HTS3FM 200°C

htuk

Electrical heating cable for the heating of long pipelines.

LONGLINE

High Efficiency Series Resistance Single Conductor Heating Cable

- Circuit lengths up to 2km.
- Single supply point - minimises supply cabling costs.
- Available up to 600V AC/DC 3 phase.
- Power outputs up to 50W/m.
- Suitable for use in safe, hazardous and corrosive areas.
- Full range of controls and accessories available.

DESCRIPTION

LONGLINE HTS3FM is a series resistance, single conductor heating cable supplied in multiples of 3 cables for configuring with a 3 phase heating system. It is used for freeze protection or process temperature maintenance of long pipelines.

A typical application is the temperature maintenance of crude or fuel oils in above ground and buried transfer lines.

LONGLINE minimises the number of electrical supplies needed and so minimises supply cabling and distribution equipment costs. Circuits are often fed at the pipe ends only.

The single conductor is sheathed with silicone rubber for flexibility.

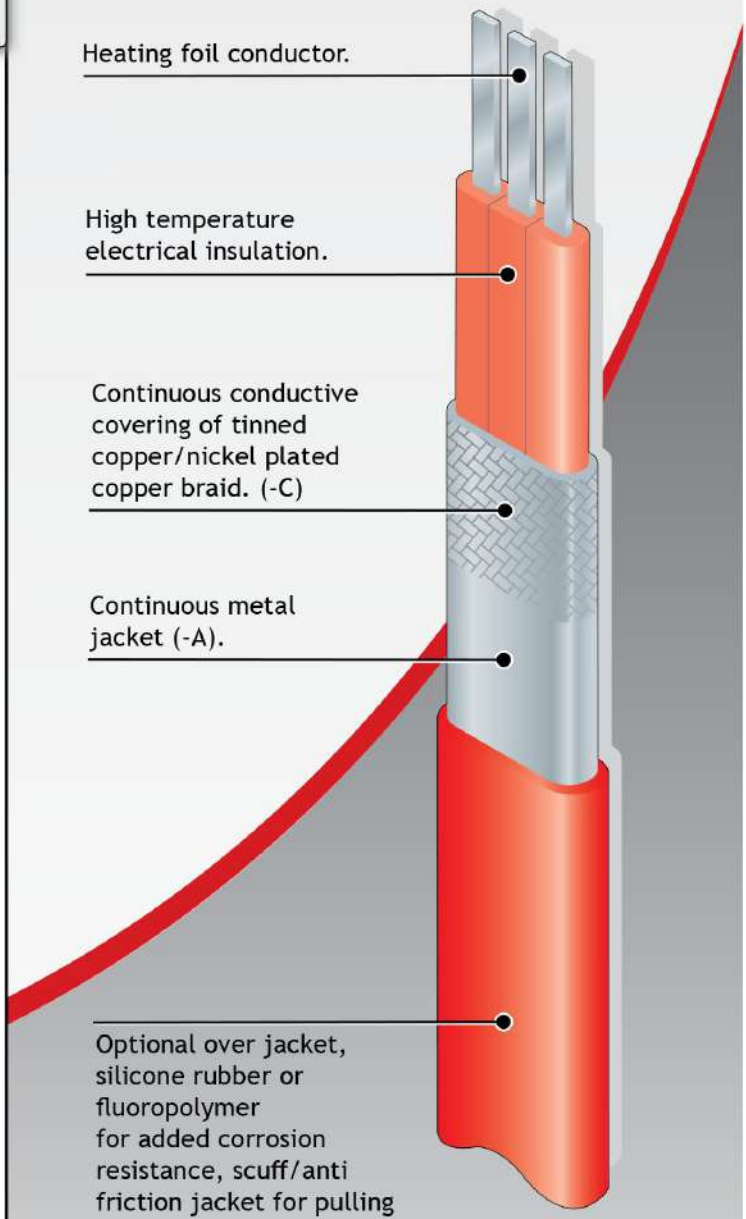
A continuous conductive cover and over-jacket can be provided for additional mechanical protection or for grounding purposes.

The number of heating cables and their conductor sizes are designed to produce the desired output for the circuit length required. The **LONGLINE** heaters are connected directly to the 3 phase mains voltage or, when required, to a step-up transformer.

