Electrical heating cable for frost protection or temperature maintenance.

# FREEZSTOP REGULAR

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.
- Approved for use in non-hazardous, hazardous and corrosive environments.
- Available up to 277 VAC.

## **DESCRIPTION**

FREEZSTOP REGULAR is an industrial grade, selfregulating heating cable that can be used for freeze protection or temperature maintenance to 85°C.

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

FREEZSTOP REGULAR is approved for use in nonhazardous, hazardous and corrosive environments to world wide standards.

Its self-regulating characteristics improve safety and reliability. FREEZSTOP REGULAR 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 REGULAR is quick and simple and requires no special skills or tools. Termination, splicing and power connection components are all provided in convenient kits.

# Buswires. Inherently temperature-safe self-regulating matrix. Thermoplastic electrical insulation. Continuous conductive covering of metal braid. Thermoplastic or fluoropolymer

# 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 selfregulating at its own limiting temperatures. All such products require temperature control to ensure their own temperature safety.





outer jacket.





















## **SPECIFICATION**

MAXIMUM CONTINUOUS EXPOSURE

TEMPERATURE (Power ON): 85°C (185°F)

MAXIMUM PERMISSABLE EXPOSURE

TEMPERATURE (Power OFF): 85°C (185°F)

MINIMUM OPERATING

*TEMPERATURE*: -65°C\* (-85°F)

MINIMUM INSTALLATION

TEMPERATURE: -40°C (-40°F)

POWER SUPPLY: 1 - 277V AC

#### TEMPERATURE CLASSIFICATION:

up to 40W/m @ nom voltage - T6 (85°C) up to 31W/m @ nom 230V powered to 277V - T6 (85°C) >40W/m @ nom voltage - T4 (135°C)

>31W/m @ nom 230V powered up to 277V - T4 (135°C)

MAXIMUM RESISTANCE

OF PROTECTIVE BRAIDING: 18.2 Ohm/km

#### **WEIGHTS & DIMENSIONS:**

Туре	Dimensions	Weight	Min Bend	Gland
Ref	(mm) +/-0.5	kg/100m	radius	Size
FSR	10.75 x 3.75	5.6	25mm	M20
FSRC	11.75 x 4.75	9.5	30mm	M20
FSRCT	12.95 x 5.95	11.8	35mm	M20
FSRCF	12.95 x 5.95	12.6	35mm	M20

#### APPROVAL DETAILS:

ATEX - Sira 02ATEX3070 IECEx - SIR 11.0121 FM - 3009080 VDE - 114665

CSA - 1295278, 1547590

EAC\* - TC RU C-GB.ΓБ05.Β.00186

# ORDERING INFORMATION: Options

FSR-C Continuous conductive covering of metal braid. Mechanical protection/earth path.

**FSR-CT** Thermoplastic outer jacket over a metal braid provides additional protection.

FSR-CF Fluoropolymer outer jacket over a metal

braid provides protection where corrosive chemical solutions or vapours may be

present.

Example:	17 FSR 2 - C T
Output 17W/m at 10°C —	
FREEZSTOP REGULAR —	
Supply Voltage 220 - 277V AC —	
Metal Braid —	
Thermonlastic Outerjacket ——	

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

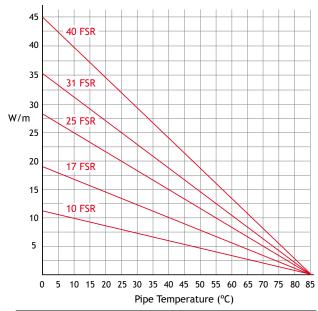
The following circuit details relate specifically to the trace heating of pipework and equipment. For any other application consult Heat Trace.

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Cat	Start-up		230V			
Reference	Temperature	10A	16A	20A	32A	
10FSR	10°C	136	198	198	198	
	0°C	122	188	188	188	
	-20°C	108	174	176	176	
	-40°C	96	154	166	166	
17FSR	10°C	92	148	152	152	
	0°C	84	134	144	144	
	-20°C	74	118	136	136	
	-40°C	66	106	128	128	
25FSR	10°C	74	118	124	124	
	0°C	68	108	120	120	
	-20°C	60	94	112	112	
	-40°C	52	84	106	106	
31FSR	10°C	58	92	112	112	
	0°C	52	84	104	106	
	-20°C	46	74	92	100	
	-40°C	42	66	82	94	
40FSR	10°C	46	74	92	98	
	0°C	42	66	84	94	
	-20°C	36	58	74	88	
	-40°C	32	52	66	84	
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For use with Type C circuit breakers to IEC 60898

#### THERMAL RATINGS:

Nominal output at 115V or 230V when FSR is installed on thermally insulated carbon steel pipes.



#### **FURTHER INFORMATION:**

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



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