

OSR-WA Medium Temperature Self-Regulating Heating Cable ELSR-WA



Features

Outer jacket

- Thermoplastic (AO, BO).

Bus wire

- Nickel plated copper.

Minimum start-up temperature

- -30 °C (-22 °F).

Maximum operating temperature (power on)

- 80 °C (176 °F).

Maximum operating temperature (power off)

- 90 °C (194 °F).

Nominal voltage

- 120V, 240/208V.

Bending radius, minimum

- 20 mm (3/4 in.).

Installation temperature, minimum

- -45 °C (-49 °F).

Classification

- Class I, Zone 1, AEx / Ex e II, T5.
- Class I, Division 2, Groups A, B, C, D.
- Class II, Division 1, Groups E, F, G.
- Class III, Division 1.

Standards

- IEEE 515, CSA 22.2 130.03.

Certification

- FM CUS 3050047.

Rating

- Wet rated, for outdoor use (WS).

Warranty

- 1-year basic warranty on the heating cable.

Application

- Freeze protection of heated lines or pipes, food processing industry, drain lines in canteens and large scale kitchens, hot water supply installations.

Models

Application	Nominal Output W/ft.	Product #		Outer jacket/Mechanical shield				Cable dimension approx. (mm)
		120V ^{1,3}	240V ^{1,2,3}	AO	Price/ft.	BO	Price/ft.	
When used for water supply lines	3	ELSR-WA-55-1-XX	ELSR-WA-55-2-XX	✓	13.00	✓	14.60	13.8 x 5.6
When used for water supply lines	5	ELSR-WA-65-1-XX	ELSR-WA-65-2-XX	✓	13.00	✓	14.60	13.8 x 5.6
When used with fat/oil lines	7	ELSR-WA-65-1-XX	ELSR-WA-65-2-XX	✓	13.00	✓	14.60	13.8 x 5.6

Custom Cut⁴

Product #	Price	Description
OSR-CUT	155.00	Cutting fee for all lengths other than 500 ft. and 1000 ft. (25 ft. minimum)

¹ XX = Outer jacket/Mechanical shield.

AO Aluminum foil and a thermoplastic outer jacket.

BO Protective braid and a thermoplastic outer jacket.

² For operations at 208V, please consult Correction Factors/Multipliers at next page.

³ When ordering, the quantity on the purchase order is equal to the length in feet of the cable required.

E.g.: To order a 500 ft. cable, write 500 for quantity with product code.

⁴ Custom cutting service available with cutting fee (OSR-CUT) for all lengths other than 500 ft. and 1000 ft. (minimum of 25 ft.).

E.g.: To order a 75 ft. cable, write 75 for quantity with product code and add the product code OSR-CUT on another line.

Options

See OSR Options and Controls section

Heating circuit length for ELSR-WA models

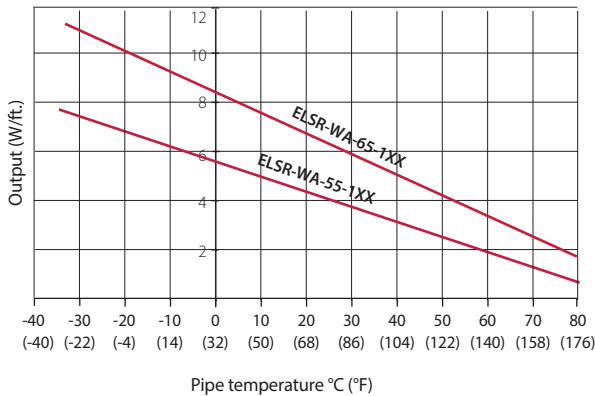
Start-up temperature	120V			240V		
	CB capacity (A)	Maximum heating circuit (ft.) for		CB capacity (A)	Maximum heating circuit (ft.) for	
		ELSR-WA-55-1	ELSR-WA-65-1		ELSR-WA-55-2	ELSR-WA-65-2
10 °C (50 °F)	10	144	97	10	231	149
	15	219	145	15	348	226
	20	246	194	20	430	302
	25	246	198	25	430	348
	30	246	198	30	430	348
0 °C (32 °F)	10	131	87	10	207	136
	15	197	133	15	312	203
	20	233	176	20	405	272
	25	233	189	25	405	326
	30	233	189	30	405	326
-10 °C (14 °F)	10	118	81	10	187	123
	15	180	121	15	279	184
	20	221	160	20	372	247
	25	221	180	25	384	310
	30	221	180	30	384	312
-30 °C (-22 °F)	10	102	68	10	158	105
	15	153	103	15	237	160
	20	202	139	20	315	212
	25	203	167	25	353	263
	30	203	167	30	353	286

