## STRIP HEATERS

# SEAMLESS INCOLOY SHEATH **STRIP HEATERS**

NS and NSL Series Starts at



- ✓ 1.9 cm (¾") Wide, **High Temperature**
- Rugged, Reliable, **Premium Quality**
- ✓ 500 to 3000 Watt
- 2 Terminals at One End Seamless Construction

### **FEATURES**

Strip-heater advantages for highertemperature applications are offered by NS series. The heater design, materials and construction give long life for given power densities. The Incoloy sheath encloses nickelchromium resistance wire embedded in a densely compacted refractory material selected for dielectric insulation value and good heat conduction to the sheath. The small cross-section is often an advantage where space is a factor.

### Clamp-on Temperatures to 1200°F

Maximum work temperature depends on the watt density of the heater. (Above right) gives a few examples of work temperatures at different watt densities.

#### Mounting

The flat top and bottom surfaces may be flush mounted or sandwiched between two heatconducting metal parts. Straight heaters can be mounted on surfaces curved to 15 cm (6") inside radius or larger. The heater may be field bent to minimum 8 cm (3") inside radius. Standard strip heater clamps and clamping bands may be used for mounting.

### In Free or Forced Air, Sheath Temperature to 1500°F Maximum work temperature

depends on the watt density of

NS-1505/120, \$101, shown smaller than actual size. 1½ (3.8) 2% (5.4) NS Series Incoloy |Sheath 0 **NSL** Series 1½ (3.8) Dimensions: In (cm)

the heater. Table 1 (below) gives a few examples of work temperatures at different watt densities.

**Optional Features Available** Terminal end bend of 15°-for clearing terminal block when mounted on a flat surface. \$15. Add suffix "-TERMINAL BEND" to model number.

#### Seal welding end opposite terminals.

### Max Work Temperature °F

| Application                           |     | 20 W/in <sup>2</sup> | 10 W/in <sup>2</sup> |
|---------------------------------------|-----|----------------------|----------------------|
| Clamp-on                              | 300 | 750                  | 950                  |
| Clamp-on<br>Convection<br>Air Heating |     |                      |                      |
| Air Heating                           | 950 | 1200                 | 1350                 |
|                                       |     |                      |                      |

### SPECIFICATIONS

Sheath Material: Incoloy Max Sheath Temp: 399°C (1500°F) Power: 120, 240 or 480 Vac **Minimum Inside Bend Radius:** 76 mm (3")

### MOST POPULAR MODELS HIGHLIGHTED!

| Dimensio                             | mension: Inches (cm) NS Series-Incoloy Sheath |       |                    |             |       | NSL Series–10" Wire Type Leads |       |             |
|--------------------------------------|-----------------------------------------------|-------|--------------------|-------------|-------|--------------------------------|-------|-------------|
| Α                                    | В                                             | Watts | W/In <sup>2†</sup> | Model No.   | Price | Model No.                      | Price | Wt. (lb) kg |
| 12½(32)                              | 8%(23)                                        | 500   | 32                 | NS-1205/**  | \$94  | NSL-1205/**                    | \$118 | .63 (.28)   |
| 13¾(35)                              | 101/8 (26)                                    | 500   | 28                 | NS-1405/**  | 99    | NSL-1405/**                    | 124   | .68 (.30)   |
| 151/16 (39)                          | 1113/16 (30)                                  | 500   | 24                 | NS-1505/**  | 101   | NSL-1505/**                    | 125   | .73 (.33)   |
| <b>17</b> <sup>13</sup> ⁄16 (45)     | 14¾ (36)                                      | 750   | 30                 | NS-1807/**  | 108   | NSL-1807/**                    | 132   | .90 (.40)   |
| 18½(47)                              | 14% (38)                                      | 1000  | 38                 | NS-1801/**  | 108   | NSL-1801/*                     | 132   | .93 (.42)   |
| 19% (49)                             | 15¾(40)                                       | 1000  | 36                 | NS-1901/*   | 115   | NSL-1901/*                     | 139   | 1.0 (.45)   |
| 21 <sup>7</sup> /16 (54)             | 1713/16 (45)                                  | 1100  | 35                 | NS-2001/**  | 120   | NSL-2001/*                     | 143   | 1.1 (49)    |
| 23¾(60)                              | 201/8 (51)                                    | 1200  | 34                 | NS-2401/*   | 121   | NSL-2401/*                     | 147   | 1.2 (.54)   |
| 25¼ (64)                             | 21%(55)                                       | 1300  | 34                 | NS-2501/*   | 129   | NSL-2501/*                     | 149   | 1.25 (.56)  |
| 2615/16 (68)                         | 235/16 (59)                                   | 1400  | 34                 | NS-2601/**  | 131   | NSL-2601/*                     | 152   | 1.30 (.59)  |
| 30 <sup>3</sup> / <sub>16</sub> (77) | 26% (67)                                      | 1500  | 32                 | NS-3015/*   | 141   | NSL-3015/*                     | 163   | 1.52 (.68)  |
| 3315/16 (86)                         | 305/16 (77)                                   | 1500  | 28                 | NS-3301/**  | 153   | NSL-3301/*                     | 175   | 1.68 (.76)  |
| 36% (92)                             | 32¾ (83)                                      | 1850  | 32                 | NS-3601/*   | 164   | NSL-3601/*                     | 186   | 1.85 (.83)  |
| 39 (99)                              | 35% (90)                                      | 2000  | 32                 | NS-3802/*   | 168   | NSL-3802/*                     | 192   | 2.00 (.90)  |
| 40¾ (104)                            | 37½ (94)                                      | 2100  | 32                 | NS-4302/*   | 185   | NSL-4302/*                     | 205   | 2.13 (.96)  |
| 51%(130)                             | 47¾(121)                                      | 2700  | 32                 | NS-4827/**  | 250   | NSL-4827/*                     | 275   | 2.7 (.12)   |
| 54 (138)                             | 50% (128)                                     | 3000  | 34                 | NS-5403/*** | 285   | NSL-5403/***                   | 305   | 2.75 (.12)  |

\*\* 120 or 240 Vac only. \*\*\* 240 or 480 Vac only.

<sup>†</sup> To determine maximum allowable watt density, see Figures C-8 to C-10 (page 80).

Ordering Examples: NS-2601/240, seamless Incoloy sheath, \$152.

NSL-1205/120, seamless 10" wire type leads, \$118.

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