

1.7 Tank Accessories

Accessories for your tank



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Alfa Laval LKTC Tank Leg

The Perfect Support for Your Tank

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Application

Stainless steel tank leg type LKTC is used for free standing stainless steel tanks or vessels where adjustable supports is necessary to ensure stability.

Standard design

LKTC consists of a cylindrical welding piece with an internal thread which takes an adjustable cylinder-shaped spindle. LKTC is designed so that it can stand either on the floor or on a stainless steel baseplate. The baseplate has a ball socket and is used where the floor is not completely horizontal to ensure stable support. The design ensures that the legs are easy to clean.



TECHNICAL DATA

Size	Max. static load (N)	Floor area of baseplate (mm ²)
¾"	75000	2600
1"	100000	5000
1½"	160000	7800

PHYSICAL DATA

Materials

Steel parts: Stainless steel AISI 304.
 Finish: Base plate: Mat.
 Other parts: Semi bright.

Dimensions (mm)

Size	¾"	1"	1½"
A	38	53	80
B	35.5	39.8	65.3
C	58	80	100
D	¾"	1"	1½"
E	35	40	45
F	5	5	5
Lmin.	20	20	20
Lmax.	35	50	60
R	15	15	25
T	4	6	8
Weight	0.35	0.60	1.67
(kg)	0.43*	0.83*	2.25*

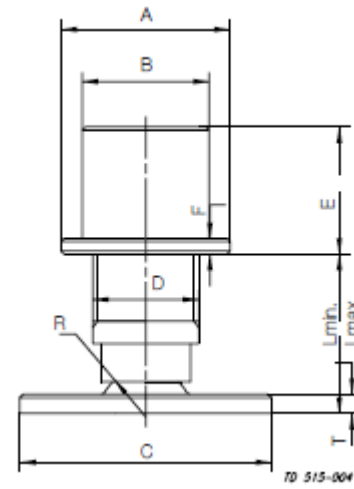
Ordering

Tanklegs without base plate

¾"	9611-71-029-0
1"	9611-71-030-0
1½"	9611-71-032-0

Tanklegs with base plate

¾"	9611-71-022-0
1"	9611-71-023-0
1½"	9611-71-025-0



Alfa Laval LKS 105 Tank Sight Glass

Keep an Eye on Your Product

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Application

Sight glass, type LKS 105, is designed for pressureless storage tanks and should be installed above liquid level. The sight glass is welded into tanks or containers to facilitate inspection of product, level, processing, cleaning ect.

Standard design

The sight glass consists of a welding flange with inside thread, two seal rings as well as a glass plate and lock washer. The sight glass is completely tight-fitting.



TECHNICAL DATA

Max. product pressure: 100 kPa (1 bar).
 Max. temperature: 90 °C.

Options

- a. MiniVision light fitting with push botton for LKS (20 or 50 Watt).
- b. MiniVision light fitting without push botton for LKS (50 Watt).
- c. Collar flange fixation for MiniVision light fitting without push botton for LKS size 105.

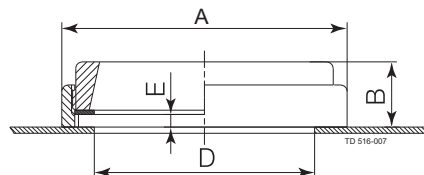
PHYSICAL DATA

Materials

Washers: Stainless steel AISI 304.
 Glass: Borasilikat
 Seal rings: Para rubber, Klingerite.
 Finish: Semi-bright.

Measurements

Size: ø 105 mm.
 Weight: 1 kg.



Size	105 (mm)	105 (inch)
A	136	5.35
B	31	1.22
D	105	4.13
E	6.5	0.26

Alfa Laval Union Sight Glass based on DIN 11851

Keep an Eye on Your Product

Concept

These screwed sight glasses are used for the visual control of processes inside vessels, storage tanks, mixers, reactors etc. They are used in dairies, breweries and other food industries as well as pharmaceutical and cosmetics industries.

