

# NICKEL RTDS

Quick snap latch



Double encapsulation process for all probe related sensors

Hinged cover (no screws)

Product shown: Plastic Box



| ACCURACY    |            |           |
|-------------|------------|-----------|
| Temperature | Resistance | Accuracy  |
| -50°F       | 674 Ohms   | +/- 1.4°F |
| -30°F       | 725 Ohms   | +/- 1.2°F |
| 32°F        | 892 Ohms   | +/- 0.5°F |
| 70°F        | 1000 Ohms  | +/- 0.4°F |
| 170°F       | 1314 Ohms  | +/- 1.3°F |
| 250°F       | 1597 Ohms  | +/- 1.7°F |

| CONFIGURATION |                             |
|---------------|-----------------------------|
| Part #        | Configuration               |
| ( D )         | Duct                        |
| ( DO )        | Duct w/o box                |
| ( I )         | Immersion w/ two piece well |
| ( IM )        | Immersion w/ machined well  |
| ( INW )       | Immersion w/o well          |
| ( A )         | Copper Averaging            |
| ( FA )        | Flex. Cable Averaging       |
| ( RA )        | Rigid Averaging             |
| ( S )         | Strap                       |
| ( O )         | Outdoor Air                 |
| ( W )         | Raw Potted Sensor           |
| ( W-6' )      | Raw w/6' Leads              |
| ( BP )        | Bullet Probe                |
| ( BP-20'Z )   | BP w/20' of Zip Wire        |

| SENSOR OUTPUTS |                       |
|----------------|-----------------------|
| Part #         | Output                |
| I-1K-NI        | 1K Ohms @ 70°F (21°C) |

## NICKEL RTDS

A comprehensive list of general mounting configurations (see list above) is available. The most prominent enclosure of this series is the Plastic Box. It features a robust design and advanced features not typically found in a standard sensor enclosure. Each sensor configuration is designed and manufactured for long-term quality and performance.



Made in the U.S.A.

## SPECIFICATIONS

|                             |                                      |
|-----------------------------|--------------------------------------|
| Operating Temperature Range | -32 to 275°F (0 to 134.8°C)          |
| Operating Humidity Range    | 10 to 95% non-condensing             |
| Temperature Coefficient     | 0.00527 Ohm/Ohm/°C                   |
| Tolerance                   | T<0°C (32°F): +/-0.4 + 0.028 *T (°C) |
| Tolerance                   | T>0°C (32°F): +/-0.4 + 0.007 *T (°C) |

## ORDERING

**BUILD YOUR PART#**

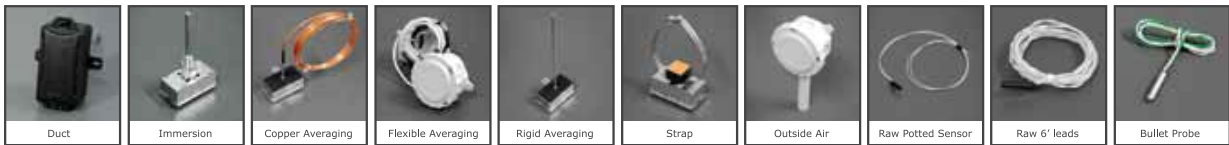
EXAMPLE

I-1K-NI - D - 4" - PB - ----

I-1K-NI - - - - -

| STEP 1  | A SENSOR SERIES | B CONFIGURATION                    | C LENGTH             | D ENCLOSURE         | E LEAD WIRE              |
|---|-----------------|------------------------------------|----------------------|---------------------|--------------------------|
| <p>Select sensor series, configuration, length, enclosure &amp; lead wire if needed.</p> <p>The orange outlines indicate related characteristics</p> <p>Two piece thermowells are not intended for moving water or high pressure service. Fluid velocity and wake frequency are primary factors in well failure. Machined thermowells should be used in these types of applications. Two part thermowells are intended for tank, or low to no flow, applications.</p> | I-1K-NI         | ( D ) Duct                         | 4", 6", 8", 12", 18" | PB, GD, BB, 4X, EH  | (----)                   |
|   |                 | ( DO ) Duct w/o box                | 4", 6", 8", 12", 18" | (----)              | 6'CL2P, 10'CL2P, 20'CL2P |
|   |                 | ( I )* Immersion w/ two piece well | 2.5", 4", 6"         | PB*, GD, BB, 4X, EH | (----)                   |
|   |                 | ( IM ) Immersion w/ machined well  | 2.5", 4", 6"         | PB*, GD, BB, 4X, EH | (----)                   |
|   |                 | ( INW ) Immersion w/o well         | 2.5", 4", 6"         | PB*, GD, BB, 4X, EH | (----)                   |
|   |                 | ( A ) Copper Averaging             | 8', 12', 24'         | PB, GD, BB, 4X, EH  | (----)                   |
|   |                 | ( FA ) Flex. Cable Averaging       | 8', 12', 24'         | PB, GD, BB, 4X, EH  | (----)                   |
|   |                 | ( RA ) Rigid Averaging             | 18", 24", 36"        | PB, GD, BB, 4X, EH  | (----)                   |
|   |                 | ( S ) Strap                        | (----)               | PB* GD, --, 4X, --  | (----)                   |
|   |                 | ( O ) Outdoor Air                  | (----)               | --, --, BB, 4X, EH  | (----)                   |
|   |                 | ( W ) Raw Potted Sensor            | (----)               | (----)              | (----)                   |
|   |                 | ( W-6' ) Raw w/6' Leads            | (----)               | (----)              | (----)                   |
|   |                 | ( BP ) Bullet Probe                | (----)               | (----)              | 6'CL2P, 10'CL2P, 20'CL2P |
| ( BP-20'Z ) BP w/20' of Zip Wire  | (----)          | (----)                             | (----)               |                     |                          |

### CONFIGURATION OPTIONS (Table B)



### ENCLOSURE OPTIONS (Table D) available options shown on the same line as their corresponding configurations

|        |                              |
|--------|------------------------------|
| ( 4X ) | NEMA 4X                      |
| ( BB ) | NEMA 3R                      |
| ( GD ) | Galvanized Box               |
| ( EH ) | Euro Housing (weather tight) |
| ( PB ) | Plastic Box                  |

\*The plastic box (PB) is rated for application environments ranging from -4 to 196°F (-20 to 91°C), the box is shown with an immersion adapter.



The Plastic Box has a UL94-HB rating.

The NEMA 4X enclosure has a UL94-V2 flammability rating.

The Euro Housing enclosure has a UL94-V0 flammability rating.