

## LONGLINE - HTP1F SERIES RESISTANCE HEATING CABLE

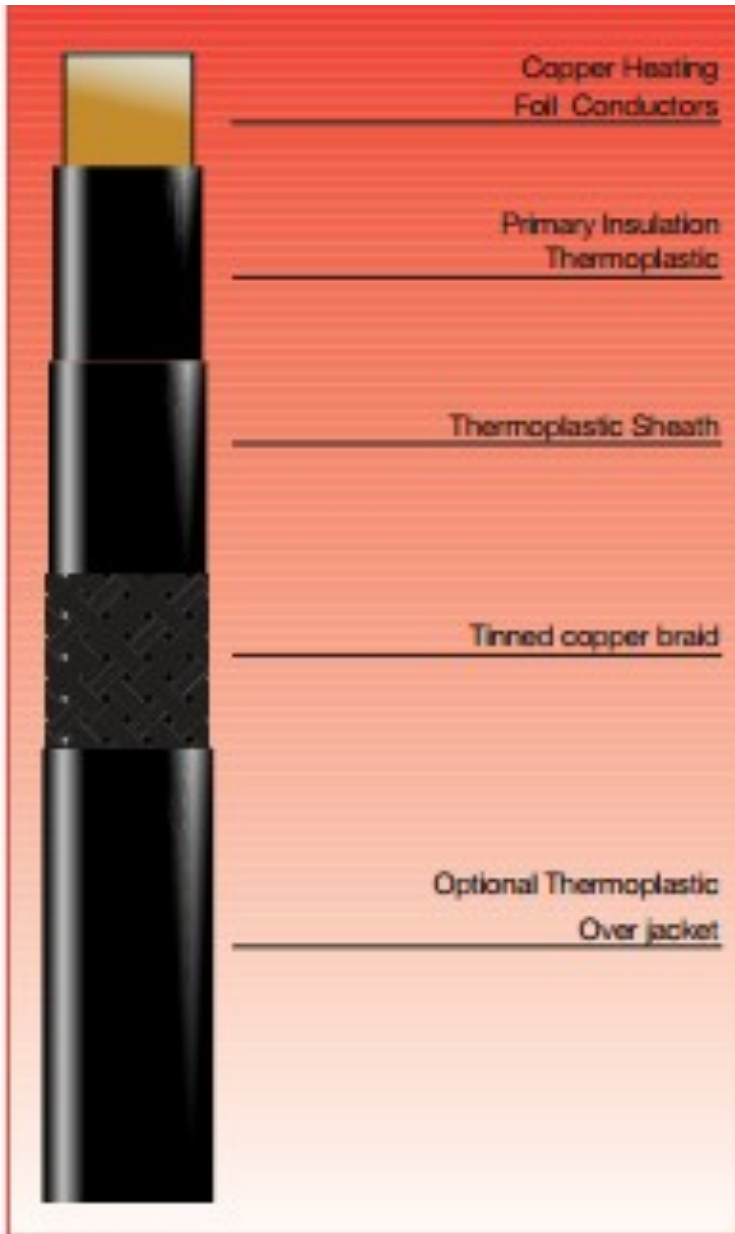
**Flexotherm™** offers Longline High Efficiency Series Resistance Heating Cable for heating of moderately long pipelines. Longline Heating Cable minimizes the number of electrical supplies needed, resulting in minimized supply cabling and distribution equipment costs.

### FEATURES

- Circuit lengths up to 5km
- Single supply point - minimizes supply cabling costs
- High efficiency, flat and flexible
- Freeze protection and heat raising capabilities
- Power outputs up to 23 W/m
- Easy installation in convenient lengths
- Thermoplastic sheath for flexibility
- Safe and reliable

### INDUSTRIES

- Freeze protection
- Process heating of pipe work and vessels
- Piping and Pipelines



## LONGLINE - HTP1F

### SERIES RESISTANCE HEATING CABLE

#### Specification

Maximum Temperature	Unenergized 125°C (257°F)
Minimum Installation Temperature	-40°C (-40°F)
Power Output	Up to 23W/m by design according to application req.
Power Supply	Up to 600V 3 phase According to design req.
Construction	
Heating Conductors	Copper
Sheath	Thermoplastic
Braid (optional)	Tinned Copper
Primary Insulation	Thermoplastic
Jacket (optional)	Thermoplastic
Heating Conductor Thickness	i) 16mm wide, 1.0, 1.25, 1.5mm ii) 20mm wide, 1.75, 2.0mm  Please note that Neptech Inc. will size conductors to provide the required W/m output for required circuit length
Maximum Pipe / Workpiece Temperature (°C)	

