Food, Dairy & Pharmaceutical

Configuration Code FD07
Penetration Style Sensors

Pyromation insertion probes with formed pistol grip handles, are used to measure internal temperature of meat, fish, poultry, and other food products, both fresh and slightly frozen varieties. Other uses include penetration of soft process materials such as rubber and plastic compounds. The materials of construction are all FDA compliant for use in sanitary applications. The sheath tips are made of full hard-drawn 304SS hypodermic tubing with a sharp needle-point insertion tip. Handles are constructed of formed stainless steel tubing and are available in three size and strength configurations to match the process duty requirements. All leads are epoxy sealed.

FIGURE 1

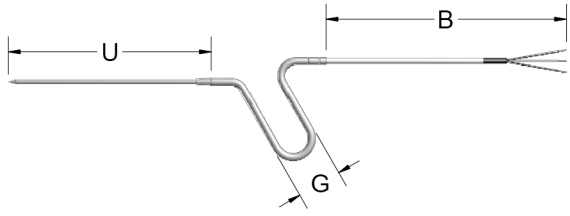
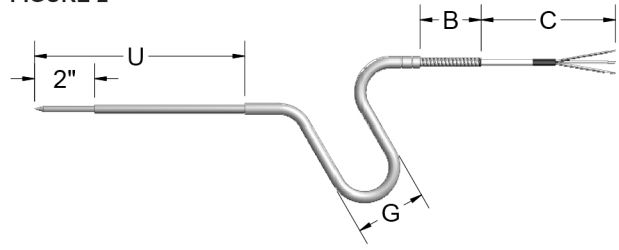


FIGURE 2



ORDER CODES

	1		2		3		4
Example Thermocouple Order Number:	**JPGM2G**	-	**06**	-	**M3036**	-	**4**
Example RTD Order Number:	**RBF185PGM3**	-	**06**	-	**M3120**	-	**2**

1 Penetration Thermocouple

CODE	TIP DIA. (inches)	GRIP "G" DIM. (inches)	GRIP DIA. (inches)
LIGHT-DUTY HANDLE - FIGURE 1			
JPGL2G	0.134	1 1/4	1/4
MEDIUM-DUTY HANDLE - FIGURE 2			
JPGM2G	0.134	2 3/8	5/16
JPGM3G	0.180	2 3/8	5/16
HEAVY-DUTY HANDLE - FIGURE 2			
JPGH3G	0.180	2 3/8	3/8
DUPLEX - FIGURE 2			
JJPGH3G	0.180	2 3/8	3/8
To specify other calibrations, change first digit to K or T. To specify ungrounded junction, change last digit from G to U.			

2 Immersion "U" Length

DESCRIPTION
Specify "U" dimension in inches using 2 digits, plus any fractional lengths. Examples: 02 = 2", 02(1/2) = 2.5". 12" maximum insertion length.

4 Terminations

CODE	DESCRIPTION
2	2" split leads 1/4" stripped
3	2" split leads with spade lugs
4	Standard plug
6	Miniature plug
Options	
RB	Rubber boot (2 pin plugs only)
MC	Mating connector
CG	Cord grip (1/2" NPT PVC)

1 Penetration Style 3-Wire RTDs Pt100 (α = 0.003 85 °C^{-1})

CODE	TOLERANCE[1]	TIP DIA. (inches)	GRIP 'G' DIM (inches)	GRIP DIA. (inches)
LIGHT-DUTY HANDLE - FIGURE 1				
RBF185PGL2	Class B	0.134	1 1/4	1/4
MEDIUM-DUTY HANDLE - FIGURE 2				
RBF185PGM2	Class B	0.134	2 3/8	5/16
RBF185PGM3	Class B	0.180	2 3/8	5/16
HEAVY-DUTY HANDLE - FIGURE 2				
RBF185PGH3	Class B	0.180	2 3/8	3/8
DUPLEX - FIGURE 2				
RBF285PGH3	Class B	0.180	2 3/8	3/8
Consult factory for other accuracies and types.				
[1] Refer to RTD tolerance information in the General Information section for calculations to determine specific tolerance at temperature.				

