

Electric Contact, Dome Version

Electric Contact Dome Version Gas Filled Temperature Gauge overcomes most of the limitations of other members of family. It is offered in a vary wide temperature range i.e. (-) 200 to 700 deg cent. Practically any stem length can be offered and capillary length as long as 25 meter, without any loss of accuracy. Inert, non hazardous, non toxic nature of the filled system makes it virtually ideal choice of cross section of industries. This TG have Electric contact NO/NC user can set desired set point externally.



FEATURES

- Inert gas filled expansion
- Filled versions
- Bi-metal Case compensation

APPLICATION

- Liquid & gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical

REFERENCE

- EN 13190

STANDARD SPECIFICATIONS

Dial size	: DN100
Range	: 0...100°C
Mounting pattern	: Direct, Bottom connection
Stem size	: 6.0 mm
Ingress protection	: IP 65
Stem length	: 150 mm
Assembly	: Direct
Process connection type	: Adjustable connection
Process connection	: 1/2" NPT (M)
Electric contact	: Double; Break contact + Make contact
Electrical termination	: 4 pin PG 13.5 connector

STANDARD PARAMETERS

Accuracy	: CL 1.0 (Class 1)
Ambient temperature	: 0...40°C max at case
Storage & Transport temperature	: -20...+70°C without liquid dampening
Over range limits	: -20...+60°C with liquid dampening
Stem pressure rating	: 110% full scale
Weld joints	: 25 bar (Without thermowell)
Weld joints	: TIG argon arc welding

MATERIAL OF CONSTRUCTION

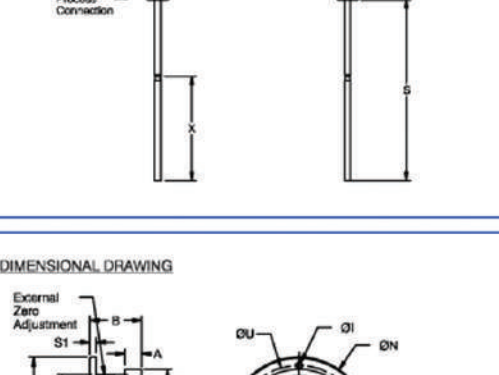
Sensing Element	: Inert Gas Filled bulb
Case & Ring Material	: AISI 304 SS
Stem & Process connection material	: AISI 316 SS
Dial	: Aluminum, black graduation on white background
Pointer	: Micrometer zero adjustable, aluminum, black powder coated
Gaskets	: Neoprene
Window	: Polycarbonate dome

STAND. SPEC.: DAMPENING LIQUID FILLED, DIELECTRIC OIL

Gaskets & Filling plugs	: NBR
Dampening liquids	: Dielectric Oil

DRAWING

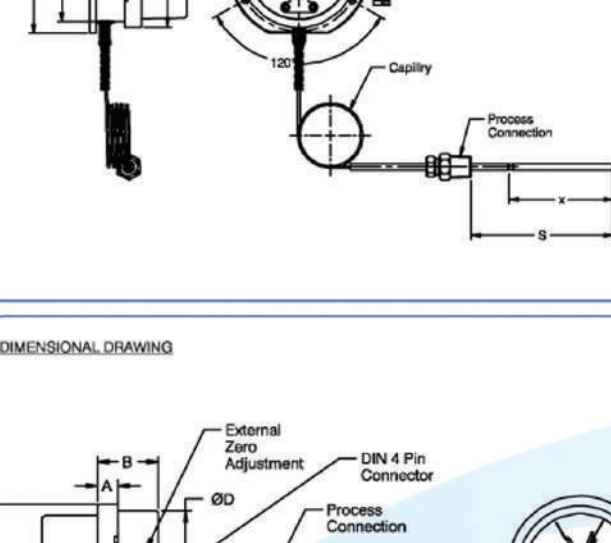
DIMENSIONAL DRAWING



DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
ØI	6	6
ØN	134	168
M	128	172.4
S1	6	6
ØU	118	168
S	*	*
X	**	**

* As per customer requirement.
** Refer technical sheet - Temperature Gauges.

