



protection or temperature maintenance.

# Electrical heating cable for freeze FREEZSTOP REGULA

Self-Regulating Heating Cable

- Automatically adjusts heat output in response to increasing or decreasing pipe temperature.
- Can be cut-to-length.
- Inherently temperature safe.

- Suitable for use in safe, hazardous and corrosive areas.
- Available up to 277V AC/DC.
- Full range of controls and accessories available.

# DESCRIPTION

FREEZSTOP REGULAR is an industrial grade, self-regulating 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 non-hazardous, hazardous and corrosive environments to world wide standards.

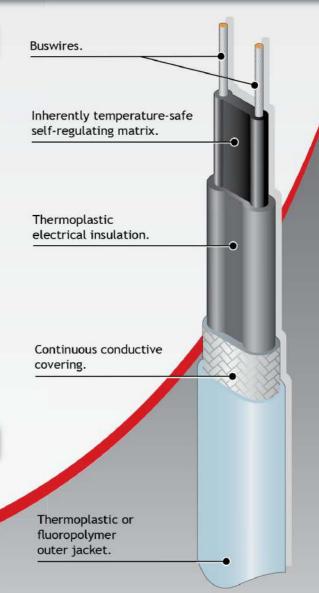
Its self-regulating characteristics improve safety and reliability. FREEZSTOP REGULAR will not overheat or burnout, even when overlapped upon itself. Its power output is self-regulated in response to the pipe temperature.

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.

## 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

Other manufacturers 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.



FSR-CF is supplied with a black fluoropolymer 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: -40°C (-40°F)

MINIMUM INSTALLATION

TEMPERATURE: -40°C (-40°F)

POWER SUPPLY: 12 - 277V AC/DC

#### 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)

<b>INGRESS</b>	PROTECTION	IP67

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

Туре	Dimensions	Weight	Min Bend	Gland	
Ref	(mm) +/-0.5	kg/100m	radius	Size	
FSRC	11.75 x 4.75	9.5	30mm	M20	
FSRCT	12.95 x 5.95	12.9	35mm	M20	
FSRCF	$12.65 \times 5.65$	14.8	35mm	M20	

#### APPROVAL DETAILS:

ATEX† - CML 19ATEX3378 IECEx† - CML 19.0121 CSA - 1295278, 1547590

EAC† - EA9C RU C-GB.HA65.B.01383/22

DNV-GL† - TAE0000272

Japanese - CML 16JPN3355X 1 to 4

CNEX - CNEx19.1555U

## ORDERING INFORMATION:

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

#### ATEX & IECEX MARKINGS:

EX 60079-30-1 IIC T6 Gb

Ex 60079-30-1 IIC T85°C Db

Ex 60079-30-1 IIC T4 Gb

Ex 60079-30-1 IIIC T135°C Db

EN 60079-0:2018 EN 60079-30-1:2017

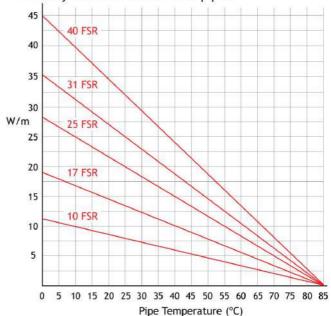
## MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE:

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

Cat	Start-up	art-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	
Residentia	l Comm	Commercial Industry an		nd		
buildings	build	buildings		Infrastructure		
MCB's certi	fied MC	B's certif	ied acc	cording	3	
IEC 60898-	·1 both I	both IEC 60898-1 & IEC 60947-2				

#### 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 Design, Installation & Maintenance Manual (HTDIMM 010) for further details.

HTUK Ltd, Alexandra Building Wearfield Sunderland SR5 2TA, England



Tel: +44 (0) 191 5166636

Fax: +44 (0) 191 5166686

Web: www.ht-uk.com E mail: enquiries@ht-uk.com