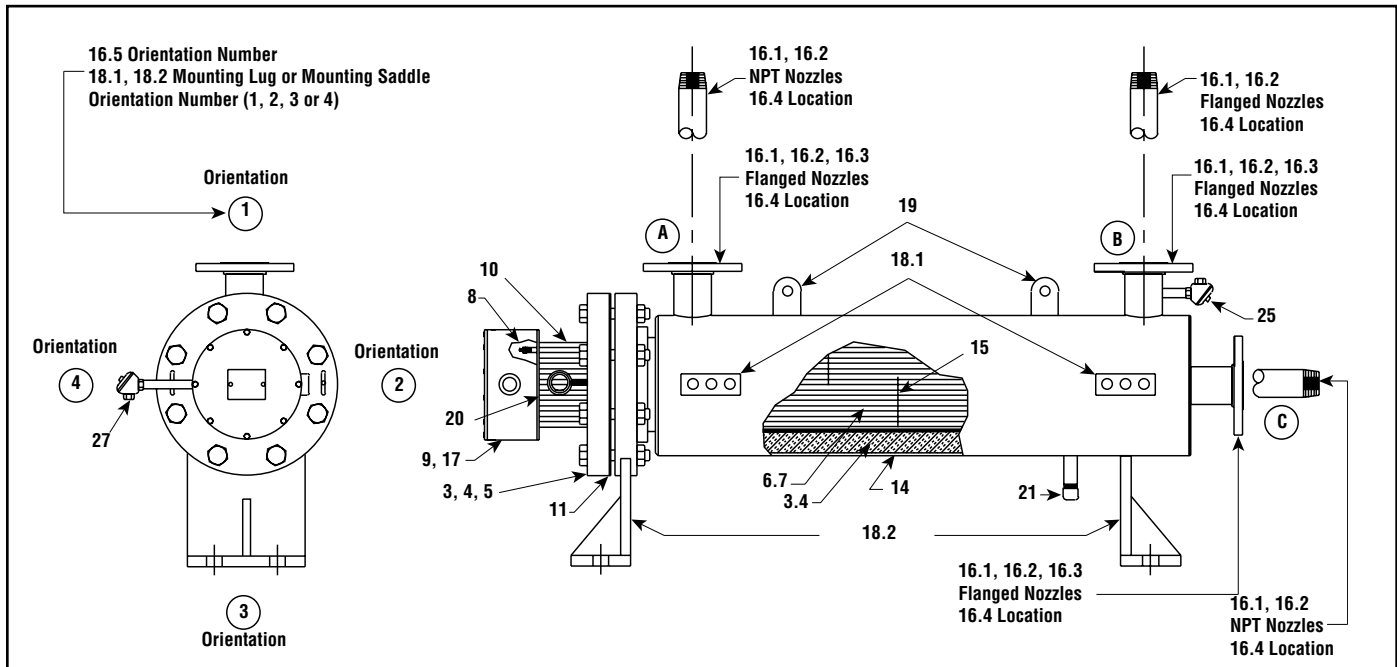


CIRCULATION HEATER SYSTEMS

ASME & Custom Engineering Specifications

Customer Name: _____ Reference: _____ Date: _____



Note — Drawing is for Illustration Purposes Only. The flange size, number of heating elements, terminal enclosure configuration etc., will vary according to options selected.

