

I - SECTION -FLANGED DIAPHRAGM SEAL TGI19

APPLICATIONS

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

FEATURES

- For flanges below 1½" size
- Optional exotic materials



I - SECTION - FLANGED DIAPHRAGM SEAL, TGI19

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

Top chamber material : ASTM A105 / AISI 304 SS / AISI 316 SS

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

Gaskets : PTFE [ranges ≤70 bar] / Metal [ranges ≥100 bar]

Bottom chamber 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 pressed steel [cup type]
AISI 304 SS [machined, for seal type R02 & R03]

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 : ½" NPT (F) / ½" BSP (F)

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

Process connection : Flange as per standard between ½ to 1¼"

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

Wetted parts protection

Lining on bottom chamber [Code E67]

Material : PTFE - 2 mm thick

Service temperature : 200°C max.

Lining on Diaphragm [Code E68]

Material : PTFE - 100 Micron thick

Service temperature : 150°C max.

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.

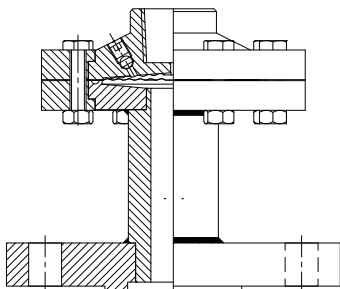
I - SECTION FLANGED DIAPHRAGM SEAL

TGI19

ORDERING CODES								
MODEL						TGI19		
TGI19	I - Section diaphragm seal							
SEAL TYPE						R02		
R01	-1...0...21 bar [Eco]		R02	-1...0...70 bar [Standard]			R03	100...400 bar [High pressure]
TOP CHAMBER MATERIAL						S01		
S09	ASTM A105		S01	AISI 304 SS			S02	AISI 316 SS
DIAPHRAGM MATERIAL						S03		
S03	AISI 316L SS		S05	Monel 400			S10	Hastelloy C-276
S06	Inconel 600		S07	Titanium		S08	Tantalum	
BOTTOM CHAMBER MATERIAL						S02		
S01	AISI 304 SS		S02	AISI 316 SS			S03	AISI 316L SS
S05	Monel 400		S10	Hastelloy C-276		S07	Titanium	
S08	Tantalum		S11	PTFE		S16	PVC	
S18	Polypropylene		S19	PVDF				
INSTRUMENT CONNECTION						P28		
P28	½" NPT (F)		P23	¼" BSP (F)			P27	½" BSP (F)
P24	¼" NPT (F)							
PROCESS CONNECTION						XXX		
XXX	As per Flange table							
FLANGE FACING						G1		
G1	Serrated raised face		G2	Flat face			G3	Ring type joint 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						XXX		
E77	Dry Seal		E31	Material test certificate 3.1			E32	Material test certificate 2.2

Ordering Example : TGI19-R02.S01.S03.S02.P28.F07.G1.L1.R1/XX.XX.XXXXX/XXX

GENERAL DRAWING



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