

## The Best Access to Sanitary Tanks & Vessels

### Access Tank Cover - Oval Type LKD

#### Application

The oval Access Tank Cover LKD are used on tanks or containers where a closeable means of access to the interior of the vessel is required.

The particular cover has been designed taking into account today's demands for tank covers which are suitable for CIP cleaning processes and where access to the tank is only necessary for occasional inspection

#### Working principle

Open the cover by loosening the handle. For inspection purposes the cover can then be turned into the tank. If it is necessary to physically enter the tank, the cover can be removed at the double hinge or swung out of the tank, depending on the model. The seal is hygienically positioned and is not affected by positive or negative pressure in the tank.



Upper. LKD 12½ x 17¼ with hinge and LKD 20 x 16⅛ manway cover. Lower. LKD 17¾ x 13¾ with angle-shaped frame and flat frame.

#### Materials

Type	LKD 12½ x 17¼	LKD 20 x 16⅛	LKD 17¾ x 13¾
Steel parts	AISI 304 (W.Nr. 1.4301) or AISI 316L (W.Nr. 1.4404) Cover and frame are supplied with inspection certificat 3.1.B according EN10204	AISI 304 (1.4301) or AISI 316L (1.4404) Cover and casing are supplied with inspection certificate 3.1.B according EN10204	Cover and frame: AISI 304 (1.4301) or AISI 316Ti (1.4571) supplied with inspection certificate 3.1.B according EN10204. Other steel parts: AISI 304 (1.4301)
Plastic parts	Nylon	Nylon	
Seal	Nitrile (NBR) in a quality approved by the food industry	Nitrile (NBR) in a quality approved by the food industry	Nitrile (NBR)
Finish	Semi bright.	Semi-bright	Semi-bright

**Technical data**

Type	LLKD 12½ x 17¼	LKD 20 x 161/8*	LKD 17¼ x 13¾	LKD-P TÜV /PED approved
Max. static pressure	21.76 PSI (1.5 bar)	36.26 PSI (2.5 bar)	29.00 PSI (2 bar)	43.51 PSI (3 bar)
Max. positive working pressure	0 PSI (0 bar)	0 PSI (0 bar)	0 PSI (0 bar)	up to 72.51 PSI (5 bar)
Max. negative working pressure	7.25 PSI (0.5 bar)	7.25 PSI (0.5 bar)	7.25 PSI (0.5 bar)	7.25 PSI (0.5 bar)
Test pressure	32.63 PSI (2.25 bar)	54.39 PSI (3.75 bar)	43.51 PSI (3 bar)	1.3 x max. working pressure
Test temperature			68°F	68°F
Temperature range	-20°C to +90°C (NBR)	-4°F to +194°F (NBR)	-4°F to + 212°F	-4°F to + 212°F

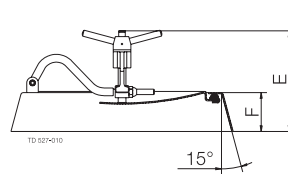
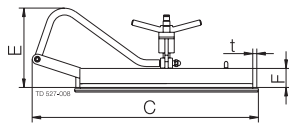
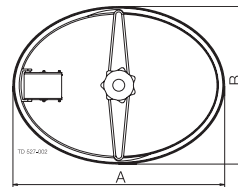
\* The above values apply for non-pressure Access Tank cover, type LKD and LKDI.

Dimensions (in.)

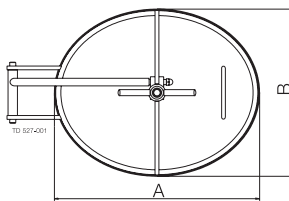
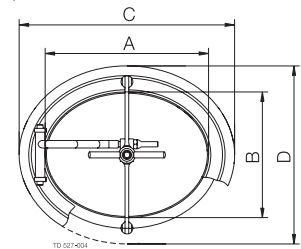
Type	LKD12½ x 17¼	LKD20 x 16⅛	LKDI20 x 16⅛	LKTD20 x 16⅛	LKTDI20 x 16⅛	LKD flat17¼ x 13¾	LKD angled17¼ x 13¾
A	18.11	21.02	21.02	21.02	21.02	17.56	17.56
B	13.39	17.09	17.09	17.09	17.09	13.62	13.62
C		26.18	26.18	26.18	26.18	19.92	20.35
D						15.98	16.42
E		9.06	10.24	9.06	10.24	6.30	8.66
E							9.84
E							11.42
F	1.89	2.20	3.86	2.02	3.86		2.76
F							3.98
F							5.51
t	0.39	0.47	0.47	0.47	0.47	0.39	0.12-0.16
Sheet thickness of cover		0.10	0.10	0.39	0.39	0.12-0.16	0.12-0.16
Weight (lb)	17.64	41.89	52.91	68.34	74.96		

