



TRIVOLT

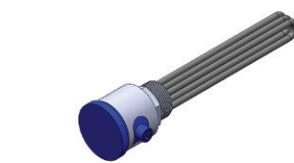
industries

ELECTRIC HEATING ELEMENTS



Immersion Flanged Tubular

- » Heating solvents, caustic solution, viscous oils, salts, storage tanks, degreasing tanks
- » Up to 600 volts
- » Up to 48" flange, 600 PSI
- » NEMA 1, 4, 4X & explosion proof
- » CSA/UL, ASME & ATEX (pending)



Immersion Screwplug Tubular

- » Heating solvents, caustic solution, viscous oils, salts, storage tanks, degreasing tanks
- » Up to 600 volts
- » Up to 3" NPT, 600 PSI NEMA 1, 4, 4X & explosion proof
- » CSA/UL, ASME & ATEX (pending)



Immersion Aluma

- » High power, low-density
- » Heating solvents, transformer oil, & insulation oils
- » Up to 600 volts
- » Up to 48" flange, 600 PSI
- » NEMA 1, 4, 4X & explosion proof
- » CSA/UL, ASME & ATEX (pending)

Circulation

- » Vessel up to 48" in steel, SS304 or SS316
- » Available Tubular, Aluma or Triflex Immersion
- » Complete with SS shroud & 1" thick insulation
- » Up to 48" flange, 600 PSI standard
- » CSA/UL, ASME & ATEX (pending)
- » Stand & control available



Circulation 1,000 volt

- » Medium voltage heater (suitable for transit or EV) up to 4160 volts
- » Heating solvents, caustic solution, viscous oils, salts, storage tanks & degreasing tanks
- » Up to 600 volts
- » Up to 48" flange, 600 PSI
- » NEMA 1, 4, 4X & explosion proof
- » CSA/UL, ASME & ATEX (pending)



Immersion Flanged Triflex

- » High efficiency
- » Element material: SS304 or SS3016
- » Available diameters 1/2", 5/8", 3/4", 1", 1.9", 2.5"
- » Option of Teflon coating
- » Up to 48" flange 600 PSI pressure
- » Up to 600 volts, 3-phase multiple circuits



Immersion Screwplug Triflex

- » Heating solvents, caustic solution, viscous oils, salts, storage tanks & degreasing tanks
- » Up to 600 volts
- » Up to 3" NPT 600 PSI
- » NEMA 1, 4, 4X & explosion proof
- » CSA/UL, ASME & ATEX (pending)



Immersion Over-The-Side (OVS)

- » Installed in base of tanks or mounted on the tank wall
- » High limit and process sensors available
- » Single or 3-phase voltages; up to 600 volts
- » Different anti-corrosion treatments available
- » Nema and Crouse Hinds enclosure available compliant with CSA-CUS and Hazloc certifications



Immersion Flanged Square

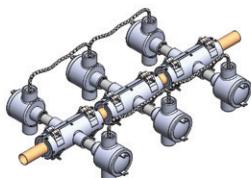
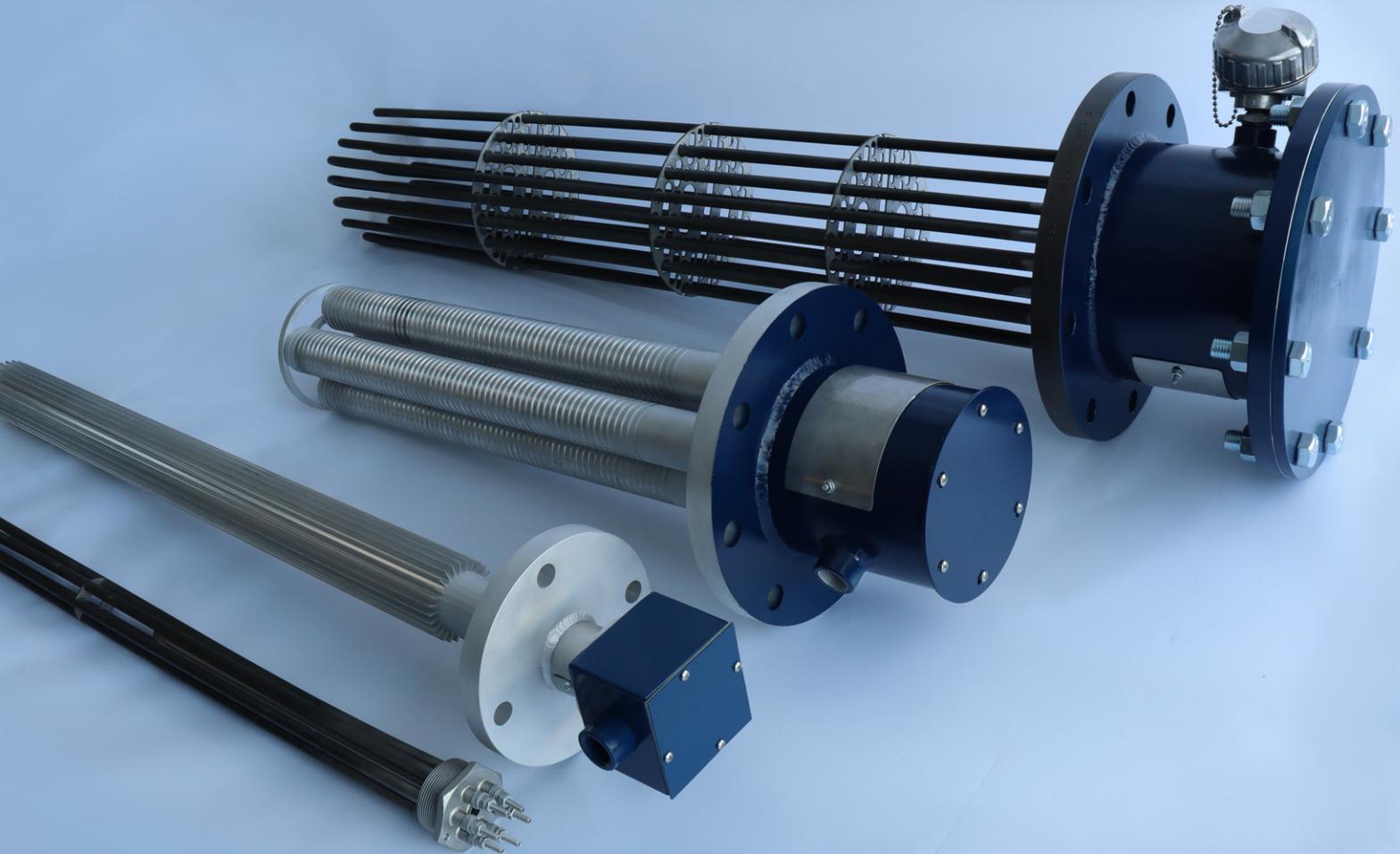
- » Standard for thermolators
- » Heating heat transfer fluids, medium to lightweight oils & water in tanks
- » Applications requiring low to medium wattages

Immersion Screwplug 1 NPT

- » Standard 1" NPT
- » Used primarily for heating fluids in tanks or vessels
- » Designed to be fully immersed in liquid at all times
- » Various plug sizes available

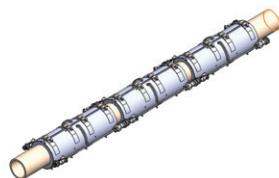
Immersion SS Finned Flanged

- » Heating inert gases and air only
- » Up to 600 volts
- » Up to 3" NPT 600 PSI
- » NEMA 1, 4, 4X & explosion proof
- » CSA/UL, ASME & ATEX (pending)
- » High efficiency option available



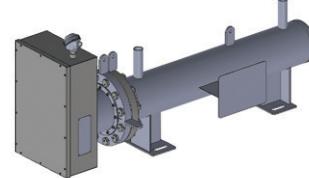
Triflex Tube Trace

- » Newly introduced to the market
- » Prevent freezing of tubes in difficult to access locations
- » Replaces heat trace cables which are inefficient



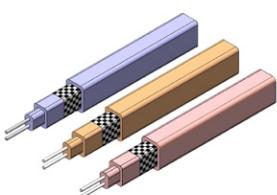
Triflex Pipe Trace

- » Newly introduced to the market
- » Prevent freezing of large pipes (3" dia. & more) over extensive lengths
- » Easy installation
- » Controlled by PID controller



Immersion 1 Megawatt

- » CSA/CUL & ASME certified



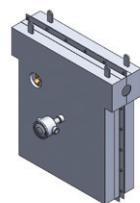
Heat Trace Cable

- » Apply heat to a product contained within an equipment such as a pipe or vessel
- » Available in three different temperature ranges
- » All self-regulating
- » Complete with accessories for connection



Heat Trace Mineral Insulated

- » For applications requiring higher temperatures
- » Power output remains constant & not affected by temperature variations
- » Most durable heat trace cable
- » Single & dual core mineral insulated
- » Up to 600 volts



Block

- » Newly available on the market
- » Prevent flow meter valves from freezing up
- » Available with controls
- » NEMA 1, 4, 4X & Explosion proof



