



ACI
INDUSTRIEARMATUREN

3-way flow sight glass type 590 PN 16/400

Three-way flow sight glass
with flange connections
according to DIN EN 1092-1

**Type
590**



Three-way flow sight glass with flange connections
according to DIN EN 1092-1

USAGE

Three-way flow sight glasses of type 590 serve to observe the level and flow in pipelines.

They enable reliable monitoring of the function and performance of individual devices as well as complete systems. The flow sight glasses of type 590 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 when MAXOS® safety sight glasses according to DIN 7080 are used

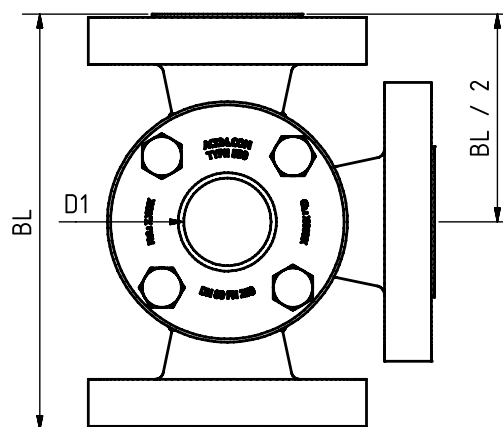
Materials:

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

Seals should always be used that match the sealing surfaces. The screw material should be equivalent or higher grade compared to the flange material. Whenever possible, both the screw thread and the screw head should be provided with a suitable lubricant.

DRAWING



DN	25	40	50	65	80	100	125	150	200
Length (BL) ²	DIN EN 558-1 FTF 2								
Flange dimensions	DIN EN 1092-1								
Free view (D1) ²	65	80	100	150	175	175	175	175	240
2) All measurements will be carried out according to standards – provided it is constructively possible. Otherwise, the information from the order confirmation and customer drawing applies. Measurements correspond to the nominal pressure level PN 16; other pressure levels may differ									
Custom dimensions and other standards available upon request									



3-way flow sight glass type 590 PN 16/400

Three-way flow sight glass
with flange connections
according to DIN EN 1092-1

Type 590

PRODUCT CODE

Example for Explaining the Code Composition

11 - 590 - 8 - 2 - 1 - 1 - 7 - 000

GROUP	TYPE	DN	PN	BODY	GLASS	GASKET	VARIANT
11	590	3) 25	1) 16	1) 1.4571	1) Borosilicate glass DIN 7080	1) PTFE	000) Standard
		4) 40	2) 40	8) Special	2) Soda-lime glass DIN 8902	2) FKM	
		5) 50	3) 63		4) Borosilicate glass DIN 7080 + Mica	3) NBR	
		6) 65	4) 100		5) META® glass	4) C4400	
		7) 80	5) 160			5) Silicone	
		8) 100	6) 250			6) EPDM	
		9) 125	7) 320			7) Graphite	
		10) 150	8) 400			8) Special	
		11) 200	9) Special				
		12) Special					



Unless otherwise specified, the highlighted factory standard is delivered.

EXAMPLE

The product code **11-590-8-2-1-1-7-000**

corresponds to the standard version:

ACI type 590

DN 100

PN 16

Body 1.4571

Cover flanges 1.4571

Connection flanges 1.4571

Borosilicate glass DIN 7080

Gasket novaphit® MST-XP



ACI
INDUSTRIEARMATUREN

3-way flow sight glass type 590 PN 16/400

Three-way flow sight glass
with flange connections
according to DIN EN 1092-1

Type 590

QUICK OVERVIEW



max. 400 barg



heat resistant up to 320
°C



for liquid media



for gaseous media



Nominal sizes
DN 25 - 200



custom productions
possible



> 50 sealing materials



accessories available

OPERATING CONDITIONS

Terms of Service depend on the choice of glass and the gaskets:

		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	Silicon 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



ACI
INDUSTRIEARMATUREN

3-way flow sight glass type 590 PN 16/400

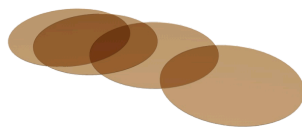
Three-way flow sight glass
with flange connections
according to DIN EN 1092-1

Type 590

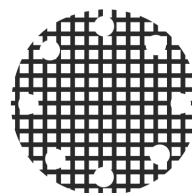
OPTIONAL ACCESSORIES



Double glazing

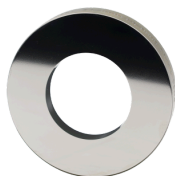


Round mica discs



Grid impact protection window

> up to 320 °C with Borosilicate glass
DIN 7080



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)



ACI Industriearmaturen GmbH

✉ info@aci24.com

🌐 www.aci24.com

📍 Königskamp 19 · 52428 Jülich · Germany

☎ +49 (0) 2461 91634 00

☎ +49 (0) 2461 91634 44

Continental Trade Sp. z o.o.

✉ biuro@continentaltrade.com.pl

🌐 www.continentaltrade.com.pl

📍 Stara 23 · 05-270 Nadma · Poland

☎ +48 22 670 11 81

☎ -