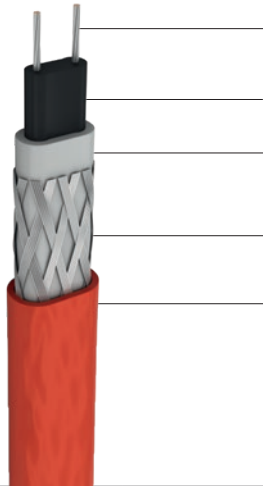


HTC-S

Compact self-regulating heating cable for tracing of pipes and tanks up to 85 °C



STRUCTURE

- conductor wires*
tinned copper
- self-regulating conductive matrix*
- primary insulation*
thermoplastic elastomer
- metal braid*
tinned copper
- outer coating*
thermoplastic elastomer

APPLICATIONS

- Freeze protection or temperature maintenance of pipes and tanks containing liquids or gases (e. g. water pipe systems, fire extinguishing system)

FEATURES

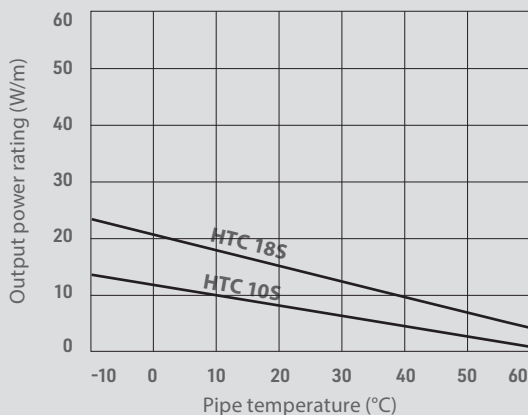
- Compact size
- Outer sheath colour: Red
- CE Marking

For accessories
see page 220
or download pdf



ref.	item	Nominal power output at 10 °C (W/m)	max contact temperature		minimum installation temperature	min./ mult. ord. (m)
			continuous	intermittent		
HTC10S	HTC10S	10	65 °C	85 °C	-40 °C	10
HTC18S	HTC18S	18				10

Power rating



Nominal power output versus temperature graph evaluated on thermal insulated metal pipes

Sizing table

ref.	start-up temperature (°C)	circuit breaker current rating			
		10 A	16 A	20 A	25 A
HTC10S	-20	77	111	139	173
	0	95	137	171	214
	+10	100	144	180	225
HTC18S	-20	41	59	74	92
	0	58	84	104	131
	+10	60	86	108	135

* Estimated values for installation with type C curve and 30 mA ground-fault circuit breaker

Type
Self-regulating

Supply voltage
230 Vac

Conductor cross-section
0.6 mm²

Maximum intermittent exposure temperature
85 °C

Maximum continuous exposure temperature
65 °C

Cable cross dimensions
8 × 5 mm

Minimum bend radius
40 mm (at -40°C)

HTC-P
HTC-H

Self-regulating heating cable

for tracing of pipes and tanks
up to 85 °C



STRUCTURE

- conductor wires
tinned copper
- self-regulating conductive matrix
- primary insulation
modified polyolefin
- metal braid
tinned copper
- outer coating
polyolefin

APPLICATIONS

- Freeze protection or temperature maintenance of pipes and tanks containing liquids or gases (e. g. water pipe systems, fire extinguishing system)

Also available HTC-PX/HTC-HX series for ATEX environments (p. 216) and HTC-FF in fluoropolymer (p. 217)

FEATURES

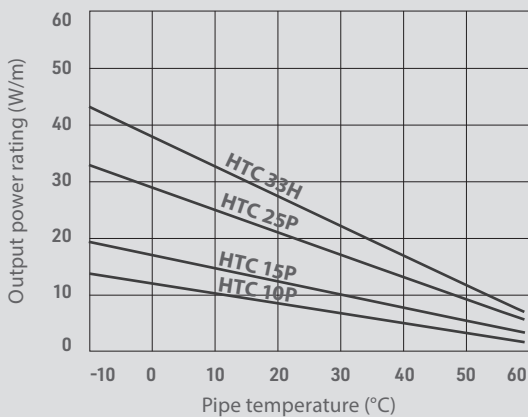
- Outer sheath colour: grey
- Degree of protection: IP 66 (EN 60529)
- CE Marking

