

INDUSTRIAL BIMETAL THERMOMETER

The label *Trafag Industrial Components* extends the Trafag brand name to instruments manufactured by qualified partner companies.

Trafag Industrial Components complement the genuine Trafag product range to offer customers a complete portfolio from one single source.

The TMT502 Industrial Bimetal Thermometer for general industrial applications is externally zero adjustable and has a dial which can be adjusted to every angle for excellent readability even in complex installations.



Applications

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

Features

- Bimetal helix system
- Hermetically sealed
- Every angle entry
- External zero adjustment

Reference

- EN 13190

02/2018

Data sheet H20018b

Standard parameters	
Accuracy	CL 1.0 (Class 1)
Ambient temperature	-20 ... +60°C
Over range limits	110% full scale
Stem pressure rating	25 bar (Without thermowell)
Weld joints	TIG argon arc welding
Measuring range	-80 ... 0 to 0 ... 600°C
	-110 ... 0 to 0 ... 1100°F

Ordering code

		TMT502	-	XX	-	XXX	-	XX	-	XXX	-	XX	-	XXXX	-	XX	-	XX	-	XX
1. Dial size	80 mm / 3"			03																
	100 mm / 4"			04																
	125 mm / 4½"			05																
	150 mm / 6"			06																
2. Range	Refer "Range Table"																			
3. Mounting pattern	Every Angle mounting, Centre back connection																			
4. Stem diameter	6,0 mm																			
	¼" (6,35 mm)																			
	8,0 mm																			
	9,5 mm																			
	10 mm																			
	12 mm																			
5. Ingress protection	IP 65																			
	IP 66																			
	IP 67																			
	Hermetically sealed																			
6. Stem length	Up to 1,500 mm																			
7. Process connection type	Fixed connection																			
	Adjustable connection																			
	Swivel / Revolving connection																			
	Without																			
8. Process connection¹	½" NPT (M)	14N	¾" NPT (M)	15N																
	½" BSP (M)	14B	¾" BSP (M)	15B																
	¼" NPT (M) ²	12N	½" NPT (F)	04N																
	¼" BSP (M) ²	12B	¾" NPT (F)	05N																
	M20 X 1.5 mm (M)	14M	M27 X 2.0 mm (M)	16M																
	3/8" BSP (M) ³	13B	Without process connection	099																
	1.5" Triclover	T15	Special process connection ¹	ZZZ																
	9. Other options	Case & Ring in AISI 316 SS (R1)	BH	SS tag plate, AISI 304 SS	XF															
Shatterproof safety glass	GC	SS tag plate, AISI 316 SS	XG																	
Dampening liquid, silicon oil (200°C)	OA	Dial tag marking	XT																	
Rubber parts, Viton	RA	Custom designed dial	XR																	
5 - point factory calibration certificate	TA	Dampening liquid, glycerin (65°C)	EG																	
Material test certificate 2.2	TM																			

Range table (°C)	Code
-20 ... +40	C01
-20 ... +60	C02
-30 ... +70	C08
-30 ... +120	C05
-50 ... +100	C11
-80 ... +120	C12

Range table (°C)	Code
0 ... 50	C13
0 ... 60	C14
0 ... 80	C15
0 ... 100	C16
0 ... 120	C17
0 ... 150	C18

Range table (°C)	Code
0 ... 200	C20
0 ... 250	C21
0 ... 300	C22
0 ... 400	C23
0 ... 500	C24
0 ... 600	C25

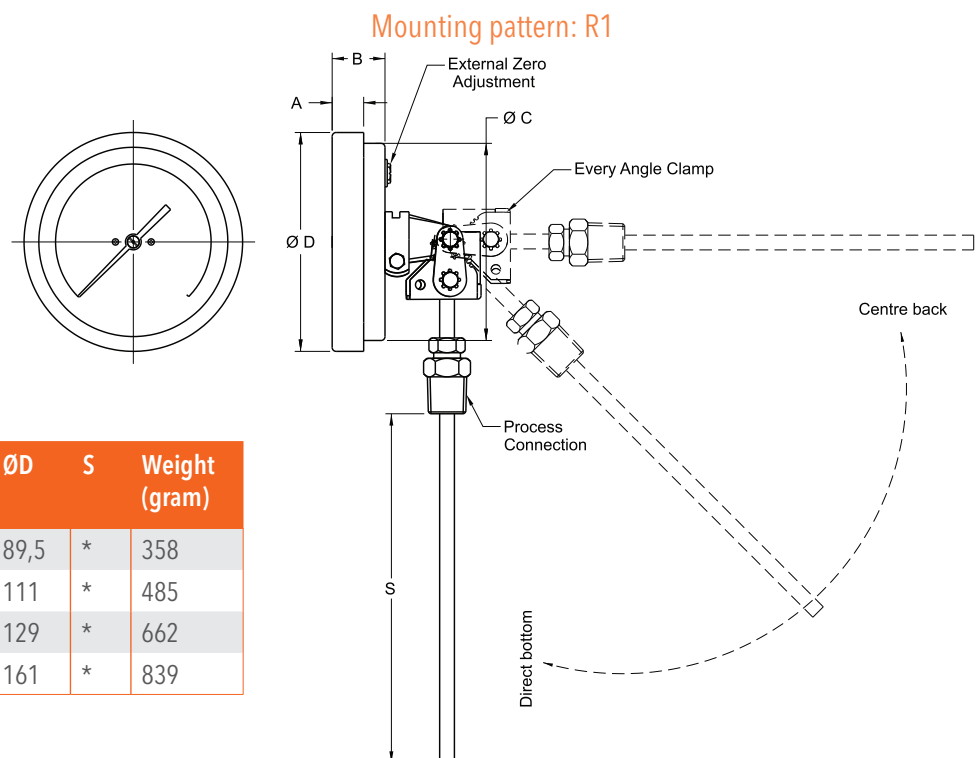
¹ For other connections, please contact factory.