Power Band

- » Heater responds quickly to applications requiring high temperatures & high watt densities
- » Can operate continuously at sheath temperatures up to 1300°F
- » Variety of terminations & lead wire options



Power Band Moisture Proof

- » Heater responds quickly to applications requiring high temperatures & high watt densities
- » Can operate continuously at sheath temperatures up to 1300°F
- » Variety of terminations & lead wire options
- » Resistant to wet environment



Ceramic Band

- » Designed for high operating temperature applications
- » Flexible & less prone to expansion issues
- » Max. operating temp is 1400°F
- » Sheath temp. up to 950°F
- » Long functional life span



Mica Band

- » Installed on cylinder forms such as barrels, pipes and nozzles of injection molding & extrusion machines
- » Various sizes, voltages & wattages
- » Options of holes, cut-outs and notches
- » Variety of terminations & lead wire options
- » Sheath temp up to 800°F



Mica Band Moisture Proof

- » Designed to resist intermittent splashes of water or plastic spills
- » Ends, edges & terminations are fully sealed
- » Manufactured with 24GA SS
- » 35 WPSI
- » Sheath temp. up to 800°F
- » Applications: humid environment



Mica Thin Band

- » Installed on cylinder forms such as barrels, pipes & nozzles of injection molding & extrusion machines
- » Various sizes, voltages & wattages
- » Options of holes, cut-outs & notches
- » Variety of terminations & lead wire options
- » Sheath temp. up to 800°F
- » Application: restricted area or space



Mica Strip

- » Flat form mica insulated
- » Various sizes, voltages, wattages
- » Options of holes, cut-outs and notches
- » Variety of terminations and lead wire options
- » Sheath temp. up to 800°F
- » Applications: plastic extrusion, pressure molding, pipe and tank heating



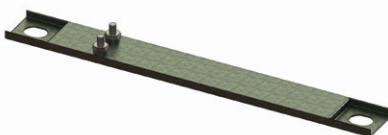
Mica Strip Moisture Proof

- » Designed to resist intermittent splashes of water or plastic spills
- » Ends, edges and terminations are fully sealed
- » Manufactured with 24 gauge SS
- » 35 WPSI
- » Sheath temp. up to 800°F
- » Applications: wet environment or outdoors



SSH Strip

- » Designed for applications requiring operating temperatures & densities higher than standard
- » Manufactured with SS 304
- » 30 WPSI
- » Sheath temp. up to 900°F
- » Variety of voltages, wattages & sizes
- » Application: convection air & heating



Channel Strip

- » Provide efficient heat to flat surfaces such as platinums & dies
- » Variety of terminations, lead wire options & mounting tabs
- » Sheath temp. up to 800°F
- » Applications: plastic extrusion, injection molding, structural foam, chemical, oil & gas

Channel Strip Finned

- » Designed with fins to provide maximum surface contact which dissipates heat rapidly
- » Variety of terminations, lead wire options & mounting tabs
- » Sheath temp. up to 800°F



Channel Strip Moisture Proof

- » Designed to work in wet environment & -40°F temperature
- » Shock & vibe approved
- » Designed with fins to provide maximum surface contact which dissipates heat rapidly
- » Variety of terminations, lead wire options & mounting tabs
- » Sheath temp. up to 800°F



For more than 23 years, TriVolt Industries has been a premier supplier of electrical heaters and sensors. We service different types of verticals, from rubber & plastic processing, gas, energy & power, food processing through to our origins in transit and transportation.

TriVolt Industries continuously invests in R&D, and we have grown our product line to accommodate nearly every requirement in the industrial sector. We are known for deploying new solutions to our line of electrical heaters, sensors and controllers, and we now carry over 80 unique products.

At TriVolt Industries, we believe in building a partnership with our customers, matching our expertise and depth of knowledge with a customer's needs. Beyond tailoring solutions to a specific client requirement, we ensure only leading industry heaters are shipped bearing our name. Our stringent internal quality assurance process guarantees a reliable product is delivered to our customers every time. TriVolt tests 100% of our heaters prior to shipment, resulting in the lowest failure rate in the industry. This maximizes operational efficiency and limits customer downtime. All our products are CSA, UL approved, and/or CE certified.

As customer needs change, and emergencies occur, we offer our clients an "SOS Service", which allows TriVolt to respond and repair within 72 hours.

Our extensive product line, high quality heaters, and lowest industry failure rate, make it easy to stand behind TriVolt products.



Cartridge

- » Installed in limited spaces requiring high concentration of heat
- » Up to 76 WPSI
- » Operating temp. up to 1400°F
- » Applications: plastic processing, rubber parts, food processing, medical equipment & nuclear industries



Cartridge MZC High Temperature

- » Multi-Zone cartridge for high temperatures
- » Up to 220 WPSI
- » Operating temp. up to 1800°F
- » Applications: ovens & reactors



Tubular

- » Highly efficient, provides heat directly to air & liquids
- » Custom designed in multiple shapes
- » Sheath material: Incoloy 800 & 840, SS 304 & Inconel
- » Diameter size: 1/4", 5/16", 3/8", 7/16", 17/36"



Tubular Finned

- » Highly efficient, provides heat directly to air & liquids
- » Custom designed in multiple shapes with fins
- » Sheath material: Incoloy 800 & 840, SS 304 & Inconel
- » Diameter size: 1/4", 5/16", 3/8", 7/16", 17/36"



Coil

- » High-performance heaters allowing high wattage in limited area
- » Formed in a variety of shapes & enabled to heat different parts of the coil
- » Max. operating temp. is 1200°F
- » Can accommodate type J or K thermocouple
- » Applications: nozzles & hot runners



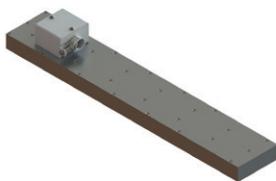
Triflex Cast

- » Ideal for food industry because of frequent exposure to moisture
- » Stainless steel
- » Fully CNC machined
- » Can operate up to 1292°F



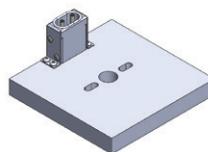
Hybrid Cast

- » Cast aluminum heater that can be repaired on-site (first on the market)
- » Available with heat only, heat & water cooled, or heat & finned
- » Option to add shroud & blower



Hybrid Plate

- » Flat heater
- » Steel, aluminum, or stainless steel
- » Fully CNC machined
- » The unit can be repaired (at 40% cost of new)



Cast Plate

- » Casted heater to heat flat surfaces
- » Available with holes notches & a variety of terminations



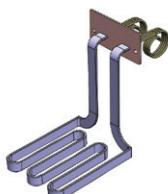
Triflex Mica

- » Available flat, L-shaped or square-shaped
- » Manufactured with an intergraded pressure plate ensuring a flat surface for uniform transfer of heat



Triflex Ceramic

- » Mostly commonly used on a barrel
- » Manufactured with a combination of aluminum & stainless steel
- » Ceramic insulation redirects the heat towards the media



Triflex Blade

- » Flat tubular provides enhanced heating performance over the standard round tubular heater element
- » Designed for immersion applications in liquids such as oils, solvents & process solutions



Triflex Blade Plate

- » Used in tanks to melt wax or soft metals such as lead
- » Can be treated to prevent materials from adhering to heater
- » Up to 25 WPSI
- » Operating temp. up to 1050°F
- » Integrated high limits available

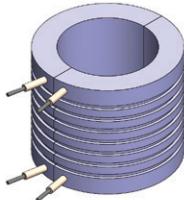
OUR SCOPE

*Service
Cooperation
Opportunity
Pricing
Efficiency*



Triflex EXHT

- » High temperature applications such as electric furnaces, glass, metal & magnet industries
- » Manufactured with green silicon carbide, compressed into a solid form & re-crystallized
- » Durable, non-metal element
- » Very little deformation
- » Easy installation & maintenance



Cast Round

- » Cast aluminum heater
- » Available in aluminum or bronze
- » Available with air-cooled fins or water cooled



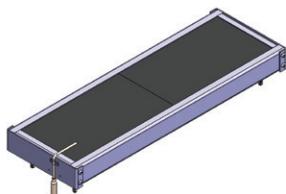
Duct Tubular

- » Forced air applications
- » Available in open-coil or tubular
- » Can be integrated in existing duct systems



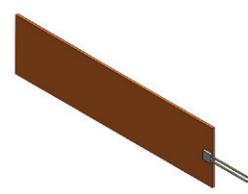
Thermocouple

- » Offered in a variety of lead types & lengths
- » Suitable for temp. up to 2280°F
- » Available with a variety of terminations & mounting fittings
- » Mineral-insulated option available
- » Applications: rubber, packaging, chemical, oil & gas & food industries



Infrared

- » Installed in drying ovens, thermoforming machines, flash dryers & powder coating
- » Types of infrared: Quartz, ceramic & metal
- » Delivers uniform heat quickly without physical contact
- » Focus heat directly on a particular object or area



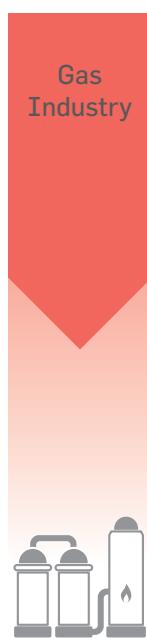
Silicone

- » Applications requiring low temperatures
- » Up to 10 WPSI
- » Thin & flexible
- » Can resist mechanical shock & vibration
- » Resistant to moisture & chemicals
- » Option of various terminations, lead wires & thermostats



Foil

- » Low-profile design
- » Available in various sizes & shapes
- » Cost-effective
- » Applications: food service equipment, laboratory & medical equipment





TRIVOLT
industries

Mica insulated band heaters are installed on cylinder forms such as barrels, nozzles and dies of injection molding, extrusion machines or plastic process equipment.

