

PT100 Sensor Bolt

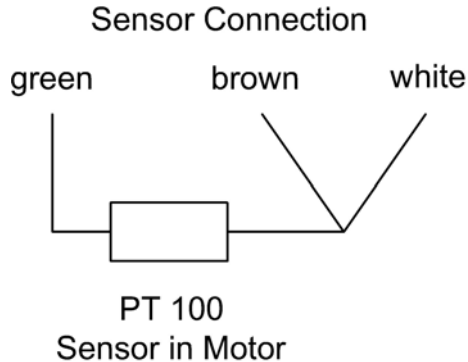
PT100 temperature sensors kits are available for Franklin Electric 6" and 8" motors. The PT100 will sense if there is insufficient cooling to the motor.

To install the sensor bolt, remove the top end bell bolt that is opposite of the lead and replace it with the PT100 sensor. Do not loosen or remove the other three bolts in the end bell. Tighten the sensor bolt to the torque specifications shown below.

6" Motors	54 - 61 N-m	(40 - 45 ft-lbs)
8" Motors (40 HP-100 HP)	54 - 61 N-m	(40 - 45 ft-lbs)
8" Motors (125 HP-200 HP)	115 - 122 N-m	(85 - 90 ft-lbs)

This sensor does not replace the electrical overload protection that is required by the motor installation manual. All three power supply legs of a 3-Phase submersible motor still requires an AMBIENT COMPENSATED OVERLOAD WITH QUICK-TRIP CHARACTERISTICS (NEMA Class 10) or a FRANKLIN ELECTRIC SUBTROL PLUS premium motor protection system.

MONITORING UNIT SETTINGS		
Franklin Electric does not manufacture the above ground monitors. These units have to be purchased separately.		
Conditions	Normal Temperature of Water Without Motor Operating	Maximum Trip Temperature Setting
Motor Operating at Nameplate Output with 0.15 m/sec (05 ft/sec) Flow Past The Motor	10°C (50°F)	40°C (104°F)
	15°C (59°F)	44°C (111°F)
	20°C (68°F)	48°C (118°F)
	25°C (77°F)	51°C (124°F)
	30°C (86°F)	55°C (131°F)
Motor that has been Derated with 0.9 m/sec (3 ft/sec) Flow Past the Motor	35°C (95°F)	59°C (138°F)
	40°C (104°F)	63°C (145°F)
	45°C (113°F)	66°C (151°F)
	50°C (122°F)	70°C (158°F)
	55°C (131°F)	74°C (165°F)
	60°C (140°F)	78°C (172°F)



A 29 foot lead is supplied on the PT100 as shipped from the factory. It has three individual 20AWG conductors (green, brown, white) enclosed in a 60C PVC jacket. The user will need to supply the remaining drop cable required to reach the surface control equipment. The user will also need to supply the surface control equipment to which these wires will connect.