FSU/FSUw

Extremely high temperature self-regulating heating cable.

FailSafe Ultimo

Inherently Temperature-Safe 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.
- High power outputs to 100W/m at 10°C.
- Full range of controls and accessories available.

DESCRIPTION

FSU is an extremely high temperature self-regulating heating cable, having an exposure limit of 250°C, energised or not.

Easy terminations, cut-to-length.

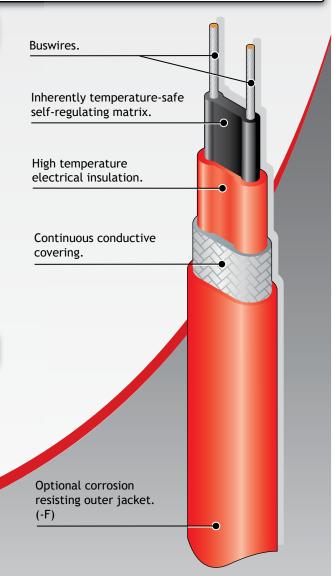
Safest ever self-regulating product range for extremely high temperature exposure; will not overheat even when exposed to 250°C when energised or switched off as it is inherently temperature-safe.

ATEX, IECEx & UKEX Approved.

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 120°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.



























SPECIFICATION

MAXIMUM EXPOSURE TEMPERATURE: 250°C (482°F) (ENERGISED OR SWITCHED OFF)

MINIMUM OPERATING

TEMPERATURE: -40°C (-40°F)

MINIMUM INSTALLATION

TEMPERATURE: -40°C (-40°F)

POWER SUPPLY: 12 - 277V AC/DC

TEMPERATURE CLASSIFICATION: #

15FSU, 30FSU, 45FSU & 60FSU @ nom 230V - T3 (200°C) 75FSU & 100FSUw @ nom 230V - T2 (300°C)

WEIGHTS & DIMENSIONS:

| Type | Dimensions. | Weight | Min Bending | Gland |
|---------|--------------|---------|-------------|-------|
| Ref | (mm) + /-0.5 | kg/100m | radius | Size |
| FSU-N | 11.3 x 4.6 | 11.3 | 30mm | M20 |
| FSU-NF | 12.5 x 5.8 | 14.6 | 35mm | M20 |
| FSUw-N | 13.6 x 4.8 | 15.8 | 30mm | M25 |
| FSUw-NF | 14.8 x 6.0 | 19.5 | 35mm | M25 |
| | | | | |

APPROVAL DETAILS:

- CML 19ATEX3385, CML 19ATEX3386 ATEX

IECEx - CML 19.0128, CML 19.0129

- TAE00002KC DNV

EAC - EA3C RU C-GB.HA65.B.01383/22 - CML 21UKEX31143, CML UKEX31145 UKEX

*CCC - 2020312312000120

ORDERING INFORMATION:

| Example: | 75 FSU 2 - N F |
|-----------------------------------|----------------|
| Output 75W/m at 10°C | |
| FSU Heating Cable ————— | |
| Supply Voltage 220 - 277V AC/DC — | |
| Metal Braid | |
| Outer Sheath, Fluoropolymer | |

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 and Maintenance Manual (HTDIMM 010) for further details.

INGRESS PROTECTION:

IP67

ATEX, IECEX & UKEX MARKINGS:

€x II 2 GD

Ex 60079-30-1 IIC T3 or T2# Gb

Ex 60079-30-1 IIIC T200°C or T300°C Db

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

*denotes FSU only.

MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE:

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

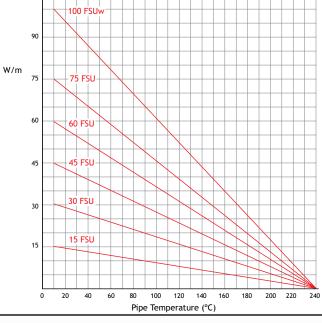
| Cat | Environmental | | 230V | | | | |
|-----------|----------------|-----|------|-----|-----|-----|--|
| Reference | Start-up Temp. | 10A | 16A | 20A | 32A | 50A | |
| 15FSU | 10°C | 76 | 122 | 154 | 172 | 172 | |
| | 0°C | 70 | 112 | 140 | 172 | 172 | |
| | -20°C | 62 | 98 | 122 | 172 | 172 | |
| | -40°C | 52 | 82 | 102 | 164 | 172 | |
| 30FSU | 10°C | 52 | 82 | 102 | 122 | 122 | |
| | 0°C | 46 | 74 | 92 | 122 | 122 | |
| | -20°C | 40 | 66 | 82 | 122 | 122 | |
| | -40°C | 34 | 54 | 68 | 110 | 122 | |
| 45FSU | 10°C | 38 | 62 | 76 | 100 | 100 | |
| | 0°C | 34 | 56 | 70 | 100 | 100 | |
| | -20°C | 30 | 50 | 62 | 98 | 100 | |
| | -40°C | 22 | 34 | 44 | 70 | 100 | |
| 60FSU | 10°C | 30 | 50 | 62 | 86 | 86 | |
| | 0°C | 28 | 44 | 56 | 86 | 86 | |
| | -20°C | 20 | 32 | 40 | 62 | 86 | |
| | -40°C | 12 | 18 | 24 | 38 | 60 | |
| 75FSU | 10°C | 22 | 34 | 44 | 70 | 76 | |
| | 0°C | 16 | 26 | 34 | 54 | 76 | |
| | -20°C | 12 | 18 | 24 | 38 | 60 | |
| | -40°C | 8 | 12 | 14 | 22 | 36 | |
| 100FSUw | 10°C | 18 | 30 | 36 | 58 | 84 | |
| | 0°C | 18 | 28 | 34 | 56 | 84 | |
| | -20°C | 16 | 24 | 30 | 50 | 76 | |
| | -40°C | 14 | 22 | 28 | 46 | 70 | |

For use with Type C circuit breakers to IEC 60898

These circuit lengths may be exceeded dependant on specific design parameters.

THERMAL RATINGS:

Nominal output at 230V when FSU is installed on thermally insulated carbon steel pipes.





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