

# NET2 and NET3 Heads

## Instruction manual



THIS MANUAL MUST BE CAREFULLY READ BY ALL PERSONS WHO HAVE OR WILL HAVE THE RESPONSIBILITY FOR INSTALLING, USING OR SERVICING THIS PRODUCT.

Like any equipment, this product will perform as designed only if installed, used, and serviced in accordance with the manufacturer's instructions.



OTHERWISE, IT COULD FAIL TO PERFORM AS DESIGNED AND PEOPLE WHO RELY ON THIS PRODUCT FOR THEIR SAFETY COULD SUFFER SEVERE PERSONAL INJURY OR DEATH.

The warranties made by N.E.T s.r.l. with respect to this product are voided if the product is not installed, used, and serviced in accordance with the instructions in this user guide. Please protect yourself and others by following them.

We recommend our customers to write or call us regarding this equipment prior to use or for any additional information relative to use or repair.

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## 1.0 Introduction

These security instructions refer to the installation, use and maintenance of NET2 and NET3 gas heads series (identification code NET..), for applications in areas with presence of potentially explosive atmospheres classified as Zone 1 or 21. This manual refers to the heads with inside only the sensing element ( Infrared, electrochemical cell or pellistor).

### 1.1 General description

NET2 and NET3 heads are used to detect the presence of different gases in environments where the principal constituent is air.

The sensing element inside the heads can be either a catalytic sensor, an infrared sensor, or an electrochemical cell.

The industrial grade catalytic sensor (pellistor) employed for the detection of flammable compounds offers a great precision and selectivity with most of the explosive gases, thus avoiding false alarms. Infrared sensors are immune to poisoning produced by certain substances that inhibit and damage catalytic sensors. This allows you to add reliability and durability, allowing the use of detectors even in places where the pellistors cannot guarantee optimal functionality.

Electrochemical cells are used to detect gases at low concentration, for this reason they are used to detect toxic gases.

The N.E.T. detector head is the ideal solution for gas detection system manufacturers who prefer not to invest in designing their own detection head and/or obtaining ATEX/IECEX certification for it.

NET heads are devices characterised by the presence of the sensing element in the flameproof detector head. A multi-core cable with 6 conductors or 3 to 5 single conductors allow the connection to power supply and different outputs depending on the sensing element inside the head.

Heads with electrochemical cell and pellistor sensors provide only the raw output of the sensing element whereas heads with infrared sensor provide digital output (UART) or voltage output.

NET2X/NETC2 can house 20mm (4-series) size sensors from N.E.T.'s full array of detection technologies: Single header catalytic pellistor gas sensors; a wide range of electrochemical oxygen or toxic gas sensors; NDIR sensors for hydrocarbons, refrigerants and CO<sub>2</sub>.

It is a completely sealed device, designed to be fully replaced at the end of the product's life. The single sensing element is not removable or accessible.

NET3X/NETC3 can house 20mm (4-series) or 32mm (7-series) size sensors from N.E.T.'s full array of detection technologies.

The two-piece design of the housing allows the internal sensor to be field replaceable.

The user can select among 3/4", 1" or M20 (only NET3 version) thread for connection to the detector's main body. An additional M46 (for NET3), or M35 (for NET2) front thread allows easy fit for selected accessories (splash guard, calibration cap and additional filter for GD protection).

The flameproof enclosure is equipped with an integral stainless steel sinter filter guaranteeing safe entry of the atmosphere being detected.

## 1.2 Version identification

Here it is following picture of the two possible version in which could be supplied NET2 head. On the left side is identified NETC2 version whereas on the right side NET2X version:



Here it is following picture of the two possible version in which could be supplied NET3 head. On the left side is identified NETC3 version whereas on the right side NET3X version:



## 2.0 Technical specifications

To identify technical specification of each type of sensor's head, please refer to the datasheet of each sensing element.

## 3.0 Certifications



10-2 classification.

NET2 and NET3 heads series meet the essential health and safety requirements in accordance with the ATEX Directive 2014/34/EU.

