

SUBMITTAL SHEET
BK-LSRX CABLE
HEAT TRACE



CAPACITIES
3, 5, 8, 10, 12 W/ft 120 or 208-277 Volts

BK-LSRX - SELF-REGULATING HEATING CABLE

JOB NAME: _____

LOCATION: _____

ARCHITECT: _____

ENGINEER: _____

CONTRACTOR: _____

SUBMITTED BY: _____ DATE: _____

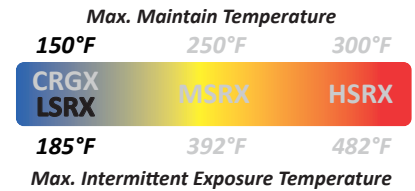
TAG/ITEM	QTY.	CATALOG NUMBER	HEATER		MAX CIRCUIT LENGTH	CIRCUIT BREAKER SIZE	MAINTAIN TEMP	MINIMUM AMBIENT TEMP
			W/FT	VOLTS				

ACCESSORIES AND CONTROLS	TAG/ITEM	QTY.	CATALOG NUMBER	DESCRIPTION

SUBMITTED BY:	DATE

APPROVED BY:	DATE

LSRX Self-Regulating Heating Cable



Product Description

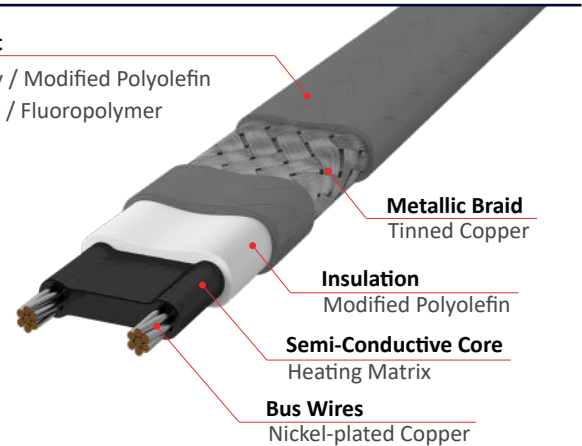
The LSRX Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

The unique PTC feature of LSRX self-regulating core elements adjusts its heat output in response to the surrounding temperature along the entire circuit, delivering more heat where and when required. This self-regulating feature also serves to prevent overheating, even in cases where LSRX cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Marley Engineered Products system connection kits for quick and convenient installations.

LSRX heating cable system is certified for ordinary and hazardous areas with maximum maintain temperature of 150°F (65°C) and intermittent exposure temperature of 185°F (85°C). Use of Marley Engineered Products connection kits for LSRX installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

Outer Jacket

- CR: Grey / Modified Polyolefin
- CT: Grey / Fluoropolymer



Specification

Max. Intermittent Exposure Temp.	185°F (85°C)
Max. Maintain or Continuous Exposure Temp.	150°F (65°C)
Supply Voltage	120V or 208-277V
Output Wattage	3, 5, 8, 10, 12* W/ft @50°F (10, 16, 26, 33, 39W/m @10°C) (* 12W/ft only available in Supply Voltage 208 – 277V)
Bus wire	16 AWG
Min. Bending Radius	0.5" @68°F (13mm @20°C), 1.6" @-58°F (40mm @-50°C)
Min. Installation Temperature	-58°F (-50°C)
Min. Start-up Temperature	-40°F (-40°C)
Max. Circuit Breaker Size	40A
Outer Jacket Color	Grey
Heating Cable Dimensions (Nominal)	CR : 0.49" x 0.25" (12.5mm x 6.0mm), CT : 0.46" x 0.21" (11.8mm x 5.0mm)
Heating Cable Weight	CR : 0.0741lb/ft(0.110kg/m), CT : 0.0695lb/ft(0.103kg/m)

Ordering Information

BK-LSRXa-bc

BK-LSRX = Model Name

a = Output Wattage: 03, 05, 08, 10, 12* W/ft at 50 deg F

b = Voltage: 1 = 120V , 2 = 208-277V

c = Outer Jacket: CR = Polyolefin, CT = Fluoropolymer

*12W/ft(39W/m) only available for 208 – 277V

Connection Kits

Marley Engineered Products offers system components for power connections, splice or tee connections and end terminations to ensure proper functioning of the products and comply with warranty and approvals requirements.

For easier installation and safe operation, use of substituted parts are not recommended. Please contact Marley Engineered Products for more information on system components.

Certification / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors
 Class I, Division 2, Groups A, B, C, and D T6
 Class II/III, Division 2, Groups F and G T6
 Class I, Zone 1, AEx/Ex 60079-30-1 IIC T6 Gb
 Zone 21, AEx/Ex 60079-30-1 IIIC T6 °C Db
 Type 4X, IP66

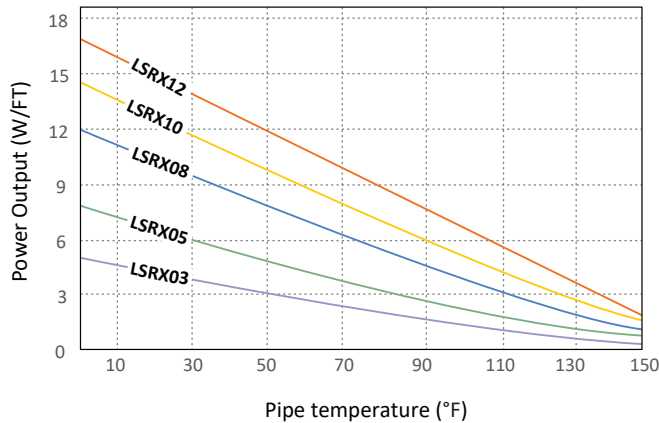


E515829 : Industrial and Commercial Pipe-Heating Cable†
E552707 : Residential Pipe-Heating Cable†
E515828 : De-icing and Snow-Melting Equipment†

Approval is valid only if the cable is installed with certified connection kits as a system.
 †UL certification excludes 12 W/ft cables as well as fluoropolymer outer jacket cables.

