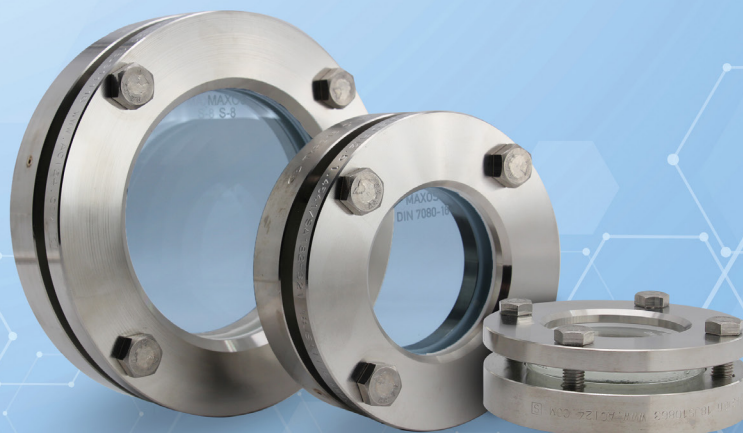




Similar to DIN 28120 as
lightweight version

USE:

Round sight glasses are used to observe and illuminate the inside of closed vessels (boilers, tanks, silos, etc.). Sight glass fittings type 318 are round flanged sockets for welding in or on a vessel, each completed with a sight glass plate inserted between the gaskets and screwed tight.

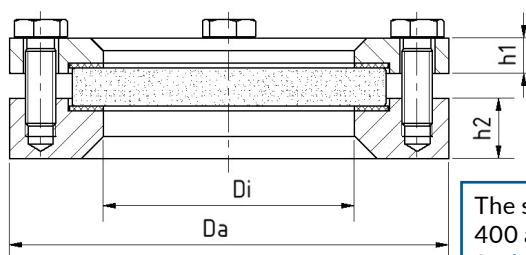
INSTALLATION INSTRUCTIONS:

After welding in the base flange, check whether the gasket surface has warped. If necessary, this must be reworked! Also observe the specified torques for the screw connection! The operating pressure does not apply to the base flange, this must be tested together with the pressure device according to AD leaflet B9!

OPERATING CONDITIONS

Temperature: (depending on glass and gasket)	≤ 150°C	Soda-lime glass (DIN 8902 or similar)
	≤ 280°C	Borosilicate glass (DIN 7080 or similar)
	≤ 400°C	Borosilicate glass untempered
	> 400°C	on request
Pressure:	≤ 2,5 bar(g)	

DRAWING:



The sizes DN 300 and DN 400 are particularly suitable for **biogas applications**



MATERIALS

Base flange:	1.4571
Glass:	Borosilicate glass (DIN 7080 or similar), Soda lime glass (DIN 8902 or similar), Borosilicate glass untampered
Gasket:¹	PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite
Screws:	A4-70
Special materials on request	

1) See „INFO Gaskets“

DN	50	80	100	125	150	200	300	400
Da [mm]	150	175	200	220	250	300	400	500
Di [mm]	80	100	125	150	175	225	305	390
h1 [mm]	12	14	14	16	16	16	20	22
h2 [mm]	24	24	24	24	24	24	24	24
Weight [kg]	3,6	5,0	5,9	7,1	8,8	11,3	21,7	35,0

PRODUCT CODE:

Example to explain the code composition

11 - 318 - 100 - 1 - 1 - 4 - 000

GROUP	TYPE	NOMINAL SIZE	BASE FLANGE ¹	GLASS	GASKET	VARIANT
11	318	DN 50	1) 1.4571	1) Borosilicate glass according to DIN 7080 or similar	1) PTFE	000) Standard
		DN 80			2) FKM	G00) Borosilicate glass ² + mica disc
		DN 100		2) Soda-lime glass according to DIN 8902 or similar	3) NBR	
		DN 125		3) Quartz glass	4) C4400	SV3) Spraying device
		DN 150		4) Borosilicate glass ² + PTFE wiper SGW	5) Silicone	
		DN 200		5) Borosilicate glass ² + Silicone wiper SGW	6) EPDM	
		DN 300		6) Soda-lime glass ³ + PTFE wiper SGW	7) Graphite	
		DN 400		7) Soda-lime glass ³ + Silicone wiper SGW	8) Special	
				8) Borosilicate glass untempered		

1) Cover flange according to offer/ order confirmation

2) Similar to DIN 7080

3) Similar to DIN 8902



Unless otherwise stated, the highlighted factory standard is supplied.

EXAMPLE:

11-318-100-1-1-4-000 equivalent to:

ACI Type 318

DN 100

PN 2,5

Base flange made of 1.4571

Cover flange made of 1.4541

Borosilicate glass DIN 7080

Gasket C4400

Standard version

- additional equipment optional

CONSTRUCTION:

Screws

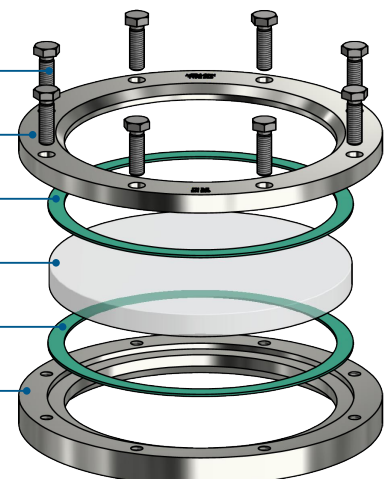
Cover flange

Gasket (on the atmosphere side)

Sight glass

Gasket (on the media side)

Base flange



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

QUICK OVERVIEW:



PN 2,5
2,5 bar(g)



heat-resistant up to
400 °C



for liquid
media



for gaseous
media



Nominal size
DN 50 - 400



Customized products
possible



> 50 gasket
materials



Additional equipment
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)	Borosilicate glass untempered	Quartz glass	PTFE max. 200 °C	FKM max. 200 °C	NBR max. 80 °C	C4400 max. 175 °C	Silicone max. 180 °C	EPDM max. 130 °C	Graphite > 400 °C
TEMPERATURE	up to 80 °C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	up to 130 °C	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
	up to 150 °C	✓	✓	✓	✓	✓	✓	✗	✓	✓	✗	✓
	up to 175 °C	✗	✓	✓	✓	✓	✓	✗	✓	✓	✗	✓
	up to 200 °C	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓
	up to 280 °C	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓
	up to 400 °C	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓
	> 400 °C	on request				on request						
PRESSURE	up to 2,5 bar (g)	✓	✓	✓	✓ ¹	✓	✓	✓	✓	✓	✓	✓

✓ suitable ✗ unsuitable

1) Limited, use must be checked by the system operator for compliance with regulations

OPTIONAL EQUIPMENT:



Wiper SGW

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



Spraying device SV3

- > made of high-quality stainless steel grade 1.4571



LED light

- > for Ex and non-Ex areas



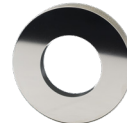
Mica discs

- > up to 320°C with borosilicate glass DIN 7080¹



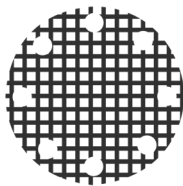
FEP protective screen/ coating

- > for high pH values

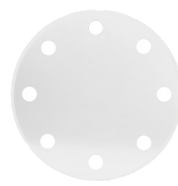


Metal fused safety sight glass

- > for chemical use



Grid impact protection window²



PLEXIGLAS® impact protection

1) Starting from nominal size DN 300 up to 300°C
2) Punching on customer request