



- High-temperature code carrier up to 500 °C (932 °F)
- Sturdy and compact design
- Integrated illumination
- High operating range
- Large sensing range
- High depth of focus

Optical high temperature identification system, 300 to 450 mm

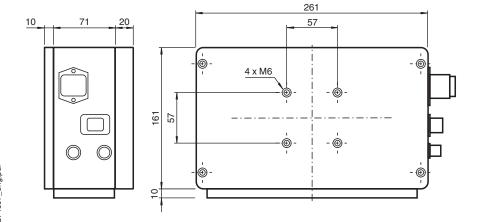
# C € EHI

## **Function**

The OIT500-\* stationary read device is an optical identification system that works using industrial vision methods and is used in automated manufacturing processes. The ambient conditions in automobile construction in particular, for example the cyclical temperature changes, often make the use of read-only tags with electronic components difficult if not impossible. For the OIT high-temperature identification system, read-only tags of solid metal plates with a perforated matrix are used, which are designed for use at temperatures of up to 500 °C and suitable for high mechanical stress.

Simple installation and commissioning without complicated, time-consuming Teach-In processes enable rapid entry. Pluggable connections for the rapid exchange of devices and a controller with simple command set via the Ethernet interface guarantee simple operation. A scratchresistant, replaceable quartz glass panel and sturdy metal housing make the OIT500-\* a robust, efficient identification system.

## **Dimensions**



# **Technical Data**

General specifications		
Light source	Integrated LED lightning	
Light type	infrared	
Symbologies	CB1: perforated matrix 6 x 6 6 decimal digits CB3: hole pattern 3 x 12 12 binary digits	
Read distance	CB1: 300 450 mm CB3: 350 400 mm	
Reading field	340 mm x 210 mm at max. read distance	
Evaluation frequency	5 Hz	
Target velocity	triggered max. 1.5 m/s	

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#### **Technical Data** Functional safety related parameters $\mathsf{MTTF}_\mathsf{d}$ 51 a Mission Time (T<sub>M</sub>) 10 a Diagnostic Coverage (DC) 0 % Indicators/operating means LED green: supply LED green: ready Operation indicator Function indicator Yellow LED: trigger Yellow LED: code read Red LED: pre-fault Red LED: group error **Electrical specifications** $24 \text{ V DC} \pm 15\%$ , PELV Operating voltage $\mathsf{U}_\mathsf{B}$ Operating current $I_B$ 250 mA without output drivers Interface Physical Ethernet Protocol TCP/IP 100 MBit/s Transfer rate Input 24 V ± 15% PELV Input voltage Number/Type 1 trigger input 3 control unit inputs Input current approx. 1 mA at 24 V DC Output Number/Type 1 conventional electronic output, PNP Switching voltage 24 V ± 15 % PELV Switching current 100 mA each output Conformity EN 60068-2-27:2009 Shock resistance EN 60068-2-6:2008 Vibration resistance **Emitted interference** EN 61000-6-4:2007+A1:2011 Noise immunity EN 61326-1:2013 Photobiological safety EN 62471:2008 exempt group Approvals and certificates CE conformity EAC conformity TR CU 020/2011 **Ambient conditions** Ambient temperature 0 ... 45 °C (32 ... 113 °F) Storage temperature -20 ... 60 °C (-4 ... 140 °F) Mechanical specifications Degree of protection IP64 Connection 8-pin Harting HAN RJ-45 2 x 5-pin M12 socket Material Housing diecast aluminum powder coated Mass approx. 4000 g

# Connection

#### 8-pin Network connection

(LAN)



#### Pin Signal

- Transmit data (+)
- Transmit data (-)
- 3 Receive data (+)
- not assigned
- not assigned
- 6 Receive data (-)
- not assigned
- not assigned

#### 8-pin Harting connection

(Process)



# Pin Signal

- not connected
- External ground
- 3 not connected 4 not connected
- 5
- 24 V external power supply 24 V device power supply 6
- not connected
- Device ground

#### 4-pin M12 socket

(external illumination)



#### Signal

- 24 V power supply
- not connected
- 3 Ground
- Illumination control

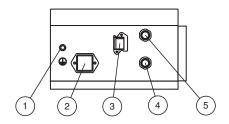
# 4-pin M12 socket (Trigger)



#### Signal Pin

- 24 V power supply
- not connected 2
- 3 Ground
- Trigger signal

# **Assembly**



1	Grounding screw	
2	Power supply	
3	Network	
4	Trigger	
5	external illumination	

# **Accessories**

V8HAN-G-10M-PVC-ABG	Female cordset, Harting, 8-pin, shielded, PVC cable
V45-GP-10M-PUR-ABG- V45-G	Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
V45-GP	Male connector RJ45 straight 4-pin, Cat5, shielded, field-attachable, Outdoor
V45-G	Male connector RJ45 straight 4-pin, Cat5, shielded, field-attachable

Accessories		
	V1S-G-10M-PVC	Male cordset single-ended M12 straight A-coded, 4-pin, PVC cable grey
	V8HAN-G	Female connector, Harting, 8-pin, field attachable
	OIZ-FG500	Replacement glass for series OIT300, OIT500 and OIT1500
<u>Gr</u>	Vision Configurator	Operating software for camera-based sensors