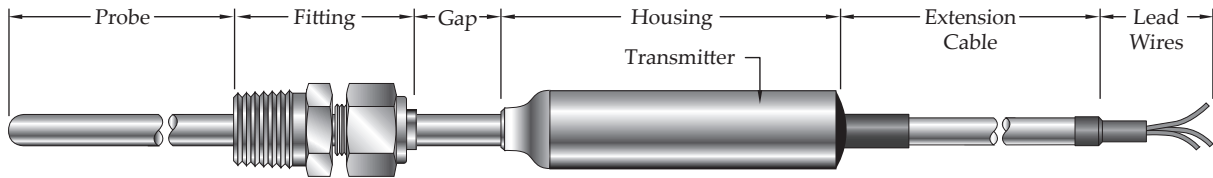
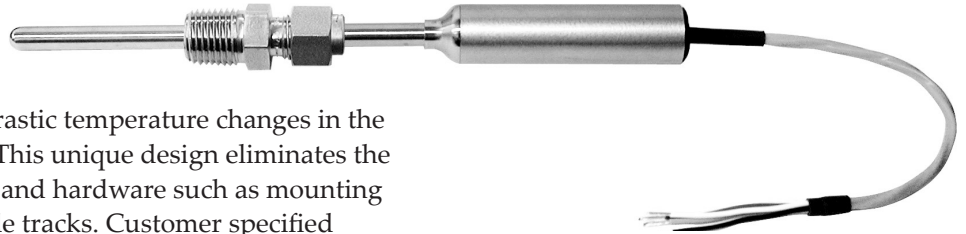


Resistance Temperature Detectors

INTEGRATED TRANSMITTER RTD ASSEMBLY

The unique line of Integrated Transmitter RTD Assemblies combines an industry standard 4-20mA transmitter with a matched high accuracy RTD (Resistive Temperature Device) in a compact, hermetically sealed assembly. The robust construction of this product enables it to withstand vibrations, harsh wash downs and drastic temperature changes in the roughest environmental conditions. This unique design eliminates the need for additional connection leads and hardware such as mounting boxes, transmitter housings, and cable tracks. Customer specified temperature range for the transmitter calibration as well as custom probe dimensions, extension cable length and type, and process connection types make these sensors a sure fit for the most challenging applications.



Design Features:

- Can be recalibrated and re-scaled in the field.
- Compact size permits easy usage where space is limited
- Standard 2.5" long by 0.62" diameter housing holds electronic circuit and microprocessor
- Robust construction of transmitter housing resists wear in severe operating conditions
- Hermetic seal prevents moisture from entering the transmitter housing, ensuring reliability
- Sturdy construction is resistant to vibrations
- Cost effective and maintenance free

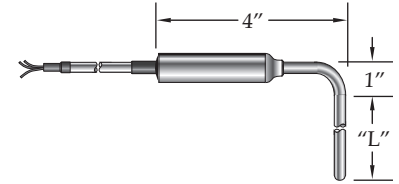
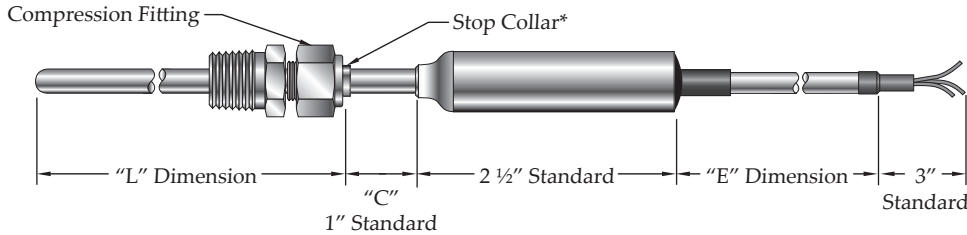
Typical Applications:

- Generators
- Engines
- Compressors
- Pharmaceutical Industries
- Utilities
- Chemical Plants
- Gas Pipelines
- Food Preparation
- Refineries
- Petrochemical Plants
- Paper Mills

Resistance Temperature Detectors

INTEGRATED TRANSMITTER RTD ASSEMBLY

The IT22 assembly's configuration range stands out amongst other temperature sensors in its class. With a wide variety of probe diameters, temperature ranges, and fitting configurations, the IT22 can be designed to fit an abundance of applications.



