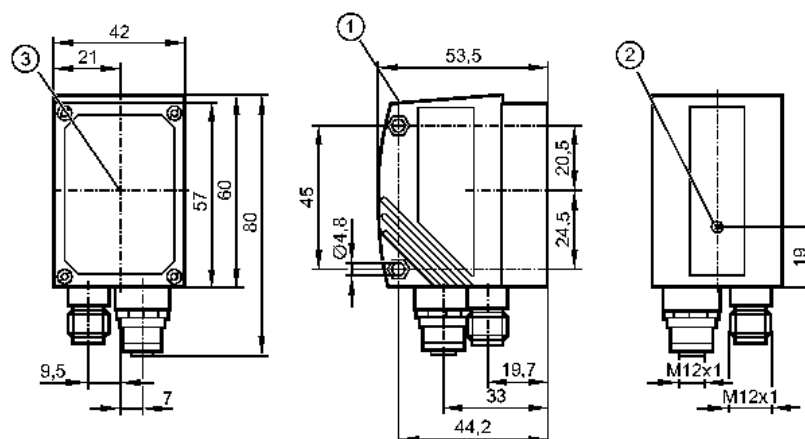


**O2I350**

O2IROS-G/D/RS232/E1/E2

Identifikationssysteme

**Da bei 8-poligen Kabel Dosen die Adernfarben nicht normiert sind, beachten Sie bitte immer die Anschlussbelegung des Sensors und der Kabel Dosen (siehe Datenblatt).**



- 1: Display  
2: Fokuseinsteller  
3: Mitte der Optikachsen


**Produktmerkmale**

Multicode Reader

Texterkennung

Max. Bildfeldgröße: 64 x 48 mm

integrierte, konfigurierbare Code-Auswertung

Prozessschnittstellen Ethernet TCP/IP, EtherNet/IP, RS-232

Parametrierschnittstellen Ethernet TCP/IP; UDP/IP

Interne Beleuchtung: Rotlicht (625 nm)

**Einsatzbereich**

Lesbare Codes

Interleaved 2-of-5, Industrial 2-of-5, Code 39, Code 93, Code 128, Pharmacode, Codabar

EAN8, EAN8 Add-On 2, EAN8 Add-On 5

EAN13, EAN13 Add-On 2, EAN13 Add-On 5

UPC-A, UPC-A Add-On 2, UPC-A Add-On 5

UPC-E, UPC-E Add-On 2, UPC-E Add-On 5

GS1 DataBar Omnidirectional, GS1 DataBar Truncated, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Limited, GS1 DataBar Expanded, GS1 DataBar Expanded Stacked, GS1 - 128

MSI Barcode

ECC200, PDF-417, QR

Micro-QR

Aztec Code

GS1 ECC200, GS1 QR Code, GS1 Aztec Code

Lesbare Schriftarten

Industrial, Document

**Elektrische Daten**

Betriebsspannung [V]

 24 DC  $\pm$  10 %

Stromaufnahme [mA]

&lt; 300

Schutzklasse

III

Verpolungsschutz

ja \*)

Anschluss externe Beleuchtung [V]

