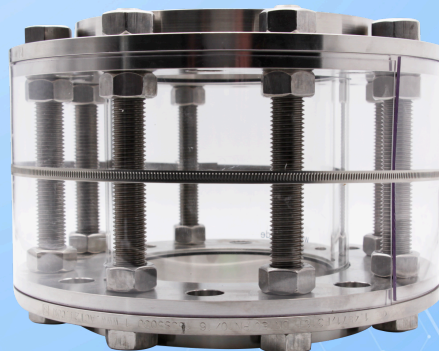




With flange connections according to ASME B16.5

## USAGE

Tubular sight glass is used for observing fillings and flow in pipelines. The sight glass enables reliable 360° monitoring of the function and performance of individual devices as well as entire systems. The tubular sight glass type 620 is executed with flanges on both sides according to DIN EN 1092-1 - PN 10/16 up to DN 150. Nominal sizes from DN 200 are executed according to DIN EN 1092-1 PN 10.

### Operating condition

|                                                 |                                                       |
|-------------------------------------------------|-------------------------------------------------------|
| Temperature:<br>(depending on glass and gasket) | up to 300 °C <sup>1</sup> with borosilicate glass 3.3 |
| Pressure:                                       | ≤ 16 <sup>2</sup> barg                                |

- 1) Higher upon request  
2) Higher see type 670 / 671

### Materials

|                         |                                                 |
|-------------------------|-------------------------------------------------|
| Flanges:                | 1.4571                                          |
| Glass cylinder:         | Borosilicate glass 3.3                          |
| Gasket <sup>3</sup> :   | PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite |
| Threaded rods and nuts: | A4-70                                           |

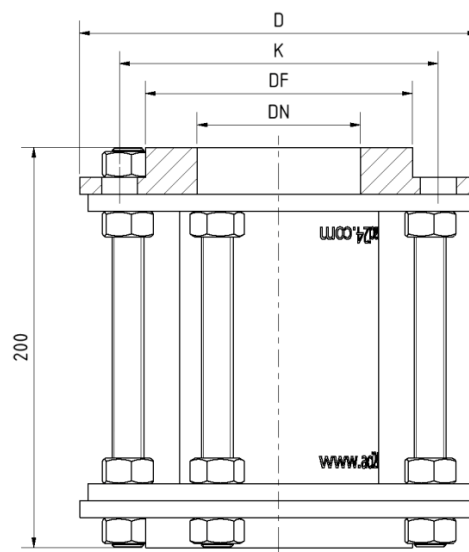
Special materials on request

3) See "INFO Gaskets"

## INSTALLATION NOTE

Seals must be used that fit exactly to the sealing surfaces. The screw material should correspond to that of the sight glass body or be of higher quality. Screws must match the hole pattern of the flanges. Threads and screw heads should be treated with lubricant whenever possible. Tubular sight glasses must be installed without stress – pipe forces, vibrations, and pressure shocks must not affect the fitting.

## DRAWING





| DN                                                                                                                  | 15 | 20  | 25  | 32  | 40  | 50  | 65  | 80  | 100 | 125 | 150 | 200 | 250 <sup>4</sup> | 300 <sup>4</sup> |
|---------------------------------------------------------------------------------------------------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------|------------------|
| K [mm]                                                                                                              | 65 | 75  | 85  | 100 | 110 | 125 | 145 | 160 | 180 | 210 | 240 | 295 | 350              | 410              |
| DF [mm]                                                                                                             | 41 | 54  | 64  | 74  | 84  | 98  | 118 | 134 | 154 | 184 | 208 | 264 | 320              | 370              |
| D [mm]                                                                                                              | 95 | 105 | 115 | 145 | 150 | 175 | 195 | 200 | 225 | 250 | 295 | 345 | 400              | 460              |
| PS [barg]                                                                                                           | 16 | 16  | 16  | 16  | 16  | 16  | 10  | 10  | 10  | 8   | 7   | 5   | 4                | 4                |
| Number of bores and diameter according to DIN EN 1092-1 - PN10/16 (from the nominal size DN 200 only PN 10)         |    |     |     |     |     |     |     |     |     |     |     |     |                  |                  |
| 4) Special construction, only upon prior request. Other sizes, lengths, and flange standards available upon request |    |     |     |     |     |     |     |     |     |     |     |     |                  |                  |

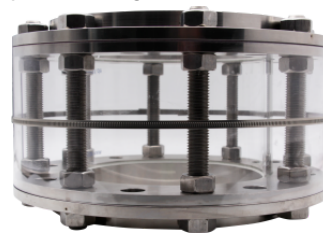
### SPECIAL VERSIONS/OPTIONS

- a) Impact protection cover
- b) Nearly dead space-free execution with precision glass cylinder possible
- c) Additional running-in phase for special piping
- d) Additional options on request

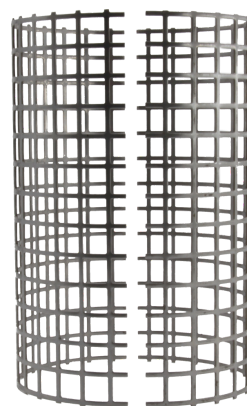
### IMPACT PROTECTION COVER (OPTIONAL)

Optionally, the tubular sight glass type 620 can be equipped with an elastic impact protection cover for the protection of the glass tube. Alternatively, a robust impact protection made of stainless steel perforated sheet is also available.

