# Orsense Melt-Bolt Thermocouple Probes with Attached Plug



**Overview** 

- Used on extruders and injection molding machines to directly measure the melt temperature of plastic as it moves down the extruder barrel
- Commonly used Type J thermocouple
- 3" or 6" bolt lengths
- Flush, 1/8", 1/4", or adjustable tip lengths
- Grounded or ungrounded junctions
- 1/2-20 UNF thread process connection
- 2-pin standard size plug

<u>THMJ-MB6T00-02</u>



#### THMJ-MB6TA-01

Melt-Bolt Thermocouple Probes with Attached Plug - Type J											
Part Number	Pcs/Pkg	Wt (lb)	Price	Туре	Tip Length	Tip Diameter	Bolt Length	Temperature Sensing Range	Junction Type	Attached Plug Size	Mating Jack (see accessories- purchased separately)
<u>THMJ-MB3T00-01</u>	-	0.63	\$49.00		Flush		3"	18 to 482°C (0 to 900°F), plug rated to 204°C (400°F)	Grounded	Standard	THMJ-SJ or THMJ-SPJ
<u>THMJ-MB3T18-01</u>		0.63	\$49.00		1/8"						
<u>THMJ-MB3T14-01</u>		0.63	\$49.00		1/4"						
<u>THMJ-MB3T00-02</u>		0.63	\$51.50		Flush	4/0"			Ungrounded		
<u>THMJ-MB3T18-02</u>		0.63	\$51.50		1/8"						
THMJ-MB3T14-02	1	0.63	\$51.50		1/4"						
<u>THMJ-MB6T00-01</u>	- 1 -	0.75	\$61.00		Flush	- 1/8" - 6"			Grounded		
<u>THMJ-MB6T18-01</u>		0.75	\$61.00	J	1/8"						
<u>THMJ-MB6T14-01</u>		0.75	\$61.00		1/4" Flush		6"				
<u>THMJ-MB6T00-02</u>		0.75	\$63.50						Ungrounded		
THMJ-MB6T18-02		0.75	\$63.50		1/8"						
THMJ-MB6T14-02		0.75	\$63.50		1/4"						
THMJ-MB3TA-01		0.75	\$156.00		Adjustable (0 - 1")	5/32" -	3"		Exposed		
THMJ-MB6TA-01		0.75	\$161.00				6"				

Technical Specifications				
ASTM E230 Standard Limits of Error	±2.2°C (±4.0°F) or 0.75%, whichever is greater			
Bolt Threads	1/2-20 UNF - 2A Bolt Thread (Nominal Thread Length 1-7/8")			
Response Time	2.9 seconds, 63.2% of a 25-77°C step change per method ASTM E839			
Wiring	Fixed tip: Fiberglass insulation with flexible armor Adjustable tip: MgO insulated tube 1/8" graduated marks Attached plug, mating jack sold separately. See accessories.			

Note: Check the chemical compatibility of the sensor's wetted parts with the medium to be measured.

# **Project Melt-Bolt Thermocouple Probes with** Attached Plug

### Dimensions

inches [mm]

#### THMJ-MBxxxx-xx

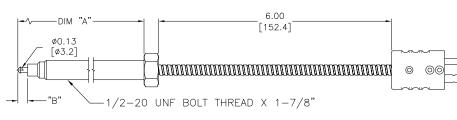


TABLE A						
PART NUMBER	DIM "A"	DIM "B"				
THMJ-MB3T00-01	3.00[76.2]	0.00[FLUSH]				
THMJ-MB3T14-01	3.00[76.2]	0.25[6.4]				
THMJ-MB3T18-01	3.00[76.2]	0.125[3.2]				
THMJ-MB3T00-02	3.00[76.2]	0.00[FLUSH]				
THMJ-MB3T14-02	3.00[76.2]	0.25[6.4]				
THMJ-MB3T18-02	3.00[76.2]	0.125[3.2]				
THMJ-MB6T00-01	6.00[152.4]	0.00[FLUSH]				
THMJ-MB6T14-01	6.00[152.4]	0.25[6.4]				
THMJ-MB6T18-01	6.00[152.4]	0.125[3.2]				
THMJ-MB6T00-02	6.00[152.4]	0.00[FLUSH]				
THMJ-MB6T14-02	6.00[152.4]	0.25[6.4]				
THMJ-MB6T18-02	6.00[152.4]	0.125[3.2]				

# Wiring Information

#### Type J: (+) white (-) red

• Must use thermocouple extension lead wire

 Observe polarity when making connections

• Do not use standard wire nuts



## **Dimensions**

#### inches [mm]

#### THMJ-MB3TA-0X

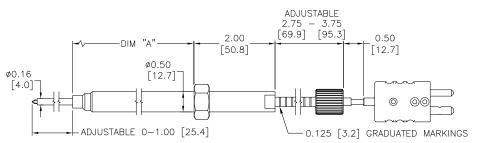


TABLE A					
PART NUMBER	DIM "A"				
THMJ-MB3TA-01	3.00[76.2]				
THMJ-MB3TA-02	6.00[152.4]				

# **Procense Melt-Bolt Thermocouple Probes with** Attached Plug - Accessories

## **Accessories**

Part No.	Description	Pcs/Pkg	Price	
<u>THMJ-SP</u>	Thermocouple connector, Type J, standard round pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size	1	\$4.50	
<u>THMJ-SJ</u>	Thermocouple connector, Type J, standard round pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size			
<u>WCB-S</u>	Wire / cable clamp bracket for use with standard thermocouple and RTD connectors	4	\$12.00	
<u>THMJ-SPJ</u>	Thermocouple connector, Type J, standard round pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	\$11.00	
<u>THMJ-MPJ</u>	Thermocouple connector, Type J, miniature flat pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	\$8.25	

Note: Thermocouple extension lead wire available at www.automationdirect.com See end of section for full listing of accessories and

THMJ-SJ

