



Electric heat tracing

Application

Electric heating cables (also called heat tracing cables) are used to protect against frost and keep products at a specific temperature to avoid residue build-up or clumping.

Heating cables are typically placed on piping and storage tanks and used to compensate for heat loss. Heating Group International offers both low-temperature and high-temperature cables for temperatures up to 340°C, and with power ratings up to 150W/m. Heating Group International has set up its own engineering department to support customers when specifying heating cables.

Electric heat tracing is used in various markets and sectors, such as:

- refrigeration engineering
- non-residential construction
- water treatment
- the chemical and petrochemical industry
- offshore
- food and beverage
- tank construction



Technical description

Parallel-circuit self-limiting heating cables

This type of heating cable features a semi-conductive, self-limiting core with a resistance that varies depending on the temperature. This means that the cable adapts its capacity to the situation. It generates less heat at a higher temperature, and more heat at a lower temperature. This characteristic prevents overheating, even at points where the cable crosses itself. Due to the parallel-circuit design, the cable can be cut at any point. Self-limiting cables are available for temperatures up to 200°C, with power ratings up to 60W/m².

Parallel-circuit constant-power heating cable

The constant-power heating cable delivers a fixed power output per metre and is not affected by the temperature. This characteristic makes this type of cable ideal for process heating, among other applications.

The cable may not cross itself and must be thermostatically controlled. The cable can easily be cut to length on-site. Heating Group International supplies constant-power cables for temperatures up to 350°C, and with power ratings up to 150W/m.

Serial heating cables

This type of cable is custom-made and generates heat through Ohmic resistance. This cable may not be severed. Heating Group International uses SIKA cable for this application. A flexible cable, for temperatures up to 180°C, with power ratings up to 40W/m. Please contact the engineering department at Heating Group International to request a separate data sheet for this product.

11HGM2-CR 230VAC 11W/M at 10°C HEATING GROUP INTERNATIONAL BV Max Ex

25HGR2-CR 230VAC 25W/M at 10°C HEATING GROUP INTERNATIONAL BV Max Exposure

Heating cables from Heating Group International

Parallel-circuit self-limiting heating cables

Cable type	Power (@10°C) W/m	Temperature (on/off) °C	Dimensions mm	Outer jacket	Voltage volts	ATEX (Ex)
HGM2-CR	11, 17	65 / 85	8.3 x 5.7	Thermoplastic	230	No
HGLe2-CR	31	65 / 85	10.9 x 6	Thermoplastic	230	Yes
HGR2-CR	10, 25, 40	65 / 85	12.6 x 6	Thermoplastic	230	Yes
HGP2-CR	31	110 / 135	13.6 x 6	Thermoplastic	230	Yes
HGS2-CT	30, 45, 60	120 / 200	10.2 x 6	Fluoropolymer	230	Yes

Parallel-circuit constant-power heating cables

Cable type	Power (@10°C) W/m	Temperature (on/off) °C	Dimensions mm	Outer jacket	Voltage volts	ATEX (Ex)
EMTS2-CF	6.5, 13, 23, 33, 50	190 / 200	10.2 x 8	Fluoropolymer	230	No
EMTS2-CS	6.5, 13, 23, 33, 50	190 / 200	11 x 8.8	Silicone	230	No
AHT	15, 30, 50, 70, 100, 150	340 / 425	10 x 7	Aluminium	230	Yes

Accessories

Heating Group International supplies complete systems, including all the accessories required:

- Capillary thermostats
(0-40°C / 30-85°C / 30-110°C)
- Explosion-proof capillary thermostats
(0-40°C / 20-110°C / 20-300°C)
- Digital control
- Switch boxes
- Junction boxes
- Explosion-proof junction boxes
- Finishing sets
- Fasteners
- Entry gland sets

Mounting

Heating Group International has installation instructions available if you wish to install the cables yourself: please request them from the engineering department. Heating Group International can also arrange installation for you. After a site visit to analyse your situation, our experienced fitting team installs, finishes and connects the heat tracing cables, controls and accessories.