24 DC PNP

Sensorart

CMOS Bildsensor S/W, VGA-Auflösung 640 x 480

**Eingänge**

## O2I350

O2IROS-G/D/RS232/E1/E2

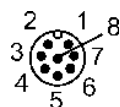
Identifikationssysteme

|                                    |                                                                                           |                              |         |
|------------------------------------|-------------------------------------------------------------------------------------------|------------------------------|---------|
| Trigger                            | intern<br>extern; 24 V PNP gem. IEC 61131-2 Typ 1<br>über RS-232, TCP/IP oder EtherNet/IP |                              |         |
| Ausgänge                           |                                                                                           |                              |         |
| Ausgang                            | max. 2 (konfigurierbar) / 24 V PNP                                                        |                              |         |
| Strombelastbarkeit je Ausgang [mA] | 100                                                                                       |                              |         |
| Spannungsabfall [V]                | < 2                                                                                       |                              |         |
| Kurzschlussschutz                  | ja                                                                                        |                              |         |
| Überlastfest                       | ja                                                                                        |                              |         |
| Erfassungsbereich                  |                                                                                           |                              |         |
| Arbeitsabstand [mm]                | 50                                                                                        | 100                          | 200     |
| Bildfeldgröße [mm]                 | 16 x 12                                                                                   | 32 x 24                      | 64 x 48 |
| Omnidirektionales Lesen            | ja                                                                                        |                              |         |
| Neigung zur Bildebene              | ≤ 45°                                                                                     |                              |         |
| Lesungen [Hz]                      | ≤ 20                                                                                      |                              |         |
| Bewegungsgeschwindigkeit [m/s]     | ≤ 7                                                                                       |                              |         |
| Software / Programmierung          |                                                                                           |                              |         |
| Parametriermöglichkeiten           | über 2 Tasten und 10-Segment-Anzeige oder über PC/Notebook mit Bediensoftware             |                              |         |
| Schnittstellen                     |                                                                                           |                              |         |
| Parametrierschnittstelle           | Ethernet TCP/UDP/IP; 10Base-T / 100Base-TX                                                |                              |         |
| Prozessschnittstelle               | Ethernet TCP/IP, EtherNet/IP, RS-232                                                      |                              |         |
| IP-Adresse                         | 192.168.0.79                                                                              |                              |         |
| Subnetzmaske                       | 255.255.255.0 (Class C)                                                                   |                              |         |
| Gateway IP-Adresse                 | 192.168.0.201                                                                             |                              |         |
| MAC-Adresse                        | siehe Typenschild                                                                         |                              |         |
| Umgebungsbedingungen               |                                                                                           |                              |         |
| Umgebungstemperatur [°C]           | -10...50                                                                                  |                              |         |
| Lagertemperatur [°C]               | -40...85                                                                                  |                              |         |
| Schutzart                          | IP 67                                                                                     |                              |         |
| Zulassungen / Prüfungen            |                                                                                           |                              |         |
| EMV                                | Störemission                                                                              | nach EN 61326                |         |
|                                    | Störfestigkeit                                                                            | nach EN 61326                |         |
| Zulassungsnummer UL                | T001                                                                                      |                              |         |
| Schockfestigkeit                   | IEC 60028-2-27                                                                            |                              |         |
| Vibrationsfestigkeit               | IEC 60028-2-6                                                                             |                              |         |
| Mechanische Daten                  |                                                                                           |                              |         |
| Gehäusewerkstoffe                  | Gehäuse: Zinkdruckguss pulverbeschichtet; Frontscheibe: Glas; LED-Fenster: Polycarbonat   |                              |         |
| Gewicht [kg]                       | 0,385                                                                                     |                              |         |
| Anzeigen / Bedienelemente          |                                                                                           |                              |         |
| Anzeige                            | Funktionsanzeige                                                                          | 3 x LED grün<br>4 x LED gelb |         |
|                                    | Anzeigeeinheit / Status 4-stellige 10-Segment-Anzeige                                     |                              |         |
| Elektrischer Anschluss             |                                                                                           |                              |         |
| Anschluss                          | M12 Stecker, 8-polig<br>M12 Buchse, 4-polig                                               |                              |         |
| Anschlussbelegung                  |                                                                                           |                              |         |

**O2I350**

O2IROS-G/D/RS232/E1/E2

Identifikationssysteme



## RS-232: Prozessanschluss

- 1: U+
- 2: Triggereingang
- 3: 0 V
- 4: Schaltausgang 1 (Code Auswertung) / Triggerausgang (bei externer Beleuchtung)
- 5: RxD RS-232
- 6: TxD RS-232
- 7: Schaltausgang 2 (Ready-Signal)
- 8: GND RS-232 (galvanisch getrennt bis 50 V)



## Ethernet: Parametrier-/Prozessanschluss

- 1: TxD+
- 2: RxD+
- 3: TxD-
- 4: RxD-

**Sonstige Ausstattung**

|                     |                                                                                                |
|---------------------|------------------------------------------------------------------------------------------------|
| Interne Beleuchtung | Rotlicht (625 nm)<br>segmentiert in 4 Bereiche<br>(über PC-Bedienprogramm einzeln ansteuerbar) |
| Lasermarkierung     | rot, Laserschutzklasse 2 gem. DIN EN 60825-1                                                   |

**Zubehör**

|                    |                                   |
|--------------------|-----------------------------------|
| Zubehör (optional) | Bediensoftware;<br>Montagezubehör |
|--------------------|-----------------------------------|

**Bemerkungen**

|                            |                                                                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bemerkungen                | Betriebsspannung "supply class 2" gemäß cULus<br>*) Die Spannung an Pin 2, 4, 5, 6, 7 und 8 darf die Versorgungsspannung an Pin 1 (U+) nicht übersteigen (siehe Bedienungsanleitung). |
| Verpackungseinheit [Stück] | 1                                                                                                                                                                                     |

