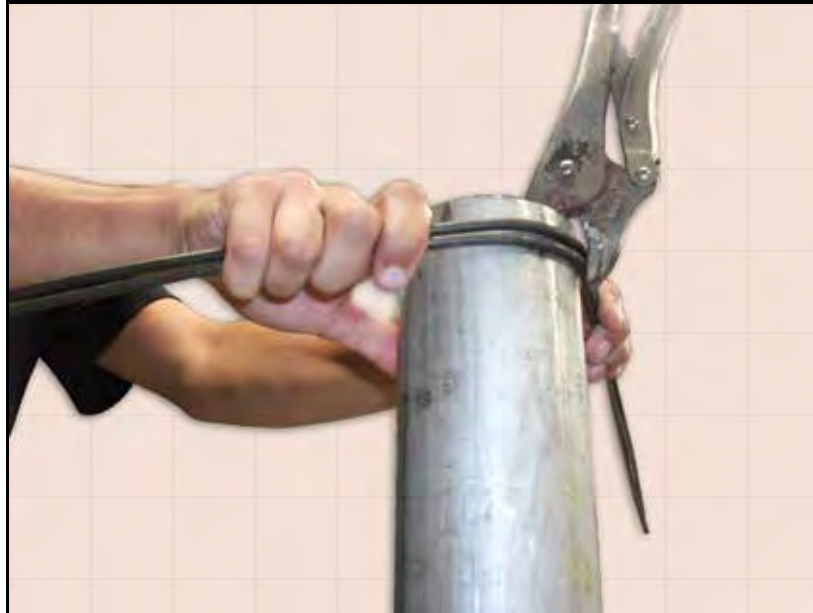


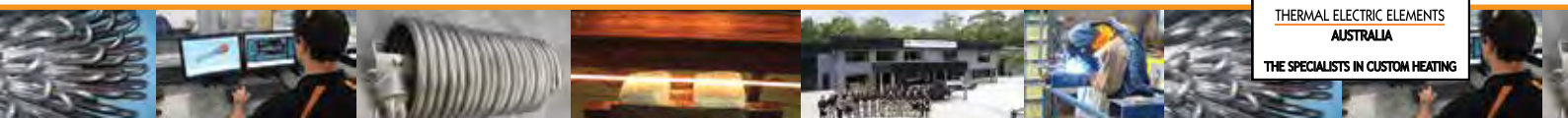
Section 12

U-Bend-It Tubular Heating Elements



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U-Bend-It Tubular Heating Elements

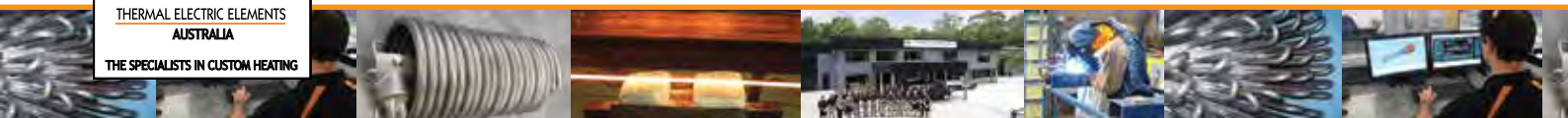
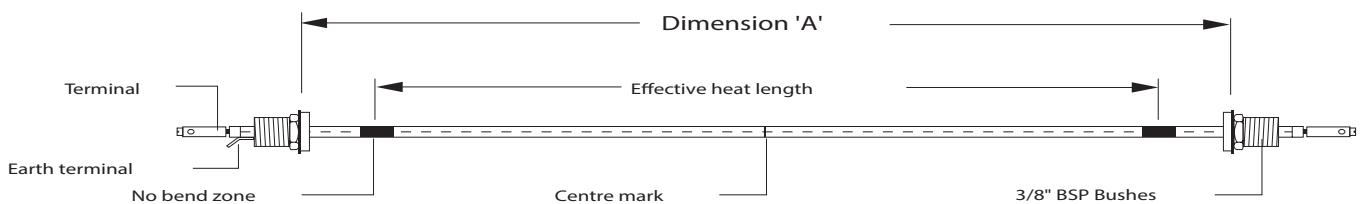
Thermal Electric manufacture annealed straight length heating elements in two element sheaths: Incoloy sheath for water, plate and air heating; and Stainless Steel for oil heating. U-Bend-It (UBI) elements are designed to be bent by you on site and therefore eliminate the need for one off specials where possible, thus reducing down time and saving you money.