Mica band heaters can be constructed in a variety of dimensions, voltage and wattages with different options such as holes, cut-outs and notches. A number of terminals, wire lead options and terminal boxes offer great flexibility for field wiring. With sheath temperature capabilities of up to 800°F, these heaters are ideal for the plastic processing applications.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL, or CE certified.

Applications

- Plastic extrusion*
- Injection molding*
- Blow-molding*
- Pressure molding*
- Structural foam*
- Food industry*
- Container pipe and tank heating*
- Packaging*

Specifications

- » Sheath temperature: up to 800°F (427°C)
- » For higher sheath temperature refer to our Mica Band HT-950 model
- » Nominal watt density: 20-35 watts/sq. in.
- » Maximum watt density: depends on size of heater and operating temperature
- » Maximum voltage 600VAC
- » Resistance tolerance: +/- 5%
- » Wattage tolerance: +/- 5%

Construction

- » Exterior material: 304 2b stainless steel
- » Interior material: Nickel Chromium wire and silicone bonded mica
- » Standard gap: 0.375" (if different please specify)
- » Thickness: 0.205" +/- 0.003"
- » Min. diameter: 1" / Max. diameter: 96"
- » Min. width: 1" / Max. width: 6" (Consult factory for sizes other than those mentioned above)
- » 1 to 4 piece construction
- » Expandable one-time
- » Fully expandable
- » Partial coverage
- » Reverse band
- » Conical shaped



Expandable



Shroud



Conical shaped

Mica Band Heater Data Sheet

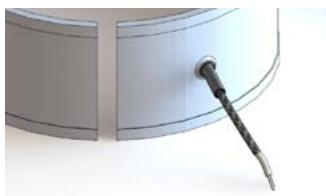
Electrical Connections

- » Post terminals: 10-32 (10A per zone)
- » High temperature lead wire, 550°C (1022°F) with protective:
 - > fiberglass sleeve (SL),
 - > stainless steel over braid (SS)
 - > armored cable (AC)
- » Teflon leads
- » Silicone wire
- » Ground post
- » Low profile cap
- » Dual voltage
- » Single or 3-phase

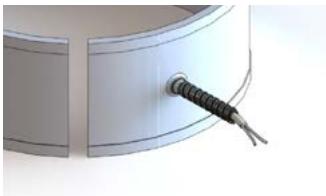
Types of leads



Fiberglass sleeve (SL), single or double conductor



Stainless Steel over braid (SS)



Armored cable (AC)



Teflon leads



Silicone wire

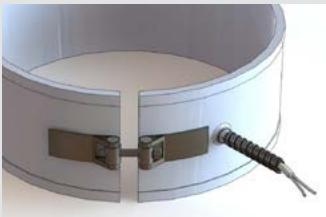
Lead positions



Exiting from edge of width, nozzle-style



Exiting 180° from gap, center of width

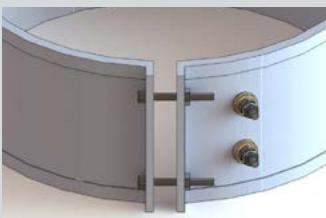


Exiting at right angle to sheath, next to gap, center of width

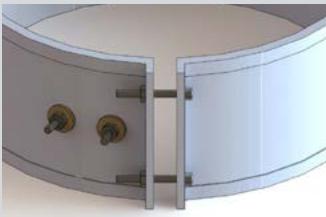
Post terminations



Post terminals on each side of gap, center of width

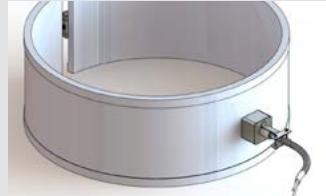


Post terminals vertical position, center of width



Post terminals horizontal position, center of width

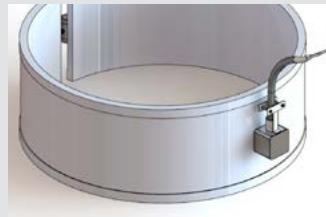
Lead directions



Exiting straight out, positioned 180° from gap



Exiting 90°, positioned 180° from gap

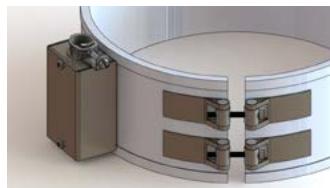


Exiting 270°, positioned 180° from gap

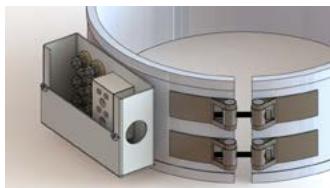
Mica Band Heater Data Sheet

Terminal Housing

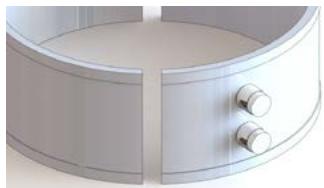
- » Terminal box
- » Terminal block with ceramic block
- » European plug (aluminum block protection)
- » European plug with terminal box
- » Ceramic post covers
- » Stainless steel square cap
- » Brass cap for heaters with different angle lead exits



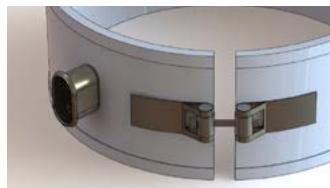
Terminal box (TB)



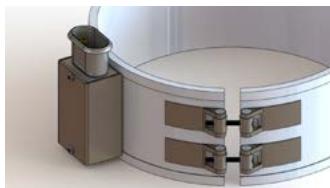
Terminal box with ceramic block



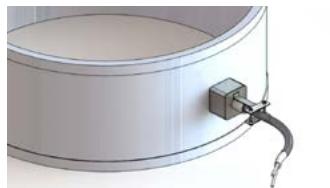
Ceramic post covers



European plug (EP)



European plug with terminal box



Stainless steel square cap



Brass cap

Holes

- » Mounting holes
- » Notches
- » Square cut-out
- » Adaptors and fittings



Mounting holes



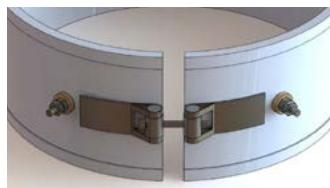
Notches



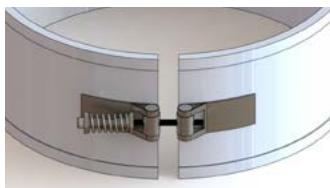
Adaptors and fittings

Clamping Methods

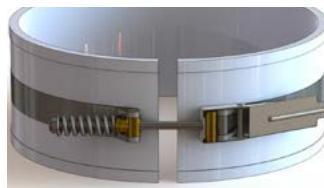
- » Full strap
- » Barrel nut construction
- » Spring-loaded barrel nuts
- » Coaxial wedge lock
- » Hinges
- » Latch and trunnion
- » Flange lock-up (16-gauge stainless steel tab, option of support bar for sturdiness)



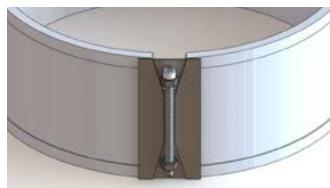
Barrel nut construction



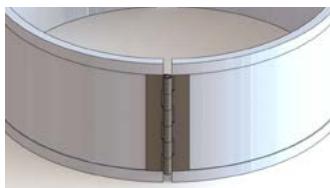
Spring-loaded barrel nuts



Latch and trunnion



Coaxial wedge lock



Hinges



Flange lock-up

Mica insulated moisture proof band heaters are fully sealed to protect against the admission of liquids, molten plastics or other contaminants. Moisture proof band heaters are manufactured with 24-gauge stainless steel. The edges are welded together and all terminations are protected with a brass cap that is silver brazed securely onto the heater making it resistant to moisture.

For extreme conditions, TriVolt developed the MPBI heater which is 100% fully sealed and has been tested by being fully submerged in water. Sealed to operate underwater, in saltwater and in open air conditions.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL, or CE certified.

