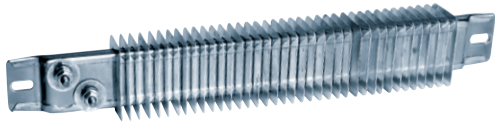


Finned Strip Heater - FS Series

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.

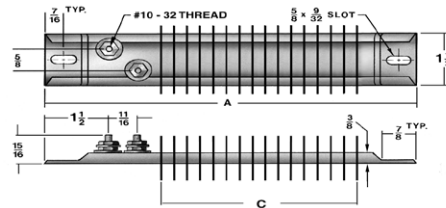


Figure 55

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		in²	cm²	120V	240V	120V	240V	120V	240V
High Watt Density	10 ½	267	6 ¼	159	725	29.7	4.6	FS2001	FS2002	—	—	OTF-100	OTF-100
	11 ¾	298	7 ½	191	900	31.0	4.8	FS2011	FS2012	—	—	OTF-120	OTF-120
	14	356	9 ¾	248	1100	29.3	4.5	FS2021	FS2022	—	—	OTF-140	OTF-140
	15	381	10 ¾	273	1250	30.3	4.7	FS2031	FS2032	—	—	—	OTF-150
	17 ¾	451	13 ½	343	1550	30.1	4.7	FS2041	FS2042	—	—	—	OTF-180
	19 ½	495	15 ¼	387	1700	29.2	4.5	FS2051	FS2052	—	—	—	OTF-190
	21	533	16 ¾	425	1900	29.8	4.6	FS2061	FS2062	—	—	—	OTF-210
	23 ½	597	19 ¼	489	2200	30.1	4.7	FS2071	FS2072	—	—	—	OTF-240
	25 ½	648	21 ¼	540	2400	29.8	4.6	—	FS2142	—	—	—	OTF-250
	26 ¾	679	22 ½	572	2500	30.1	4.7	—	FS2082	—	—	—	OTF-260
	30 ¼	768	26	660	2800	28.4	4.4	—	FS2092	—	—	—	OTF-300
	33 ½	851	29 ¼	743	3150	28.5	4.4	—	FS2102	—	—	—	OTF-330
	35 ¾	908	31 ½	800	3450	29.0	4.5	—	FS2112	—	—	—	OTF-360
	38 ½	978	34 ¼	870	3700	28.6	4.4	—	FS2122	—	—	—	OTF-380
42 ¼	1073	38	965	4150	28.9	4.5	—	FS2132	—	—	—	OTF-430	
Low Watt Density	7 ¼	184	3	76	150	12.3	1.9	FS1001	FS1002	*SS1041F	*SS1052F	—	—
	8	203	3 ¾	95	175	11.7	1.8	FS1011	FS1012	*SS1081F	*SS1092F	—	—
	10 ½	267	6 ¼	159	350	14.4	2.2	FS1021	FS1022	—	—	OTF-10	OTF-10
	11 ¾	298	7 ½	191	500	17.2	2.7	FS1031	FS1032	*SS2161F	*SS2172F	OTF-12	OTF-12
	14	356	9 ¾	248	500	13.3	2.1	FS1041	FS1042	*SS2181F	*SS2192F	—	OTF-14
	15	381	10 ¾	273	500	12.1	1.9	FS1051	FS1052	*SS2201F	*SS2212F	—	—
	17 ¾	451	13 ½	343	1000	19.4	3.0	FS1061	FS1062	*SS2281F	*SS2292F	OTF-18	OTF-18
	19 ½	495	15 ¼	387	1000	17.2	2.7	FS1071	FS1072	*SS2321F	*SS2332F	—	OTF-19
	21	533	16 ¾	425	1000	15.7	2.4	FS1081	FS1082	—	—	—	OTF-21
	23 ½	597	19 ¼	489	1000	13.7	2.1	FS1091	FS1092	*SS2401F	*SS2412F	—	OTF-24
	25 ½	648	21 ¼	540	1250	15.5	2.4	FS1151	FS1152	—	—	—	OTF-25
	26 ½	679	22 ½	572	1350	15.8	2.4	FS1101	FS1102	—	—	—	OTF-26
	30 ¼	768	26	660	1500	15.2	2.4	FS1111	FS1112	—	—	—	OTF-30
	33 ½	851	29 ¼	743	1700	15.4	2.4	FS1121	FS1122	—	—	—	—
	35 ¾	908	31 ½	800	1800	15.1	2.3	FS1131	FS1132	—	—	—	OTF-36
	38 ½	978	34 ¼	870	2000	15.5	2.4	—	FS1162	—	—	—	OTF-38
42 ¼	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.

