	7	5	4	4	4	3	4	33
500	506	8	5	5	4	4	4	4	34
500	506	9	6	5	5	5	5	4	35
500	506	10	7	6	6	5	5	4	36
500	506	11	7	6	6	6	6	4/5	37
600	608	6	3	2	2	2	2	4	42
600	608	8	4	3	3	3	3	4	44
600	608	9	4	3	3	3	3	4	45
600	608	10	5	4	4	4	3	4	46
600	608	11	5	4	4	4	4	4	48
600	608	12	6	5	5	4.5	4.5	5/6	49
600	608	14	7	6	5	5	5	6	53
800	808	10	2	2	2	2	2	6	66
800	808	12	3	3	2	2	2	6	68
800	808	13	3	3	3	3	2	6	74
800	808	14	4	3	3	3	3	6	78
800	808	16	4	4	3.8	3.7	3.5	6	92

Table 1.a. Selection table.

Selection table for seals of FPM or FEP covered Q.

Size (mm)	Min. number of screws
200	4
300	5
400	6
450	7
500	8
600	9
800	12

Table 1.b. Selection table.

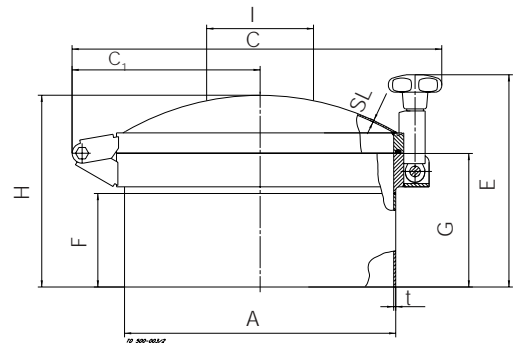


Fig. 2. Dimensions.

Dimensions (mm)

Size	200	300	400	450	500	600	800
A	206	306	406	456	506	608	808
C ₁	185	235	285	310	335	385	485
C	350	450	550	600	650	750	950
E	325	325	325	325	325	325	325
F	135	135	135	135	135	135	135
G	200	200	200	200	200	200	200
H	260	275	290	300	305	315	320
t	3	3	3	3	3	4	4
SL	See table 1.a.						