To order the IT22 with a 90° bend, add suffix "B" after the model number.
Ex: IT22B

STYLE IT22

*No stop collar option, "C" = N00

Stop collar recommended for temperatures above 100°C

| Code | Table 1: Calibrated Temperature Range |
|------|---------------------------------------|
| 05 | 0 to 50°C (32-122°F) |
| 10 | 0 to 100°C (32-212°F) |
| 15 | 0 to 150°C (32-302°F) |
| 20 | 0 to 200°C (32-392°F) |
| 55 | -50 to 50°C (-58-122°F) |
| 51 | -50 to 150°C (-58-302°F) |
| 52 | -50 to 200°C (-58-392°F) |
| XX | Custom Temperature Range, Specify |

Integrated Transmitter RTD Assemblies are factory calibrated to an accuracy of ± 0.25% of span or better.

| Code | Table 2: Output |
|------|------------------------------------------|
| LP | 4-20 mA loop, upscale burnout (standard) |
| LD | 4-20 mA loop, downscale burnout |

| Code | Table 3: Probe Diameter "D" |
|------|-----------------------------|
| B | 1/8" |
| C | 3/16" |
| D | 1/4" |
| F | 3/8" |
| H | 1/2" |

| Code | Table 4: Probe Material |
|------|-------------------------|
| S | 316 Stainless Steel |

| Code | Table 5: Probe Length "L" |
|------|------------------------------------------------|
| --- | Specify in 0.1 inch increments. Ex: 065 = 6.5" |

| Code | Table 6: Extension Length "C" |
|------|------------------------------------------------|
| N_ _ | Specify in 0.1 inch increments. Ex: N20 = 2.0" |

| Code | Table 7: Fitting Type |
|-------|----------------------------------------------|
| N | None |
| S18S* | Compression Fitting (See below to configure) |

*S18S is an example, configure fitting type:

Ferrule material:

S = Stainless Steel* B = Brass* T = Teflon

*Not readjustable with metal ferrule

Process NPT Size:

18 = 1/8" 14 = 1/4"

38 = 3/8" 12 = 1/2"

34 = 3/4" 44 = 1"

Fitting material:

S = Stainless Steel B = Brass

| Code | Table 8: Extension Cable Type |
|------|-----------------------------------------------------------|
| PV | PVC Insulation, 90°C (195°F) max. |
| TF | Teflon Insulation, 200°C (392°F) max. |
| TA | Teflon with Stainless Steel Armor, 200°C (392°F) max. |
| TB | Teflon with Stainless Steel Overbraid, 200°C (392°F) max. |

| Code | Table 9: Extension Cable Length "E" |
|------|-------------------------------------|
| --- | Specify in inches. Ex: 060 = 60" |

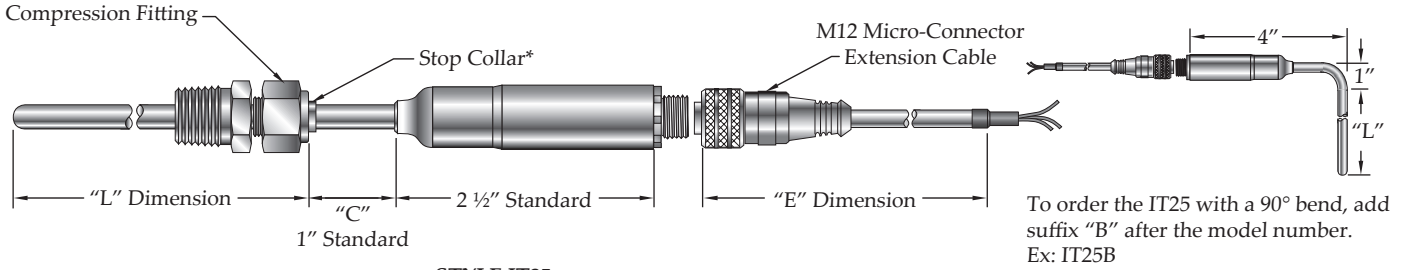
Part Number Sequence IT22-05-LP-B-S-065-N20-N-TA-060

| | | | | | | | | | | | | | | | | | | |
|-------------------------|------------|---------|----------------|----------------|--------------|------------------|--------------|----------------------|------------------------|---------|---|---------|---|---------|---|---------|---|---------|
| IT22 | - | 05 | - | LP | - | B | - | S | - | 065 | - | N20 | - | N | - | TA | - | 060 |
| IT22 | | Table 1 | | Table 2 | | Table 3 | | Table 4 | | Table 5 | | Table 6 | | Table 7 | | Table 8 | | Table 9 |
| Sensor Type & Style No. | Temp Range | Output | Probe Diameter | Probe Material | Probe Length | Extension Length | Fitting Type | Extension Cable Type | Extension Cable Length | | | | | | | | | |

Resistance Temperature Detectors

INDUSTRIAL TEMPERATURE SENSOR WITH M12 MICRO-CONNECTOR

IT25 assemblies can be utilized in similar applications as the IT22, but the IT25 allows for quick disconnections. IT25 devices are effective in laboratory test equipment, hydraulic power units, skids, generators, and mobile equipment.



