

# Self-Regulating Heating Tape Freezstop Ultimo 200°C - FSU



**Electrical heating tape for process heating or temperature maintenance of pipework and vessels where high temperature withstand is required** **Withstands 250°C\***

- 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
- High power outputs up to 90W/m
- Full range of controls and accessories
- Available for 220/240VAC (110/120VAC on demand)

## FEATURES

FREEZSTOP ULTIMO is an industrial grade, self-regulating heating tape that can be used for applications ranging from process heating or maintenance of temperatures up to 200°C.

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

FREEZSTOP ULTIMO is used where high temperatures are required (up to 200°C) or where the heater must be capable of withstanding high exposure temperatures (up to 250°C\* un-energised).

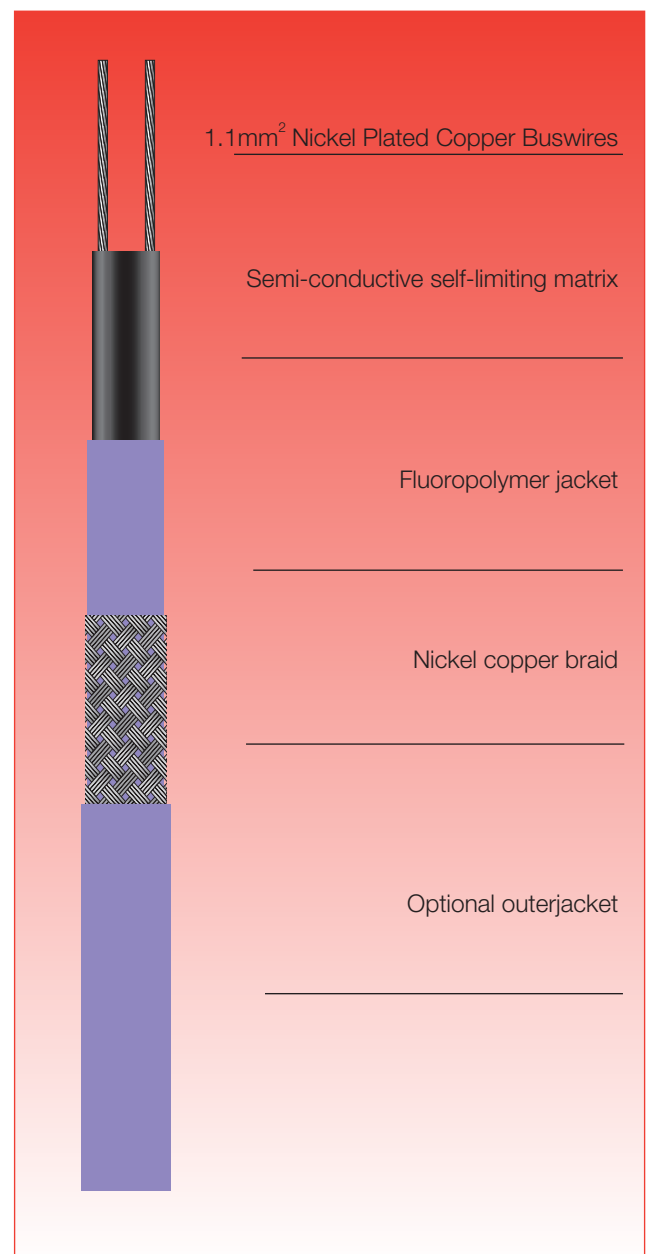
Its self-regulating characteristics improve safety and reliability. FREEZSTOP ULTIMO will not overheat or burnout.

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

\* 240°C only in hazardous areas

## OPTIONS

- |         |   |
|---------|---|
| FSU     | Unbraided base heater protected against corrosive chemical solutions and vapours. Heaters must have additional protection from mechanical damage in service.                              |
| FSU..N  | Nickel plated braid for where traced equipment does not provide an effective earth path, eg. plastic pipework. Heaters must have additional protection from mechanical damage in service. |
| FSU..NF | Fluoropolymer outerjacket over nickel plated braid provides additional protection where corrosive chemical solutions or vapours may be present.   |



# SPECIFICATION

**MAXIMUM CONTINUOUS TEMPERATURE (energised)** 200°C (392°F)

**MAXIMUM PERMISSIBLE EXPOSURE TEMPERATURE** 250°C (482°F)\*  
\* 240°C only in hazardous areas

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

**TEMPERATURE CLASSIFICATION** 75 & 90W/m = T2 (300°C)  
15 - 60W/m = T3 (200°C)

**POWER SUPPLY** 220 - 240 VAC  
(110 - 120 VAC on demand)




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

## WEIGHTS & DIMENSIONS


Type Ref	Nom. Dims. (mm)	Weight kg/100m	Min. Bending radius @ -20°C	Gland Size
FSU	10.4 x 3.4	7.6	20 mm	M20
FSU..N	11.4 x 4.4	11.7	25 mm	M20
FSU..NF	12.2 x 5.2	15.4	30 mm	M20

N denotes nickel plated copper braid

## APPROVAL DETAILS

Testing Authority	Certificate No.	Standard
CENELEC 		EN60079-0/EN60079-7
ATEX 	02ATEX3012	EN60079-0/EN60079-7 IEC62086
CSA 	1295278	C22.2 No. 130.1 C22.2 No. 130.2 C22.2 No. 138

Standard Area Approval Zone 1 and Zone 2

GOST R  POCC GB.ГБ05.В02364 GOST R 51330.0-99 (МЭК 60079-0-98)  
GOST R 51330.8-99

## ORDERING INFORMATION

Example 45 FSU 2-NF

Output 45W/m at 10°C \_\_\_\_\_

FREEZSTOP ULTIMO \_\_\_\_\_

Supply Voltage 220 - 240V AC \_\_\_\_\_

Nickel Plated Copper Braid \_\_\_\_\_

Fluoropolymer Outer Jacket \_\_\_\_\_

## FURTHER INFORMATION

Please consult the appropriate termination instructions and the Heat Trace Installation, Maintenance and Testing Manual (IMEHT010) for further details.

## ACCESSORIES

Backer supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. Such items carry separate approvals from the heating tapes.

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

Cat Ref	Start-up Temp	230V					
		6A	10A	16A	20A	25A	32A
15FSU	10°C	48	78	126	154	-	-
	0°C	46	76	120	150	154	-
	-20°C	40	68	108	136	154	-
30FSU	10°C	30	52	82	102	108	-
	0°C	30	48	78	96	108	-
	-20°C	26	44	70	88	108	-
45FSU	10°C	24	38	62	78	88	-
	0°C	22	36	58	74	88	-
	-20°C	20	34	52	66	82	88
60FSU	10°C	18	30	50	62	76	-
	0°C	18	30	46	58	72	76
	-20°C	16	26	42	52	66	76
75FSU	10°C	16	26	42	52	64	82
	0°C	14	24	40	48	60	78
	-20°C	14	22	36	44	54	70
90FSU	10°C	12	22	34	42	54	68
	0°C	12	20	32	40	50	64
	-20°C	10	18	30	36	46	58

For use with Type C circuit breakers to BS EN60898:1991

## THERMAL RATINGS

Nominal output @ 230V when installed on insulated metal pipe. W/m