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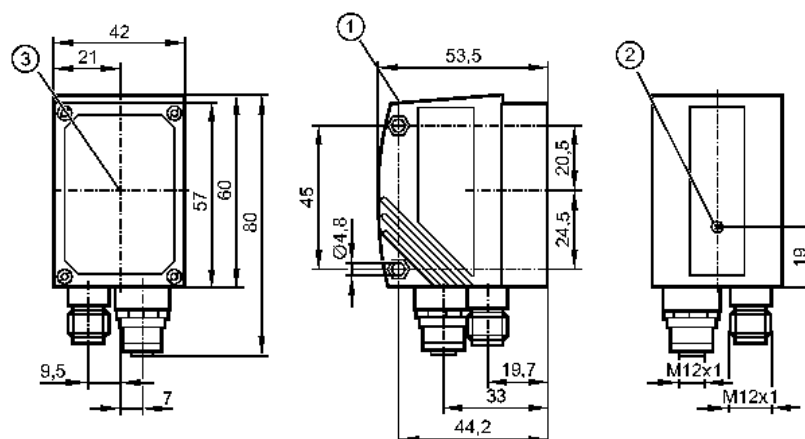
**Da bei 8-poligen Kabeln die Adernfarben nicht normiert sind, beachten Sie bitte immer die Anschlussbelegung des Sensors und der Kabeln (siehe Datenblatt).**

## O2I350

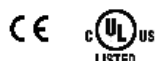
O2IROS-G/D/RS232/E1/E2

Identification systems

**Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.**



- 1: display  
2: Focus adjustment screw  
3: Centre of the lens axes



### Product characteristics

Multicode Reader

Text recognition

Max. field of view size: 64 x 48 mm

integrated, configurable code evaluation

Process interfaces Ethernet TCP/IP, EtherNet/IP, RS-232

Parameter setting interfaces Ethernet TCP/IP; UDP/IP

Integrated lighting: red light (625 nm)

### Application

Readable codes

Interleaved 2-of-5, Industrial 2-of-5, Code 39, Code 93, Code 128, Pharmacode, Codabar

EAN8, EAN8 Add-On 2, EAN8 Add-On 5

EAN13, EAN13 Add-On 2, EAN13 Add-On 5

UPC-A, UPC-A Add-On 2, UPC-A Add-On 5

UPC-E, UPC-E Add-On 2, UPC-E Add-On 5

GS1 DataBar Omnidirectional, GS1 DataBar Truncated, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Limited, GS1 DataBar Expanded, GS1 DataBar Expanded Stacked, GS1 - 128

MSI bar code

ECC200, PDF-417, QR

Micro QR

Aztec code

GS1 ECC200, GS1 QR code, GS1 Aztec code

Legible fonts

Industrial, Document

### Electrical data

Operating voltage [V]

24 DC  $\pm$  10 %

Current consumption [mA]

&lt; 300

Protection class

III

Reverse polarity protection

ja \*)

Connection external illumination [V]

