

Similar to DIN 28120 as a lightweight vacuum-compatible version²

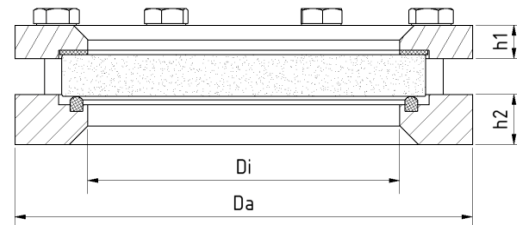
USAGE

Round sight glass fittings serve to observe and illuminate the interior of closed containers (boilers, tanks, silos, etc.). Sight glass fittings of type 318V are round flange fittings for welding in or on, completed with a sight glass plate that is inserted and tightly screwed between the seals. The D-ring or O-ring sealing makes it possible to use it for vacuum containers without any issues.

INSTALLATION NOTE

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

DRAWING



Operating condition

Temperature: (depends on glass and gasket)	≤ 150 °C	Soda-lime glass (DIN 8902 or similar)
	≤ 200 ¹ °C	Borosilicate glass (DIN 7080 or similar)
Pressure:	-0.9 barg ² to 2.5 barg	

1) Limited by gasket

2) Depends on environmental variables

Materials

Base flange:	1.4571
Glass:	Borosilicate glass (DIN 7080 or similar); Soda-lime glass (DIN 8902 or similar)
Gasket¹:	PTFE; FKM; NBR; Silicone; EPDM
Screws:	A2-70 / A4-70
Special materials upon request	

1) See "INFO Gaskets"

DN	50	80	100	125	150	200	300
Da [mm]	150	175	200	220	250	300	400
Di [mm]	80	100	125	150	175	225	305
h1 [mm]	12	14	14	16	16	16	20
h2 [mm]	24	24	24	24	24	24	24
Weight [kg]	3.4	4.8	5.7	6.6	8.3	10.8	20.8

PRODUCT CODE

Example for Explaining the Code Composition

11 - 318V - 100 - 1 - 1 - 1 - 000

GROUP	TYPE	NOMINAL SIZE	BASE FLANGE ¹	GLASS	GASKET	VARIANT
11	318V	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	
		DN 100		4) Borosilicate glass ² + PTFE wiper SGW	3) NBR	
		DN 125		5) Borosilicate glass ² + silicone wiper SGW	5) Silicone	
		DN 150		6) Soda-lime glass ³ + PTFE wiper SGW	6) EPDM	
		DN 200		7) Soda-lime glass ³ + silicone wiper SGW	8) Special	
		DN 300				

1) Cover flange according to the offer / 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 **11-318V-100-1-1-1-000** corresponds to the standard version:

ACI Type 318V

DN 100

Vacuum - PN 2.5

Base flange made of 1.4571

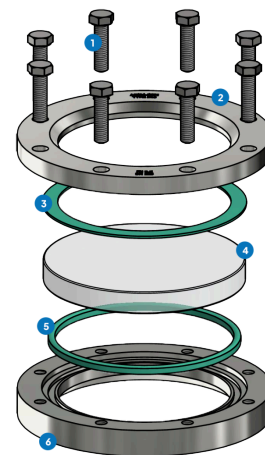
Cover flange made of 1.4541

Borosilicate glass DIN 7080

Gasket PTFE

STRUCTURE

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



For aggressive media, FEP or Halar® coated sight glass plates can be used. When steam is present, mica discs should be used to protect the glasses.

QUICK OVERVIEW



-0.9 barg to 2.5 barg



heat resistant up to 200 °C



for liquid media



for gaseous media



Nominal sizes DN 50 - 300



Custom manufacturing possible



Custom sealing materials possible



Accessories available

OPERATING CONDITIONS

Operating conditions depend on the choice of glass and seals:

		SIGHT GLASS		GASKETS				
		Soda-lime glass (DIN 8902 or similar)	Borosilicate glass (DIN 7080 or similar)	PTFE max. 200 °C	FKM max. 200 °C	NBR max. 80 °C	Silicone max. 180 °C	EPDM max. 130 °C
TEMPERATURE	up to 80 °C	✓	✓	✓	✓	✓	✓	✓
	up to 130 °C	✓	✓	✓	✓	✗	✓	✓
	up to 150 °C	✓	✓	✓	✓	✗	✓	✗
	up to 200 °C	✗	✓	✓	✓	✗	✗	✗
PRESSURE	-0.9 barg ¹ to 2.5 barg	✓	✓	✓	✓	✓	✓	✓

1) Dependent on ambient variables

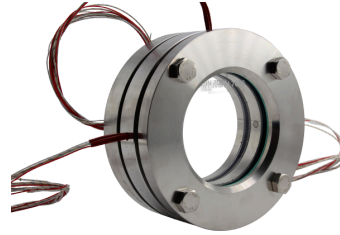
✓ suitable ✗ unsuitable

OPTIONAL ACCESSORIES



Sight glass wiper

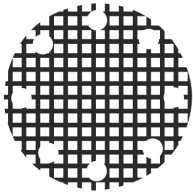
- > with PTFE, silicone, EPDM or FKM wipers



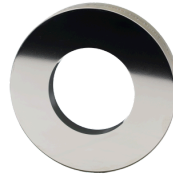
Double glazing with heating cartridge



**PLEXIGLAS Impact protection
window**



Grid impact protection window



Metal fused safety sight glass

- > for safety applications



LED lights

- > for Ex and non-Ex areas



FEP protective screen / coating

- > for high pH values