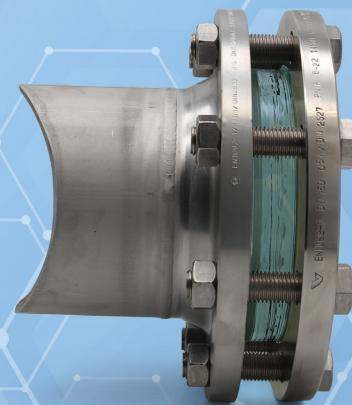
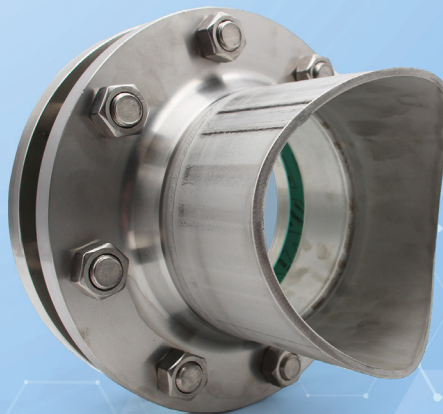
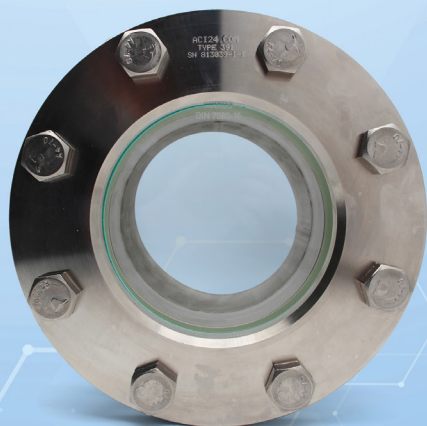




With pipe adapter for welding onto the medium-carrying pipeline

USE:

Round sight glass fittings are used to observe and illuminate the inside of pipelines. Sight glass fittings type 391 are round flange mountings with pipe adapter for welding onto pipelines.

INSTALLATION INSTRUCTIONS:

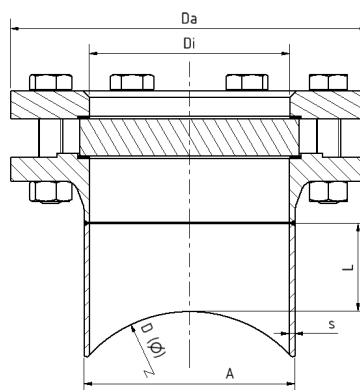
After welding on the base flange, check whether the sealing surfaces have warped! If necessary, they must be reworked! Also observe the specified torques for the screw connection according to the operating and maintenance instructions.

OPERATING CONDITIONS		
Temperature: (depending on glass and gasket)	≤ 150°C	Soda-lime glass (DIN 8902 or similar)
	≤ 200°C	Borosilicate glass (DIN 7080 or similar)
Pressure:	≤ 16 bar(g) up to 40 bar(g)	
Low temperature application as well as higher temperatures/pressures on request		

DRAWING:



D = Nominal size of the pipe carrying the medium



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 (DIN 7080 or similar); Soda lime glass (DIN 8902 or similar)
Gasket: ¹	PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite
Screws:	A4-70 / A2-70
Special materials on request	

DN	100	125	150	200 ⁴	300 ⁵	350 ⁵
Da (PN 16) [mm]	220	250	285	340 ⁴	460 ⁵	520 ⁵
Weight (PN 16) [kg] ²	10,5	14,5	18,6	28,2	55,7	78
Da (PN 25/40) [mm]	235	270	300	375	-	-
Weight (PN 25/40) [kg] ³	14,8	21,1	27,5	52,6	-	-
Di [mm]	107	132	160	207	310	340
L [mm] (standard)	70	70	70	70	70	70
s [mm]	3,6	4	4,5	6,3	7,1	8
A [mm]	114,3	139,7	168,3	219,1	232,9	355,6

2) Depending on the size of D and L.

