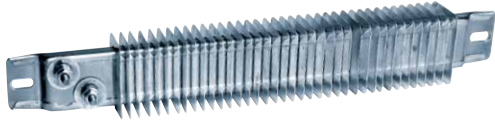


Finned Strip Heater - FS Series

FS Series strip heaters have two offset bolt type terminals at one end.



Aluminum Steel Sheath

The entire heater assembly is encased in an aluminized steel sheath and is compressed under high pressure. The sheath provides both corrosion resistance and an attractive appearance. Aluminized steel strip heaters are suitable for applications where the maximum sheath temperature does not exceed 1000°F (538°C).

Fins are 0.022" (0.56 mm) thick cadmium plated steel with a nominal four fins per inch. Fins are approximately 2" (51 mm) x 1 3/8" (35 mm).

Installation

Standard strip heaters listed are rated at 120V and 240V. All strip heaters can be used on voltages lower than listed for reduced wattage, and some designs can also be used on higher voltages – check factory.

Whenever voltage to ground exceeds 300V, secondary insulators must be used. See Special Features on page A30.

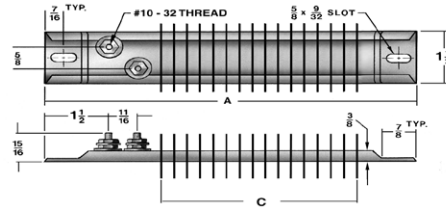


Figure 55

Table 18 – Type FS Finned Strip Heaters - Terminals at One End/Aluminized Steel Sheath

