



### APPLICATION:

Observation and illumination of the interior of closed vessels (boilers, tanks, silos, etc.). Sightglasses are round flange sockets for welding into or onto the vessel, each complete with a firmly screwed sightglass plate inserted between the gaskets.

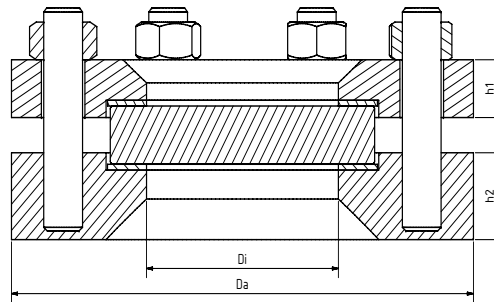
### INSTALLATION NOTE:

After welding the base flange onto/into the pressure vessel, the sealing surface must be checked for deformations! Reworking may be required! Observe the listed torque values for remounting the cover flange! The pressure rating does not consider the base flange. This will have to be audited together with the pressure vessel according to AD 2000 instructions B9 or equivalent standard!

According to DIN 28120  
( $\Delta P \leq 10 / 16$  bar)

### Operating conditions:

Temperature: (depending on glass and gasket)	150 °C 280 °C 400 °C <sup>1</sup>
Pressure:	≤ 10 / 16 Bar



Materials:	
Flange:	1.4571; 1.4541; 1.4404; 1.4306; 1.4435; 1.4539; 1.4462; P265GH
Glass:	Borosilicate glass DIN 7080 Soda-lime glass DIN 8902 Borosilicate glass untempered
Gasket:	PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite
Screws:	A4-70
Special materials on request	

DN	25	40	50	80	100	125	150	200	250 <sup>2</sup>	300 <sup>2</sup>
Da	115	150	165	200	220	250	285	340	395	445
Di	48	65	80	100	125	150	175	225	280	325
h1	16	16	16	20	22	25	30	35	40	45
h2	25	30	30	30	30	30	36	36	40	45
Glas Ø	63	80	100	125	150	175	200	250	300	355
s (PN10)	10	10	12	15	20	20	25	30	45	60
s (PN16)	10	12	15	20	25	25	30	- <sup>4</sup>	- <sup>4</sup>	- <sup>4</sup>
kg	2,9	5,1	6,0	10,3	11,5	15,2	23,5	30,7	44,6	62,2
Nm	30 <sup>3</sup>	55 <sup>3</sup>	55 <sup>3</sup>	55 <sup>3</sup>	55 <sup>3</sup>	64 <sup>3</sup>	107 <sup>3</sup>	125 <sup>3</sup>	107 <sup>3</sup>	130 <sup>3</sup>

<sup>1</sup> high temperature on request <sup>2</sup> similar to DIN28120 <sup>3</sup> graphite gasket <sup>4</sup> only PN10 sim DIN

## PRODUCTCODE:

Group	TYPE	DN	Base flange*	Glass	Gasket	Variant
11	320	25	1: 1.4541	<b>1: Borosilicate glass (Boro) DIN 7080</b>	1: PTFE	V00: vacuum
		40	2: <b>1.4571</b>	2: Soda lime glass (SLG) DIN 8902	2: FKM	G00: Boro with
		50	3: 1.4404	3: Quartz glass	3: NBR	Mica shield
		80	4: 1.4539	4: Boro + PTFE wiper	4: <b>C4400</b>	(bis 320°C)
		100	5: 1.4435	5: Boro + silicone wiper	5: Silicone	S00: spraying device
		125	6: 1.4306	6: SLG + PTFE wiper	6: EPDM	S01: SWII wiper
		150	7: P265GH	7: SLG + silicone wiper	7: Graphite	Assigned by ACI if required
		200	8: Special	8: Borosilicate glass untempered	8: Special	
		250	(z.B. Hastelloy)			
		300				

**INFO:** Unless otherwise stated, the factory standard highlighted is supplied.

\*Cover flange according to quotation / order confirmation.

## SPECIAL DESIGNS/OPTIONS:

- Wiper SWI or SWII with PTFE or silicone Wiper blade
- Spray device SVI
- LED or halogen lights, ATEX-certified, EX
- High-temperature version with quartz glass or Boro untempered up to 400°C, higher on request
- O-Ring-Dichtung (Vakuumtauglich)<sup>5</sup>
- FEP protective screen
- Plexiglas impact protection (5 mm)
- Grid impact protection
- Double glazing (320D)

<sup>5</sup> depending on environmental variables

## EXAMPLE:

**11-320-100-2-1-7-000 equals the product code:**

ACI Type 320

DN100

Base flange 1.4571

borosilicate glass

gasket graphite

standard version



## RECOMMENDATION:

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