



**PRODUCT DATASHEET**  
**TESH™**  
**LOW VOLTAGE REFRIGERATION HEAT TRACING**

**APPLICATION**

TESH low voltage refrigeration heater cables are a series resistance cable used primarily for freeze protection around freezer doors and condensate drains to prevent frost build up.

**RATINGS**

Supply Voltage ..... Up to 32 Volts  
 Maximum exposure temp. (power off) ..... 260°C  
 Minimum installation temperature power ..... -60°C  
 Output of Cable (W/m) ..... 14.8 to 31.5  
 Diameter ..... 4.9 - 5.3 mm

**BENEFITS**

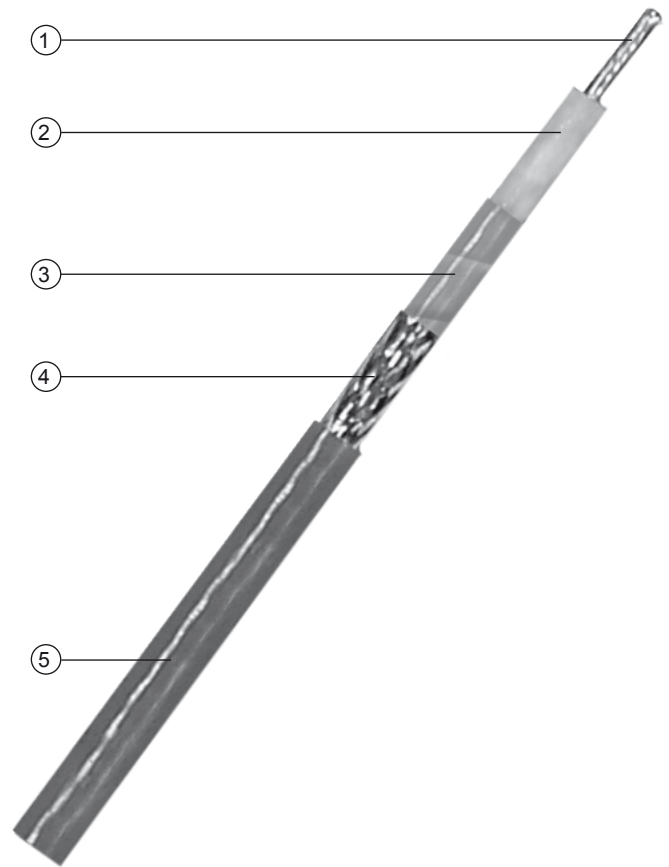
- Cut to length
- Field fabricated (no termination kits required)
- Low voltage
- Easy to bend (circular construction)
- Robust Construction

**COMPONENTS/ACCESSORIES**

- Aluminum Tape
- Step down transformer  
(contact factory for more information)

**CERTIFICATIONS/APPROVALS**

For use in non-hazardous areas only



**CONSTRUCTION**

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



**TESH SELECTION TABLE**

	32 V	24 V	18 V	12 V	TESH 100 W/m	TESH 150 W/m	TESH 200 W/m	TESH 380 W/m	TESH 480 W/m
<b>Circuit Length (m)</b>	10.7	8	6	4				21.2	16.9
	12	9	6.8	4.5			32.4	16.8	13.4
	13.3	10	7.5	5			26.5	13.7	
	14.7	11	8.3	5.5		29.0	22.0		
	16	12	9	6		24.6	18.6		
	17.3	13	9.8	6.5	29.1	21.0	15.9		
	18.7	14	10.5	7	25.3	18.2			
	20	15	11.3	7.5	22.3	16.1			

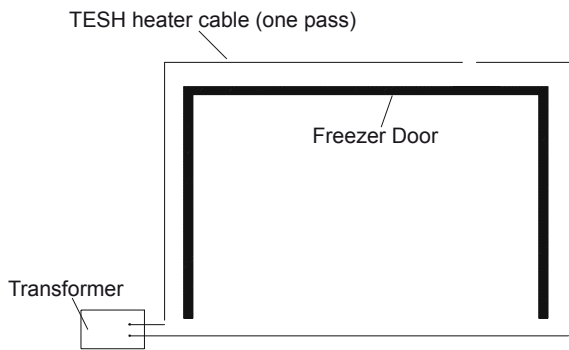
**HOW TO SELECT CABLE**

Step 1 - Choose supply voltage and look down for the heater cable length for your application eg. 32V and 20m

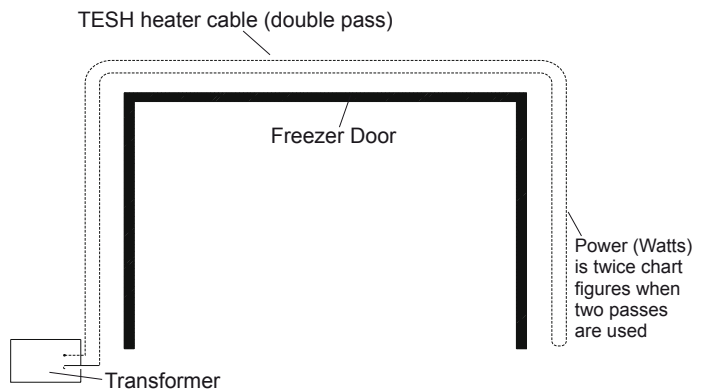
Step 2 - Move across the table and select the w/m required eg. Cable TESH 150 is the only cable at 16.1 w/m

A double pass of TESH 150 cable could be used in the “Up and Back” configuration shown below giving a total of 32.2 w/m

**TYPICAL CIRCUIT LAYOUT OF TESH HEATER CABLE IN FREEZER DOORS**



“Around & Back” (Floor Heated)



“Up & Back” (Floor Not Heated)

**TYPICAL REQUIREMENTS**

- 25°C freezer - Requires 30 - 35 W/m
- 40°C freezer - Requires 45 - 50 W/m

**HEATER CABLE ACCESSORIES AND TERMINATION**

1. Trim TESH heater cable to conductor and connect each end to terminals on transformer. Termination is not required.