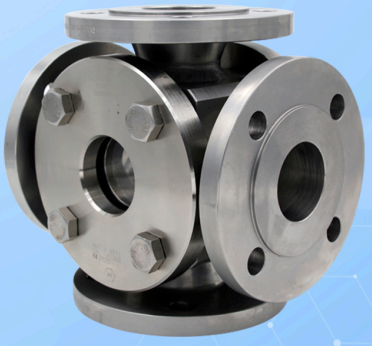
# Flow sight glass type 595 PN 16/400

## 4-way flow sight glass with 2 viewports and flange connections according to DIN EN 1092-1

**Type 595**



4-way flow sight glass with 2 viewing openings and flange connections according to DIN EN 1092-1

## USAGE

Flow sight glasses with 4-way connections and 2 viewports of type 595 serve to observe the level and flow in pipelines. A clear advantage of the 4-way design with two viewports is that several inlet and outlet pipes can be included in the process monitoring. This allows the flow of the medium to be observed from different directions and the process to be comprehensively controlled. The flow sight glasses of type 595 are designed for installation between flanges according to DIN EN 1092-1.

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

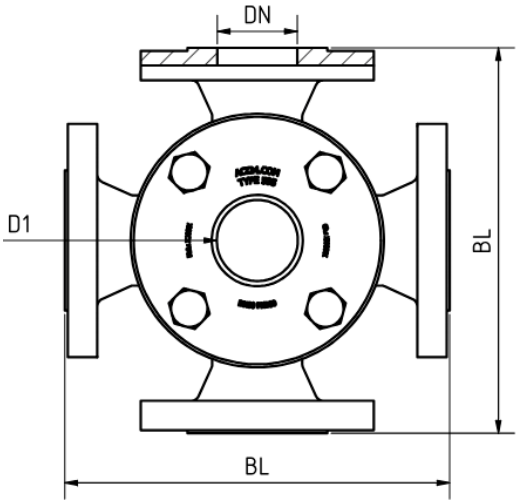
1) Only possible if MAXOS® safety sight glasses according to DIN 7080 are used

| **Materials:** | |
|---|---|
| Connection flange, cover flange and body: | 1.4571 |
| Glass: | Borosilicate glass DIN 7080<br>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 match the sealing surfaces. The screw material should be equal to or of higher value compared to the flange material. If 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] | 100 | 150 | 175 | 175 | 175 | 175 | 240 |

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

# Flow sight glass type 595 PN 16/400

## 4-way flow sight glass with 2 viewports and flange connections according to DIN EN 1092-1

**Type 595**

## PRODUCT CODE

Example for Explaining the Code Composition

**11 - 595 - 8 - 2 - 1 - 1 - 4 - 000**

| GROUP | TYPE | DN | PN | BODY | GLASS | GASKET | VARIANT |
|---|---|---|---|---|---|---|---|
| 11 | 595 | 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 11-595-8-2-1-1-4-000 corresponds to the standard version:**
ACI type 595
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 595 PN 16/400

**4-way flow sight glass with 2 viewports and flange connections according to DIN EN 1092-1**

**Type 595**

## QUICK OVERVIEW

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

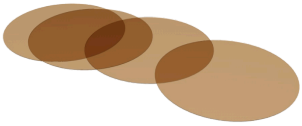
## OPERATING CONDITIONS

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 | Upon 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 | ✗ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ |

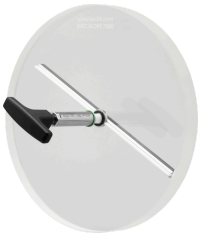
✓ suitable ✗ unsuitable

## OPTIONAL ACCESSORIES



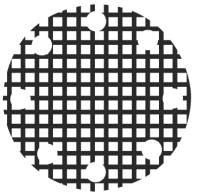
**Round mica discs**

> up to 320 °C with Borosilicate glass DIN 7080

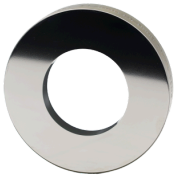


**Sight glass wiper**

> 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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