Heater Nominal Output (W/m)	MAXIMUM PERMISSIBLE PIPE TEMP (°C)		
	HTP1F	HTP1F - C	HTP1F - CT
10	112	109	100
15	94	95	85
23	78	80	70

#### Weights and Dimensions

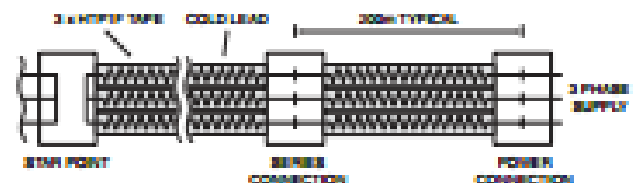
##### 16mm Foil Width

Type Ref	Nominal Dimensions (mm)	Weight kg/100m	Min. Bending radius
HTP1F	20.0 x 6.0	36	35
HTP1F - C	21.0 x 7.0	44	35
HTP1F - CT	22.0 x 8.0	65	75

##### 20mm Foil Width

Type Ref	Nominal Dimensions (mm)	Weight kg/100m	Min. Bending radius
HTP1F	24.0 x 6.0	48	35
HTP1F - C	25.0 x 7.0	58	35
HTP1F - CT	27.0 x 8.0	86	75

#### Typical Arrangement



## LONGLINE - HTP3F SERIES RESISTANCE HEATING CABLE

**Flexotherm™** offers Longline High Efficiency Series Resistance Heating Cable for heating of moderately long pipelines. Longline Heating Cable minimizes the number of electrical supplies needed, resulting in minimized supply cabling and distribution equipment costs.

### FEATURES

- Circuit lengths up to 2km
- Single supply point - minimizes supply cabling costs
- High efficiency, flat and flexible
- Freeze protection and heat raising capabilities
- Power outputs up to 23 W/m
- Easy installation in convenient lengths
- Thermoplastic sheath for flexibility
- Safe and reliable

### INDUSTRIES

- Freeze protection
- Process heating of pipe work and vessels
- Piping and Pipelines

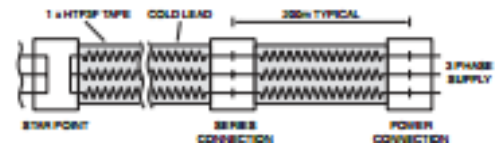


# LONGLINE - HTP3F

## SERIES RESISTANCE HEATING CABLE

### Specification

Maximum Temperature	Unenergized	125°C (257°F)	Dimensions
Minimum Installation Temperature	-40°C (-40°F)		<b>Type Ref.</b> <b>Nom. Dims (mm)</b>
Power Output	Up to 23W/m by design according to application req.		HTP3F                      24 x 6
Power Supply	Up to 600V 3 phase		HTP3F - C                25 x 7
	According to design req.		HTP3 - CT                27 x 9
Construction			Typical Arrangement
Heating Conductors	Copper 4mm wide		
Sheath	Thermoplastic		
Braid (optional)	Tinned Copper		
Primary Insulation	Thermoplastic		
Jacket (optional)	Thermoplastic		
Heating Conductor Thickness	0.3mm    0.7mm		
	0.4mm    0.8mm		
	0.5mm    1.00mm		
	0.6mm    1.25mm		
	Please note that Neptech Inc. will size conductors to provide the required W/m output for required circuit length		



### Maximum Pipe / Workpiece Temperature (°C)

Heater Nominal Output (W/m)	MAXIMUM PERMISSIBLE PIPE TEMP (°C)		
	HTP1F	HTP1F - C	HTP1F - CT
10	112	109	100
15	94	95	85
23	78	80	70