Type 620 with impact protection cover made of plastic (PETg)



Type 620 with impact protection cover made of perforated metal sheet (VA)





## PRODUCT CODE

Example for Explaining the Code Composition

**11 - 620 - 100 - 2 - 4 - 0 - 000**

| GROUP | TYPE | NOMINAL SIZE        | FLANGE     | GASKET      | IMPACT PROTECTION                                                        | TOTAL LENGTH             |
|-------|------|---------------------|------------|-------------|--------------------------------------------------------------------------|--------------------------|
| 11    | 620  | DN 15               | 1) P265GH  | 1) PTFE     | 0) without impact protection sleeve                                      | 000) Standard (200 mm)   |
|       |      | DN 20               | 2) 1.4571  | 2) FKM      | 1) with impact protection sleeve made of PETg (Tmax. 80 °C)              | D00) DIN EN 558 Series 1 |
|       |      | DN 25               | 8) Special | 3) NBR      | 2) with impact protection sleeve made of perforated sheet (Tmax. 300 °C) |                          |
|       |      | DN 32               |            | 4) C4400    |                                                                          |                          |
|       |      | DN 40               |            | 5) Silicone |                                                                          |                          |
|       |      | DN 50               |            | 6) EPDM     |                                                                          |                          |
|       |      | DN 65               |            | 7) Graphite |                                                                          |                          |
|       |      | DN 80               |            | 8) Special  |                                                                          |                          |
|       |      | DN 100              |            |             |                                                                          |                          |
|       |      | DN 125              |            |             |                                                                          |                          |
|       |      | DN 150              |            |             |                                                                          |                          |
|       |      | DN 200 <sup>5</sup> |            |             |                                                                          |                          |
|       |      | DN 250 <sup>5</sup> |            |             |                                                                          |                          |
|       |      | DN 300 <sup>5</sup> |            |             |                                                                          |                          |

5) Flange connection according to DIN EN 1092-1 - PN 10



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

## EXAMPLE

The product code **11-620-100-2-4-0-000** corresponds to the standard version:

ACI type 620

DN 100

PN 16

Flanges made of 1.4571

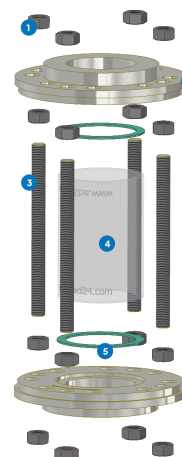
Gasket KlingerSil® C4400

without impact protection

Standard length 200 mm

## STRUCTURE

1. Nuts
2. Flange
3. Threaded rod
4. Borosilicate glass cylinder
5. Gasket





**ACI**  
INDUSTRIEARMATUREN

# Tubular sight glass type 620 PN 10/16 with flange connections according to DIN EN 1092-1

## Type 620

### QUICK OVERVIEW



max. 16 barg



heat-resistant up to 300  
°C



for liquid media



for gaseous media



Nominal sizes  
DN 15 - 300



custom manufacturing  
possible



> 50 sealing materials



accessories available

### OPERATING CONDITIONS

Operating conditions depend on the choice of glass and seals:

|             |               | Sight glass            |                     | Gaskets            |                   |                      |                         |                     |                      |
|-------------|---------------|------------------------|---------------------|--------------------|-------------------|----------------------|-------------------------|---------------------|----------------------|
|             |               | Borosilicate glass 3.3 | PTFE<br>max. 200 °C | FKM<br>max. 200 °C | NBR<br>max. 80 °C | C4400<br>max. 175 °C | Silicone<br>max. 180 °C | EPDM<br>max. 130 °C | Graphite<br>> 300 °C |
| TEMPERATURE | up to 80 °C   | ✓                      | ✓                   | ✓                  | ✓                 | ✓                    | ✓                       | ✓                   | ✓                    |
|             | up to 130 °C  | ✓                      | ✓                   | ✓                  | ✗                 | ✓                    | ✓                       | ✓                   | ✓                    |
|             | up to 175 °C  | ✓                      | ✓                   | ✓                  | ✗                 | ✓                    | ✓                       | ✗                   | ✓                    |
|             | up to 200 °C  | ✓                      | ✓                   | ✓                  | ✗                 | ✗                    | ✗                       | ✗                   | ✓                    |
|             | up to 300 °C  | ✓                      | ✗                   | ✗                  | ✗                 | ✗                    | ✗                       | ✗                   | ✓                    |
|             | >300 °C       | on request             | on request          |                    |                   |                      |                         |                     |                      |
| PRESSURE    | up to 16 barg | ✓                      | ✓                   | ✓                  | ✓                 | ✓                    | ✓                       | ✓                   | ✓                    |



suitable



unsuitable

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