

# Bi-Metal Thermometer with Integral RTD or Thermocouple

# TIR



**Optional**  
Stainless Steel Head

## Description & Features:

- Provides a local and remote temperature reading
- 304 stainless steel case, stem and socket
- Hermetically-sealed thermometer case
- Bi-metallic sensing element
- 1/2" adjustable angle connections
- 4" (100mm), 6" (150mm) and 9" (230mm) stem lengths
- Multiple output styles (RTD/J type/K Type)
- Anti-parallax dial that reduces operator reading errors
- 1 year warranty

## Applications:

- Local and remote temperature sensing

Specifications	
<b>Dial</b>	3" (75mm) aluminum silver dish with black markings
<b>Case</b>	AISI 304 SS
<b>Lens</b>	Glass standard, hermetically sealed
<b>Measuring Element (Mechanical)</b>	Bi-metallic coil
<b>Measuring Element RTD (Electrical)</b>	100 Ohm, platinum DIN 3 wire standard
<b>Connection</b>	1/2" NPT adjustable
<b>Stem</b>	AISI 304 SS
<b>Welding</b>	Argon arc welding
<b>Operating Temperature</b>	75% of full scale (recommended maximum)
<b>Ambient Temperature</b>	-58°F to 248°F (-50°C to 120°C)
<b>Accuracy</b>	±1%
<b>Enclosure Rating</b>	IP65

### Order Codes

Bi-Metal with RTD			
Dial Size	3" (75mm)		
Connection	Fully Adjustable		
Stem Length	4" (100mm)	6" (150mm)	9" (225mm)
-40°F to 120°F	TIR007	TIR030	TIR053
-40°F to 160°F	TIR008	TIR031	TIR054
0°F to 140°F	TIR009	TIR032	TIR055
0°F to 200°F	TIR010	TIR033	TIR056
20°F to 240°F	TIR011	TIR034	TIR057
0°F to 250°F	TIR012	TIR035	TIR058
50°F to 300°F	TIR013	TIR036	TIR059
50°F to 400°F	TIR014	TIR037	TIR060
50°F to 550°F	TIR015	TIR038	TIR061
150°F to 750°F	TIR016	TIR039	TIR062
0°F to 800°F	TIR017	TIR040	TIR063
200°F to 1,000°F	TIR018	TIR041	TIR064
-80°F to 50°C	TIR019	TIR042	TIR065
-50°F to 50°C	TIR020	TIR043	TIR066
0°F to 50°C	TIR021	TIR044	TIR067
-50°F to 100°C	TIR022	TIR045	TIR068
0°F to 100°C	TIR023	TIR046	TIR069
-20°F to 120°C	TIR024	TIR047	TIR070
0°F to 150°C	TIR025	TIR048	TIR071
0°F to 200°C	TIR026	TIR049	TIR072
0°F to 300°C	TIR027	TIR050	TIR073
0°F to 450°C	TIR028	TIR051	TIR074
100°F to 550°C	TIR029	TIR052	TIR075

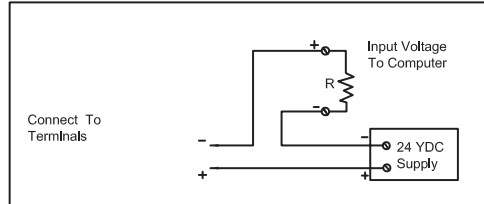
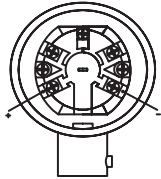
#### Option suffix for above order codes only:

SPG3 = 3" shatterproof glass lens  
 A005 = Aluminum head  
 A006 = Stainless steel head  
 T4-20A = 4-20mA transmitter  
*(i.e. Bi-metal/J Type with 4" (100mm) stem, 0-250°, SS head and 4-20mA transmitter = TIR205A006T4-20mA)*

Dial Size	Bi-Metal with Thermocouple Type J				Bi-Metal with Thermocouple Type K			
	3" (75mm)				3" (75mm)			
	Fully Adjustable				Fully Adjustable			
Stem Length	2.5" (63mm)	4" (100mm)	6" (150mm)	9" (225mm)	2.5" (63mm)	4" (100mm)	6" (150mm)	9" (225mm)
-40°F to 120°F	TIR077	TIR200	TIR223	TIR246	TIR269	TIR292	TIR315	TIR338
-40°F to 160°F	TIR078	TIR201	TIR224	TIR247	TIR270	TIR293	TIR316	TIR339
0°F to 140°F	TIR079	TIR202	TIR225	TIR248	TIR271	TIR294	TIR317	TIR340
0°F to 200°F	TIR080	TIR203	TIR226	TIR249	TIR272	TIR295	TIR318	TIR341
20°F to 240°F	TIR081	TIR204	TIR227	TIR250	TIR273	TIR296	TIR319	TIR342
0°F to 250°F	TIR082	TIR205	TIR228	TIR251	TIR274	TIR297	TIR320	TIR343
50°F to 300°F	TIR083	TIR206	TIR229	TIR252	TIR275	TIR298	TIR321	TIR344
50°F to 400°F	TIR084	TIR207	TIR230	TIR253	TIR276	TIR299	TIR322	TIR345
50°F to 550°F	TIR085	TIR208	TIR231	TIR254	TIR277	TIR300	TIR323	TIR346
150°F to 750°F	TIR086	TIR209	TIR232	TIR255	TIR278	TIR301	TIR324	TIR347
0°F to 800°F	TIR087	TIR210	TIR233	TIR256	TIR279	TIR302	TIR325	TIR348
200°F to 1,000°F	TIR088	TIR211	TIR234	TIR257	TIR280	TIR303	TIR326	TIR349
-80°F to 50°C	TIR089	TIR212	TIR235	TIR258	TIR281	TIR304	TIR327	TIR350
-50°F to 50°C	TIR090	TIR213	TIR236	TIR259	TIR282	TIR305	TIR328	TIR351
0°F to 50°C	TIR091	TIR214	TIR237	TIR260	TIR283	TIR306	TIR329	TIR352
-50°F to 100°C	TIR092	TIR215	TIR238	TIR261	TIR284	TIR307	TIR330	TIR353
0°F to 100°C	TIR093	TIR216	TIR239	TIR262	TIR285	TIR308	TIR331	TIR354
-20°F to 120°C	TIR094	TIR217	TIR240	TIR263	TIR286	TIR309	TIR332	TIR355
0°F to 150°C	TIR095	TIR218	TIR241	TIR264	TIR287	TIR310	TIR333	TIR356
0°F to 200°C	TIR096	TIR219	TIR242	TIR265	TIR288	TIR311	TIR334	TIR357
0°F to 300°C	TIR097	TIR220	TIR243	TIR266	TIR289	TIR312	TIR335	TIR358
0°F to 450°C	TIR098	TIR221	TIR244	TIR267	TIR290	TIR313	TIR336	TIR359
100°F to 550°C	TIR099	TIR222	TIR245	TIR268	TIR291	TIR314	TIR337	TIR360