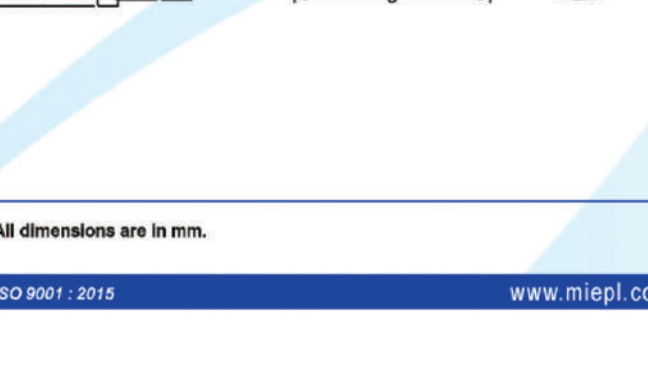
DIMENSIONAL DRAWING



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

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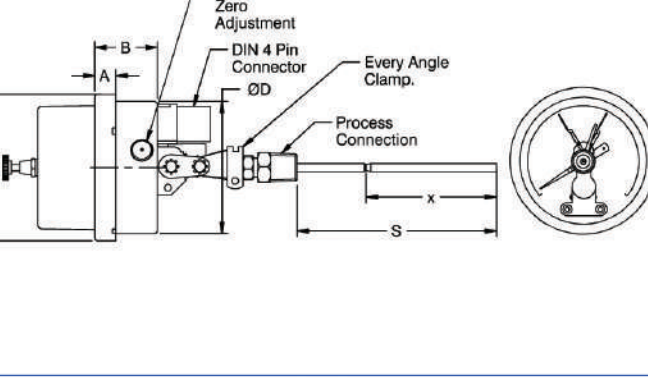
DN	100	150
A	12	15
B	48	48
ØC	111	161
ØD	100	149
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All dimensions are in mm.

