

FULLY WELDED DIAPHRAGM SEAL WITH PRESSURE GAUGE

TGI18-2

APPLICATIONS

- Sanitary, food & beverages
- Optional electric contacts
- Optional transmitter output
- Filled version

FEATURES

- Dairy, Ice cream industries
- Pharmaceutical industries
- Sterilization applications



HOMOGENIZER PRESSURE GAUGE, TGI18-1

DESCRIPTION

General

Design : EN 837-3

Accuracy : $\pm 1.6\%$ of full scale

Ambient temperature: -40...+65°C [without dampening liquid]
-20...+65°C [with dampening liquid]

Service temperature : 10...150°C max.

Pressure limits : Steady pressure up to FS value
Fluctuating pressure up to 90% of FS value
Short time 1.3 x FS value for range up to 100 bar
Short time 1.15 x FS value for range above 100 bar

Weld joints : TIG argon arc welding

Material of construction

Sensing element : Diaphragm

Case & Ring material : AISI 304 SS (Bayonet type)

Diaphragm, Bourdon tube & Shank : AISI 316L SS

Movement mechanism : AISI 304 SS

Dial : Aluminum, black graduation on white background

Pointer : Fixed, aluminum, black powder coated

Gaskets & filling plug : Neoprene

Window : Plexi glass

Standard version

Dial size : DN100

Range : -1...600 bar

Mounting pattern : Direct, Bottom connection

Process connection : Without mounting flange

Seal filling fluid : Glycerine [10°C to 150°C]

Ingress protection : IP 65

Execution : Dry / Dry but fillable

Filled versions

Glycerin

Window : Plexi glass

Dampening liquid : Glycerin 99.7%

Temperature effect

When temperature of the measuring system deviates from reference temperature (+20°C) :

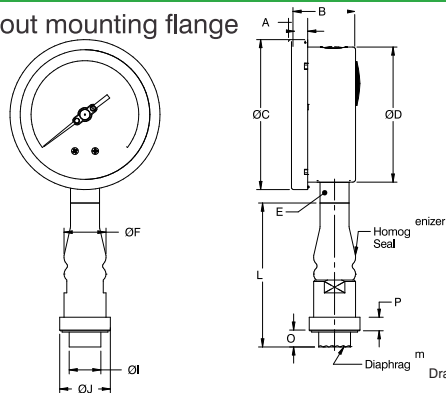
max error $\pm 0.4\%$ / 10K of true scale value.

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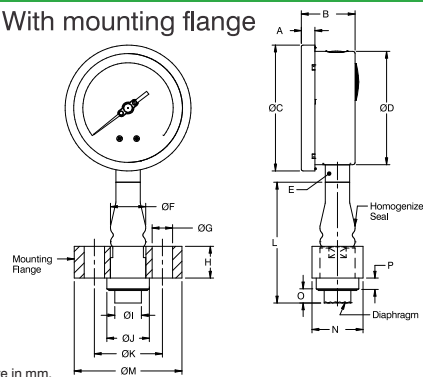
TGI18-2

DIMENSIONAL DRAWING

Without mounting flange



With mounting flange



Drawing not to scale. All dimensions are in mm.

DN	A	B	OC	OD	E	F	I	J	L	O	P	Weight (grams)
100	12	48	111	100	SQ.22	31	23.5	37.5	106.5	11	11	1295

DN	A	B	OC	OD	E	OF	G	H	I	J	K	L	M	N	O	P	Weight (grams)
100	12	48	111	100	SQ.22	31	18	28	23.5	37.5	60	106.5	95	45	11	11	1688

ORDERING CODES

MODEL

TGI18-2 Fully Welded Diaphragm Seal with Pressure Gauge

DIAL SIZE

D4 4" / 100 mm

MOUNTING CONNECTION

P41 With mounting flange P42 Without Mounting Flange P43 1 1/4" BSP(F) Union Nut

CASE FILLING

F1 Dry F2 Dry but fillable F3 Glycerin filled

WETTED PARTS

S02 AISI 316 SS S03 AISI 316L SS

INGRESS PROTECTION

I1 IP 65 I6 IP 68

RANGE

0-250 bar Please mention range required with the measurement unit
[TGI offer in all types of National & International measurement units, e.g. kg/cm², psi, kPa, etc. with single or dual scales]

OTHER OPTIONS

E16 5 - point calibration certificate E31 Custom designed dial E32 Dial tag marking
E17 Material test certificate 3.1 E21 Material test certificate 2.2 E28 SS tag plate, AISI 316 SS
E27 SS tag plate, AISI 304 SS E47 Crimped case & ring

TGI10

D2

M1

P42

F2

S02

I1

0-250 bar

E16/E27

Ordering Example : TGI18-1.D2.M1.P42.F2.S02.I1/0-250 bar/E16/E27