

On Top of your pressure Tank

Access Tank Cover - Circular Type HLSD

Application

Outward opening manway 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 European Pressure Directive (PED), the Danish A.T. and the Dutch Stoomwezen for pressures up to 145 PSI (10 bar).

Working principle

HLSD is secured in the closed position by spring-loaded 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:	W. No. 1.4404 (AISI 316L), supplied with inspection certificate 3.1.B according to EN10204
Other steel parts:	W. No. 1.4301 (AISI 304)
Seal:	EPDM (14° F to 284° F).
Finish:	Semi-bright.

Note! Weldings are not treated.

Sizes

Internal diameters of frame: 7.87", 11.81", 15.75", 17.72", 19.68", 23.62" and 31.50"

Technical Data

Working pressure:	Up to 145 PSI (10 bar), ø7.87"
Negative working pressure:	Full vacuum.
Test pressure:	Max. 1.3 x working pressure.
Temperature range:	14° F to 428° F



HLSD, Manhole Cover.

Options

- Spring to assist opening.
- Arrangement for securing cover in open and closed position.
- Bracket for indication unit.
- Handle in stainless steel.
- Guide for cover for vertical installation.
- Sight glass acc. to DIN 28120.
- Union sight glass based on DIN 11851.
- Safety grid.
- Special surface finish.
- Different frame heights (up to 800 mm).

Material grades

- Seal of Q (silicone), NBR (nitrile).
- Seal of FPM or FEP covered Q.

Note! Extra screws required (see table 1.b.).

Ordering

Please state the following when ordering:

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

Selection Table

Size (in.)	A (in.)	No. of Screws	Working pressure (PSI) at working temperature (°F)					SL (in.)	Weight (lb.)
			122°	212°	302°	392°	482°		
7.9	8.11	4	145	145	145	145	145	0.12	33
11.8	12.0	4	102	87	87	87	87	0.12	42
11.8	12.0	5	116	116	102	102	116	0.12	44
15.7	16.0	4	58	44	44	44	44	0.16	53
15.7	16.0	5	73	58	58	58	58	0.16	55
15.7	16.0	6	87	73	73	73	73	0.16	57
15.7	16.0	7	102	87	87	87	87	0.16	60
15.7	16.0	8	116	102	102	102	87	0.16	62
17.7	17.9	5	58	44	44	44	44	0.16	62
17.7	17.9	6	73	58	58	58	58	0.16	64
17.7	17.9	7	87	73	73	73	58	0.16	66
17.7	17.9	8	102	87	73	73	73	0.16	68
17.7	17.9	9	102	87	87	87	87	0.16	71
17.7	17.9	10	116	102	102	102	87	0.16/0.20	73
19.7	19.9	5	44	44	44	29	29	0.16	68
19.7	19.9	6	58	44	44	44	44	0.16	71
19.7	19.9	7	73	58	58	58	44	0.16	73
19.7	19.9	8	73	73	58	58	58	0.16	75
19.7	19.9	9	87	73	73	73	73	0.16	77
19.7	19.9	10	102	87	73	73	73	0.16	79
19.7	19.9	11	102	87	87	87	87	0.16/0.20	82
23.6	23.9	6	44	29	29	29	29	0.16	93
23.6	23.9	8	58	44	44	44	44	0.16	97
23.6	23.9	9	58	44	44	44	44	0.16	99
23.6	23.9	10	73	58	58	58	44	0.16	101
23.6	23.9	11	73	58	58	58	58	0.16	106
23.6	23.9	12	87	73	73	65	65	0.20/0.24	108
23.6	23.9	14	102	87	73	73	73	0.24	112
31.5	31.8	10	29	29	29	29	29	0.24	117
31.5	31.8	12	44	44	29	29	29	0.24	146
31.5	31.8	13	44	44	44	44	29	0.24	150
31.5	31.8	14	58	44	44	44	44	0.24	163
31.5	31.8	16	58	58	55	53	50	0.24	172

Table 1.a.

Selection table for seals of FPM or FEP covered Q.

Size (in)	Min. number of screws
7.9	4
11.8	5
15.7	6
17.7	7
19.7	8
23.6	9
31.5	12

Table 1.b

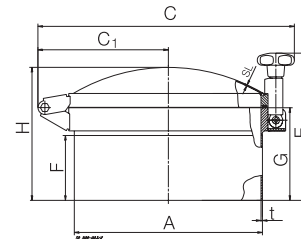


Fig. 2. Dimensions.

Dimensions (in.)

Size	7.9	11.8	15.8	17.7	19.7	23.6	31.5
A	8.11	12.1	16.0	18.0	19.9	23.9	31.8
C ₁	7.28	9.25	11.2	12.2	13.2	15.2	19.1
C	13.8	17.7	21.7	23.6	25.6	29.5	37.4
E	12.8	12.8	12.8	12.8	12.8	12.8	12.8
F	5.31	5.31	5.31	5.31	5.31	5.31	5.31
G	7.87	7.87	7.87	7.87	7.87	7.87	7.87
H	10.2	10.8	11.4	11.8	12.0	12.4	12.6
t	0.12	0.12	0.12	0.12	0.12	0.16	0.16
SL	See table 1. a.						