

NTW

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 μ m (up to 400°C/752°F)

Designed to operate in high-temperature environments

IP66/IP67

DESCRIPTION

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.

The NTW housing, made of polished stainless steel AISI 316L, can be equipped with zinc selenide glass designed for thermal video cameras with a wavelength from 7.5 μ m to 14 μ m, or sapphire glass for shortwave thermal video cameras, with a wavelength from 0.75 μ m to 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 purify the air drawn from a compressor.



NTW

AVAILABLE MODELS

Model Number	ZnSe glass	Sapphire glass	Usable diameter
NTW0K2000	✓	–	65mm (2.6in)
NTW0K3000	–	✓	65mm (2.6in)

TECHNICAL DATA

GENERAL

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

- AISI 316L
- 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:

- ISO: 7380
- AISI: 316
- ISO quality: A4
- Resistance class ISO: from 50 to 70

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: O-ring

Flange thickness: 9mm (back)

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

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

Internal usable length: 345mm (13.6 in)

Internal usable length with camera power supply: 280mm (11in)

Unit weight: 10.2kg (22lb)

Cooling liquid (application example with incoming water at 20°C (68°F) temperature):

- T ambient 200°C, water capacity 2l/min, T inside housing 32°C
- T ambient 300°C, water capacity 2.2l/min, T inside housing 41°C
- T ambient 400°C, water capacity 6.5l/min, T inside housing 44°C

Cooling Air (example of application with air supplied at a temperature of 17°C and T ambient of 80°C):

- with pressure 1bar, capacity 10m³/h, T inside housing 45°C
- with pressure 2bar, capacity 15m³/h, T inside housing 35°C

Air filtering

- Pressure: from 0.3bar up to 2.5bar
- Filtering: 0.1µm

Air Barrier

- Pressure: 1bar max

HOUSING'S WINDOW

Usable diameter: 65mm (2.6in)

Window in zinc selenide

- Thick: 4mm (0.16in)
- Operating temperature: 200°C (392°F) max
- Spectral range: from 7.5µm up to 14µm

Window in sapphire

- Thick: 1mm
- Operating temperature: 400°C (752°F) max
- Spectral range: from 0.75µm up to 4.5µm

ELECTRICAL

Camera power supply

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

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

ENVIRONMENT

For installation indoors and outdoors

CERTIFICATIONS

Electrical safety (CE): EN60065

Electromagnetic compatibility (CE): EN50130-4, EN61000-6-3

IP protection degree: EN60529 (IP66)

EAC certification

ACCESSORIES

OHEPS24 Camera power supply IN 230Vac, 50/60Hz - OUT 12Vdc, 400mA

OHEPS25 Camera power supply IN 230Vac, 50/60Hz - OUT 24Vac, 400mA

BRACKETS AND ADAPTORS

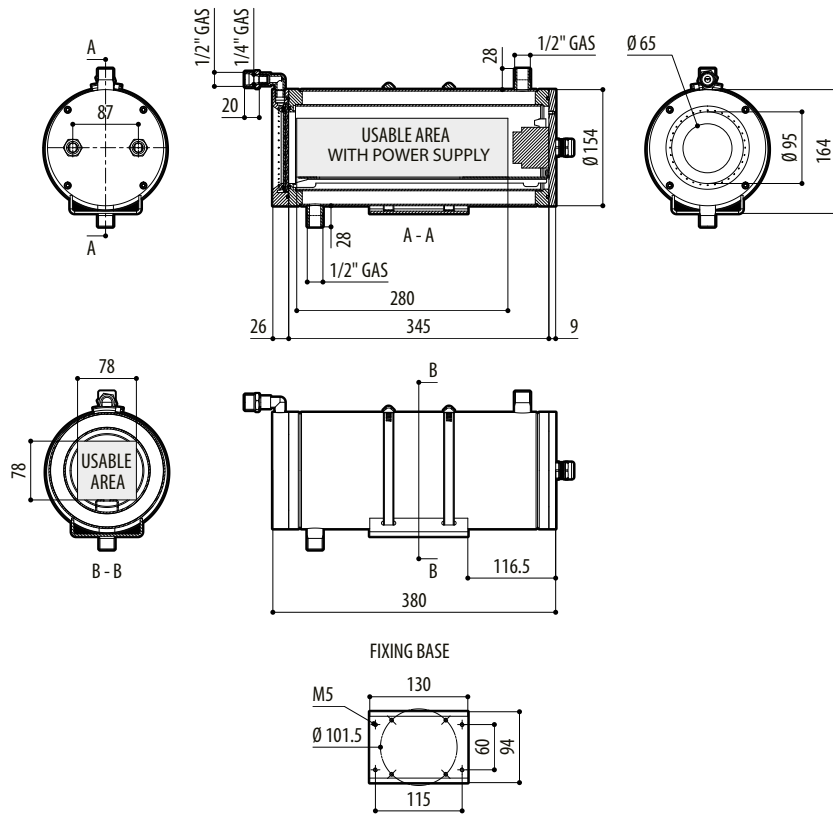
NXWBS1 AISI 316L stainless steel wall bracket with joint

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
NTW0K3000	10.8kg (23.8lb)		24.3x24.2x49.5cm
(9.6x9.5x19.5in)	-		

TECHNICAL DRAWINGS

The dimensions of the drawings are in millimetres.



NTW