

## Strip Heaters

### 375 Strip

Aptly named for its 0.375 inch (9.5 mm) thickness, the Watlow 375 strip is a rugged heater capable of both high temperatures and high watt densities.

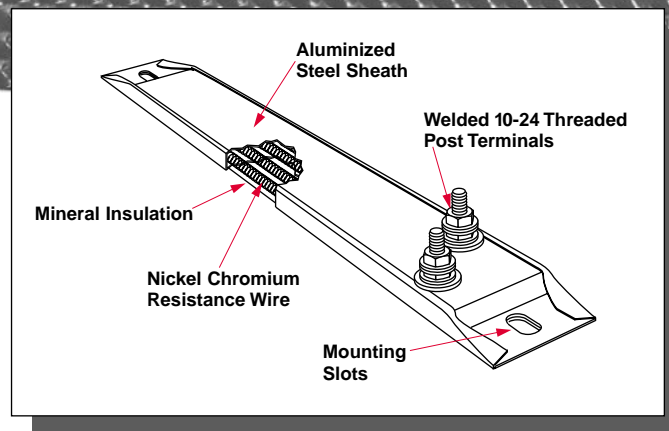
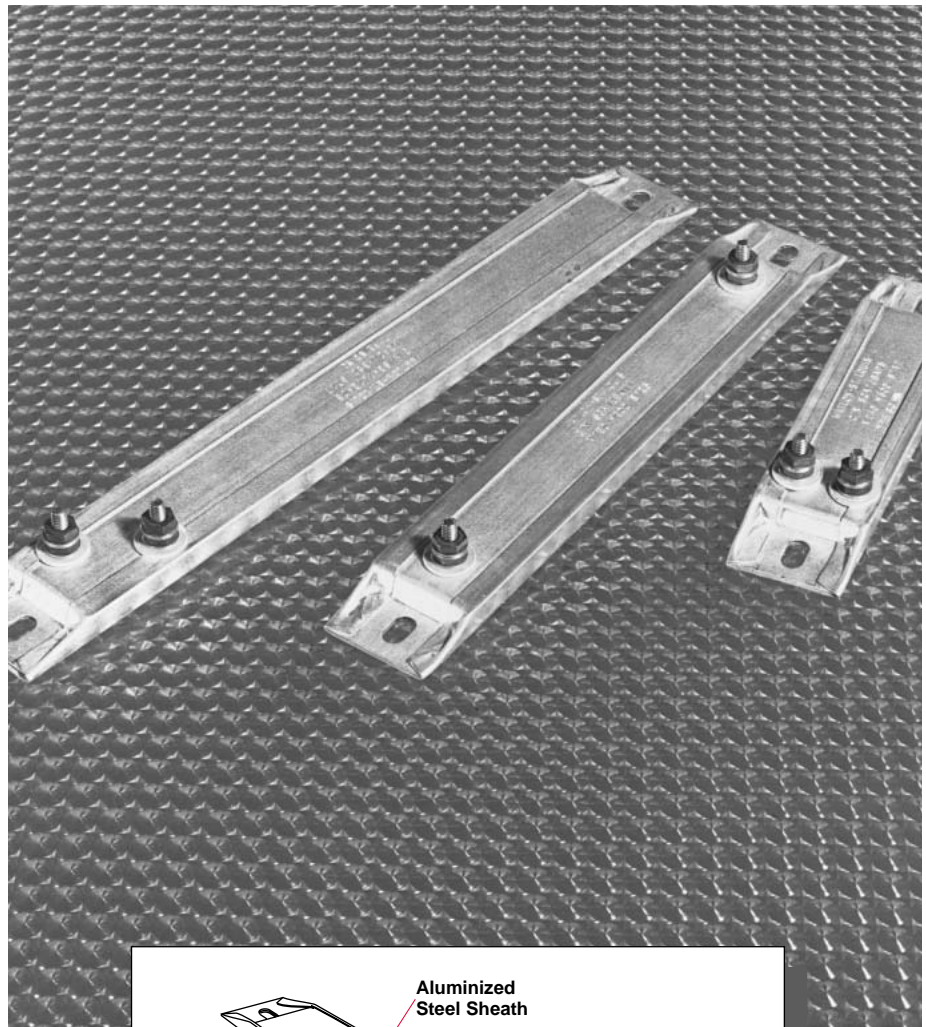
Its ruggedness comes from the design and use of choice materials. Watlow begins construction by accurately placing a coiled, nickel-chrome element wire in the center of the heater. The element wire is then embedded in MgO-based insulation ... compacted into a solid mass that results in excellent heat conductivity and high dielectric strength. Finally, the heater is enclosed in aluminized steel sheathing.

