

SCHAFFER DIAPHRAGM PRESSURE GAUGE

TGI16-1

APPLICATIONS

- Liquid & gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Food & Beverages
- Nuclear power plants

FEATURES

- All SS measuring system
- Socket-case, direct welded
- Threaded / Flanged connection
- External zero adjustment



SCHAFFER DIAPHRAGM PRESSURE GAUGE, TGI16-1

DESCRIPTION

General

Design : EN 837-3

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

Ambient temperature : $-40 \dots +65^{\circ}\text{C}$

Service temperature : 100°C max.

Pressure limits : Steady pressure up to FS value
Fluctuating pressure up to 90% of FS value

Weld joints : TIG argon arc welding

Material of construction

Sensing element : Diaphragm

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

Top chamber : AISI 304 SS -Machined Flange

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

Bottom chamber : AISI 304 SS / AISI 316 SS / Monel
Hastelloy C-276-Machined Flange

Movement mechanism : Copper alloy

Dial : Aluminum, black graduation on white background

Pointer : Micro-adjustable, aluminum, black powder coated

Gaskets, Blow-off disc & filling plug : Neoprene / NBR

Window : Sheet glass / Shatterproof Safety Glass

Option: PTFE Lining

Standard version

Dial size : DN100 / DN150

Range : $-1 \dots 0 \dots 25$ bar [Standard] / $60 \dots 600$ mbar [Low pressure]
 $6 \dots 40$ mbar [Very low pressure]

Mounting pattern : Direct, Bottom connection

Process connection : $\frac{1}{2}$ " NPT (M) / $\frac{1}{2}$ " BSP (M)

Ingress protection : IP 54

Execution : Dry

Filled versions

Glycerin

Accuracy : $\pm 2.5\%$ of full scale

Service temperature : -20°C up to 65°C

Ranges : ≥ 600 mbar

Dampening liquid : Glycerin 99.7% / 80% / 60%

Ranges : ≥ 100 mbar

Dampening liquid : Glycerin + Water [20%+80%]

Temperature effect

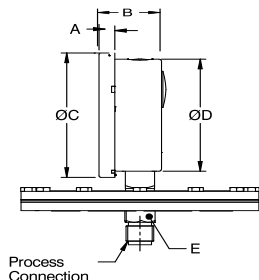
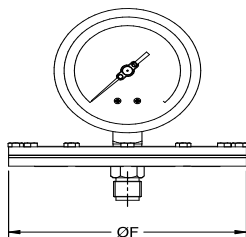
When temperature of the measuring system deviates from reference temperature ($+20^{\circ}\text{C}$) :

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

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DIMENSIONAL DRAWING



Range	DN	A	B	ØC	ØD	E	ØF	Weight (grams)
1 to 25 bar	100	12	48	111	100	A/F-22	98	1551
	150	15	48	161	149	A/F-22	98	1945

Range	DN	A	B	ØC	ØD	E	ØF	Weight (grams)
40 mbar to 600 mbar	100	12	48	111	100	A/F-22	150	2235
	150	15	48	161	149	A/F-22	150	2629

NOTES

- Drawing not to scale. All dimensions are in mm.
- For other mounting details, Panel cut-out dimensions, kindly contact factory.

Range	DN	A	B	ØC	ØD	E	ØF	Weight (grams)
Below 40 mbar to 6 mbar	100	12	48	111	100	A/F-22	180	2914
	150	15	48	161	149	A/F-22	180	3308

ORDERING CODES

MODEL						TGI16-1	
TGI16-1 Schaffer Diaphragm Pressure Gauge							
DIAL SIZE						D4	
D4	4" / 100 mm		D6	6" / 150 mm			
MOUNTING						M1	
M1	Direct bottom						
CONNECTION						P08	
P04	1/4" NPT (M)		P08	1/2" NPT (M)	P20		M20 X 1.5 mm (M)
P03	1/4" BSP (M)		P05	3/8" BSP (M)	P07	1/2" BSP (M)	
CASE FILLING						F1	
F1	Dry		F3	Glycerin filled	F4		Silicon oil filled
WETTED PARTS						S01	
S01	AISI 304 SS		S02	AISI 316 SS	S05		Monel
S10	Hastelloy C-276						
INGRESS PROTECTION						I1	
I1	IP 65						
RANGE						0-1 bar	
0-1 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/E27	
E16	5 - point calibration certificate		E31	Custom designed dial	E32		Dial tag marking
E28	SS tag plate, AISI 316 SS		E27	SS tag plate, AISI 304 SS	E33		AISI 316 SS case & ring
E20	Cleaned for Oxygen service		E10	Over range protection 1.5xFS	S112		PTFE Lining on flange

Ordering Example : TGI16-1-D4.M1.P08.F1.S01.I1/0-1 bar/E16/E27