Applications

- Wet conditions
- Outdoor environment
- Nozzle tip (ground wire)



Specifications

- » Sheath temperature: up to 800°F (427°C)
- » Nominal watt density: 20-35 watts/sq. in.
- » Maximum watt density: depends on size of heater and operating temperature
- » Maximum voltage 240VAC (consult factory for higher voltages)
- » Resistance tolerance: +/- 5%
- » Wattage tolerance: +/- 5%



Electrical Connections

- » High temperature lead wire, 550°C (1022°F) with protective:
 - > fiberglass sleeve (SL),
 - > stainless steel over braid (SS)
 - > armored cable (AC)
- » Ground wire complete with Teflon sleeve or shrink tube



Construction

- » 1-piece construction
- » Exterior material: 304 2b stainless steel
- » Interior material: Nickel Chromium wire and silicone bonded mica
- » Edges welded and fully sealed
- » Brass cap and sheet metal silver brazed and fully sealed
- » Right angle brass cap can be rotated to 90°, 180°, 270° or 360°
- » Steel inserts spot welded at ends to secure position
- » Cross section option of 0.125" or 0.187"
- » Option to seal lead wire with rubber shrink tube or Teflon sleeve
- » Standard gap: 0.375" (if different please specify)
- » Min. diameter: 1.5"
- » Max. diameter: 96"
- » Min. width: 1.5"
- » Max. width: 3"
- » Thickness: 0.205" +/- 0.003"

(Consult factory for sizes other than those mentioned above)

Types of leads



Fiberglass sleeve (SL), single or double conductor



Stainless Steel over braid (SS)



Armored cable (AC)



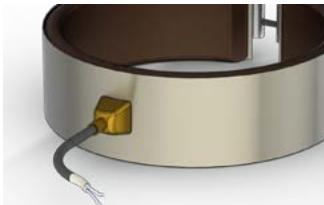
Ground wire complete

Moisture Proof Mica Band Data Sheet

Terminal Housing

- » Brass cap for heaters with different angle lead exits

Lead direction



Exiting straight out, positioned 180° from gap



Exiting at a right angle, positioned 180° from gap



Exiting straight up, positioned 180° from gap

Brass cap angle



Exiting at a 45° angle upwards, positioned 180° from gap



Exiting at a 45° angle lateral, positioned 180° from gap



Exiting at a 45° angle lateral, positioned 180° from gap

Holes

- » Mounting holes (consult Trivolt)
- » Notches (consult Trivolt)
- » Square cut-out (consult Trivolt)
- » Adaptors and fittings



Mounting holes



Notches



Adaptors and fittings

Clamping Methods

- » Full strap
- » Barrel nut construction
- » Mounting tab



Barrel nut construction



Mounting tab

Ceramic band heaters are specifically designed for high operating temperature applications. The maximum operating temperature is 1400°F depending on the application. TriVolt Industries' ceramic band heaters are manufactured with stainless steel exterior case. A sheet of mica and insulation is inserted between the exterior case and the ceramics to prevent heat loss. The interlocking ceramics make these heaters flexible, less prone to expansion problems and provides good thermal conductivity. Ceramic band heaters are easy to install and have a long functional life.

TriVolt uses high quality nickel chromium on all our products improving its durability and longevity. Ceramic band heaters can be manufactured with slots, holes or notches. A number of terminals, wire lead options, terminal boxes and European plugs offer great flexibility for field wiring. The terminations are TIG welded to ensure a solid connection. All our ceramic band heaters are shipped with a round die to protect them from damage and deformation during transport.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL, or CE certified.

Applications

- Plastic extrusion*
- Injection molding*
- Blow-molding*
- Pressure molding*
- Structural foam*
- Food industry*
- Container pipe and tank heating*
- Packaging*
- Chemical, oil and gas*
- Energy industry*



Specifications

- » Sheath temperature: up to 950°F (510°C)
- » For higher sheath temperature refer to our Ceramic Band HT-1200 model
- » Nominal watt density: 20-40 watts/sq. in.
- » Maximum watt density: depends on size of heater and operating temperature
- » Maximum voltage 600VAC
- » Resistance tolerance: +/- 5%
- » Wattage tolerance: +/- 5%

Construction

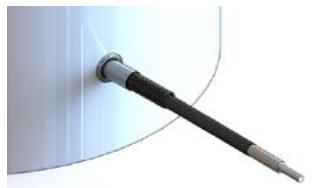
- » Exterior material: 304 2b stainless steel
- » Insulation thickness is 0.1875", 0.25" or 0.5"
- » Standard gap: 0.5" (if different please specify)
- » Connections welded on to post terminals
- » Coiled with 80 coil wire Nichrome
- » Manufactured with steatite ceramics
- » Silicone bonded mica installed between the exterior case and ceramics to increase dielectric strength
- » Standard 0.125" insulation ceramic paper is installed above ceramics to prevent heat loss
- » 1 to 4 piece construction
- » Partial coverage
- » Min. diameter: 3"
- » Max. diameter: 96"
- » Min. width: 2"
- » Max. width: 24"
- » Thickness: 0.5" +/- 0.003" (Consult factory for sizes other than those mentioned above)

Ceramic Band Heater Data Sheet

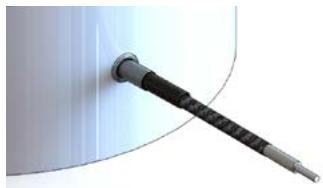
Electrical Connections

- » Connections TIG welded on to post terminals
- » Post terminals: 1/4-20 (15A per zone)
- » High temperature lead wire, 550°C (1022°F) with protective:
 - > fiberglass sleeve (SL),
 - > stainless steel over braid (SS)
 - > armored cable (AC)
- » Teflon leads
- » Ground post
- » Dual voltage
- » Single or 3-phase

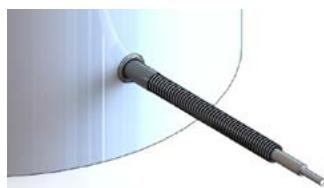
Types of leads



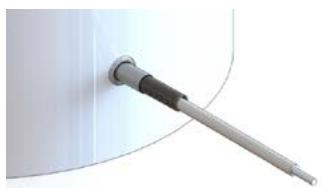
Fiberglass sleeve (SL), single or double conductor



Stainless Steel over braid (SS)

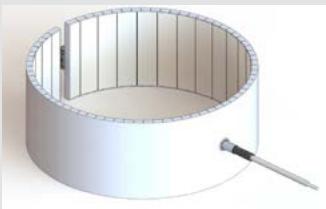


Armored cable (AC)

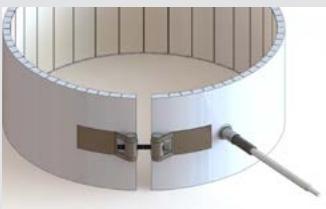


Teflon leads

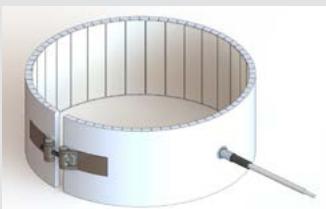
Lead positions



Exiting 180° from gap, center of width

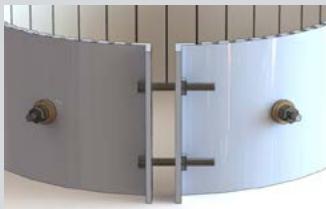


Exiting at right angle to sheath, next to gap, center of width

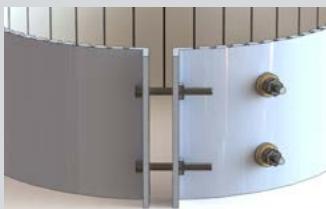


Exiting 90° from gap, center of width

Post terminations



Post terminals on each side of gap, center of width

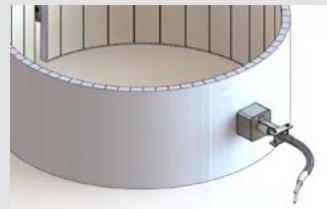


Post terminals vertical position, center of width



Post terminals horizontal position, center of width

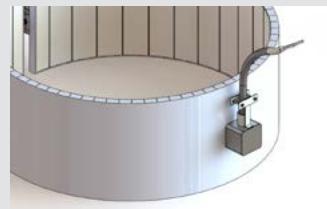
Lead directions



Exiting straight out, positioned 180° from gap



Exiting at a right angle, positioned 180° from gap

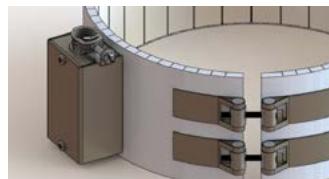


Exiting straight up, positioned 180° from gap

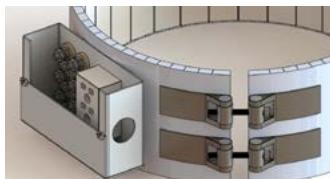
Ceramic Band Heater Data Sheet

Terminal Housing

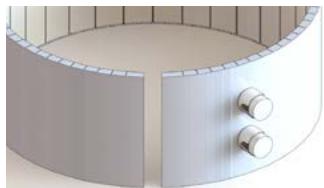
- » Terminal box
- » Terminal block with ceramic block
- » European plug (aluminum block protection)
- » European plug with terminal box
- » Ceramic post covers
- » Stainless steel square cap
- » Brass cap for heaters with different angle lead exits



Terminal box (TB)



