



Similar to DIN 28120 for the pressureless operation

USAGE

Circular sight glass fittings are used to observe and illuminate the interior of closed containers (boilers, tanks, silos, etc.). Sight glass fittings of type 317 are round flange fittings for welding in or on, completed with a sight glass plate inserted and securely bolted between the gaskets.

INSTALLATION NOTE

After welding the base flange, it must be checked whether the sealing surface has warped. If necessary, it must be reworked! Also note the specified torques for the bolting! The working pressure does not apply to the base flange; this must be checked together with the pressure equipment according to AD2000 Leaflet B9!

DRAWING



Operating condition

Temperature: (depends on glass and gasket)	≤ 150 °C	Soda-lime glass (DIN 8902 or similar)
	≤ 280 °C	Borosilicate glass (DIN 7080 or similar)
	≤ 400 °C	Borosilicate glass untempered
	> 400 °C	on request
Pressure:	≤ 0.49 barg	

Materials

Base flange:	1.4571
Glass:	Borosilicate glass DIN 7080 Soda-lime glass DIN 8902 Unhardened borosilicate glass Quartz glass
Gasket: ¹	PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite; etc.
Screws:	A2-70 / A4-70
Special materials available on request	

1) See „INFO Gaskets“

DN	50	80	100	125	150	200	300	400
Da [mm]	140	165	190	215	240	290	370	450
Di [mm]	80	100	125	150	175	225	300	370
h1 [mm]	10	10	10	10	10	10	15	20
h2 [mm]	15	15	15	15	15	15	20	25
Weight [kg]	2,0	2,8	3,2	4,3	5,1	6,8	12,2	23,0

PRODUCT CODE

Example for Explaining the Code Composition

11 - 317 - 100 - 1 - 1 - 4 - 000

GROUP	TYPE	NOMINAL SIZE	BASE FLANGE ¹	GLASS	GASKET	VARIANT
11	317	DN 50	1) 1.4571	1) Borosilicate glass according to DIN 7080 or similar.	1) PTFE	000) Standard
		DN 80		2) Soda-lime glass according to DIN 8902 or similar.	2) FKM	G00) Borosilicate glass ² + mica protection
		DN 100		3) Quartz glass	3) NBR	SV3) Spraying device
		DN 125		4) Borosilicate glass ² + PTFE wiper SGW	4) C4400	
		DN 150		5) Borosilicate glass ² + silicone wiper SGW	5) Silicone	
		DN 200		6) Soda-lime glass ³ + PTFE wiper SGW	6) EPDM	
		DN 300		7) Soda-lime glass ³ + silicone wiper SGW	7) Graphite	
		DN 400		8) Unhardened borosilicate glass	8) Special	

1) Cover flange according to quote / order confirmation

2) Similar to DIN 7080

3) Similar to DIN 8902



Unless otherwise specified, the highlighted factory standard will be delivered.

EXAMPLE

The product code **11-317-100-1-1-4-000** corresponds to the standard version:

ACI type 317

DN 100

PN 0

Base flange made of 1.4571

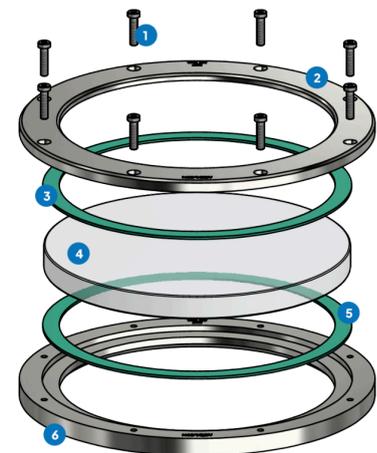
Cover flange made of 1.4571

Borosilicate glass DIN 7080

Gasket KlingerSil® C4400

STRUCTURE

1. Crews
2. Cover flange
3. Glass cushion
4. Sight glass
5. Gasket
6. Base flange



For aggressive media, FEP or Halar® coated sight glasses can be used. In case of steam, mica discs should be used to protect the glasses.

QUICK OVERVIEW



max. 0,49 barg



heat-resistant up to 400
°C



for liquid media



for gaseous media



Nominal sizes
DN 50 - 400



Custom manufacturing
possible



> 50 gasket materials



Accessories available

OPERATING CONDITIONS

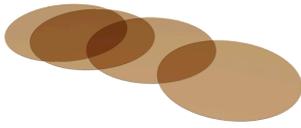
Operating conditions depend on the choice of glass and gaskets:

		Sight glass				Gaskets						
		Soda-lime glass DIN 8902	Borosilicate glass DIN 7080	Borosilicate glass untempered	Quartz glass	PTFE max. 200 °C	FKM max. 200 °C	NBR max. 80 °C	C4400 max. 175 °C	Silicone max. 180 °C	EPDM max. 130 °C	Graphite > 400 °C
TEMPERATURE	up to 80 °C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	up to 130 °C	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
	up to 150 °C	✓	✓	✓	✓	✓	✓	✗	✓	✓	✗	✓
	up to 175 °C	✗	✓	✓	✓	✓	✓	✗	✓	✓	✗	✓
	up to 200 °C	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓
	up to 280 °C	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓
	up to 400 °C	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓
PRESSURE	>400 °C	on request				on request						
	up to 0.49 barg	✓	✓	✓	✓ ¹	✓	✓	✓	✓	✓	✓	✓

1) Conditional, the use must be checked by the plant operator for compliance with regulations

✓ suitable ✗ unsuitable

OPTIONAL ACCESSORIES



Round mica discs

- > up to 320 °C with Borosilicate glass
DIN 7080



Sight glass wiper

- > with PTFE, silicone, EPDM or FKM
wipers



LED lights

- > for Ex and non-Ex areas



FEP protective screen / coating

- > for high pH values