High temperature identification system

OIT300-F113-B12-CB2

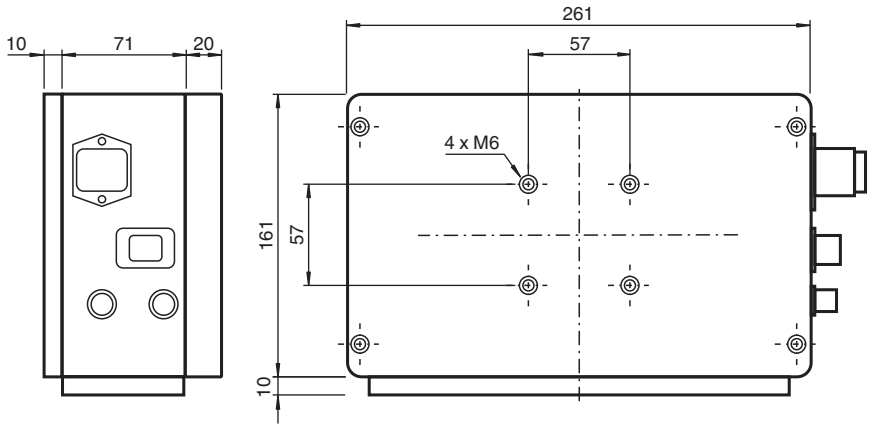
- High-temperature code carrier up to 500 °C (932 °F)
- Sturdy and compact design
- Integrated illumination
- Large sensing range
- High depth of focus

Optical high temperature identification system, 100 to 270 mm

Function

The stationary scanner OIT300-F113-B12-CB2 is an optical identification system using the methods of industrial image processing, which finds application in automated manufacturing processes.
For this reason, the high-temperature identification system OIT is fitted with code carriers with massive metal plates provided with a perforated matrix, which can withstand temperatures up to 500°C and high mechanical loads.
Simple installation as well as commissioning without complicated and long-winded TEACH-IN enable fast application. Plug-in connections for fast exchange of devices and the control with simple command sets through an Ethernet interface ensure very easy operation. A scratch resistant quartz glass pane, which can be replaced, if and when required, as well as the stable metal housing turn the OIT300-F113-B12-CB2 into a robust and powerful identification system.

Dimensions



Technical Data

General specifications	
Light source	Integrated LED lightning
Light type	infrared
Symbologies	Hole matrix Value range: 4-digit numerical, between 1 and 4095 Code carrier size: 80 mm x 36 mm
Read distance	adjustable 100 ... 270 mm
Depth of focus	± 50 mm
Reading field	210 mm x 160 mm at max. read distance
Evaluation frequency	5 Hz

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Technical Data

Target velocity		triggered max. 0.5 m/s
Functional safety related parameters		
$MTTF_d$		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		to be applied externally 24 V ± 15% PELV
Number/Type		1 trigger input 2 control unit inputs , optically decoupled
Input current		approx. 1 mA at 24 V DC
Output		
Number/Type		1 electronic output, PNP, optically decoupled
Switching voltage		to be applied externally 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 Supplied ferrite sleeve for suppression of the Ethernet cable
Material		
Housing		diecast aluminum powder coated
Mass		approx. 4000 g

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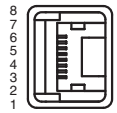
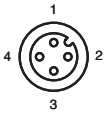
Connection Assignment

8-pin Network connection
(LAN)



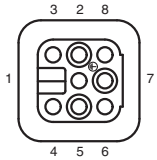
Pin	Signal
1	Transmit data (+)
2	Transmit data (-)
3	Receive data (+)
4	not assigned
5	not assigned
6	Receive data (-)
7	not assigned
8	not assigned

4-pin M12 socket
(external illumination)



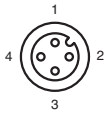
Pin	Signal
1	24 V power supply
2	Laser control
3	Ground
4	Illumination control

8-pin Harting connection
(Process)



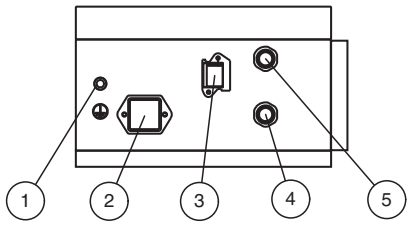
Pin	Signal
1	n.c. (reserved)
2	Ground for separate I/O supply (GND IO)
3	Mode bit 1 (MOD 1)
4	Mode bit 0 (MOD 0)
5	24 V supply for separate I/O (24 V IO)
6	24 V supply device
7	n.c. (reserved)
8	Device ground (GND)

4-pin M12 socket
(Trigger)



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

Assembly



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

Accessories

	**OIC-C11V4A-CB2**	Code carrier for optical high-temperature identification system, stainless steel
	**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, insulation displacement connection, Outdoor

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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
	**OITControl**	Software for OIT high temperature identification system
	**OIZ-FG500**	Replacement glass for series OIT300, OIT500 and OIT1500

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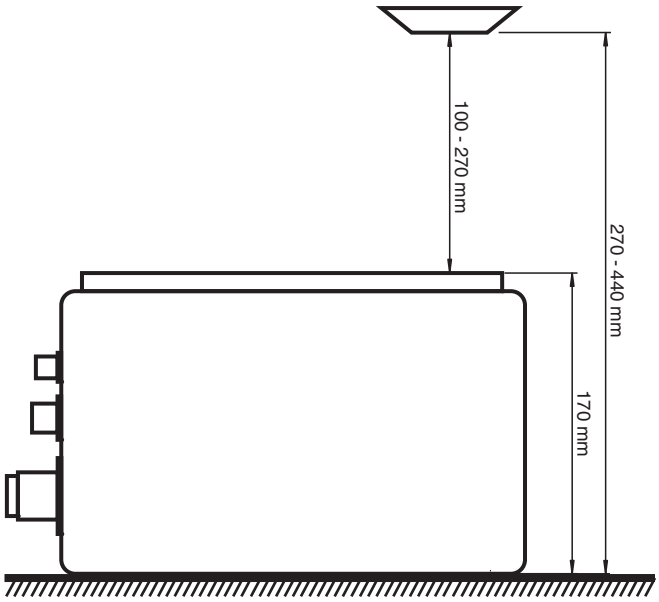
Distance Code Carrier/OIT



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