

## Project Planning Information for Pipes

### Contact information

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

### Application of Electrical Trace Heating System

Frost protection
Temperature maintenance
Heating up and temperature maintenance

### 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 <sup>3</sup>
Number of valves	pcs.
Number of flanges	pcs.
Number of supports	pcs.
Number of pumps/filters	pcs.
Number of drains/vents	pcs.
Location	indoor outdoor buried

### Thermal insulation information

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

### Product information

Medium	
Density*	kg/m <sup>3</sup>
Specific heat*	J/(kg·K)
Phase change temperature* (if undergo)	°C
Latent 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	50Hz 60Hz
Installation in potentially explosive atmospheres	Yes No
Temperature class	
ATEX	
IECEX	
CSA	
EAC	
INMETRO	
KOSHA	
Other	

### Temperature control

Provided by
Customer
BARTEC
Only temperature sensor by BARTEC
If by BARTEC,
Local controller
Controller in distribution panel
Distribution panel in hazardous area
Controller
Electronic
Mechanical