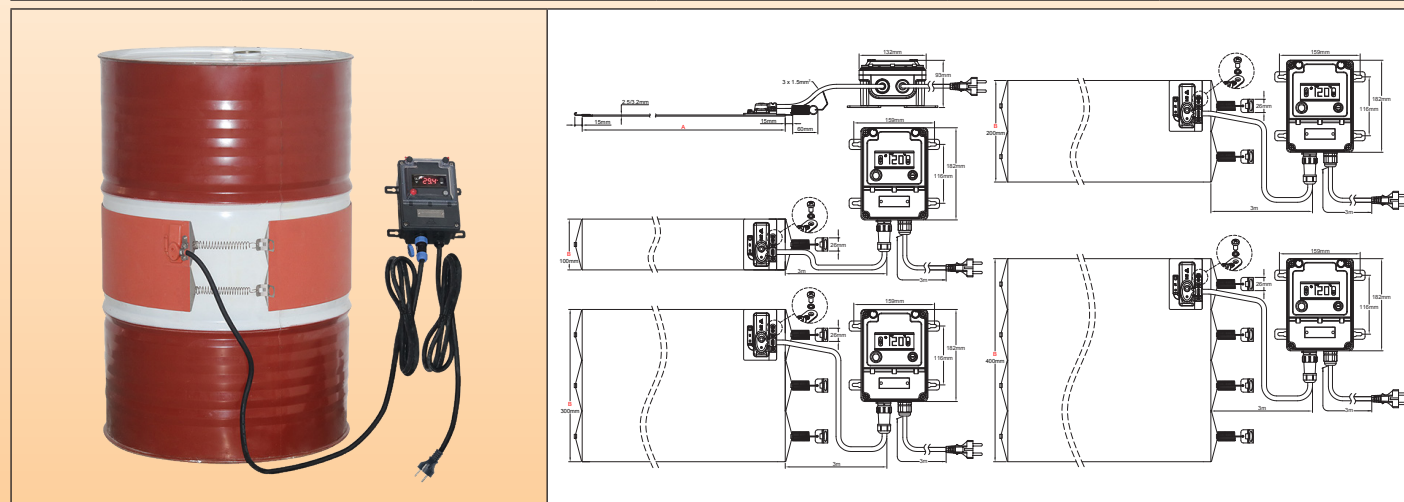


Silicone rubber heating belts for metal drums, with remote electronic control, on-off action, 0-120°C or 0-200°C



Containers material	Maximum temperature	Tightening	Thermostat	Silicone thickness (mm)	Type
Metal only	120°C 200°C	Hooks and springs	Remote electronic temperature control, on-off action	2,5 (3,2)	9AC



Main features

Silicone rubber belt heaters are made of fiberglass reinforced laminated silicone rubber sheets, vulcanized together through heat and high pressure on both sides of an embedded specially formed heating wire element. Fiberglass-reinforced silicone rubber gives the heater dimensional stability without sacrificing flexibility.

Silicone is used because of its high temperature resistance (Constant temperature up to 200°C (390°F), high thermal conductivity ($\sim 7 \cdot 10^{-4}$ W/cm.K) and good electrical insulation properties (~ 12 KV/mm)

This series is distinguished by the use of a remote electronic control system, on-off action, with digital display of the measured value, connection by waterproof connector for easy disconnection of the heater, and IP65 ingress protection class for the whole assembly. This allows its use in most of industrial applications.

Other general particularities of these flexible silicone heaters are:

- Not affected by vibration or flexing,
- Lightweight,
- Comply with UL94-VO (flame retardant) and ROHS,
- Low smoke and low Toxicity,
- Silicone is non-toxic, and moisture and chemical resistant
- Very thin profile

Main Applications

Combining high power density with flexibility silicone heating belts are a simple and economical solution for heating metal drums.

They bring and maintain products to the consistency required for their use. Some typical applications examples are:

- Consistency control of paints, oils, greases, fats, molasses, adhesives, plastics, mastics, resins, syrups,
- Freeze protection,
- Maintaining liquid temperatures at 45-65°C (115-150°F) in food industry water purification systems,
- Maintain polyester resin at 20-25°C (70-80°F) for spray and pour equipment.

