



With welding ends according to DIN EN 1092-1 type 11

USE:

Round sight glasses are used for observation and illumination of the inside of closed vessels (boilers, tanks, silos, etc.) or pipelines for **vacuum applications**.

Sight glass fittings type 390V are round flanged fittings with welding ends according to DIN EN 1092-1 for welding, each completed with a sight glass plate inserted between the gaskets and screwed firmly.

INSTALLATION INSTRUCTIONS:

After welding the flange on 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

OPERATING CONDITIONS		
Temperature: (depending on glass and gasket)	≤ 200°C	Borosilicate glass according to DIN 7080 or similar
	> 200°C	on request
Pressure:	≤ -0,9 ¹ bar(g) up to 16 bar(g)	
Low temperature application as well as higher temperatures/pressures on request		

1) Depending on environment variables

MATERIALS	
Base flange:	1.4571; 1.4404; 1.4539; 1.4435; 1.4541; 1.4301/7; 1,4876; 1.4828; 2.4602; 2.4610
Glass:	Borosilicate glass according to DIN 7080 or similar
Gasket: ²	PTFE; FKM; NBR; Silicone; EPDM
Screws:	A4-70 / A2-70
Special materials on request	

2) See „INFO-gasket“ leaflet

ATTENTION!

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

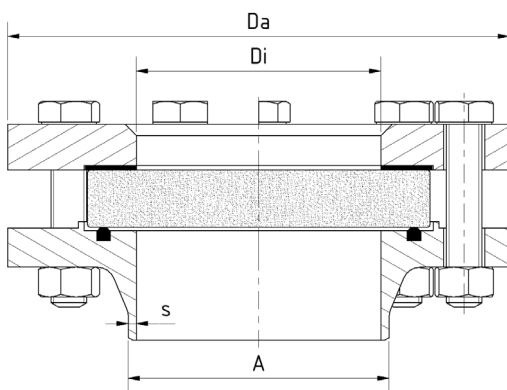
Our tool of the same name is available on our website for this purpose.
(www.ACI24.com, in the Service category, subcategory Tools)



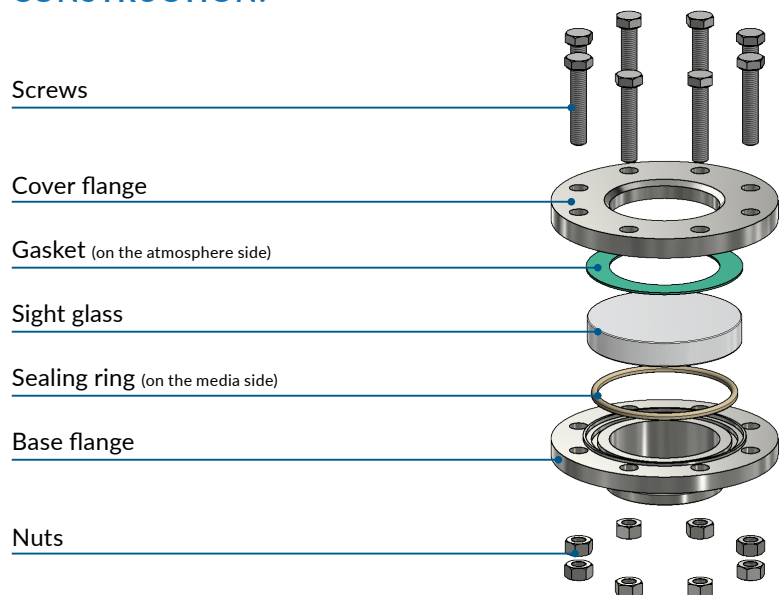
PN	DN	Da [mm]	Di [mm]	A [mm]	s [mm]	SEALING RING DESIGN	WEIGHT [kg]
16	15	95	17	21,3	2	D-ring DIN 11851	1,6
	20	105	22	26,9	2,3	D-ring DIN 11851	2,3
	25	115	28	33,7	2,6	D-ring DIN 11851	2,7
	32	140	37	42,4	2,6	D-ring DIN 11851	4,0
	40	150	43	48,3	2,6	O-ring	4,4
	50	165	54	60,3	2,9	O-ring	5,3
	65	185	70	76,1	2,9	D-ring DIN 11851	6,5
	80	200	83	88,9	3,2	D-ring DIN 11851	8,4
	100	220	107	114,3	3,6	D-ring DIN 11851	9,8
	125	250	132	139,7	4	D-ring DIN 11851	13,3
	150	285	160	168,3	4,5	O-ring	17,1
PS 10 ¹	200	340	207	219,1	6,3	O-ring	25,1
PS 6 ¹	250	405	260	273	6,3	O-ring	37,4
	300	460	310	323,9	7,1	O-ring	49,3
	350	520	340	355,6	8	O-ring	70

