

# Silicone Rubber Wire-Wound Heaters

*Uniform heating to 220°C*



## Overview

- These silicone rubber heaters have a wire-wound element and are economical in large sizes.
- Mean time between failure (MTBF) of 100,000 hours+ provides longer heater life under continuous operation
- Rugged construction and high ductility allows repeated flexing for easier installation
- Element wires sealed inside silicone rubber protects electrical connections from moisture preventing costly downtime for field repairs
- Uniform heating to 220°C (428°F) 235°C (220 for UL)
- Heater lengths to 90" (1.8 m)
- Mount to flat or curved surfaces
- 2.5, 5, 10, 15 watts/in<sup>2</sup> (0.39, 0.78, 1.55, 2.33 watts/cm<sup>2</sup>) at 120 or 240 VAC
- Lower leakage current due to reduce capacitive coupling

## Typical Applications

- Prevent condensation in motors and generators
- Protect instrument cabinets from cold and humidity
- De-icing
- Control fluid viscosity in valves and vessels
- Industrial ovens and thermal processing equipment
- Platens
- Medical devices

## Options

- Shapes and sizes to 22" × 90" (560 × 2285 mm)
- Resistance to 150 Ω/in<sup>2</sup>
- TÜV and UL component recognition marking are available
- Heaters can include thermostats, temperature sensors and cutouts, wiring harnesses, and connectors
- RoHS compliance

## Specifications

- **Temperature range:** -45 to 235°C (-50 to 455°F).  
With UL component recognition: -45 to 220°C (-50 to 428°F).
- **Overall Thickness:** 0.055" ±0.005" (1.4 ±0.13 mm).  
0.250" (6.4 mm) maximum over leadwires.
- **Maximum voltage rating:** UL rating is 600 VAC, TÜV recognition up to 250 VAC.
- **Leadwires:** AWG 20 except where noted, PTFE insulated per UL 1199/CSA. Length on standard models is 12" (305 mm).
- **Current capacity** (based on 100°C max. ambient temp.):  
AWG 20 - 13.5 A  
AWG 18 - 16.0 A
- **Approvals:** Can be configured to comply with UL Standard 499 and Canadian Standard C22.2, No. 72-M1984 and European Standard EN60335 and may bear the corresponding recognition marks.
- **Wattage tolerance:** ±5%.

# Stock Silicone Rubber Wire-Wound Heaters

## Notes for Stock Heaters

- Heated area is within the X and Y dimensions
- Voltage and wattage values are for reference only
- Resistance tolerance is +/- 10% or +/- 0.5Ω, whichever is greater
- Heaters may be operated at other voltages if they do not exceed the maximum allowable watt density ratings
- Leadwire length is 12" (305 mm) minimum
- Mounting: no adhesive mounting supplied
- TUV and UL component recognition marking are standard

## 120 Volt

Size (inches)		Size (mm)		Volts	Watts	Model number
X	Y	X	Y			
1	6	25.4	152.4	120	30	HR6870A
1	10	25.4	254.0	120	25	HR6877A
1	10	25.4	254.0	120	50	HR6850A
1	12	25.4	304.8	120	60	HR6871A
1	20	25.4	508.0	120	50	HR6878A
1	20	25.4	508.0	120	100	HR6852A
1	24	25.4	609.6	120	120	HR6873A
1	30	25.4	762.0	120	75	HR6880A
1	30	25.4	762.0	120	150	HR6854A
1	40	25.4	1016.0	120	100	HR6882A
1	40	25.4	1016.0	120	200	HR6856A
1	60	25.4	1524.0	120	150	HR6884A
1	60	25.4	1524.0	120	300	HR6858A
2	10	50.8	254.0	120	100	HR6860A
2	20	50.8	508.0	120	100	HR6886A
2	20	50.8	508.0	120	200	HR6862A
2	24	50.8	609.6	120	240	HR6875A
2	30	50.8	762.0	120	150	HR6888A
2	30	50.8	762.0	120	300	HR6864A
2	40	50.8	1016.0	120	200	HR6890A
2	40	50.8	1016.0	120	400	HR6866A
2	60	50.8	1524.0	120	600	HR6868A

## 240 Volt

Size (inches)		Size (mm)		Volts	Watts	Model number
X	Y	X	Y			
1	10	25.4	254.0	240	50	HR6851A
1	12	25.4	304.8	240	60	HR6872A
1	20	25.4	508.0	240	50	HR6879A
1	20	25.4	508.0	240	100	HR6853A
1	24	25.4	609.6	240	120	HR6874A
1	30	25.4	762.0	240	75	HR6881A
1	30	25.4	762.0	240	150	HR6855A
1	40	25.4	1016.0	240	100	HR6883A
1	40	25.4	1016.0	240	200	HR6857A
1	60	25.4	1524.0	240	150	HR6885A
1	60	25.4	1524.0	240	300	HR6859A
2	10	50.8	254.0	240	100	HR6861A
2	20	50.8	508.0	240	100	HR6887A
2	20	50.8	508.0	240	200	HR6863A
2	24	50.8	609.6	240	240	HR6876A
2	30	50.8	762.0	240	150	HR6889A
2	30	50.8	762.0	240	300	HR6865A
2	40	50.8	1016.0	240	200	HR6891A
2	40	50.8	1016.0	240	400	HR6867A
2	60	50.8	1524.0	240	600	HR6869A

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