Terminal box with ceramic block



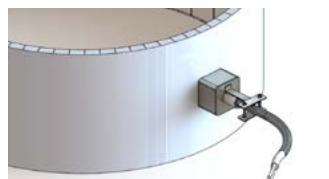
Ceramic post covers



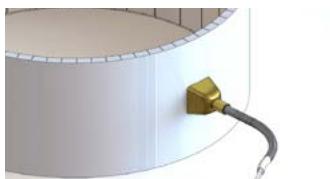
European plug (EP)



European plug with terminal box



Stainless steel square cap



Brass cap

Holes

- » Mounting holes
- » Notches
- » Square cut-out
- » Adaptors and fittings



Mounting holes



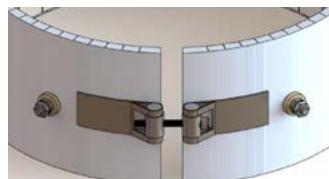
Notches



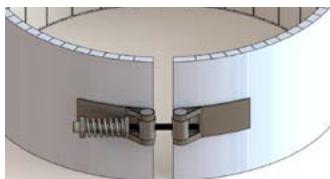
Adaptors and fittings

Clamping Methods

- » Barrel nut construction
- » Spring-loaded barrel nuts
- » Latch and trunnion
- » Hinges
- » Flange lock-up (16-gauge stainless steel tab, option of support bar for sturdiness)



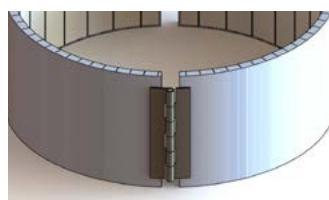
Barrel nut construction



Spring-loaded barrel nuts



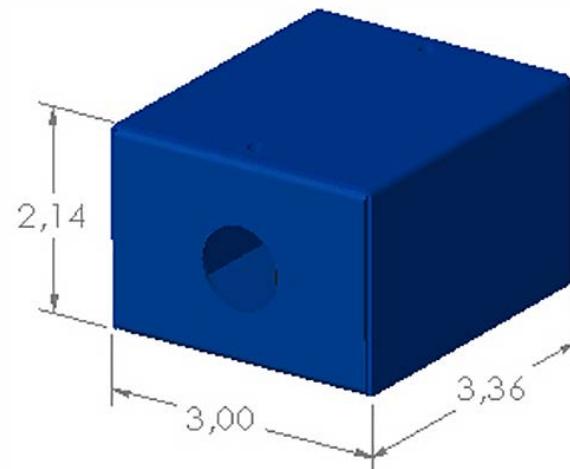
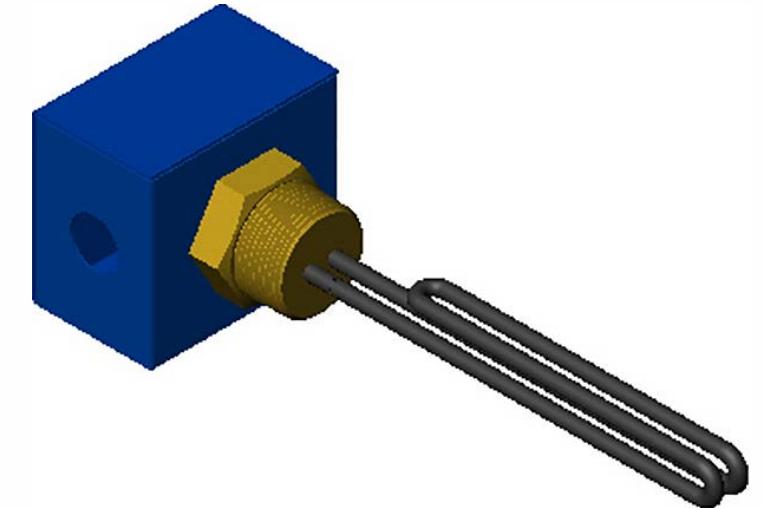
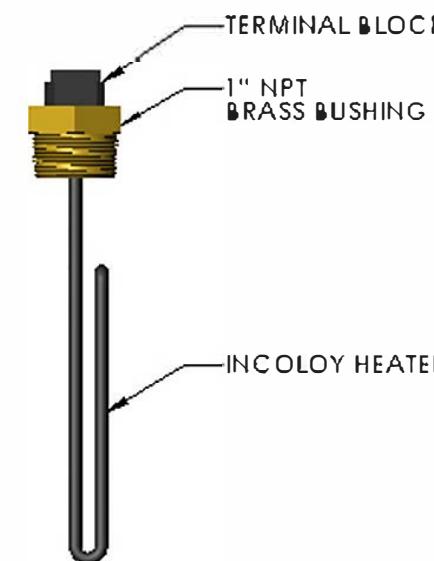
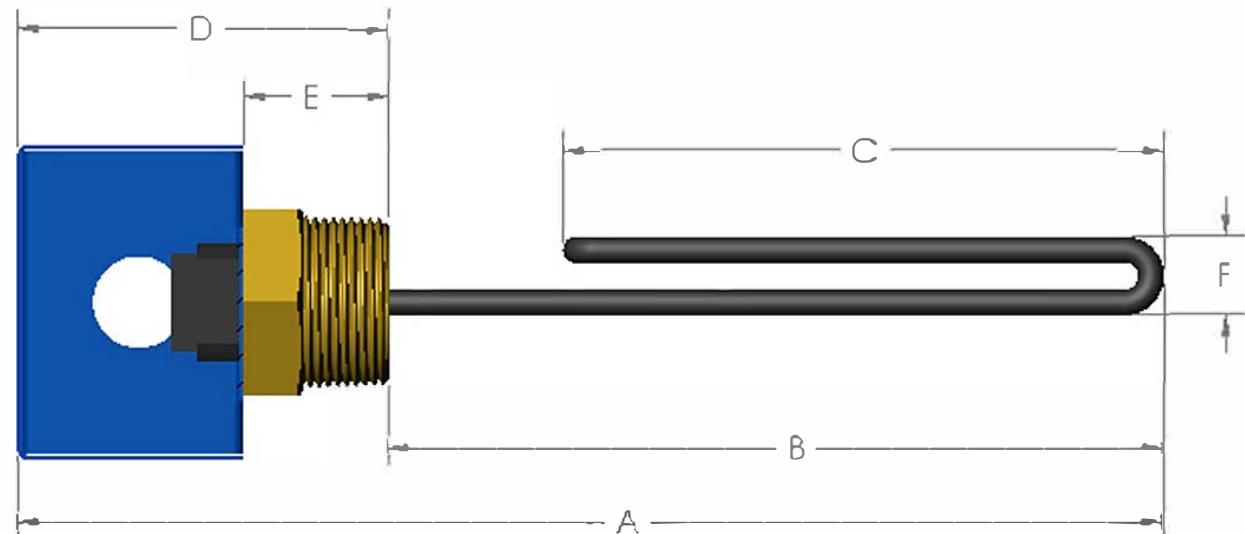
Latch and trunnion