1) max. operating pressure 6 bar(g) resp. 10 bar(g) for these nominal sizes

DRAWING:

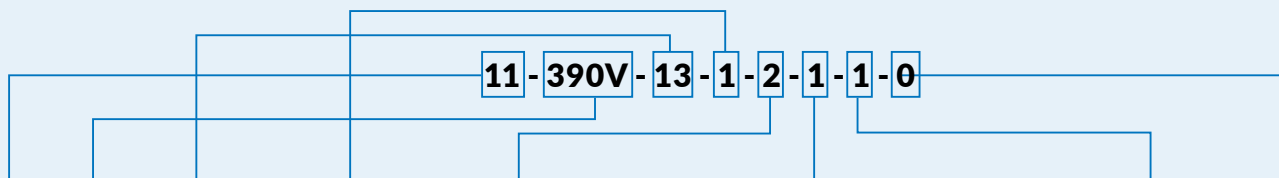


CONSTRUCTION:



PRODUCT CODE:

Example to explain the code composition



GROUP	TYPE	NOMINAL SIZE	PN	BASE FLANGE ¹	GLASS	GASKET	VARIANT
11	390V	1) 15 2) 20 3) 25 4) 32 5) 40 6) 50 7) 65 8) 80 9) 100 10) 125 11) 150 12) 200 13) 250 14) 300 15) 350	1) 16 2) Special	2) 1.4571 3) 1.4404 4) 1.4301/7 5) 1.4539 7) 1.4435 8) 1.4541 9) Special	1) Borosilicate glass according to DIN 7080 or similar 4) Borosilicate glass ² + PTFE-wiper SGW 5) Borosilicate glass ² + Silicone-wiper SGW 8) Borosilicate glass untempered	1) PTFE 2) FKM 3) NBR 5) Silicone 6) EPDM 8) Special	0) Standard

1) Cover flange according to quotation/order confirmation.
2) Similar to DIN 7080

Unless otherwise stated, the highlighted factory standard is supplied.

EXAMPLE:

11-390V-13-1-2-1-1-0 equivalent to:

ACI Type 390V

DN 250

PN 16

Base flange made of 1.4571

Cover flange made of 1.4571

Borosilicate glass DIN 7080 or similar

Gasket PTFE O-ring

Standard version

- other equipment optional

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

QUICK OVERVIEW:



PN 16
≤ -0,9¹ bar(g)
up to 16 bar(g)



heat-resistant up to
200 °C



for liquid
media



for gaseous
media



Nominal size
DN 15 up to 350



Customized products
possible



Additional equipment
available

OPERATING CONDITIONS:

Operating conditions depend on the
choice of glass and gaskets:

		SIGHT GLASS	GASKETS					
		Borosilicate glass (DIN 7080 or similar)	PTFE max. 200 °C	FKM max. 200 °C	NBR max. 80 °C	C4400 max. 175 °C	Silicone max. 180 °C	EPDM max. 130 °C
TEMPERATURE	up to 80 °C	✓	✓	✓	✓	✓	✓	✓
	up to 130 °C	✓	✓	✓	✗	✓	✓	✓
	up to 200 °C	✓	✓	✓	✗	✗	✗	✗
	> 200 °C	on request	on request					
PRESSURE	≤ -0,9 ¹ bar(g) up to 16 bar(g)	✓	✓	✓	✓	✓	✓	✓



suitable



unsuitable

OPTIONAL EQUIPMENT:



Mica discs

- > up to 200°C with borosilicate glass
DIN 7080



Wiper SGW

- > with PTFE, Silicone, EPDM or
FKM wiper



LED - light

- > for Ex- and Non-Ex areas



FEP protective screen/ coating

- > for high pH values



High pressure version

- > Type 390



Pipe attachment

- > Type 391



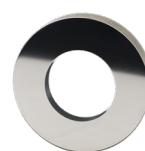
External thread connection

- > Type 392



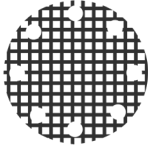
Internal thread connection

- > Type 394

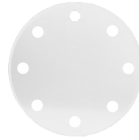


Metal fused safety sight glass

- > for chemical use



Grid impact protection window¹



PLEXIGLAS® impact protection

1) Punching on customer request

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