

FLANGED FLUSH DIAPHRAGM SEAL

TGI29-1

APPLICATIONS

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

FEATURES

- Large volume type design
- Flushed diaphragm
- Laser welded diaphragm
- Optional flushing ring
- Optional exotic materials



FLANGED FLUSH DIAPHRAGM SEAL, TGI29-1

DESCRIPTION

General

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

Storage temperature : -40...+65°C

Service temperature : 370°C max.

Weld joints : Laser welding for Diaphragm and
TIG argon arc welding for other parts

Material of construction

Sensing element : Diaphragm

Diaphragm : AISI 316L SS / Monel 400 / Hastelloy C-276

Inconel 600 / Titanium / Tantalum

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

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

Coupling flanges & hardware : AISI 304 SS

Capillary : AISI 304 SS / AISI 316 SS

Armour : AISI 304 SS / AISI 316 SS / PVC

Remote distance : 0.25 Mtr. to 25 Mtr.

Standard version

Seal type : -1...250 bar (Flange $\geq 1.5"$) /
4...250bar (Flanges $\frac{1}{2}"$ to $1"$)

Instrument connection : $\frac{1}{2}"$ NPT (F) / $\frac{1}{2}"$ BSP (F)

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

Process connection : Flange as per standard between $\frac{1}{2}"$ to $4"$

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

Wetted parts protection

Service temperature : 200°C max.

Lining on Diaphragm

Material : PTFE Coating - 100 Micron thick

Service temperature : 150°C max.

Coating on Bottom chamber & diaphragm

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

FLANGED FLUSH DIAPHRAGM SEAL

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ORDERING CODES					
MODEL					
TGI29-1		Flanged flush diaphragm seal			
SEAL TYPE					
R12	-1...0...250 bar [Flange ≥1.5"]		R13	4...250bar [Flanges ½" to 1"]	
DIAPHRAGM					
S03	AISI 316L SS		S05	Monel 400	
S06	Inconel 600		S07	Titanium	
S10	Hastelloy C-276		S08	Tantalum	
CHAMBER / FLANGE					
S01	AISI 304 SS		S02	AISI 316 SS	
S05	Monel 400		S10	Hastelloy C-276	
S08	Tantalum		S03	AISI 316L SS	
S07	Titanium		S07	Titanium	
INSTRUMENT CONNECTION					
P28	½" NPT (F)		P23	¼" BSP (F)	
P24	¼" NPT (F)		P27	½" BSP (F)	
PROCESS CONNECTION					
XXX	As per Flange table				
FLANGE FACING					
G1	Serrated raised face		G2	Flat face	
G4	Tongue & Groove face		G3	Ring type joint face	
SEALING FLUID					
XX	As per Filling liquid Vs Temperature Rating table				
EXECUTION					
R1	Direct		R2	Remote	
CAPILLARY MATERIAL					
S01	AISI 304 SS		S02	AISI 316 SS	
ARMOUR MATERIAL					
S01	AISI 304 SS		S02	AISI 316 SS	
S16	PVC [Ambient ≤60°C]				
REMOTE DISTANCE					
XXXXX	500 mm (Min.) to 25000 mm (Max.)				
OTHER OPTIONS					
E77	Dry Seal		E31	Material test certificate 3.1	
E32	Material test certificate 2.2				

Ordering Example : TGI29-1-R12.S03.S02.P28.F07.G1.L1.R1/XX.XX.XXXXXX/XXX