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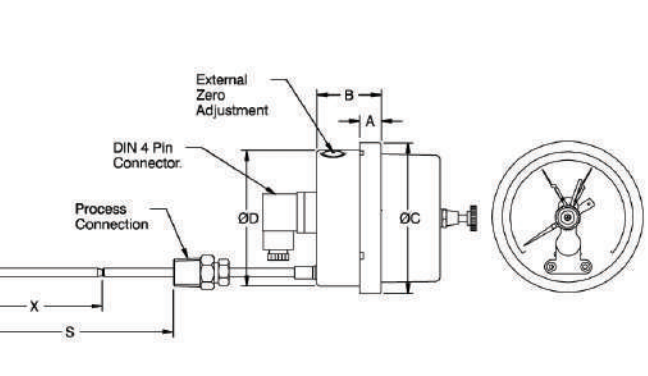
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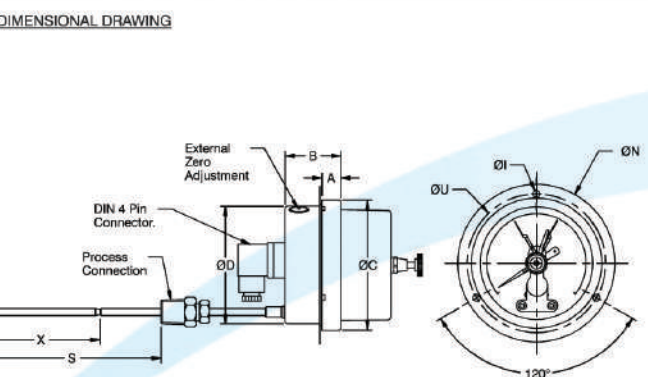
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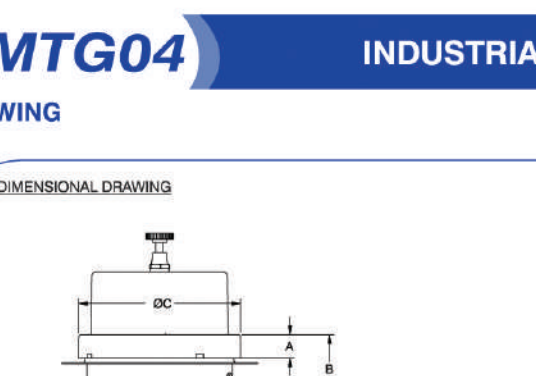
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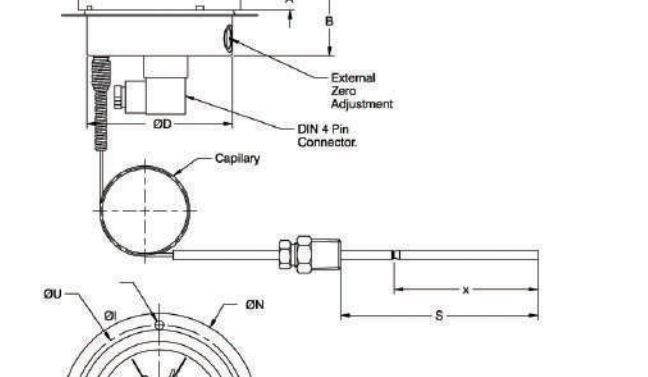
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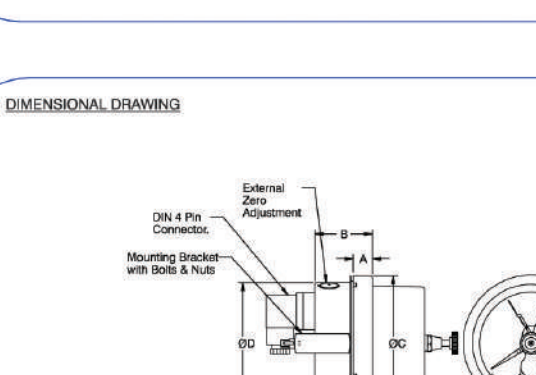
DN	100
A	12
B	48
ØC	111
ØD	100
J	72
K	16
V	108
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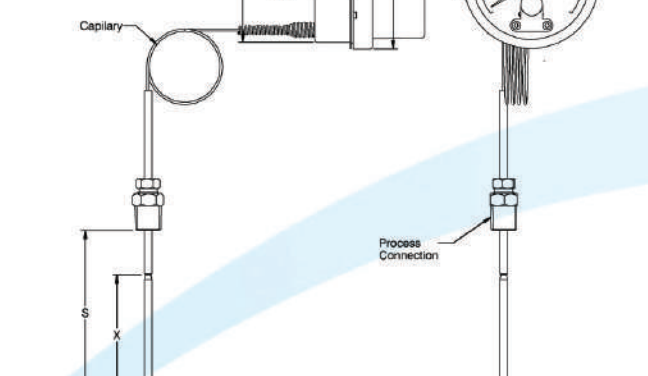
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ORDERING CODE

MTG04 D XXX 1A MF IP2 XXXX AC 4NM B8

1. DIAL SIZE	100 mm / 4"	D							
2. RANGE	150 mm / 6"	F							
3. MOUNTING PATTERN	Refer "Range Table"	XXX	1A	MF	IP2	XXXX	AC	4NM	B8
4. STEM DIAMETER	6.0 mm								
5. INGRESS PROTECTION	IP 65								
6. STEM LENGTH	Up to 2000 mm								
7. PROCESS CONNECTIONS TYPE	Fixed connection							FC	
8. PROCESS CONNECTIONS	Adjustable connection							AC	
9. ASSEMBLY	Direct (Stem type)								B8
	Remote (Capillary type)								B9