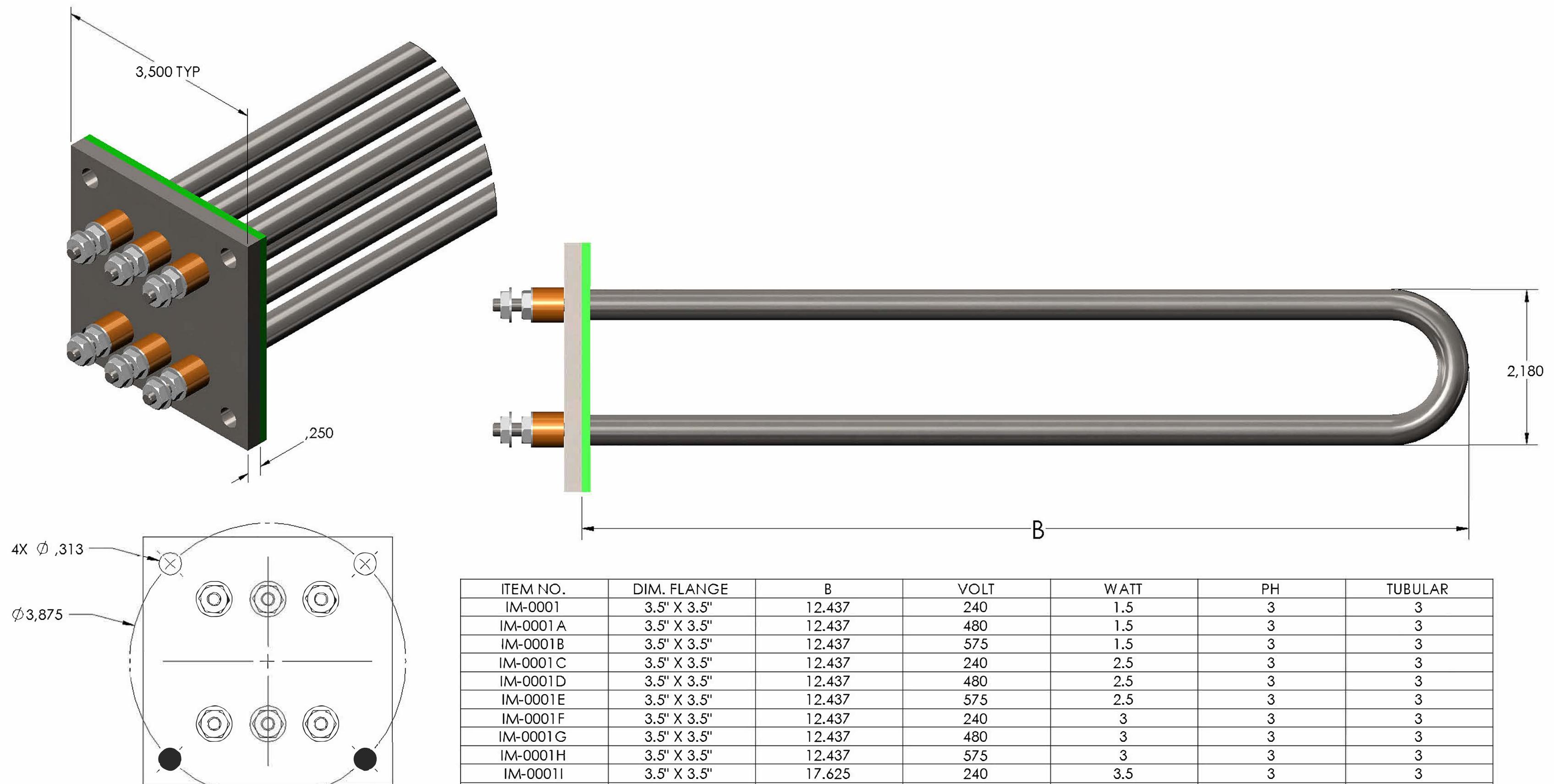
Hinges



Flange lock-up



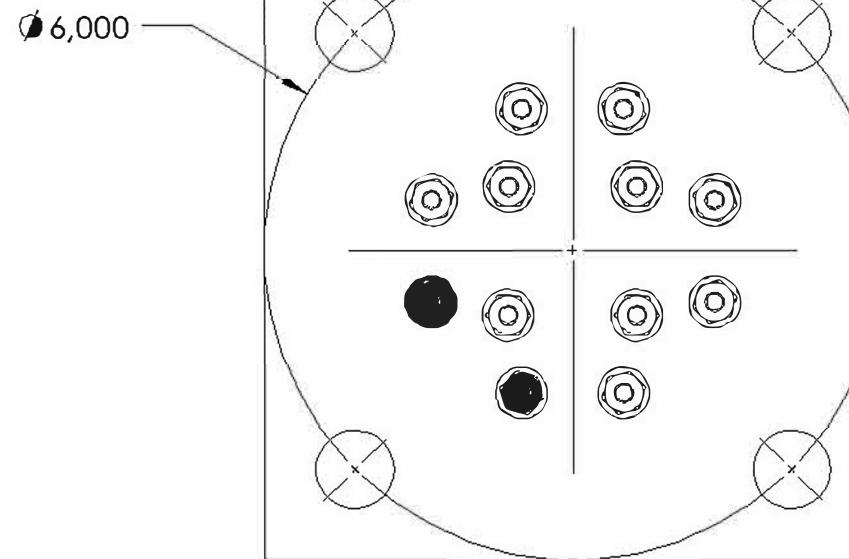
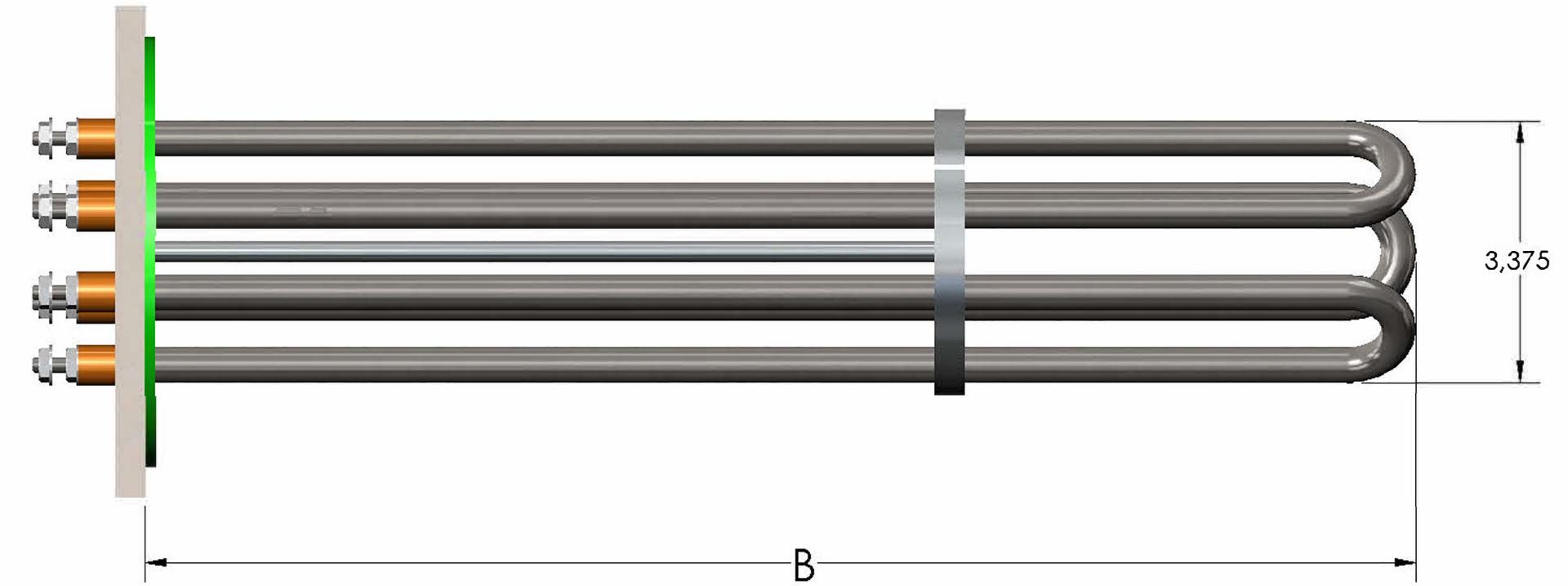
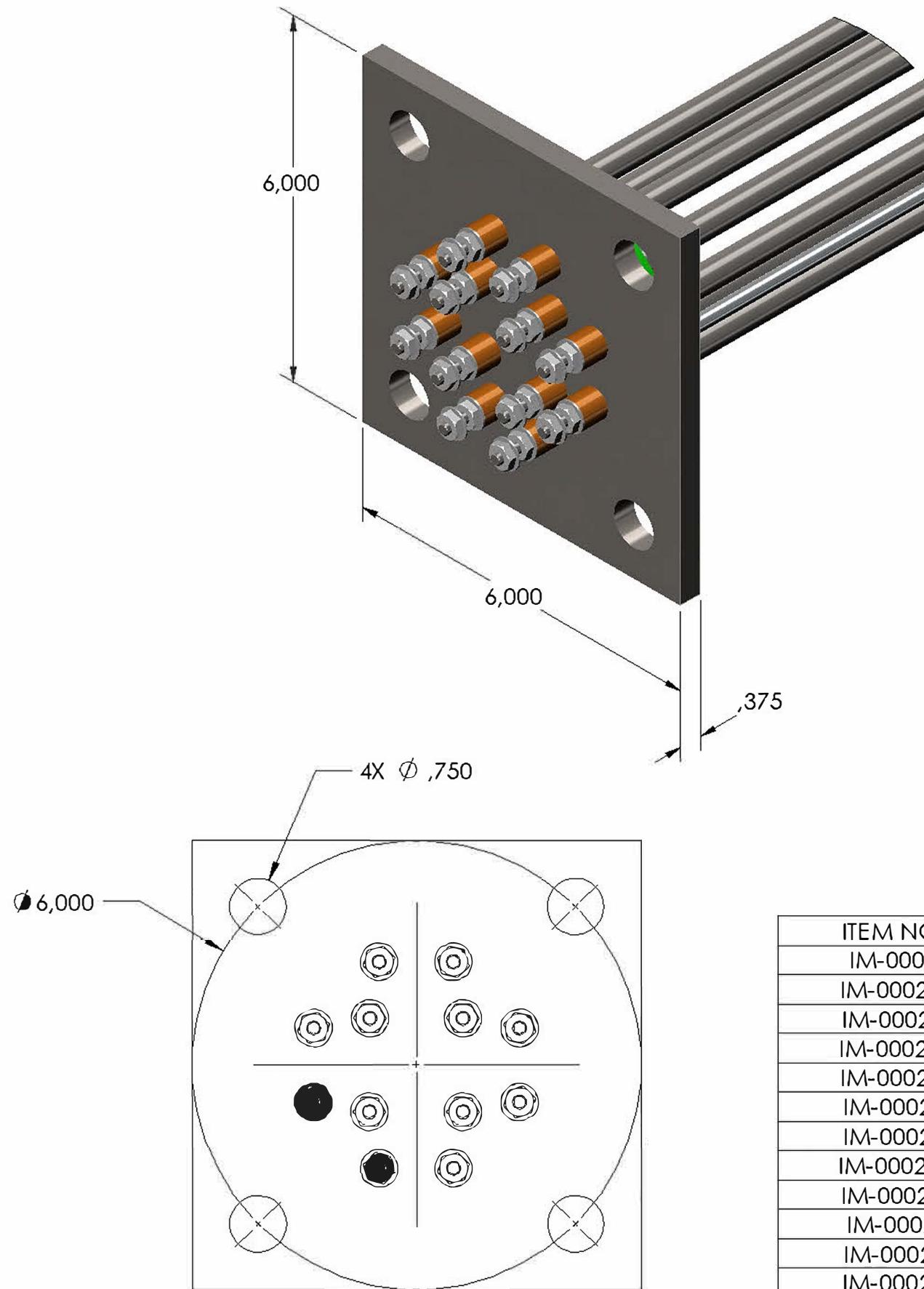
	A	A	B	C	D	E	F	VOLT	WATTS	TERMINAL
NPT1	13.250		10.000	7.500	3.250	1.125	1.000	208	1000	10-32
NPT2	13.250		10.000	7.500	3.250	1.125	1.000	240	1000	10-32
NPT3	13.250		10.000	7.500	3.250	1.125	1.000	208	1500	10-32
NPT4	13.250		10.000	7.500	3.250	1.125	1.000	240	1500	10-32
NPT5	13.250		10.000	7.500	3.250	1.125	1.000	208	2000	10-32
NPT6	13.250		10.000	7.500	3.250	1.125	1.000	240	2000	10-32
NPT7	13.250		10.000	7.500	3.250	1.125	1.000	208	2500	10-32
NPT8	13.250		10.000	7.500	3.250	1.125	1.000	240	2500	10-32
NPT9	13.250		10.000	7.500	3.250	1.125	1.000	208	3000	10-32
NPT10	13.250		10.000	7.500	3.250	1.125	1.000	240	3000	10-32
NPT11	13.250		10.000	7.500	3.250	1.125	1.000	208	4000	10-32
NPT12	13.250		10.000	7.500	3.250	1.125	1.000	240	4000	10-32
NPT13	13.250		10.000	7.500	3.250	1.125	1.000	208	4500	10-32
NPT14	13.250		10.000	7.500	3.250	1.125	1.000	240	4500	10-32
NPT15	13.250		10.000	7.500	3.250	1.125	1.000	208	5000	10-32
NPT16	13.250		10.000	7.500	3.250	1.125	1.000	240	5000	10-32



