

## FEATURES

- Laser welded diaphragm
- Optional electric contacts
- Optional transmitter output
- Filled version

## APPLICATION

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

### Diaphragm Seal



#### STANDARD PARAMETERS

Accuracy	: CL 1.6
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
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 (Shank welded directly to case)
Movement mechanism	: Dampened movement, AISI 304 SS
Dial	: Aluminum, black graduation on white background
Pointer	: Micro-zero adjustable, aluminum, black powder coated
Gaskets & filling plug	: Silicon Rubber gasket & Neoprene filling plug
Window	: Plexi glass

#### STANDARD SPECIFICATIONS

Dial size	: DN100
Range	: 0...160 bar [B21], 0...250 bar [B24], 0...400 bar [B27], 0...600 bar [B29]
Mounting pattern	: Direct, Bottom connection
Process connection	: With mounting flange
Seal filling fluid	: Food grade oil
Ingress protection	: IP 65
Execution	: Dampening liquid filled, glycerine

#### STANDARD SPECIFICATIONS : DAMPENING LIQUID FILLED

Window	: Acrylic glass dome
Switch type	: Normally open; Make contact (1NO)
Execution	: Dampening liquid filled, dielectric oil
Electrical termination	: 4 Pin PG13.5 connector

#### TEMPERATURE EFFECT

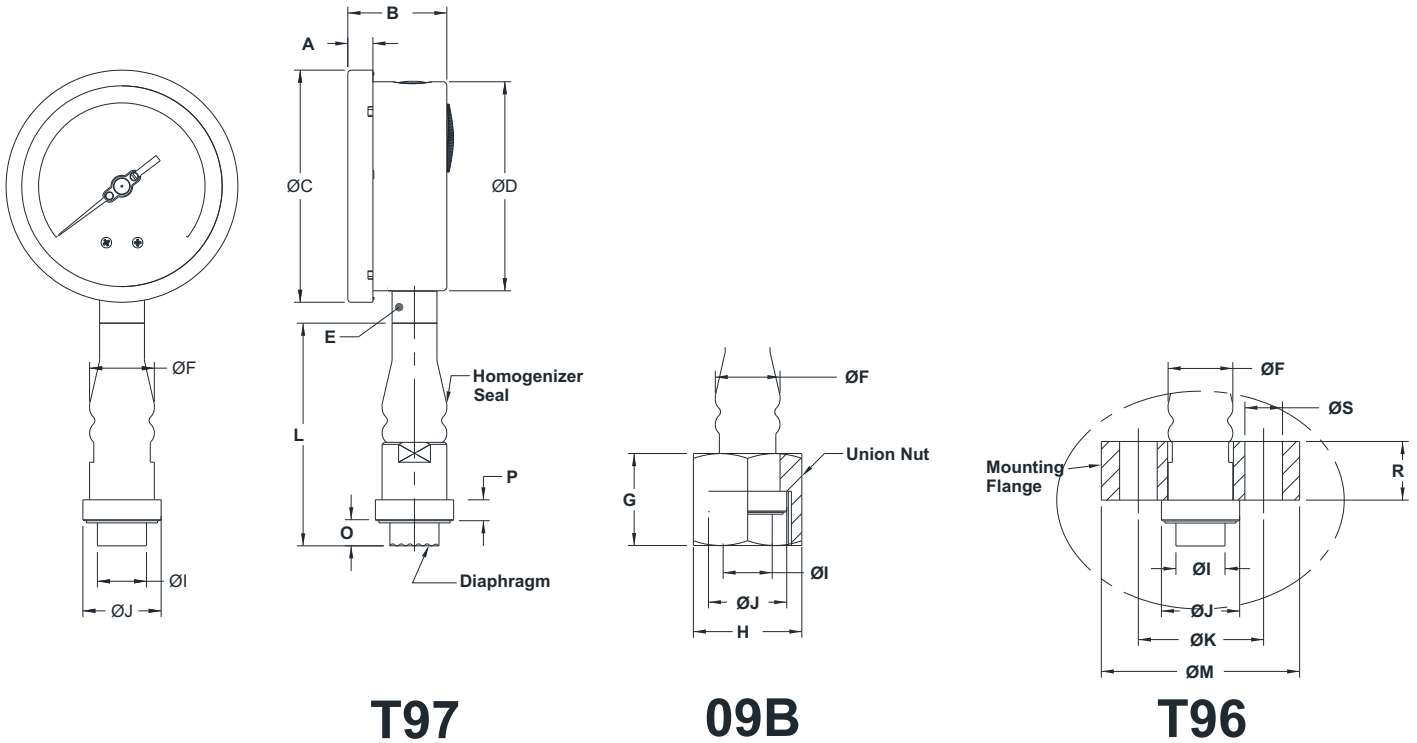
When temperature of the measuring system deviates from reference temperature (+20°C) max error  $\pm 0.4\%$  / 10K of true scale value.

