

APPLICATIONS

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

FEATURES

- All stainless steel welded construction
- Follows EN 13190 / ASME B40.200
- Accuracy as per Class 1
- Dry / Fillable / Liquid filled

DESCRIPTION

General

Design : EN 13190

Accuracy : $\pm 1.0\%$ of full scale

Ambient temperature : -20...+60°C

Storage temperature : -50...+70°C without
liquid dampening
-20...+60°C with liquid dampening

Over range limits : 110% full scale

Stem pressure rating : 25 bar
(Without thermowell)

Weld joints : TIG argon arc welding

Material of construction

Sensing element : Inert Gas Filled sensor bulb

Case & Ring material : AISI 304 SS

Stem material : AISI 316 SS

Process connection material : AISI 316 SS

Dial : Aluminum, black graduation on
white background

Pointer : Micro-zero adjustable,
aluminum, black powder coated

Gaskets : Neoprene / NBR

Window : Sheet glass

Electric Contact : Double;
Break contact + Make contact

Electrical Termination: 4 Pin Din connector



GAS FILLED TEMPERATURE GAUGE WITH EZA, TMC53

Standard version

Dial size : 100 mm / 150 mm

Range : -50 up to 800°C

Mounting pattern : Direct Bottom connection

Stem size : 6.0 mm / 8.0 mm / 9.5 mm / 12 mm

Ingress protection : IP 65

Stem length : 150 mm standard up to 3000 mm

Process connection type : Adjustable connection

Process connection : ½" NPT (M) / ½" BSP (M)

Filled version

Window : Shatterproof safety glass /
Polycarbonate Glass (Doom Glass)

Gasket, Blow off disc & filling plug : NBR / Viton

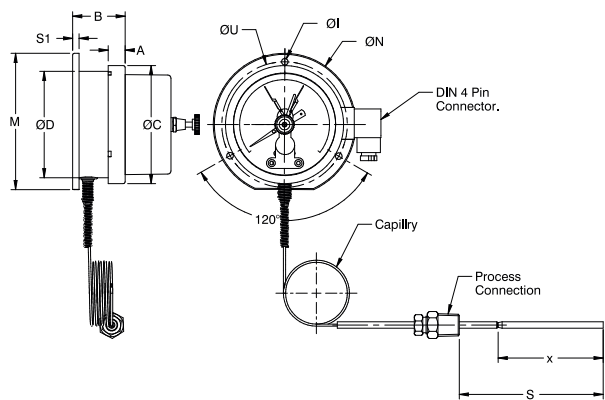
Dampening liquid : Dielectric Oil

Temperature Effect

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

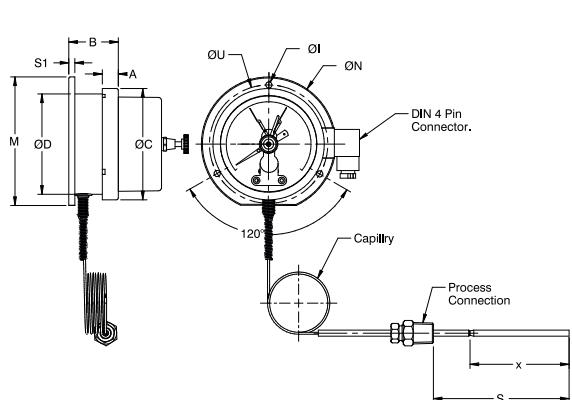
DIMENSIONAL DRAWING

A1



DN	A	B	OC	OD	ØI	ØN	M	S1	ØU	S	X
100	12	52	111	100	6	134	128	6	118	*	**
150	15	52	161	149	6	186	172.4	6	168	*	**

A2



DN	A	B	OC	OD	ØI	ØN	M	S1	ØU	S	X
100	12	52	111	100	6	134	128	6	118	*	**
150	15	52	161	149	6	186	172.4	6	168	*	**

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

ORDERING CODES

MODEL				TMC53	
TMC53				Gas filled temperature gauge with Electric Contact	
Electric Contact Type				A2	
A1	Electric Contact with Safety Glass		A2	Electric Contact with Polycarbonate Glass (DoomGlass)	
DIAL SIZE				D4	
D4	4" / 100 mm		D6	6" / 150 mm	
MOUNTING				M1	
Direct type (Rigid stem)					
M1	Direct bottom		M5	Direct center back	
M6	Direct lower back		M16	Bottom with Anti-vibration spring	
Remote type (Capillary extension)					
M2	Direct bottom with Back flange		MF	Direct lower back with front flange	
M8	Direct lower back with panel mounting clamp				
CONNECTION				P8	
P4	¼" NPT (M)		P6	3/8" NPT (M)	
P3	¼" BSP (M)		P5	3/8" BSP (M)	
			P8	½" NPT (M)	
			P7	½" BSP (M)	
CASE FILLING				F9	
F1	Dry		F2	Dry but fillable	
			F9	Dielectric Oil filled	
INGRESS PROTECTION				I1	
I1	IP 65		I6	IP 68	

ORDERING CODES

EXECUTION

R1	Direct	R2	Remote
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R1

STEM SIZE

B6	6 mm	B8	8 mm	B10	10 mm
B12	12 mm	B9	9.5 mm	B7	6.35 mm (¼")

B6

STEM LENGTH

XXXX	Please mention stem length in 'mm'
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100 mm

RANGE

0-100°C	Please mention range required with the measurement unit [TMC offer in all types of National & International measurement units, e.g. °C, °F, etc. with single or dual scales]
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0-100°C

CAPILLARY

S01	AISI 304 SS	S02	AISI 316 SS
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XXX

CAPILLARY

S01	AISI 304 SS	S02	AISI 316 SS	S16	PVC [Ambient up to 65°C]
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XXX

STEM LENGTH

XXXX	Please mention stem length in 'mm'
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XXXX

ELECTRIC CONTACT TYPE [RATING - MAGNETIC CONTACTS : 45mA@230VAC, INDUCTIVE CONTACT : 8VAC]

N1	Magnetic Contact - 1NC	N2	Magnetic Contact - 1NO	N3	Magnetic Contact - 1NC & 1NO
N4	Magnetic Contact - 2NC	N5	Magnetic Contact - 2NO		
N6	Inductive Contact - 1NC	N7	Inductive Contact - 1NO	N8	Inductive Contact - 1NC & 1NO
N9	Inductive Contact - 2NC	N10	Inductive Contact - 2NO		
N11	1 SPDT	N12	1 DPDT		

N3

OPTIONAL EXTRAS

E33	AISI 316 SS case & ring	E01	Shatterproof safety glass	E46	External zero adjustment
E27	AISI 304 SS tag plate	E28	AISI 316 SS tag plate	E31	Custom designed dial
E32	Dial tag marking	E16	5 - point calibration certificate	E14	Rubber parts, Viton

E16/E27

Ordering Example : TMC53-D4.M1.P8.F9.I1.R1.B6/100 mm/0-100°C/E16/E27/N3