

# Self-regulating heating cable HTP

- Automatically adjusts heat generation in response to changes in the pipe temperature
- Can be cut to the desired length without compromising on performance
- Will not overheat or burn even when overlapping
- Full set of control tools and accessories
- Operating voltage ~220–240 V (~110–120 V available on request)



1. 1.25 mm<sup>2</sup> nickel-plated copper conductors
2. Semi-conductive self-regulating matrix
3. Matrix insulation
4. Tinned copper braid
5. Overjacket thermoplastic or fluoropolymer

## Versions

**HTP...BT** Design with a thermoplastic elastomer jacket over tinned copper wire armor for added protection.

**HTP...BP** Design with a fluoroplastic jacket over tinned copper wire armor for added protection in locations exposed to corrosive chemicals or vapors.

## Approvals

№ Sira 17ATEX3335U

№ Sira 18ATEX3038X

№ IECEx CCVE 17.0006U

№ IECEx CCVE 17.0007X

№ 16.00338.120

№ TC RU C-RU.AA87.B.00340

№ C-RU.ПБ37.B.02047

## Key features

HTP is a self-regulating industrial-grade heating cable typically used for protection of pipelines and tanks against freezing or maintaining the desired temperature. It can be easily cut to the desired length in place to exactly match the pipeline length.

HTP cable is approved for installation in safe and explosive areas pursuant to international standards, as well as the Russian standards GOST R IEC 60079-0-2011, GOST R IEC 60079-7-2012, GOST IEC 60079-30-1-2011.

Self-regulation properties enhance the safety and reliability of the cable. HTP will neither overheat nor burn, even when overlapping. Heat generation is self-regulated in response to changes in temperature.

Installation of the HTP is straightforward, requires little time and does not require any special skills or tools. All components for connecting or splicing the ends and connecting to a power source are available in convenient kits.



# Low-temperature cables

## Technical specifications

|  |  |
|--|--|
| Maximum continuous operating temperature (energized)   | 65 °C  |
| Maximum continuous exposure temperature (de-energized) | 85 °C  |
| Ambient temperature range                              | -60...+55 °C   |
| Minimum installation temperature:                      |  |
| HTP...BT   | -30 °C   |
| HTP...BP   | -60 °C   |
| Rated voltage  | ~220–240 V   |
| Ex marking   | Ex 60079-30-1 IIC T6 Gb<br>Ex 60079-30-1 IIIC T85°C Db |
| Temperature class                                      | T6   |
| IP rate  | IP67   |
| Maximum braiding resistance                            | 10 Ohm/km  |

## Weight and dimensions

| Type     | Nominal size, mm | Weight, kg/100 m | Minimum bending radius <sup>°</sup> , mm |
|----------|------------------|------------------|--|
| HTP...BT | 13.2×6.1         | 14.24            | 25                                       |
| HTP...BP | 12.8×5.7         | 15.19            | 25                                       |

<sup>°</sup> The minimum bending radius is given for a temperature of -20 °C.

## Accessories

(to be ordered separately)

Junction boxes of series PTB 401, 402 (see pp. 48–55); PTB 601, 602 (see pp. 64–71)

TKR connection kit for junction boxes – see p. 88

TKR/J connection kit for junction boxes without terminal glands – see p. 89

TKT/M kit for connection to the installation wire (without boxes, up to +125 °C) – see p. 89

CP-6 kit for connecting two heating cables (for maintenance, etc.) – see p. 90

Cable fasteners – see pp. 98–99

## Ordering information

**Example: 33HTP2-BT**

① ②③④ ⑤⑥

1. Linear power 33 W/m (to IEC 60079-1-30)
2. Type of self-regulating heating cable:  
HT – low temperature
3. Cable version: P – for industrial applications
4. Power supply voltage: 1 – ~110–120 V, 2 – ~220–240 V
5. Braiding material: B – copper tinned wire
6. Outer jacket material: T – thermoplastic elastomer, P – fluoropolymer

## Max. heating circuit length

(or combined length of a section of same grade connected in parallel) depending on the type of automatic circuit breaker:

| Type  | Activation temperature, °C | 230 V |      |      |      |
|-------|----------------------------|-------|------|------|------|
|       |                            | 16 A  | 20 A | 32 A | 40 A |
| 10HTP | 10                         | 205   | –    | –    | –    |
|       | -15                        | 140   | 186  | 195  | –    |
|       | -20                        | 123   | 165  | 195  | –    |
| 15HTP | 10                         | 145   | 162  | –    | –    |
|       | -15                        | 93    | 125  | 160  | –    |
|       | -20                        | 82    | 111  | 160  | –    |
| 25HTP | 10                         | 88    | 117  | 126  | –    |
|       | -15                        | 60    | 75   | 117  | 125  |
|       | -20                        | 50    | 70   | 105  | 125  |
| 33HTP | 10                         | 70    | 90   | 108  | –    |
|       | -15                        | 50    | 65   | 95   | 105  |
|       | -20                        | 45    | 58   | 85   | 105  |
| 40HTP | 10                         | 56    | 73   | 91   | –    |
|       | -15                        | 35    | 54   | 77   | –    |
|       | -20                        | 31    | 47   | 72   | –    |

For use with type C circuit breakers to GOST R 50345-2010 (IEC 60898-1:2003)

<sup>°</sup> When the heating section is switched on, there is a surge of current (starter current). Within 5 minutes after switching on, the current stabilizes. The maximum value of the starter current can exceed by a factor of 5 to 6 the nominal current of the automatic circuit breaker.

## Power output curve

Nominal power output at rated voltage 230 VAC.

Linear power, W/m