## LONGLINE - HTS1F SERIES RESISTANCE HEATING CABLE

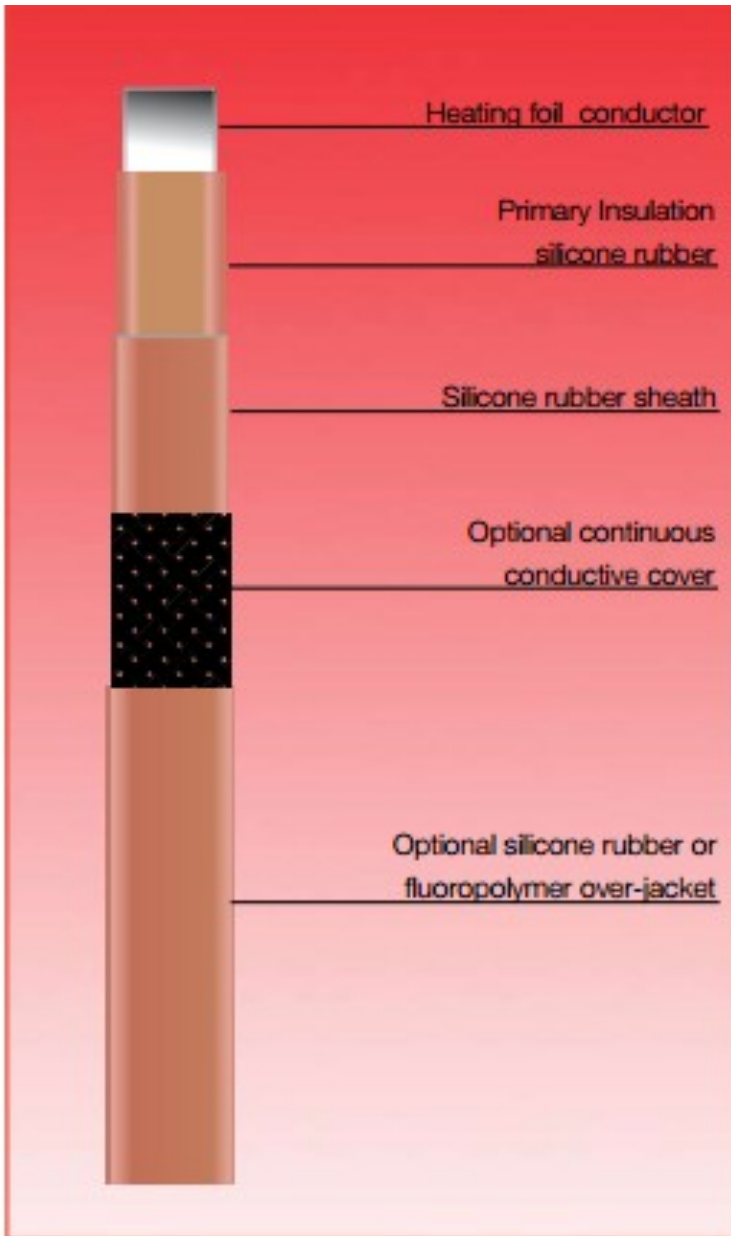
**Flexotherm™** offers Longline High Efficiency Series Resistance Heating Cable for heating of moderately long pipelines. Longline Heating Cable minimizes the number of electrical supply needed, resulting in minimized supply cabling and distribution equipment costs.

### FEATURES

- Circuit lengths up to 5km
- Single supply point - minimizes supply cabling costs
- High efficiency, flat and flexible
- Freeze protection and heat raising capabilities
- Power outputs up to 60 W/m
- Easy installation in convenient lengths
- Silicone Rubber sheath for flexibility
- Safe and reliable

### INDUSTRIES

- Freeze protection
- Process heating of pipe work and vessels
- Piping and Pipelines



## LONGLINE - HTS1F

### SERIES RESISTANCE HEATING CABLE

#### Specification

Maximum Temperature	Unenergized 230°C (392°F) 205°C (401°F)	
Minimum Operating Temperature	-80°C (-112°F)	
Minimum Installation Temperature	HTS1F-xS	-40°C (-40°F)
	HTS1F-xF	-20°C (-4°F)
Power Supply	Up to 1000v 3 phase According to application req.	
Power Output	Up to 60W/m by design according to application req.	
Construction		
Heating Conductors	Sized to suit application	
Primary Insulation	Silicone Rubber	
Sheath	Silicone Rubber	
Continuous conductive cover (optional)	T-Copper/Aluminum	
Overjacket (optional)	Silicone Rubber or Fluoropolymer	
Temperature Classification	205°C*	Devices are classified to rated output and conditions of use (ex. Limited pipe temperature).
	230°C	
	T3 (200°C)	
	T4 (135°C)	
	T5 (100°C)	
	T6 (85°C)	
*denotes Fluoropolymer outer jacket		

