

Self-Regulating Heating Cable HTM

HTM is an industrial-grade self-regulating heating cable (self-limiting parallel trace heater) that can be used for freeze protection of pipelines and vessels. It can be used in non-hazardous and ex-hazardous areas. The power output adjusts automatically in response to the ambient temperature.

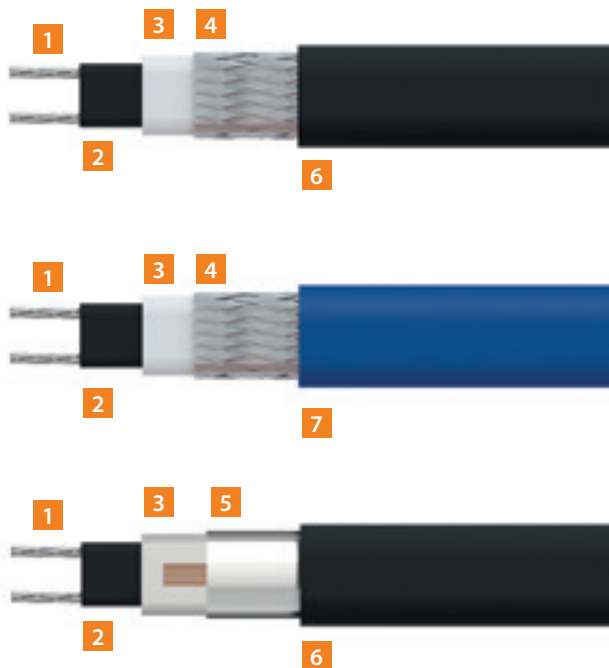
Due to its self-regulating characteristics it will not overheat even when the cable is overlapped. This guarantees maximum safety and reliability.

Features

- 10 or 15 W/m
- Ex-approved solution
- Self-regulating, automatically adjusts power output in response to ambient temperature
- Thermoplastic elastomer or fluoropolymer outer jacket
- Easy to install
- Can be cut to required length on site without any complicated design calculations
- Will not overheat even when overlapped
- Can be used in explosive environments without temperature limiter
- Full range of accessories available
- UV- and chemical-resistant (fluoropolymer)

Application

- Freeze protection of pipelines and vessels in non-hazardous and ex-hazardous areas



Construction

1. 0.56 mm² nickel-plated copper conductors
2. Semi-conductive self-regulating heating matrix
3. Matrix insulation
4. Tinned copper braid
5. Al/PET tape with drain conductor
6. Thermoplastic elastomer outer jacket
7. Fluoropolymer outer jacket

Self-Regulating Heating Cables

Technical Data

Rated voltage	230 VAC
Maximum continuous operating temperature (trace heater energized)	+65 °C
Maximum continuous exposure temperature (trace heater de-energized)	+85 °C
Ambient temperature range	-60 ... +55 °C
Minimum installation temperature:	
Thermoplastic elastomer outer jacket	-30 °C
Fluoropolymer outer jacket	-60 °C
Minimum bending radius	25 mm
Maximum resistance	
- Braiding	10 Ohm/km
- Al/PET foil with drain conductor	18.2 Ohm/km
Conductor cross-section	0.56 mm ²
Dimension:	
Thermoplastic elastomer outer jacket	
- Braiding	9.0×5.8 mm
- Al/PET tape with drain conductor	8.7×5.1 mm
Fluoropolymer outer jacket, braiding	8.6×5.4 mm
Weight:	
Thermoplastic elastomer outer jacket	
- Braiding	69 kg/km
- Al/PET tape with drain conductor	88 kg/km
Fluoropolymer outer jacket, braiding	97 kg/km

Maximum Heating Circuit Length

For use with type C circuit breakers according to IEC 60898-1:2015

Cable Type	Switch-on temperature, °C	Recommended maximum length depend on Type C circuit breaker, m	
		10 A	16 A
10-HTM	10	130	130
	-20	110	110
15-HTM	10	120	120
	-20	85	85

Marking

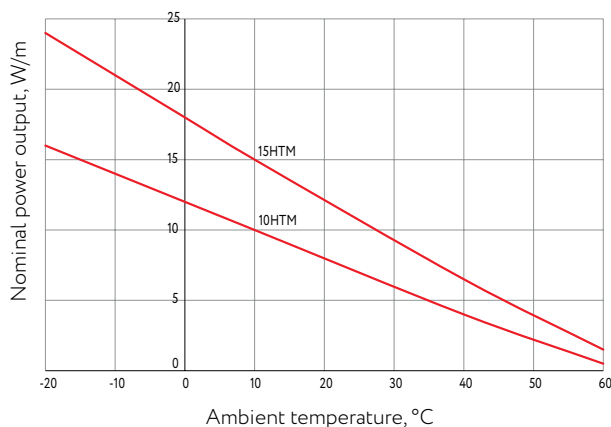
Example: 15-HTM2-BT

① ② ③ ④ ⑤

1. Nominal power output, W/m at +10 °C
2. Cable type
3. Rated voltage: 2 – 230 VAC
4. Screen type: B – Tinned copper wire braiding, A – Al/PET tape with drain conductor
5. Outer jacket material: T – Thermoplastic elastomer, P – Fluoropolymer

Power Output Curve

Nominal power output at rated voltage 230 VAC



Types

Outer jacket type	Order code	Outer jacket color	Name	Power output, W/m
Thermoplastic elastomer outer jacket, Al/PET tape with drain conductor	3201100000	Black	10-HTM2-AT	10
	3201100001		15-HTM2-AT	15
Thermoplastic elastomer outer jacket, braiding	3201100002	Black	10-HTM2-BT	10
	3201100003		15-HTM2-BT	15
Fluoropolymer outer jacket, braiding	3201100004	Blue	10-HTM2-BP	10
	3201100005		15-HTM2-BP	15

Approvals



CETS 23 ATEX 030X
II 2 GD
Ex 60079-30-1 IIC T6 Gb
Ex 60079-30-1 IIIC T85°C Db

