

# TESXL™

## Series Constant Watt Heating Cable

### Product Specifications

#### Application . . .

##### Long Line Temperature Maintenance or Freeze Protection

TESXL series resistance constant Watt heating cables are used where circuit lengths exceed the limitations of parallel resistance heating cables. TESXL withstands the temperature exposures associated with steam purging.

The series circuitry of TESXL provides consistent Watt-per-meter power output along the entire length of the cable with no voltage drop. A polyamide tape layer adds additional protection to the heating cable and a fluoropolymer overjacket provides chemical resistance while maintaining maximum flexibility. The construction of the cable meets the 7 Joule impact test per IEC-EN-60079-30-1.

TESXL cables are approved for use in ordinary (nonclassified) areas and Categories 2 and 3 ATEX classified areas.

#### Ratings . . .

Maximum Watt density .....	30 W/m
Maximum supply voltage .....	600 Vac
Maximum continuous exposure temperature	
Power-off .....	260°C
Minimum installation temperature .....	-60°C
Minimum bend radius .....	6 x cable O.D.
T-rating <sup>1</sup> .....	T2 to T6 (using the principles of stabilized design or limiters) <sup>2</sup>

#### Stabilised Design<sup>2</sup> . . .

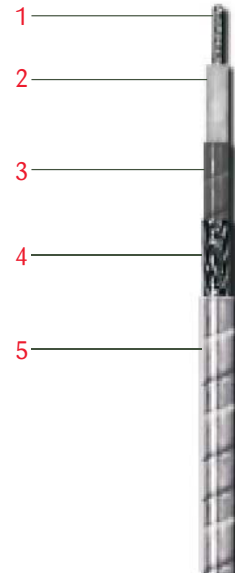
The Watt density limitation for TESXL cables is directly related to the desired maintain temperature. Thermon is able to ensure the T-rating based on a stabilised design that enables series constant Watt heating cables to operate in hazardous areas without limiting thermostats. TESXL cable output and T-rating are dependent upon supply voltage, cable resistance, temperature conditions as well as additional variables. Contact Thermon for design assistance.

#### Basic Accessories . . .

**Power Connection:** TESXL cables typically require nonheating terminations at each end of the circuit before connecting to power. Contact Thermon for complete information.

#### Notes . . .

1. T-rating per internationally recognised testing agency guidelines.
2. Thermon heating cables are approved for the listed T-ratings using the stabilised design method. This enables the cable to operate in hazardous areas without limiting thermostats. The T-rating may be determined using CompuTrace® Electric Heat Tracing Design Software or contact Thermon for design assistance.



#### Construction . . .

- 1 Heating Conductor
- 2 Fluoropolymer Dielectric Insulation
- 3 Polyamide Tape
- 4 Nickel-Plated Copper Braid (BN)
- 5 Fluoropolymer Overjacket

#### Certification/Approval . . .

**CENELEC** European Organisation for Electrotechnical  
Standardisation  
Hazardous (Classified) Locations

**Sira**  
**CE** II 2G Exe II T3 to T6 08 ATEX 3127 X



**THERMON . . . The Heat Tracing Specialists®**  
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**Available Cables . . .**

Product Type	Resistance Ohm/m at 20°C	Conductor Diameter mm	Cable Diameter mm
TESXL 0.8	0.0008	6.05	10
TESXL 1.1	0.0011	5.16	9.4
TESXL 1.8	0.0018	4.03	8.0
TESXL 2.9	0.0029	3.20	7.2
TESXL 4.4	0.0044	2.58	6.5
TESXL 7	0.007	2.05	6.0
TESXL 10	0.0100	1.72	5.7
TESXL 11.6	0.0116	1.60	5.6
TESXL 15	0.015	1.38	5.3
TESXL 17.8	0.0178	1.28	5.2
TESXL 25	0.025	1.08	5.0
TESXL 31.5	0.0315	0.96	4.9
TESXL 50	0.050	0.76	4.7
TESXL 68	0.068	0.65	4.6
TESXL 100	0.100	1.31	5.3
TESXL 150	0.150	1.07	5.0
TESXL 170	0.170	1.00	5.0
TESXL 200	0.200	0.93	4.9
TESXL 240	0.240	1.05	5.0
TESXL 330	0.330	1.25	5.2
TESXL 370	0.370	1.18	5.1
TESXL 500	0.500	1.02	5.0
TESXL 730	0.730	0.60	4.6
TESXL 1000	1.000	0.90	4.9
TESXL 1440	1.440	0.77	4.7
TESXL 1730	1.730	0.70	4.7
TESXL 2160	2.160	0.63	4.6
TESXL 2400	2.400	0.89	4.8
TESXL 3000	3.000	0.76	4.7
TESXL 4000	4.000	0.68	4.6
TESXL 5600	5.600	0.58	4.5
TESXL 8000	8.000	0.48	4.4

**Circuit Breaker Sizing and Type . . .**

Maximum circuit lengths for TESXL heating cables will be a function of cable resistance, circuit length and operating voltage. Circuit length, breaker sizing and earth-fault protection should be based on applicable local codes.

Earth-fault protection of equipment should be provided for each branch circuit supplying electric heating equipment.

**Also Available . . .**

The CKTES(X)L Termination Kit, designed to connect TESL and TESXL heating cables to power, to facilitate circuit extension and for making cold-lead connections. For more information about the CKTES(X)L Termination Kit, ask for the CKTES(X)L Spec Sheet.

