

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