



**eltherm**<sup>®</sup>  
innovations in heat tracing



**Type ELSR-R-19-2-OT**  
**Type ELSR-R-27-2-BOT**

Frost and Freeze Protection for Cold Storage Rooms

**Application description**

The “R” in the name of our self-regulating heating cable ELSR-R is an abbreviation for “round”. This heating cable was specially developed to protect the doors and seals of cold storages against frost as well as all for applications requiring a round heating cable.

It is also often used in cold water lines by breweries and drinks manufacturers (as frost protection). The maximum exposure temperature is 55 °C.

Moreover, the heating cable ELSR-R is damp-protected and UV-resistant as are all eltherm<sup>®</sup> self-regulating heating cables.

**Technical data:**

Outer jacket.....TPE-O  
 Bus wire.....Cu nickel-plated  
 Maximum exposure temperature (deenergised)..... 55 °C  
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 Nominal voltage.....230 V  
 Bending radius minimum.....30 mm  
 Minimum installation temperature.....- 30 °C

**Design:**

B: Protective braid  
 BO: Protective braid and a thermoplastic outer jacket  
 AO: Aluminium foil and a thermoplastic outer jacket  
 OT: additional Fluoropolymer outer jacket  
 BOT: Protective braid, thermoplastic outer jacket and additional Fluoropolymer outer jacket

**Your benefits:**

- Self regulating
- temperature adjustment according to environmental temperature
- Energy saving by temperature and function without additional devices
- Better heat transmission by round form
- overheating is impossible, no risk of fire
- Constant heat without gaps
- Moisture proof, Fluoropolymer outerjacket gives reliable protection and avoids damage
- UV-resistant , Fluoropolymer outer jacket gives reliable protection
- Highest chemical resistance , Fluoropolymer outer jacket gives reliable protection
- Flexible - round cable can be installed easier, no risk of damage, better mechanical resistance because of Fluoropolymer outer jacket
- cutting to each length is possible
- Long lasting - high quality material and proven technic



Type	Nominal output	Dimensions approx. Ø (mm)	Weight approx. (g/m)	Item number
ELSR-R-27-2-BOT	27 W/m at 10°C	7,3	74	B02000605
ELSR-R-19-2-OT	19 W/m at 10°C	6,9	54	B02000506



**Type ELSR-R-19-2-OT**  
**Type ELSR-R-27-2-BOT**

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**Cold storage room doors**

In order to achieve good door sealing properties, ELSR-R-19-2-OT or ELSR-R-27-2-BOT heating is installed to the door frame, opposite of the door seal, or behind the door seal, to prevent the rubber seal from freezing and the door from sticking when opening.

**Drainline heating**

The ELSR-R-19-2-OT or ELSR-R-27-2-BOT heating cable is to be fitted to the drainlines, pipe work and even drip trays to keep them free of ice and permit the draining of water during the defrost cycle.

**Fin defrosting**

During operation ice will build up on the cooler fins and a defrosting cycle would be needed to take place. ELSR-R-19-2-OT or ELSR-R-27-2-BOT will be placed between the fins in order to melt the ice.

**Comfort rails**

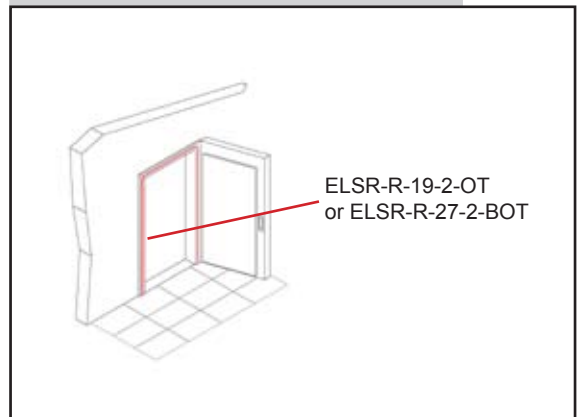
ELSR-R-19-2-OT or ELSR-R-27-2-BOT heating cable is fitted to the underside of front rails on cabinets, to give the shopper a warm hold when reaching into the cabinet to select his or her purchases.

**Anti condensation**

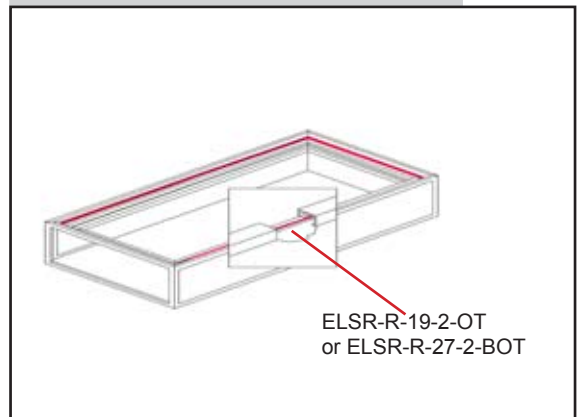
ELSR-R-19-2-OT or ELSR-R-27-2-BOT heating cable is installed between the warm air surrounding of the cabinet and the cold refrigerated air inside the cabinet. Applying the heating cable in these areas prevents forming of moisture that would go inside the cabinet.

**Demisting**

ELSR-R-19-2-OT or ELSR-R-27-2-BOT heating cable is installed all around the double glazed units fitted to the fronts and sides of display cabinets to ensure clear vision of the products contained within the cabinet.



The round form of the self-regulating heating cable allows to position it exactly in the door frame



**Heating circuit lengths ELSR-R-19-2**  
considering

- 230 V nominal voltage
- Delayed action circuit breakers (C-characteristic) with 80 % maximum load
- Maximum 10 % line voltage drop on the heating cable bus wire
- A (1) single end power input heating cable into consideration

Switch-on temperature (°C)	Nominal cut-out value (A)	Heating circuit length (m) for	
		ELSR-R-19-2	
10	16	95.5	
	20	95.5	
0	16	88	
	20	88	
-10	16	82.5	
	20	82.5	
-20	16	77.5	
	20	77.5	
-40	16	70	
	20	70	