NOTES:

1. INCOLOY ELEMENTS OF .430 DIAMETER
2. ALL HEATER SUPPLIED WITH GASKET
3. PRESSURE (150 PSI), DIELECTRIC, AND RESISTANCE TEST ON ALL HEATERS

ITEM NO.	DIM. FLANGE	B	VOLT	WATT	PH	TUBULAR
IM-0001	3.5" X 3.5"	12.437	240	1.5	3	3
IM-0001A	3.5" X 3.5"	12.437	480	1.5	3	3
IM-0001B	3.5" X 3.5"	12.437	575	1.5	3	3
IM-0001C	3.5" X 3.5"	12.437	240	2.5	3	3
IM-0001D	3.5" X 3.5"	12.437	480	2.5	3	3
IM-0001E	3.5" X 3.5"	12.437	575	2.5	3	3
IM-0001F	3.5" X 3.5"	12.437	240	3	3	3
IM-0001G	3.5" X 3.5"	12.437	480	3	3	3
IM-0001H	3.5" X 3.5"	12.437	575	3	3	3
IM-0001I	3.5" X 3.5"	17.625	240	3.5	3	3
IM-0001J	3.5" X 3.5"	17.625	480	3.5	3	3
IM-0001K	3.5" X 3.5"	17.625	575	3.5	3	3
IM-0001L	3.5" X 3.5"	17.625	240	4	3	3
IM-0001M	3.5" X 3.5"	17.625	480	4	3	3
IM-0001N	3.5" X 3.5"	17.625	575	4	3	3
IM-0001O	3.5" X 3.5"	17.625	240	5	3	3
IM-0001P	3.5" X 3.5"	17.625	480	5	3	3
IM-0001Q	3.5" X 3.5"	17.625	575	5	3	3



NOTES:

1. INCOLOY ELEMENTS OF .430 DIAMETER
2. ALL HEATER SUPPLIED WITH GASKET
3. PRESSURE (150 PSI), DIELECTRIC, AND RESISTANCE TEST ON ALL HEATERS
4. TERMINAL BOX OPTIONAL

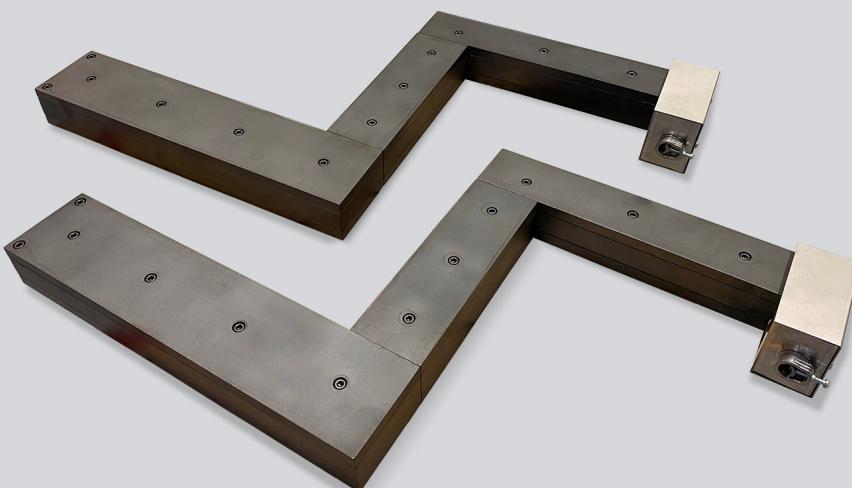
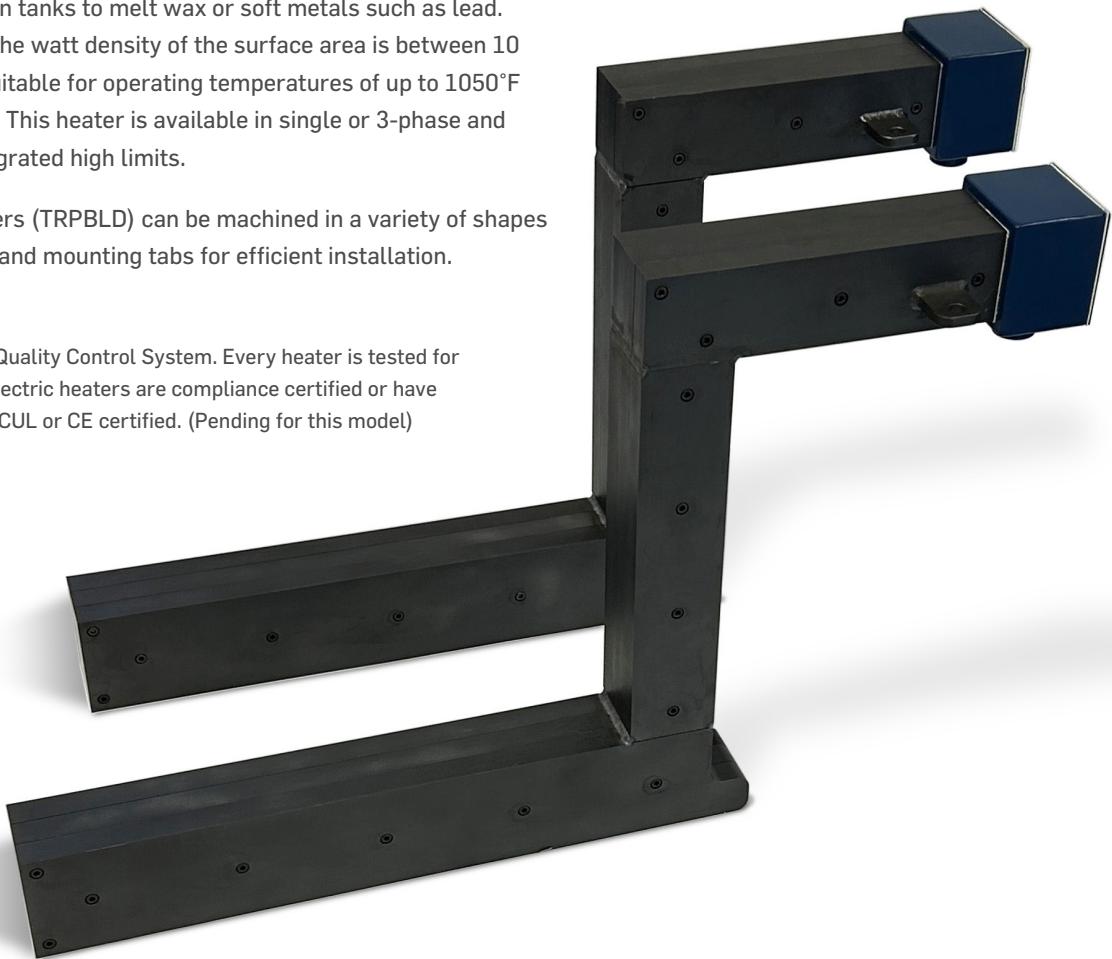
ITEM NO.	DIM. FLANGE	B	VOLT	WATT	PH	TUBULAR
IM-0002	6" X 6"	15.5	208	9	3	6
IM-0002A	6" X 6"	15.5	230	9	3	6
IM-0002B	6" X 6"	15.5	460 / 480	9	3	6
IM-0002C	6" X 6"	15.5	575	9	3	6
IM-0002D	6" X 6"	15.5	208	10.5	3	6
IM-0002E	6" X 6"	15.5	230	10.5	3	6
IM-0002F	6" X 6"	15.5	460 / 480	10.5	3	6
IM-0002G	6" X 6"	15.5	575	10.5	3	6
IM-0002H	6" X 6"	15.5	208	12	3	6
IM-0002I	6" X 6"	15.5	230	12	3	6
IM-0002J	6" X 6"	15.5	460 / 480	12	3	6
IM-0002K	6" X 6"	15.5	575	12	3	6
IM-0002L	6" X 6"	15.5	208	15	3	6
IM-0002M	6" X 6"	15.5	230	15	3	6
IM-0002N	6" X 6"	15.5	460 / 480	15	3	6
IM-0002O	6" X 6"	15.5	575	15	3	6
IM-0002P	6" X 6"	15.5	208	18	3	6
IM-0002Q	6" X 6"	15.5	230	18	3	6
IM-0002R	6" X 6"	15.5	460 / 480	18	3	6
IM-0002S	6" X 6"	15.5	575	18	3	6