Weights (lb) LKD 17¼ x 13¾

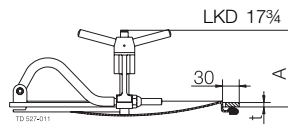
Angle shaped frame	70/3 (F/t)	7.7 lbs
Angle shaped frame	70/4 (F/t)	10.1 lbs
Angle shaped frame	100/3 (F/t)	8.4 lbs
Angle shaped frame	100/4 (F/t)	11.2 lbs
Angle shaped frame	140/3 (F/t)	13.2 lbs
Angle shaped frame	140/4 (F/t)	17.6 lbs
Flat frame	10 x 30	6.6 lbs
Cover	3 (t)	6.6 lbs
Cover	4 (t)	8.8 lbs
Handle + clamp arm		5.3 lbs
Hinge		4.0 lbs



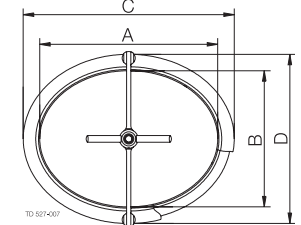
LKD 12½ x 17¼



LKD 20 x 16⅛



LKD 17¼ x 13¾ angle-shaped frame



LKD 17¼ x 13¾ flat frame

**Installation LKD 320x440**

Welding of manhole cover LKD 12½ x 17¼ into insulated tank.

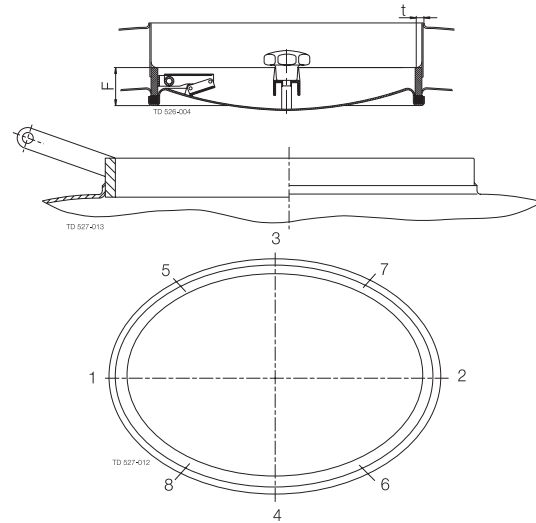
**Installation LKD 20 x 16⅛**

In order to obtain a perfect seal and a good function of our access tank covers, it is essential that the welding of the casing is carried out carefully and correctly. If the cover is fitted on a vertical tank wall, the hinge of the casing must always be placed on the left-hand side.

For thin-gauged containers, ie. sheet thickness less than 2.5 mm, welding is easier if the hole is marked in such a way that a 10 mm edge can be burred up as sharply as possible. When the hole is cut and the edge burred up, if applicable, the casing is inserted, and tack-welding is now carried on at points placed opposite each other all the way round, in the sequence shown in fig. 4.

The casing may now be fully welded on both sides. A control should be made by removing the rubber seal, and cover and casing should be assembled loosely to ensure that they fully contact each other over the whole surface.

Any stresses are removed by hammering the sheet around the casing.

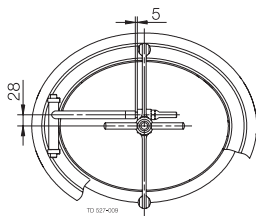


Installation of LKD 20 x 16⅛

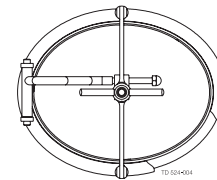
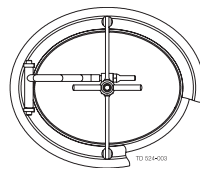
**Installation LKD 17¾ x 13¾**

1. Remove seal form cover.
2. Fit cover with hinge in frame.

Please note the dimensions shown.



TÜV/PED approved version, LKD-P



3. Weld hinge to frame.
- Left-hand hinge to the left and right-hand hinge to the right.

Frame thickness (in.)	Cover (in.)	Max. working pressure (PSI)	Max. negative working pressure
		at max. working temperature 212°F	(PSI)
3	0.12	43.5 PSI	7.3
** 4	0.16	58.0 PSI	7.3
10	0.12	43.5 PSI	7.3
**10	0.16	72.5 PSI	7.3

\*\* On request

**Option LKD 12½ x 17¼**

A. Seal of EPDM rubber.

LKD AISI 316

Order code no 9611-70-076-1

**Ordering**

Please state the following:

**Cover with hinge:**

LKD AISI 304                      Order code no 9611-70-029-0  
 LKD AISI 316                      Order code no 9611-70-029-1

**Cover with hinge:**

LKD AISI 304                      Order code no 9611-70-076-0

**Options LKD 20 x 161/8**

**Material Grades**

- EPDM rubber seal ring.

**Ordering**

Please state the following:

- Cover type: LKD, LKDI, LKTD or LKTDI
- Steel part material: AISI 304 or AISI 316L
- Seal ring material type: Nitrile or EPDM