



Design similar to DIN 28121

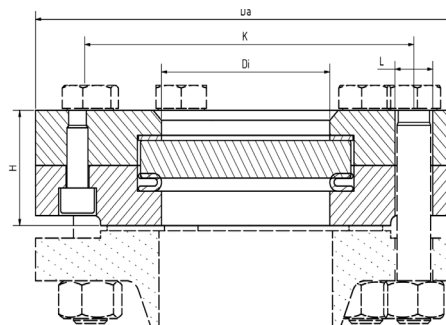
USE:

Round sight glasses are used to observe and illuminate the interior of closed vessels (boilers, tanks, silos, etc.). Type 321A sight glasses are round sight glass fittings compatible with ANSI Class 150 Lbs flanges, each completed with a sight glass plate inserted between the gaskets and screwed tight. Sealing is provided by a flexible gasket, with the **force shunt** providing the necessary compression.

INSTALLATION INSTRUCTIONS:

Gaskets matching the sealing surfaces should be used. The screw material should be of equal or higher grade than the sight glass flanges. Always use screws that are suitable according to the applicable standards. If possible, the screw thread and the screw head should be provided with screw lubrication.

DRAWING:



OPERATING CONDITIONS

Temperature: (depending on glass and gasket)	≤ 150°C	Soda-lime glass (DIN 8902 or similar)
	≤ 200°C ¹	Borosilicate glass (DIN 7080 or similar)
Pressure:	≤ 20 bar (g)	

1) Limited by gasket; for higher temperatures alternative: Type 323

MATERIALS

Base flange:	1.4571; 1.4541; 1.4404; 1.4301/7
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

PRODUCT CODE:

Example to explain 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"	1) 1.4571	1) Borosilicate glass according to DIN 7080 or similar	1) PTFE	0) Standard
			2) 3"	2) 1.4541	2) Soda-lime glass according to DIN 8902 or similar		
			3) 4"	3) 1.4404	4) Borosilicate glass ² + PTFE wiper SGW		
			4) 5"		5) Borosilicate glass ² + Silicone wiper SGW		
			5) 6"		6) Soda-lime glass ³ + PTFE wiper SGW		
			6) 8"		7) Soda-lime glass ³ + Silicone wiper SGW		

1) Class only referred to the bolt hole circle. Pressure max. 20 bar! For higher working pressures see high pressure version type 322A

2) Similar to DIN 7080

3) Similar to DIN 8902



Unless otherwise stated, the highlighted factory standard is supplied.

EXAMPLE:

11-321A-1-4-1-1-1-0 equivalent to:

ACI Type 321A

CLASS 150

NPS 5"

Base flange made of 1.4571

Cover flange made of 1.4571

Borosilicate glass DIN 7080

PTFE encased corrugated ring gasket

Standard version

- additional equipment optional

CONSTRUCTION:

Cover flange

Gasket (on the atmosphere side)

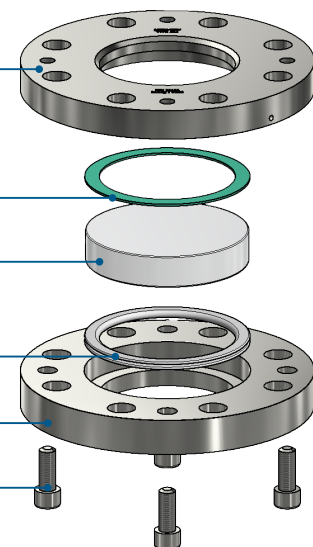
Sight glass

PTFE encased corrugated ring gasket

(on the media side)

Base flange

Screws



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

QUICK OVERVIEW:



Class 150 lbs.
≤ 20 bar(g)



heat-resistant up to
200 °C



for liquid
media



for gaseous
media



Nominal size
2" up to 8"



Customized products
possible



Additional equipment
available

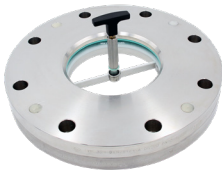
OPERATING CONDITIONS:

Operating conditions depend on the
choice of glass and gaskets:

		SIGHT GLASS		GASKET
		Soda lime glass (DIN 8902 or similar)	Borosilicate glass (DIN 7080 or similar)	PTFE max. 200 °C
TEMPERATURE	up to 150 °C	✓	✓	✓
	up to 200°C	✗	✓	✓
PRESSURE	up to 20 bar (g)	✓	✓	✓

✓ suitable ✗ unsuitable

OPTIONAL EQUIPMENT:



Wiper SGW

- > with PTFE, Silicone, EPDM or FKM wiper blade



Spraying device SV2

- > made of high-quality stainless steel grade 1.4571



LED light

- > for Ex and non-Ex areas



Mica discs

- > with borosilicate glass DIN 7080



FEP protective screen/ coating

- > for high pH values

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