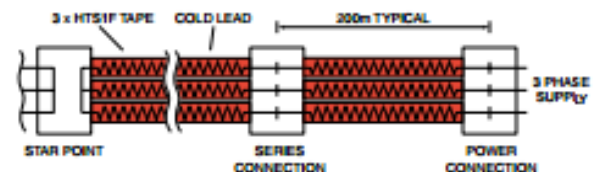
\*denotes Fluoropolymer outer jacket

Devices are classified to rated output and conditions of use (ex. Limited pipe temperature).

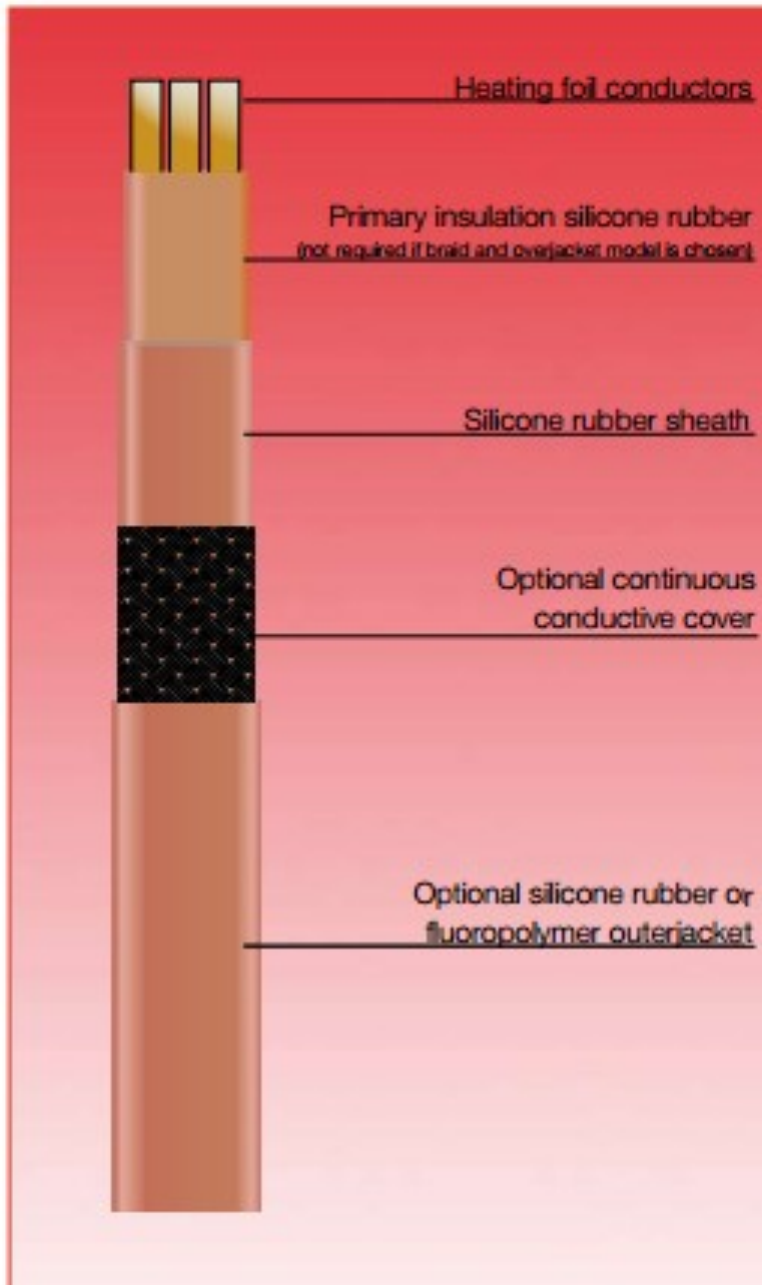
#### Maximum Pipe / Workpiece Temperatures (°C)