Standard Design

The sight glass consists of a welding flange (see drawing pos. 1), a grooved collar nut (2), a glass disc (3) and two gaskets (4+5). The product wetted side of the gasket (5) is made of EPDM. The welding part (1) and glass disc (3) are delivered with a material certificate EN10204.3.1.B/2.2 as standard.



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TECHNICAL DATA

Temperature

Temperature range: -10°C to +140°C (EPDM).

Pressure

Max. product pressure: Max. 6 bar (600 kPa).

Min. product pressure: 1 mbar absolute (1 Torr).

PHYSICAL DATA

Materials

Welding flange: AISI 316L, material certificate 3.1B/ADW2 to DIN 50049.

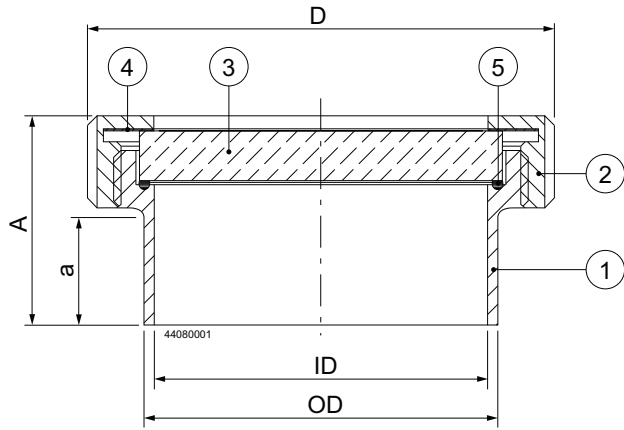
Grooved collar nut: AISI 304

Glass disc: Borosilicate to DIN 7080 (max. 280°C), material certificate 2.2.

Gasket cover side: PTFE

Gasket product wetted side: . . EPDM.

Dimensions (mm)



Size DIN DN	ID	a	A	OD	D
65	65	22	49	72	112
100	100	32	65	106	148
125	125	20	60	132	178

Options

- A. Product wetted side of gasket in FPM, PTFE or Silicone.
- B. miniVISION light fitting.

Ordering

- DN size.
- Material type of product wetted gasket side.
- miniVISION light fitting, if needed.

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Alfa Laval LKGG-1 and LKGL-1 In-Line Sight Glass

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Concept

In-line sight glass type LKGG-1 and LKGL-1 is used in pipelines to allow visual observation of product flow.

Standard Design

LKGG-1 consists of a perforated stainless steel shield tube fitted with a welding union at each end. A special glass tube is fixed in the shield tube so that it is unaffected by possible stresses in the pipelines.

LKGL-1 has a stainless steel light fitting unit welded onto the shield tube so that the product flow can be illuminated.



TECHNICAL DATA

Temperature

Recommended max. working temperature: 110°C.

Max. thermal shock: 100°C.

Bulb: 24 V / 24 W.

Bulb socket: B 15.

Pressure

Max. test pressure (20°C): 500 kPa (5 bar).

Sizes

25 mm (1"), 38 mm (1½"), 51 mm (2"), 63.5 mm (2 ½") and 76 mm (3").

PHYSICAL DATA

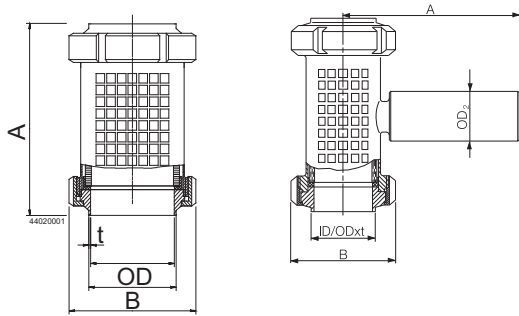
Materials

Seals: EPDM rubber.

Steel grade: Stainless steel AISI 304 or
acidresistant steel AISI 316.

Glass disc: Borosilicate.

Dimensions (mm)



Size	25mm	38mm	51mm	63.5mm	76.1mm	101.6mm
A	175	181	188	194	200	-
B	64	77	91	106	122	148
OD	26.2	38.9	51.6	64.3	76.6	102
ID	22.5	35.5	48.5	60.5	72	97.6
t	1.85	1.7	1.55	1.9	2.3	2.2
Weight (kg)	1.0	1.5	2.0	2.5	3.6	-

Note!