Operating Conditions		4. FLANGE AND VESSEL MATERIAL:	
1. HEATED MEDIUM:		<input type="checkbox"/> Carbon Steel	<input type="checkbox"/> Carbon Steel-Galvanized
2. TEMPERATURE IN:	°F	TEMPERATURE OUT:	°F
3. FLOW RATE:	SCFM or	GPM or	
	Lbs/Hr or	<input type="checkbox"/> Other (Specify)	
4. OPERATING PRESSURE:	psig.	5. FLANGE RATING:	<input type="checkbox"/> Class 150 <input type="checkbox"/> Class 300 <input type="checkbox"/> Other (Specify)
5. DESIGN TEMPERATURE:	°F Max.	°F Min.	6. HEATING ELEMENT WATT DENSITY:
6. DESIGN PRESSURE:	psig.		<input type="checkbox"/> 6.5 W/In ² <input type="checkbox"/> 15 W/In ²
7.	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		7. HEATING ELEMENT SHEATH MATERIAL:
8. HAZARDOUS AREA ENVIRONMENT:			<input type="checkbox"/> Steel <input type="checkbox"/> Copper <input type="checkbox"/> 304 Stainless Steel
Class	Div.	Group	<input type="checkbox"/> 316 Stainless Steel <input type="checkbox"/> INCOLOY®
9. AMBIENT TEMPERATURE:	°F		<input type="checkbox"/> Other (Specify)
Heater Specifications (Check All That Apply)		8. TERMINAL SEALS:	<input type="checkbox"/> Yes <input type="checkbox"/> No
1. RATING:		<input type="checkbox"/> Silicone Resin (450°F)	<input type="checkbox"/> Silicone Fluid (500°F)
Volts	Phase	Kilowatts	<input type="checkbox"/> RTV (450°F) <input type="checkbox"/> Epoxy (250°F)
2. NUMBER OF ELECTRICAL CIRCUITS:	<input type="checkbox"/> Standard		<input type="checkbox"/> Hermetic (Maximum 1000°F Sheath Temperature)
<input type="checkbox"/> Other: No. of Circuits	kW/Circuit		<input type="checkbox"/> Other (Specify)
3. NOMINAL FLANGE & VESSEL SIZE/NO. HEATING ELEMENTS:		9. TERMINAL ENCLOSURE:	<input type="checkbox"/> General Purpose
<input type="checkbox"/> 3"/3	<input type="checkbox"/> 6"/12	<input type="checkbox"/> 8"/18	<input type="checkbox"/> Moisture Resistant <input type="checkbox"/> Explosion Proof
<input type="checkbox"/> 10"/27	<input type="checkbox"/> 12"/36	<input type="checkbox"/> 14"/45	10. TERMINAL ENCLOSURE STANDOFFS:
<input type="checkbox"/> 16"/72	<input type="checkbox"/> 18"/108	<input type="checkbox"/> Other (Specify)	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> 4" <input type="checkbox"/> 6" <input type="checkbox"/> Other (Specify)
			11. BODY FLANGE GASKET:
			<input type="checkbox"/> Standard <input type="checkbox"/> Spiral Wound <input type="checkbox"/> Other (Specify)

CIRCULATION HEATER SYSTEMS

ASME & Custom Engineering Specifications *(cont'd.)*

Customer Name: _____ Reference: _____ Date: _____

Heater Specifications (Check All That Apply)

