



With flange connections according to ASME B16.5

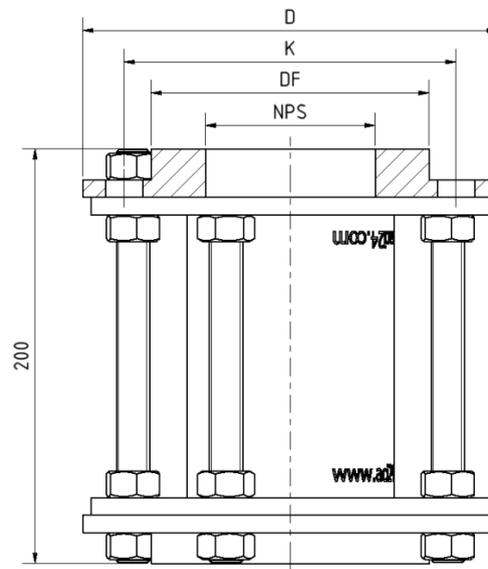
## USAGE

Pipe sight glasses are used to observe fillings and flow in pipelines. The sight glass allows for reliable 360° monitoring of the function and performance of individual devices as well as entire systems. The tubular sight glass type 620A is executed with flanges on both sides suitable for ASME B16.5 Class 150 lbs.

## INSTALLATION NOTE

Seals are to 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. Pipe sight glasses must be installed without tension – pipe forces, vibrations, and pressure shocks must not act on the fitting.

## DRAWING



| Operating condition                             |   |
|---|---|
| Temperature:<br>(dependent on glass and gasket) | up to 300 °C <sup>1</sup> with borosilicate glass 3.3 |
| Pressure:                                       | ≤ 16 barg   |
| 1) Higher upon request                          |   |

| Materials                      |   |
|--------------------------------|---|
| Flanges:                       | 1.4571  |
| Glass cylinder:                | Borosilicate glass 3.3                          |
| Gasket <sup>2</sup> :          | PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite |
| Threaded rods and nuts:        | A4-70   |
| Special materials upon request |   |

2) See "INFO Gaskets"

| NPS       | 1/2" | 3/4" | 1"  | 1 1/2" | 2"  | 3"  | 4"  | 6"  | 8"  |
|-----------|------|------|-----|--------|-----|-----|-----|-----|-----|
| LK [mm]   | 60   | 70   | 79  | 98     | 121 | 152 | 190 | 241 | 298 |
| DF [mm]   | 35   | 43   | 51  | 73     | 92  | 127 | 157 | 216 | 270 |
| D [mm]    | 95   | 105  | 115 | 150    | 165 | 200 | 230 | 285 | 345 |
| PS [barg] | 16   | 16   | 16  | 16     | 16  | 10  | 10  | 7   | 5   |

### SPECIAL VERSIONS/OPTIONS

- a) Impact protection cover
- b) Additional run-in phase for special piping
- c) Additional options on request

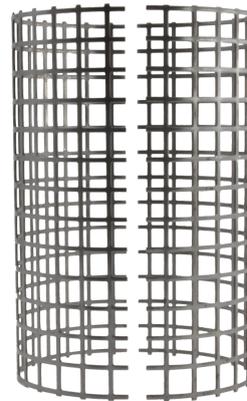
### IMPACT PROTECTION COVER (OPTIONAL)

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

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



Type 620A with impact protection cover made of perforated sheet metal



**PRODUCT CODE**

Example for Explaining the Code Composition

**11 - 620A - 3 - 2 - 4 - 0 - 000**

| GROUP | TYPE | NOMINAL SIZE | FLANGE     | GASKET      | IMPACT PROTECTION  | TOTAL LENGTH           |
|-------|------|--------------|------------|-------------|--|------------------------|
| 11    | 620A | 1) 1/2"      | 2) 1.4571  | 1) PTFE     | 0) without impact protection sleeve                                      | 000) Standard (200 mm) |
|       |      | 2) 3/4"      | 8) Special | 2) FKM      | 1) with impact protection sleeve made of PETg (Tmax. 80 °C)              |                        |
|       |      | 3) 1"        |            | 3) NBR      | 2) with impact protection sleeve made of perforated sheet (Tmax. 300 °C) |                        |
|       |      | 5) 1 1/2"    |            | 4) C4400    |  |                        |
|       |      | 6) 2"        |            | 5) Silicone |  |                        |
|       |      | 8) 3"        |            | 6) EPDM     |  |                        |
|       |      | 9) 4"        |            | 7) Graphite |  |                        |
|       |      | 10) 6"       |            | 8) Special  |  |                        |
|       |      | 11) 8"       |            |             |  |                        |



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

**EXAMPLE**

The product code **11-620A-3-2-4-0-000** corresponds to the standard version:

Type 620A

NPS 1"

Flanges made of 1.4571

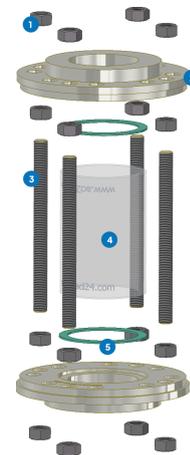
Gasket KlingerSil® C4400

without impact protection

Standard length 200 mm

**STRUCTURE**

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



## QUICK OVERVIEW



max. 16 barg



heat resistant up to 300 °C



for liquid media



for gaseous media



Nominal sizes  
NPS 1/2" - 8"



custom manufacturing  
possible



> 50 sealing materials



accessories available

## OPERATING CONDITIONS

Operating conditions depend on the choice of glass and the 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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