## REFERENCE

EN 837-1

DIMENSIONAL DRAWING

Standard version



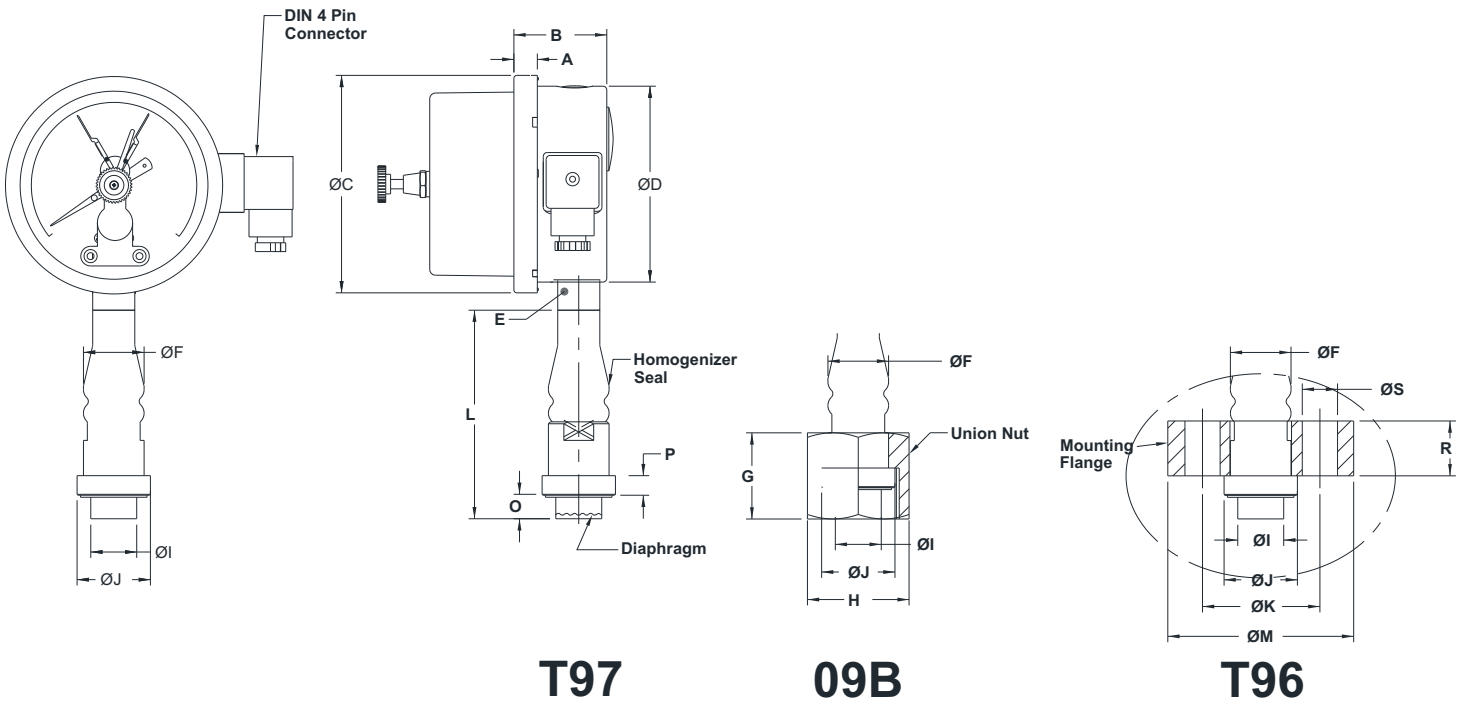
T97

09B

T96

DN	A	B	ØC	ØD	E	ØF	G	H	I	J	K	L	M	N	O	P	R	ØS	Weight (Grams)
100	12	48	111	100	SQ.22	31	44	A/F50	23.5	37.5	60	106.5	95	45	11	11	28	18	1295

Electric contact version



T97

09B

T96

All dimensions are in mm.