#### **Performance Capabilities**

- Aluminized steel sheath temperatures to 1100°F (595°C)
- Stainless steel sheath temperatures to 1200°F (650°C)
- Watt densities to 130 W/in<sup>2</sup> (20.2 W/cm<sup>2</sup>)
- UL® approved to 240V~(ac) (File No. E52951)
- CSA approved to 600V~(ac) (File No. LR7392)

#### **Features and Benefits**

- **Nickel-chrome element wire** is centered in the heater to uniformly heat the strip.
- **Aluminized steel sheath** operates at higher temperatures and resists corrosion better than iron-sheathed heaters.
- **Optional 430 stainless steel sheath** is available for applications where temperatures reach 1200°F (650°C).
- **Post terminals, welded to the element wire**, produce strong, trouble-free connections.
- **Rigid 3/8 inch (9.5 mm) thick design** enables the 375 strip heater to fit into many existing applications.



- **Available dimensions** are 1½ inches (38 mm) wide, and 5½ (140 mm) to 48 inches (1220 mm) long.
- **Next day shipment is available on 106 in-stock models** in popular sizes and ratings.

#### **Applications**

- Food warming
- Freeze and moisture protection
- Tank and platen heating
- Packaging
- Dies and mold heating
- Autoclaves
- Ovens

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### Applications and Technical Data

#### Calculating Watt Density

Use the *Maximum Allowable Watt Density* graphs and formulas to ensure that the allowable watt density for the heater will not be exceeded in your application.

**Watt density is calculated for one side of the heater only.**

#### Formulas:

$$\text{Watt Density} = \frac{\text{Wattage}}{\text{Heated Area}}$$

Heated Area

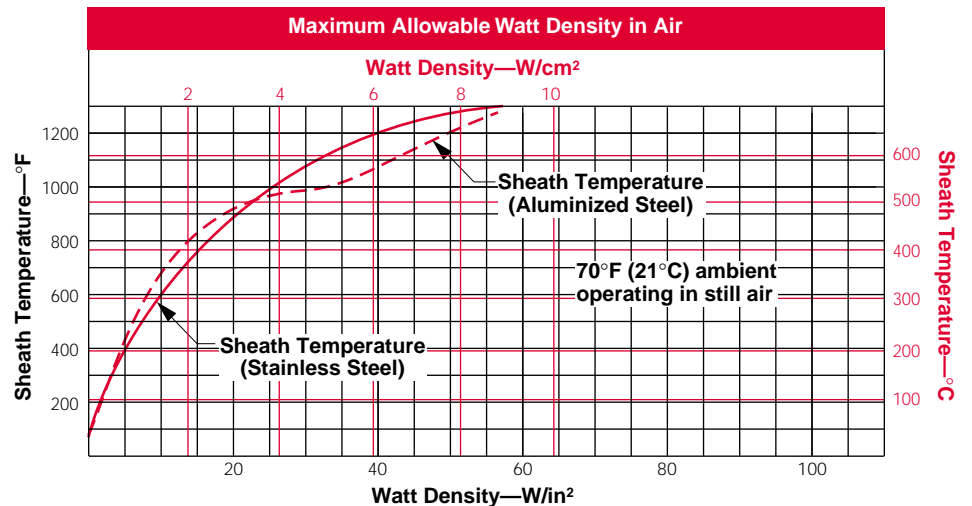
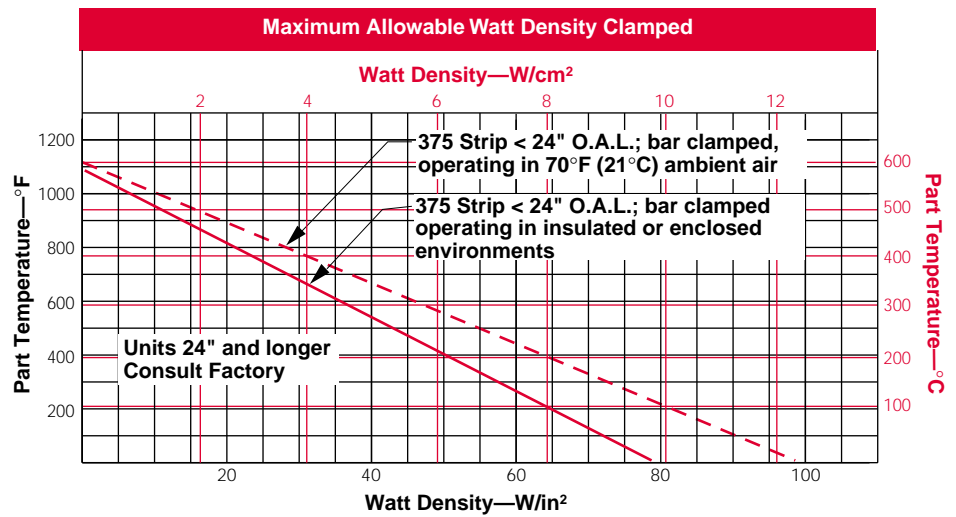
$$\begin{aligned} \text{(Offset Terminals)} &= [\text{Overall Length (A)} \times 1.5 \text{ in}] - 6 \text{ in}^2 \\ &= [\text{Overall Length (A)} \times 38.1 \text{ mm}] - 38.7 \text{ cm}^2 \end{aligned}$$