3) For PN 25/40 possibly smaller or larger depending on the size of D and L

4) PS max. 10 bar(g)

5) PS max. 6 bar(g)

1) See „INFO-gasket“ leaflet

PRODUCT CODE:

Example to explain the code composition

11 - 391 - 1 - 1 - 1 - 2 - 1 - 4 - 0												
GROUP	TYPE	DN		DØ		PN		BASE FLANGE ¹		GLASS	GASKET	VARIANT
11	391	1)	100	1)	125	1)	16	2)	1.4571	1) Borosilicate glass according to DIN 7080 or similar	1) PTFE	0) Standard
		2)	125	2)	150	2)	25	3)	1.4404		2) FKM	
		3)	150	3)	200	3)	40	6)	Special	4) Borosilicate glass ² + PTFE-wiper SGW	3) NBR	
		4)	200	4)	250	4)	Special			5) Borosilicate glass ² + Silicone-wiper SGW	4) C4400	
		5)	300	5)	350					6) Soda-lime glass ³ + PTFE-wiper SGW	5) Silicone	
		6)	350	6)	400					7) Soda-lime glass ³ + Silicone-wiper SGW	6) EPDM	
		7)	Special	7)	450						7) Graphite	
				8)	500						8) Special	
				9)	600							
				10)	700							
				11)	800							
				12)	900							
				13)	1000							
				14)	Special							

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:

11-391-1-1-1-2-1-4-0 equivalent to:

ACI Type 391

DN 100 sight glass

DN 125 medium-carrying line

PN 16

Base flange with pipe adapter made of 1.4571

Cover flange made of 1.4571

Borosilicate glass (DIN 7080 or similar)

Gasket C4400

Standard version

- other equipment optional

CONSTRUCTION:

Screws

Cover flange

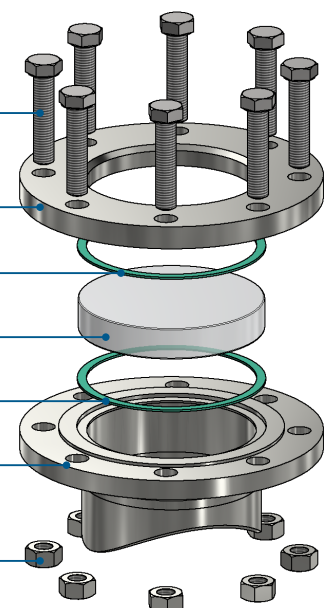
Gasket (on the atmosphere side)

Sight glass

Gasket (on the media side)

Base flange with pipe adapter

Nuts



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

QUICK OVERVIEW:



PN 16 - PN 40
16 up to 40 bar(g)



heat-resistant up to
280 °C



for liquid
media



for gaseous
media



Nominal size
DN 100 - 350



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)	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	✗	✓	✗	✗	✗	✗	✗	✗	✓
PRESSURE	up to 16 bar (g)	✓	✓	✓	✓	✓	✓	✓	✓	✓
	16 up to 40 bar (g)	✓	✓	✓	✗	✗	✓	✗	✗	✓

✓ suitable ✗ unsuitable

OPTIONAL EQUIPMENT:



Mica discs

- > up to 300°C with borosilicate glass DIN 7080¹



Wiper SGW

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



LED - light

- > for Ex- and Non-Ex areas



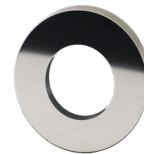
FEP protective screen/coating

- > for high pH values



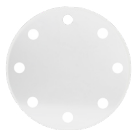
Vacuum version²

- > similar to type 390V

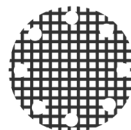


Metal fused safety sight glass

- > for chemical use



PLEXIGLAS® impact protection



Grid impact protection window³

1) From nominal pressure PN 16 & nominal size DN 100 to DN 150 up to 320°C
From nominal pressure PN 25 & nominal size DN 100 to DN 125 up to 320°C
From nominal pressure PN 40 in nominal size DN 100 up to 320°C

2) Depending on environment variables
3) Punching on customer request

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)



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