Nominal Power Output Ratings on Insulated Metal Pipes at 120/240 V

LSRX Power-Temperature Characteristics



Circuit length adjustment factor

Voltage	LSRX03	LSRX05	LSRX08	LSRX10	LSRX12
208V	0.969	0.957	0.925	0.920	0.915
240V	1.000	1.000	1.000	1.000	1.000
277V	1.054	1.065	1.088	1.120	1.130

Power adjustment factor

Voltage	LSRX03	LSRX05	LSRX08	LSRX10	LSRX12
208V	0.800	0.820	0.880	0.910	0.943
240V	1.000	1.000	1.000	1.000	1.000
277V	1.190	1.170	1.120	1.100	1.071

[Note]

The power output will be derated by 25% on plastic pipes. HTAT-1 aluminum tape is required for installation on plastic pipes.

Max. Circuit Length based on Circuit Breaker Selection

Catalog Number	Start-Up Temperature °F (°C)	Maximum Circuit Length per Circuit Breaker, feet (meters)							
		120V				240V			
		15A	20A	30A	40A	15A	20A	30A	40A
LSRX03	50 (10)	327 (99)	377 (115)	377 (115)	377 (115)	654 (199)	732 (223)	732 (223)	732 (223)
	32 (0)	262 (80)	350 (106)	377 (115)	377 (115)	525 (160)	700 (213)	732 (223)	732 (223)
	0 (-18)	200 (60)	266 (81)	377 (115)	377 (115)	400 (121)	533 (162)	732 (223)	732 (223)
	-20 (-29)	173 (52)	231 (70)	346 (105)	377 (115)	346 (105)	461 (140)	692 (210)	732 (223)
	-40 (-40)	152 (46)	203 (61)	305 (92)	377 (115)	305 (92)	406 (123)	610 (185)	732 (223)
LSRX05	50 (10)	200 (60)	267 (81)	302 (92)	302 (92)	400 (121)	533 (162)	604 (184)	604 (184)
	32 (0)	166 (50)	222 (67)	302 (92)	302 (92)	333 (101)	444 (135)	604 (184)	604 (184)
	0 (-18)	126 (38)	168 (51)	252 (76)	302 (92)	252 (76)	336 (102)	504 (153)	604 (184)
	-20 (-29)	110 (33)	146 (44)	220 (66)	293 (89)	220 (66)	293 (89)	439 (133)	586 (178)
	-40 (-40)	97 (29)	130 (39)	195 (59)	259 (79)	195 (59)	259 (79)	389 (118)	519 (158)
LSRX08	50 (10)	154 (46)	205 (62)	243 (74)	243 (74)	307 (93)	409 (124)	482 (147)	482 (147)
	32 (0)	131 (40)	175 (53)	243 (74)	243 (74)	262 (80)	350 (106)	482 (147)	482 (147)
	0 (-18)	104 (31)	138 (42)	207 (63)	243 (74)	207 (63)	276 (84)	415 (126)	482 (147)
	-20 (-29)	92 (27)	122 (37)	184 (55)	243 (74)	184 (55)	245 (74)	367 (111)	482 (147)
	-40 (-40)	82 (25)	110 (33)	165 (50)	219 (66)	165 (50)	219 (66)	329 (100)	439 (133)
LSRX10	50 (10)	125 (38)	167 (50)	207 (63)	207 (63)	250 (76)	334 (101)	410 (125)	410 (125)
	32 (0)	110 (33)	146 (44)	207 (63)	207 (63)	220 (66)	293 (89)	410 (125)	410 (125)
	0 (-18)	90 (27)	120 (36)	179 (54)	207 (63)	179 (54)	239 (72)	359 (109)	410 (125)
	-20 (-29)	81 (24)	107 (32)	161 (49)	207 (63)	161 (49)	215 (65)	322 (98)	410 (125)
	-40 (-40)	73 (22)	97 (29)	146 (44)	195 (59)	146 (44)	195 (59)	292 (89)	390 (118)
LSRX12	50 (10)					222 (67)	295 (89)	322 (98)	322 (98)
	0 (-18)					156 (47)	209 (63)	313 (95)	322 (98)
	-20 (-29)					140 (42)	187 (56)	280 (85)	322 (98)
	-40 (-40)					127 (38)	169 (51)	253 (77)	322 (98)

[Note]

1. The circuit lengths are based on trip current characteristics of Type QO and Type QCB devices. For devices with different trip characteristics please consult Marley Engineered Products.
2. Use local electrical codes to select appropriate branch circuit breakers.
3. The total length of heating cables connected to the circuit breaker is the sum of all cables that have been spliced or interconnected in parallel. Ensure that the total length does not exceed the maximum circuit length as indicated above.
4. Ground fault protection of equipment is required for heat tracing branch circuits with typical trip level of 30mA. Thermal magnetic breakers are recommended to reduce nuisance tripping.
5. It is recommended to start up the circuits at higher temperatures, when possible, to avoid large start-up or in-rush current which may trip the circuit breaker.

Technical information subject to change without notification.

Questions? Reach out to start a conversation at MarleyMEP.com