

High temperature identification system

OIT500-F113-B12-CB3



- 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

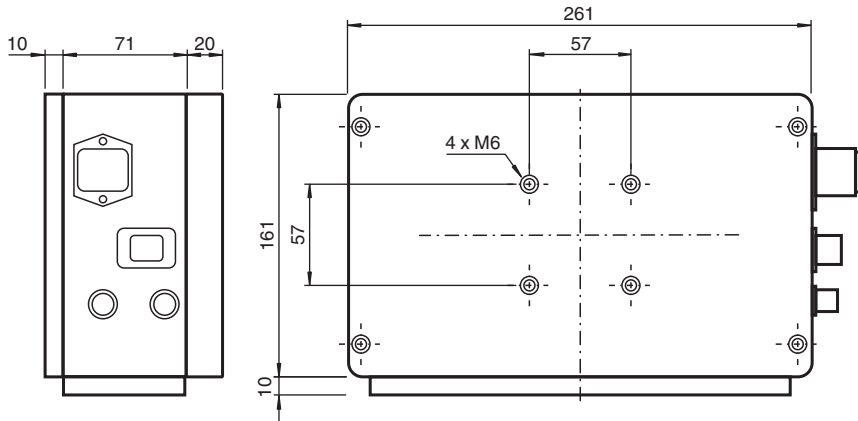


Function

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 scratch-resistant, 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

Functional safety related parameters

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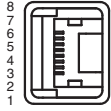
Technical Data

MTTF _d		51 a
Mission Time (T _M)		10 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green: supply LED green: ready
Function indicator		Yellow LED: trigger Yellow LED: code read Red LED: pre-fault Red LED: group error
Electrical specifications		
Operating voltage	U _B	24 V DC ± 15% , PELV
Operating current	I _B	250 mA without output drivers
Interface		
Physical		Ethernet
Protocol		TCP/IP
Transfer rate		100 MBit/s
Input		
Input voltage		24 V ± 15% PELV
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		
Shock resistance		EN 60068-2-27:2009
Vibration resistance		EN 60068-2-6:2008
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		CE
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

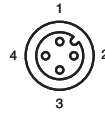
(LAN)



Pin	Signal
1	Transmit data (+)
2	Transmit data (-)
3	Receive data (+)
4	not assigned
5	not assigned
6	Receive data (-)
7	not assigned
8	not assigned

4-pin M12 socket

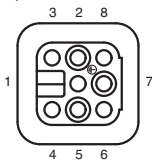
(external illumination)



Pin	Signal
1	24 V power supply
2	not connected
3	Ground
4	Illumination control

8-pin Harting connection

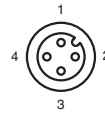
(Process)



Pin	Signal
1	not connected
2	External ground
3	not connected
4	not connected
5	24 V external power supply
6	24 V device power supply
7	not connected
8	Device ground

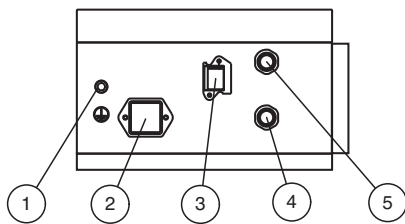
4-pin M12 socket

(Trigger)



Pin	Signal
1	24 V power supply
2	not connected
3	Ground
4	Trigger signal

Assembly








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

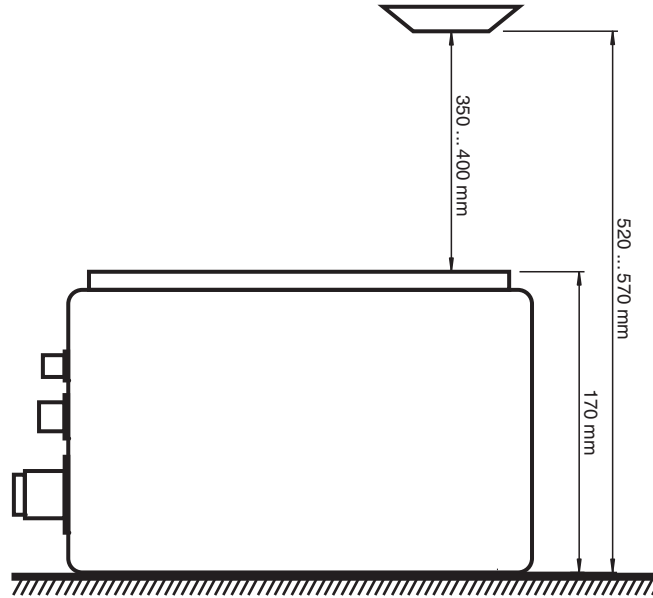
Accessories

	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
	Vision Configurator	Operating software for camera-based sensors
	OIC-C10V2A-CB1-xxxxxx-yyyyyy	Code carrier for optical high-temperature identification system, stainless steel

Distance Code Carrier/OIT



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