Maximum heating circuit ELSR-WA-XX on the following conditions:

- 120/240 Voltage
- Voltage drop max. 10%
- MCB type QO (100% utilization)
- Single cable fed 1 end

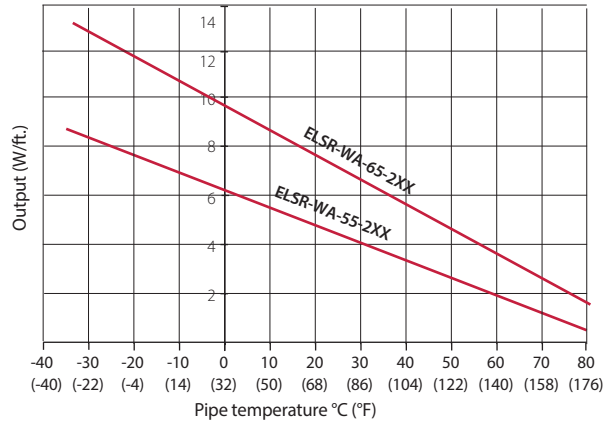
ELSR-WA-XX-1-XX output

(on insulated metallic pipes, in accordance with IEEE 515/CSA 22.2 130-03)



ELSR-WA-XX-2-XX output

(on insulated metallic pipes, in accordance with IEEE 515/CSA 22.2 130-03)



Eltherm® Correction Factors/Multipliers for Operation of Heating Cables in 208V

To calculate the corrected power output for operation in 208V, multiply the published output at 240V (in W/ft.) by the nominal output factor provided for the applicable heating cable type.

To calculate maximum heating circuit lengths for operation in 208V (tables provided in product data sheets), multiply the published max. heating circuit length at 240V provided for the applicable heating cable type.

Heating Cable Correction Factors/ Multipliers	Nominal Output 208V vs. 240V	Heating Circuit Length 208V vs. 240V
ELSR-WA-XX-2	0.80	1.00

