

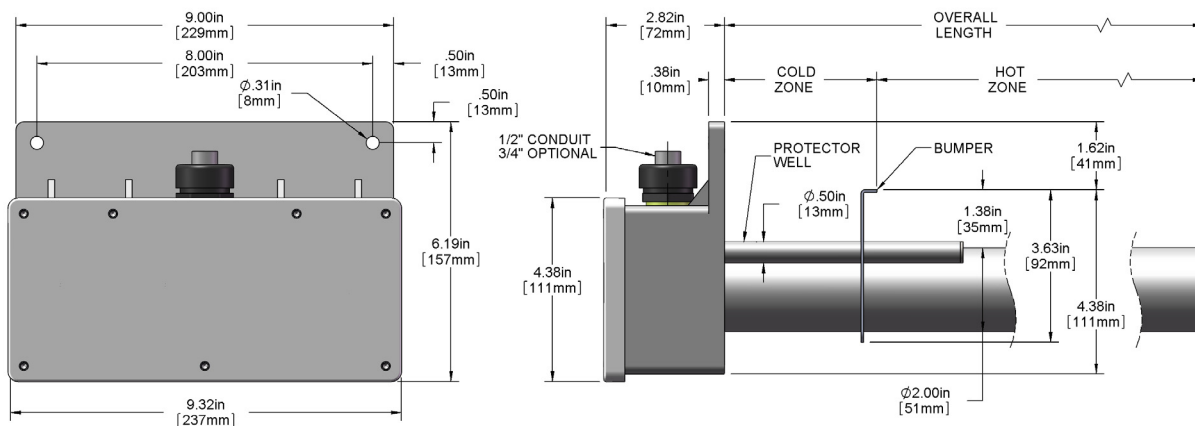
D3 SERIES, DERATED TRIPLE METAL HEATERS								
WATTS	VOLTS	HOT OVERALL		STEEL	304 SS	316 SS	TITANIUM	SHIP WGT. Lbs./kg)
		ZONE	LENGTH					
		In./(mm)	In./(mm)					
1500	120	6	11	D3P1.5111-*.**	D3F1.5111-*.**	D3S1.5111-*.**	D3T1.5111-*.**	21
	240	(155)	(280)	D3P1.5211-*.**	D3F1.5211-*.**	D3S1.5211-*.**	D3T1.5211-*.**	(9.5)
3000	240	10	17	D3P3217-*.**	D3F3217-*.**	D3S3217-*.**	D3T3217-*.**	30
	480	(255)	(430)	D3P3417-*.**	D3F3417-*.**	D3S3417-*.**	D3T3417-*.**	(14)
4500	240	16	23	D3P4.5223-*.**	D3F4.5223-*.**	D3S4.5223-*.**	D3T4.5223-*.**	33
	480	(405)	(585)	D3P4.5423-*.**	D3F4.5423-*.**	D3S4.5423-*.**	D3T4.5423-*.**	(15)
6000	240	20	29	D3P6229-*.**	D3F6229-*.**	D3S6229-*.**	D3T6229-*.**	39
	480	(510)	(735)	D3P6429-*.**	D3F6429-*.**	D3S6429-*.**	D3T6429-*.**	(18)
7500	240	25	35	D3P7.5235-*.**	D3F7.5235-*.**	D3S7.5235-*.**	D3T7.5235-*.**	45
	480	(635)	(890)	D3P7.5435-*.**	D3F7.5435-*.**	D3S7.5435-*.**	D3T7.5435-*.**	(20.5)
9000	240	30	40	D3P9240-*.**	D3F9240-*.**	D3S9240-*.**	D3T9240-*.**	51
	480	(760)	(1015)	D3P9440-*.**	D3F9440-*.**	D3S9440-*.**	D3T9440-*.**	(23)
12000	240	37	47	D3P12247-*.**	D3F12247-*.**	D3S12247-*.**	D3T12247-*.**	63
	480	(940)	(1195)	D3P12447-*.**	D3F12447-*.**	D3S12447-*.**	D3T12447-*.**	(28.5)
13500	240	44	54	D3P13.5254-*.**	D3F13.5254-*.**	D3S13.5254-*.**	D3T13.5254-*.**	69
	480	(1120)	(1370)	D3P13.5454-*.**	D3F13.5454-*.**	D3S13.5454-*.**	D3T13.5454-*.**	(31)
15000	240	49	59	D3P15259-*.**	D3F15259-*.**	D3S15259-*.**	D3T15259-*.**	75
	480	(1245)	(1500)	D3P15459-*.**	D3F15459-*.**	D3S15459-*.**	D3T15459-*.**	(34)
18000	240	58	68	D3P18268-*.**	D3F18268-*.**	D3S18268-*.**	D3T18268-*.**	84
	480	(1475)	(1730)	D3P18468-*.**	D3F18468-*.**	D3S18468-*.**	D3T18468-*.**	(38)

Standard units consist of single head with single conduit. Add "-1" for single phase or "-3" for three phase.

