

Oval design

## USE:

Observation of the liquid level inside closed vessels (boilers, tanks, silos, etc.).

Sight glass fittings type 337 are oval longitudinal sight glass fittings for welding in or on, each completed with a sight glass plate inserted between the gaskets and firmly screwed in place.

| OPERATING CONDITIONS                            |             |  |
|---|-------------|--|
| Temperature:<br>(depending on glass and gasket) | ≤ 243°C     | Borosilicate glass reflex and transparent (saturated steam or hot water pressure)        |
|   | ≤ 280°C     | Borosilicate glass reflex and transparent (without technically significant glass attack) |
|   | ≤ 320°C     | Borosilicate glass transparent (with mica protection)                                    |
| Pressure:                                       | ≤ 25 bar(g) |  |

| MATERIAL                     |  |
|------------------------------|--|
| Base frame:                  | 1.4571; 1.4404   |
| Glass:                       | Boroilicate glass (according to or similar) DIN 7081 reflex or transparent glass |
| Gasket: <sup>1</sup>         | PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite                                  |
| Screws:                      | A4-70  |
| Special materials on request |  |

1) See „INFO-gasket“ leaflet

## INSTALLATION INSTRUCTIONS:

After welding in the base frame, check whether the sealing surface has warped. If necessary, it must be reworked! Also observe the specified torques for the screw connection, according to the operating and maintenance instructions!

The operating pressure does not apply to the base flange, this must be verified together with the pressure vessel according to AD 2000 instruction leaflet B9 or equivalent code!

## REFLECTIVE AND TRANSPARENT GLASS:

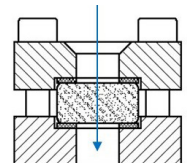
In the case of clear media, dark or non-illuminated vessels or a closed level indicator, the use of a reflex sight glass is recommended (see adjacent picture).

Due to the refraction of light in the incorporated prisms, the level can be seen better. However, if the vessel is illuminated, the medium is very clear or if the color of the medium should be visible, a transparent glass should be used.

Reflex glass cannot be protected with mica glass, as this will prevent reflection.

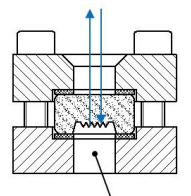
We will be happy to help you select the appropriate design.

Light beam



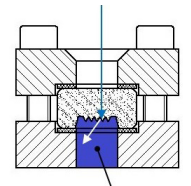
Transparent glass

Light beam



without liquid

Light beam



with liquid

**PRODUCT CODE:**

Example to explain the code composition.

**11-337-256-2-1-4-000**

| GROUP | TYPE | OVERALL LENGTH | BASE FRAME <sup>1</sup> | GLASS  | GASKET          | VARIANT       |
|-------|------|----------------|-------------------------|--|-----------------|---------------|
| 11    | 337  | 176            | 2) 1.4571               | 1) Borosilicate glass (DIN 7081) transparent glass | 1) PTFE         | 000) Standard |
|       |      | 226            | 4) 1.4404               | 2) Borosilicate glass (DIN 7081) transparent glass | 2) FKM          |               |
|       |      | <b>256</b>     | 8) Special              | + mica discs                                       | 3) NBR          |               |
|       |      | 316            |                         | 3) Borosilicate glass (DIN 7081) reflective glass  | <b>4) C4400</b> |               |
|       |      | 376            |                         | 5) Borosilicate glass unhardened transparent glass | 5) Silicone     |               |
|       |      | 436            |                         |  | 6) EPDM         |               |
|       |      | 496            |                         |  | 7) Graphite     |               |
|       |      | 536            |                         |  | 8) Special      |               |

1) Cover frame according to offer/order confirmation



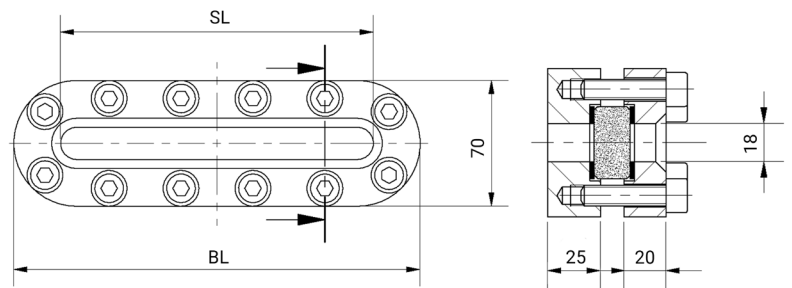
Unless otherwise specified, the highlighted work standard is delivered.

**EXAMPLE:**

**11-337-256-2-1-4-000 equivalent to:**

- ACI Type 337
- 256 mm overall length
- Base frame made of 1.4571
- Cover frame made of 1.4571
- Borosilicate glass (DIN 7081) transparent glass
- Gasket C4400
- Standard version**
- Special lengths on request
- other equipment optional

**DRAWING:**



Picture with transparent glass

| BL [mm]     | 176 | 226 | 256 | 316 | 376 | 436 | 496 | 536  |
|-------------|-----|-----|-----|-----|-----|-----|-----|------|
| SL [mm]     | 124 | 174 | 204 | 264 | 324 | 384 | 444 | 484  |
| Weight [kg] | 3,3 | 4,3 | 4,9 | 6,0 | 7,1 | 8,3 | 9,4 | 10,2 |

OPTIONAL EQUIPMENT:



**Mica discs**  
up to 320°C with borosilicate glass  
DIN 7081 transparent



**FEP-protective screen or  
FEP-coating**  
for higher pH values

CONSTRUCTION:

Screws

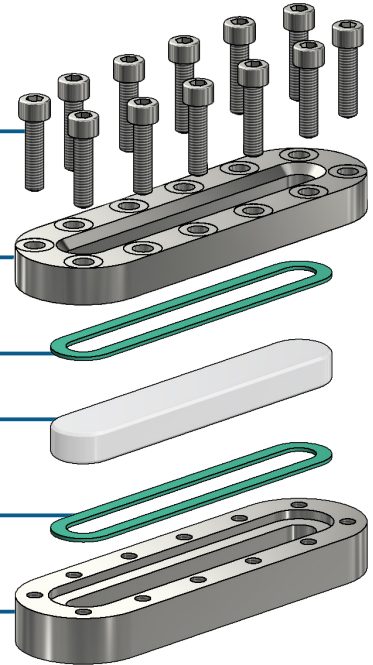
Cover frame

Gasket (on the atmosphere side)

Sight glass

Gasket (on the media side)

Base frame



For aggressive media or steam, mica lenses should be used to protect the glasses. (Not possible for reflective glasses, as this would cause them to lose their function).