- LKGL-1: +0.5 kg
- Size 101.6mm only for LKGG-1

Options

Material grades

- A. Seals of Nitrile (NBR).

Ordering

Please state the following when ordering:

- Materials, AISI 304 or 316.
- Type: LKGG-1 or LKGL-1.
- Size.

Alfa Laval Sight Glass according to DIN 28120

Keep an Eye on Your Product

1.7

Concept

The bolted sight glass is used for visual control of processes inside vessels which typically are under high pressure and have temperatures. The sight glass is used in chemical, pharmaceutical and cosmological industries as well as in dairies, breweries and other food industries.

Standard Design

The sight glass consists of a base flange, a cover flange, gaskets, a glass disc, nuts and studs. The sight glass is to be welded into or onto vessel walls and it corresponds in its construction and assembly to the dimensions and constructional guidelines of the DIN specification 28120. The respect of the DIN prescriptions for the flange thicknesses guarantees a distortion free location of the sight glass disc in case of correct welding. The pressure resistance of the glass disc is, of course, dependent on the care with which the bolts and nuts are tightened (always working on diametrically opposed pairs). For lubricated bolts, $R_a = 0.1\text{mm}$, the recommended tightening torque values (in Nm) are indicated in the table on page 2. The glass discs are made of borosilicate glass to DIN 7080 which means that the maximum operating temperature is 280°C . All steel parts available with material certificate EN10204. 3.1B/AD-W2.



TECHNICAL DATA

Temperature

Temperature range: -10°C to $+140^\circ\text{C}$
(EPDM), (higher temperatures up to 280°C with gaskets of Klingersil).

Pressure

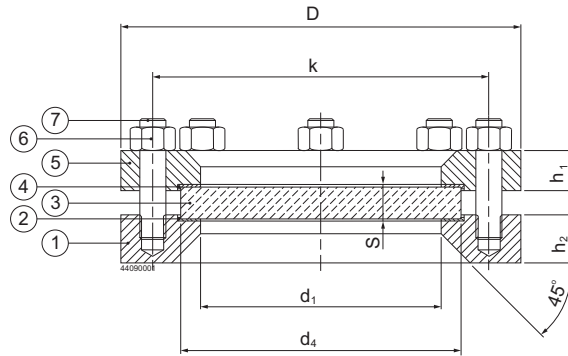
Max. product pressure: Max. 10 bar (1000 kPa).
Min. product pressure: Full vacuum.

PHYSICAL DATA

Materials

Base flange: AISI 316L, material certificate 3.1B/AD-W2.
Cover flange: AISI 321, material certificate 3.1B/AD-W2.
Gaskets: Klingersil C4400 (cover side)/EPDM (product side).
Glass disc: Borosilicate to DIN 7080, material certificate 2.2
(max. 280°C).
Bolts or studs: To DIN 938/934 in A2-70.

Dimensions (mm)



Size DIN	Pressure Rating	Viewing Diameter	Sight glass disc			Base flange and cover flange				Bolts or studs and nuts		
			d1	d4	s	D	k	h1	h2	Number	Size	Tightening torque (Nm)
50	10	80	100	15	165	125	16	30	4	M16	28	
80	10	100	125	15	200	160	20	30	8	M16	20	
100	10	125	150	20	220	180	22	30	8	M16	26	
125	10	150	175	20	250	210	25	30	8	M16	32	
150	10	175	200	25	285	240	30	36	8	M20	47	
200	10	225	250	30	340	295	35	36	8	M20	63	

Installation

The numbers in the following installation instructions refer to the drawing above.

After having correctly welded the base flange (1) onto or into the vessel wall, the gasket (2), the sight glass disc (3), the gasket (4) and the cover flange (5) are mounted one after the other and then the nuts (6) are tightened, always working on diametrically opposite pairs. The above indicated tightening torque values have to be strictly respected. Additional information may be taken from the DIN specification 28120.