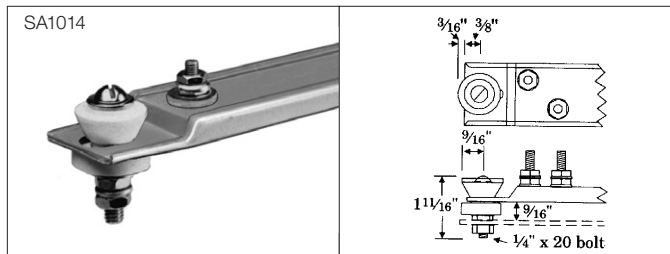


Figure 56

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.

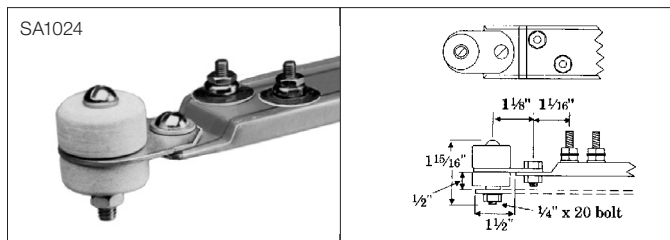


Figure 57

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

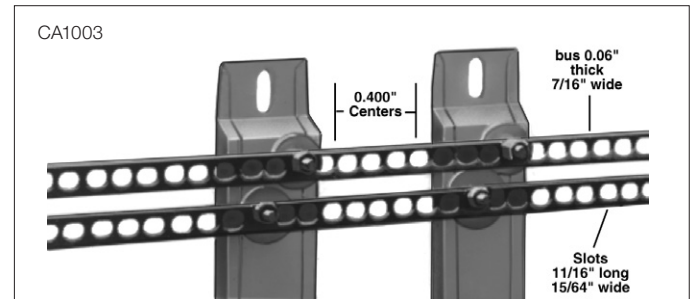


Figure 59

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.

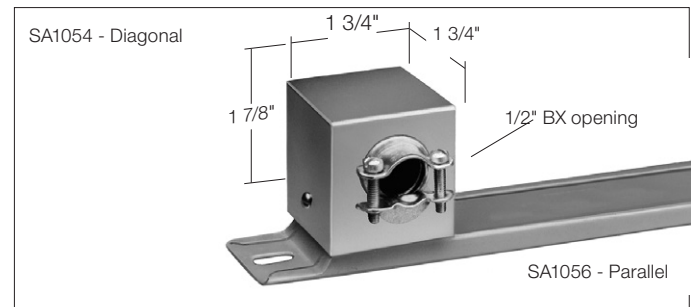


Figure 60

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.

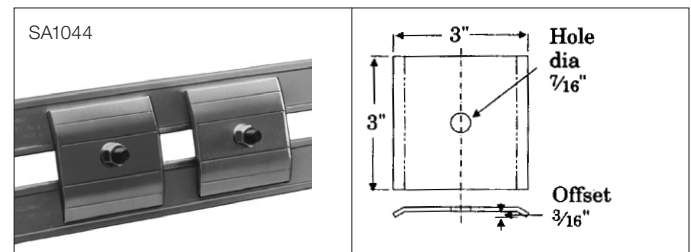


Figure 61