| | 'A' Dim. | | 'C' Dim. | | Watts | Watts Per | | Caloritech™ Cat. No. | | Caloritech™ Part No. | | Chromalox Cat. No. | |
|-------------------|----------|--------|----------|------|-------|-----------------|-----------------|----------------------|--------|----------------------|----------|--------------------|---------|
| | in. | mm | in. | mm | | in ² | cm ² | 120V | 240V | 120V | 240V | 120V | 240V |
| High Watt Density | 10 1/2 | 267 | 6 1/4 | 159 | 725 | 29.7 | 4.6 | FS2001 | FS2002 | — | — | OTF-100 | OTF-100 |
| | 11 3/4 | 298 | 7 1/2 | 191 | 900 | 31.0 | 4.8 | FS2011 | FS2012 | — | — | OTF-120 | OTF-120 |
| | 14 | 356 | 9 3/4 | 248 | 1100 | 29.3 | 4.5 | FS2021 | FS2022 | — | — | OTF-140 | OTF-140 |
| | 15 | 381 | 10 3/4 | 273 | 1250 | 30.3 | 4.7 | FS2031 | FS2032 | — | — | — | OTF-150 |
| | 17 3/4 | 451 | 13 1/2 | 343 | 1550 | 30.1 | 4.7 | FS2041 | FS2042 | — | — | — | OTF-180 |
| | 19 1/2 | 495 | 15 1/4 | 387 | 1700 | 29.2 | 4.5 | FS2051 | FS2052 | — | — | — | OTF-190 |
| | 21 | 533 | 16 3/4 | 425 | 1900 | 29.8 | 4.6 | FS2061 | FS2062 | — | — | — | OTF-210 |
| | 23 1/2 | 597 | 19 1/4 | 489 | 2200 | 30.1 | 4.7 | FS2071 | FS2072 | — | — | — | OTF-240 |
| | 25 1/2 | 648 | 21 1/4 | 540 | 2400 | 29.8 | 4.6 | — | FS2142 | — | — | — | OTF-250 |
| | 26 3/4 | 679 | 22 1/2 | 572 | 2500 | 30.1 | 4.7 | — | FS2082 | — | — | — | OTF-260 |
| | 30 1/4 | 768 | 26 | 660 | 2800 | 28.4 | 4.4 | — | FS2092 | — | — | — | OTF-300 |
| | 33 1/2 | 851 | 29 1/4 | 743 | 3150 | 28.5 | 4.4 | — | FS2102 | — | — | — | OTF-330 |
| | 35 3/4 | 908 | 31 1/2 | 800 | 3450 | 29.0 | 4.5 | — | FS2112 | — | — | — | OTF-360 |
| 38 1/2 | 978 | 34 1/4 | 870 | 3700 | 28.6 | 4.4 | — | FS2122 | — | — | — | OTF-380 | |
| 42 1/4 | 1073 | 38 | 965 | 4150 | 28.9 | 4.5 | — | FS2132 | — | — | — | OTF-430 | |
| Low Watt Density | 7 1/4 | 184 | 3 | 76 | 150 | 12.3 | 1.9 | FS1001 | FS1002 | *SS1041F | *SS1052F | — | — |
| | 8 | 203 | 3 3/4 | 95 | 175 | 11.7 | 1.8 | FS1011 | FS1012 | *SS1081F | *SS1092F | — | — |
| | 10 1/2 | 267 | 6 1/4 | 159 | 350 | 14.4 | 2.2 | FS1021 | FS1022 | — | — | OTF-10 | OTF-10 |
| | 11 3/4 | 298 | 7 1/2 | 191 | 500 | 17.2 | 2.7 | FS1031 | FS1032 | *SS2161F | *SS2172F | OTF-12 | OTF-12 |
| | 14 | 356 | 9 3/4 | 248 | 500 | 13.3 | 2.1 | FS1041 | FS1042 | *SS2181F | *SS2192F | — | OTF-14 |
| | 15 | 381 | 10 3/4 | 273 | 500 | 12.1 | 1.9 | FS1051 | FS1052 | *SS2201F | *SS2212F | — | — |
| | 17 3/4 | 451 | 13 1/2 | 343 | 1000 | 19.4 | 3.0 | FS1061 | FS1062 | *SS2281F | *SS2292F | OTF-18 | OTF-18 |
| | 19 1/2 | 495 | 15 1/4 | 387 | 1000 | 17.2 | 2.7 | FS1071 | FS1072 | *SS2321F | *SS2332F | — | OTF-19 |
| | 21 | 533 | 16 3/4 | 425 | 1000 | 15.7 | 2.4 | FS1081 | FS1082 | — | — | — | OTF-21 |
| | 23 1/2 | 597 | 19 1/4 | 489 | 1000 | 13.7 | 2.1 | FS1091 | FS1092 | *SS2401F | *SS2412F | — | OTF-24 |
| | 25 1/2 | 648 | 21 1/4 | 540 | 1250 | 15.5 | 2.4 | FS1151 | FS1152 | — | — | — | OTF-25 |
| | 26 1/2 | 679 | 22 1/2 | 572 | 1350 | 15.8 | 2.4 | FS1101 | FS1102 | — | — | — | OTF-26 |
| | 30 1/4 | 768 | 26 | 660 | 1500 | 15.2 | 2.4 | FS1111 | FS1112 | — | — | — | OTF-30 |
| | 33 1/2 | 851 | 29 1/4 | 743 | 1700 | 15.4 | 2.4 | FS1121 | FS1122 | — | — | — | — |
| | 35 3/4 | 908 | 31 1/2 | 800 | 1800 | 15.1 | 2.3 | FS1131 | FS1132 | — | — | — | OTF-36 |
| 38 1/2 | 978 | 34 1/4 | 870 | 2000 | 15.5 | 2.4 | — | FS1162 | — | — | — | OTF-38 | |
| 42 1/4 | 1073 | 38 | 965 | 2100 | 14.6 | 2.3 | — | FS1142 | — | — | — | — | |

Note

* Assembly stock (2 days)

To Order Specify

- Quantity
- Voltage
- Special features
- Catalog number
- Wattage

Special Features

Special Wattage, Voltage and Lengths

Check factory if you require a custom designed heater.

Lengthwise Bending

Consult factory if lengthwise bending is required.

Finned Strip Heater - FS Series

Type SS strip heaters (with offset terminals) can be supplied with fins on request. See Finned Strip Heater on page A29 for standard listings.

Secondary Insulators

Whenever the voltage to ground on the strip heater exceeds 300V secondary insulators must be used.

Secondary Insulators – Catalog Number SA1014

This insulator shown is for use where mounting space is limited to 1/2" (12.7 mm) longer than the strip heater. Strip heater mounting tabs must be factory punched to install insulator.