UBI elements can be bent to any shape of your imagination as long as they are bent between the two cold-hot zone junctions and a minimum bending radius of two times the element sheath diameter is achieved. A minimum of 10mm distance is required from the cold-hot junction to the centre of the bending mandril to reduce the risk of breaking.

U-Bend-It elements come as a straight element with terminals only or fitted with 3/8" BSP brass bushes, which are very popular in the commercial cooking industry and are used for hot food bars and bain maries.

Special voltages, wattages, lengths, diameters and sheath materials are manufactured to the customer's request.

U-BEND-IT HEATING ELEMENTS WITH BUSHES & TERMINALS



U-Bend-It Elements with Bushes & Terminals

High Watt Density - Water Heating Only

Incoloy Sheath

Watt Density = 120kW/m² (80W/in²)

For use in water heating applications including urns, bain maries, sterilisers, wash boilers, steamers and more.

Part #	Volts	Watts	Effective Heat Length	Dim. 'A'
UBI-WB50	240	500	160	210
UBI-WB75	240	750	245	295
UBI-WB100	240	1000	325	375
UBI-WB125	240	1250	405	455
UBI-WB150	240	1500	490	540
UBI-WB175	240	1750	570	620
UBI-WB200	240	2000	650	700
UBI-WB240	240	2400	780	830
UBI-WB300	240	3000	975	1025
UBI-WB360	240	3600	1170	1220
UBI-WB420	240	4200	1365	1415
UBI-WB480	240	4800	1560	1610
UBI-WB540	240	5400	1755	1805
UBI-WB600	240	6000	1950	2000
UBI-WB660	240	6600	2145	2195
UBI-WB720	240	7200	2340	2390
UBI-WB800	415	8000	2600	2650
UBI-WB900	415	9000	2925	2975
UBI-WB1000	415	10000	3250	3300
UBI-WB1200	415	12000	3900	3950

Low Watt Density - Oil Heating

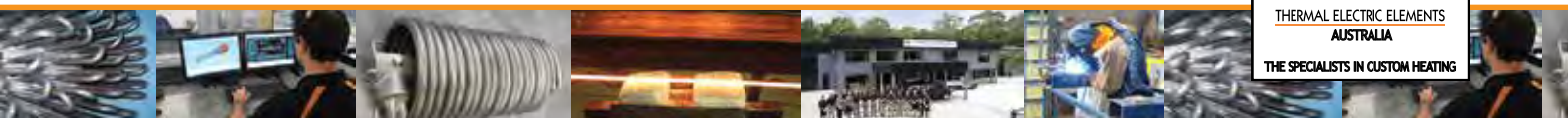
Stainless Steel Sheath

Watt Density = 31kW/m² (20W/in²)

For liquid heating including alkali solutions, detergents, caustic/cyanide solutions and oil.

Part #	Volts	Watts	Effective Heat Length	Dim. 'A'
UBI-OB50	240	500	650	750
UBI-OB75	240	750	975	1075
UBI-OB100	240	1000	1300	1400
UBI-OB125	240	1250	1625	1725
UBI-OB150	240	1500	1950	2050
UBI-OB175	240	1750	2275	2375
UBI-OB200	240	2000	2600	2700
UBI-OB225	240	2250	2925	3025
UBI-OB250	240	2500	3250	3350
UBI-OB275	240	2750	3575	3675
UBI-OB300	240	3000	3900	4000

All dimensions in millimetres



U-Bend-It Elements with Bushes & Terminals

U-Bend-It Elements with Bushes & Terminals

Stainless Steel Sheath

Watt Density = 46.5kW/m² (30W/in²)

A longer lasting alternative suitable for bain maries, hot food display bars, ovens and fan forced air heating systems.

