

# Strip Sensing Thermal-Ribbons™

## Overview

These models average temperatures along their length to eliminate point measurement errors. Wrap them around cylinders or adhere them to flat surfaces.

## Specifications

| Dimensions<br>W x L x T <sub>max</sub>  | Element<br>options   | Insulation                                   | Temperature<br>range           | Lead-<br>wires                       | Time<br>constant* | Features   | Model       |
|---|----------------------|--|--------------------------------|--------------------------------------|-------------------|--|-------------|
| 0.50 x 1.25 x 0.050" (12.7 x 31.8 x 1.3 mm)<br>  | PA, PE,<br>CA, NA    | Polyimide                                    | -73 to 200°C<br>-100 to 392°F  | AWG<br>26,<br>PTFE<br>insu-<br>lated | 0.17 sec.         | Easy motor<br>installations                                    | S3238       |
| 0.375 x 4.00 x 0.075" (9.5 x 101.6 x 1.9 mm)<br> | PB22<br>PD12<br>PE22 | Silicone<br>rubber w/ poly-<br>imide backing | -62 to 220°C<br>-80 to 428°F   |                                      | 0.6 sec.          | Platinum PD accuracy   | S34<br>S386 |
| 0.375 x 4.00 x 0.065" (9.5 x 101.6 x 1.7 mm)<br> | FA                   | Polyimide                                    | -200 to 200°C<br>-328 to 392°F |                                      | 0.2 sec.          | Wire-wound nickel-iron<br>for high resistance, thin<br>element | S35         |
|   | FA                   | Mylar  | -100 to 150°C<br>-148 to 302°F |                                      | 0.3 sec.          | Wire-wound<br>nickel-iron, low cost                            | S2          |

Notes: T<sub>max</sub> is measured over the lead bulge.

\*Time constant is in water at 1 m/sec.

Refer to Sensing Elements Table on Page 10-4

## Specification and order options

|                                  |  |
|----------------------------------|--|
| S34                              | Model number from table (except S3238)   |
| PB22                             | Sensing element from table   |
| Y                                | Number of leads:<br>Y = 2 leads<br>Z = 3 leads (required on CA)<br>X = 4 leads (PD only) |
| 36                               | Lead length in inches: 36" stocked (42" on S2)   |
| A                                | Adhesive backing:<br>A = No adhesive<br>B = Pressure-sensitive adhesive (PSA)            |
| S34PB22Y36A = Sample part number |  |

Notes: PSA reduces temperature range to -20 to 177°C (-4 to 350°F) and adds 0.005" (0.1 mm) to thickness.

## Model S3238

Model S3238 is specially designed to sense **stator** temperatures in motors and generators. An alternative to the "stick" sensors, the S3238 mounts on the end turns of stator windings and provides an easy way to add overtemperature protection when the stator is not being rewound.

## S3238 specification and order options

|                                    |  |
|------------------------------------|--|
| S3238                              | Model number S3238   |
| PA                                 | Sensing element from table   |
| Y                                  | Number of leads:<br>Y = 2 leads (not available on CA)<br>Z = 3 leads X = 4 leads |
| T                                  | Lead insulation:<br>T = PTFE K = polyimide<br>TS = SS braid over PTFE            |
| 36                                 | Lead length in inches: 36" stocked   |
| U                                  | Lead configuration:<br>T = Twisted U = Untwisted                                 |
| A                                  | Adhesive backing:<br>A = No adhesive<br>B = Pressure-sensitive adhesive (PSA)    |
| S3238PAYT36UA = Sample part number |  |



## STOCKED PARTS

| Model # | Sensor<br>Insulation                      | Temperature<br>Range             | Time<br>Constant | Sensing<br>Element | # of<br>Leadwires | Leadwire<br>Insulation | Lead<br>Length | Pressure Sensitive<br>Adhesive Backing | Stock Part #  |
|---------|---|----------------------------------|------------------|--------------------|-------------------|------------------------|----------------|--|---------------|
| S3238   | Polyimide                                 | -73 to 200° C<br>-100 to 392° F  | 0.17 Sec         | PA                 | 3                 | PTFE                   | 96"            | No                                     | S3238PAZT96UA |
|         |   |                                  |                  | NA                 | 3                 | PTFE                   | 96"            | No                                     | S3238PAZT36UA |
|         |   |                                  |                  | CA                 | 3                 | PTFE                   | 96"            | No                                     | S3238NAZT96UA |
|         |   |                                  |                  | CA                 | 3                 | PTFE                   | 96"            | No                                     | S3238CAZT96UA |
| S34     | Silicone Rubber with<br>Polyimide Backing | -62 to 220° C<br>-100 to 392° F  | 0.6 Sec          | PB22               | 3                 | PTFE                   | 36"            | No                                     | S34PB22Z36A   |
| S386    | Silicone Rubber with<br>Polyimide Backing | -62 to 220° C<br>-100 to 392° F  | 0.6 Sec          | PD12               | 3                 | PTFE                   | 36"            | No                                     | S386PD12Z36A  |
|         |   |                                  |                  | PE22               | 2                 | PTFE                   | 96"            | No                                     | S386PE22Y96A  |
| S35     | Polyimide                                 | -200 to 200° C<br>-328 to 392° F | 0.2 Sec          | FA                 | 2                 | PTFE                   | 36"            | No                                     | S35FAY36A     |

Note: Available up to 10 pieces or contact Minco Customer Service

Specifications subject to change