The large heated surface of **LONGLINE'S** flat foil construction results in lower operating temperatures than equivalent round conductor contructions thereby improving safety and system life. The high efficiency produces high power capability (up to 50W/m) per cable.

LONGLINE cable may be straight run to above ground pipes. For buried lines, cables are usually drawn into channel raceways within a pre-insulated pipeline system.

Cable is provided in convenient lengths for series connection at site.



IEC IECEx EAC CE 2776 Ex

HEAT TRACE

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SPECIFICATION

MAXIMUM CONTINUOUS EXPOSURE TEMPERATURE (Power ON): 200°C (392°F)

MAXIMUM PERMISSABLE EXPOSURE TEMPERATURE (Power OFF): 200°C (392°F)

MINIMUM OPERATING TEMPERATURE: -80°C (-112°F)*

MINIMUM INSTALLATION TEMPERATURE: -40°C (-40°F)

POWER SUPPLY: up to 600V AC/DC 3 phase according to application requirements

POWER OUTPUT: up to 50W/m by design according to application requirements

TEMPERATURE CLASSIFICATION:

(See workpiece temperature tables)

APPROVAL DETAILS: - Specific constructions have the following approvals

ATEX - CML 19ATEX3389X
IECEx - IECEx CML 19.0132X
EAC* - ЕАЭС RU C-GB.МЮ62.B.01122/19

CONSTRUCTION:

Heating Conductors:	Sized to suit application
Max Conductor size:	4 x (0.3mm - 1.5mm)
Insulation:	Silicone Rubber
Continuous Conductive Covering:	Braid/Aluminium
Over Jacket:	Silicone or Fluoropolymer

ORDERING INFORMATION:

Example: HTS 3FAM - A S/2.3

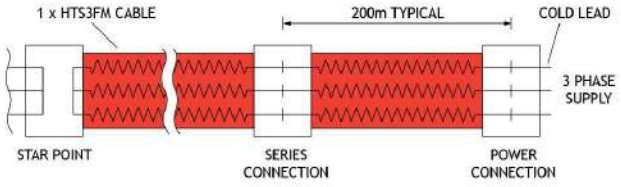
- Silicone Rubber Sheath
- Three heating conductors
- *(3FM) Copper or (3FAM) - Alumininium*
- Continuous conductive cover
- *(C) Metal Braid or (A) Continuous Metal jacket*
- Optional over-jacket
- *(F) Fluoropolymer or (S) Silicone*
- Nominal foil height (mm)

MAXIMUM PIPE/WORKPIECE TEMPERATURE:

The surface of the heater must not exceed the maximum withstand temperature of its constructional materials or the Temperature Classification (if installed in a hazardous area). This is ensured by limiting the pipe or workpiece temperature to a safe level either by design calculation (a Stabilised Design) or by means of temperature controls.
For worst case conditions, the temperature of steel pipes should be limited to the following levels.

Cat Ref	Nom. Output (W/m)	Area Classification Hazardous T6	T5	T4	T3	T2	T1	Safe
HTS3FM-x	10	47	66	107	181	200	200	200
	20	–	32	75	157	191	191	191
	30	–	–	41	132	163	163	163
	40	–	–	–	108	133	133	133
	50	–	–	–	76	97	97	97
HTS3FM-xS	10	57	73	112	181	200	200	200
	20	37	53	93	166	180	180	180
	30	–	31	73	152	157	157	157
	40	–	–	51	127	127	127	127
	50	–	–	27	92	92	92	92
HTS3FM-xF	10	57	73	112	181	200	200	200
	20	37	53	93	166	180	180	180
	30	–	31	73	152	157	157	157
	40	–	–	51	127	127	127	127
	50	–	–	27	92	92	92	92

TYPICAL ARRANGEMENT:



CIRCUIT PROTECTION:

Circuit breakers, switch gear and supply cabling should be sized to cater for cold start-up conditions. Heat Trace Ltd will advise operating and start-up loads.

ACCESSORIES:

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes, controls and fixing tape. These items are recommended for the correct operation of LONGLINE products.

LONGLINE - A COMPLETE SYSTEM:

Reliability of the heating system is usually paramount. LONGLINE cables form only part of a high integrity LONGLINE heating system including power control, temperature control and circuit health monotoring/ alarm equipment - all specifically developed and produced by Heat Trace Ltd.

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