

Immersion temperature sensor

- >> Accurate NTC 10k type resistance temperature detector
- >> The single point sensor is encapsulated in a 6.35 mm OD 304 stainless steel probe
- >> Easily fitted to a FX-TW thermowell with 1/2" threads
- >> Optional probe lengths



Immersion temperature measurement

The immersion temperature sensor FX-TES-W is designed to measure the temperature inside pipes carrying liquid or steam. It is used with FX-TW stainless steel thermowell. The rigid stainless steel probe and the enduring ABS casing make the sensor suitable for most HVAC applications. The standard length of the probe is 100mm. The immersion type probes are installed in the appropriate length thermowell for the pipe size. Thermal conductive compound should be added inside the thermowell to provide optimum thermal transfer.

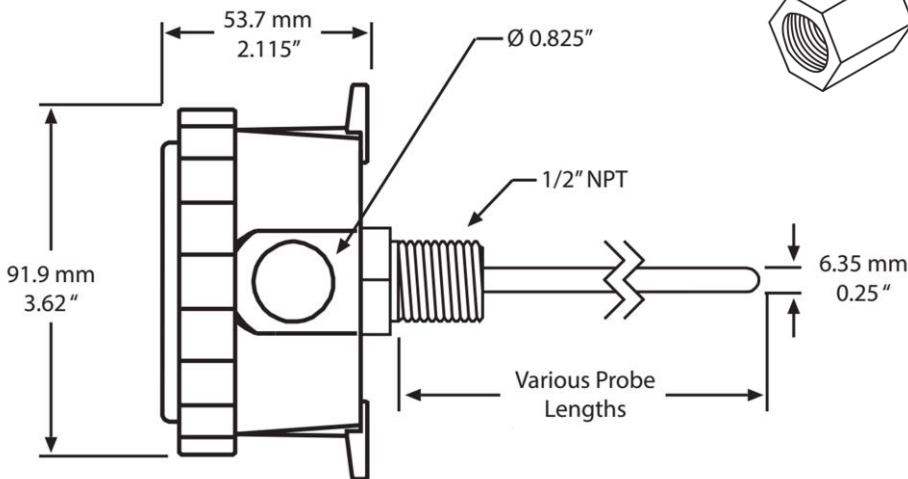
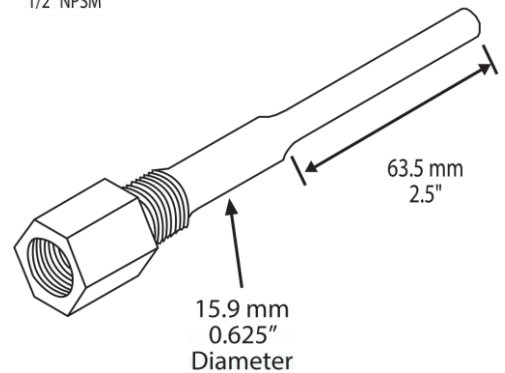
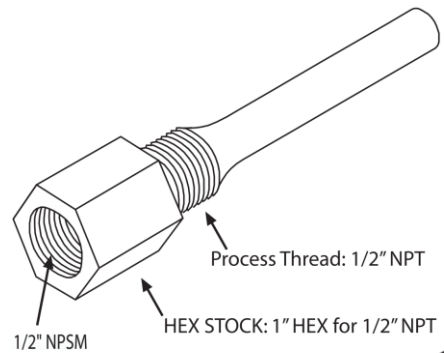
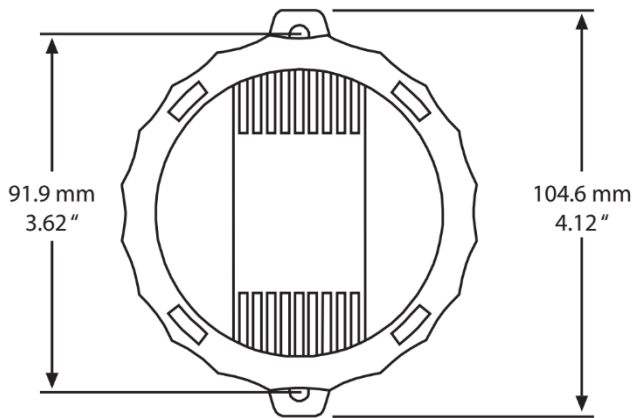
The FX-TW series thermowells are machined lathed from 1" barstock stainless steel. Thermowells have 1/2" NPT external thread and 1/2 NPSM internal thread.

Technical features

Sensor Type: NTC 10k
Sensor Accuracy: ± 0.2 °C
Temperature Range: -20 to 105 °C (-4 to 221 °F)
Probe Lengths: 100 mm, 50 mm, 150 mm, 200 mm, 300 mm, 450 mm
Wire Material: PVC insulated, parallel bonded
Probe Material: 304 Series Stainless Steel
Probe Dimensions: 0.25" (6.35 mm) Diameter
Enclosure: ABS - UL94-5VB - IP65 (NEMA4X)
Termination: Terminal block
Manufacturing Process: ISO9001

*In order to maintain the published NEMA/IP ratings, properly rated conduit or cable gland adapters must be used.

Temp.	Ω	Temp.	Ω	Temp.	Ω	Temp.	Ω	Temp.	Ω	Temp.	Ω
		75	1480	29	8406	19	13073	9	20884	-5	42327
140	235	70	1752	28	8779	18	13681	8	21918	-10	55329
130	301	65	2083	27	9165	17	14325	7	23015	-15	72957
120	390	60	2488	26	9574	16	15000	6	24170	-20	97083
110	511	55	2986	25	10000	15	15710	5	25391	-25	130422
100	679	50	3602	24	10448	14	16461	4	26683	-30	176976
95	786	45	4368	23	10924	13	17256	3	28051	-35	24682
90	916	40	5324	22	11421	12	18091	2	29498	-40	336479
85	1070	35	6532	21	11940	11	18970	1	31030	-45	472178
80	1255	30	8055	20	12491	10	19902	0	32650	-50	671305



150 mm and up machined thermowells have a two step stem as shown. Welded construction have a 0.375" (9.5 mm) diameter.

Part numbers

FX-TES-W100 NTC 10k, 100 mm probe, default length
FX-TW100 Thermowell 100mm

FX-TES-W50 50 mm probe
FX-TES-W150 150 mm probe
FX-TES-W200 200 mm probe
FX-TES-W300 300 mm probe
FX-TES-W450 450 mm probe

FX-TW50 Thermowell 50mm
FX-TW150 Thermowell 150mm
FX-TW200 Thermowell 200mm
FX-TW300 Thermowell 300mm
FX-TW450 Thermowell 450mm