Heated Area

$$\begin{aligned} \text{(Parallel Terminals)} &= [\text{Overall Length (A)} \times 1.5 \text{ in}] - 4.7 \text{ in}^2 \\ &= [\text{Overall Length (A)} \times 38.1 \text{ mm}] - 30.3 \text{ cm}^2 \end{aligned}$$

Heated Area

$$\begin{aligned} \text{(One-on-One Terminals)} &= [\text{Overall Length (A)} \times 1.5 \text{ in}] - 6.4 \text{ in}^2 \\ &= [\text{Overall Length (A)} \times 38.1 \text{ mm}] - 41.3 \text{ cm}^2 \end{aligned}$$



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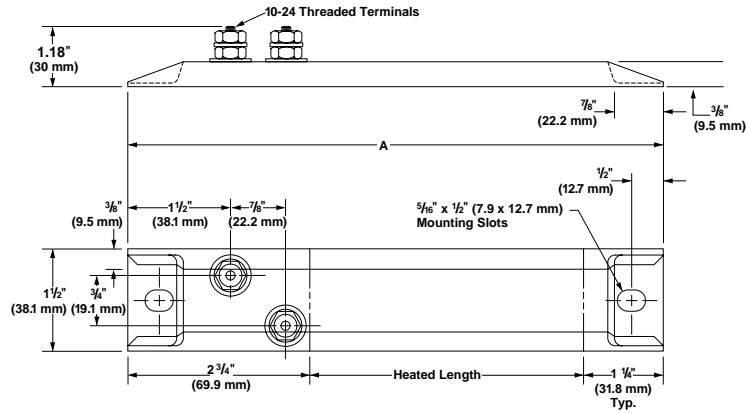
## 375 Strip

### Termination Options

\* Tab removal available from stock or manufactured.

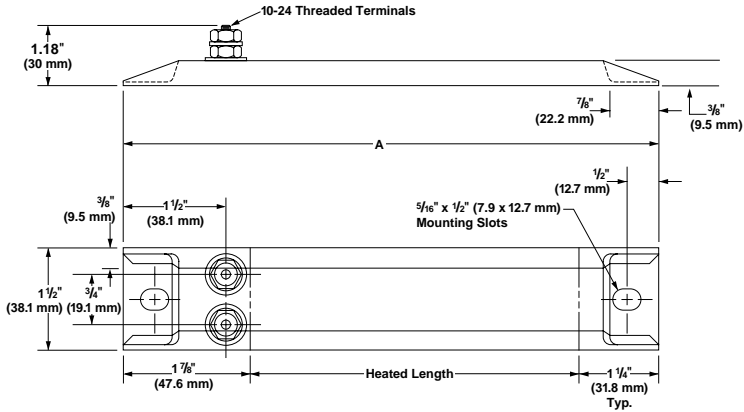
#### Offset Terminals\*

Two 10-24 threaded post terminals are offset from each other on the same end.



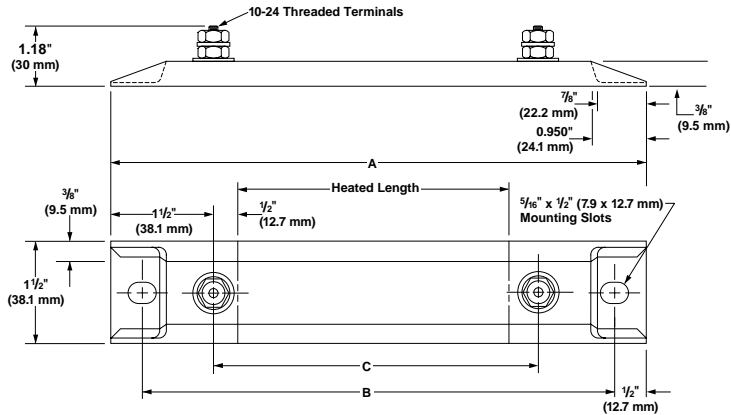
#### Parallel Terminals\*

Two 10-24 threaded post terminals are used; both terminals on one end.