Cat Ref.	Nom. Output W/m	AREA CLASSIFICATION						
		HAZARDOUS¹						
		T6	T5	T4	T3	T2	T1	SAFE²
HTS1F	10							217
	20							189
	30							156
	40							128
	50							98
	60							50
HTS1F - X	10	47	66	107	181	217	217	217
	20	-	32	75	157	191	191	191
	30	-	-	41	132	163	163	163
	40	-	-	-	108	133	133	133
	50	-	-	-	76	97	97	97
	60	-	-	-	30	46	46	46
HTS1F - xS	10	57	73	112	181	207	207	207
	20	37	53	93	166	180	180	180
	30	-	31	73	152	157	157	157
	40	-	-	51	127	127	127	127
	50	-	-	27	92	92	92	92
	60	-	-	-	-	-	-	57
HTS1F - xF	10	57	73	112	181	192	192	192
	20	37	53	93	166	177	177	177
	30	-	31	73	152	165	165	165
	40	-	-	51	127	127	127	127
	50	-	-	27	92	92	92	92
	60	-	-	-	-	-	-	57

#### Typical Arrangement



## LONGLINE - HTS3F SERIES RESISTANCE HEATING CABLE



**Flexotherm™** offers Longline High Efficiency Series Resistance Heating Cable for heating of moderately long pipelines. Longline Heating Cable minimizes the number of electrical supplies needed, resulting in minimized supply cabling and distribution equipment costs.

### FEATURES

- Circuit lengths up to 2km
- Single supply point - minimizes supply cabling costs
- High efficiency, flat and flexible
- Freeze protection and heat raising
- International Approvals for hazardous areas
- Power outputs up to 60 W/m
- Easy installation in convenient lengths
- Silicone Rubber sheath for flexibility
- Safe and reliable

### INDUSTRIES

- Freeze protection
- Process heating of pipe work and vessels
- Piping and Pipelines

## LONGLINE - HTS3F

### SERIES RESISTANCE HEATING CABLE

#### Specification

Maximum Temperature	Unenergized 230°C (392°F) 205°C (401°F)	
Minimum Operating Temperature	-80°C (-112°F)	
Minimum Installation Temperature	HTS1F-xS	-40°C (-40°F)
	HTS1F-xF	-20°C (-4°F)
Power Supply	Up to 1000v 3 phase According to application req.	
Power Output	Up to 60W/m by design according to application req.	
Construction		
Heating Conductors	Sized to suit application	
Primary Insulation	Silicone Rubber	
Sheath	Silicone Rubber	
Continuous conductive cover (optional)	T-Copper/Aluminum	
Overjacket (optional)	Silicone Rubber or Fluoropolymer	
Temperature Classification	205°C*	Devices are classified to rated output and conditions of use (ex. Limited pipe temperature).
	230°C	
	T3 (200°C)	
	T4 (135°C)	
	T5 (100°C)	
	T6 (85°C)	

\*denotes Fluoropolymer outer jacket

#### Maximum Pipe / Workpiece Temperatures (°C)

Cat Ref.	Nom. Output W/m	AREA CLASSIFICATION						
		HAZARDOUS¹						
		T6	T5	T4	T3	T2	T1	SAFE²
HTS3F	10							217
	20							189
	30							156
	40							128
	50							98
	60							50
HTS3F - X	10	47	66	107	181	217	217	217
	20	-	32	75	157	191	191	191
	30	-	-	41	132	163	163	163
	40	-	-	-	108	133	133	133
	50	-	-	-	76	97	97	97
	60	-	-	-	30	46	46	46
HTS3F - xS	10	57	73	112	181	207	207	207
	20	37	53	93	166	180	180	180
	30	-	31	73	152	157	157	157
	40	-	-	51	127	127	127	127
	50	-	-	27	92	92	92	92
	60	-	-	-	-	-	-	57
HTS3F - xF	10	57	73	112	181	192	192	192
	20	37	53	93	166	177	177	177
	30	-	31	73	152	165	165	165
	40	-	-	51	127	127	127	127
	50	-	-	27	92	92	92	92
	60	-	-	-	-	-	-	57

#### Typical Arrangement

