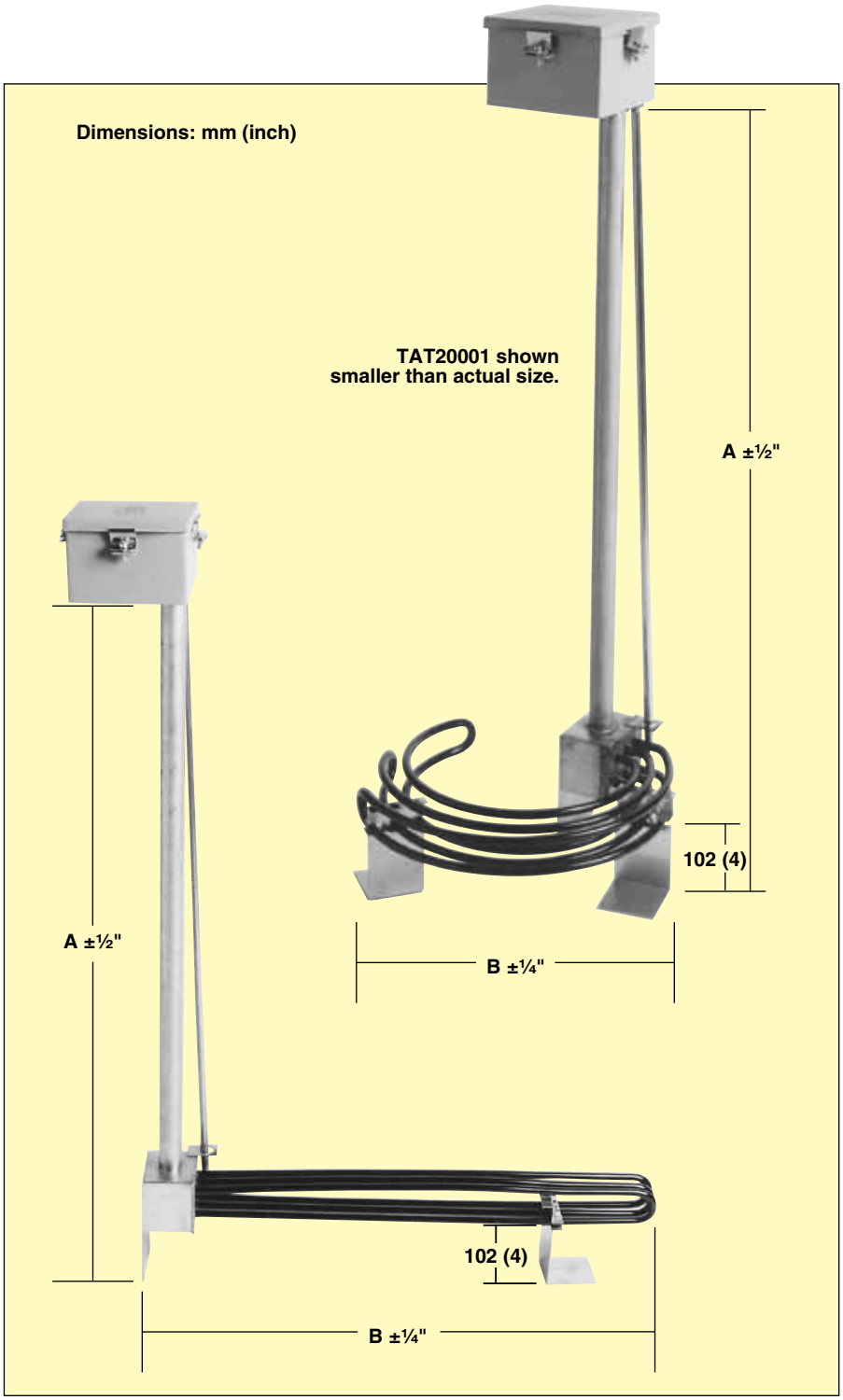
Tank Immersion Heaters

Over-the-Side Immersion Heaters

TAT1 and TAT2 Series



- Incoloy® 800 Steath Heating Element
- Thermowell Standard
- Lightweight and Portable
- Easy Installation and Removal
- NEMA 4 Electrical Enclosure
- Single- or Three-Phase Wiring

Optional Custom Features

- 304 or 316 Stainless Steel Construction for All Wetted Parts
- Passivation of All Wetted Parts; Electropolished or Bright Annealed Surface Treatments for Stainless Steel or Incoloy® Designs (Heating Elements Only)
- NEMA 1 or NEMA 4/7 (Explosion Resistant) Terminal Housings
- Flange, Fixed or Adjustable Bracket on Riser for Mounting
- Mounting Flange for Terminal Housing
- External Power Wiring Options Include Flexible Cord/Plug, Armored Cable, Wire Braided or Plain Lead Wire
- Double- or Single-Pole Thermostat
- Process or Hi-Limit Thermocouple in Thermowell in Place of the Thermostat
- Hi-Limit Thermocouple on Sheath
- Special Riser and/or Sludge Leg Heights
- Up to 12 Elements Per Heater Assembly
- Right-Angle Riser Design

Application

OMEGA® Over-the-Side Immersion heaters are specifically designed for heating fluids in tanks. Depending on the tank shape, size, accessibility and working area inside the tank, choose a round or L shaped heater.

