

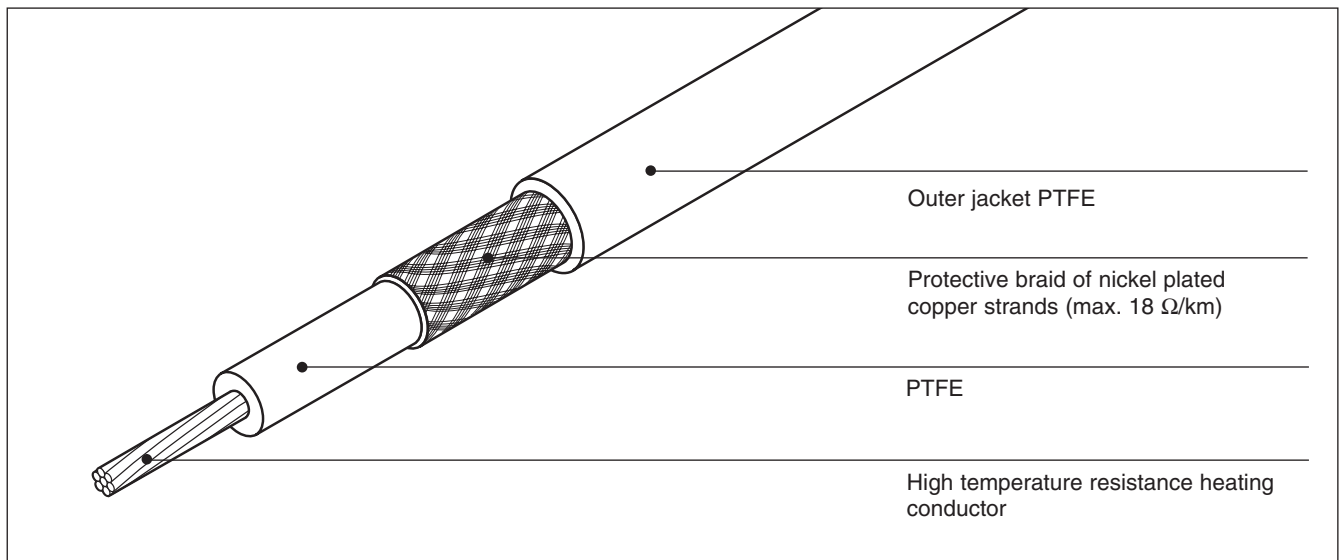
## Polymer insulated (PI) series resistance heating cable for use in non-hazardous areas

XPI-NH is a polymer insulated (PI) series resistance 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. XPI-NH offers an economical solution for a wide variety of heat-tracing applications in non-hazardous areas, in particular for pipe lengths

beyond the maximum circuit lengths of parallel heating cables (e.g. 250 m). The selection of PTFE for the inner and outer insulation makes XPI-NH a safe and reliable product. It provides highest chemical withstand and good mechanical strength, in particular at elevated temperatures.

XPI-NH heating cables can be used for temperatures up to 260°C. The heating cable is easy to install and has printed meter-marks. Tyco Thermal Controls offers XPI-NH heating cables in a very wide range of resistances, starting from 0.8 Ω/km up to 8000 Ω/km as well as a complete range of components for connection and splicing of the cables.

### Heating cable construction



### Application

Area classification	Ordinary areas
Chemical resistance	Organics and corrosives

### Technical Data

Max. exposure temperature	260°C (continuous, power off)
Min. installation temperature	-60°C
Min. bend radius	2.5 x cable diameter at -25°C 6 x cable diameter at -60°C
Min. clearance	20 mm between heating cables
Max. power output	25 W/m (typical value, depending on application)
Nominal voltage	Up to 300/500 V AC ( $U_0 / U$ )

