# Flexible jacket heaters with remote digital display electronic controller for <u>Q</u> glass or plastic containers



## **Main Features**

Thanks to its adjustable digital display temperature controller, these flexible jacket heaters are used for antifreeze protection, reheating, temperature stabilization, to reduce viscosity or to melt soaps, animal or vegetable fats, varnishes, oils, food or chemical products.

This series of jacket heaters is the most professional solution for heating at a set temperature glass or plastic containers. The wall mounting of the control box, as well as the quick connector ensuring the connection of this box on the jacket heater facilitate industrial use in a fixed working place in a production line They are available for containers of 18L/20L (5 US gallons), 23L/25L (6 US gallons), 30L (8 US gallons), 60L (15 US gallons) and 110 liters (30 US gallons). The jacket heater covers almost the entire surface and is surmounted by a soft collar "a scarf" preventing it from sliding down. They can be made with two power levels (0.05W/cm<sup>2</sup> and 0.1W/cm<sup>2</sup>) 20mm thicknesses of insulation to cover antifreeze applications even for very low temperatures. See these applications described in the technical introduction. They can also simply be used to maintain positive temperature of liquids.

In these models their surface temperature is limited to 65°C to prevent deformation or melting of plastic containers, or temperature stress breaking of glass containers.

When they are used with an insulated lid and an insulated pedestal, their energetic efficiency can rise 90%.

## **Technical characteristics**

The heating element of the flexible jacket heater consists of a network of silicone insulated heating wires shielded by a metal braid, taken under a cover sewn in PU and Teflon coated polyester fabric. A 20mm thick, temperature-resistant NBR-PVC foam insulation is inserted between the heating network and the outer wall. This insulating foam has an insulation coefficient (Lambda  $\lambda$ ) of 0.039W/m.K, and this makes it possible to divide the energy losses by 3 compared to jacket heaters insulated with mineral wool or carbon fiber felt of the same thickness. Adjustable metal buckles allow quick assembly and disassembly and efficient clamping on the container. Their mechanical strength is exceptional. **Fabric covering:** 

- Internal heating face: Teflon coated polyester fabric,

- External side: waterproof PU coated polyester fabric.

### **Thermal insulation:**

NBR-PVC foam, with closed cells and high temperature resistance, thickness 20mm.

#### Heating element:

Silicon insulated heating wire with metal braid providing mechanical protection against puncturing and good grounding. **Temperature control:** 

By electronic controller with digital display, On-Off action, relay output, located in an independent waterproof housing, designed for wall mounting. It is connected to the heating blanket by a cable equipped with a 5-pin waterproof quick connector, facilitating the connection and disconnection with the jacket heater. It controls the temperature by means of a thermistor probe placed on the inner surface of the fabric in contact with the container. This probe has an anticipation loop avoiding overheating. A temperature limiter is incorporated in the heating net to limit the surface temperature to 65°C.

### Connection cable:

Insulated rubber power supply cable, for industrial environments, 3 x 1mm<sup>2</sup> length 3m, Euro plug. UL plug on request.

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#### Mounting on containers:

These jacket heaters feature nylon straps with quick-release adjustable buckles for adjustment to the diameter of the container, and a soft fabric collar without thermal insulation named scarf. This flexible scarf can be used to hold in place an insulating lid.

#### **Options:**

- 0.135W/cm<sup>2</sup> surface load for fast heating. See technical introduction.

- Power supply 110/115V

- Power cord with industrial plug 2-pole + earth 16A CEE (IEC60309)

- Lids and insulating pedestals: see the accessories pages.

**Compliance with standards:** CE compliant. TUV certificate for EEC Low Voltage Directive (LVD) and EMC directive 2004/108/EC, and CE marked accordingly

References*	Insulation (mm)**	Volume, US gallons	Volume, Liters	Dia. (mm ± 12; Inch ± ½")	Height <mark>A</mark> (mm/inch)	Flat length B (mm/inch)	Scarf <mark>C</mark> (mm/inch)	w/cm² (W/in²)	Watt	Voltage V
9VJEF300958150HC	20	5	18/20	280 (11)	300 (11.8)	950 (37.4)	150 (5.9)	0,05 (0.32)	150	220/240
9VJEF301028165HC	20	6	25/30	280 (11)	300 (11.8)	1020 (40.2)	150 (5.9)	0,05 (0.32)	165	220/240
9VJEF401398275HG	20	15	50/60	410 (16.1)	400 (15.7)	1390 (54.7)	100 (3.9)	0,05 (0.32)	275	220/240
9VJEF731558550HG	20	30	110	460 (18.1)	730 (28.8)	1550 (61)	100 (3.9)	0,05 (0.32)	550	220/240
9VJEF300958300HC	20	5	20/25	280 (11)	300 (11.8)	900 (35.4)	150 (5.9)	0,1 (0.64)	300	220/240
9VJEF301028330HC	20	6	25/30	280 (11)	300 (11.8)	1020 (40.2)	150 (5.9)	0,1 (0.64)	330	220/240
9VJEF401398550HG	20	15	50/60	410 (16.1)	400 (15.7)	1390 (54.7)	100 (3.9)	0,1 (0.64)	550	220/240
9VJEF731558A10HG	10	30	110	460 (18.1)	730 (28.8)	1550 (61)	100 (3.9)	0,1 (0.64)	1100	220/240

\* For these products supplied with UL plug and not Euro plug, replace the 15th character by X.