

LIQUID-COOLED HOUSING FOR THERMAL CAMERAS

MAIN FEATURES

Made of AISI 316L electropolished stainless steel

Steel cylindrical chamber for internal circulation of cooling liquid linked to an external circuit

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 $400^{\circ} C/752^{\circ} F)$

Designed to operate in high temperature environments IP66/IP67



The NTW housing, constructed from AISI 316L 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 PG13.5 cable glands on the back flange. Two 1/2" GAS connectors allow for the cooling liquid inflow/outflow.

The NXW 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 NXFIGRU filter group is recommended, to purifie 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

AVAILABLE MODELS				
Model Number	ZiSe glass	Sapphire glass	Ø glass window	
NTW0K2000	1	_	60mm	
NTW0K3000	_	1	60mm	

NTW 2014/07/10

TECHNICAL DATA

GENERAL

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

AISI 316

UNI 6900-71: X 2 Cr Ni Mo 17 12 2

DIN 17006: X 2 Cr Ni Mo 17 13 2

N° werkstoff 1.4404

AFNOR: Z2 CND 17-12

BSI: 316S11

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

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

Cable glands: 2PG13.5 (nickel-plated brass for external connections)

2 x 1/2"GAS connectors for liquid input / output

1x1/4"GAS connector for air barrier input

External body polishing

Gaskets: 0-ring

Flange thickness: 9mm (back)

Window (Ø): 65mm (2.6in)(internal), 80mm (3.1in) (external)

External dimensions (ØxL): 154x380mm (6.1x15in)

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

Internal usable length

NTW 345mm (13.6in)

Internal usable length with camera power supply

NTW 280mm (11.1in)

Unit weight: 10.2kg (22lb)

Zinc Selenide glass

Thick: 4mm (0.2in)

Operating temperature: 200°C (392°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 6.5l/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 EN60529

ACCESSORIES

OHEPS24 Camera power supply IN 230Vac - OUT 12Vdc, 10VA/5W, for NXW,

NTW housings

OHEPS25 Camera power supply IN 230Vac - OUT 24Vac, 10VA, for NXW, NTW

housings

BRACKETS AND ADAPTORS

NXWBS1 Stainless steel wall bracket with joint

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
NTW0K3000 (9.6x9.5x19.5in)	10.8kg (23 -	.8lb)	24.3x24.2x49.5cm



2014/07/10 NTW

TECHNICAL DRAWINGS

Sizes in millimeters.



