

Project Planning Information for Pipes Electric Trace Heating Systems

Company	Web site
Street	Contact person
Post code/Town	E-mail
Country	Phone

Application of Electrical Trace Heating System

Frost protection	<input type="checkbox"/>
Temperature maintenance	<input type="checkbox"/>
Heating up and temperature maintenance	<input type="checkbox"/>

Piping information

Length	m
Nominal bore	mm
Pipe material	
Specific heat of the pipe material*	J/(kg·K)
Pipe weight per meter*	kg/m
Wall thickness*	mm
Density of the pipe material*	kg/m ³
Number of valves	pcs.
Number of flanges	pcs.
Number of supports	pcs.
Number of pumps/filters	pcs.
Number of drains/vents	pcs.
Location	indoor <input type="checkbox"/> outdoors <input type="checkbox"/> buried <input type="checkbox"/>

Thermal insulation information

Material	
Thickness	mm
Thermal conductivity	W/(m·K) at mean temperature °C
Density*	kg/m ³
Specific heat*	J/(kg·K)
Upper limit temperature of thermal insulation material	°C

*required for heating up applications

Product information

Medium	
Density*	kg/m ³
Specific heat*	J/(kg·K)
Phase change temperature* (if undergo)	°C
Specific heat of fusion*	J/kg

Process data

Initial temperature*	°C
Final temperature*	°C
Required heat up period*	h
Maintain temperature	°C
Max. allowed temperature of the product	°C
Min. ambient temperature	°C
Max. ambient temperature	°C
Startup temperature	°C

Temperature limitations

Max. operating pipe temperature (continuously, trace heater energized)	°C
Max. exposure heater temperature (intermittently, trace heater de-energized)	°C

Electrical data, area classification, approvals/certifications

Supply voltage	V AC	Frequency	50 Hz <input type="checkbox"/>	60 Hz <input type="checkbox"/>
Installation in potentially explosive atmospheres	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
Temperature class				
ATEX <input type="checkbox"/>	IECEX <input type="checkbox"/>	CSA <input type="checkbox"/>	EAC <input type="checkbox"/>	
INMETRO <input type="checkbox"/>	KOSHA <input type="checkbox"/>			