

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

DESCRIPTION

General

Design : EN 837-3

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

Ambient temperature : -40...+65°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



SCHAFFER DIAPHRAGM PRESSURE GAUGE, TMC16-1

Standard version

Dial size : DN100 / DN150

Range : -1...0...25 bar [Standard] / 60...600 mbar
[Low pressure]

6...40 mbar [Very low pressure]

Mounting pattern : Direct, Bottom connection

Process connection : 1/2" NPT (M) / 1/2" BSP (M)

Ingress protection : IP 54

Execution : Dry

Filled versions

Glycerin

Accuracy : 2.5% of full scale

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

Ranges : ≥ 600 mbar

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

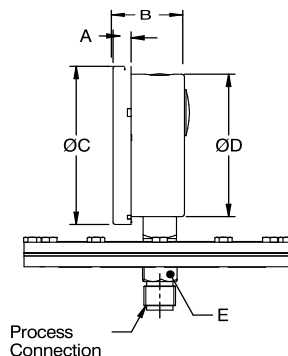
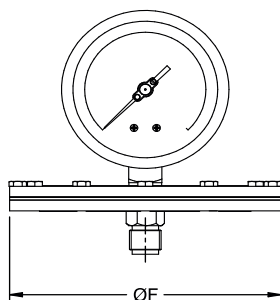
Ranges : ≥ 100 mbar

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

Temperature Effect

When temperature of the measuring system deviates from reference temperature (+20°C) :
max error 0.4% / 10K of true scale value.

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

TMC16-1 Schaffer Diaphragm Pressure Gauge

TMC16-1

DIAL SIZE

D4 4" / 100 mm **D6** 6" / 150 mm

D4

MOUNTING

M1 Direct bottom

M1

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)

P08

CASE FILLING

F1 Dry **F3** Glycerin filled **F4** Silicon oil filled

F1

WETTED PARTS

S01 AISI 304 SS **S02** AISI 316 SS **S05** Monel
S10 Hastelloy C-276

S01

INGRESS PROTECTION

I1 IP 65

I1

RANGE

0-1 bar Please mention range required with the measurement unit
 [TMC offer in all types of National & International measurement units, e.g. kg/cm², psi, kPa, etc. with single or dual scales]

0-1 bar

OTHER OPTIONS

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

E16/E27

Ordering Example : TMC16-1-D4.M1.P08.F1.S01.I1/0-1 bar/E16/E27