



A CECO ENVIRONMENTAL BRAND

PRODUCT DATASHEET

FLX LSZH™

SELF-REGULATING HEAT TRACING

APPLICATION

FLX LSZH (Low Smoke Zero Halogen) self-regulating trace heaters provide freeze protection and temperature maintenance to metallic and nonmetallic pipes, tanks and equipment. FLX LSZH is rated for heat outputs of 9, 15, 25 and 32 W/m at 10°C when powered at 230 Vac. FLX LSZH is a safe, reliable, and easy to use solution for both metal and plastic pipes.

SAFE & SUSTAINABLE

In addition to rigorous performance testing, FLX LSZH is third party certified to meet IEC Low Smoke and Zero Halogen standards. Select FLX LSZH to ensure that your trace heating complies with the latest building fire safety requirements and minimize your overall environmental impact.

RUGGED & RELIABLE

FLX LSZH is protected by a tinned copper braid and an LSZH polyolefin outer jacket to provide grounding and additional mechanical protection.

Built with proven and proprietary compounding, extrusion, and cross-linking technology, FLX LSZH allows for continuous operation and extended life expectancy.

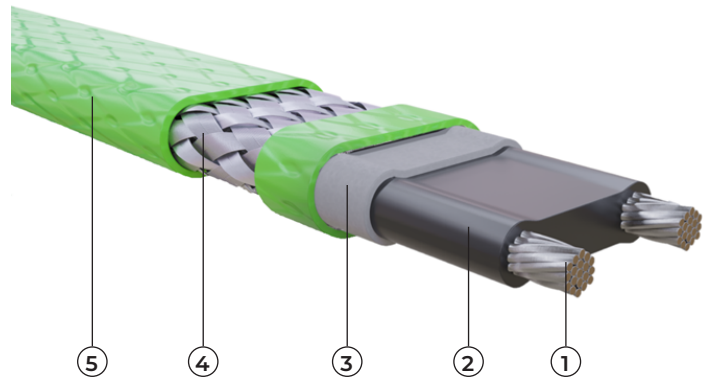
EASY TO DESIGN

Whether the project is simple or complex, designing an electric heat traced freeze protection system is easy with FLX LSZH. The step-by-step design guide leads the reader through determining the heating requirements and number of circuits required to establish a bill of materials.

With parallel circuitry, FLX LSZH does not require exact piping lengths to be known in advance and can be cut to length in the field. Heat tracing circuits for field-routed piping can be quickly and easily designed on site.

EASY TO INSTALL

FLX LSZH heat tracing is cut to length and installed directly on the supply piping under conventional thermal insulation with ordinary hand tools. Kits for power connection, end termination and splicing, plus other accessories, are designed for quick and easy installation



CHARACTERISTICS

1. 1.23 mm² (16 AWG) Nickel-Plated Copper Bus Wire
2. E-Beam Cross-Linked Polyolefin Semiconductive Heating Matrix
3. E-Beam Cross-Linked LSZH Polyolefin Primary Dielectric Insulation
4. Tinned Copper Metallic Braid
5. LSZH Polyolefin Outer Jacket

RATINGS

Power outputs.....9, 15, 25, and 32 W/m (10°C & 230 Vac)
 Supply voltages.....100-120 Vac or 200-277 Vac
 Max. continuous exposure temperature
 Power on 65°C (150°F)
 Power off 85°C (185°F)
 Minimum bend radius
 @ -15°C (5°F) 10 mm (0.38")
 @ -60°C (-76°F) 32 mm (1.25")
 30 mA Ground-Fault Protection Required

SYSTEM ACCESSORIES

Thermon offers system accessories designed specifically for rapid and easy installation of Thermon heat tracing. All trace heaters require a connection kit to comply with approval requirements. Information on accessories to complete a heater circuit installation can be found in the Accessories product datasheet (Form CPD1100U).

CERTIFICATIONS/APPROVALS



FLX LSZH is 3rd Party tested for:
 Low Smoke per IEC61034-1 & 2
 Zero Halogen per IEC 60754-2 & 3