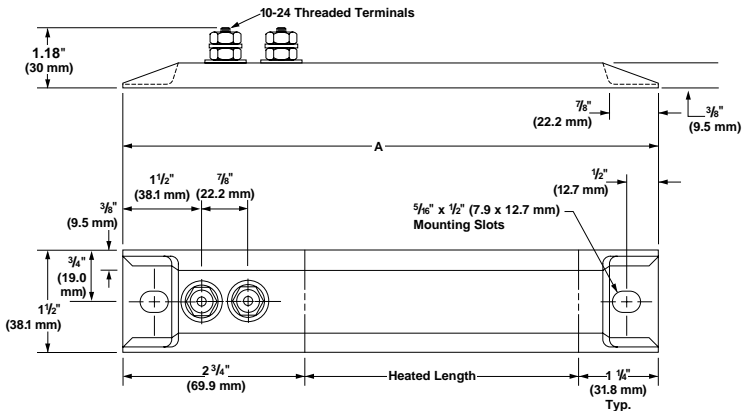
#### One-on-One Terminals\*

Two 10-24 threaded post terminals are placed one on each end.



#### In-Line Terminals\*

Two 10-24 threaded post terminals are in-line with each other on the same end.



# Strip Heaters

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### Termination Options

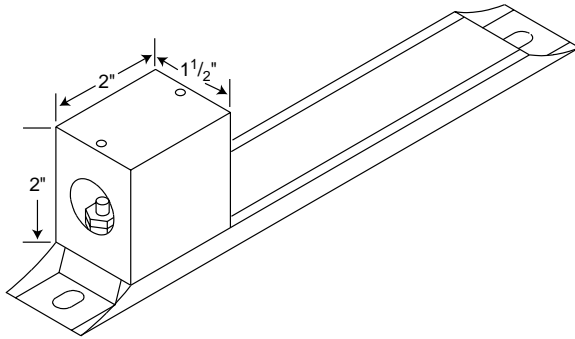
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### Variations

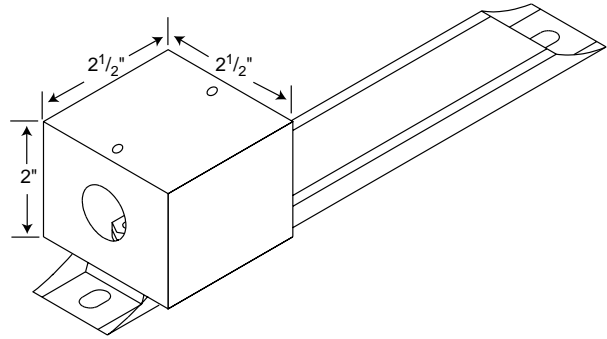
#### Metallic Terminal Boxes

Metallic terminal boxes are available on offset terminals from stock. Terminal boxes act as a safety feature by covering the terminals.

Conduit may be attached to the box through  $\frac{7}{8}$  inch (22 mm) diameter holes in the ends of the box. To order, specify terminal box.



Available in in-line terminals only.

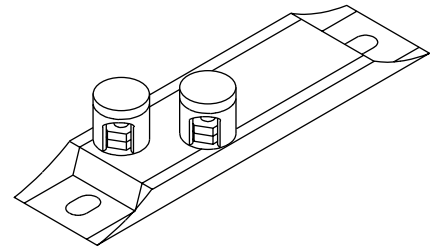


Available on offset terminals from stock and manufactured.

### Accessories

#### Ceramic Terminal Covers

A convenient and economic way to insulate post terminals. Sized for standard length posts. 10-24 screw thread size. These are supplied as an accessory item and shipped separately. Specify **Z-4918** and quantity.



#### How to Order

To order your **stock** 375 strip heater, specify:

- Quantity
- Watlow code number
- Removal of mounting tabs, if desired

If stock units do not meet application needs, Watlow can manufacture 375 strip heaters to special requirements.

For **made-to-order** units, please specify, in addition to above information:

- Width
- Heater length, including mounting tabs
- Terminal type (offset, parallel or one-on-one)

#### Availability

**Stock:** Next day shipment

**Made-to-Order:** Please consult your Watlow sales engineer or authorized distributor.

**Note:**  $\frac{5}{16}$  inch (7.9 mm) x  $\frac{1}{2}$  inch (12.7 mm) mounting slots are supplied on all 375 strip heaters. Tabs can be removed upon request. Also, note Watlow code number specifies that the 375 strip heater comes with an aluminized steel sheath. If you require a special sheath material, such as stainless steel, please consult your sales engineer or authorized distributor for material availability.

① Chromalox® and Wellman® part numbers are used as a cross reference to help you select the equivalent Watlow code number. Chromalox® sizes 27 inches and longer, and all Wellman® sizes, will have mounting slot center to center distances  $\frac{1}{8}$  inch less than Watlow spacing.

