

APPLICATION:

Round sight glass fittings are used for observation and illumination of the interior of closed vessels (boilers, tanks, silos, etc.).

Sight glass fittings type 318 are round flanged sockets for welding in or on, each completed with a sight glass plate inserted between the gaskets and screwed firmly.

The sizes DN 300 and DN 400 are particularly suitable for [biogas applications](#).

INSTALLATION NOTE:

After welding the base frame to the pressure vessel, check whether the sealing surface has warped. Reworking may be required! Also observe the specified torques for the screw connections!

The operating pressure does not apply to the base flange, this must be verified together with the pressure vessel according to AD 2000 instruction leaflet B9 or equivalent code!

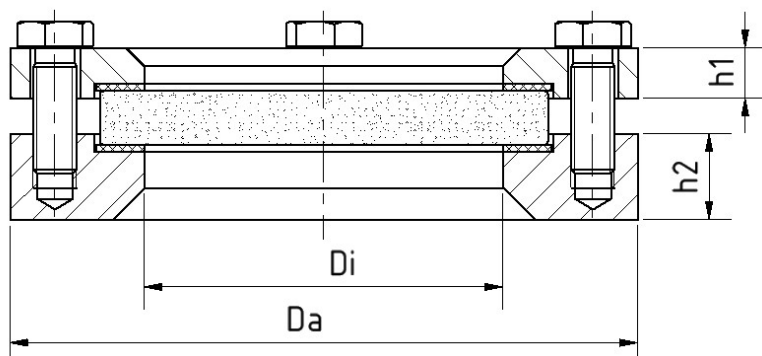
Similar to DIN 28120
Lightweight design

Operating conditions:

Temperature: up to **150 °C** with soda lime glass DIN 8902
(depending on glass and gasket) up to **280 °C** with Borosilicate glass according to DIN 7080 or similar
up to **400 °C** ¹ with Borosilicate glass unhardened

Pressure: ≤ 2,5 bar(g)

¹ higher temperatures on request



Materials:

Flange: 1.4571
Glass: Borosilicate glass according to DIN 7080 or similar
Soda-lime glass DIN 8902
Borosilicate glass unhardened
Gasket: ² PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite
Screws: A4-70

Special materials on request

² see INFO gaskets-leaflet

DN	50	80	100	125	150	200	300	400
Da [mm]	150	175	200	220	250	300	400	500
Di [mm]	80	100	125	150	175	225	305	390
h1 [mm]	12	14	14	16	16	16	20	22
h2 [mm]	24	24	24	24	24	24	24	24
Weight [kg]	3,6	5,0	5,9	7,1	8,8	11,3	21,7	35,0

PRODUCTCODE:

Group	TYPE	DN	Base flange*	Glass	Gasket	Variant
11	318	50	1: 1.4571	1: Borosilicate glass (Boro) DIN 7080	1: PTFE	G00: Boro with Mica disc
		80		2: Soda-lime glass (SLG) DIN 8902	2: FKM	
		100		3: Quartz glass	3: NBR	
		125		4: Boro DIN 7080 + PTFE - wiper SGW	4: C4400	S00: spraying device
		150		5: Boro DIN 7080 + Silicone - wiper SGW	5: Silicone	
		200		6: SLG DIN 8902 + PTFE - wiper SGW	6: EPDM	
		300		7: SLG DIN 8902 + Silicone - wiper SGW	7: Graphite	Assigned by ACI if required
		400		8: Borosilicate glass unhardened	8: Special	

INFO: Unless otherwise stated, the factory standard highlighted is supplied.

*Cover flange according to quotation / order confirmation.

ACCESSORIES:

- a) Wiper SGW with PTFE or silicone wiper blade
- b) LED lights, for Ex- and Non-Ex-areas
- c) Spray device SVI
- d) FEP protective screen (for higher pH-values)
- e) Mica protection (up to 320 °C with borosilicate glass DIN 7080)

EXAMPLE:

11-318-100-1-1-4-000 equivalent to:

ACI Type 318

DN 100 PN 2,5

Base flange made of 1.4571

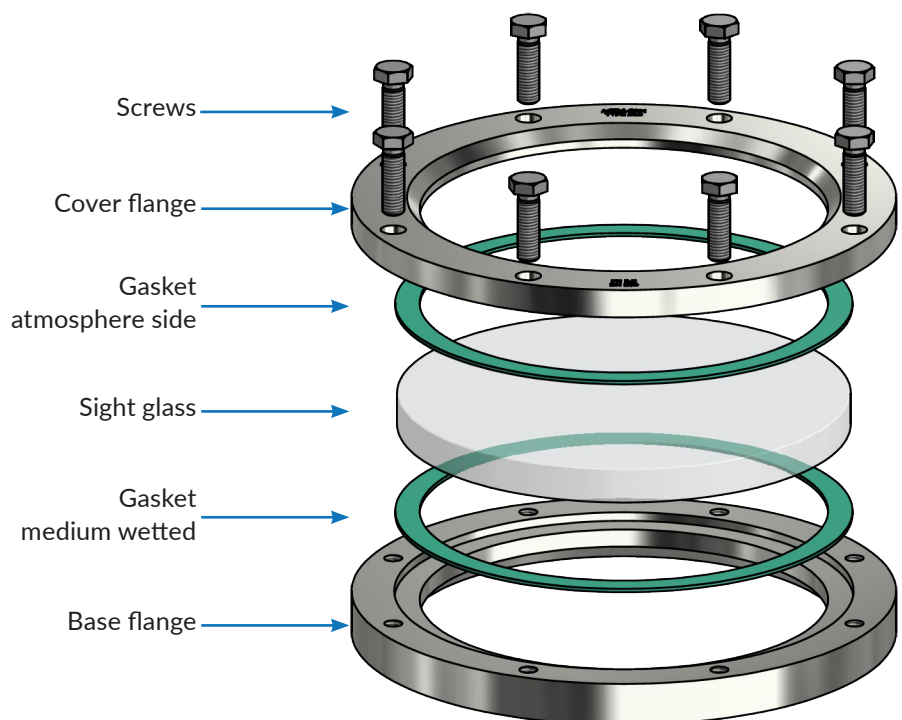
Cover flange made of 1.4541

Borosilicate glass DIN 7080

Gasket C4400

Standard design

- additional accessories optional



RECOMMENDATION:

For aggressive media or steam, mica discs should be used to protect the glass.