The gas heads of the NET series have been designed for use in potentially explosive atmospheres due to the presence of gas, vapour, mist, and dust, classified as zone 1 or zone 2 (or zone 21 or 22 when the dust cover is applied) according to EN 60079-10-1 and EN 60079-

### 3.1 Marking

The NETC2 and NETC3 heads are equipped with an instrument label with one of the following markings indicating the explosion protection mode:

Table 1) Marking of the ATEX/IECEX approval

ATEX/IECEX certification details	<b>Certificate number</b>	CESI 10 ATEX 032X	IECEX CES 12.0009X
	<b>Marking (only gas)</b>	II 2G Ex db IIC T6 or T5 Gb <sup>(1)</sup>	Ex db IIC T6 or T5 Gb <sup>(1)</sup>
	<b>Marking (gas and dust, with dust cover)</b>	II 2GD Ex tb IIIC T85°C or T100°C Db IP65 <sup>(1)</sup>	Ex tb IIIC T85°C or T100°C Db IP65 <sup>(1)</sup>

<sup>(1)</sup> The temperature class (T6 or T5) depends on the sensor power dissipation inside the sensor head and is thus dependent on the type of sensor used. See certificate for details.

CE 0722  II 2G Ex db IIC T\* Gb

Or, when equipped with dust adapter:



 0722  II 2GD Ex db IIC T\* Gb  
 Ex tb IIIC T\*\*\*°C Db  
 IP65

Table 2) Marking of the United States and Canadian approval

<b>Certification Details</b>	<b>Certificate number</b>	ETL21CA27903X	
	<b>Approval</b>	United States	Canada
	<b>Marking (only gas)</b>	Class I Zone 1 AEx db IIC T6 Gb Class I Div 2 Group A T6	Ex db IIC T6 Gb Class I Div 2 Group A T6 Gb


In case of ETL21CA27903X certification, then environmental temperature range is between - 20°C till 40°C

The NET2X and NET3X heads are equipped with an instrument label with one of the following markings indicating the explosion protection mode as component:

Table 3) Marking of the ATEX approval as component

<b>ATEX certification details</b>	<b>Certificate number</b>	CESI 01 ATEX 066U
	<b>Marking (only gas)</b>	II 2G Ex db IIC Gb
	<b>Marking (gas and dust, with dust cover)</b>	II 2GD Ex db IIC Gb Ex tb IIIC Db IP65

Table 4) The data present on the marking label is explained below

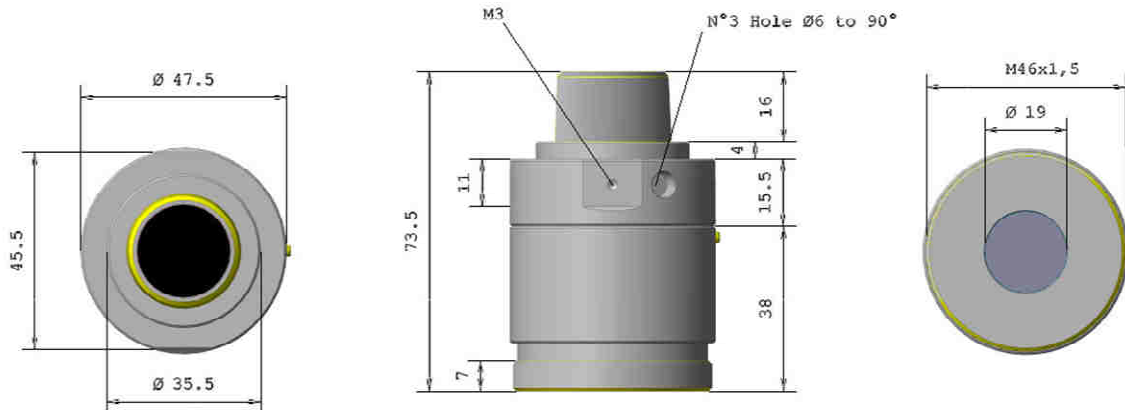
N.E.T S.r.l. Via Legnano 2, 20007 Cornaredo MI Italia	Name and address of the manufacturer of the electrical device
	Conformity marking for the applicable European directives ATEX Directive 2014/34/EU and to the related technical regulations
NET.....	Identification
s/n Year	Serial number and year of production
0722	Number of the Notified Body that audits the production system
CESI 10 ATEX 032X CESI 01 ATEX 066U	CESI: name of the laboratory that released the UE type certificate yy: year of issuing of the certificate nnn: number of the certificate
II	Electrical equipment for surface plants (not allowed in mines)
2	Category of the electrical devices for use in areas classified as zone 1 and zone 2 (by redundancy)
G	Electrical equipment for atmospheres with the presence of flammable gas