3 Extension Leadwire

CODE	DESCRIPTION	TEMP RATING
T3_ _ _[1]	Fluoropolymer Insulation - Stranded Conductor	204 °C [400 °F]
T3A_ _ _[1]	Fluoropolymer Insulation - Stranded Conductor - Flexible Armor	204 °C [400 °F]
T3T_ _ _[1]	Fluoropolymer Insulation - Stranded Conductor - Flexible Armor - FEP coated	204 °C [400 °F]
T3P_ _ _[1]	Fluoropolymer Insulation - Stranded Conductor - Flexible Armor - PVC-Coated	105 °C [221 °F]
M3_ _ _[1][2]	Fluoropolymer Insulation - Stranded Conductor - Stainless Steel Overbraid - FEP Insulation	204 °C [400 °F]
S3_ _ _[1][3]	Fluoropolymer Insulation - Stranded Conductor - Silicon Rubber Jacket	204 °C [400 °F]
[1] Insert 3 digit "B" dimension in inches. [2] Not available with Type K. [3] Only available in single 3-wire RTD.		

Food, Dairy & Pharmaceutical

Configuration Code FD08
Penetration Style RTD Sensors

Insertion RTD probes are used to monitor internal temperatures of meat, fish, poultry, dough, and other food products, both fresh and slightly frozen varieties. Other uses include penetration of soft process materials such as rubber and plastic compounds. The materials of construction are all FDA compliant for use in sanitary applications. The sheaths are made of full hard-drawn 304SS, hypodermic tubing with a sharp needle-point insertion tip. Several varieties of handles, leadwire, and termination configurations are available. All assemblies are 3-wire construction and use a 100 ohm platinum element with a Temperature Coefficient of 0.003 85 $^{\circ}C^{-1}$ (Class B) and are rated to 200 °C [392 °F] maximum temperature limit.

FIGURE 1

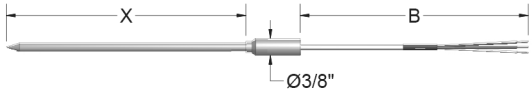


FIGURE 2

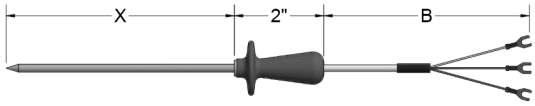


FIGURE 3

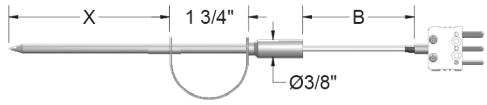
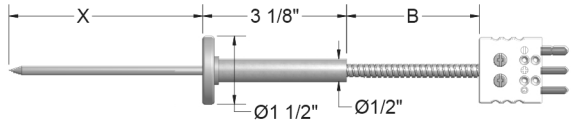


FIGURE 4



ORDER CODES

Example Order Number:

1		2		3		4
RBF185MH2	-	**06**	-	**T3120**	-	**4**

1 Pt100 (α = 0.003 85 °C^{-1}) 3-Wire RTD Assemblies

CODE		NOM. SHEATH DIAMETER (inches)
SINGLE	***DUPLEX***	
FIGURE 1 LESS HANDLE		
RBF185LH2		0.134
RBF185LH3	RBF285LH3	0.180
FIGURE 2 MOLDED NYLON HANDLE 150 °C [302 °F]		
RBF185MH2		0.134
RBF185MH3	RBF285MH3	0.180
FIGURE 3 SABRE HANDLE		
RBF185SH2		0.134
RBF185SH3	RBF285SH3	0.180
FIGURE 4 HEAVY DUTY HANDLE		
RBF185HD2		0.134
RBF185HD3	RBF285HD3	0.180

2 Sheath 'X' Dimension

Specify "X" length in inches using 2 digits plus any fractional length. Examples: 02 = 2", 02(1/2)" = 2.5"
12" max. standard construction length.

3 Extension Leadwire

CODE	DESCRIPTION	TEMP RATING
T3_ _ _ [1]	Fluoropolymer Insulation - stranded conductor	200 °C [392 °F]
T3A_ _ _ [1]	Fluoropolymer Insulation - stranded conductor - flexible armor	200 °C [392 °F]
T3T_ _ _ [1]	Fluoropolymer Insulation - stranded conductor - flexible armor - FEP coated	200 °C [392 °F]
T3P_ _ _ [1]	Fluoropolymer Insulation - stranded conductor - flexible armor - PVC-coated	105 °C [221 °F]
M3_ _ _ [1]	Fluoropolymer Insulation - stranded conductor - stainless steel overbraid - FEP Insulation	200 °C [392 °F]
S3_ _ _ [1]	Fluoropolymer Insulation - stranded conductor - silicon rubber jacket	200 °C [392 °F]
[1] Insert 3 digit "B" dimension in inches.		

4 Terminations

CODE	DESCRIPTION
2	2" split leads, 1/4" stripped
3	2" split leads with spade lugs
4	Standard plug
6	Miniature plug
Options	
RB	Rubber boot (2 pin plugs only)
MC	Mating connector
CG	Cord grip (1/2" NPT PVC)