

## FREEZSTOP LOW VOLTAGE

Electrical heating cable for frost protection or temperature maintenance.

*Self-Regulating Heating Cable*

- 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.
- Full range of controls and accessories.
- Available for 22/24VAC and 11/12VAC.
- ATEX & IECEX certified for hazardous areas.
- FLV available in outputs 12W/m & 17W/m. FLVw available in 30W/m.

### DESCRIPTION

FREEZSTOP LOW VOLTAGE is a light industrial/commercial grade self-regulating heating cable 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.

FREEZSTOP LOW VOLTAGE is approved for use in non-hazardous and hazardous areas to world wide standards.

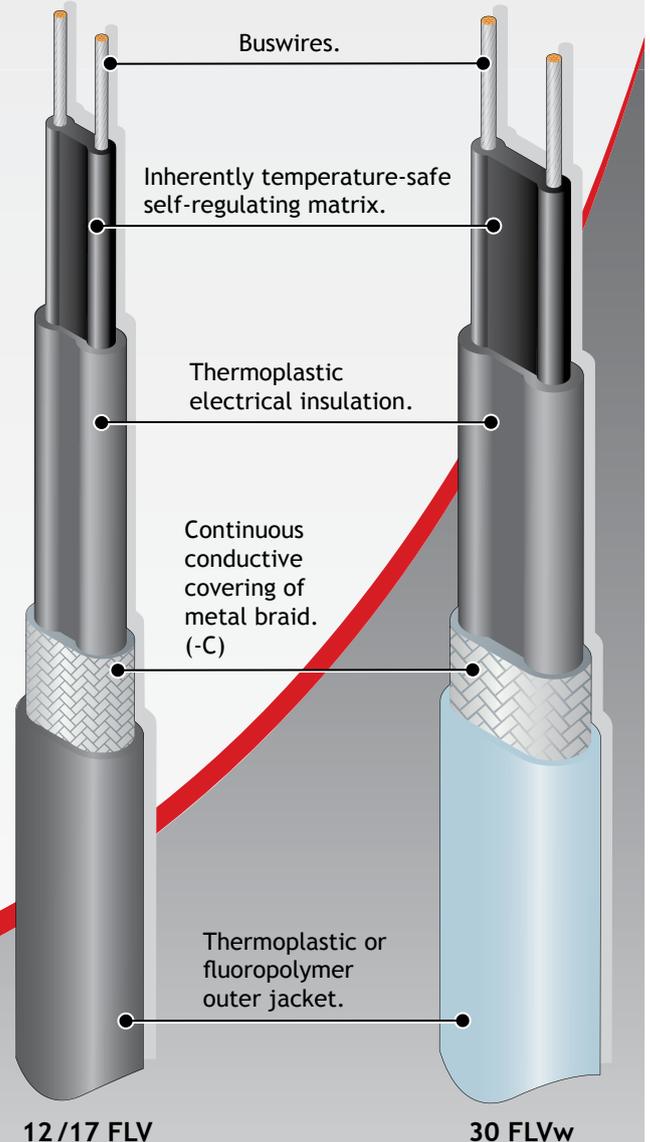
Its self-regulating characteristics improve safety and reliability. FREEZSTOP LOW VOLTAGE will not overheat or burnout, even when overlapped upon itself. Its power output is self-regulated in response to the pipe temperature.

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

### INHERENTLY TEMPERATURE-SAFE

“The inherent ability to self-regulate at a temperature level below the maximum product rating and withstand temperature of the insulating materials, without the need for temperature control.”

Similar competitor self-regulating products are typically limited to a maximum energised temperature, typically 65°C at which point, their retained power output prevent the cable from self-regulating at its own limiting temperatures. All such products require temperature control to ensure their own temperature safety.