**XPI-NH heating cable references**

Order Reference	Nominal resistance [ $\Omega/\text{km}$ @ 20°C]	Temp. coefficient [ $\times 10^{-3}/\text{K}$ ]	Outer diameter [mm nom.]	Nom. weight [kg/km]	Part Number PN
XPI-NH-0.8	0.8	4.3	11.5	388	1244-003083
XPI-NH-1.1	1.1	4.3	9.7	284	1244-003084
XPI-NH-1.8	1.8	4.3	8.2	196	1244-003085
XPI-NH-2.9	2.9	4.3	6.5	127	1244-003086
XPI-NH-4.4	4.4	4.3	5.5	89	1244-003087
XPI-NH-7	7.0	4.3	4.9	65	1244-003088
XPI-NH-10	10.0	4.3	4.4	52	1244-003089
XPI-NH-11.7	11.7	4.3	4.2	48	1244-003090
XPI-NH-15	15.0	4.3	4.1	44	1244-003091
XPI-NH-17.8	17.8	4.3	3.9	42	1244-003092
XPI-NH-25	25.0	3.0	3.9	42	1244-003093
XPI-NH-31.5	31.5	1.3	4.3	50	1244-003094
XPI-NH-50	50	1.3	3.9	42	1244-003095
XPI-NH-65	65	1.3	3.8	38	1244-003096
XPI-NH-80	80	0.7	4.1	44	1244-003097
XPI-NH-100	100	0.4	4.2	48	1244-003098
XPI-NH-150	150	0.4	3.9	42	1244-003099
XPI-NH-180	180	0.33	3.7	36	1244-003100
XPI-NH-200	200	0.40	3.8	38	1244-003101
XPI-NH-320	320	0.18	3.9	40	1244-003102
XPI-NH-380	380	0.18	3.8	38	1244-003103
XPI-NH-480	480	0.18	3.7	36	1244-003104
XPI-NH-600	600	0.18	3.5	34	1244-003105
XPI-NH-700	700	0.18	3.5	32	1244-003106
XPI-NH-810	810	0.04	3.6	35	1244-003107
XPI-NH-1000	1000	0.04	3.5	34	1244-003108
XPI-NH-1440	1440	0.04	3.4	31	1244-003109
XPI-NH-1750	1750	0.04	3.4	30	1244-003110
XPI-NH-2000	2000	0.35	3.6	34	1244-003111
XPI-NH-3000	3000	0.35	3.4	31	1244-003112
XPI-NH-4000	4000	0.35	3.4	30	1244-003113
XPI-NH-4400	4400	0.1	3.4	30	1244-003114
XPI-NH-5160	5160	0.1	3.4	30	1244-003115
XPI-NH-5600	5600	0.1	3.4	30	1244-003116
XPI-NH-7000	7000	0.1	3.4	30	1244-003117
XPI-NH-8000	8000	0.1	3.4	30	1244-003118

Resistance tolerance: +10/-5%

In particular for cables < 31.5  $\Omega/\text{km}$  the resistance of the conductor materials is a function of temperature and the change must be considered for design purposes.

**Recommended cold lead cables for XPI-NH** (cold lead cables from XPI-S can be used alternatively)

Nom. cross section [mm <sup>2</sup> ]	Current rating [ A ]	Outer diameter [mm nom.]	Nominal resistance [ $\Omega/\text{km}$ @ 20°C]	Temperature coefficient [ $\times 10^{-3} / \text{K}$ ]	Order reference	Part number PN
2.5	32	4.9	7.0	4.3	XPI-7	1244-000203
4	42	5.5	4.4	4.3	XPI-4.4	1244-000190
6	54	6.5	2.9	4.3	XPI-2.9	1244-000202
10	73	8.2	1.8	4.3	XPI-1.8	1244-000182
16	98	9.7	1.1	4.3	XPI-1.1	1244-000201
25	129	11.5	0.8	4.3	XPI-0.8	1244-000189

**Notes:** Delivery length depends on type of resistance and is limited by max. weight of 120 kg/spool, respectively 1000 m/run. Not all resistances are standard items and as such may 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.