DRAWING

DIMENSIONAL DRAWING

10. CAPILLARY	AISI 304SS	OU	XXXXX	XX	ECS1
	AISI 316 SS	OV			
	AISI 304SS	OZ			
11. ARMOUR	PVC (Ambient max. 60°C)	OY			
	AISI 316 SS				
12. REMOVE MOUNTING LENGTH	250 mm up to 10,000 mm		XXXXX		
	10,000 mm up to 25,000 mm		XXXXX		
13. SWITCH CATEGORY	Economic contacts				XX
	Precision contacts				XX
	ATEX/ICE approved contacts				XX
14. ELECTRIC CONTACT	Break contact (1NC)				ECS1
	Make cotact (1NO)				ECS2
	2 x Break contact (2NC)				ECS3
	2 x Make contact (2NO)				ECS4
	1 Break + 1 Make (1NC+1NO)				ECS5
	1 Make + 1 Break (1NO+1NC)				ECS6
	Break contact (1NC)				EC01
	Make cotact (1NO)				EC02
	2 x Break contact (2NC)				EC03
	2 x Make contact (2NO)				EC04
	1 Break + 1 Make (1NC+1NO)				EC05
	1 Make + 1 Break (1NO+1NC)				EC06
	SPDT				EC07
	DPDT				EC08
	Break contact (1NC)				EC11
	Make cotact (1NO)				EC12
	2 x Break contact (2NC)				EC13
	2 x Make contact (2NO)				EC14
	1 Break + 1 Make (1NC+1NO)				EC15
	1 Make + 1 Break (1NO+1NC)				EC16
	Booster relay for current up to 5A				EC19

DRAWING

DIMENSIONAL DRAWING

15. OTHER OPTIONS	Case & Ring in AISI 316 SS (1A)	AA	Case & Ring in AISI 316 SS (2F)	AL	Material test certificate 2.2	SM
	Case & Ring in AISI 316 SS (1B)	AB	Case & Ring in AISI 316 SS (2G)	AM	SS tag plate, AISI 304 SS	WF
	Case & Ring in AISI 316 SS (1C)	AC	Hellum gas filled system	D9	SS tag plate, AISI 316 SS	WG
	Case & Ring in AISI 316 SS (2A)	AG	Rubber parts, Viton	QA	Dial tag marking	WT
	Case & Ring in AISI 316 SS (2B)	AH	Rubber parts, NBR	QN	Custom designed dial	WR
	Case & Ring in AISI 316 SS (2E)	AK	5 - pin factory calibration certificate	SA	6 pin, M20x1.5mm connector	F6

STANDARD	RANGE	CODE	STANDARD	RANGE	CODE
-20...+40	XXX	-50...+100	XXX	0...250	XXX
-20...+60	XXX	-100...+60	XXX	0...300	XXX
-20...+80	XXX	0...50	XXX	0...400	XXX
-20...+100	XXX	0...60	XXX	0...500	XXX
-20...+120	XXX	0...80	XXX	0...600	XXX
-20...+180	XXX	0...100	XXX	0...850	XXX
-30...+50	XXX	0...120	XXX	100...650	XXX
-30...+70	XXX	0...150	XXX	500...600	XXX
-40...+40	XXX	0...160	XXX	100...700	XXX
-40...+60	XXX	0...200	XXX		XXX

Ordering Example: MTG04-D-XXX-1A-MF-IP2-XXXX-AC-4NM-B8-XXXX-XX-ECS1

- NOTES:
- For other ranges, connections, please contact factory.
 - Equivalent scales available in °F, °C/F, °F/C.
 - Option "Case & Ring in AISI 316 SS" is applicable for DN100 & DN150 only.
 - 1/4" connections are available up to 1/4" (6.35 mm) stem diameter only.
 - 3/8" connections are available up to 10 mm stem diameter only.