

## Flanged Immersion Heaters

### Process Temperature & Overtemperature Controls

#### Temperature Control — Mechanical Devices

An integral on-off process temperature control thermostat can be factory installed into the housing of the heater. The sensing bulb of the thermostat is inserted into a thermowell in the center of the heating bundle. AR type mechanical controls (see Controls section for details) are utilized.

#### Mechanical Devices

Option Number	Thermostat Range
T1	0 - 100°F
T2	60 - 250°F
T3	200 - 550°F

#### Notes —

- A. The controls are for pilot duty only and must be connected to a remote mounted magnetic contactor.
- B. For explosion resistant heaters, an integral thermostat can only be specified on a 3, 5 and 6" flange immersion heater.

#### Temperature Control — Electronic Devices

A process control thermocouple can be factory installed into a thermowell in the center of the heating bundle for process control. This thermocouple must be connected to a remote mounted electronic temperature controller.

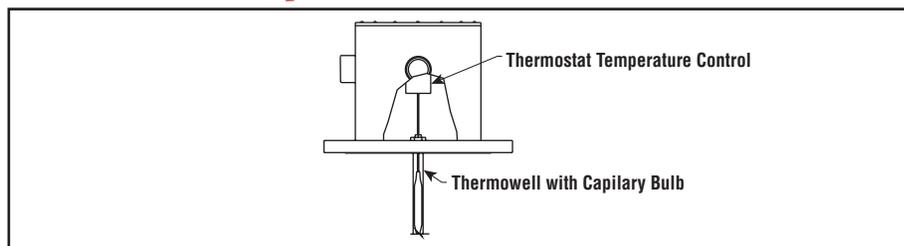
#### Overtemperature Protection — Electronic Devices

A thermocouple can be attached to the heating element sheath to switch the heater off in the event of a high temperature condition. This thermocouple must be connected to a remote mounted electronic high limit temperature controller.

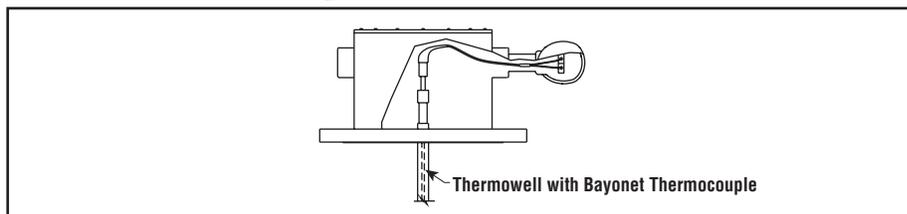
Please refer to the Controls section for an overview of power control panels.

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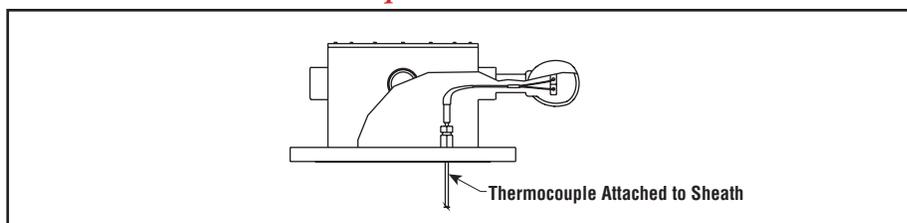
#### Mechanical Device Temperature Control



#### Process Control Thermocouple



#### Overheat Protection Thermocouple



## Flanged Immersion Heaters

### Process Temperature & Overtemperature Controls

#### Flanged Immersion Heater Model Descriptions

Model										
TM	ANSI Flange Immersion Heater									
	<b>Code</b>	<b>Element Sheath Material</b>								
	(Blank)	Copper								
	O	Carbon Steel								
	S	304 Stainless Steel								
	I	Incoloy 800								
	X	Other Material								
	<b>Code</b>	<b>Flange Material</b>								
	(Blank)	Carbon Steel								
	S	304 Stainless Steel								
	X	Other Material								
	<b>Code</b>	<b>Baffled Flow</b>								
	(Blank)	No Baffles								
	B	Baffled Flow								
	<b>Code</b>	<b>Number of Elements</b>								
	03	Three Heating Elements								
	06	Six Heating Elements								
	12	Twelve Heating Elements								
	18	Eighteen Heating Elements								
	27	Twenty-Seven Heating Elements								
	36	Thirty-Six Heating Elements								
	45	Forty-Five Heating Elements								
	<b>Code</b>	<b>Wattage</b>								
	004P5	4.5 kW (use actual kilowatt in 3 digits)								
	<b>Code</b>	<b>Terminal Housing Style</b>								
	E1	General Purpose								
	E4	Moisture Resistant								
	E2	Explosion / Moisture Resistant								
	E5	Explosion / Moisture Resistant - addition of Group IIC w/ Acetylene (IEC only)								
	<b>Code</b>	<b>Non-Standard Feature</b>								
	(Blank)	Catalog PCN item								
	XX	Custom Feature								
	<b>Code</b>	<b>Voltage</b>								
	208	208V								
	240	240V								
	380	380V								
	415	415V								
	480	480V								
	575	575V								
	<b>Code</b>	<b>Number of circuits</b>								
	1	One								
	2	Two								
	3	Three								
	4	Four								
	<b>Code</b>	<b>Phase</b>								
	1P	Single Phase								
	3P	Three Phase								
	<b>Code</b>	<b>Kilowatts</b>								
	4.5	kW								
TM	I	- 03	- 004P5	- E4	480V	1	- 3P	4.5	kW	Typical Model Number

**Example of Final Model Description:** TMI-03-004P5-E4 480V 1-3P 4.5kW

**Note:** Shaded sections of the model build table are not a finite list. Items such as Number of Elements, Wattage, Voltage, Circuits, and Phase should be adjusted to match design.