Standard sheath materials are Incoloy® 800 and steel with all wetted parts made with compatible alloys.

Construction

Tubular heating elements are welded into a liquid-tight junction box. Power leads for the elements travel up through the riser pipe and are connected to a terminal block in a NEMA 4 housing. Unless otherwise specified, heaters are wired for three-phase from the factory but can easily be converted to single-phase.

A thermowell for a 9.5 mm (⅜") diameter bulb is standard to accommodate an optional thermostat. A thermostat can be field installed to mounting lugs located in the electrical enclosure.

102 mm (4") sludge legs keep the elements off the bottom of the tank and above any deposits that may accumulate there.

Typical Heating Applications: Lightweight Oils, Degreasing Solutions, Mineral Oil, Watt Density 3.6 watt/cm² (23 watt/in²)

To Order ***Visit omega.com/tat1_tat2_series for Pricing and Details***

Model No. 240V-3Ph	Model No. 480V-3Ph	Element Shape	A mm	A inch	B mm	B inch	KW	Approximate Net Weight kg	Approximate Net Weight lb
TAT20001	TAT20002	Round	999	39 5/16	343	13 1/2	3	8	17
TAT20003	TAT20004		1303	51 5/16	470	18 1/2	6	9	20
TAT20005	TAT20006		1303	51 5/16	597	23 1/2	9	10	22
TAT10001	TAT10002	Straight	999	39 5/16	575	22 5/8	3	7	15
TAT10003	TAT10004		1303	51 5/16	956	37 5/8	6	8	18
TAT10005	TAT10006		1303	51 5/16	1337	52 5/8	9	9	20

Ordering Example: TAT20001, *3 KW immersion heater, 240V-3 phase.*

Typical Heating Applications: Citric and Phosphoric Acid Solutions, Water Based Chemical Solutions, Watt Density 3.6 watt/cm² (23 watt/in²)

Model No. 240V-3Ph	Model No. 480V-3Ph	Element Shape	A mm	A inch	B mm	B inch	KW	Approximate Net Weight kg	Approximate Net Weight lb
TAT20007	TAT20008	Round	999	39 5/16	343	13 1/2	3	8	17
TAT20009	TAT20010		1303	51 5/16	470	18 1/2	6	9	20
TAT20011	TAT20012		1303	51 5/16	597	23 1/2	9	10	22
TAT10007	TAT10008	Straight	999	39 5/16	575	22 5/8	3	7	15
TAT10009	TAT10010		1303	51 5/16	956	37 5/8	6	8	18
TAT10011	TAT10012		1303	51 5/16	1337	52 5/8	9	9	20

Ordering Example: TAT20007, *3 KW immersion heater, 240V-3 phase.*

Typical Heating Applications: Process Water, Mild Caustic Solutions (2% maximum), Clean Water, Watt Density 7.4 watt/cm² (42 watt/in²)

Model No. 240V-3Ph	Model No. 480V-3Ph	Element Shape	A mm	A inch	B mm	B inch	KW	Approximate Net Weight kg	Approximate Net Weight lb
TAT20013	TAT20014	Round	999	39 5/16	273	10 3/4	3	7	16
TAT20015	TAT20016		999	39 5/16	343	13 1/2	6	8	17
TAT20017	TAT20018		999	39 5/16	406	16	9	8	18
TAT20019	TAT20020		1303	51 5/16	470	18 1/2	12	9	20
TAT20021	TAT20022		1303	51 5/16	540	21 1/2	15	10	21
TAT20023	TAT20024		1303	51 5/16	597	23 1/2	18	10	22
TAT10013	TAT10014	Straight	999	39 5/16	371	14 5/8	3	6	14
TAT10015	TAT10016		999	39 5/16	575	22 5/8	6	7	15
TAT10017	TAT10018		999	39 5/16	765	30 1/8	9	7	16
TAT10019	TAT10020		1303	51 5/16	956	37 5/8	12	8	18
TAT10021	TAT10022		1303	51 5/16	1146	45 1/8	15	9	19
TAT10023	TAT10024		1303	51 5/16	1337	52 5/8	18	9	20

Ordering Example: TAT20014, *3 KW immersion heater, 480V-3 phase.*

Custom Engineered/Manufactured Heaters

An electric heater can be very application specific, for sizes and ratings not listed, OMEGA® will design and manufacture an over-the-side immersion heater to meet your requirements.

Please Specify the Following:

- Application
- Wattage, Voltage and Phase
- Element Sheath Material
- Number of Elements
- Element Watt Density
- "A" and "B" Dimensions
- Optional Features
- Quantity