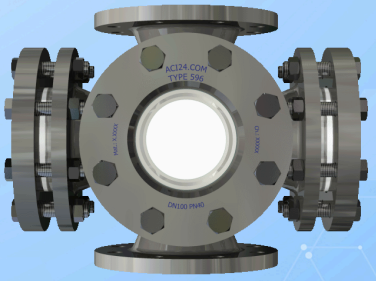
Flow sight glass type 596 PN 16/400

Sight glass with 4 viewports and flange connections according to DIN EN 1092-1

Type 596



Sight glass with 4 sight openings and flange connections according to DIN EN 1092-1

USAGE

Flow sight glasses with 2-way connections and 4 viewing openings of type 596 are used to observe the fill level and flow in pipelines. A clear advantage of the version with four viewing openings is that the user receives an almost 360° panoramic view of the process – even at very high operating pressures. This allows the flow of the medium to be optimally observed and the process to be comprehensively controlled. The flow sight glasses of type 596 are designed for installation between flanges according to DIN EN 1092-1.

Operating conditions:	
Temperature: (depending on glass and gasket)	150 °C Soda-lime glass DIN 8902 280 °C Borosilicate glass DIN 7080 300 °C or 320 °C[1] Borosilicate glass DIN 7080 with mica protection discs
Pressure:	≤ 16 / 40 / 63 / 100 / 160 / 250 / 320 / 400 barg

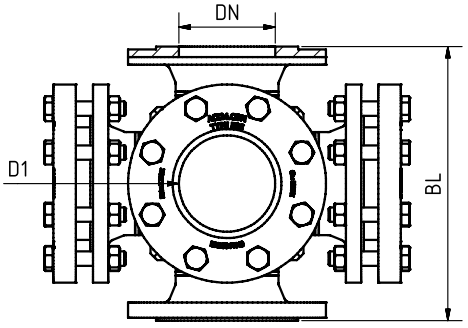
1) Only possible if MAXOS® safety sight glasses according to DIN 7080 are used

Materials:	
Connection flange, cover flange and body:	1.4571
Glass:	Borosilicate glass DIN 7080 Soda-lime glass DIN 8902
Gasket:	Graphite; C4400; PTFE; FKM; NBR; Silicone; EPDM
Screws:	A2-70 / A4-70

INSTALLATION NOTE

Gaskets must always be used that fit the sealing surfaces. The screw material should be equivalent or superior compared to the flange material. Whenever possible, both the screw thread and the screw head should be provided with a suitable lubricant.

DRAWING



DN	**50**	**65**	**80**	**100**	**125**	**150**	**200**
Total length (BL)[2]	DIN EN 558-1 FTF 2						
Flange dimensions	DIN EN 1092-1						
free view (D1)[2]	55	70	83	107	132	159	207

2) All dimensions are executed – as far as constructionally possible – according to the standard. Otherwise, the information from the order confirmation and customer drawing applies.
Dimensions correspond to the nominal pressure level PN 16, other pressure levels may differ

PRODUCT CODE

Example for Explaining the Code Composition

11 - 596 - 8 - 2 - 1 - 1 - 4 - 000

GROUP	TYPE	DN	PN	BODY	GLASS	GASKET	VARIANT
11	596	5) 50	1) 16	1) 1.4571	1) Borosilicate glass DIN 7080	1) PTFE	000) Standard
		6) 65	2) 40	8) Special	2) Soda-lime glass DIN 8902	2) FKM	
		7) 80	3) 63		4) Borosilicate glass DIN 7080 + Mica	3) NBR	
		8) 100	4) 100		5) META® glass	4) C4400	
		9) 125	5) 160			5) Silicone	
		10) 150	6) 250			6) EPDM	
		11) 200	7) 320			7) Graphite	
		12) Special	8) 400			8) Special	

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

EXAMPLE

The product code 11-596-8-2-1-1-4-000 corresponds to the standard version:
ACI type 596
DN 100
PN 40
Body 1.4571
Cover flanges 1.4571
Connection flanges 1.4571
Borosilicate glass DIN 7080
Gasket KlingerSil® C4400

Flow sight glass type 596 PN 16/400

Sight glass with 4 viewports and flange connections according to DIN EN 1092-1

Type 596

QUICK OVERVIEW

- max. 400 barg
- temperature resistant up to 320 °C
- for liquid media
- for gaseous media
- Nominal sizes DN 50 - 200
- Custom made constructions possible
- > 50 sealing materials
- Accessories available

OPERATING CONDITIONS

Operating conditions depend on the choice of glass and seals:

		SIGHT GLASS		GASKETS						
		Soda-lime glass DIN 8902	**Borosilicate glass** DIN 7080	**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	✗	✓	✗	✗	✗	✗	✗	✗	✓
	> 280 °C	On request								
PRESSURE	up to 16 barg	✓	✓	✓	✓	✓	✓	✓	✓	✓
	up to 40 barg	✓	✓	✓	✗	✗	✓	✗	✗	✓
	up to 63 barg	✗	✓	✗	✗	✗	✗	✗	✗	✓
	up to 100 barg	✗	✓	✗	✗	✗	✗	✗	✗	✓
	up to 160 barg	✗	✓	✗	✗	✗	✗	✗	✗	✓
	up to 250 barg	✗	✓	✗	✗	✗	✗	✗	✗	✓
	up to 320 barg	✗	✓	✗	✗	✗	✗	✗	✗	✓
	up to 400 barg	✗	✓	✗	✗	✗	✗	✗	✗	✓

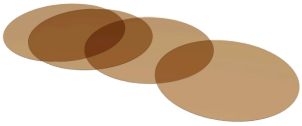
✓ suitable ✗ unsuitable

Flow sight glass type 596 PN 16/400

Sight glass with 4 viewports and flange connections according to DIN EN 1092-1

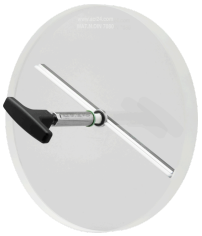
Type 596

OPTIONAL ACCESSORIES



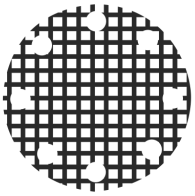
Round mica discs

> up to 320 °C with Borosilicate glass DIN 7080

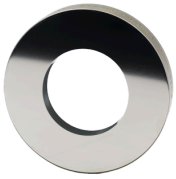


Sight glass wiper

> with PTFE, silicone, EPDM or FKM wipers



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

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

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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