

APPLICATIONS

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

FEATURES

- For flanges all sizes
- Optional exotic materials



FULLY WELDED DIAPHRAGM SEAL HEAVY DUTY SEAL, TMC21

Standard version

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

Instrument connection : ½" NPT (F) / ½" 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.

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 / PVC* / PVDF* / Polypropylene* / PTFE*

Coupling flanges & hardware : Plated SS

Capillary : AISI 304 SS / AISI 316 SS

Armour : AISI 304 SS / AISI 316 SS / PVC

Remote distance : 0.25 Mtr. to 15 Mtr.

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.

ORDERING CODES

MODEL

TMC21 Fully Welded diaphragm

TMC21

SEAL TYPE

R04 -1...0...2.5 bar [Low Pressure] **R05** 4...70 bar [Standard] **R06** 100...280 bar [High Pressure 1]

R02

TOP CHAMBER

S01 AISI 304 SS **S02** AISI 316 SS

S01

DIAPHRAGM

S03 AISI 316L SS **S05** Monel 400 **S10** Hastelloy C-276
S06 Inconel 600 **S07** Titanium **S08** Tantalum

S03

BOTTOM CHAMBER

S01 AISI 304 SS **S02** AISI 316 SS **S03** AISI 316L SS
S05 Monel 400 **S10** Hastelloy C-276 **S07** Titanium
S08 Tantalum

S02

INSTRUMENT CONNECTION

P28 ½" NPT (F) **P23** ¼" BSP (F) **P27** ½" BSP (F)
P24 ¼" NPT (F)

P28

PROCESS CONNECTION

P04 ¼" NPT (M) **P08** ½" NPT (M) **P20** M20 X 1.5 mm (M)
P03 ¼" BSP (M) **P05** 3/8" BSP (M) **P07** ½" BSP (M)
P28 ½" NPT (F) **P23** ¼" BSP (F) **P27** ½" BSP (F)
P24 ¼" NPT (F)

P08

All other connections are available on request.

SEALING FLUID

XX As per Filling liquid Vs Temperature Rating table

L1

EXECUTION

R1 Direct **R2** Remote

R1

CAPILLARY MATERIAL

S01 AISI 304 SS **S02** AISI 316 SS

XX

ARMOUR MATERIAL

S01 AISI 304 SS **S02** AISI 316 SS **S16** PVC [Ambient ≤60°C]

XX

REMOTE DISTANCE

XXXXX 500 mm (Min.) to 25000 mm (Max.)

XXXXX

OTHER OPTIONS

E77 Dry Seal **E31** Material test certificate 3.1 **E32** Material test certificate 2.2

XXX

Ordering Example : TMC21-R02.S01.S03.S02.P28.P08.L1.R1/XX.XX.XXXXX/XXX

Note : For GA Drawings, kindly contact factory.



TEMPSENS MEASUREMENT & CONTROL PVT. LTD.
gauges@tempsens.com | www.tempsens.com