Strip Heaters

F.O.B.: St. Louis, Missouri

375 Strip

Width in (mm)	Length in (mm)	Term.	Volts	Power (Watts)	Watt Density W/in <sup>2</sup> (W/cm <sup>2</sup> )	Approx. Net Wt. lbs (kg)	Avail.	Code No.	Chromolox® Code No. ①		Wellman® Code No. ②	
									Rust Resist. Iron Sheath	Chrome Stl. Sheath	Aluminized Steel Sheath	Chrome Stl. Sheath
1½ (38.1)	5½ (139.7)	Parallel	120	125	35 (5.4)	0.4 (0.18)	Stk	SGA1J5JP1	PT-512	—	—	—
	5½ (139.7)	Parallel	120	250	70 (10.8)	0.4 (0.18)	Stk	SGA1J5JP2	—	PT-502	—	—
	6 (153.0)	Parallel	120	150	35 (5.4)	0.4 (0.18)	Stk	SGA1J6AP2	PT-615	—	—	—
	6 (153.0)	Parallel	240	150	35 (5.4)	0.4 (0.18)	Stk	SGA1J6AP3	PT-615	—	—	—
	6 (153.0)	Parallel	120	300	70 (10.8)	0.4 (0.18)	Stk	SGA1J6AP4	—	PT-603	—	—
	6 (153.0)	Parallel	240	300	70 (10.8)	0.4 (0.18)	Stk	SGA1J6AP5	—	PT-603	—	—
	7½ (190.5)	Offset	120	150	29 (4.5)	0.5 (0.23)	Stk	SGA1J7J01	OT-715	—	SS1041	—
	7½ (190.5)	Offset	240	150	29 (4.5)	0.5 (0.23)	Stk	SGA1J7J02	OT-715	—	SS1052	—
	7½ (190.5)	Offset	240	200	38 (5.9)	0.5 (0.23)	Stk	SGA1J7J03	—	OT-702	—	SS2052
	8 (203.2)	Offset	120	150	25 (3.9)	0.5 (0.23)	Stk	SGA1J8A01	OT-815	—	SS1061	—
	8 (203.2)	Offset	240	150	25 (3.9)	0.5 (0.23)	Stk	SGA1J8A05	OT-815	—	SS1072	—
	8 (203.2)	Offset	120	175	29 (4.5)	0.5 (0.23)	Stk	SGA1J8A06	OT-817	—	SS1081	—
	8 (203.2)	Offset	240	175	29 (4.5)	0.5 (0.23)	Stk	SGA1J8A07	OT-817	—	SS1092	—
	8 (203.2)	Offset	120	250	42 (6.5)	0.5 (0.23)	Stk	SGA1J8A02	—	OT-802	—	SS2061
	8 (203.2)	Offset	240	250	42 (6.5)	0.5 (0.23)	Stk	SGA1J8A08	—	OT-802	—	SS2072
	8 (203.2)	Offset	120	400	67 (10.4)	0.5 (0.23)	Stk	SGA1J8A09	—	OT-804	—	SS2081
	8 (203.2)	Offset	240	400	67 (10.4)	0.5 (0.23)	Stk	SGA1J8A010	—	OT-804	—	SS2092
	8 (203.2)	Offset	120	500	83 (12.9)	0.5 (0.23)	Stk	SGA1J8A03	—	—	—	—
	8 (203.2)	Offset	240	500	83 (12.9)	0.5 (0.23)	Stk	SGA1J8A04	—	—	—	—
	8 (203.2)	1-on-1	120	150	24 (3.7)	0.5 (0.23)	Stk	SGA1J8AT1	S-815	—	SD1021	—
	8 (203.2)	1-on-1	240	150	24 (3.7)	0.5 (0.23)	Stk	SGA1J8AT2	S-815	—	SD1032	—
	9½ (241.3)	1-on-1	120	200	23 (3.6)	0.6 (0.27)	Stk	SGA1J9JT1	S-920	—	SD1041	—
	10½ (266.7)	Offset	120	250	26 (4.0)	0.7 (0.32)	Stk	SGA1J10J01	OT-1025	—	SS1101	—
	10½ (266.7)	Offset	240	250	26 (4.0)	0.7 (0.32)	Stk	SGA1J10J02	OT-1025	—	SS1102	—