24 DC PNP

Type of sensor

CMOS image sensor B/W, VGA resolution 640 x 480

### Inputs



## O2I350

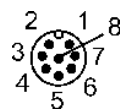
O2IROS-G/D/RS232/E1/E2

Identification systems

|                                   |                                                                                           |                                 |         |
|-----------------------------------|-------------------------------------------------------------------------------------------|---------------------------------|---------|
| Trigger                           | internal<br>external; 24 V PNP to IEC 61131-2 type 1<br>via RS-232, TCP/IP or EtherNet/IP |                                 |         |
| Outputs                           |                                                                                           |                                 |         |
| Output                            | max. 2 (configurable) / 24 V PNP                                                          |                                 |         |
| Max. current load per output [mA] | 100                                                                                       |                                 |         |
| Voltage drop [V]                  | < 2                                                                                       |                                 |         |
| Short-circuit protection          | yes                                                                                       |                                 |         |
| Overload protection               | yes                                                                                       |                                 |         |
| Range                             |                                                                                           |                                 |         |
| Operating distance [mm]           | 50                                                                                        | 100                             | 200     |
| Field of view size [mm]           | 16 x 12                                                                                   | 32 x 24                         | 64 x 48 |
| Omnidirectional reading           | yes                                                                                       |                                 |         |
| inclination to the image plane    | ≤ 45°                                                                                     |                                 |         |
| readings [Hz]                     | ≤ 20                                                                                      |                                 |         |
| Motion speed [m/s]                | ≤ 7                                                                                       |                                 |         |
| Software / programming            |                                                                                           |                                 |         |
| Parameter setting options         | via 2 pushbuttons and 10-segment display or via PC / notebook with operating software     |                                 |         |
| Interfaces                        |                                                                                           |                                 |         |
| parameter setting interface       | Ethernet TCP/UDP/IP; 10Base-T / 100Base-TX                                                |                                 |         |
| Process interface                 | Ethernet TCP/IP, EtherNet/IP, RS-232                                                      |                                 |         |
| IP address                        | 192.168.0.79                                                                              |                                 |         |
| subnet mask                       | 255.255.255.0 (Class C)                                                                   |                                 |         |
| gateway IP address                | 192.168.0.201                                                                             |                                 |         |
| MAC address                       | see type label                                                                            |                                 |         |
| Environment                       |                                                                                           |                                 |         |
| Ambient temperature [°C]          | -10...50                                                                                  |                                 |         |
| Storage temperature [°C]          | -40...85                                                                                  |                                 |         |
| Protection                        | IP 67                                                                                     |                                 |         |
| Tests / approvals                 |                                                                                           |                                 |         |
| EMC                               | radiation of interference<br>noise immunity                                               | to EN 61326<br>to EN 61326      |         |
| UL approval number                | T001                                                                                      |                                 |         |
| Shock resistance                  | IEC 60028-2-27:                                                                           |                                 |         |
| Vibration resistance              | IEC 60028-2-6:                                                                            |                                 |         |
| Mechanical data                   |                                                                                           |                                 |         |
| Housing materials                 | housing: diecast zinc powder-coated; window: glass; LED window: polycarbonate             |                                 |         |
| Weight [kg]                       | 0.385                                                                                     |                                 |         |
| Displays / operating elements     |                                                                                           |                                 |         |
| Display                           | Function display                                                                          | 3 x LED green<br>4 x LED yellow |         |
|                                   | Display unit / status                                                                     | 4-digit 10-segment display      |         |
| Electrical connection             |                                                                                           |                                 |         |
| Connection                        | M12 plug, 8 poles<br>M12 socket, 4 poles                                                  |                                 |         |
| Wiring                            |                                                                                           |                                 |         |

**O2I350**

O2IROS-G/D/RS232/E1/E2

**Identification systems**


RS-232: Process connection

- 1: U+
- 2: trigger input
- 3: 0 V
- 4: Switching output 1 (code evaluation) / Trigger output (with external illumination)
- 5: RxD RS-232
- 6: TxD RS-232
- 7: Switching output 2 (ready signal)
- 8: GND RS-232 (electrically separated up to 50 V)



Ethernet: parameter setting/process connection

- 1: TxD+
- 2: RxD+
- 3: TxD-
- 4: RxD-

**Other technical data**

|                     |                                                                                                            |
|---------------------|------------------------------------------------------------------------------------------------------------|
| Integrated lighting | red light (625 nm)<br>segmented in 4 areas<br>(can be activated individually via the PC operating program) |
| Laser marking       | red, laser protection class 2 to DIN EN 60825-1                                                            |

**Accessories**

|                        |                                             |
|------------------------|---------------------------------------------|
| Accessories (optional) | Operating software;<br>Mounting accessories |
|------------------------|---------------------------------------------|

**Remarks**

|                       |                                                                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remarks               | cULus - Class 2 source required<br>*) The voltage on pins 2, 4, 5, 6, 7 and 8 must not exceed the supply voltage on pin 1 (U+) (see operating instructions). |
| Pack quantity [piece] | 1                                                                                                                                                            |

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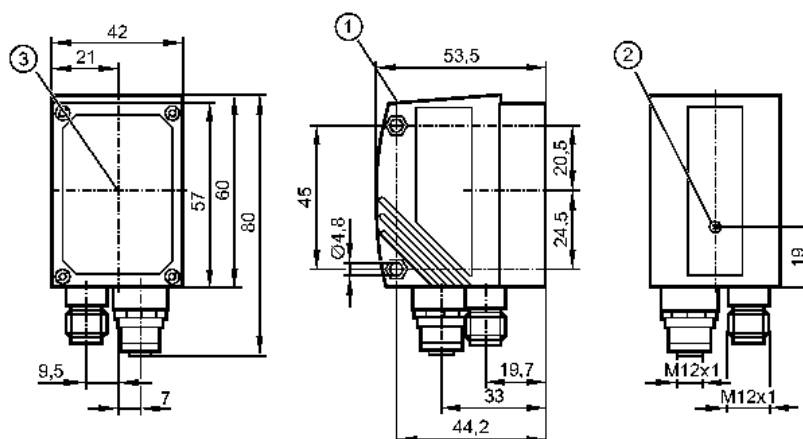
**Please note the wiring of the sensor and the sockets (see data sheet) as for 8-pole sockets the core colours are not standardised.**