DN	A	B	ØC	ØD	E	ØF	G	H	I	J	K	L	M	N	O	P	R	ØS	Weight (Grams)
100	12	48	111	100	SQ.22	31	44	A/F50	23.5	37.5	60	106.5	95	45	11	11	28	18	1295

ORDERING CODES

1. DIAL SIZE

<b>04</b>	100 mm / 4"
<b>25</b>	25 mm / 2.5"

04

2. RANGE

<b>XXX</b>	Refer "Range Table"
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XXX

3. MOUNTING PATTERN

<b>B0</b>	Direct, Bottom connection
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B0

4. PROCESS CONNECTION

<b>T96</b>	With mounting flange
<b>T97</b>	Without mounting flange
<b>09B</b>	1¼" BSP (F) Union Nut

T96

5. INGRESS PROTECTION

<b>ER</b>	IP 65
<b>ES</b>	IP 66
<b>ET</b>	IP 67

ER

6. EXECUTION

<b>EB</b>	Dry but fillable
<b>EG</b>	Dampening liquid filled, glycerine
<b>EK</b>	Dampening liquid filled, dielectric oil <sup>2</sup>

EB

7. SWITCH CATEGORY

<b>RR</b>	Economic contacts
<b>RS</b>	Precision contacts
<b>RT</b>	ATEX / CE approved contacts

RR

8. ELECTRIC CONTACT

<b>CS1</b>	Break contact (1NC)
<b>CS2</b>	Make contact (1NO)
<b>CS3</b>	2 x Break contact (2NC)
<b>CS4</b>	2 x Make contact (2NO)
<b>CS5</b>	1 Break + 1 Make (1NC+1NO)
<b>CS6</b>	1 Make + 1 Break (1NO+1NC)
<b>CD1</b>	Break contact (1NC)
<b>CD2</b>	Make contact (1NO)
<b>CD3</b>	2 x Break contact (2NC)
<b>CD4</b>	2 x Make contact (2NO)
<b>CD5</b>	1 Break + 1 Make (1NC+1NO)
<b>CD6</b>	1 Make + 1 Break (1NO+1NC)
<b>CD7</b>	SPDT
<b>CD8</b>	DPDT
<b>CI1</b>	Break contact (1NC)
<b>CI2</b>	Make contact (1NO)
<b>CI3</b>	2 x Break contact (2NC)
<b>CI4</b>	2 x Make contact (2NO)
<b>CI5</b>	1 Break + 1 Make (1NC+1NO)
<b>CI6</b>	1 Make + 1 Break (1NO+1NC)
<b>CI9</b>	Booster relay for current up to 5A

CS1

7. OTHER OPTIONS

<b>GW</b>	Maximum reading pointer
<b>RA</b>	Rubber parts, Viton
<b>TA</b>	5 - point calibration certificate
<b>TC</b>	Material test certificate 3.1
<b>TM</b>	Material test certificate 2.2
<b>XF</b>	SS tag plate, AISI 304 SS
<b>XG</b>	SS tag plate, AISI 316 SS
<b>XR</b>	Custom designed dial
<b>XT</b>	Dial tag marking

XX

Ordering Example : P702-04-XXX-B0-T96-ER-EB

ELECTRIC CONTACT DETAILS				
Switch type	Contacts	Action	Rating	Code
Normally closed (1NC)	Single	Break contact	230VAC/1A; 48VDC/0.5A	CS1 / CD1
Normally open (1NO)	Single	Make contact	230VAC/1A; 48VDC/0.5A	CS2 / CD2
Normally closed (2NC)	Double	Break contact	230VAC/1A; 48VDC/0.5A	CS3 / CD3
Normally open (2NO)	Double	Make contact	230VAC/1A; 48VDC/0.5A	CS4 / CD4
Normally closed + Normally open (1NC+1NO)	Double	Break contact + Make contact	230VAC/1A; 48VDC/0.5A	CS5 / CD5
Normally open + Normally closed (1NO+1NC)	Double	Make contact + Brake contact	230VAC/1A; 48VDC/0.5A	CS6 / CD6
SPDT	Single		230VAC/1A; 48VDC/0.5A	CD7
DPDT	Double		230VAC/1A; 48VDC/0.5A	CD8
Normally closed (1NC)	Single	Break contact	220VAC/0.4A	CI1
Normally open (1NO)	Single	Make contact	220VAC/0.4A	CI2
Normally closed (2NC)	Double	Break contact	220VAC/0.4A	CI3
Normally open (2NO)	Double	Make contact	220VAC/0.4A	CI4
Normally closed + Normally open (1NC+1NO)	Double	Break contact + Make contact	220VAC/0.4A	CI5
Normally open + Normally closed (1NO+1NC)	Double	Make contact + Brake contact	220VAC/0.4A	CI6

NOTES

- For other connections, please contact factory.
- Rubber parts shall be in Viton.
- Codes starts with "CS / CD" denomination are magnetic contacts and "CI" are Inductive contacts.
- Type 'CS' contacts are single insulated and economic contacts & 'CD' are double insulated and precision contacts.
- Inductive contacts are ATEX approved.