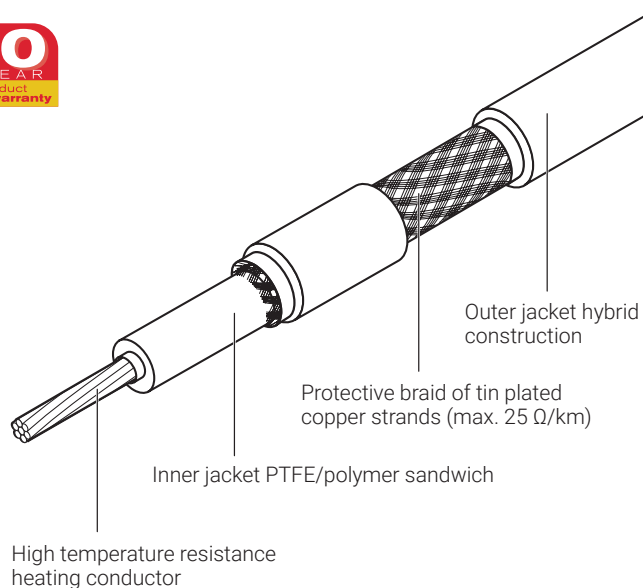


Polymer insulated (PI) series resistance heating cable

PRODUCT OVERVIEW



nVent RAYCHEM XPI-F is a polymer insulated (PI) series heating cable, suitable for use in ordinary and hazardous areas. It has been designed for freeze protection and low temperature maintenance applications on pipes, tanks and other equipment.

XPI-F offers an economical solution for a wide variety of heat-tracing applications, in particular for pipe lengths beyond the maximum circuit lengths of parallel heating cables.

The inner insulation is a sandwich construction of PTFE and PE, the outer insulation is a hybrid PE construction. The use of PTFE in the construction makes it very easy to terminate, provides flexibility, eliminates internal mechanical and thermal stress and makes XPI-F a very safe and reliable product. The PE provides a good chemical withstand and excellent mechanical strength.

XPI-F heating cables can be used for temperatures up to 90°C (continuous) and 100°C (intermittent short-term exposure), making it an ideal PI heating cable for transfer lines and large tanks with limited temperature requirements.

XPI-F is easy to install and has printed meter-marks. nVent offers XPI-F heating cables in a wide range of resistances, starting from 1.8 Ω/km up to 200 Ω/km as well as a complete range of components for connection and splicing.

Application

Chemical resistance	Organic corrosives
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PRODUCT SPECIFICATIONS

Technical details

Max. exposure temperature	90°C (power off, continuous), 100°C (power off, intermittent for max 1000 h)
Min. installation temperature	-60°C
Min. bending radius at -55°C	7.5 x cable diameter
Max. power output	20 W/m (typical value, depending on application)
Nominal voltage	Up to 300/500 Vac (U0/U)
Min. impact resistance	4 Joule (as per EN 60079-30-1)
Min. clearance	20 mm between heating cables

APPROVALS

For use in ordinary and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust)

Temperature classification

T6 ... T2

nVent RAYCHEM heat-tracing products are approved for the listed temperature classifications by using the principles of stabilized design. Use TraceCalc design software or contact nVent.

Product certification



More details about product certification, approvals and conditions of safe use are available in the installation manual for Polymer Insulated (PI) Series Constant Wattage Heating Cable Systems at www.nVent.com/RAYCHEM.

ORDERING INFORMATION

XPI-F 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)	Part number PN
XPI-F-1.8	1.8	4.3	9.5	208	1244-018798
XPI-F-2.9	2.9	4.3	7.8	143	1244-018799
XPI-F-4.4	4.4	4.3	7.2	112	1244-018800
XPI-F-7	7	4.3	6.6	83	1244-018801
XPI-F-10	10	4.3	6.5	76	1244-018802
XPI-F-11.7	11.7	4.3	6.4	65	1244-018803
XPI-F-15	15	4.3	6.1	61	1244-018804
XPI-F-17.8	17.8	4.3	6	57	1244-018805
XPI-F-25	25	3	6	57	1244-018806
XPI-F-31.5	31.5	1.3	6.4	67	1244-018807
XPI-F-50	50	1.3	6	57	1244-018808
XPI-F-65	65	1.3	5.7	53	1244-018809
XPI-F-80	80	0.7	6.1	61	1244-018810
XPI-F-100	100	1.3	5.4	67	1244-018811
XPI-F-150	150	0.4	5.9	48	1244-018812
XPI-F-200	200	0.4	5.6	53	1244-018814

Resistance tolerance: +10/-5%. In particular for cables < 31.5 Ω/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-F (Cold lead cables from XPI can be used alternatively)

Order reference	Nominal resistance [Ω/km @ 20°C]	Temperature coefficient [x 10 ⁻³ /K]	Outer diameter [mm nom.]	Nom. cross section [mm ²]	Current rating [A]	Part number PN
XPI-F-7	7	4.3	6.6	2.5	32	1244-018801
XPI-F-4.4	4.4	4.3	7.2	4	42	1244-018800
XPI-F-2.9	2.9	4.3	7.8	6	54	1244-018799
XPI-F-1.8	1.8	4.3	9.5	10	73	1244-018798

Notes: Delivery length depends on type of resistance and is limited by max. weight of 120 kg/spool, respectively 1000 m/run.

To ensure practical and safe on-site handling, it is strongly recommended to limit spool lengths to 25 - 30 kg. Not all resistances are standard items and as such may not be in stock. Contact nVent to confirm lead time. nVent requires the use of a 30 mA residual current device to provide maximum safety and protection from fire.

Where design results in higher leakage current, the preferred trip level for adjustable devices is 30 mA above any inherent capacitive leakage characteristic of the heater as specified by the trace heater supplier or alternatively, the next common available trip level for non adjustable devices, with a maximum of 300 mA. All safety aspects need to be proven.

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