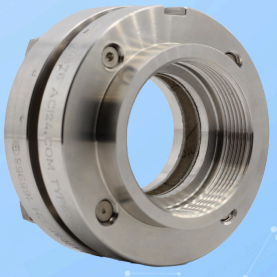
INDUSTRIEARMATUREN

# Circular sight glass fitting type 394 PN 16/160

## with female thread for screwing on

**Type 394**



EDELSTAHL Rostfrei INOX STAINLESS STEEL

With threaded connection according to DIN EN ISO 228-1

## USAGE

The sight glass fittings type 394 with screwed sockets are suitable for screwing into pipelines, boilers, tanks, and apparatus of all kinds. The areas of application are everywhere where visual inspections of filling or flow are required. They are equally suitable for liquids and gases. The sight glass fittings are particularly recommended for custom made designs in various fields of application.

| Operating condition | | |
|---|---|---|
| Temperature: (depending on glass and gasket) | ≤ 280 °C | Borosilicate glass (DIN 7080 or similar) |
| Pressure: | ≤ 16 barg to 160 barg | |
| Higher pressures available on request | | |
| Cryogenic application and higher temperatures / pressures available on request | | |

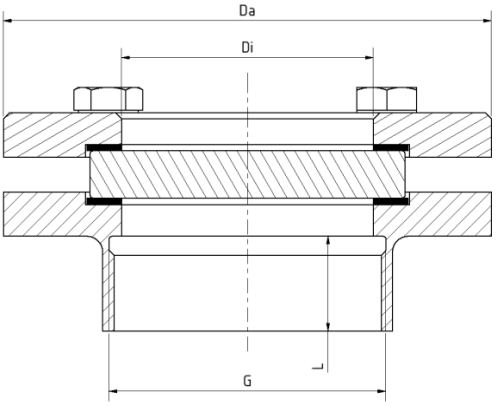
| Materials | |
|---|---|
| Base flange: | 1.4571; 1.4404 |
| Glass: | Borosilicate glass (DIN 7080 or similar) |
| Gasket[1]: | PTFE; FKM; NBR; C4400; Silicone; EPDM; Graphite |
| Screws: | A2-70 / A4-70 |
| Special materials on request | |

1) See "INFO Gaskets"

## INSTALLATION NOTE

The screw connection must be sealed with the appropriate sealing material in order to reach the specified pressure rating. The connecting thread is not designed to be self-sealing!

## DRAWING



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| PN | G | Da [mm] | Di [mm] | L [mm] | Weight [kg] |
|---|---|---|---|---|---|
| 16 | ½“ | 70 | 15 | 20 | 0.8 |
| | 1“ | 95 | 25 | 20 | 1.5 |
| | 1½“ | 110 | 40 | 20 | 2.2 |
| | 2“ | 110 | 40 | 20 | 2.1 |
| 40 | ½“ | 70 | 15 | 20 | 0.8 |
| | 1“ | 95 | 25 | 20 | 1.5 |
| | 1½“ | 110 | 40 | 20 | 2.2 |
| | 2“ | 110 | 40 | 20 | 2.2 |
| 63 | ½“ | 95 | 15 | 20 | 0.8 |
| | 1“ | 95 | 25 | 20 | 1.5 |
| | 1½“ | like PN 100 | | | |
| | 2“ | like PN 100 | | | |
| 100 | ½“ | 70 | 15 | 20 | 0.8 |
| | 1“ | 95 | 25 | 20 | 1.5 |
| | 1½“ | 110 | 40 | 20 | 2.2 |
| | 2“ | 110 | 40 | 20 | 2.2 |
| 160 | ½“ | 70 | 15 | 20 | 0.8 |
| | 1“ | 95 | 25 | 20 | 1.8 |
| | 1½“ | 110 | 40 | 20 | 2.6 |
| | 2“ | 110 | 40 | 20 | 2.7 |
| Other sizes and pressure ratings on request | | | | | |
| Installation via hook wrenches as for DIN 11851 | | | | | |

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## PRODUCT CODE

Example for Explaining the Code Composition

**11 - 394 - 2 - 1 - 2 - 1 - 4 - 0**

| GROUP | TYPE | G | PN | BASE FLANGE[1] | GLASS | GASKET | VARIANT |
|---|---|---|---|---|---|---|---|
| 11 | 394 | 1) ½“ | 1) 16 | 1) 1.4404 | 1) Borosilicate glass according to DIN 7080 or similar | 1) PTFE | 0) Standard |
| | | 2) 1“ | 2) 40 | 2) 1.4571 | 4) Borosilicate glass[2] + PTFE wiper SGW | 2) FKM | |
| | | 3) 1½“ | 3) 63 | 3) Custom made design | 5) Borosilicate glass[2] + silicone wiper SGW | 3) NBR | |
| | | 4) 2“ | 4) 100 | | | 4) C4400 | |
| | | 5) Custom made design | 5) 160 | | | 5) Silicone | |
| | | | 6) Custom made design | | | 6) EPDM | |
| | | | | | | 7) Graphite | |
| | | | | | | 8) Custom made design | |

1) Cover flange according to offer / order confirmation
2) Similar to DIN 7080

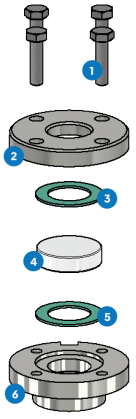
Unless otherwise stated, the highlighted factory standard is delivered.

## EXAMPLE

**The product code 11-394-2-1-2-1-4-0 corresponds to the standard version:**
ACI type 394
Thread G 1"
PN 16
Base flange made of 1.4571
Cover flange made of 1.4571
Borosilicate glass (DIN 7080 or similar)
Gasket KlingerSil® C4400

## STRUCTURE

1. Screws
2. Cover flange
3. Glass cushion
4. Sight glass
5. Gasket
6. Base flange with threaded connection



For aggressive media, FEP or Halar® coated sight glasses can be used. In case of steam, mica discs should be used for the protection of the glasses.

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**Type 394**

## QUICK OVERVIEW

- max. 160 barg
- heat resistant up to 280 °C
- for liquid media
- for gaseous media
- Nominal sizes ½" - 2"
- Custom designs possible
- > 50 sealing materials
- Accessories available

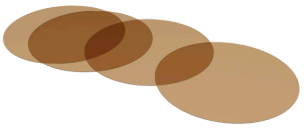
## OPERATING CONDITIONS

Operating conditions depend on the choice of glass and gaskets:

| | | Sight glass | Gaskets | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Borosilicate glass (DIN 7080 or similar) | 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 175 °C | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✓ |
| | up to 200 °C | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | ✗ | ✓ |
| | up to 280 °C | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ |
| PRESSURE | up to 16 barg | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | up to 40 barg | ✓ | ✓ | ✗ | ✗ | ✓ | ✗ | ✗ | ✓ |
| | up to 63 barg | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ |
| | up to 100 barg | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ |
| | up to 160 barg | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ |

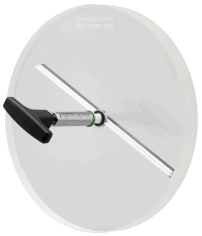
✓ suitable ✗ unsuitable

## OPTIONAL ACCESSORIES



### Round mica discs

> up to 320 °C with Borosilicate glass DIN 7080



### Sight glass wiper

> with PTFE, silicone, EPDM or FKM wipers

### FEP protective screen / coating

> for high pH values

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