STYLE IT25

*No stop collar option, "C" = N00
Stop collar recommended for temperatures above 100°C

To order the IT25 with a 90° bend, add suffix "B" after the model number.
Ex: IT25B

| Code | Table 1: Calibrated Temperature Range |
|------|---------------------------------------|
| 05 | 0 to 50°C (32-122°F) |
| 10 | 0 to 100°C (32-212°F) |
| 15 | 0 to 150°C (32-302°F) |
| 20 | 0 to 200°C (32-392°F) |
| 55 | -50 to 50°C (-58-122°F) |
| 51 | -50 to 150°C (-58-302°F) |
| 52 | -50 to 200°C (-58-392°F) |
| XX | Custom Temperature Range, Specify |

Integrated Transmitter RTD Assemblies are factory calibrated to an accuracy of ± 0.25% of span or better.

| Code | Table 2: Output |
|------|------------------------------------------|
| LP | 4-20 mA loop, upscale burnout (standard) |
| LD | 4-20 mA loop, downscale burnout |

| Code | Table 3: Probe Diameter "D" |
|------|-----------------------------|
| B | 1/8" |
| C | 3/16" |
| D | 1/4" |
| F | 3/8" |
| H | 1/2" |

| Code | Table 4: Probe Material |
|------|-------------------------|
| S | 316 Stainless Steel |

| Code | Table 5: Probe Length "L" |
|------|------------------------------------------------|
| --- | Specify in 0.1 inch increments. Ex: 065 = 6.5" |

| Code | Table 6: Extension Length "C" |
|------|------------------------------------------------|
| N_ | Specify in 0.1 inch increments. Ex: N20 = 2.0" |

| Code | Table 7: Fitting Type |
|-------|----------------------------------------------|
| N | None |
| S18S* | Compression Fitting (See below to configure) |

*S18S is an example, configure fitting type:

Ferrule material:

S = Stainless Steel* B = Brass* T = Teflon

*Not readjustable with metal ferrule

Process NPT Size:

18 = 1/8" 14 = 1/4"

38 = 3/8" 12 = 1/2"

34 = 3/4" 44 = 1"

Fitting material:

S = Stainless Steel B = Brass

| Code | Table 8: Connector Type |
|------|----------------------------------------------------------------|
| M12 | M12 Micro-Connector 5 pin male receptacle, Nickel Plated Brass |

| Code | Table 9: Extension Cable "E" |
|------|------------------------------|
| N | None |
| A2 | Straight, 2 meters |
| A5 | Straight, 5 meters |
| B2 | Right Angle, 2 meters |
| B5 | Right Angle, 5 meters |

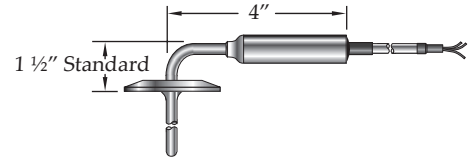
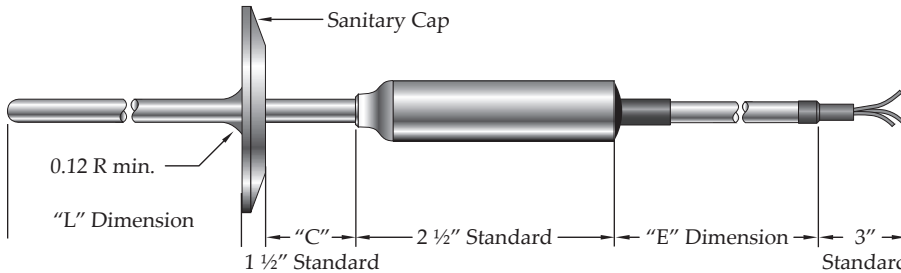
Part Number Sequence IT25-05-LP-B-S-065-N20-N-M12-A2