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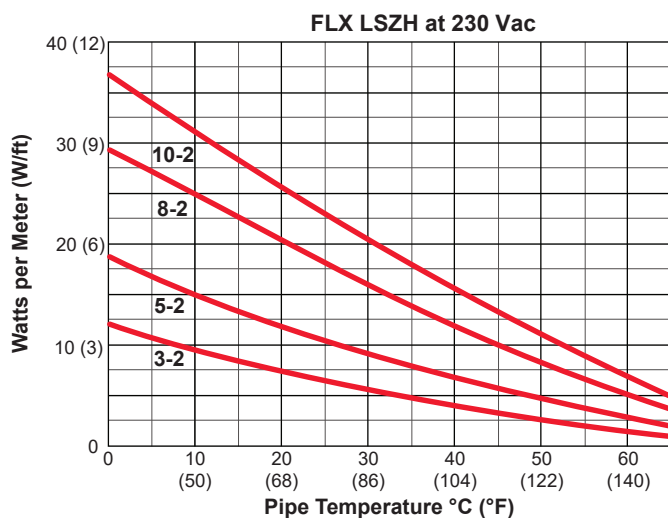
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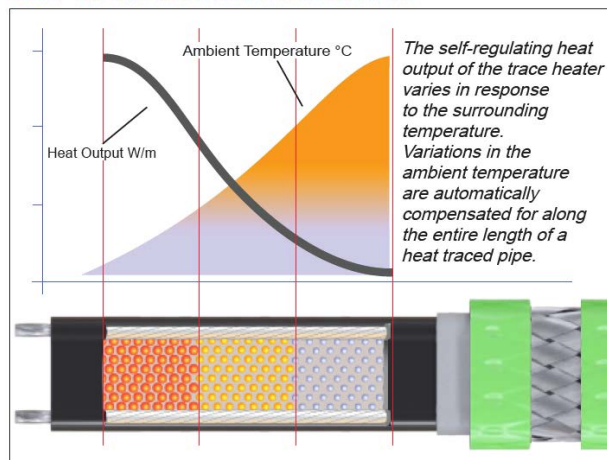
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POWER OUTPUT CURVES¹

Catalog Number (230 Vac Nominal)	Power Output at 10°C and 230 Vac (W/m)
FLX-B-3-2-LSZH	9
FLX-B-5-2-LSZH	15
FLX-B-8-2-LSZH	25
FLX-B-10-2-LSZH	32



SELF-REGULATING HEAT OUTPUT



CIRCUIT BREAKER SIZING²

Maximum circuit lengths for various circuit breaker amperages are shown below. Circuit breaker sizing and earth-fault protection should be based on applicable local codes. For information on design and performance on other voltages, contact Thermon. Earth-fault protection of equipment should be provided for each branch circuit supplying electric heating equipment.

230 Vac Service Voltage		Max. Circuit Length ⁴ vs. Breaker Size m (ft)					
Catalog Number	Start-Up Temp. ³ °C (°F)	Type B			Type C		
		16 A	25 A	32 A	16 A	25 A	32 A
FLX-B-3-2-LSZH	10 (50)	191 (627)	220 (722)	220 (722)	191 (627)	220 (722)	220 (722)
	0 (32)	191 (627)	220 (722)	220 (722)	191 (627)	220 (722)	220 (722)
	-20 (-4)	156 (512)	220 (722)	220 (722)	156 (512)	220 (722)	220 (722)
	-40 (-40)	127 (417)	199 (653)	220 (722)	127 (417)	199 (653)	220 (722)
FLX-B-5-2-LSZH	10 (50)	117 (384)	176 (577)	176 (577)	117 (384)	176 (577)	176 (577)
	0 (32)	117 (384)	176 (577)	176 (577)	117 (384)	176 (577)	176 (577)
	-20 (-4)	98 (322)	153 (502)	176 (577)	98 (322)	153 (502)	176 (577)
	-40 (-40)	80 (262)	126 (413)	161 (528)	80 (262)	126 (413)	161 (528)
FLX-B-8-2-LSZH	10 (50)	93 (305)	146 (479)	147 (482)	93 (305)	146 (479)	147 (482)
	0 (32)	93 (305)	146 (479)	147 (482)	93 (305)	146 (479)	147 (482)
	-20 (-4)	74 (243)	116 (381)	147 (482)	74 (243)	116 (381)	147 (482)
	-40 (-40)	61 (200)	95 (312)	122 (400)	61 (200)	95 (312)	122 (400)
FLX-B-10-2-LSZH	10 (50)	66 (217)	104 (341)	132 (433)	77 (253)	120 (394)	132 (433)
	0 (32)	58 (190)	91 (299)	117 (384)	71 (233)	111 (364)	132 (433)
	-20 (-4)	46 (151)	71 (233)	92 (302)	55 (180)	87 (285)	111 (364)
	-40 (-40)	37 (121)	58 (190)	75 (246)	45 (148)	71 (233)	91 (299)

Notes

- Power outputs shown apply to cable installed on insulated metallic pipe (using the procedures outlined in IEC 62395-1) at the service voltages stated. For use on other service voltages, contact Thermon. For more precise power output values as a function of pipe temperature, refer to CompuTrace®.
- Maximum circuit lengths shown are based on an instantaneous trip current characteristic per IEC 60898 at the referenced start-up temperature and a 10°C maintenance temperature. For maximum circuit lengths with other trip current characteristics, contact Thermon.
- While a heat tracing system is generally designed to keep the contents of a pipe at the desired maintain temperature, the trace heater may be energized at lower temperatures. For design data with lower start-up temperatures than represented above contact Thermon for design assistance.
- The maximum circuit length is for one continuous length of trace heater, not the sum of segments of cable. Refer to CompuTrace® design software or contact Thermon for current loading of segments.