eltherm®

ELSR-MA-BF
up to 140 °F (60 °C)

At a Glance

Applications

Temperature maintenance

Freeze prevention

Pipelines

- In-pipe trace heating for water pipes and water hoses

Benefits

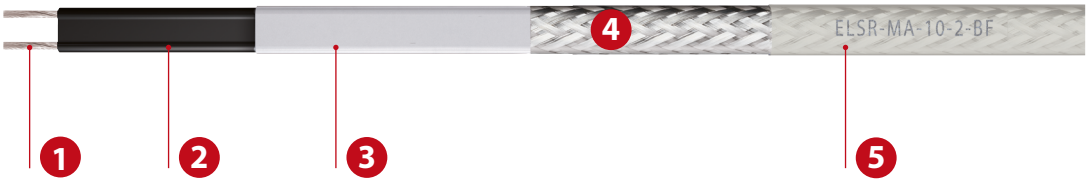
- NSF compliant
- Water proof & UV-resistant
- Small dimensions

Designs

BF Protective braid and outer jacket, suitable for use in potable water hoses (certified according to NSF/ANSI 61)

Approvals

- Certification
  FM 16 NUS 0014
  FM 16 NCA 0007
- Standards
  IEEE 515, CSA 22.2 130.16



1	Bus wire	Nickel plated copper, 20 AWG (0.63 mm²)
2	Self-regulating heating element	
3	Insulation	
4	Protection	Protective braid (Cu, tin plated)
5	Outer jacket	NSF compliant outer jacket

Technical Information

Min. start up temperature	-22 °F (-30 °C)
Max. continuous exposure temperature (power on)	140 °F (60 °C)
Max. intermittent exposure temperature (de-energized)	140°F (60 °C)
Nominal voltage	120 VAC (ELSR-MA-XX-**1**-BF) / 240 VAC (ELSR-MA-XX-**2**-BF)
Min. Bending radius	1.0 in (25 mm)
Min. Installation temperature	-13 °F (–25 °C)
Rating	PS (2,000 kPa / 290 psi)

Checklist

Power Connection & End Termination		
ELVB-SRAM-3/4" ST	Power Connection Kit ELSR-MA, -MA-BF with steel/zinc cable gland/fitting, 3/4" NPT (**non-hazardous location**)	09CA013
EL-SPN-16	Connection kit (splice set)	09CA033
EL-ECMF	End Termination Kit for ELSR-MA, -MA-BF, (**non-hazardous location**)	09CA042

Heating Circuit Length

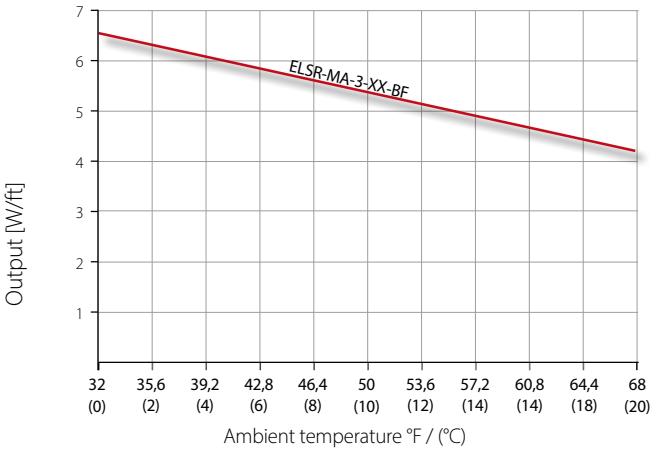
Start up temperature [°C]	Nominal CB rating [A]	120 VAC Heating circuit length [ft] ELSR-MA-3-1-BF	240 VAC Heating circuit length [ft] ELSR-MA-3-2-BF
50 °F (10 °C)	10	139	241
	15	167	302
	20	167	302
	25	167	302
32 °F (0 °C)	10	112	202
	15	153	282
	20	153	282
	25	153	282

Heating circuit lengths on the following conditions

- Voltage 120 VAC (-1-) / 240 VAC (-2-)
- Voltage drop max. 10%
- MCB type QO (100% utilisation)
- Single heater fed from 1 end

Power Output

ELSR-MA-3-X-BF output
(in a filled water pipeline)



Ordering Information

120 VAC

Type	Nominal output [at 50°F (10 °C)]	WxH approx. [mm]	Weight approx. [g/m]	Article - No.
ELSR-MA-3-1-BF	3 W/ft	8.1 x 5x8	68	BA225150

240 VAC

Type	Nominal output [at 50°F (10 °C)]	WxH approx. [mm]	Weight approx. [g/m]	Article - No.
ELSR-MA-3-2-BF	3 W/ft	8.1 x 5x8	68	BA225160

864302BA225X0 data sheet ELSR-MA-BF EN - Technical alterations reserved

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