Triflex blade plate heaters (TRPBBLD) are manufactured with cold roll steel. An HT-65 treatment option can be applied to the cold roll steel which is then polished, preventing materials from adhering to the heater.

This heater is commonly used in tanks to melt wax or soft metals such as lead. Depending on the application, the watt density of the surface area is between 10 to 25 watts per square inch. Suitable for operating temperatures of up to 1050°F (with high limit thermocouple). This heater is available in single or 3-phase and can be manufactured with integrated high limits.

Trivolt Triflex blade plate heaters (TRPBBLD) can be machined in a variety of shapes and sizes, with terminal boxes and mounting tabs for efficient installation.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL or CE certified. (Pending for this model)



Applications

Melt metals such as lead

Melt materials such as wax

Heat chemicals and oils

Heat water

Triflex Blade Plate Heater Data Sheet

Specifications

- » Operating temperature: up to 1050°F (565°C) with TC
- » Watt density: 10-25 watts/sq. in.
- » Single or 3-phase
- » Maximum voltage 600VAC
- » Resistance tolerance: +10% / -5%

Construction

- » Exterior material: steel
- » Dimensions can be customized
- » Thickness: 1" to 3"
- » Width: up to 8"
- » Notches
- » Square cut-out

Electrical Connections

- » Single phase
- » 3-phase

Options

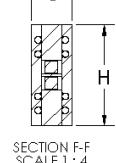
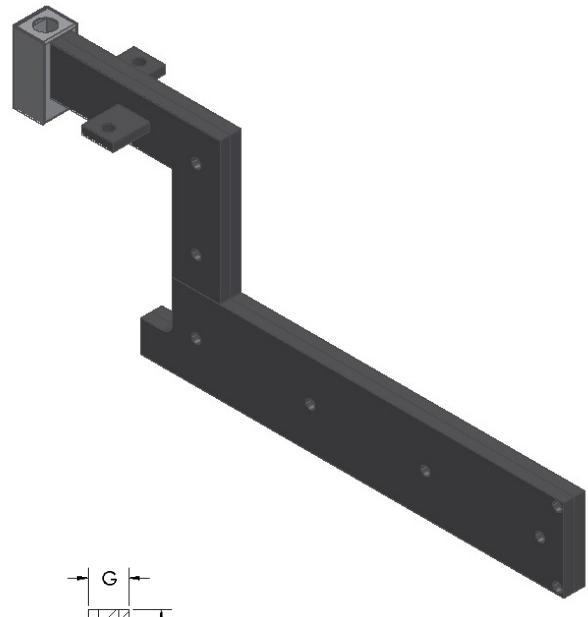
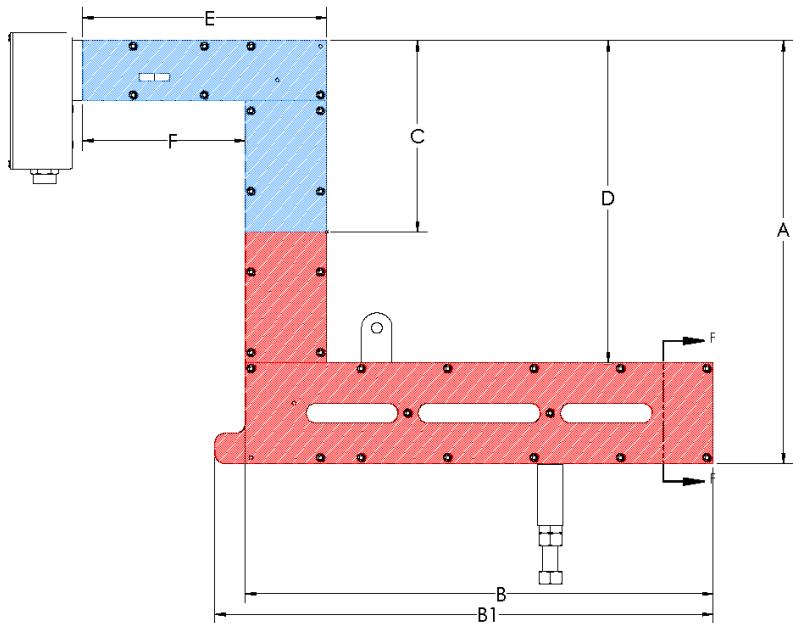
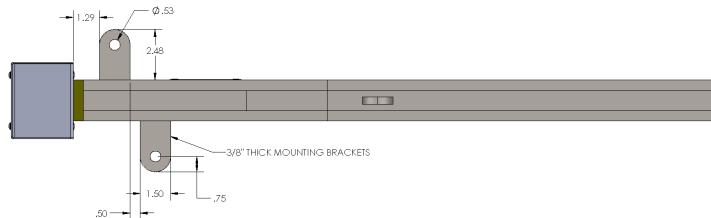
- » Failure mode
- » Mechanical indicator
- » Foot
- » Lift lug
- » HT-65 treatment
- » Process thermocouple type K
- » High limit type K
- » Two heaters in one frame
- » Hybrid

Clamping Method

- » Mounting tabs

Terminal Housing

- » Terminal box Nema 1 or 4
- » Terminal box with wire



Item no.	KW	Volts	A	B	B1	C	D	E	F	G	H
TRPBBLD-5001(S)	5	240	12.25	16.00	16.25	6.00	8.25	12.00	8.00	2.00	4.00
TRPBBLD-5002(S)	5	240	19.25	16.00	16.25	6.00	15.25	12.00	8.00	2.00	4.00
TRPBBLD-5003(S)	10	240	19.25	16.00	16.25	6.00	11.25	12.00	8.00	3.00	8.00
TRPBBLD-5004(S)	10	480	19.25	16.00	16.25	6.00	11.25	12.00	8.00	3.00	8.00

Over-the-side (OVS) immersion heaters are specifically engineered for tanks, reservoirs, and process vessels where installing a heater through the sidewall or bottom isn't practical. Instead of being permanently built into the tank, these heaters are designed to be installed by simply laying the heater on the base of the tank or mounting it securely over the tank wall. This flexible design allows the heating elements to extend directly into the liquid for efficient heat transfer.

TriVolt adopts a stringent internal Quality Control System. Every heater is tested for resistance and dielectric. All our electric heaters are compliance certified or have international approvals from CSA, CUL, or CE certified.



Applications

- Acid & corrosive chemical heating*
- Chemical processing*
- Electro -chemical heating*
- Anodizing*
- Electro-finish*
- Electro-plating*
- Electro-polishing*
- Metals processing*
- Oil & gas*
- Water heating*
- Food industry*

Specifications

- » Sheath temperature: up to 360°F (182°C)
- » Nominal watt density: 5-35 watts/sq. in.
- » Maximum watt density: depends on size of heater and operating temperature
- » Maximum voltage 600VAC
- » Resistance tolerance: +/- 5%
- » Wattage tolerance: +/- 5%

Electrical connections

- » Post terminals
- » Lead wire: fiberglass, high-temperature wire, stainless steel braid, or armor cable
- » Terminal boxes; NEMA 1-4 enclosures
- » Terminals are sealed with epoxy

Mounting

- » Mounting plate or bracket
- » Screw plug
- » Flanged support

Construction

- » Stainless steel - SS304, SS316, SS316L
- » Titanium
- » Incoloy
- » Industrial teflon coated

Auxiliary options

- » Control panel
- » High-limit

OVS-1



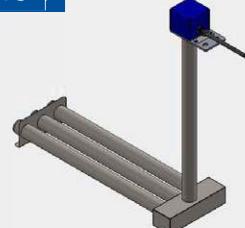
OVS-2



OVS-3



OVS-4



OVS-5