	10½ (266.7)	Offset	120	350	36 (5.6)	0.7 (0.32)	Stk	SGA1J10J08	—	OT-1003	—	SS2101
	10½ (266.7)	Offset	240	350	36 (5.6)	0.7 (0.32)	Stk	SGA1J10J05	—	OT-1003	—	SS2112
	10½ (266.7)	Offset	120	400	41 (6.4)	0.7 (0.32)	Stk	SGA1J10J06	—	OT-1004	—	SS2131
	10½ (266.7)	Offset	240	400	41 (6.4)	0.7 (0.32)	Stk	SGA1J10J07	—	OT-1004	—	SS2132
	12 (304.8)	Offset	120	250	21 (3.3)	0.8 (0.32)	Stk	SGA1J12A01	OT-1225	OT-1202	SS1141	—
	12 (304.8)	Offset	240	250	21 (3.3)	0.8 (0.32)	Stk	SGA1J12A02	OT-1225	OT-1202	SS1152	—
	12 (304.8)	Offset	120	350	29 (4.5)	0.8 (0.36)	Stk	SGA1J12A05	—	OT-1203	—	SS2141
	12 (304.8)	Offset	240	350	29 (4.5)	0.8 (0.36)	Stk	SGA1J12A06	—	OT-1203	—	SS2152
	12 (304.8)	Offset	120	500	42 (6.5)	0.8 (0.36)	Stk	SGA1J12A03	—	OT-1205	—	SS2161
	12 (304.8)	Offset	240	500	42 (6.5)	0.8 (0.36)	Stk	SGA1J12A04	—	OT-1205	—	SS2172
	12 (304.8)	1-on-1	120	250	20 (3.1)	0.8 (0.36)	Stk	SGA1J12AT1	S-1225	S-1202	SD1061	SD2071
	12 (304.8)	1-on-1	240	250	20 (3.1)	0.8 (0.36)	Stk	SGA1J12AT2	S-1225	S-1202	SD1072	SD2082
12 (304.8)	1-on-1	240	500	40 (6.2)	0.8 (0.36)	Stk	SGA1J12AT3	—	S-1205	—	SD2122	
14 (355.6)	Offset	120	300	20 (3.1)	0.9 (0.41)	Stk	SGA1J14A02	OT-1430	—	SS1181	—	
14 (355.6)	Offset	240	300	20 (3.1)	0.9 (0.41)	Stk	SGA1J14A01	OT-1430	—	SS1192	—	
14 (355.6)	Offset	120	500	33 (5.1)	0.9 (0.41)	Stk	SGA1J14A03	—	OT-1405	—	SS2181	
14 (355.6)	Offset	240	500	33 (5.1)	0.9 (0.41)	Stk	SGA1J14A04	—	OT-1405	—	SS2192	
14 (355.6)	1-on-1	120	300	20 (3.1)	0.9 (0.41)	Stk	SGA1J14AT1	S-1430	—	SD1131	—	
15¼ (387.4)	Offset	120	325	19 (2.9)	1.0 (0.45)	Stk	SGA1J15E02	OT-1532	—	SS1201	—	
15¼ (387.4)	Offset	240	325	19 (2.9)	1.0 (0.45)	Stk	SGA1J15E03	OT-1532	—	SS1212	—	
15¼ (387.4)	Offset	240	500	30 (4.6)	1.0 (0.45)	Stk	SGA1J15E04	—	OT-1505	—	SS2212	
17½ (454.0)	Offset	120	350	17 (2.6)	1.2 (0.54)	Stk	SGA1J17R04	OT-1835	—	SS1221	SS2221	
17½ (454.0)	Offset	240	350	17 (2.6)	1.2 (0.54)	Stk	SGA1J17R05	OT-1835	—	SS1232	SS2232	
17½ (454.0)	Offset	120	375	18 (2.8)	1.2 (0.54)	Stk	SGA1J17R06	OT-1837	—	SS1241	—	
17½ (454.0)	Offset	240	375	18 (2.8)	1.2 (0.54)	Stk	SGA1J17R07	OT-1837	—	SS1252	—	
17½ (454.0)	Offset	120	500	24 (3.7)	1.2 (0.54)	Stk	SGA1J17R01	OT-1850	—	SS1261	SS2241	
17½ (454.0)	Offset	240	500	24 (3.7)	1.2 (0.54)	Stk	SGA1J17R02	OT-1850	—	SS1272	SS2252	