| | | | | | | | | | | | | | | | | | | |
|-------------------------|---|------------|---|---------|---|----------------|---|----------------|---|--------------|---|------------------|---|--------------|---|----------------|---|-----------------|
| IT25 | - | 05 | - | LP | - | B | - | S | - | 065 | - | N20 | - | N | - | M12 | - | A2 |
| IT25 | | Table 1 | | Table 2 | | Table 3 | | Table 4 | | Table 5 | | Table 6 | | Table 7 | | Table 8 | | Table 9 |
| Sensor Type & Style No. | | Temp Range | | Output | | Probe Diameter | | Probe Material | | Probe Length | | Extension Length | | Fitting Type | | Connector Type | | Extension Cable |

Resistance Temperature Detectors

SANITARY TEMPERATURE SENSOR WITH EXTENSION CABLE

ITS22 assemblies are particularly useful where extreme operating conditions exist in wash down situations and very wet environments. While external cables will withstand wash downs, to further protect the sensor and ensure longer life, stainless steel armor or overbraid can be custom added to prevent abrasion wear.



To order the ITS22 with a 90° bend, add suffix "B" after the model number. Ex: ITS22B

STYLE ITS22

| Code | Table 1: Calibrated Temperature Range |
|------|---------------------------------------|
| 05 | 0 to 50°C (32-122°F) |
| 10 | 0 to 100°C (32-212°F) |
| 15 | 0 to 150°C (32-302°F) |
| 20 | 0 to 200°C (32-392°F) |
| 55 | -50 to 50°C (-58-122°F) |
| 51 | -50 to 150°C (-58-302°F) |
| 52 | -50 to 200°C (-58-392°F) |
| XX | Custom Temperature Range, Specify |

Integrated Transmitter RTD Assemblies are factory calibrated to an accuracy of ± 0.25% of span or better.

| Code | Table 2: Output |
|------|------------------------------------------|
| LP | 4-20 mA loop, upscale burnout (standard) |
| LD | 4-20 mA loop, downscale burnout |

| Code | Table 3: Probe Diameter "D" | |
|------|-----------------------------|----------------|
| D | 1/4" | |
| F | 3/8" | |
| H | 1/2" | |
| - | Sheath Outer Dia. | Tip Outer Dia. |
| DB | 1/4" | 1/8" |
| FC | 3/8" | 3/16" |
| HC | 1/2" | 3/16" |
| HD | 1/2" | 1/4" |
| JD | 5/8" | 1/4" |

| Code | Table 4: Probe Material |
|------|-------------------------|
| S | 316 Stainless Steel |

| Code | Table 5: Probe Length "L" |
|------|------------------------------------------------|
| --- | Specify in 0.1 inch increments. Ex: 065 = 6.5" |

| Code | Table 6: Extension Length "C" |
|------|------------------------------------------------|
| N_ | Specify in 0.1 inch increments. Ex: N20 = 2.0" |

| Code | Table 7: Fitting Type |
|------|----------------------------|
| T15 | Tri-Clamp, 1 1/2" (16 AMP) |
| T20 | Tri-Clamp, 2" (16 AMP) |
| T25 | Tri-Clamp, 2 1/2" (16 AMP) |
| T30 | Tri-Clamp, 3" (16 AMP) |

| Code | Table 8: Extension Cable Type |
|------|-----------------------------------------------------------|
| PV | PVC Insulation, 90°C (195°F) max. |
| TF | Teflon Insulation, 200°C (392°F) max. |
| TA | Teflon with Stainless Steel Armor, 200°C (392°F) max. |
| TB | Teflon with Stainless Steel Overbraid, 200°C (392°F) max. |

| Code | Table 9: Extension Cable Length "E" |
|------|-------------------------------------|
| --- | Specify in inches. Ex: 060 = 60" |

| Code | Table 10: Surface Finish |
|------|--------------------------|
| S | Standard |
| P | Pharmaceutical |

Part Number Sequence ITS22-05-LP-DB-S-065-N20-T15-PV-060-S

ITS22 - 05 - LP - DB - S - 065 - N20 - T15 - PV - 060 - S

ITS22 Table 1 Table 2 Table 3 Table 4 Table 5 Table 6 Table 7 Table 8 Table 9 Table 10

Sensor Type & Style No. Temp Range Output Probe Diameter Probe Material Probe Length Extension Length Fitting Type Extension Cable Type Extension Cable Length Surface Finish