For accessories see page 220 or download pdf



ref.	item	Nominal power output at 10 °C (W/m)	max contact temperature		minimum installation temperature	min./mult. ord. (m)
			continuous	intermittent		
HTC10P	HTC10P	10				10
HTC15P	HTC15P	15	65 °C	85 °C	-40 °C	10
HTC25P	HTC25P	25				10
HTC33H	HTC33H	33				10

Power rating



Nominal power output versus temperature graph evaluated on thermal insulated metal pipes

Sizing table

ref.	start-up temperature (°C)	circuit breaker current rating		
		20 A	30 A	40 A
		maximum cable circuit length * (m)		
HTC10P	-20	141	150	180
	0	161	180	180
	+10	150	180	180
HTC15P	-20	100	133	150
	0	115	150	150
	+10	130	150	150
HTC25P	-20	71	106	120
	0	80	120	120
	+10	110	120	120
HTC33H	-20	58	78	89
	0	66	89	100
	+10	90	100	100

* Estimated values for installation with type C curve and 30 mA ground-fault circuit breaker

Type
Self-regulating

Supply voltage
230 Vac

Conductor cross-section
0.8 mm² (18 AWG)

Maximum intermittent exposure temperature
85 °C

Maximum continuous exposure temperature
65 °C

Cable cross dimensions
11.5 × 6.3 mm

Minimum bend radius
40 mm

SIZING TABLES FOR PIPE TRACING SELF-REGULATING HEATING CABLES

Lowest ambient temperature $-10\text{ }^{\circ}\text{C}$

Pipe outer diameter		Insulation thickness				
inches	mm	10 mm	20 mm	30 mm	40 mm	50 mm
½	21.3	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P
¾	26.9					
1	33.7	1 × 18S	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P
1 ¼	42.4					
1 ½	48.3	1 × 25P	1 × 18S	1 × 18S	1 × 18S	1 × 18S
2	60.3					
2 ½	76.1	1.3 × 25P	1.1 × 18S	1 × 18S	1.1 × 10S 1.1 × 10P	1 × 18S
3	88.9					
4	114.3	1.3 × 33H	1.3 × 18S	1 × 18S	1.1 × 10S 1.1 × 10P	1 × 18S
6	165					

Lowest ambient temperature $-20\text{ }^{\circ}\text{C}$

Pipe outer diameter		Insulation thickness				
inches	mm	10 mm	20 mm	30 mm	40 mm	50 mm
½	21.3	1 × 18S	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P
¾	26.9					
1	33.7	1 × 25P	1.1 × 18S	1 × 10S 1 × 10P	1 × 10S 1 × 10P	1 × 10S 1 × 10P
1 ¼	42.4					
1 ½	48.3	1 × 33H	1.2 × 25P	1 × 18S	1 × 18S	1 × 18S
2	60.3					
2 ½	76.1	1.3 × 33H	1 × 25P	1 × 18S	1 × 18S	1 × 18S
3	88.9					
4	114.3	1.8 × 33H	1.3 × 25P	1 × 25P	1 × 18S	1 × 18S
6	165					

The number preceding the heating cable reference is the number of runs of cable required for each meter of pipe, based on the lowest ambient temperature, insulation thickness and pipe diameter.
For example: 1.3 × 25P means 1.3 meters of HTC25-P heating cable are required for each meter of pipe length.

Heating cable extra length for flanges and valves

In applications on pipes or tanks, where flanges and valves are present, a longer heating cable must be provided, which depends on the pipe dimensions.

Valves and flange tracing should always be carried out in compliance with minimum bend radius of the heating cable used.

Heating cables installed on tanks should be fixed with ISOALL aluminium adhesive tape (see page 214).

Pipe outer diameter		Application on flange (m)	Application on valve (m)
inches	mm		
½	21.3	-	-
¾	26.9	0.3	0.3
1	33.7		
1 ½	48.3		0.6
2	60.3		0.9
3	88.9		1.2
4	114.3	0.6	1.2
6	165		

Download and print data collection form (page 223)