Technical Features

Clamping on drums: By spring and hook lock-up that allows adjusting the band to the drum diameter; change position to the right place as content levels fluctuate; and also keeps the band tight to the drum surface, providing good thermal contact. Clamping force of each spring is from 1 to 3DaN in the recommended drums diameter range. The spring is equipped with a pull ring for easy installation and removing of the belt.

Length (Dimension A): Designed to be used on standard container diameters. Consult factory if a custom size is requested.

Width (dimension B): 100mm (4"), 200mm (8") 300mm (12"), and 400mm (16"). **Heating belts must always be applied on cylindrical surfaces without hoops or ribs.**

Silicone foil minimum bending radius: 3.2mm (0.125")

Ingress protection: IP65.

Minimum ambient temperature: -10° C (+15° F)

Voltage: 220-240VAC.

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Power tolerance: ±10% at 20°C

Temperature control:

By electronic controller with digital display, On-Off action, set point adjustment range up to 120°C (NTC sensor), or 200°C (Pt100 sensor), relay output, located in an independent **waterproof** housing, **designed for wall mounting**. It is connected to the flexible silicone rubber heater by a cable equipped with a 5-pin **waterproof quick connector**, facilitating the connection and disconnection with the heater. It controls the temperature by means of a probe placed under a silicone boot on the outer surface of the heater.

Rating 16A 230V.

The setting of this temperature controller is extremely simple.

Power density:

- 0.75W/cm² (4.8W/in²), for usual applications.
- 1W/cm² (6.5W/in²) for fast heating applications

Thickness of the flexible silicone foil: 2.5mm. (Optional 3.2mm, for heavy duty applications requiring strong mechanical strength and reinforced insulation).

Quality control routine tests: Each element is 100% tested for continuity, resistance and insulation. Tests are made according to EN 60335-1 and EN 50106 standards. See technical introduction.

Dielectric Strength: 1750V AC.

Insulation resistance: ≥ 10 Megohms.

Operating temperature:

The temperature measured by the electronic controller is that of the heating surface. The temperature of the heated product is generally much lower than that of the surface and depends mainly on the surface power (W/cm²), the quality of the thermal contact with the container, the viscosity, heat capacity and thermal conductivity of the heated product, the good positioning of the heating belt, the set point value, and room temperature (See technical introduction).

You can find in the technical introduction examples of the temperatures reached by silicone heating belts. They represent the temperature that may reach the heating belt if it is not correctly installed (for example: Poor thermal contact, empty container or improperly temperature controlled).

Connection cable:

Insulated rubber power supply cable, for industrial environments, 3 × 1.5mm² length 3m, Euro plug. UL plug on request.

Options:

- 3.2mm reinforced thickness.
- Power supply 110/115V.
- Power cord with industrial plug 2-pole + earth 16A CEE (IEC60309)
- Surface temperature limiter.
- Grounded mesh wire layer.
- **Power density reduced to 0.2W/cm² (1.3W/in²) for plastic containers.**
- Outside thermal insulation by silicone foam layer.

Safety standards:

The heaters have been designed in compliance with EEC Low Voltage Directive (LVD) 2006/95/EC and EMC directive 2004/108/EC. They must be installed in accordance with all local applicable instructions, codes, and regulations.

Main parts numbers in 220/240V with 3 meters cords and euro plug*

(See the technical introduction for the liquids heating time)

