

vessels in non-hazardous area.



Electrical heating tape for temperature

maintenance or frost protection of pipework or

Constant Wattage Heating Tape non-Ex

200°C



- Temperature resistant up to 200°C
- · Can be cut to length without wastage
- Outputs available up to 50W/m

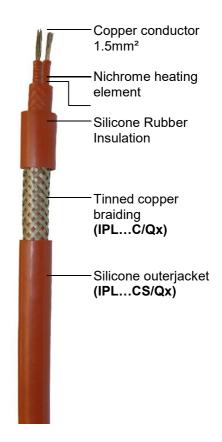
- · High flexibility
- Available for 208 277V AC (110 - 120V AC upon request)

## **Description**

IPL is a constant wattage heating tape that can be used for freeze protection or maintenance of process temperatures in pipework and vessels. It can be cut-to-length at site and can replace mineral insulated (MI) cables for applications where the cut-tolength feature or field fabricated heating cable is preferred.

IPL is approved for use in non-hazardous areas. Because of the special construction with "heating zones" no additional cold lead is needed. From cut point to the next heating wire bonding point the heating cable remains cold and serves as cold lead.

The installation of IPS heating tape is quick and simple and requires few special skills or tools. Termination and power connection components are all provided in convenient kits.



## **Options**

**IPL...C** With tinned copper braid for mechanical protection and an effective grounding.

**IPL...CS** Silicone outerjacket over the braiding provides additional protection.

**IPL...CF** Fluoropolymer outerjacket provides protection from aggressive chemicals and vapours.



# **Technical Data**

Max. Temperature:

Power On: see table Power Off: 200°C

Minimal Installation Temperature: -40°C

Cross Section: 1.5mm<sup>2</sup>

Power Supply: 208 - 277V AC

Max. Resistance of Protective Braid: 18,2 Ohm/km

Weights and Dimensions:

Туре	Nom. Dimensions (mm)	Weight Kg/100m	Min. Bending (mm)	Cable Glands
IPLC	9.4 x 6.2	11.7	12	M16
IPLCS	11.4 x 8.2	14.3	15	M20
IPLCF	10.2 x 7.0	14.3	25	M20

## **Structure**

Heating Element: Nickel-Chromium

Power Conductors: Tin Plated Copper 1.5mm<sup>2</sup>

Conductor Insulation: Silicone Rubber
Primary Insulation: Silicone Rubber
Braiding: Tinned Copper
Outerjacket: Silicone Rubber
or Fluoropolymer

## **Ordering Information**

Example:

	<u>IF</u>	<u>L</u> 5	0 2	2 (	2 5	3
Quintherm IPL						
Output 50W/m						
Supply Voltage 220-240V						
Tinned Copper Braid (C)						
Silicone Rubber Outerjacket (S) Fluoropolyme Outerjacket (F)						

### **Further Information**

Please consult the installation instructions.

# Maximum Pipe/ Workpiece Temperature

The surface of the heater must not exceed the maximum withstand temperature of its constructional materials or the Temperature Classification (if installed in a hazardous area). This is ensured by limiting the pipe or workpiece temperature to a safe level either by design calculation (a Stabilised Design) or by means of temperature controls.

For worst case conditions, the temperature of steel pipes should be limited to the following levels:

Output	Maximum Pipe Temperature (°C)			
(W/m)	IPLC	IPLCS	IPLCF	
6.5	190	190	190	
13	180	185	185	
23	150	160	160	
33	110	115	115	
50	75	80	75	

### Maximum Circuit Length

Output (W/m)	Max. Circuit Length		Zone Length		
	115V	230V	115V	230V	
6.5	82m	164m	1000mm	1500mm	
13	58m	116m	800mm	1100mm	
23	44m	87m	900mm	1000mm	
33	36m	73m	750mm	1000mm	
50	30m	59m	1000mm	1000mm	

#### **Power Conversion Factors**

115V Heating Tape		230V Heating Tape		
277V	Factor 5.80	277V	Factor 1.45	
230V	Factor 4.00	240V	Factor 1.09	
208V	Factor 3.27	220V	Factor 0.91	
120V	Factor 1.09	208V	Factor 0.82	
110V	Factor 0.91	115V	Factor 0.25	

#### Accessories

Quintex offers a complete line of accessories, temperature controller, connection sets as well as different enclosures. These products are recommended for a failure free operation.