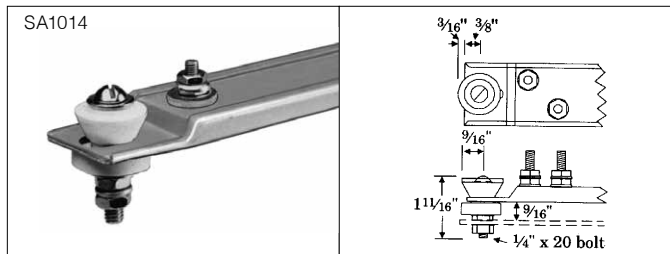


Figure 56

Secondary Insulators – Catalog Number SA1024

This secondary insulator is for use with stock strip heaters. The mounting space must be 3" (76 mm) longer than the strip heater.

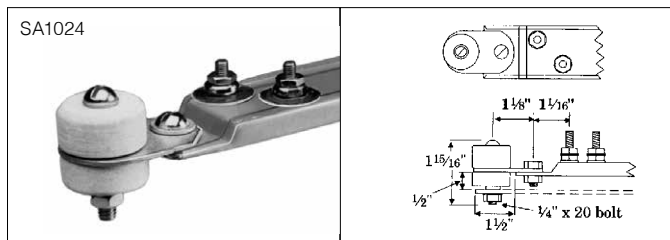


Figure 57

Ceramic Post Terminal Cover – Catalog Number BA0002

For heaters with standard 10-32 threaded terminals at both ends or with offset terminals at one end, these ceramic post terminal covers may be used with insulated wiring to provide protection against electrical shock.



Figure 58

Brass Bus Bar - Catalog Number CA1003

Perforated brass bus bar provides a sturdy conductor for connecting numerous strip heaters in series or parallel. Bus bars may be stacked for higher current-carrying capacities.

Table 19 – Brass Bus Bar

| Ambient Temperature °F (°C) | Current Capacity (Amps) | |
|--------------------------------|-------------------------|-------|
| | 1 Bus | 2 Bus |
| 70 (21) | 36 | 50 |
| 250 (121) | 32 | 45 |
| 500 (260) | 26 | 36 |
| 750 (399) | 20 | 28 |

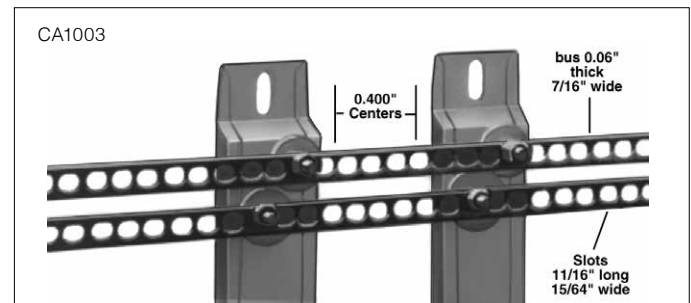


Figure 59

Terminal Box – Catalog Number SA1054

For type SS strip heaters the box is equipped with BX cable fitting and can be mounted in any of four directions.

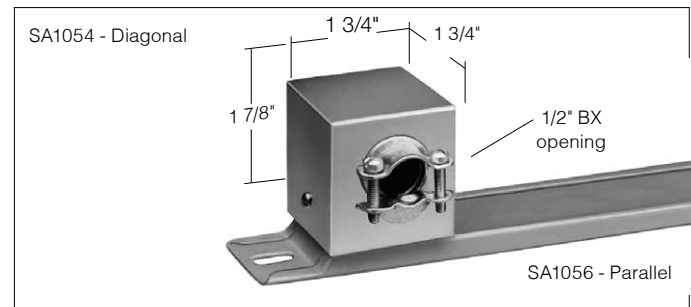


Figure 60

Surface Clamp—Catalog Number SA1044

This heavy-gauge, nickel-plated steel clamp is used to mount strip heaters securely to broad surfaces such as tank walls, platens, dies. Threaded 3/8" (9.5 mm) diameter studs must be first welded, brazed or threaded into the work surfaces.

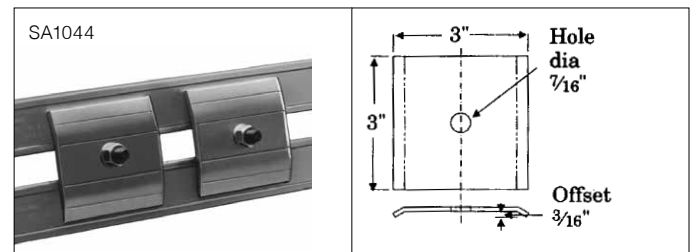


Figure 61