# Bi-Metal Thermometer with Integral RTD or Thermocouple

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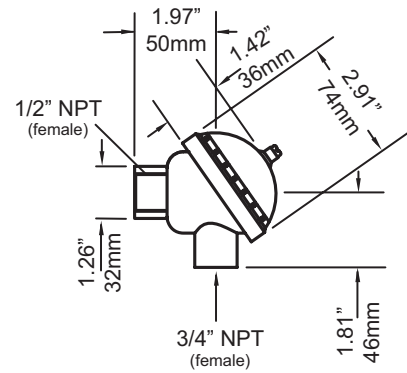


For R=250ohm

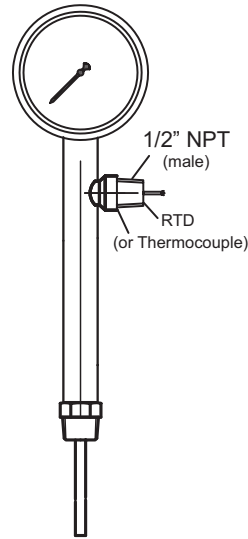
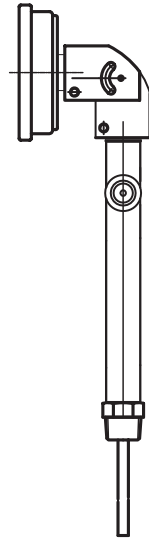
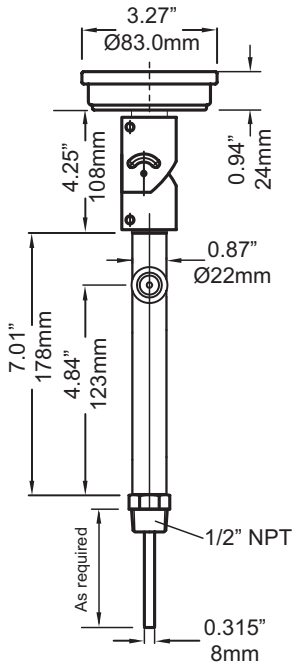
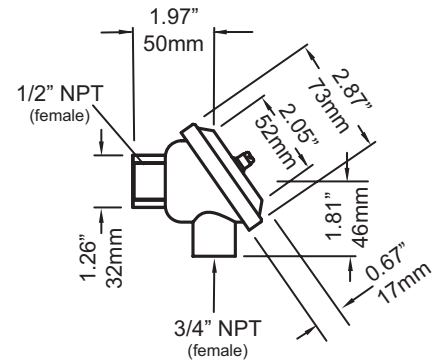
I (mA)	°F	°C
4	0	-17.8
20	+250	+120

Accuracy: +/-1% of full scale

Aluminum Head



Stainless Steel Head



### Series Number (for custom, non-standard product)

	T	I	R	-		-				-		-				-	
<b>SERIES</b>																	
<b>HEAD MATERIAL</b>																	
Aluminum																	A
Stainless steel																	S
<b>STEM LENGTH</b>																	
4" (minimum)																	0 4 0
5"																	0 5 0
6"																	0 6 0
Other (inches X 10)																	X X X
<b>THREAD SIZE</b>																	
3/8"																	3
1/2"																	2
Special																	Z
<b>THREAD TYPE</b>																	
NPT																	N
BSP																	B
BSPT																	T
M20 X 1.5																	M
<b>RANGE (DUAL)</b>																	
-100/150F (-70/70C)																	B 0 1
-40/120F (-40/50C)																	B 0 2
0/140F (-20/60C)																	B 0 3
-40/160F (-40/70C)																	B 0 4
25/125F (-5/50C)																	B 0 5
0/200F (-20/90C)																	B 0 6
20/240F (-5/115C)																	B 0 7
0/250F (-20/120C)																	B 0 8
50/300F (10/150C)																	B 0 9
50/400F (10/200C)																	B 1 0
50/500F (10/260C)																	B 1 1
150/750F (100/400C)																	B 1 2
200/1000F (100/540C)																	B 1 3
<b>OPTIONS</b>																	
4-20mA output																	M
Output style RTD																	R
Output style J																	J
Output style K																	K