² ¼" connections are available up to ¼" (6.35 mm) stem diameter only.

³ 3/8" connections are available up to 10 mm stem diameter only.

Specifications		
Material of construction	Sensing element	Coiled bimetal strip
	Case & Ring material	AISI 304 SS
	Stem & Process connection material	AISI 316LSS
	Dial	Aluminum, black graduation on white background
	Pointer	Slotted zero adjustable, aluminum, black powder coated
	Gaskets	NBR
	Window	Sheet glass
Standard specifications	Dial size	DN80 / DN100 / DN125 / DN150
	Range	-80 ... 0 to 0 ... 600°C / -110 ... 0 to 0 ... 1100°F
	Mounting pattern	Every Angle mounting, Centre Back connection
	Stem size	6,0 mm
	Ingress protection	IP 65
	Zero adjustment	External
	Stem length	25 mm to 1500 mm*
	Process connection type	Adjustable connection
	Process connection	½" NPT (M) / ½" BSP (M)
	Standard specifications : dampening liquid filled, glycerin	Gaskets & Filling plugs
Dampening liquid		Glycerin 99.7% (-20°C to 65°C) [Up to range 100°C]
Window		Shatterproof safety glass
Standard specifications : dampening liquid filled, silicon	Gaskets & Filling plugs	NBR
	Dampening liquids	Silicon oil [Up to range 200°C]
	Window	Shatterproof safety glass
* Depending on range & stem diameter		

Dimensions - All dimensions are in mm



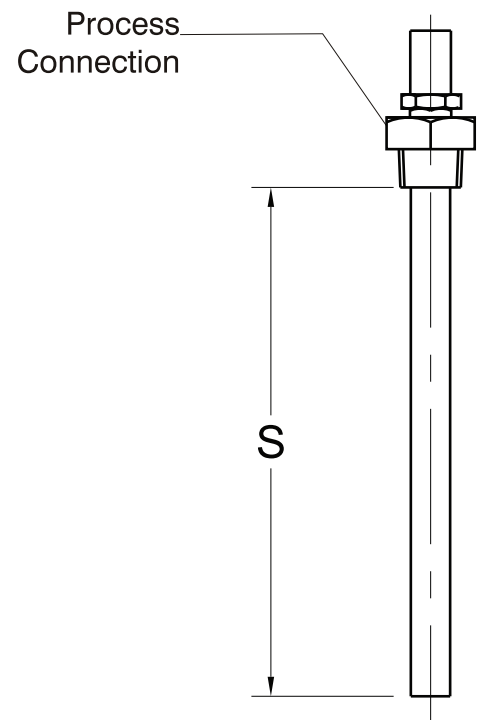
NS	A	B	ØC	ØD	S	Weight (gram)
80	9,5	23	80	89,5	*	358
100	12	23	100	111	*	485
125	15	23	118,5	129	*	662
150	15	23	149	161	*	839

* As per customer requirement.

Stem length chart

Stem diameter	6 mm & ¼"	8 mm	10 mm	12 mm
Range (°C)	Min. Stem Length			
	(mm)	(mm)	(mm)	(mm)
0 ... 50	130	110	110	110
0 ... 60	110	95	95	95
0 ... 80	95	70	70	70
0 ... 100	75	70	70	70
0 ... 120	70	60	60	60
0 ... 150	60	50	50	50
0 ... 200	50	45	45	45
0 ... 250	40	35	35	35
0 ... 300	60	50	50	50
0 ... 400	50	45	45	45
0 ... 500	45	40	40	40
0 ... 600	40	35	35	35

- All length mentioned above are to be considered below thread only.
- For other reduced length, contact factory before ordering.



Additional information

Documents	Data sheet	H20018	www.trafag.com/H20018
	Instructions	H21017	www.trafag.com/H21017