Part #	Volts	Watts	Effective Heat Length	Dim. 'A'
UBI-CL50	240	500	450	565
UBI-CL75	240	750	670	785
UBI-CL100	240	1000	900	1015
UBI-CL125	240	1250	1120	1235
UBI-CL150	240	1500	1345	1460
UBI-CL175	240	1750	1570	1685
UBI-CL200	240	2000	1790	1905
UBI-CL225	240	2250	2015	2130
UBI-CL250	240	2500	2240	2355
UBI-CL275	240	2750	2465	2580
UBI-CL300	240	3000	2690	2805
UBI-CL360	240	3600	3230	3345
UBI-CL420	240	4200	3765	3880
UBI-CL480	240	4800	4300	4415

U-Bend-It Elements with Bushes & Terminals

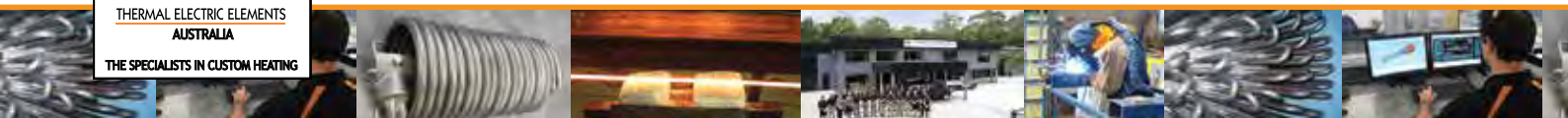
Incoloy Sheath

Watt Density = 55kW/m² (35W/in²)

Suitable for ovens and fan forced air heating systems. Can also be suited to water situations where boil dry may occur, eg. bain maries and hot food display cabinets.

Part #	Volts	Watts	Effective Heat Length	Dim. 'A'
UBI-CC50	240	500	370	485
UBI-CC75	240	750	555	670
UBI-CC100	240	1000	740	855
UBI-CC125	240	1250	925	1040
UBI-CC150	240	1500	1110	1225
UBI-CC175	240	1750	1300	1415
UBI-CC200	240	2000	1485	1600
UBI-CC225	240	2250	1670	1785
UBI-CC250	240	2500	1860	1975
UBI-CC275	240	2750	2040	2155
UBI-CC300	240	3000	2225	2340
UBI-CC360	240	3600	2675	2790
UBI-CC420	240	4200	3120	3235
UBI-CC480	240	4800	3565	3680

All dimensions in millimetres



U-Bend-It Elements without Bushes

Part #	Volts	Watts	Effective	
			Heat Length	Dim. 'A'
UBI-W50	240	500	160	250
UBI-W75	240	750	245	335
UBI-W100	240	1000	325	415
UBI-W125	240	1250	405	395
UBI-W150	240	1500	490	580
UBI-W175	240	1750	570	660
UBI-W200	240	2000	650	740
UBI-W240	240	2400	780	870
UBI-W300	240	3000	975	1065
UBI-W360	240	3600	1170	1260
UBI-W420	240	4200	1365	1455
UBI-W480	240	4800	1560	1650
UBI-W540	240	5400	1755	1845
UBI-W600	240	6000	1950	2040
UBI-W660	240	6600	2145	2235
UBI-W720	240	7200	2340	2430
UBI-W800	415	8000	2600	2690
UBI-W900	415	9000	2925	3015
UBI-W1000	415	10000	3250	3340
UBI-W1200	415	12000	3900	3990