Belt width B = 100mm						
Container Liters (Gallons)	Part number with temperature controller adjustable up to 120°C (250°F)	Part number with temperature controller adjustable up to 200°C (390°F)	High and low limits of acceptable diameter (measured at no-hoops or no-ribs place) mm (inch)	A Length mm (inch)	Power density W/cm ² (W/in ²)	Power Watts
57~60 (16)	9ACB8A1102855F30	9ACB8B1102855F30	356-373 (14-14.7)	1020 (40.1)	0,75 (4.8)	550
57~60 (16)	9ACBBA1102874F30	9ACBBB1102874F30	356-373 (14-14.7)	1020 (40.1)	1 (6.5)	740
110~120 (30)	9ACB8A1135875F30	9ACB8B1135875F30	463-480 (18.2-18.9)	1350 (53.1)	0,75 (4.8)	750
110~120 (30)	9ACBBA11358A0F30	9ACBBB11358A0F30	463-480 (18.2-18.9)	1350 (53.1)	1 (6.5)	1000
208~210 (55)	9ACB8A1169895F30	9ACB8B1169895F30	571-588 (22.5-23.2)	1690 (66.5)	0.75 (4.8)	950
208~210 (55)	9ACBBA11698A3F30	9ACBBB11698A3F30	571-588 (22.5-23.2)	1690 (66.5)	1 (6.5)	1300
Belt width B = 200mm						
Container Liters (Gallons)	Part number with temperature controller adjustable up to 120°C (250°F)	Part number with temperature controller adjustable up to 200°C (390°F)	High and low limits of acceptable diameter (measured at no-hoops or no-ribs place) mm (inch)	A Length mm (inch)	Power density W/cm ² (W/in ²)	Power Watts
57~60 (16)	9ACB8A21028A3F30	9ACB8B21028A3F30	356-373 (14-14.7)	1020 (40.1)	0,75 (4.8)	1300
57~60 (16)	9ACBBA21028A7F30	9ACBBB21028A7F30	356-373 (14-14.7)	1020 (40.1)	1 (6.5)	1700
110~120 (30)	9ACB8A21358A7F30	9ACB8B21358A7F30	463-480 (18.2-18.9)	1350 (53.1)	0,75 (4.8)	1700
110~120 (30)	9ACBBA21358B3F30	9ACBBB21358B3F30	463-480 (18.2-18.9)	1350 (53.1)	1 (6.5)	2300
208~210 (55)	9ACB8A21698B2F30	9ACB8B21698B2F30	571-588 (22.5-23.2)	1690 (66.5)	0,75 (4.8)	2200
208~210 (55)	9ACBBA21698B9F30	9ACBBB21698B9F30	571-588 (22.5-23.2)	1690 (66.5)	1 (6.5)	2900

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Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice

Belt width B = 300mm						
Container Liters (Gallons)	Part number with temperature controller adjustable up to 120°C (250°F)	Part number with temperature controller adjustable up to 200°C (390°F)	High and low limits of acceptable diameter (measured at no-hoops or no-ribs place) mm (inch)	A Length mm (inch)	Power density W/cm ² (W/in ²)	Power Watts
57~60 (16)	9ACB8A31028B0F30	9ACB8B31028B0F30	356-373 (14-14.7)	1020 (40.1)	0,75 (4.8)	2000
57~60 (16)	9ACBBA31028B7F30	9ACBBB31028B7F30	356-373 (14-14.7)	1020 (40.1)	1 (6.5)	2700
110~120 (30)	9ACB8A31358B7F30	9ACB8B31358B7F30	463-480 (18.2-18.9)	1350 (53.1)	0,75 (4.8)	2700
110~120 (30)	9ACBBA31358C6F30	9ACBBB31358C6F30	463-480 (18.2-18.9)	1350 (53.1)	1 (6.5)	3600**
Belt width B = 400mm						
Container Liters (Gallons)	Part number with temperature controller adjustable up to 120°C (250°F)	Part number with temperature controller adjustable up to 200°C (390°F)	High and low limits of acceptable diameter (measured at no-hoops or no-ribs place) mm (inch)	A Length mm (inch)	Power density W/cm ² (W/in ²)	Power Watts
57~60 (16)	9ACB8A41028B8F30	9ACB8B41028B8F30	356-373 (14-14.7)	1020 (40.1)	0,75 (4.8)	2800**

* Cord with UL plug instead of Euro plug, replace F30 by E30 in the Part number.

** Values above 3600W are not compatible with the 16A 230V rating of the electronic controller.

*** 3.2mm reinforced thickness, replace 9ACB by 9ACC in the Part number.