Strip Heaters

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Wellman® is a registered tradename of Wellman Thermal Systems Corp.  
Chromolox® is a registered tradename of Chromolox Industrial Heaters Products.

# Strip Heaters

F.O.B.: St. Louis, Missouri

## 375 Strip

Width in (mm)	Length in (mm)	Term.	Volts	Power (Watts)	Watt Density W/in <sup>2</sup> (W/cm <sup>2</sup> )	Approx. Net Wt. lbs (kg)	Avail.	Code No.	Chromalox® Code No. ①		Wellman® Code No. ②	
									Rust Resist. Iron Sheath	Chrome Stl. Sheath	Aluminized Steel Sheath	Chrome Stl. Sheath
1½ (38.1)	17½ (454.0)	Offset	120	750	36 (5.6)	1.2 (0.54)	Stk	<b>SGA1J17R09</b>	—	OT-1807	—	SS2261
	17½ (454.0)	Offset	240	750	36 (5.6)	1.2 (0.54)	Stk	<b>SGA1J17R08</b>	—	OT-1807	—	SS2272
	17½ (454.0)	Offset	120	1000	48 (7.4)	1.2 (0.54)	Stk	<b>SGA1J17R010</b>	—	OT-1801	—	SS2281
	17½ (454.0)	Offset	240	1000	48 (7.4)	1.2 (0.54)	Stk	<b>SGA1J17R03</b>	—	OT-1801	—	SS2292
	17½ (454.0)	1-on-1	120	500	24 (3.7)	1.2 (0.54)	Stk	<b>SGA1J17RT1</b>	S-1850	S-1805	SD1211	SD2171
	17½ (454.0)	1-on-1	240	500	24 (3.7)	1.2 (0.54)	Stk	<b>SGA1J17RT2</b>	S-1850	S-1805	SD1222	SD2182
	17½ (454.0)	1-on-1	240	750	35 (5.4)	1.2 (0.54)	Stk	<b>SGA1J17RT3</b>	—	S-1807	—	SD2202
	17½ (454.0)	1-on-1	120	1000	47 (7.3)	1.2 (0.54)	Stk	<b>SGA1J17RT4</b>	—	S-1801	—	SD2211
	17½ (454.0)	1-on-1	240	1000	47 (7.3)	1.2 (0.54)	Stk	<b>SGA1J17RT5</b>	—	S-1801	—	SD2222
	19½ (495.3)	Offset	240	350	15 (2.3)	1.3 (0.59)	Stk	<b>SGA1J19J06</b>	OT-1935	—	SS1301	—
	19½ (495.3)	Offset	120	500	22 (3.4)	1.3 (0.59)	Stk	<b>SGA1J19J07</b>	OT-1950	OT-1905	—	SS2301
	19½ (495.3)	Offset	240	500	22 (3.4)	1.3 (0.59)	Stk	<b>SGA1J19J04</b>	OT-1950	OT-1905	—	SS2312
	19½ (495.3)	Offset	240	750	32 (5.0)	1.3 (0.59)	Stk	<b>SGA1J19J08</b>	—	OT-1907	—	—
	19½ (495.3)	Offset	240	1000	43 (6.7)	1.3 (0.59)	Stk	<b>SGA1J19J01</b>	—	OT-1901	—	SS2332
	19½ (495.3)	1-on-1	240	750	32 (5.0)	1.3 (0.59)	Stk	<b>SGA1J19JT1</b>	—	S-1907	—	SD2262
	21 (533.4)	Offset	120	500	20 (3.1)	1.4 (0.64)	Stk	<b>SGA1J21A01</b>	OT-2150	—	SS1341	—
	21 (533.4)	Offset	240	500	20 (3.1)	1.4 (0.64)	Stk	<b>SGA1J21A02</b>	OT-2150	—	SS1352	—
	21 (533.4)	Offset	120	750	29 (4.5)	1.4 (0.64)	Stk	<b>SGA1J21A03</b>	—	OT-2107	—	SS2341
	21 (533.4)	Offset	240	750	29 (4.5)	1.4 (0.64)	Stk	<b>SGA1J21A04</b>	—	OT-2107	—	SS2352
	21 (533.4)	1-on-1	120	500	19 (2.9)	1.4 (0.64)	Stk	<b>SGA1J21AT1</b>	S-2050	S-2005	SD1291	SD2291
23¾ (603.3)	Offset	120	500	17 (2.6)	1.5 (0.68)	Stk	<b>SGA1J23N05</b>	OT-2450	OT-2405	SS1361	SS2361	
23¾ (603.3)	Offset	240	500	17 (2.6)	1.5 (0.68)	Stk	<b>SGA1J23N06</b>	OT-2450	OT-2405	SS1372	SS2372	
23¾ (603.3)	Offset	120	750	25 (3.9)	1.5 (0.68)	Stk	<b>SGA1J23N01</b>	OT-2475	OT-2407	SS1391	SS2381	