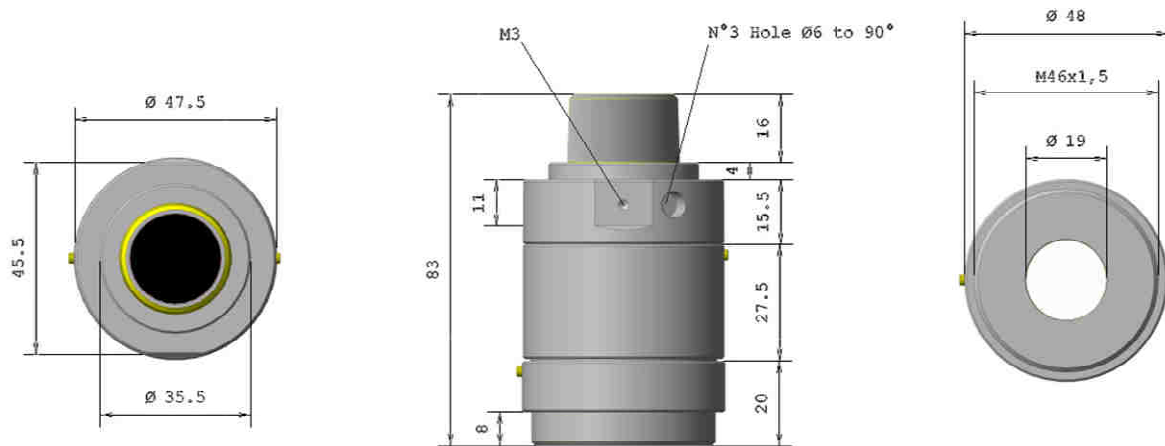
GD	Electrical equipment for atmospheres with the presence of flammable gas and combustible dust
Ex db	Explosion proof protection mode based on EN 60079-1
IIC	Gas group, acetylene, and hydrogen. (The equipment for the group of gas IIC is also suitable for the groups of gas IIA e IIB.)
T*	Temperature class T* for flammable gas. (The equipment with a given class of temperature is also suitable for all the substances with a lower class of temperature (for example the detectors T6 are suitable for substances with class of temperature T5, T4, T3, T2 and T1).)
Ex tb	Type of protection for combustible dust by means of dust-proof enclosure based on EN 60079-31
IIIC	Combustible dust group
T*** °C	Maximum surface temperature relating to combustible dust
IP65	IP degree of protection (1st number: protection against solids, 2nd number: protection against liquids) guaranteed when the optional dust cover is applied
Gb/Db	EPL, Equipment Protection Level Gb or Db suitable for zone 1,2,21 and 22 surface installations
* °C ≤ Ta ≤ * °C	Ambient temperature range
Pmax * W	Maximum dissipated power
Thread	Thread used for the entries of the enclosure

