

Execution similar to DIN 28121

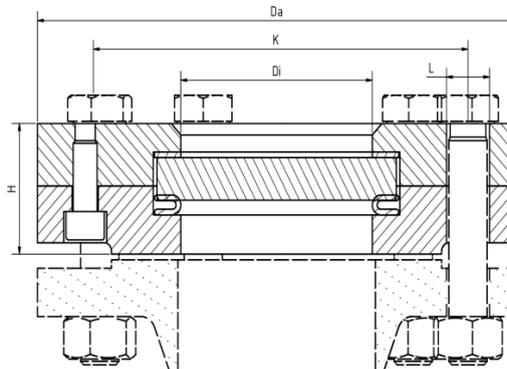
USAGE

Round sight glass fittings serve to observe and illuminate the interior of closed containers (boilers, tanks, silos, etc.). Sight glasses of type 321A are round sight glass fittings that are compatible with ANSI flanges Class 150 lbs, completed with a sight glass plate inserted between the seals and tightly screwed. The sealing is done through a flexible seal, where the force shunt ensures the necessary compression.

INSTALLATION NOTE

Seals suitable for the sealing surfaces should be used. The screw material should be equivalent to or of higher quality than the sight glass flanges. In principle, screws that meet the applicable standards should be used. Whenever possible, the screw thread as well as the screw head should be lubricated with screw lubrication.

DRAWING



Operating Condition

Temperature: (depending on glass and gasket)	$\leq 150\text{ }^{\circ}\text{C}$	Soda-lime glass DIN 8902 or similar
	$\leq 200\text{ }^{\circ}\text{C}^1$	Borosilicate glass DIN 7080 or similar
Pressure:	$\leq 20\text{ barg}$	

1) Limited by gasket

Materials

Base flange:	1.4571; 1.4404; 1.4541; 1.4306
Glass:	Borosilicate glass (DIN 7080 or similar) Soda-lime glass (DIN 8902 or similar)
Gasket ² :	PTFE encased corrugated ring gasket
Screws:	A4-70
Special materials on request	

2) See "INFO Gaskets"

NPS	2"	3"	4"	5"	6"	8"
Di [mm]	65	80	100	125	125	150
H [mm]	41	50	59	66	66	66
Da [mm]	According to ASME B 16.5					
L [mm]						
K [mm]						
Weight [kg]	3.8	8	13.5	17.4	23	36.7

EXECUTION

Similar to DIN 28121 but for Flange connection according to ANSI / ASME

PRODUCT CODE

Example for Explaining the Code Composition

11 - 321A - 1 - 4 - 1 - 1 - 1 - 0

GROUP	TYPE	CLASS ¹	NPS	BASE FLANGE	GLASS	GASKET	VARIANT
11	321A	1) 150	1) 2" 2) 3" 3) 4" 4) 5" 5) 6" 6) 8"	1) 1.4571 2) 1.4541 3) 1.4404 10) Special	1) Borosilicate glass according to DIN 7080 or similar 2) Soda-lime glass according to DIN 8902 or 4) Borosilicate glass ² + PTFE scraper SGW 5) Borosilicate glass ² + silicone scraper SGW 6) Soda-lime glass ³ + PTFE scraper SGW 7) Soda-lime glass ³ + silicone scraper SGW	1) PTFE	0) Standard

1) Class only related to the bolt circle. Max pressure 20 barg!
For higher working pressures see high-pressure variant type 322A
2) Similar to DIN 7080
3) Similar to DIN 8902



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

EXAMPLE

The product code **11-321A-1-4-1-1-1-0** corresponds to the standard design:

ACI Type 321A

NPS 5"

Class 150 lbs

Base flange made of 1.4571

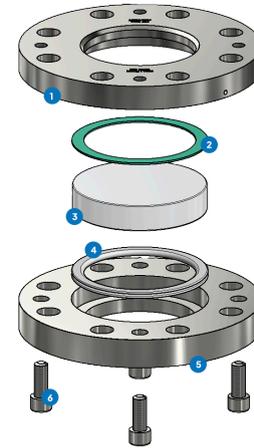
Cover flange made of 1.4571

Borosilicate glass acc. to DIN 7080

PTFE coated encased corrugated ring gasket

STRUCTURE

- Cover flange
- Glass cushion
- Sight glass
- PTFE coated encased corrugated ring gasket
- Base flange
- Screws



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



max. 20 barg



heat-resistant up to 200 °C



for liquid media



for gaseous media



Nominal sizes
2" - 8"



Custom made designs
possible



Accessories available

OPERATING CONDITIONS

Operating conditions depend on the choice of glass and gaskets:

		SIGHT GLASS		GASKETS	
		Sodium-lime glass DIN 8902 or similar	Borosilicate glass DIN 7080 or similar	PTFE max. 200 °C	
PRESSURE	TEMPERATURE	up to 150 °C	✓	✓	✓
	up to 200 °C	✗	✓	✓	
	up to 20 barg	✓	✓	✓	

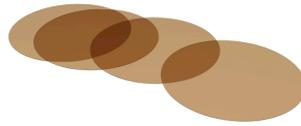
✓ suitable ✗ unsuitable

OPTIONAL ACCESSORIES



Spraying device SV2

- > For intermediate flange mounting



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