NTW

LIOUID-COOLED HOUSING FOR THERMAL CAMERAS



REVISION 0945

MAIN FEATURES

Designed to operate in high temperature environments

Zinc-Selenium glass for thermal cameras, wavelength 7.5 - 14 μ m (up to 200°C/500°F)

Sapphire glass for shortwave thermal cameras, wavelength 0.75 - 4.5 μm (up to 400°C/752°F)

AISI 316 stainless steel double chamber

Weatherproof standard IP66/IP67



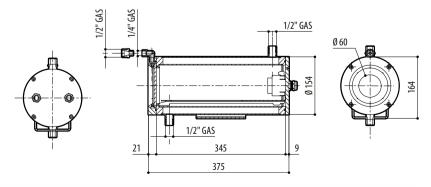
DESCRIPTION

The NTW housing, constructed from AISI 316 electropolished stainless steel, can be equipped with a Zinc-Selenium glass window designed for thermal cameras, wavelength 7.5 - 14 μ m, or with Sapphire glass window for shortwave thermal cameras, wavelength 0.75 – 4.5 μ m.

The NTW consists of a body with a double chamber for the circulation of a cooling liquid or air. The NTW is enclosed by two thick flanges at either end and allows cables to pass through by means of two cable glands on the back flange. Two 1/2" GAS connectors allow for the cooling liquid inflow/outflow.

The NTW is equipped with a flange designed to create an air barrier in front of the glass. This prevents the formation of dust deposits and attenuates the heat of the glass itself. With the supplied air barrier, the filter group is recommended, which purifies the air drawn from a compressor.

The solid construction of this housing makes it suitable for heavy duty applications, such as the surveillance of ovens, foundries, and other high temperature environments.



NTW

mm 1:10

NTW

AVAILABLE MODELS								
Code	Sunshield	ZiSe Glass	Sapphire Glass	Ø Glass				
NTW0K2000	•			60mm				
NTW0K3000	•		•	60mm				

TECHNICAL DATA

GENERAL

Constructed from electropolished stainless steel (Austenitic alloy stainless steel, corrosion and heat resistant according to the following standards)

• UNI 6900-71: X 2 Cr Ni Mo 17 12

• AISI: 316

• DIN 17006: X 2 Cr Ni Mo 18 10

• N° WERKSTOFF: 1.4404

• AFNOR: Z2 CND 17-12

• BSI: 316 S 12

The screws utilised are in austenitic alloy stainless steel, corrosion and heat resistant according to the following standards

• UNI 6900: X 5 Cr Ni Mo 1712

• AISI: 316

• ISO quality: A4

Resistance class ISO: 80

Supplied with instruction manual, desiccant bag, accessories for camera and lens mounting

UNI: Ente Nazionale Italiano di Unificazione, AISI: American Iron and Standard Institute, DIN: Deutsche Industrie Normen, AFNOR: Association Française de Normalisation, BSI: British Standard Institution, ISO: International Organization for Standardization.

MECHANICAL

2xPG13.5 cable glands in nickel-plated brass for external connections

 $2x1/2^{\prime\prime} GAS$ connectors for liquid input / output

1x1/4"GAS connector for air barrier input

External body polishing

0-ring gaskets

9mm (0.35in) thick back flange

Window: internal Ø 60mm (2.4in), external Ø 80mm (3.1in)

External dimensions: Ø 154mm (6.1in), length 375mm (14.8in)

Internal usable dimensions (WxH): 78x78mm (3.1x 3.1in)

Interna usable length

NTW 345mm (13.6in)

Internal usable length with camera power supply

NTW 280mm (11.1in)

ZISE GLASS

4mm (0.16in) thick

Operating temperature 200°C (500°F)

Trasparency from 7.5 to 14 μm

SAPPHIRE GLASS

1mm (0.04in) thick

Operating temperature 400°C (752°F)

Trasparency from 0.75 to 4.5 μm

COOLING LIQUID

Application example with incoming water at 20°C (68°F) temperature:

- T environmental 200°C (392°F), water flow 2 l/min (0.5US gal/min), T housing internal 32°C (89.6°F)
- T environmental 300°C (572°F), water flow 2.2 l/min (0.6US gal/min),T housing internal 41°C (105.8°F)
- T environmental 400°C (752°F), water flow 6.5 l/min (1.7US gal/min), T housing internal 44°C (111°F)

COOLING AIR

Application example with incoming air at $17^{\circ}C(62^{\circ}F)$ and an environmental temperature at $80^{\circ}C(176^{\circ}F)$

- pressure 1 Bar -flow rate 10 m³/h, the internal temperature is about 45°C(113°F)
- pressure 2 Bar -flow rate 15 m³/h, the internal temperature is about 35°C(95°F)

AIR FILTERING

Pressure air flow 0.3-2.5 Bar, filter 0.1 micron

AIR BARRIER

Max pressure 1Bar

ELECTRICAL

Camera power supply

- IN 230Vac OUT 12Vdc, 50/60Hz, 400mA
- IN 230Vac OUT 24Vac, 50/60Hz, 400mA

ENVIRONMENT

Indoor / Outdoor

CERTIFICATIONS

CE EN61000-6-3, EN60065, EN50130-4

IP66/IP67 EN60529

ACCESSORIES

OHEPS24 Camera power supply IN 230Vac - OUT 12Vdc, 400mA
OHEPS25 Camera power supply IN 230Vac - OUT 24Vac, 400mA

BRACKETS AND ADAPTORS

NXWBS1 Stainless steel wall bracket

PACKAGE										
Code	Unit weight	Unit weight		Package weight		ons (WxHxL)	Master carton			
	kg	lb	kg	lb	cm	in	unit			
NTW	10.2	22.5	10.8	23.8	24.3x24.2x49.5	9.6x9.5x19.5	-			