## 4.0 Mechanical Specifications

### NET3 Version without GD Filter



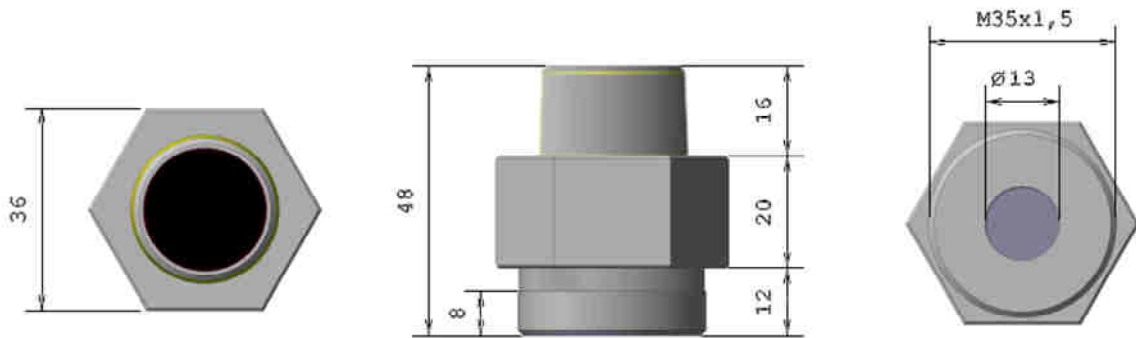
### NET3 Version with GD Filter



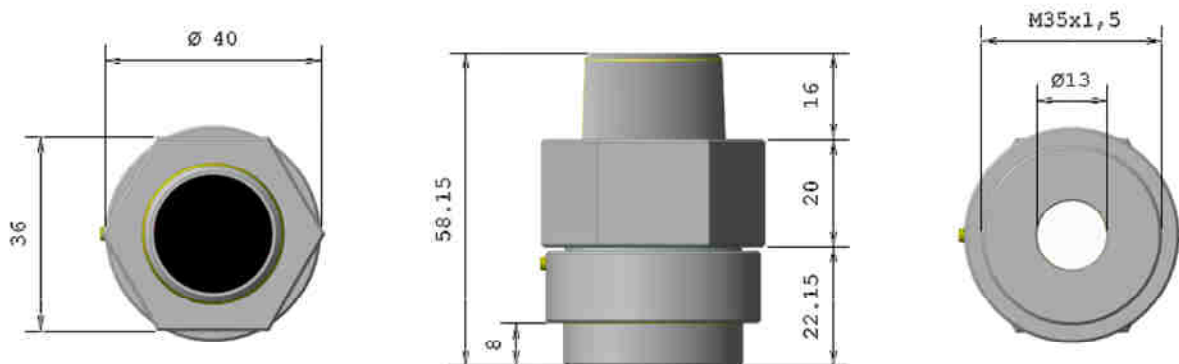
All dimensions are expressed in mm.

Standard length of the cable is 25cm, other lengths are available on customer's request.

**NET2 Version without GD Filter**



**NET2 Version with GD Filter**



## 5.0 Installation site pre arrangement

### 5.1 Suitability of detectors in relation to the area of installation

If the head is installed in a hazardous area, the user must verify that the equipment is suitable for the classified area and for the flammable substances present.

The safety essential requirements against explosion risk in classified areas are described by European directives 2014/34/UE of 26/02/2014 and 1999/92/CE of 16/12/199.

The criteria to classify hazardous areas are described in the standard EN 60079-10-1 (for explosive gas) and in the standard EN 60079-10-2 (for explosive dusts). The technical requirements for electrical systems in classified areas are reported in the standard EN 60079-14. Following the mentioned dispositions, the user must choose the gas detector type based on these factors:

- System type: Group II
- Zone classification: 1, 2
- Zone classification: 21, 22
- Gas group: IIA, IIB or IIC
- Dust group: IIIA, IIIB or IIIC
- Gas temperature class: T\*
- Maximum dusts' superficial temperature: \* °C

\* See data reported on the label

### 5.2 General precautions

At the mounting and installation phase, be sure all safety precautions have been considered. Always remember how important the correct positioning of gas head is to get the optimum response. Be careful:

- never to install gas heads close to air intakes or fans causing strong air currents.
- the heads are attached to a firm base to prevent vibration that can damage them, producing unreliable results. It is advised to keep the detectors at a distance from any radio frequency senders (such as radio links or similar).
- those heads are placed in a convenient location for future maintenance and calibration requirements.

### 5.3 Precautions based on the gas to detect and environmental inhibitors

When preparing the installation site, it is necessary to consider the nature of the gas to be detected and the presence of chemical agents in the environment.

- All the gases lighter than air (Methane, Hydrogen, Ammonia) tend to spread upwards; the detector should be placed at 30 cm from the ceiling to maximise the effectiveness of the detection. All the gases heavier than air (LPG, Butane, Petrol Vapours) tend to spread downwards; the detector should be placed at 30 cm from the floor.