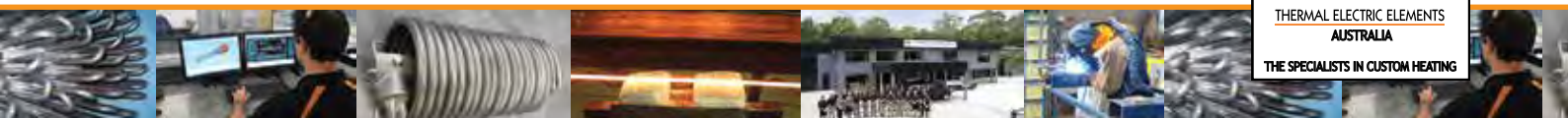
High Watt Density - Water Heating Only
Incoloy Sheath
Watt Density = 120kW/m² (80W/in²)
For use in water heating applications including urns, bain maries, sterilisers, wash boilers, steamers and more.

Part #	Volts	Watts	Effective	
			Heat Length	Dim. 'A'
UBI-O50	240	500	650	790
UBI-O75	240	750	975	1115
UBI-O100	240	1000	1300	1440
UBI-O125	240	1250	1625	1765
UBI-O150	240	1500	1950	2090
UBI-O175	240	1750	2275	2415
UBI-O200	240	2000	2600	2740
UBI-O225	240	2250	2925	3065
UBI-O250	240	2500	3250	3390
UBI-O275	240	2750	3575	3715
UBI-O300	240	3000	3900	4040

Low Watt Density - Oil Heating

Stainless Steel Sheath
Watt Density = 31kW/m² (20W/in²)
For liquid heating including alkali solutions, detergents, caustic/cyanide solutions and oil.

All dimensions in millimetres



U-Bend-It Elements without Bushes

U-Bend-It Elements

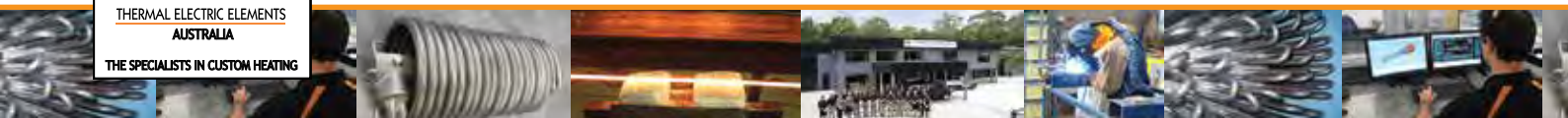
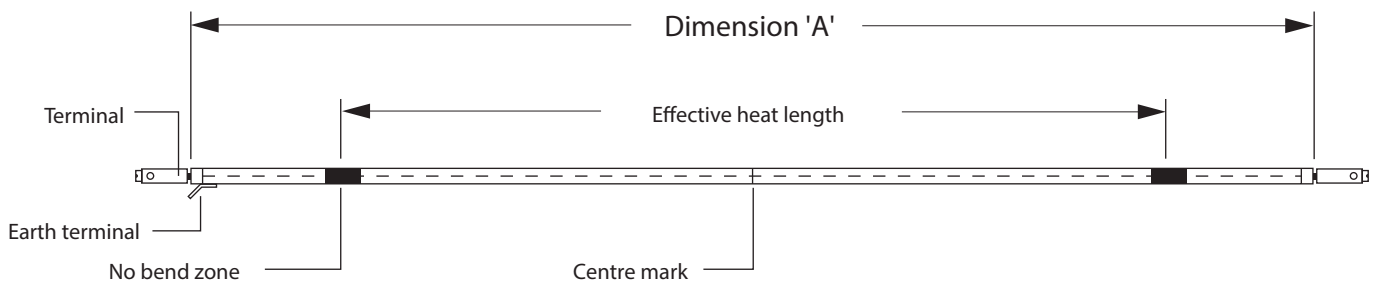
Incoloy Sheath

Watt Density = 46.5kW/m² (30W/in²)

