



ACI
INDUSTRIEARMATUREN

Circular sight glass fitting type 390V PN 16 - Vacuum with welding ends according to DIN EN 1092-1 type 11

Type 390V



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

USAGE

Round sight glass fittings are used for observation and illumination of the interior of closed containers or pipelines for vacuum applications. Sight glass fittings of type 390V are round flange housings with stubs according to DIN EN 1092-1 for welding, completed with each having a sight glass plate embedded and securely screwed between a flat gasket and a sealing ring.

Operating conditions

Temperature: (dependent on glass and gasket)	≤ 200 °C	Borosilicate glass (DIN 7080 or similar)
	> 200 °C	on request
Pressure:	≤ -0.9 ¹ barg up to 16 barg	
Low temperature operation as well as higher temperatures / pressures on request		

1) Dependent on environmental variables

Materials

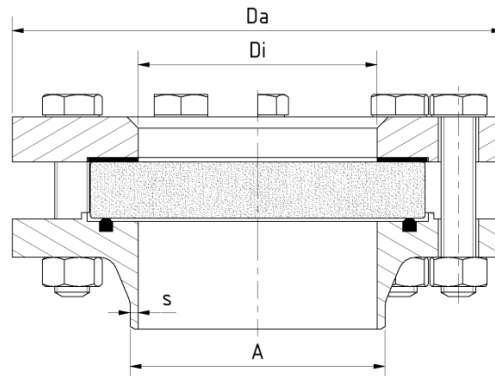
Base flange:	1.4571; 1.4404; 1.4539; 1.4435; 1.4541; 1.4301/7; 1.4876; 1.4828; 2.4602; 2.4610
Glass:	Borosilicate glass (DIN 7080 or similar)
Seal ² :	PTFE; FKM; NBR; Silicone; EPDM
Screws:	A2-70 / A4-70
Special materials on request	

2) See „INFO gaskets“

INSTALLATION NOTE

After welding ends of the base flange, it must be checked whether the sealing surfaces have warped! If necessary, rework is required! Also, pay attention to the specified torque values for the bolting according to the working pressure and maintenance manual.

DRAWING





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**Type
390V**

PN	DN	Da [mm]	Di [mm]	A [mm]	s [mm]	Seal 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 barg or 10 barg for these nominal size



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PRODUCT CODE

Example for Explaining the Code Composition

11 - 390V - 9 - 1 - 2 - 1 - 1 - 0

GROUP	TYPE	NOMINAL SIZE	PN	BASE FLANGE ¹	GLASS	GASKET	VARIANT
11	390V	1) 15	1) 16	2) 1.4571	1) Borosilicate glass according to DIN 7080 or similar.	1) PTFE	0) Standard
		2) 20	2) Special	3) 1.4404	2) Soda-lime glass according to DIN 8902 or similar.	2) FKM	
		3) 25		4) 1.4301/7	8) Unhardened borosilicate glass	3) NBR	
		4) 32		5) 1.4539		5) Silicone	
		5) 40		7) 1.4435		6) EPDM	
		6) 50		8) 1.4541		8) Special	
		7) 65		9) Special			
		8) 80					
		9) 100					
		10) 125					
		11) 150					
		12) 200					
		13) 250					
		14) 300					
		15) 350					

1) Cover flange according to quote / order confirmation



Unless otherwise stated, the highlighted factory standard will be delivered.

EXAMPLE

The product code **11-390V-9-1-2-1-1-0** corresponds to the standard version:

ACI Type 390V

DN 100

PN 16

Base flange made of 1.4571

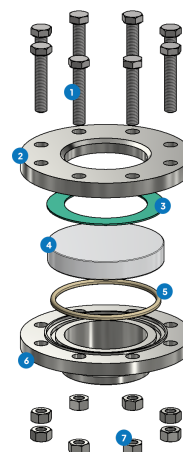
Cover flange made of 1.4571

Borosilicate glass (DIN 7080 or similar)

Seal PTFE D-ring

STRUCTURE

1. Screws
2. Cover flange
3. Glass cushion
4. Sight glass
5. D- or O-ring
6. Base flange
7. Nuts



For aggressive media, FEP- or Halar® coated sight glass plates can be used.



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QUICK OVERVIEW



-0.9¹ barg to max. 16 barg



heat resistant up to 200
°C



for liquid media



for gaseous media



Nominal sizes
DN 15 - 350



Custom designs possible



Accessories available

OPERATING CONDITIONS

Operating conditions depend on the choice of glass and seals:

		SIGHT GLASS	GASKETS				
		Borosilicate glass (DIN 7080 or similar)	PTFE max. 200 °C	FKM max. 200 °C	NBR max. 80 °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 barg up to 16 barg	✓	✓	✓	✓	✓	✓

1) Depending on environmental variables

✓ suitable ✗ unsuitable

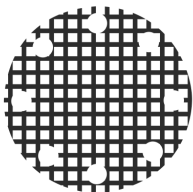


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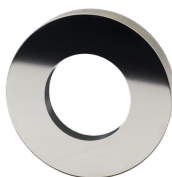
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OPTIONAL ACCESSORIES



Grid impact protection window



Metal fused safety sight glass

> for safety applications



LED lights

> for Ex and non-Ex areas



FEP protective screen / coating

> for high pH values

NOTE !



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

Our tool with the same name is available on our website.
(www.aci24.com, under Service, sub-item Tools)



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