12. ASME DESIGN and CERTIFIED: <input type="checkbox"/> Yes Section _____					23. ELECTRONIC PROCESS TEMPERATURE CONTROL MOUNTED ON HEATER: <input type="checkbox"/> Yes <input type="checkbox"/> No				
13. ELECTRICAL CODES: National Electrical Code (<i>Standard</i>)					a) <input type="checkbox"/> General Purpose <input type="checkbox"/> Moisture Resistant				
<input type="checkbox"/> UL Listed <input type="checkbox"/> CSA Certified <input type="checkbox"/> Other (<i>Specify</i>) _____					<input type="checkbox"/> Explosion Proof				
14. THERMAL INSULATION: <input type="checkbox"/> None <input type="checkbox"/> Standard					24. MECHANICAL PROCESS TEMPERATURE HIGH LIMIT PROTECTION CONTROL MOUNTED ON HEATER: <input type="checkbox"/> Yes <input type="checkbox"/> No				
<input type="checkbox"/> High Temperature <input type="checkbox"/> Weatherproof Jacket					a) <input type="checkbox"/> General Purpose <input type="checkbox"/> Moisture Resistant				
15. CIRCULATION: <input type="checkbox"/> Unbaffled <input type="checkbox"/> Baffled					<input type="checkbox"/> Explosion Proof				
16. NOZZLE SIZE, TYPE and ORIENTATION:					b) Temperature Range (°F)				
<input type="checkbox"/> No Standard or as Indicated Below					<input type="checkbox"/> 0 - 100 <input type="checkbox"/> 60 - 250				
Nozzles	1. Size	2. Type	3. Rating	4. Location	5. Orientation	<input type="checkbox"/> 200 - 550 <input type="checkbox"/> 300 - 700			
Inlet									
Outlet									
Notes: 16.1 Size is Nominal					25. PROCESS THERMOCOUPLE IN OUTLET:				
16.2 Type is NPT threaded or raised Face Flange					a) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Type J <input type="checkbox"/> Type K				
16.3 Rating is 150 Lb. 300 Lb. etc. if Flanged					b) With Separate Terminal Box				
16.4 Location is A, B or C (from Figure)					<input type="checkbox"/> None <input type="checkbox"/> General Purpose				
16.5 Orientation is 1, 2, 3 or 4 (from Figure)					<input type="checkbox"/> Moisture Resistant <input type="checkbox"/> Explosion Proof				
17. MOUNTING POSITION:					26. ELECTRONIC HIGH LIMIT PROTECTION CONTROL MOUNTED ON HEATER: <input type="checkbox"/> Yes <input type="checkbox"/> No				
<input type="checkbox"/> Vertical-Terminal Box <input type="checkbox"/> Up <input type="checkbox"/> Down					a) <input type="checkbox"/> General Purpose <input type="checkbox"/> Moisture Resistant				
<input type="checkbox"/> Horizontal					<input type="checkbox"/> Explosion Proof				
18. MOUNTING METHOD: <input type="checkbox"/> Standard or as Indicated Below					27. OVERHEAT THERMOCOUPLE ON HEATING ELEMENT SHEATH:				
18.1 <input type="checkbox"/> Mounting Lugs-Orientation Number					a) <input type="checkbox"/> None <input type="checkbox"/> Type J <input type="checkbox"/> Type K				
18.2 <input type="checkbox"/> Mounting Saddles-Orientation Number					b) With Separate Terminal Box				
Notes: Orientation Number is 1, 2, 3 or 4 (from Figure)					<input type="checkbox"/> None <input type="checkbox"/> General Purpose				
19. LIFTING LUGS on HEATER PIPE BODY: <input type="checkbox"/> Yes <input type="checkbox"/> No					<input type="checkbox"/> Moisture Resistant <input type="checkbox"/> Explosion Proof				
20. LIFTING LUGS on HEATER FLANGE: <input type="checkbox"/> Yes <input type="checkbox"/> No					28. SKID MOUNTED CIRCULATION HEATER SYSTEM COMPLETE WITH CONTROL PANEL WIRED TO HEATER:				
21. DRAIN PIPE-3/4" NPT: <input type="checkbox"/> Yes (Horizontal Mount) <input type="checkbox"/> No					a) <input type="checkbox"/> Yes <input type="checkbox"/> No				
22. MECHANICAL PROCESS TEMPERATURE CONTROL MOUNTED ON HEATER: <input type="checkbox"/> Yes <input type="checkbox"/> No					b) <input type="checkbox"/> Vertical Orientation <input type="checkbox"/> Horizontal Orientation				
a) <input type="checkbox"/> General Purpose <input type="checkbox"/> Moisture Resistant					c) Control Panel (<i>Attach Detail Requirements</i>)				
<input type="checkbox"/> Explosion Proof					29. Other SPECIAL FEATURES:				
b) Temperature Range (°F)					30. MODEL NUMBER:				
<input type="checkbox"/> 0 - 100 <input type="checkbox"/> 60 - 250									
<input type="checkbox"/> 200 - 500 <input type="checkbox"/> 300 - 700									
<input type="checkbox"/> Other (<i>Specify</i>) _____									