

# FLANGED DIAPHRAGM SEAL - EXTENDED NECK

## TGI20-2



### APPLICATIONS

- Separation systems
- Isolation applications
- Viscous & corrosive media
- High-pressure applications
- High vibration application

### FEATURES

- For flanges all sizes
- Optional exotic materials



FLANGED DIAPHRAGM SEAL -EXTENDED NECK, TGI20-2

## DESCRIPTION

### General

**Flange design** : ANSI B16.5 / EN 1092-1 / BS-10

**Storage temperature** : -40...+65°C

**Service temperature** : 370°C max.

**Weld joints** : Diaphragm and Other Parts by  
TIG argon arc welding

### Material of construction

**Sensing element** : Diaphragm

**Flange material** : ASTM A105 / AISI 304 SS / AISI 316 SS

**Diaphragm** : AISI 316L SS / Monel 400 / Hastelloy C-276  
Inconel 600 / Titanium / Tantalum

**Extended Neck material** : ASTM A105 / AISI 304SS

AISI 316 SS / AISI 316L SS / Monel / Titanium  
Hastelloy C-276 / Tantalum #

**Capillary** : AISI 304 SS / AISI 316 SS

**Armour** : AISI 304 SS / AISI 316 SS / PVC

**Remote distance** : 0.25 Mtr. to 15 Mtr.

### Standard version

**Seal type** : -1...0...21 bar [Eco] / -1...0...70 bar [Standard] /  
100...400 bar [High pressure]

**Instrument connection** : 1/2" NPT (F) / 1/2" BSP (F)

**Sealing fluid** : Silicon DC 200 [-40...205°C]

**Process connection** : Flange as per standard

**Flange facing type** : Flat Face / Raised Face / Ring Type Joint

### Wetted parts protection

**Coating on Bottom chamber & diaphragm [Code E69]**

**Material** : PTFE [spray coated & oven baked]

**Service temperature** : 150°C max.

### Filling liquids Vs Temperature range

| CODE | Fluid Name     | Temperature Range |
|------|----------------|-------------------|
| L1   | Silicon DC 200 | -40°C to 205°C    |
| L2   | Glycerin       | 10°C to 150°C     |
| L3   | Food Grade oil | -20°C to 140°C    |
| L4   | Syltherm 800   | -40°C to 315°C    |
| L5   | Silicon DC 710 | 7°C to 371°C      |

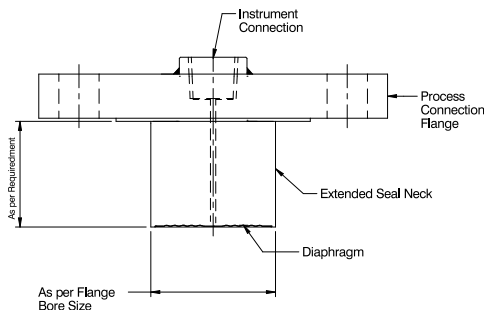
# Check temperature & pressure rating with factory before ordering.

# FLANGED DIAPHRAGM SEAL - EXTENDED NECK

## TGI20-2

| ORDERING CODES                                |                                                   |  |     |                               |                               |         |
|-----------------------------------------------|---------------------------------------------------|--|-----|-------------------------------|-------------------------------|---------|
| MODEL                                         |                                                   |  |     |                               |                               | TGI20-2 |
| TGI20-2 Flanged Diaphragm seal -Extended Neck |                                                   |  |     |                               |                               |         |
| SEAL TYPE                                     |                                                   |  |     |                               |                               | A3      |
| A3 Flanged Diaphragm seal -Extended Neck      |                                                   |  |     |                               |                               |         |
| FLANGE MATERIAL                               |                                                   |  |     |                               |                               | S01     |
| S09                                           | ASTM A105                                         |  | S01 | AISI 304 SS                   |                               |         |
|                                               |                                                   |  |     | S02                           | AISI 316 SS                   |         |
| DIAPHRAGM MATERIAL                            |                                                   |  |     |                               |                               | S03     |
| S03                                           | AISI 316L SS                                      |  | S05 | Monel 400                     |                               |         |
| S06                                           | Inconel 600                                       |  | S07 | Titanium                      |                               |         |
|                                               |                                                   |  |     | S10                           | Hastelloy C-276               |         |
|                                               |                                                   |  |     | S08                           | Tantalum                      |         |
| EXTENDED NECK MATERIAL                        |                                                   |  |     |                               |                               | S02     |
| S01                                           | AISI 304 SS                                       |  | S02 | AISI 316 SS                   |                               |         |
| S05                                           | Monel 400                                         |  | S10 | Hastelloy C-276               |                               |         |
| S08                                           | Tantalum                                          |  |     |                               |                               |         |
| INSTRUMENT CONNECTION                         |                                                   |  |     |                               |                               | P28     |
| P28                                           | ½" NPT (F)                                        |  | P23 | ¼" BSP (F)                    |                               |         |
| P24                                           | ¼" NPT (F)                                        |  |     |                               |                               |         |
| PROCESS CONNECTION                            |                                                   |  |     |                               |                               | XXX     |
| XXX                                           | As per Flange table                               |  |     |                               |                               |         |
| FLANGE FACING                                 |                                                   |  |     |                               |                               | G1      |
| G1                                            | Serrated raised face                              |  | G2  | Flat face                     |                               |         |
| G4                                            | Tongue & Groove face                              |  |     |                               |                               |         |
| SEALING FLUID                                 |                                                   |  |     |                               |                               | L1      |
| XX                                            | As per Filling liquid Vs Temperature Rating table |  |     |                               |                               |         |
| EXECUTION                                     |                                                   |  |     |                               |                               | R1      |
| R1                                            | Direct                                            |  | R2  | Remote                        |                               |         |
| CAPILLARY MATERIAL                            |                                                   |  |     |                               |                               | XX      |
| S01                                           | AISI 304 SS                                       |  | S02 | AISI 316 SS                   |                               |         |
| ARMOUR MATERIAL                               |                                                   |  |     |                               |                               | XX      |
| S01                                           | AISI 304 SS                                       |  | S02 | AISI 316 SS                   |                               |         |
|                                               |                                                   |  |     | S16                           | PVC [Ambient ≤60°C]           |         |
| REMOTE DISTANCE                               |                                                   |  |     |                               |                               | XXXXX   |
| XXXXX                                         | 500 mm (Min.) to 25000 mm (Max.)                  |  |     |                               |                               |         |
| OTHER OPTIONS                                 |                                                   |  |     |                               |                               | E31     |
| E77                                           | Dry Seal                                          |  | E31 | Material test certificate 3.1 |                               |         |
| E114                                          | PTFE Coating on Diaphragm                         |  |     | E32                           | Material test certificate 2.2 |         |

Ordering Example : TGI20-2-A3.S02.S03.S02.P28.F07.G1.L1.R1/XX.XX.XXXXX/XXX



- NOTES
- Standard GA Drawing. Not to scale.
  - Detailed GA Drawings are available, kindly contact factory.