Options

Product # Kit	Price	Description
OSR-NA Series		
ECA-JB1-NA	292.00	Junction box with power connection and termination for single connection c/w label and fastener
ECA-JB2-NA	414.00	Junction box with power connection and termination for double connection c/w label and fastener
EL-CLIC-P	223.00	Quick connector with supply lead, for 1 to 3 cables
EL-CLIC-S	212.00	Quick connector for direct connection or cold lead connection of 1 to 3 cables
EL-ECN-EX ¹	20.00	End termination for ELSR-NA
EL-SPN-16	31.00	Heat shrink splice-kit suitable for ELSR-NA and cold lead connections
ELAK-3-7	514.00	Junction box with mounting stand for non-hazardous (ordinary) and hazardous locations
ELVB-SRAN	38.00	Power connection without cable gland
ELVB-SRAN-12-PA	52.00	Power connection with plastique/PA12 cable gland/fitting, 1/2" NPT, non-hazardous location
ELVB-SRAN-34-PA	55.00	Power connection with plastique/PA12 cable gland/fitting, 3/4" NPT, non-hazardous location
ELVB-SRAN-34-ST	66.00	Power connection with steel/zinc cable gland/fitting, 3/4" NPT, non-hazardous location
ELVB-SREX-34-HT ¹	177.00	Power connection with nickel plated cable gland, 3/4" NPT, hazardous location
ELVB-SREX-M20-HT ¹	165.00	Power connection with nickel plated cable gland, M20, hazardous location
KIT-OSR-ELSR-NA	76.00	End and power termination kit with warning sticker NA Series
OSR-MA Series (AO and BO outer jacket)		
EL-ECM ¹	20.00	End termination for ELSR-MA
ELVB-SRAM	38.00	Power connection without cable gland
ELVB-SRAM-34-ST	66.00	Power connection with steel/zinc cable gland/fitting, 3/4" NPT, non-hazardous location
KIT-OSR-ELSR-MA	76.00	End and power termination kit with warning sticker MA Series
OSR-MA Series (BF outer jacket)		
EL-ECMF ²	28.00	End termination for ELSR-MA-BF
ELVB-SRAM-34-ST	66.00	Power connection with steel/zinc cable gland/fitting, 3/4" NPT, non-hazardous location
KIT-OSR-ECA-MABF-PH-FIT	44.00	Brass gland cable fitting 3/4" NPT non-hazardous location for MA-BF cable
KIT-OSR-ELSR-MA-BF	85.00	End and power termination kit with warning sticker BF Series
KIT-OSR-MABF-PH-1-CTSOD ³	83.00	Quick connect plumbing kit for 1" OD polyethylene CTS pipes for MA-BF cable
KIT-OSR-MABF-PH-114-CTSOD ³	98.00	Quick connect plumbing kit for 1 1/4" OD polyethylene CTS pipes for MA-BF cable
KIT-OSR-MABF-PH-112-CTSOD ³	127.00	Quick connect plumbing kit for 1 1/2" OD polyethylene CTS pipes for MA-BF cable
KIT-OSR-MABF-PH-34-ID ³	76.00	Quick connect plumbing kit for 3/4" ID polyethylene pipes for MA-BF cable
KIT-OSR-MABF-PH-1-ID ³	98.00	Quick connect plumbing kit for 1" ID polyethylene pipes for MA-BF cable
KIT-OSR-MABF-PH-114-ID ³	111.00	Quick connect plumbing kit for 1 1/4" ID polyethylene pipes for MA-BF cable
KIT-OSR-MABF-PH-112-ID ³	177.00	Quick connect plumbing kit for 1 1/2" ID polyethylene pipes for MA-BF cable
OSR-WA Series		
EL-CLIC-P	223.00	Quick connector with supply lead, for 1 to 3 cables
EL-CLIC-S	212.00	Quick connector for direct connection or cold lead connection of 1 to 3 cables
EL-ECW ¹	20.00	End termination for ELSR-WA
ELVB-SRAW	45.00	Power connection without cable gland
ELVB-SRAW-34-ST	72.00	Power connection with steel/zinc cable gland, 3/4" NPT, non-hazardous location
KIT-OSR-ELSR-WA	81.00	End and power termination kit with warning sticker WA Series
OSR-HA Series		
ECA-JB1-HA	292.00	Junction box with power connection and termination for single connection c/w label and fastener
ECA-JB2-HA	414.00	Junction box with power connection and termination for double connection c/w label and fastener
EL-ECH-EX ¹	20.00	End termination for ELSR-HA
ELAK-3-7	514.00	Junction box with mounting stand for non-hazardous (ordinary) and hazardous locations
ELVB-SRAH	38.00	Power connection without cable gland
ELVB-SRAH-34-ST	66.00	Power connection with steel/zinc cable gland/fitting, 3/4" NPT, non-hazardous location
ELVB-SREX-34-HT ¹	177.00	Power connection with nickel plated cable gland, 3/4" NPT, hazardous location
ELVB-SREX-M20-HT ¹	165.00	Power connection with nickel plated cable gland, M20, hazardous location
KIT-OSR-ELSR-HA	76.00	End and power termination kit with warning sticker HA Series



EL-EC(x)



ELVB-SRA(x)



ELVB-SRA(x)-34-ST



KIT-OSR-ELSR-xx



KIT-OSR-MABF-PH-xx-CTSOD



KIT-OSR-MABF-PH-xx-ID



ECA-JB1

¹ Minimum installation temperature -45 °C (-49 °F).

² Minimum installation temperature -13 °C (-25 °F).

³ Identifying the type of pipe is key to ensuring a simple and effective connection, Ouellet Canada is not responsible for incorrect pipe selection. No returns will be accepted.

Options

Product # Kit	Price	Description
All OSR Series		
Multiple applications		
ECA-TYS6-280	10.00	Stainless steel fastener 1/4" x 6" (6.8 mm x 152.4 mm)
ECA-TYS9-280	11.00	Stainless steel fastener 1/4" x 9" (6.8 mm x 228.6 mm)
ECA-TYS12-280	15.00	Stainless steel fastener 1/4" x 12" (6.8 mm x 304.8 mm)
ECA-TYS18-280	17.00	Stainless steel fastener 1/4" x 18" (6.8 mm x 457.2 mm)
ECA-TYS24-280	20.00	Stainless steel fastener 1/4" x 24" (6.8 mm x 609.6 mm)
KIT-OSR-EL-WS03	2.00	Warning label/sign bilingual (English / French)
Roof and gutter		
ELB-20	12.00	Downspout 90° mounting plate
ELB-21	15.00	Gutter mounting plate
ELB-RCLIP	38.00	Roof clips for cable, qty 25
Pipe tracing		
ELB-03	50.00	Self-adhesive glass fiber tape, max. temp. = 90 °C (194 °F), 50 m (165 ft.)
ELB-06C	38.00	Self-adhesive aluminum tape, max. temp. = 80 °C (176 °F), 50 m (165 ft.)

