



Design according to DIN 28121

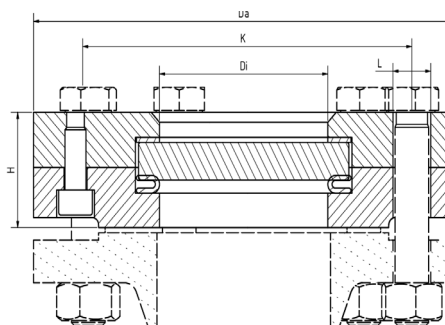
USE:

Round sight glasses are used to observe and illuminate the inside of closed vessels (boilers, tanks, silos, etc.). Type 321 sight glass fittings are round flange mountings to **DIN 28121** for screwing onto 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** ensuring the necessary compression.

INSTALLATION INSTRUCTIONS:

Gaskets matching the gasket surfaces should be used. The screw material should be of the same or higher quality than the sight glass flanges. Screws suitable according to applicable standards should always be used. 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:	≤ 10/25 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	

DN	40	50	80	100	125	150	200
Di [mm]	48	65	80	100	125	125	150
H (PN 10) [mm]	36	38	46	46	54	54	54
H (PN25) [mm]	38	41	50	59	66	66	66
Da [mm]	According to DIN EN 1092-1						
L [mm]							
K [mm]							
Wt. [kg] (PN 10)	3,8	4,6	8,2	9,3	13,8	29,5	28,7
Wt. [kg] (PN 25)	4	5	8,9	14	20	26,9	39,3

2) See „INFO Gaskets“

PRODUCT CODE:

Example to explain the code composition

GROUP	TYPE	PN	NOMINAL SIZE	BASE FLANGE ¹	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 ² + PTFE wiper SGW		
			DN 100		5) Borosilicate glass ² + Silicone wiper SGW		
			DN 125		6) Soda-lime glass ³ + PTFE wiper SGW		
			DN 150		7) Soda-lime glass ³ + Silicone wiper SGW		
			DN 200				

1) Cover flange according to quotation/order confirmation

2) Similar to DIN 7080

3) Similar to DIN 8902



Unless otherwise stated, the highlighted factory standard is supplied.

EXAMPLE:

11-321-1-100-1-1-1-0 equivalent to:

ACI Type 321

PN 10

DN 100

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)

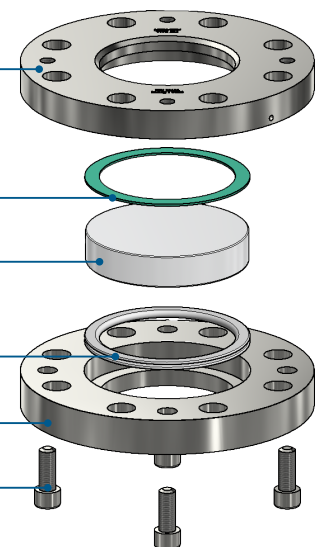
Sight glass

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:



PN 10/25
≤ 10/25 bar(g)



heat-resistant up to
200 °C



for liquid
media



for gaseous
media



Nominal size
DN 40 - 200



Customized products
possible



Additional equipment
available

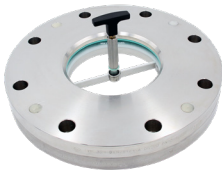
OPERATING CONDITIONS:

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 10/25 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

ATTENTION!



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

Our tool of the same name is available on our website for this purpose.
(www.ACI24.com, in the Service category, subcategory Tools)



ACI Industriearmaturen GmbH

✉ info@aci24.com ☎ +49 (0) 2461 91634 00
 🌐 www.aci24.com 📠 +49 (0) 2461 91634 44
 📍 Königskamp 19 · 52428 Jülich · Germany

Ebora B.V. Process Automation

✉ info@ebora.nl ☎ +31 (0) 263 706 830
 🌐 www.ebora.nl
 📍 Poort van Midden Gelderland Rood 8 · 6666LT Heteren
 The Netherlands