

GROUP 1 - Immersion heaters, drum heaters and accessories

1.9 - Heaters for knife sterilizers

ECU

Models as per catalogue: NTC-9604

THERMOSTATIC HEATER ASSEMBLY FOR KNIFE STERILIZERS OR OTHER INSTRUMENTS

General characteristics

- Tubular element of stainless steel AISI 316L of Ø8 mm
- BSP threaded plug of stamped brass
- Steel painted connection box with degree protection against moisture IP-66.
- Stuffing box
- Watertightness gasket
- Welded with silver alloy for stainless steel tube
- Standard voltage ~230 V
- Sheath with manual reset safety thermostat of 105 ± 4 °C. Differential 20 ± 10 °C.
- Sheath with automatic reset control thermostat of 93 ± 3 °C. Differential 6 ± 2 °C.
- On demand, special heating elements can be made according to your specifications:
 - Material tube: AISI 316L, Incoloy®-800, Incoloy®-825 and Titanium
 - Stainless steel or titanium BSP threaded plugs.



Code	L (LIR) in mm	Thread	Watts	W/cm²	Tube material	Escoin's construct. thermic class	Weight in Kg
ECU1	190	M45	1000	6,9	Ø 8 AISI 316L	T-301-E	1,1
ECU2	190	1 1/4"	1000	6,9	Ø 8 AISI 316L	T-301-E	1,1



Note: The complete set of heating element, connection box, thermostats, lock nut and klingerit joint is included in the price.

Usual applications: Especially appropriate for knife sterilizers in refrigerated slaughterhouses.

It may also be used for other applications such as heating slightly salted waters, or with low chlorine content, neutral or marginally basic pH, high oxygen content, etc., for which the most suitable sheath material for the element is 316L stainless steel, or when airtightness is required in the connection box, or double safety in the temperature control. In case of doubt, please consult NTT n°4101 or else our Technical Department.

SPARE THERMOSTATS FOR THERMOSTATIC HEATER ASSEMBLY ECU

Description	Code	Thermostat range	Range	Reset	Max. current	Capillary length	Bulb		Weight in Kg
							Material	Dimensions	
TER-BU-90-AUT-ECU	517105000	ECU	93 °C	Automatic	10 A (~250 V)	180	Copper	Ø6 x 102 mm	0,75
TER-BU-105-MAN-ECU	517106000	ECU	104 °	Manual	10 A (~250 V)	180	Copper	Ø6 x 102 mm	0,75

GROUP 1 - Immersion heaters, drum heaters and accessories

1.10 - With coupling plug and sheath for thermostat

NOB

Models as per catalogue: 733 / NTC-8750



MONOBLOCK GROUP OF HEATING ELEMENT WITH SHEATH FOR THERMOSTAT WITH BRASS 1"1/4 BSP COUPLING PLUG

General characteristics

- Tubular element of stainless steel AISI 321, AISI 316L or nickel-plate copper of Ø8 mm, according models.
- BSP threaded plug of stamped brass
- Protection hood IP-40
- Welded with silver alloy for stainless steel tube.
- Sheath for rod thermostat connectable to heating element.
- Standard voltage ~230 V

RANGE FOR WATER OR HIGH QUALITY THERMAL OIL

Code	L (LIR) in mm	Watts	W/cm²	Thermostat range according to appli.		Shape	Tube material	Escoin's constructive thermic class	Weight in Kg
				Water	Oil				
NOB11	135	500	5,3	A1	A2	VD	AISI 321 or 304L	T-300-E	0,23
NOB12	150	750	7,7	A1	A2	VD	AISI 321 or 304L	T-300-E	0,24
NOB13	315	1000	7,9	B1	B2	U	AISI 321 or 304L	T-300-E	0,27
NOB14	315	1500	7,5	B1	B2	1/2 VD	AISI 321 or 304L	T-300-E	0,34
NOB15	315	2000	7,8	B1	B2	VD	AISI 321 or 304L	T-300-E	0,38
NOB16	285	2500	7,6	B1	B2	TVC	AISI. 316L	T-301-E	0,45
NOB17	325	3000	7,8	B1	B2	TVC	AISI. 316L	T-301-E	0,50
NOB18	375	3500	7,7	B1	B2	TVC	AISI. 316L	T-301-E	0,58
NOB21	300	1000	8,3	B1	-	U	Nickeled copper	T-175-E	0,28
NOB23	290	1500	7,7	B1	-	1/2 VD	Nickeled copper	T-175-E	0,35
NOB24	330	2000	9,3	B1	-	1/2 VD	Nickeled copper	T-175-E	0,38

RECOMMENDATIONS

- To heat water **don't** use the A2 and B2 thermostat range. (Scale 30-150 °C).
 - To heat thermal oil of high quality or high velocity of movement **don't** use heating elements in copper or nickeled copper tube.
- The corrosive effect of the oil over the copper may seriously damage the life of the heating element.

L = Maximum length (sheath or resistor) including thread.

Dimensional tolerances for element shape:

"U" = $\begin{matrix} +0 \\ -3\% \end{matrix}$

"1/2 VD" - "VD" - "TVC" - "CVC" = IT15



PROTECTION HOOD ACCESSORIES AND PROTECTION HOOD
Degree protection against moisture IP40



Code: CNOB

RANGE FOR OIL

Code	L (LIR) in mm	Watts	W/cm²	Thermostat range	Shape	Tube material	Escoin's constructive thermic class	Weight in Kg
NOB3	315	1000	4	B1 - B2	VD	AISI 321 or 304L	T-300-E	0,39
NOB5	450	1500	3,9	B1 - B2	VD	AISI 321 or 304L	T-300-E	0,50
NOB7	420	2000	3,9	B1 - B2	TVC	AISI 321 or 304L	T-300-E	0,63
NOB30	450	2500	3,3	B1 - B2	CVC	AISI 321 or 304L	T-300-E	0,80
NOB32	530	3000	3,3	B1 - B2	CVC	AISI 321 or 304L	T-300-E	0,95

Santiago Escoin Homs