- Catalytic sensors (Pellistors) offer excellent output linearity up to 100% LFL and have an estimated lifetime of 4 years. Catalytic sensor performance may be altered by the presence of some substances that, when present in the atmosphere being analysed, can considerably change the response of the sensor, and even damage it irretrievably. The presence of inhibitors or poisons is the most common cause of problems in the gas detection, and, for this reason, it is necessary to pay attention to avoid any contamination. Among the most common poisons or inhibitors we can list silicones, tetraethyl lead, sulphurous compounds (hydrogen sulphide), chlorinated compounds (carbon tetrachloride), trichloroethylene and halogenated hydrocarbons. These compounds do not affect the Infrared sensor, which find a suitable application whenever a flammable gas is to be detected in environments where Pellistor cannot work. This new technology has undoubted advantages such as lower dependence from environmental factors (temperature and humidity and the non "poisoning". Estimated lifetime of Infrared sensors is higher than 4 years.

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Do not use gas detectors in atmospheres with an oxygen concentration greater than 21%.

## 5.4 Special conditions for safe use

- The installation, use, maintenance, and restoration must be done following the Safety Instructions supplied by N.E.T.
- Only the models equipped with dust filter can be installed in zone 21 and 22.
- The dust filter has a membrane, this must not be damaged or removed. Moreover, the membrane cannot be touched with bare hands to avoid filter damage.
- The operating temperature conditions are described in the label, they are compatible with sensing elements' operating temperatures and certification validity.

## 6.0 Installation

Only qualified personnel can install gas heads, as described in Annex A of EN 60079-14 standard.

It is strictly forbidden open and close the equipment when it is installed in hazardous area, and it is powered-on. This operation can be conducted in safe zone and without power source. After 10 minutes from power source interruption, the equipment can be opened. It is strictly recommended the use of personal protective equipment during operations inside the enclosure.

Installation must be performed only in clean environment.

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## 6.1 Correct mounting

The head is always to be mounted with the sensing element placed downward.

For no reasons at all the enclosure can be drilled or modified.

## 6.2 Earth ground connection

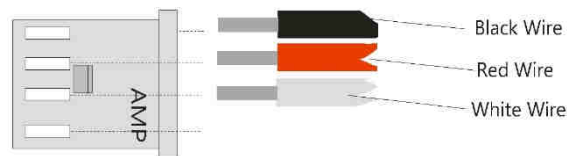
The enclosure of NET3 head can be connected to the earth ground through the external clamp with anti-loosening locking washer and anti-rotation mechanical device. To allow external earth ground connection, use a conductor with a minimum section of 4 mm<sup>2</sup>.

## 6.3 I/O Connections

Here are following the indications related to the different signals/connections present for each type of sensing element and each type of heads.

Catalytic bead and Electrochemical cells heads have the same wiring connections for both cable and single wires versions, whereas infrared sensor head has a different wire colour for single wires or cable versions.

### NET2 and NET3 wiring for Electrochemical cells and Catalytic pellistors

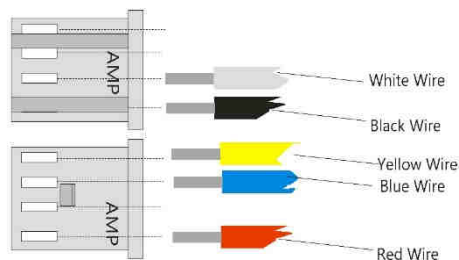


Wire colour	Catalytic bead Version	Electrochemical Cell Version	Oxygen Cell Version
Red	-Vcc, Detector	Counter	Not used
Black	+Vcc, Compensator	Reference	-Ve
White	Common	Wordking	+Ve

Connector type: AMPMODU II 280359

Mating connector: AMPMODU II 280371-1

### NET2X and NET3X wiring for Infrared sensor

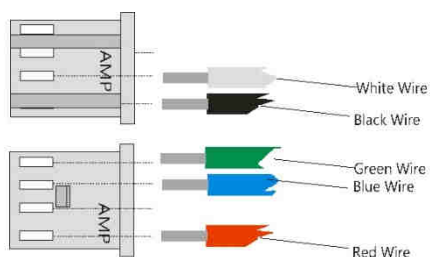


Wire colour	Meaning
Red	Vcc (+5V)
Black	GND
Yellow	RX
Blue	TX
White	Signal (Vout)

Connector type: AMPMODU II 280365-0

Mating connector: AMPMODU II 280384-1

## NETC2 and NETC3 wiring for Infrared sensor



Wire colour	Meaning
Red	Vcc (+5V)
Black	GND
Green	RX
Blue	TX
White	Signal (Vout)

## 6.4 Thread types

Thread type is described in the label of the product, it could be NPT 3/4" or 1" or M20 (only for NET3).