**O2I350**

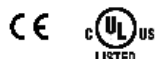
O2IROS-G/D/RS232/E1/E2

Systèmes d'identification

**Veuillez noter le branchement du capteur et du connecteur femelle (voir fiche technique) parce que pour des connecteurs femelles 8 pôles les couleurs des fils conducteurs ne sont pas standardisées.**



- 1: afficheur  
2: réglage de la focale  
3: milieu des axes optiques


**Caractéristiques du produit**

Lecteur multicode

Reconnaissance de texte

Taille max. du champ de vue : 64 x 48 mm

Evaluation de code intégrée et à configurer

Interfaces process Ethernet TCP/IP, EtherNet/IP, RS-232

Interfaces de paramétrage Ethernet TCP/IP; UDP/IP

Eclairage interne : lumière rouge (625 nm)

**Application**

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Codes lisibles      | Interleaved 2-of-5, Industrial 2-of-5, Code 39, Code 93, Code 128, Pharmacode, Codabar<br>EAN8, EAN8 Add-On 2, EAN8 Add-On 5<br>EAN13, EAN13 Add-On 2, EAN13 Add-On 5<br>UPC-A, UPC-A Add-On 2, UPC-A Add-On 5<br>UPC-E, UPC-E Add-On 2, UPC-E Add-On 5<br>GS1 DataBar Omnidirectional, GS1 DataBar Truncated, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Limited, GS1 DataBar Expanded, GS1 DataBar Expanded Stacked, GS1 - 128<br>Code barres MSI<br>ECC200, PDF-417, QR<br>Micro-QR<br>Code Aztec<br>GS1 ECC200, GS1 code QR, GS1 code Aztec |
| Caractères lisibles | Industrial, Document                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

**Données électriques**

|                                           |                                                             |
|-------------------------------------------|-------------------------------------------------------------|
| Tension d'alimentation [V]                | 24 DC $\pm$ 10 %                                            |
| Consommation [mA]                         | < 300                                                       |
| Classe de protection                      | III                                                         |
| Protection contre l'inversion de polarité | ja *)                                                       |
| Raccordement éclairage externe [V]        | 24 DC PNP                                                   |
| Type de capteur                           | Déecteur d'images CMOS noir/blanc, résolution VGA 640 x 480 |

