

# prosense® Thermocouple Threaded Bolt Sensors



**THMJ-N38P14-01**

## Overview

- Typically used to measure the temperature of the nozzle of an injection molding machine without being in direct contact with the molten plastic.
- The small size of this sensor makes it ideal for other general areas of use such as mounting in bearing housings, sealing bars, heat plates, and other limited space applications
- Type J or Type K thermocouples
- Grounded or ungrounded junctions
- 1/4-28 UNF threaded stainless steel rotating bolt allows for easy installation
- 6-foot lead wires with stainless steel overbraid
- Made in the USA

## Thermocouple Threaded Bolt Sensors - Types J and K

| Part Number                    | Pcs/Pkg | Wt (lb) | Price   | Type | Junction Type | Bolt  | Temperature Sensing Range |
|--------------------------------|---------|---------|---------|------|---------------|---|---------------------------|
| <a href="#">THMJ-N38P14-01</a> | 1       | 0.25    | \$30.00 | J    | Grounded      | 1/4-28 x 3/8" Stainless Steel Rotating Bolt | -18 to 482°C (0 to 900°F) |
| <a href="#">THMJ-N38P14-02</a> | 1       | 0.25    | \$32.50 |      | Ungrounded    |   |                           |
| <a href="#">THMK-N38P14-01</a> | 1       | 0.25    | \$31.50 | K    | Grounded      |   |                           |
| <a href="#">THMK-N38P14-02</a> | 1       | 0.25    | \$34.00 |      | Ungrounded    |   |                           |

## Technical Specifications

|   |   |
|---|---|
| <b>ASTM E230 Standard limits of Error</b> | $\pm 2.2^{\circ}\text{C}$ ( $\pm 4.0^{\circ}\text{F}$ ) or 0.75%, whichever is greater                    |
| <b>Response Time</b>                      | 2.9 seconds, 63.2% of a 25-77°C step change per method ASTM E839  |
| <b>Wiring</b>                             | 6 foot stranded 24 AWG wire leads with stripped ends, fiberglass insulation and stainless steel overbraid |

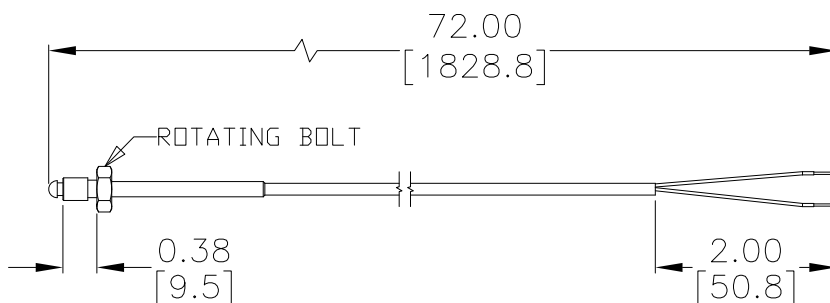


*Note: Check the chemical compatibility of the sensor's wetted parts with the medium to be measured.*

## Dimensions

inches [mm]

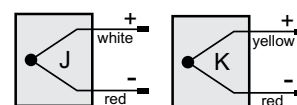
THMJ & K - N38P14-0X



## Wiring Information

**Type J: (+) white (-) red**  
**Type K: (+) yellow (-) red**

- Must use thermocouple extension lead wire
- Observe polarity when making connections
- Do not use standard wire nuts



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## Accessories

| Part No.                        | Description  | Pcs/Pkg | Price   |
|---------------------------------|--|---------|---------|
| <a href="#"><u>THMJ-SP</u></a>  | Thermocouple connector, Type J, standard round pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size        | 1       | \$4.50  |
| <a href="#"><u>THMJ-SJ</u></a>  | Thermocouple connector, Type J, standard round pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size        | 1       | \$5.75  |
| <a href="#"><u>THMK-SP</u></a>  | Thermocouple connector, Type K, standard round pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size       | 1       | \$4.50  |
| <a href="#"><u>THMK-SJ</u></a>  | Thermocouple connector, Type K, standard round pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size       | 1       | \$5.50  |
| <a href="#"><u>THMK-HSP</u></a> | Thermocouple connector, Type K, high-temperature standard round pin plug, maximum continuous temperature 662°F (350°C), thermoset brown body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size        | 1       | \$14.00 |
| <a href="#"><u>THMJ-MP</u></a>  | Thermocouple connector, Type J, miniature flat pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size        | 1       | \$3.75  |
| <a href="#"><u>THMJ-MJ</u></a>  | Thermocouple connector, Type J, miniature flat pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size        | 1       | \$4.25  |
| <a href="#"><u>THMK-MP</u></a>  | Thermocouple connector, Type K, miniature flat pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size       | 1       | \$4.00  |
| <a href="#"><u>THMK-MJ</u></a>  | Thermocouple connector, Type K, miniature flat pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size       | 1       | \$4.25  |
| <a href="#"><u>THMJ-SPJ</u></a> | Thermocouple connector, Type J, standard round pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size  | 1       | \$11.00 |
| <a href="#"><u>THMK-SPJ</u></a> | Thermocouple connector, Type K, standard round pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size | 1       | \$10.50 |
| <a href="#"><u>THMJ-MPJ</u></a> | Thermocouple connector, Type J, miniature flat pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size  | 1       | \$8.25  |
| <a href="#"><u>THMK-MPJ</u></a> | Thermocouple connector, Type K, miniature flat pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size | 1       | \$9.00  |
| <a href="#"><u>WCB-M</u></a>    | Wire / cable clamp bracket for use with miniature thermocouple connectors  | 4       | \$12.00 |
| <a href="#"><u>WCB-S</u></a>    | Wire / cable clamp bracket for use with standard thermocouple and RTD connectors   | 4       | \$12.00 |

Note: Thermocouple extension lead wire available at [www.automationdirect.com](http://www.automationdirect.com)

See end of section for full listing of accessories and dimension information.

[THMJ-SJ](#)



[THMJ-SP](#)



[THMJ-SPJ](#)



**Thermocouple Connectors**