In case of tapered thread, use a thread-lock glue (Loctite 243 for example) on 2-3 threads.

### IMPORTANT!

- Check the functionality at least one time per year, by testing detector response with gas application.

## 6.5 Safety data

Infrared sensors have been designed to be used in applications requiring SIL Capability. Please ask to technical support to receive the related information and to get precise information about order codes.

## 6.6 Analogue output connection

- Use shielded cables (in case of cable version).
- Wires' cross section depends on the distance between the detection head and the equipment at which it is connected. Maximum recommended distance could be of some meters in case of infrared and catalytic bead whereas it could be less than 1 meter for electrochemical cell
- Should any junctions be necessary on wires, please make sure there is no interruption on the shield (in case of cable version head)
- Ensure the wire connections, either clutching or crimping type, are properly carried out with terminals that do not oxidise or loosen. We recommend having them soldered or using the mating connector.

Remember always that electrochemical cells have a current output whereas infrared and catalytic bead generate a voltage output.

## 6.7 UART digital connection

Differently from the other sensing technology, Infrared sensor could be also connected to the interfacing equipment using digital communication through UART line. Communication protocols is implemented based on Modbus standard.

Connection of the head to UART line should be performed by using a 4-wire cable, 1 pair for the UART bus and 1 for the power supply.

It is also necessary that:

- The total length of the line should not exceed some meters.
- Detectors heads and interfacing instrument are to be wired in daisy chain mode. We recommend avoiding star or tree mode connection as interference immunity would be reduced.
- For the detectors' power supply connection, we recommend using a 2-wire cable with suitable section according to the distance and number of detector heads connected.
- Once the installation has been completed, verify that each detector head reaches at least 5Vdc.

To set the detectors' address, please refer to the technical communication manual of Infrared sensor.

When detectors are connected using digital communication, the proportional Voltage output remains active.

## 7.0 Testing and use

### 7.1 Power on

Once infrared head is powered on, output voltage is nearly 400mV in voltage standard mode or  $V_{in}/2$  in case of Bridge output. In the first one-minute from power on, the output Voltage will remain at this level then it will assume the value related to the measured gas concentration level.

Once the warm-up phase is over, the infrared sensor can work correctly, although the optimal performances will be achieved after two hours.

Electrochemical cells and catalytic beads before to provide a stable output should be kept stabilizing for a couple of hours from power on.



## 7.2 Testing

Infrared detector heads are factory calibrated for the specific gas required by the customers. Future adjustment of the pre-set calibration can be carried out through digital communication. Electrochemical cells could be provided with the sensitivity data to the respective target gas.

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It is strictly forbidden open and close the equipment (NET3) when it is installed in hazardous area, and it is powered-on. This operation can be conducted in safe zone and without power source. After 10 minutes from power source interruption, the equipment can be opened. It is strictly recommended the use of personal protective equipment during operations inside the enclosure.

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Testing / initial checking and calibration should be carried out by using a gas mixture in the appropriate range, along with our calibration kit (if necessary).

To execute this operation, the user must use the proper test gas bottle and connect to this the valve with flowmeter. Connect a pipe with adequate diameter, which connects to the calibration adapter for the gas detector. Calibration of the Infrared head is made by the calibration SW. See paragraph 11 for more details about the accessories for calibration.

Please consult the specific instruction manuals (Calibration SW) for further information on use. We recommend recalibrating hydrocarbon infrared sensor in both zero and span condition, zero calibration should be made applying Nitrogen, in case zero calibration will be performed in ambient air then span calibration should be performed applying target gas using a nafion tube interposed between calibration gas cylinder and detector head.

Electrochemical cells and catalytic beads should be calibrated using calibration gases balanced in air, whereas zero calibration could be performed in clean ambient air

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## 8.0 Maintenance

Only trained staff following EN 60079-17 criterion can manage inspections and maintenance of equipment with flameproof enclosure.

### 8.1 Preventive maintenance routines

Within the European Union countries, bump testing and calibration procedures of gas detectors are required by strict regulations and detailed in the IEC EN 60079-29-2.

