



Technical parameters of the heating cable Line™ T10

Heating cable type: double-core wire with braiding

Operating voltage: 230 V /50 Hz /AC

Output: 10 W/rmt

Protection: IP67

Heating cable length: 10 to 280 m

Heating cable diameter: 5 mm

Cold lead length: 2.5 m

Min. temperature at assembly: 5 °C

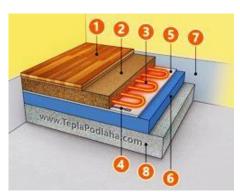
Minimum bending radius: 60 mm

Declaration of conformity: $C \in$

Issued pursuant to § 13 art. 1 of Act No. 264/99 Coll. and Government Regulation No. 194/2005 Coll. as amended by Government Regulation No. 318/2007 Coll. and No. 308/2004 Coll. as amended by Government Regulation No. 449/2007 Coll. The name: Electric heating cables Line™T10. Conformity assessment has been performed in accordance with: Government Regulation No. 194/2005 Coll. as amended by Government Regulation No. 318/2007 Coll. on electromagnetic compatibility of devices and Government Regulation No. 308/2004 Coll. as amended by Government Regulation No. 449/2007 Coll. on electric equipment. In conformity assessment regarding the product, there have been the following EU directives used as well as standards followed: EN 60730-1:2011,EN 60730-2-9:2010, EN 61000-3-2:2006+A2:2009, EN 61000-3-3:2008, the Low Voltage Directive 2006/95/EC, Annex 4, the EMC Directive 2004/108/EC, Annex II.

Before you start installing the heating cable: (indoor environment)

- a) The subfloor under the heating cable must be clean, without sharp edges and impurities.
- b) The heating cable must not be shortened, lengthened, <u>mutually contacted or crossed</u>, <u>or touched the insulation</u>. It must not be under excessive tension in the connection spot of the heating cable and power lead. It is designed for indoor applications.
- c) Bending radius of the heating cable must not be smaller than 30 mm. Min. gaps between the heating cable runs- 60 mm. Maximum distance between the cables with the output 10 W/m = 12.5 to 16.5 cm. Maximum installed capacity = 150 W/m^2 .
- d) Connection between the heating cable and power lead as well as the terminal must be placed in the floor.
- e) Do not install the heating cable at the temperature lower than 5 °C.
- f) Operate the heating cable only with suitable thermostat with floor sensor st to max. 45°C.
- g) In order to provide electrical safety, it is appropriate to use a 30 mA residual current circuit breaker. Follow the applicable standards.



Floor composition Brand - suitable flooring

- 1 flooring material
- 2 concrete/anhydrite max. 5 cm
- 3 heating cable Line™ T10
- 4 floor sensor
- 5 aluminium foil with separate layer
- 6 polystyrene about 5 10 cm
- 7 side dilations about 1 cm
- 8 ground concrete

Installation instructions

- 1. Measure the room and draw an installation plan of the heating cable, calculate correct spacing (cm) according to the formula: floor heating area $(m^2) \times 100$ / length (m) of the cable to be installed.
- 2. Within the fitting, do not include built-up areas (e.g. bathtubs, shower niches ...) to prevent the cable overheating.
- 3. Slide the power lead through the conduit into the box for thermostat in such a way that the connection will stay in the floor.
- 4. Place the cable on the floor with the correct spacing according to the installation plan. Keep placing the heating cable on the floor area in such a way that you will make a turn at the end of the heated area and continue in the opposite direction. Fix the cable by recommended fixing elements. During installation do not step on the heating cable. Avoid sharp objects and careless pouring of concrete or anhydrite. Make sure there are no air gaps in the

- concrete or anhydrite. The heating cable must not be laid across the expansion joints. Connection of the heating cable and power lead must be laid in the floor and it must not be led through the conduit.
- 5. Insert the temperature sensor into the pipe gooseneck in such a manner that it will be placed evenly between the heating cable loops and placed in the heating area 50 cm away from the wall. Seal the end of the conduit for sensor
- 6. After the heating cable is laid, measure and check the resistance and then insulation condition under the voltage >1000 VDC. Max. 2500 VDC. Insulation resistance value must be > 50 M Ω . The resistance must be within the tolerance. **Write down** the measured values into the warranty coupon.
- 7. Pour anhydrite or concrete over the heating cable. The concrete must be enhanced by plasticizer.
- 8. After curing, measure and check the resistance and insulation condition again. **Write down** the values into the warranty coupon.
- 9. Insert the temperature floor sensor only on the end of the conduit and connect the thermostat according to the wiring diagram.
- 10. You can put the heating cable into operation only after complete drying out maturing of the construction substances used.
- 11. Lay the flooring material; follow the instructions of the manufacturer. The flooring suitable for floor heating is marked either by words or marks, see the figure above.

Extended 10 year warranty – Line™ T10 heating cables - installation for wet process into concrete...

Extended 10 year warranty – Line™ T10 heating cables - installation for dry process into IzoLineT20™ is valid with correctly delivered documents:

- 1. With the Warranty coupon correctly filled in, see below;
- 2. Document of purchase: invoice or purchase receipt;

Warranty coupon

- 3. Photo documentation: of the heating cable layout, location of the connection and the cable end;
- 4. The manufacturer duty will be obliged to repair it free of charge or deliver the product to the customer without any side costs related to the repair or replacement of the unit.

The warranty is null and void, if the installation was not performed by professionally competent person or due to mistake caused by incorrect design, damage, incorrect installation or any other later damage. If we are asked to repair or replace such product, all the costs will be charged.

Room:	Room No.:	Name of the facility:

Heating cable Line™ T10	Output (W)	Length (m)	Resistance (Ω) @ 20 °C +10/-5 %	Resistance (Ω) before concrete application	Insulation resistance (MΩ)before concrete application	Resistance (Ω) after concrete application	Insulation resistance (MΩ) after concrete application
Line™ T10	100	10	529.00				а
Line™ T10	200	20	264.50				
Line™ T10	280	28	188.93				
Line™ T10	410	41	129.02				
Line™ T10	500	50	105.80				
Line™ T10	570	57	92.81				
Line™ T10	700	70	75.57				
Line™ T10	810	81	65.31				
Line™ T10	900	90	58.78				
Line™ T10	1,000	100	52.90				
Line™ T10	1,250	129	42.30				
Line™ T10	1,400	140	37.79				
Line™ T10	1,600	160	33.06				
Line™ T10	1,800	180	29.39				
Line™ T10	2,000	200	26.45				
Line™ T10	2,400	240	22.04				
Line™ T10	2,800	280	18.89				

Date of sale / Stamp:	Date of installation:	Stamp:
Electrician / Distributor:	Name and surname, tel., e-mail:	Signature: