

Execution in accordance with DIN 28121

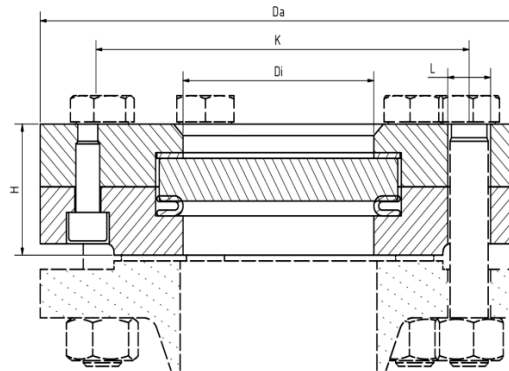
## USAGE

Round sight glass fittings are used for observing and illuminating the interior of closed containers (boilers, tanks, silos, etc.). Type 321 sight glass fittings are round flange mounts for screwing onto flanges, completed with a sight glass plate that is inserted and securely screwed between the gaskets. The sealing is done using a flexible gasket, with the force shunt ensuring the necessary compression.

## INSTALLATION NOTE

Suitable seals should be used for the sealing surfaces. The screw material should be equivalent to or of higher quality than the sight glass flanges. Generally, screws that are appropriate according to applicable standards should be used. If possible, the screw thread, as well as the screw head, should be provided with screw lubrication.

## DRAWING



### Operating conditions

Temperature: (depending on glass and gasket)	$\leq 150\text{ °C}$	Soda-lime glass DIN 8902 or similar
	$\leq 200\text{ °C}^1$	Borosilicate glass DIN 7080 or similar
Pressure:	$\leq 10/25\text{ barg}$	

1) Limited by the gasket,  
for higher temperatures see type 323

### 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:	PTFE coated corrugated ring gasket
Screws:	A4-70
Special materials available upon request	

DN	40	50	80	100	125	150	200
Di [mm] PN 10	48	65	80	100	125	125	150
H [mm] PN 10	36	38	46	46	54	54	54
Da [mm] PN 10	150	165	200	220	250	285	340
L [mm] PN 10	18	18	18	18	18	22	22
K [mm] PN 10	110	125	160	180	210	240	295
Weight [kg] PN 10	3,8	4,6	8,2	9,3	13,8	19,5	28,7
H [mm] PN 25	38	41	50	59	66	66	66
Da [mm] PN 25	150	165	200	235	270	300	360
L [mm] PN 25	18	18	18	22	26	26	26
K [mm] PN 25	110	125	160	190	220	250	310
Weight [kg] PN 25	4	5	8,9	14	20	26,9	39,3

## PRODUCT CODE

Example for Explaining the Code Composition

**11 - 321 - 1 - 100 - 1 - 1 - 1 - 0**

GROUP	TYPE	PN	NOMINAL SIZE	BASE FLANGE <sup>1</sup>	GLASS	GASKET	VARIANT
11	321	1) 10	DN 40	1) 1.4571	1) Borosilicate glass according to DIN 7080 or similar	1) PTFE	0) Standard
		2) 25	DN 50	2) 1.4541	2) Soda-lime glass according to DIN 8902 or similar		
			DN 80	3) 1.4404	4) Borosilicate glass <sup>2</sup> + PTFE wiper SGW		
			DN 100		5) Borosilicate glass <sup>2</sup> + silicone wiper SGW		
			DN 125		6) Soda-lime glass <sup>3</sup> + PTFE wiper SGW		
			DN 150		7) Soda-lime glass <sup>3</sup> + silicone wiper SGW		
			DN 200				

- 1) Cover flange according to quote / order confirmation  
 2) Similar to DIN 7080  
 3) Similar to DIN 8902



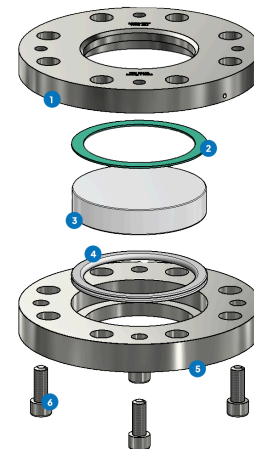
Unless otherwise specified, the highlighted factory standard will be delivered.

## EXAMPLE

The product code **11-321-1-100-1-1-1-0** corresponds to the standard version:  
 ACI Type 321  
 DN 100  
 PN 10  
 Base flange made of 1.4571  
 Cover flange made of 1.4571  
 Borosilicate glass DIN 7080  
 PTFE 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 glasses can be used. For steam, mica discs should be used to protect the glasses.

**QUICK OVERVIEW**



max. 25 barg



heat resistant up to 200 °C



for liquid media



for gaseous media



Nominal sizes  
DN 40 - 200



custom designs possible



accessories available

**OPERATING CONDITIONS**

Operating conditions depend on the choice of glass and gaskets:

		SIGHT GLASS		GASKETS
		Soda-lime glass (DIN 8902 or similar)	Borosilicate glass (DIN 7080 or similar)	PTFE max. 200 °C
TEMPERATURE	up to 200 °C	✘	✔	✔
	up to 10/25 barg	✔	✔	✔

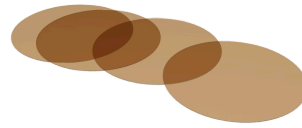
✔ suitable    ✘ unsuitable

**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



The pressure-temperature limits according to DIN EN 1092-1 apply!