Options

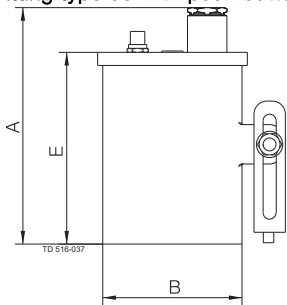
- Product wetted side of gasket in Klingersil C4400.
- miniVISION light fitting.

Ordering

When ordering, please state the following:

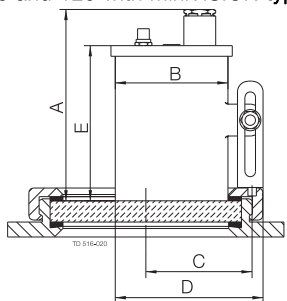
- DN size.
- Material type of product wetted gasket side.
- miniVISION light fitting, if needed.

miniVISION Light Fitting type 53 with push button.



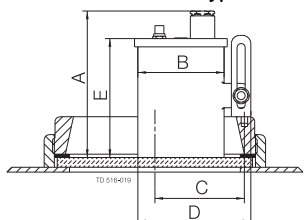
A	B	E
90	53	73

Sight glass LKS 78 and 120 with miniVISION type 53.



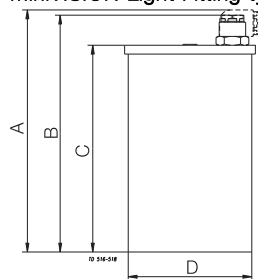
LKS size	A	B	C	D	E	Weight (kg)
78	90	53	48	72	73	0.30
120	90	53	69	72	73	0.30

Sight glass LKS 105 with miniVISION type 53.



A	B	C	D	E
90	53	59	72	73

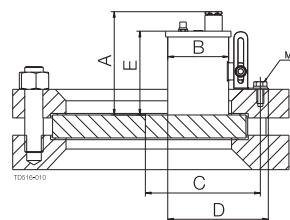
miniVISION Light Fitting type 70.



A	B	C	D
141	134	117	70

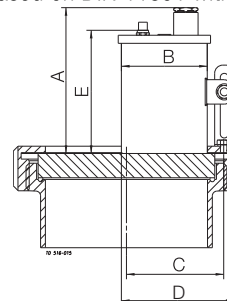
Sight glass LKS 78 with miniVISION type 70.

Sight Glass acc. to DIN 28120 with miniVISION type 53.



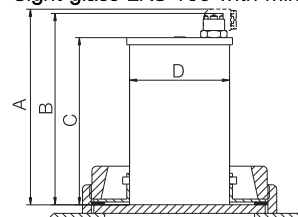
DN	A	B	C	D	E	Weight (kg)
100	90	53	87	90	73	0.30
125	90	53	100	90	73	0.30
150	90	53	112	90	73	0.30

Union Sight Glass based on DIN 11851 with miniVISION type 53.



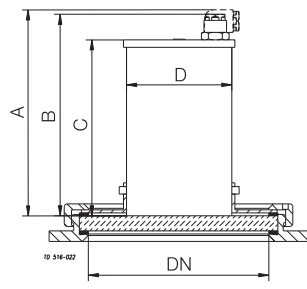
DN	A	B	C	D	E	Weight (kg)
65	90	53	39	72	73	0.30
100	90	53	57	72	73	0.30
125	90	53	69	72	73	0.30

Sight glass LKS 105 with miniVISION type 70.

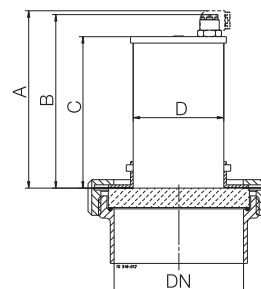


A	B	C	D
141	134	117	70

Union Sight Glass based on DIN 11851 with miniVISION type 70.



DN	A	B	C	D
78	141	134	117	70



DN	A	B	C	D
65	141	134	117	70

Note! For size DN 65 (only).

Ordering

When ordering, please state the following:

- Type and size of sight glass on which the luminaire has to be mounted.
- Power.
- Sight Glass type to be delivered with the light fitting, if needed.