This standard gives guidance on the selection, installation, use and maintenance of gas detectors intended for use in industrial and commercial applications therefore the User must read the procedure described in IEC EN 60079-29-2 for reference.

The standard requires calibration and bump testing as well as recording of the performed checks and it defines that all gas detectors should undergo periodical operational testing according to the manufacturer's specifications. Test results should be recorded into a suitable book to be shown to the Local Jurisdiction Authority in case of inspection, according to the IEC EN 60079-17.

## 8.2 Corrective maintenance routines

For any anomaly found during the functional test, please check the tests performance as described in paragraph 6.

If during the preventive maintenance routine, the head does not react to the gas it has been calibrated for, please return the head to the manufacturer for repair. Only for Infrared sensor it is possible to adjust the calibration parameters by employing the calibration SW available on request.

## 8.3 Note on IP grade

### WARNING!

Please note that the IP rating indicated on the instrument label (in case of use of the NET-GD3 or NET-GD2 accessory) does not imply that the equipment will detect gas during and after exposure to those conditions of dust and water intrusion.

If exposed to the condition's representative of the IP rating, the equipment should be checked and recalibrated with a higher frequency and in case of damage of the IP protection cap, it must be replaced.

The PTFE filter of the IP protection cap should by no means be touched by bare hands as this may alter the protection and the response in gas.

## 8.4 Sensor head substitution

It is strictly forbidden open and close the equipment when it is installed in hazardous area, and it is powered-on. This operation can be conducted in safe zone and without power source. After 10 minutes from power source interruption, the equipment can be opened. It is strictly recommended the use of personal protective equipment during operations inside the enclosure.

In case of tapered thread, use a thread-lock glue (Loctite 243 for example) on 2-3 threads.

## 8.5 Cleaning

The head must be kept clean of dust deposits. Cleaning must be performed with damp cloths or with cloths that do not accumulate electrostatic charges. It is strictly forbidden the dust cleaning using compressed air.

## 8.6 Disassembly instructions

Power the unit off, disconnect the wires on the terminals and dismount the housing from any blocking systems.

## 8.7 Trouble shooting guide

The following table lists all the error messages, which can be encountered, with corrective actions to resolve the problems with infrared sensor. Once infrared sensor is in error status voltage output is set to 200mV or  $V_{in}/2-100mV$ . Digital concentration is set to -20%F.S and the related error is indicated to the specific error register.

Table 5) Error messages with their corrective actions for Infrared Head

XIN/DIN Error Code	XIN/DIN Error Name	Error Description	Corrective action
0x00	NO_ERROR	None	None
0x02	E2PROM_CKSM_ERROR	Internal E2PROM error	<ul style="list-style-type: none"> <li>➤ Turn power off, then on again.</li> <li>➤ If the previous action does not resolve the error, please contact N.E.T.</li> </ul>
0x03	FLASH_CKSM_ERROR	Internal FLASH error	
0x04	RAM_ERROR	Internal RAM error	
0x05	VDD_ERROR	Internal Power supply fail	
0x06	I2C_ERROR	Internal communication error	
0x08	SPI_ERROR	Internal communication error	
0x09	VREF_ERROR	Internal Vref error	
0x0A	DAC_ERROR	Internal DAC error	
0x0C	ANALOGUE_4-20MA_ERROR	Output voltage does not correct	
0x0E	ADC_ERROR	Internal ADC error	
0x0F	SW_ERROR	Internal calculation error	
0x10	VIN_ERROR	Power supply level not correct	Verify input power that meets Sensor's power supply range
0x11	FLASH_READ_ERROR	Internal FLASH error	<ul style="list-style-type: none"> <li>➤ Turn power off, then on again.</li> <li>➤ If the previous action does not resolve the error, please contact N.E.T.</li> </ul>
0x12	FLASH_WRITE_ERROR		
0x13	FLASH_ERASE_ERROR		
0x14	E2PROM_WRITE_ERROR	Internal E2PROM error	
0x16	RFI_ERROR	Internal signals not stable	Verify if Electromagnetic disturbances are present in the working environment.
0x17	VBG_ERROR	Internal Band gap error	<ul style="list-style-type: none"> <li>➤ Turn power off, then on again.</li> <li>➤ If the previous action does not resolve the error, please contact N.E.T.</li> </ul>
0x18	LAMP_ERROR	IR LAMP not work	
0x19	AMP_ERROR	OP AMP not work	