## Product Features and Benefits:

- ◆ **SUPERIOR CHEMICAL RESISTANCE:** Materials available for use in most concentrated aqueous alkaline solutions, plating, and phosphate solutions. Check solution recommendation chart or with your chemical supplier for proper sheath material selection.
- ◆ **RUGGED CONSTRUCTION:** Heavy wall metal sheaths available in:
  - Steel.
  - 304 stainless steel.
  - 316 stainless steel.
  - Titanium.
- ◆ **OUTSTANDING PERFORMANCE:** Low watt densities of 18 watts per square inch (2.8 w/cm<sup>2</sup>) extend service life.
- ◆ **CORROSION RESISTANT HEADS:** Vapor tight, flame retardant polypropylene terminal enclosures each with 3-foot (.9m) flexible PVC liquid tight conduits.
- ◆ **SAFETY FEATURES:**
  - Grounded construction.
  - Thermal protector built in. Replaceable P1 fuse standard for solutions up to 180°F (82°C).
  - Non-floating construction.
- ◆ **CERTIFICATIONS:** UL listed (except steel) to U.S. and Canadian safety requirements, and CE.
- ◆ **SIZES:** 1,500 watts to 18,000 watts.
- ◆ **VOLTAGES:** 120, 240 or 480 volts. 208, 380, 415, 600 and other voltages available.
- ◆ **OPTIONS AVAILABLE (consult factory):**
  - Replaceable thermal protectors:
    - P4: for solutions from 180°F (82°C) to 230°F (110°C).
    - P5: for solutions from 230°F (110°C) to 300°F (150°C).
  - Resettable thermal protectors:
    - P2: for solutions up to 180°F (82°C).
    - P6: for solutions from 180°F (82°C) to 230°F (110°C).
    - P7: for solutions from 230°F (110°C) to 300°F (150°C).
  - Special configurations and lengths.
  - One common head (terminal enclosure) with single conduit for single or three phase.
  - Longer wire and conduit lengths.
  - Lower watt densities for highly viscous solutions.
  - Temperature and level controls sized to match the heater.

## DIMENSIONS



## DERATED TRIPLE TUBE METAL OVER THE SIDE HEATER ORDERING INFORMATION

Series	Wattage	Voltage	Length (in.)	Options	Type of Fuse	Wire and Conduit Length
	1.5 = 1500 3 = 3000 4.5 = 4500 6 = 6000 7.5 = 7500 9 = 9000 12 = 12000 13.5 = 13500 15 = 15000 18 = 18000	1 = 120 2 = 240 3 = 380 4 = 480 5 = 415 6 = 600 7 = 400 8 = 208 9 = 220 0 = 200	11 = 1.5kW 17 = 3kW 23 = 4.5kW 29 = 6kW 35 = 7.5kW 40 = 9kW 47 = 12kW 54 = 13.5kW 59 = 15kW 68 = 18kW specify custom lengths, not to exceed tank depth			no designator = 36" length standard specify variations from standard Ex: -X84 = 84"
	D3P = steel D3F = 304 stainless steel D3S = 316 stainless steel D3T = titanium				<b>Replaceable Fuse</b>	
					-P1 (std) for solutions up to 180°F -P4 for 180° - 230°F solutions -P5 for 230° - 300°F solutions	
					<b>Resettable Fuse</b> (additional control components required)	
					-P2 for solutions up to 180°F -P6 for 180° - 230°F solutions -P7 for 230° - 300°F solutions	
	-3 = three phase -1 = single phase					

1 inch = 2.54cm

### ORDERING EXAMPLE:

D3F12447-3-P4-X72

Derated, triple tube, 304 stainless steel, 12,000 watts, 480 volt, 47" long, 3 phase, P4 fuse, 72" wire and conduit.

**PROCESS  
TECHNOLOGY**