23¾ (603.3)	Offset	240	750	25 (3.9)	1.5 (0.68)	Stk	<b>SGA1J23N02</b>	OT-2475	OT-2407	SS1402	SS2392	
23¾ (603.3)	Offset	120	1000	34 (5.3)	1.5 (0.68)	Stk	<b>SGA1J23N07</b>	—	OT-2401	—	SS2401	
23¾ (603.3)	Offset	240	1000	34 (5.3)	1.5 (0.68)	Stk	<b>SGA1J23N03</b>	—	OT-2401	—	SS2412	
23¾ (603.3)	Offset	240	1500	51 (7.9)	1.5 (0.68)	Stk	<b>SGA1J23N04</b>	—	OT-2415	—	—	
23¾ (603.3)	1-on-1	240	250	8 (1.2)	1.5 (0.68)	Stk	<b>SGA1J23NT1</b>	S-2425	—	SD1322	—	
23¾ (603.3)	1-on-1	240	500	17 (2.6)	1.5 (0.68)	Stk	<b>SGA1J23NT3</b>	S-2450	S-2404	SD1342	SD2322	
23¾ (603.3)	1-on-1	240	750	25 (3.9)	1.5 (0.68)	Stk	<b>SGA1J23NT5</b>	—	S-2407	—	SD2352	
23¾ (603.3)	1-on-1	120	1000	33 (5.1)	1.5 (0.68)	Stk	<b>SGA1J23NT6</b>	—	S-2401	—	SD2361	
23¾ (603.3)	1-on-1	240	1000	33 (5.1)	1.5 (0.68)	Stk	<b>SGA1J23NT7</b>	—	S-2401	—	SD2372	
23¾ (603.3)	1-on-1	240	1500	50 (7.7)	1.5 (0.68)	Stk	<b>SGA1J23NT8</b>	—	S-2415	—	—	
25½ (647.7)	Offset	120	500	16 (2.5)	1.7 (0.77)	Stk	<b>SGA1J25J01</b>	OT-2550	—	SS1421	—	
25½ (647.7)	Offset	240	500	16 (2.5)	1.7 (0.77)	Stk	<b>SGA1J25J02</b>	OT-2550	—	SS1432	—	
25½ (647.7)	Offset	120	750	23 (3.6)	1.7 (0.77)	Stk	<b>SGA1J25J03</b>	OT-2575	OT-2507	SS1441	SS2421	
25½ (647.7)	Offset	240	750	23 (3.6)	1.7 (0.77)	Stk	<b>SGA1J25J04</b>	OT-2575	OT-2507	SS1452	SS2432	
25½ (647.7)	Offset	240	1000	31 (4.8)	1.7 (0.77)	Stk	<b>SGA1J25J05</b>	—	OT-2501	—	SS2452	
26¾ (679.5)	Offset	240	700	21 (3.3)	1.7 (0.77)	Stk	<b>SGA1J26N01</b>	OT-2670	—	SS1472	—	
26¾ (679.5)	Offset	240	1000	29 (4.5)	1.7 (0.77)	Stk	<b>SGA1J26N02</b>	—	OT-2601	—	SS2472	
30½ (774.7)	Offset	120	750	19 (2.9)	2.0 (0.91)	Stk	<b>SGA1J30J02</b>	OT-3075	OT-3007	SS1481	—	
30½ (774.7)	Offset	240	750	19 (2.9)	2.0 (0.91)	Stk	<b>SGA1J30J03</b>	OT-3075	OT-3007	SS1492	SS2482	
30½ (774.7)	1-on-1	240	750	19 (2.9)	2.0 (0.91)	Stk	<b>SGA1J30JT1</b>	S-3075	S-3007	SD1452	—	
33¾ (850.9)	Offset	240	750	17 (2.6)	2.2 (1.0)	Stk	<b>SGA1J33J01</b>	OT-3375	OT-3307	SS1522	SS2522	
33¾ (850.9)	1-on-1	240	1000	22 (3.4)	2.2 (1.0)	Stk	<b>SGA1J33JT1</b>	—	S-3301	—	SD2472	
35¾ (911.2)	Offset	120	1000	21 (3.3)	2.3 (1.0)	Stk	<b>SGA1J35R04</b>	OT-3610	SS1531	SS1531	—	
35¾ (911.2)	Offset	240	1000	21 (3.3)	2.3 (1.0)	Stk	<b>SGA1J35R03</b>	OT-3610	—	SS1542	SS2532	
35¾ (911.2)	Offset	240	1500	31 (4.8)	2.3 (1.0)	Stk	<b>SGA1J35R01</b>	—	OT-3601	SS2552	—	
35¾ (911.2)	1-on-1	240	1000	21 (3.3)	2.3 (1.0)	Stk	<b>SGA1J35RT1</b>	S-3610	S-3601	SD1492	SD2492	
38½ (977.9)	Offset	120	1000	19 (2.9)	2.5 (1.1)	Stk	<b>SGA1J38J02</b>	OT-3810	OT-3801	SS1581	SS2561	
38½ (977.9)	Offset	240	1500	29 (4.5)	2.5 (1.1)	Stk	<b>SGA1J38J03</b>	—	OT-3815	—	—	
42½ (1079.5)	Offset	240	1500	26 (4.0)	2.8 (1.3)	Stk	<b>SGA1J42J01</b>	—	OT-4315	SS1632	SS2632	
47½ (1216.0)	Offset	240	2250	34 (5.3)	3.1 (1.4)	Stk	<b>SGA1J47R01</b>	—	OT-4822	—	—	