Controls

Product #	Price	Description
Controller options for roof and gutter for de-icing		
DS-2C ¹	642.00	Aerial mounted controller with sensor to detect humidity and temperature, 30A, 100V to 277V
DS-8C ¹	763.00	Aerial mounted controller with sensor to detect temperature and a sensor to detect humidity with 10 ft. (3 m) cable, 30A, 100V to 277V
DS-9C ¹	751.00	Aerial mounted controller with sensor to detect temperature and a sensor to detect humidity with 10 ft. (3 m) cable, 2 X 30A, 100V to 277V
EX-50	228.00	50 ft. (15 m) extension kit, with connection fittings for humidity sensor
CDP-2	259.00	Interior controller and display for DS products
ETO2 ¹	748.00	Dual-zone electronic controller, 3 X 16A, 120V to 240V
ETF-744-99	186.00	24V outdoor sensor for measuring temperature
ETOR-55	364.00	Gutter sensor to detect humidity with 33 ft. (10 m) cable
Controller options for pipe tracing for use in non-hazardous (ordinary) locations		
ECA-E55-R25HT ¹	924.00	SPDT, NEMA 4X thermostat in molded aluminum housing, 22A at 120/250/480V, with 10 ft. (3 m) stainless steel bulb and capillary
TPR-L1N-3X-Q10 ¹	440.00	SPDT, NEMA 4X thermostat in polycarbonate housing, 22A at 120/250/480V, with 3 ft. (1 m) tinned copper bulb and capillary
TPR-L1N-10X-Q10 ¹	573.00	SPDT, NEMA 4X thermostat in polycarbonate housing, 22A at 120/250/480V, with 10 ft. (3 m) tinned copper bulb and capillary
TRF115-005 ¹	151.00	SPDT, NEMA 4X thermostat, range -17 °C to 49 °C (0 °F to 120 °F), 25A at 120/208/240/277V, with 5 ft. (1.5 m) stainless steel bulb and capillary
TRF115-007 ¹	156.00	SPDT, NEMA 4X thermostat, range -35 °C to 38 °C (-30 °F to 100 °F), 25A at 120/208/240/277V, with 8 ft. (2.4 m) copper bulb and capillary
ELTC-14-RTD ¹	725.00	Digital temperature control 20A at 90-260V, including 3-wire RTD (Pt-100) sensing element is 5 x 50 mm with 5 m of fluoropolymer lead wires, range 0 °C to 250 °C (32 °F to 482 °F)
Controller options for pipe tracing for use in non-hazardous (ordinary) and hazardous locations		
TXR-L2S-10-Q10 ¹	1421.00	SPDT, explosion-proof, NEMA 4, 7 and 9 thermostat, in anodized aluminum housing, 22A at 120/250/480V, with 10 ft. (3 m) stainless steel bulb and capillary
TM-1SIH1-E5-RTD-A1	1838.00	TraceMate™ I GFCI electronic thermostat for single circuit at 120V
TM-1DIH2-E5-RTD-A1	2260.00	TraceMate™ I GFCI electronic thermostat for single circuit at 240/2080V
TM-2SIH1-E5-RTD	3119.00	TraceMate™ II GFCI electronic thermostat for dual circuit at 120V
TM-2DIH2-E5-RTD	3531.00	TraceMate™ II GFCI electronic thermostat for dual circuit at 240/2080V
MS-2101 ²	3704.00	MasterTrace Single circuit electronic GFCI controller with double pole, 85V to 280V, 30A, with user interface
MS-2102 ²	4281.00	MasterTrace Double circuit electronic GFCI controller with single pole, 120V or 277V, 30A, with user interface
RTD-7	343.00	RTD probe for MasterTrace controller
Control panel options		
OSR-4-240	4477.00	240V GFCI control panel with 2 x 4-pole contactors, controller ETO2 and transformer 240-120V
OSR-6-240	4969.00	240V GFCI control panel with 3 x 4-pole contactors, controller ETO2 and transformer 240-120V
OSR-8-240	5624.00	240V GFCI control panel with 4 x 4-pole contactors, controller ETO2 and transformer 240-120V
OSR-12-240	6661.00	240V GFCI control panel with 6 x 4-pole contactors, controller ETO2 and transformer 240-120V

¹ Requires a ground fault circuit interrupter (GFCI) in the electrical panel.

² Requires a RTD probe for MasterTrace controller (RTD-7).