Infrared sensors also indicate presence of warning.  
Inside the following table are indicated warning of the detector and the related codes:

*Table 6) Warning messages with their descriptions for Infrared Head*

XIN/DIN Warning Code	XIN/DIN Warning Name	Warning Description
0x00	NO_WARNING	(no warning, functioning ok )
0x01	WARMUP_WARNING	( warm-up )
0x02	INVALID_ACTIVE_WARNING	(active not included within the functional limits expected)
0x04	INVALID_REFERENCE_WARNING	( REF not included within the functional limits expected)
0x08	INVALID_TEMPERATURE_WARNING	(TEMP not included within the functional limits expected)
0x10	INVALID_READINGS_WARNING	(active and reference signals changed too fast. This condition can happen in case of fast gas flow rate transient, fast temperature changes and presence of radio frequency,interferences. In case this flag is active then gas concentration is frozen)
0x20	INVALID_ACTIVERMS_WARNING	(WRONG VALUES on the active channel. Active signal is too low)
0x40	INVALID_REFERENCERMS_WARNING	(WRONG VALUES on the reference channel;.Reference signal is too low)
0x80	HW_TEST_WARNING	( HW test in progress. It is performed once per day)

## 9.0 Restorations

Restorations are not allowed; the user must give the entire equipment to the manufacturer with the RMA number required in advance to return the goods. For further information see EN 60079-19.

## 10.0 Packing instructions

To grant a stout protection against impacts we recommend using the original package or protect the device with bubble wrap sheets.

## 11.0 Accessories

Table 7) Table of available accessories that can be purchased. Please contact N.E.T for further information.

Part number	Description
NET-GD3	Adapter to upgrade the protection from G to GD (sold in conjunction with the order of NET3 head)
NET-GD2	Adapter to upgrade the protection from G to GD (sold in conjunction with the order of NET2 head)
NET-CAP3 or NET-CAP3-SS	Stainless steel or aluminium calibration adapter for NET3 gas detectors. It allows the right quantity of gas inlet to flow to the detector. It comes complete with adapters to fit on the detectors' heads.
NET-CAP2 or NET-CAP2-SS	Stainless steel or aluminium calibration adapter for NET2 gas detectors. It allows the right quantity of gas inlet to flow to the detector. It comes complete with adapters to fit on the detectors' heads.
NET-ZMTEST3	Permanent rain shield/test adapter for NET3 head
NET-ZMTEST2	Permanent rain shield/test adapter for NET2 head
NET-CONE3	Stainless steel collector and weather protection cone for gas detector with EPL Gb for NET3 head.
NET-CONE2	Stainless steel collector and weather protection cone for gas detector with EPL Gb for NET2 head.

## 12.0 Warranty for repairing

Warranty on N.E.T products is valid one year from the delivery date placed on transportation documents. Defective products can be returned to N.E.T. Srl only after a previous agreement and with a description of the fault. N.E.T. Srl has the right to replace or repair all the products that, according to his unquestionable judgement, are found to be defective, without being held responsible for any possible direct or indirect damages suffered by the Customer. According to the above-mentioned warranty, shipping and packaging charges and any other incidental expenses for the products returned to N.E.T. Srl will be at the Customer's own risk and charged to him. This warranty however is not valid for articles that have been broken, repaired by a third person, or not used according to the instructions contained in this document or supplied with the products, related to the storage, installation, operation, maintenance, or servicing of the products.

### WARNING!

Please be aware that all perishables installed in our products (sensors) benefit only of the warranty conditions stated by the original manufacturer.

## 13.0 Instructions for disposal

When the device reaches the end of its life, it should be disposed of in accordance with local waste management requirements and environmental legislation. Employed materials are subdivided into the following categories:

- Sensor head enclosure: stainless steel
- Sensing element: Waste Electrical & Electronic Equipment (WEEE)

N.E.T has a policy of continuous development and improvement of its products. As such the specification for the device outlined in this document may be changed without notice. In case of modification of the product, N.E.T disclaims all liability. Data may change, as well as legislation and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of N.E.T.

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