

Polymer Insulated (PI) series resistance heating cable (non-hazardous areas)

ICW-T is a polymer insulated (PI) series heating cable, for use in non-hazardous areas. It has been designed for use in freeze protection and temperature maintenance applications of pipes, tanks and other equipment. ICW-T is an economical solution for many heat tracing applications in non-hazardous areas, especially for pipe lengths beyond the maximum

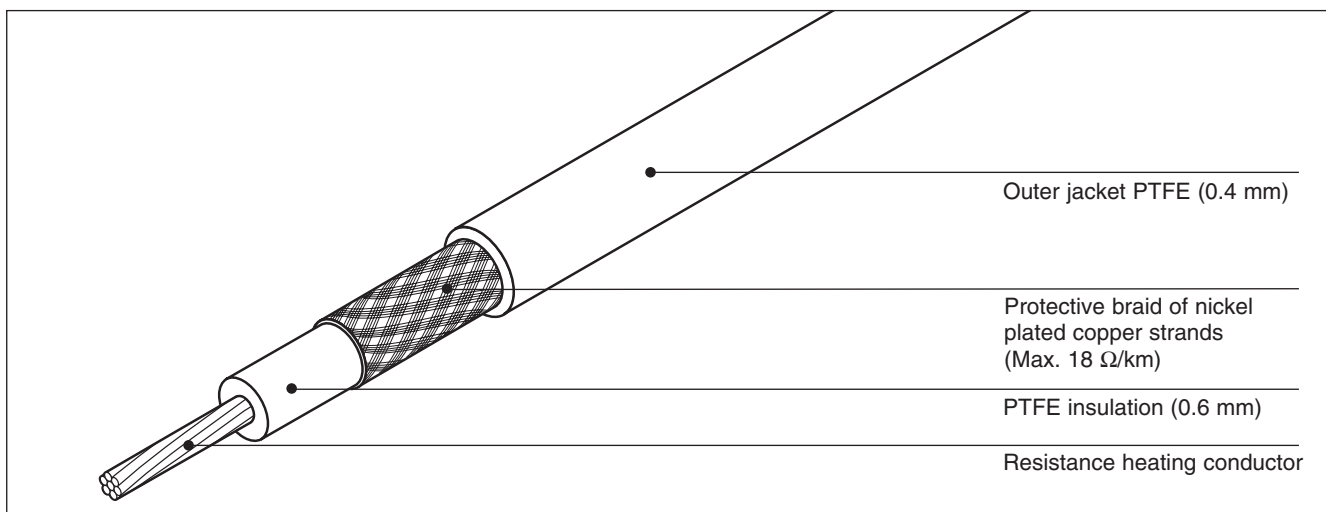
circuit lengths of parallel heating cables (e.g. 250 m).

The selection of PTFE as insulation material for the conductor and the outer insulation makes it a safe and reliable product. It provides highest chemical withstand and mechanical strength, in particular at elevated temperatures.

ICW-T heating cables can be used for temperatures up to 260°C (continuous).

Tyco Thermal Controls offers ICW-T heating cables in a wide range of resistances, starting from 1.8 Ω/km up to 8000 Ω/km as well as a complete product range of components for the connection and splicing of the cables.

Heating cable construction



Application

Area classification	Ordinary areas
Chemical resistance	Organics and corrosives

Technical Data

Max. withstand temperature	260°C (continuous, power off)
Max. maintain temperature	160°C (typical, continuous power on)
Min. installation temperature	-60°C
Min. bend radius	2.5 x cable diameter at -25°C 6 x cable diameter at -60°C
Min. spacing	20 mm
Max. power output	max. 25 W/m (typical value, depending on application)
Max. supply voltage	300/500 V AC (U_0/U)

ICW-T heating cable references

Order Reference	Nominal resistance [Ω / km @ 20°C]	Temp. coefficient [x 10 ⁻³ / K]	Outer diameter [mm nom.]	Nom. weight [kg/km]	Order Number PN
ICW-T 1.8	1.8	3.9	6.6	142	776436-000
ICW-T 2.9	2.9	3.9	5.8	97	592308-000
ICW-T 4.4	4.4	3.9	5.1	74	984120-000
ICW-T 7	7.0	3.9	4.6	58	755428-000
ICW-T 10	10.0	3.9	4.2	49	958300-000
ICW-T 11.6	11.6	3.9	4.1	43	1244-000257
ICW-T 15	15.0	3.9	3.9	39	500432-000
ICW-T 17.8	17.8	3.9	3.8	36	526036-000
ICW-T 25	25.0	3.9	3.6	29	809658-000
ICW-T 31.5	31.5	3.9	3.5	27	150330-000
ICW-T 50	50.0	3.9	3.3	24	277010-000
ICW-T 68	68.0	3.9	3.2	23	613606-000
ICW-T 78	78.0	3.9	3.1	22	1244-000261
ICW-T 100	100.0	0.7	3.8	36	206528-000
ICW-T 150	150.0	0.7	3.6	29	1244-000258
ICW-T 200	200.0	0.7	3.4	27	709680-000
ICW-T 330	330.0	3.8	3.8	36	1244-000260
ICW-T 370	370.0	0.2	3.7	34	340974-000
ICW-T 500	500.0	0.2	3.5	28	764838-000
ICW-T 730	730.0	0.45	3.1	22	191972-000
ICW-T 1000	1000.0	±0.02	3.4	27	951584-000
ICW-T 2160	2160.0	±0.02	3.1	22	1244-000259
ICW-T 3000	3000.0	0.45	3.3	24	106344-000
ICW-T 4000	4000.0	0.45	3.2	23	331410-000
ICW-T 8000	8000.0	0.45	3.0	22	719354-000

Other resistance ratings available on request.

Resistances < 80 Ω / km: Please consider the cold/warm resistance change.

Recommended cold lead cables for ICW-T

Nom. cross section [mm ²]	Current rating [A]	Outer diameter [mm nom.]	Nominal resistance [Ω /km @ 20°C]	Temperature coefficient [x 10 ⁻³ /K]	Order reference	Order number PN
2.5	32	5.7	7.0	3.9	XPI-7	1244-000203
4	42	6.3	4.4	3.9	XPI-4.4	1244-000190
6	54	7.1	2.9	3.9	XPI-2.9	1244-000202
10	73	8.8	1.8	3.9	XPI-1.8	1244-000182
16	98	10.3	1.1	3.9	XPI-1.1	1244-000201
25	129	12.1	0.8	3.9	XPI-0.8	1244-000189

Resistance tolerance: +10/-5% as per IEC

Notes:

Delivery length depends on type of resistance and is in any case limited by max. weight of 120 kg/ spool, respectively 1000 m/ run. Not all resistances are standard items and may such not be in stock. Contact Tyco Thermal Controls to confirm lead time. Tyco Thermal Controls requires the use of a 30 mA residual current device to provide maximum safety and protection from fire. Where design results in a higher leakage current, a maximum 300 mA residual current device may be used. All safety aspects need to be proven.