Part #	Volts	Watts	Effective Heat Length	Dim. 'A'
UBI-A50	240	500	450	605
UBI-A75	240	750	670	825
UBI-A100	240	1000	900	1055
UBI-A125	240	1250	1120	1275
UBI-A150	240	1500	1345	1500
UBI-A175	240	1750	1570	1725
UBI-A200	240	2000	1790	1945
UBI-A225	240	2250	2015	2170
UBI-A250	240	2500	2240	2395
UBI-A275	240	2750	2465	2620
UBI-A300	240	3000	2690	2845
UBI-A360	240	3600	3230	3385
UBI-A420	240	4200	3765	3920
UBI-A480	240	4800	4300	4455

All dimensions in millimetres

U-BEND-IT HEATING ELEMENT WITHOUT BUSHES



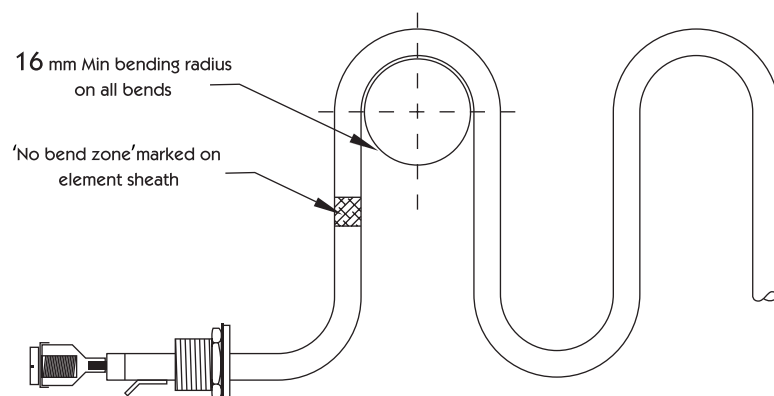
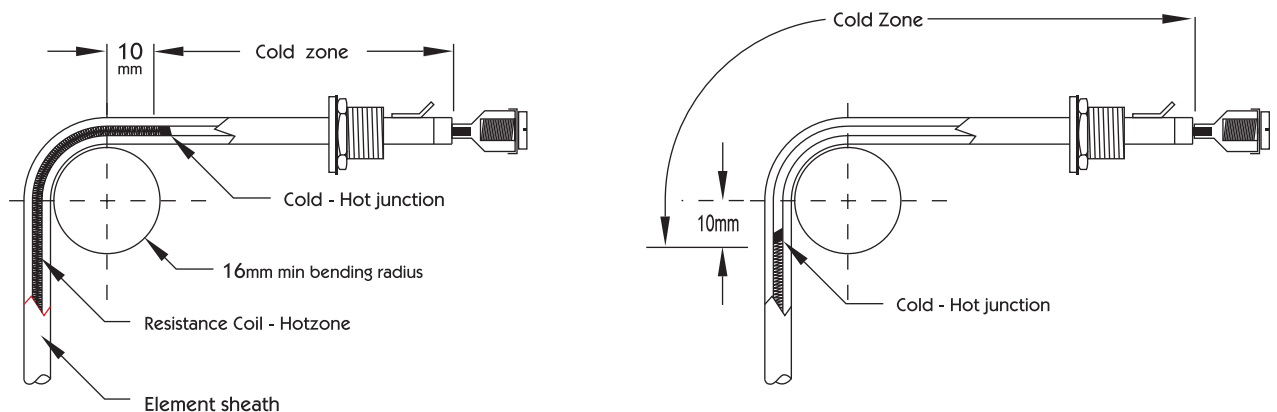
Bending Instructions

All Thermal U-Bend-It elements are supplied with the 'centre' and 'no bend' zone marked on the element sheath.

When the element shape is determined, ensure all dimensions and bends start from the centre mark - this will ensure that the element bushes, terminal ends and the cold-hot zone finish evenly in length.

Ensure that the minimum bending radius of 16mm is adhered to (32mm bending mandril), this will eliminate element breakage.

Thermal U-Bend-It elements can be clamped and bent using a vice, pipe or mandril, a bending lever or simply by hand - as long as there are no sharp edges that may cause damage to the elements.



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