

CRN TECNOPART, S.A.

Sant Roc 30 08340 VILASSAR DE MAR (Barcelona) Tel: 937 591 484 Fax: 937 591 547

e-mail: crn@crntp.com - www.crntecnopart.com

HR-170.25E

HM SERIES HEATER MATS

The various models of heating blankets presented in this brochure is characterized by great flexibility. This feature makes possible their application in flat surfaces such as pipes and cylindrical tanks.

The interior incorporates a temperature sensor. The connection cable, heat resistant, is 1 meter in length.

Standard models have a length of 500 mm. The width depends on the diameter of the pipe.

Supplied without fasteners, for this operation must take into account the temperature

Type HMST up to 250 °C

A PTFE coated grating is the basis of this heating mat. The heating conductors are insulated with PTFE and have a protective braid **MODELS AVAILABLE**

Model	Ref.	Dimensions mm	W 230V	
HMST1 - 50	03 50 01	135 x 500	50	
HMST2 - 150	03 50 02	236 x 500	150	
HMST3 - 250	03 50 03	355 x 500 25		
HMST4 - 350	03 50 04	515 x 500	350	
HMST5 - 500	03 50 05	659 x 500	500	
HMST6 - 690	03 50 06	820 x 500	690	



Type HMSG up to 450 °C

The heating conductor is insulated with glass yarn and covered on both sides with glass yarn fabric

MODELS AVAILABLE

Model	Ref.	Dimensions mm	W 230V
HMSG1 - 50	03 60 01	1 135 x 500 2	
HMSG2 - 150	03 50 02	236 x 500 500	
HMSG3 - 250	03 60 03	355 x 500	1000
HMSG4 - 350	03 60 04	515 x 500	1200
HMSG5 - 500	03 60 05	659 x 500	1600
HMSG6 - 690	03 60 06	820 x 500	2000



Type HMSQ up to 900 °C

Theating mats made of high-quality quartz fiber fabric

MODELS AVAILABLE

Model	Ref.	Dimensions mm	W 230V	
HMSQ1 - 500	03 70 01	135 x 500	500	
HMSQ2 - 1000	03 70 02	236 x 500	1000	
HMSQ3 - 2000	03 70 03	355 x 500	1200	
HMSQ4 - 2400	03 70 04	515 x 500	2400	
HMSQ5 - 3200	03 70 05	659 x 500	3200	





They are required to be supplied with a built-in temperature control

They can be supplied with other measures and powers.

Type HMG up to 250 °C

This heating mat is reinforced with a metal lattice. The heating conductors are PTFE insulated and have PE conductor braiding. The maximum operating temperature is 250°C. The heating mat can bestretched over tanks and pipes with Velcro fastenings (accessory).

Operating temperature	Max. 250 ° C
Supply Voltage	Up to 500 VAC / cc single-phase or three-phase
Power	Up to 2000 W / m ²
Minimum ambient temperature	-40 ° C
Composition	PTFE insulated heating cable, Mounted on a metal mesh of VA steel or galvanized steel
Dimensions	Maximum 1000 x 5000 mm
Separation of mesh	10 x 10 mm
Thickness	5 mm approximately
Temperature sensor	PT100 (Optional: NiCr-Ni, Fe-CuNi, HTI)
Connection cable	1.5 m
Connector	optional
Degree of protection	IP54 (EN 60529), class I
Insulation (optionall	Polymer foam (175 ° C), Silicone foam / 250 ° C)



Application example. Heating of a distributor.

Heating of a distributor. Geometrically difficult surface

Type HP 60 up to 80 °C

Made up of electric heating elements sealed in polyester fabric coated, washable and impermeable. With thermal insulation foam 5 mm thick.

The shape of the HP 60 heater can be adapted to various sizes of surfaces or containers; This includes round and square openings.

Options for fixing, by means of hooks, eyelets and velcro,



Work temperature	80 ° C
Supply Voltage	Up to 500 VAC / cc single-phase or three-phase
Power	Up to 500 W / m ²
Minimum ambient temperature	-20 ° C, Installation minimum temperature + 5 ° C
Composition	Polyester fabric with PVC coating
Dimensions	Maximum 5000 x 10000 mm
Thickness	10 mm, with 5 mm insulation foam
Fixing Options	Hooks, Buttonholes, Velcro
Temperature sensor	PT100 / HTI control
Connection cable	3.0 m
Connector	optional
Degree of protection	IP44 (EN 60529), class I

Type HFH up to 450 °C

Heating sleeve with glass silk fabric jacket

The structure is similar to type HMM. However, the entire heating sleeve consists of glass silk material that clings effectively and closely to the heated object. The sleeves are specifically adapted and manufactured for the heated object.

adapted and manaratation	a for the fleated expect
Working temperature	Up to 250 ° C with PTFE heating cable Up to 450 ° C with fiberglass heater cable
Supply Voltage	230 Vac (others on request)
Power	Depending on application and characteristics
Material	Glass silk coated
Dimensions	Made to measure
Temperature sensor	Thermocouples type J and K, probe PT 100
Connection cable	1.5 m cable
Connector	optional
Degree of protection	IP40 (standard model), IP54 (on request), Protection class I



EXAMPLE OF HFH CUSTOM FABRICATIONS

Heating systems for vacuum systems



These high vacuum pumps are heated to 350°C with a removable split heating sleeve.

The requirement was uniform heat distribution over the entire surface.

Removable insulating heating sleeve

The complicated geometry could be insulated against heat losses and heated in a cost-effective and service-friendly way by splitting into several segments. All parts are quick and easy to seal and remove with Velcro fasteners



Heating mobile tanks



Here the removable heating sleeve is adapted with thermal insulation and temperature control to the mobile tank.

Example of Perforated Envelope Plate with Free holes for pipe outlets, controls



Type HFH / HFB Flange Heatings, up to 350 °C

HORST flange heatings are used to heat flanges of pipes and containers or to compensate the loss of heat at these parts. They are deliverable for all common flanges and, due to the velcro fasteners, are easy to handle. Maximum flange temperature: 350 °C.

The heating surface is insulated with glass yarn, the outer casing is made of glass yarn fabric, coated with aluminum. If there is a blind flange, the front side can be closed by an additional insulating cap which can also be fixed by velcro fasteners.

HFH flange heating jacket		Ø D mm	Ø DH mm	Length W a HFB blind f heating 230V insulating c		lind flange ting caps	
Model	Ref.			L mm.		Model	Ref.
HFH 16	03 40 01	33,8	93	25	8 (42v)	HFB 25	03 45 01
HFH 35	03 40 02	69,5	129	50	40	HFB 36	03 45 02
HFH 63	03 40 03	113,5	173	60	65	HFB 63	03 45 03
HFH 100	03 40 04	152,0	212	75	90	HFB 100	03 45 04
HFH 150	03 40 05	202,5	262	75	140	HFB 150	03 45 05
HFH 200	03 40 06	253,0	313	80	180	HFB 200	03 45 06
HFH 250	03 40 07	306,0	366	80	220	HFB 250	03 45 07





Type HMI up to 200 °C



The silicone heating elements have a very homogeneous heat distribution. They are very flexible and available in many different designs. As foils, mats or formed parts, they are an economical solution for many appliances.



They are manufactured according to your requirements

Nominal temperature 200 °C (min. ambient temperature -60 °C)

power:	6500 W/m² (standard) and more
Material	silicone, silicone-coated glass yarn fabric
Dimensions	Maximum 950 x 1000 mm. ticknes 3 mm.)
fixing	binding, velcro, gluing, pressing
temperature sensor:	vulcanized or in a sensor pocket