## SPECIFICATION

**MAXIMUM CONTINUOUS EXPOSURE TEMPERATURE (Power ON):** 85°C (185°F)

**MAXIMUM PERMISSIBLE EXPOSURE TEMPERATURE (Power OFF):** 85°C (185°F)

**MINIMUM OPERATING TEMPERATURE:** -65°C\* (-85°F)

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

**POWER SUPPLY:** 12 - 24V AC or DC

**TEMPERATURE CLASSIFICATION:** T6 (85°C)

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

**INGRESS PROTECTION:** IP67

### WEIGHTS & DIMENSIONS:

Type Ref	Dimensions (mm) +/-0.5	Weight kg/100m	Min Bending radius	Gland Size
FLV	8.3 x 3.7	4.8	25mm	M20
FLV-C	9.3 x 4.7	8.3	30mm	M20
FLV-CT	10.5 x 5.9	10.2	35mm	M20
FLV-CF	10.5 x 5.9	10.9	35mm	M20
FLVw	10.75 x 3.75	5.6	25mm	M20
FLVw-C	11.75 x 4.75	9.5	30mm	M20
FLVw-CT	12.95 x 5.95	11.8	35mm	M20
FLVw-CF	12.95 x 5.95	12.6	35mm	M20

### APPROVAL DETAILS:

ATEX	- FLV:	Sira 12ATEX3115
	- FLVw:	Sira 12ATEX3113
IECEX	- FLV:	SIR 11.0130
	- FLVw:	SIR 11.0122
EAC*	- TC RU C-GB.AA87.B.00519	

### ORDERING INFORMATION:

#### Options

- FLV(w)-C** Continuous conductive covering of metal braid.
- FLV(w)-CT** Thermoplastic outer jacket over a metal braid provides additional protection.
- FLV(w)-CF** Fluoropolymer outer jacket over a metal braid provides protection where corrosive chemical solutions or vapours may be present.

Example:

12 FLV 24 - C T

Output 12W/m at 10°C \_\_\_\_\_

FREEZSTOP LOW VOLTAGE \_\_\_\_\_

Supply Voltage 22 - 24V AC \_\_\_\_\_

Metal Braid \_\_\_\_\_

Thermoplastic Outerjacket \_\_\_\_\_

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

The following circuit details relate specifically to the trace heating of pipework and equipment. For any other application consult Heat Trace.

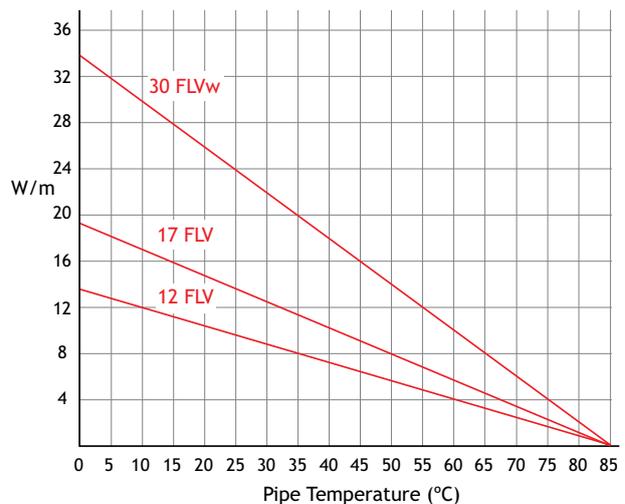
Cat Reference	Start-up Temperature	24V			
		6A	10A	16A	20A
12FLV	5°C	8	14	18	-
	0°C	8	12	18	-
	-20°C	6	12	16	-
	-40°C	6	10	14	-
17FLV	5°C	6	8	14	16
	0°C	4	8	12	14
	-20°C	4	6	10	14
	-40°C	4	6	10	12
30FLVw	5°C	4	6	10	12
	0°C	4	6	8	10
	-20°C	2	4	8	10
	-40°C	2	4	6	8

For use with Type C circuit breakers to IEC 60898

### THERMAL RATINGS:

Nominal output at 12V or 24V when FLV is installed on thermally insulated carbon steel pipes.

Note: Please refer to Evolution for more precise power output values as a function of pipe temperature.



### ACCESSORIES:

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. Such items carry separate approvals from the heating cables. Use only approved components, as per system certification.

### FURTHER INFORMATION:

Please consult the appropriate termination instructions and the Heat Trace Design, Installation & Maintenance Manual (HTDIMM 010) for further details.

**HEAT TRACE**<sup>TM</sup>  
SETTING THE STANDARDS LEADING THE WAY

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