## O2I350

O2IROS-G/D/RS232/E1/E2

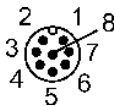
Systèmes d'identification

| Entrées                                   |  |                                                                                                      |                                                                                                         |
|-------------------------------------------|--|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Trigger                                   |  | interne<br>externe; 24 V PNP selon CEI 61131-2 type 1<br>via RS-232, TCP/IP ou EtherNet/IP           |                                                                                                         |
| Sorties                                   |  |                                                                                                      |                                                                                                         |
| Sortie                                    |  | max. 2 (à configurer) / 24 V PNP                                                                     |                                                                                                         |
| Courant max. par sortie [mA]              |  | 100                                                                                                  |                                                                                                         |
| Chute de tension [V]                      |  | < 2                                                                                                  |                                                                                                         |
| Protection courts-circuits                |  | oui                                                                                                  |                                                                                                         |
| Protection surcharges                     |  | oui                                                                                                  |                                                                                                         |
| Portée                                    |  |                                                                                                      |                                                                                                         |
| Portée de travail [mm]                    |  | 50                                                                                                   | 100200                                                                                                  |
| Taille du champ de vue [mm]               |  | 16 x 12                                                                                              | 32 x 2464 x 48                                                                                          |
| Lecture omnidirectionnelle                |  | oui                                                                                                  |                                                                                                         |
| Inclinaison par rapport au niveau d'image |  | ≤ 45°                                                                                                |                                                                                                         |
| Lectures [Hz]                             |  | ≤ 20                                                                                                 |                                                                                                         |
| Vitesse de passage [m/s]                  |  | ≤ 7                                                                                                  |                                                                                                         |
| Logiciel / programmation                  |  |                                                                                                      |                                                                                                         |
| Possibilités de paramétrage               |  | via 2 boutons et affichage à 10 segments ou via PC/PC portable avec programme utilisateur            |                                                                                                         |
| Interfaces                                |  |                                                                                                      |                                                                                                         |
| Interface de paramétrage                  |  | Ethernet TCP/UDP/IP; 10Base-T / 100Base-TX                                                           |                                                                                                         |
| Interface process                         |  | Ethernet TCP/IP, EtherNet/IP, RS-232                                                                 |                                                                                                         |
| Adresse IP                                |  | 192.168.0.79                                                                                         |                                                                                                         |
| Masque subnet                             |  | 255.255.255.0 (Class C)                                                                              |                                                                                                         |
| adresse IP passerelle                     |  | 192.168.0.201                                                                                        |                                                                                                         |
| adresse MAC                               |  | voir l'étiquette                                                                                     |                                                                                                         |
| Conditions d'utilisation                  |  |                                                                                                      |                                                                                                         |
| Température ambiante [°C]                 |  | -10...50                                                                                             |                                                                                                         |
| Température de stockage [°C]              |  | -40...85                                                                                             |                                                                                                         |
| Protection                                |  | IP 67                                                                                                |                                                                                                         |
| Tests / Homologations                     |  |                                                                                                      |                                                                                                         |
| CEM                                       |  | émission<br>immunité aux parasites                                                                   | selon EN 61326<br>selon EN 61326                                                                        |
| N° d'agrément UL                          |  | T001                                                                                                 |                                                                                                         |
| Tenue aux chocs                           |  | CEI 60028-2-27 :                                                                                     |                                                                                                         |
| Tenue aux vibrations                      |  | CEI 60028-2-6 :                                                                                      |                                                                                                         |
| Données mécaniques                        |  |                                                                                                      |                                                                                                         |
| Matières boîtier                          |  | boîtier: zamac surface protégée par pulvérisation; panneau avant : verre; fenêtre LED: polycarbonate |                                                                                                         |
| Poids [kg]                                |  | 0,385                                                                                                |                                                                                                         |
| Afficheurs / éléments de service          |  |                                                                                                      |                                                                                                         |
| Indication                                |  | Indication de fonction                                                                               | 3 x LED vert<br>4 x LED jaune<br>Unité d'affichage / indication d'état affichage à 10 segments 4 digits |
| Raccordement électrique                   |  |                                                                                                      |                                                                                                         |


**O2I350**

O2IROS-G/D/RS232/E1/E2

Systèmes d'identification

|                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Raccordement                                                                                                                                                                                     | M12 connecteur mâle, 8 pôles<br>M12 connecteur femelle, 4 pôles                                                                                                                                                                                                                                                                                                                                      |
| <b>Branchement</b><br><br><br> | RS-232: Raccord process<br>1: U+<br>2: entrée trigger<br>3: 0 V<br>4: Sortie de commutation 1 (évaluation de code) / Sortie trigger (en cas d'éclairage externe)<br>5: RxD RS-232<br>6: TxD RS-232<br>7: Sortie de commutation 2 (signal "Ready")<br>8: GND RS-232 (séparé galvaniquement jusqu'à 50 V)<br><br>Ethernet: connexion paramétrage / process<br>1: TxD+<br>2: RxD+<br>3: TxD-<br>4: RxD- |

**Autres données techniques**

|                   |                                                                                                                       |
|-------------------|-----------------------------------------------------------------------------------------------------------------------|
| Eclairage interne | lumière rouge (625 nm)<br>segmenté en 4 plages<br>(à commander individuellement via le programme utilisateur pour PC) |
| Marquage laser    | rouge, classe de protection laser 2 selon DIN EN 60825-1                                                              |

**Accessoires**

|                      |                                                          |
|----------------------|----------------------------------------------------------|
| Accessoires (option) | programme utilisateur pour PC;<br>Accessoires de montage |
|----------------------|----------------------------------------------------------|

**Remarques**

|           |                                                                                                                                                                                                     |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remarques | Tension d'alimentation "supply class 2" selon cULus<br>*) La tension sur les broches 2, 4, 5, 6, 7 et 8 ne doit pas dépasser la tension d'alimentation sur pin 1 (U +) (voir notice d'utilisation). |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|          |         |   |
|----------|---------|---|
| Quantité | [pièce] | 1 |
|----------|---------|---|

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**Veuillez noter le branchement du capteur et du connecteur femelle (voir fiche technique) parce que pour des connecteurs femelles 8 pôles les couleurs des fils conducteurs ne sont pas standardisées.**