

*Automatically adjusts heat output in response to increasing or decreasing pipe temperature*

*Can be cut to length with no wastage*

*Will not overheat or burnout, even when overlapped*

*Approved for use in non-hazardous, hazardous and corrosive environments*

*Full range of controls and accessories*

*Available for 110-120VAC and 220-277 VAC*

## FEATURES

ILL is a light industrial/commercial grade self-regulating heating tape that can be used for freeze protection or temperature maintenance of pipework and vessels in the construction and refrigeration industries.

It can be cut-to-length at site and exact piping lengths can be matched without any complicated design considerations.

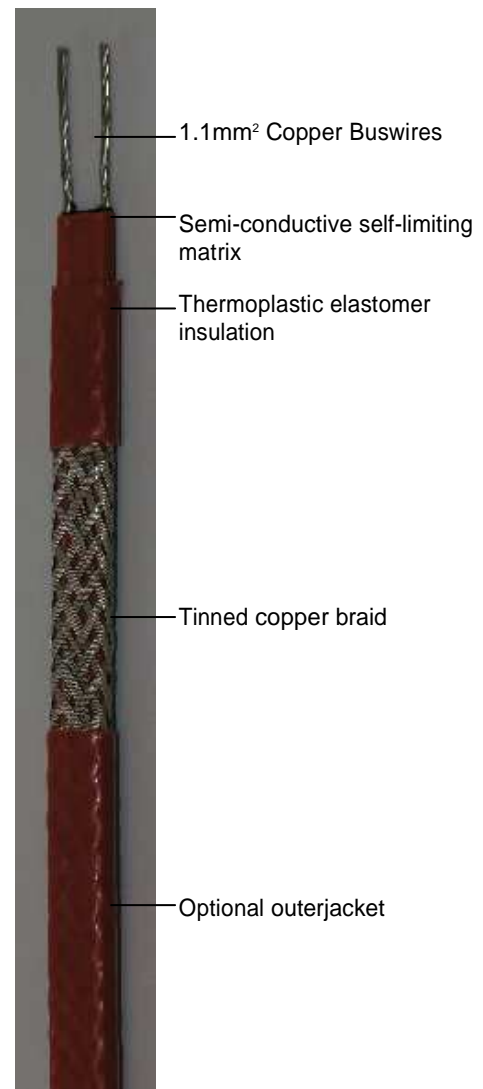
ILL is approved for use in non-hazardous, hazardous and corrosive environments to world wide standards.

Its self-regulating characteristics improve safety and reliability. ILL will not overheat or burnout, even when overlapped upon itself. Its power output is self-regulated in response to the pipe temperature.

The installation of ILL is quick and simple and requires no special skills or tools. Termination, splicing and power connection components are all provided in convenient kits.

## OPTIONS

- ILL .. C Tinned copper braid providing mechanical protection or where traced equipment does not provide an effective earth path. eg. plastic pipework.
- ILL .. CT Thermoplastic overjacket over tinned copper braid provides additional protection.
- ILL .. CF Fluoropolymer overjacket over tinned copper braid provides protection where corrosive chemical solutions or vapours may be present.



## SPECIFICATION

**MAXIMUM TEMPERATURE** 85°C (185°F)

**MAX. PERMISSIBLE TEMPERATURE de-energised** 85°C (185°F)

**MINIMUM INSTALLATION TEMPERATURE** -40°C (-40°F)  
(CENELEC -20°C, -4°F)

**POWER SUPPLY** 110 – 120VAC, 220 – 277VAC








**TEMPERATURE CLASSIFICATION** up to 23W/m T6 (85°C)  
31W/m and/or 277V T4 (135°C)

**MAXIMUM RESISTANCE OF PROTECTIVE BRAIDING** 18.2 Ohm/km

### WEIGHTS AND DIMENSIONS

Type Ref	Nominal Dimensions (mm)	Weight kg/100m	Min. Bending radius	Gland Size
ILL	8.5 x 3.9	4.6	25mm	M20
ILL .. C	9.3 x 4.7	9.2	30mm	M20
ILL .. CT	10.5 x 5.9	10.2	35mm	M20
ILL .. CF	10.5 x 5.9	9.9	35mm	M20

### APPROVAL DETAILS

Testing Authority	Certificate No.	Standard
CENELEC 	SCS Ex 99E3146	EN60079-0/EN60079-7
ATEX 	Sira 02ATEX3074	EN60079-0/EN60079-7 IEC62086
IEC 	Sira 02Y3064	CEI IEC62086 & IEC60079-7
FM 	3009080	ANSI/IEEE Std 515
VDE 	114665	DIN VDE 0254
CSA 	214197-1295278	C22.2 No. 130.1 C22.2 No. 130.2 C22.2 No. 138
Lloyds Register 	02/00062	EN60079-0/EN60079-7 IEEE Std515

Further approvals are available on request.

Example	ILL 12 2-C T
Output 12W/m at 5°C	_____
Supply Voltage 220 – 277VAC	_____
Tinned Copper Braid	_____
Thermoplastic Outerjacket	_____

### ACCESSORIES

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

### MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE

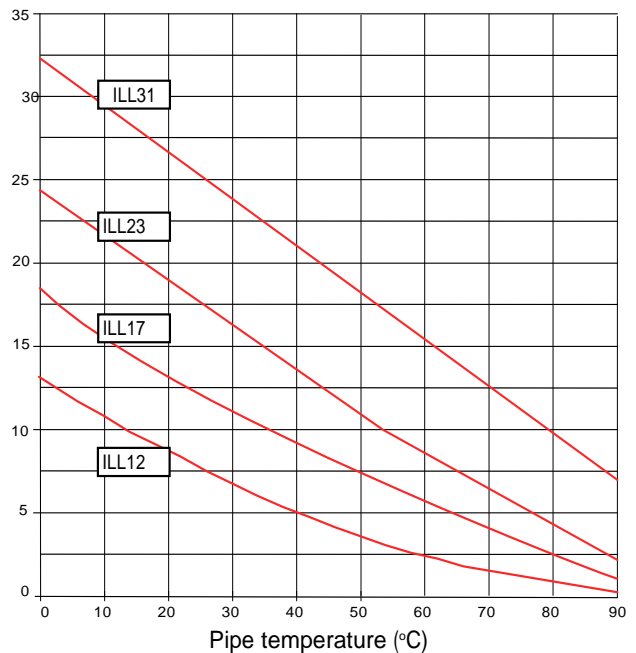
Cat Ref	Start-up Temperature	230V			
		6A	10A	16A	20A
12ILL	5°C	78	132	180	-
	0°C	74	124	180	-
	-20°C	56	94	150	180
	-40°C	46	76	124	154
17ILL	5°C	62	104	146	-
	0°C	60	100	146	-
	-20°C	48	82	130	146
	-40°C	42	70	112	138
23ILL	5°C	46	76	124	-
	0°C	42	70	114	124
	-20°C	34	56	88	110
	-40°C	28	46	72	90
31ILL	5°C	34	58	92	102
	0°C	32	52	84	102
	-20°C	24	40	56	66
	-40°C	20	34	54	66

For use with Type C circuit breakers to BS EN60898

### THERMAL RATINGS

Nominal output at 115V or 230V when ILL is installed on insulated metal pipes.

W/m



### FURTHER INFORMATION

Please consult the appropriate termination instructions and the Heat Trace Installation, Testing and Maintenance Manual (IMEHT010) for further details. For VDE compliant heaters, please consult the installation principles for flexible electric heat tracing (TDS9078/001).

Erfahrung ist Zukunft



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