

# Capsule Seals

Thread Connection, PN 600

Model

**TDM 7710**

## Application

Capsule seals are suitable for viscous and dirty media, especially at high pressures and temperatures, and also for media solidifying at falling temperatures. Pressure shocks can be successfully damped.

Usually the capsule seals are mounted to Bourdon tube pressure gauges of nominal case sizes 100 (4), 160 (6") or 250 (10"). But also pressure transmitters and pressure transducers can be mounted to capsule seals.

Important information about advantages, applications, and features can be found in our model overview 7000 where you will also find an overview of our other chemical seal series.


Please note especially the explanations about the influences of temperature and other special operating conditions, and the requirement of detailed ordering information resp. inquiries.

Please use our check list for pressure measuring instruments with chemical seal to ensure the completeness of all required ordering information (to find at our website, under "PDF-Download"). You can receive the check list in printed version with mail upon request.

## Construction

The measuring system of the pressure gauge and the capsule seal are separately filled and mounted afterwards.

The connection between capsule seal and pressure gauge is secured by a stud screw. This screw may not be released.

 Do not open any connection of the system! Otherwise filling fluid will leak out and the measuring system cannot work properly anymore!

## Standard Configuration

### Process Connection

Union nut  
G 1 female (1" BSP-f)  
stainless steel 316 L (1.4404)

### Immersion Shaft Tube

Stainless steel 316 L (1.4404)  
90 mm (3.54") long

### Nominal Pressure

PN 600

### Instrument Connection

G 3/8 female (3/8" BSP-f)  
stainless steel 316 L (1.4404)

### Filling Liquid

Glycerine (FN 3)

### Pressure Ranges Measuring Instrument

Bourdon tube pressure gauges 0- 16 bar to 0- 600 bar,  
0-200 psi to 0-10,000 psi  
Details for other pressure measuring instruments upon request

### Reference Temperature

+20 °C (+ 68 °F), dial inscription for pressure gauges: tA 20 °C



## Optional Special Configurations e.g.:

- Medium temperature tA > +20 °C (+68 °F), max. +200 °C (392 °F)  
Please state min. and max. temperature limits as accurate as possible!
- Other length of the immersion shaft tube upon request
- Process connection:  
Female: G 1 1/4 (1 1/4" BSP)  
Male: G 1/2 B, G 3/4 B, or G 1 B (1/2" BSP, 3/4" BSP, or 1" BSP)  
others upon request
- TDM mounted to Bourdon tube pressure gauge NCS 63 (2 1/2") upon request
- Capillary line between diaphragm seal and instrument (length limit upon request), or cooling element, see data sheet 7002, strongly recommended for medium temperatures >+100 °C (>+212 °F)

## How to Order:

Please note the detailed information about the required ordering information

- in our model overview 7000 and our check list for measuring instruments with chemical seal
- on the data sheet for the measuring instrument that shall be attached

Model:	<b>TDM 7710</b>
Process connection:	<b>G 1 female ( 1" BSP-f)</b>
Nominal pressure:	<b>PN 600</b>
Material:	<b>1.4404 (316 L)</b>
Instrument connection <sup>1)</sup> :	<b>G 3/8 female (3/8" BSP)</b>
Special configurations:	see above

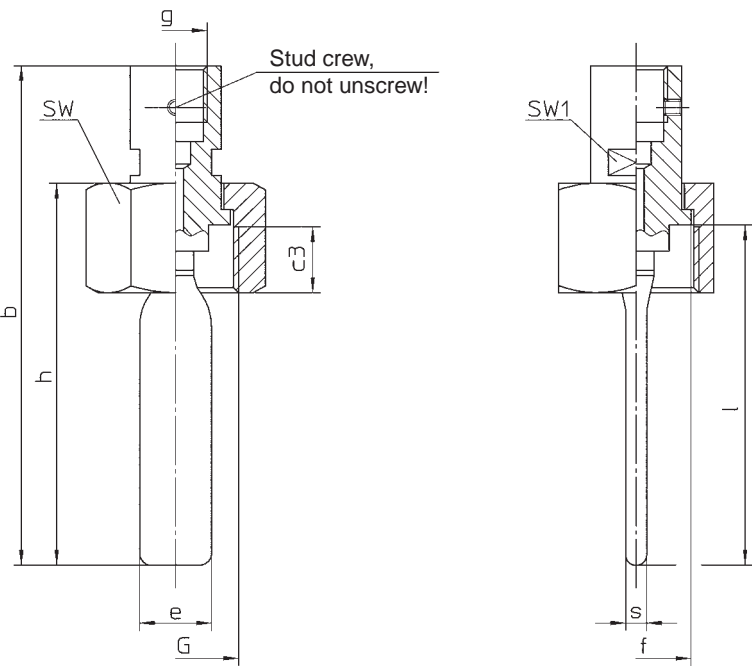
Please point out especially when the medium or ambient temperature is different than +20 °C (+68 °F).

**Example:** TDM 7710, G 1, PN 600, 1.4404, G 3/8 for instrument

<sup>1)</sup> to state only for separate ordered in-line seals

# Dimensions and Weight

## Union nut G 1 female (1" BSP-f)



Dimensions ( mm / inches ) and Weight ( kg / lb)

$b^{-4}$	$c3$	$e \pm 0.5$	$f$	$G$	$g$	$h^{-4}$	$l^{-4}$	$s \pm 0.5$	$SW$	$SW1$	Weight (approx.)
135 5.31	17.5 .69	13 .51	30 1.18	G 1 female 1" BSP-f	G $\frac{3}{8}$ female $\frac{3}{8}$ " BSP-f	101 3.98	90 3.54	5.5 .22	41 1.61	19 .75	0.35 .77

The information in this leaflet is given in good faith, but we reserve the right to make changes without notice.