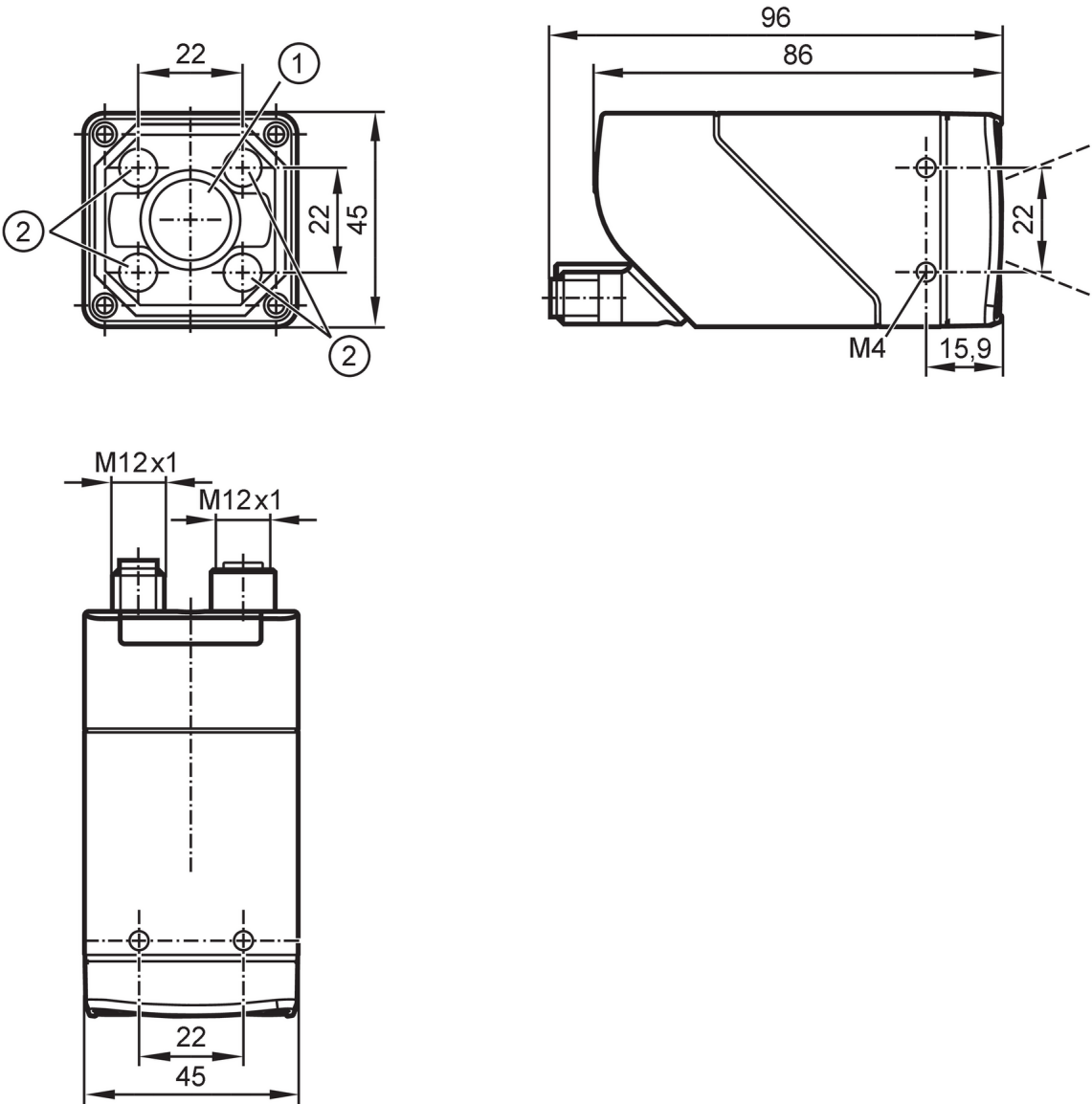


O2D520



Object recognition sensor

O2DIRDKG/E1/E2/EF/GM/TB/S/16



- 1 lens
- 2 Illumination unit



Product characteristics		
Type of light		Infrared light
Image resolution	[px]	1280 x 960
Max. reading rate	[Hz]	40
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 300; (24V DC typical)
Max. current consumption	[mA]	950; (18V DC, with switched outputs, memory stick active)
Protection class		III
Reverse polarity protection		yes
Overvoltage category		II
Type of light		Infrared light

O2D520



Object recognition sensor

O2DIRDKG/E1/E2/EF/GM/TB/S/16

Wave length	[nm]	850			
Image sensor		CMOS image sensor black/white			
Inputs / outputs					
Number of inputs and outputs		Number of digital inputs: 3; Number of digital outputs: 5			
Inputs					
Trigger		external; 24 V PNP/NPN (IEC 61131-2 Typ 3); TCP/IP; EtherNet/IP; internal			
Number of digital inputs		3			
Input circuit of digital inputs		24 V PNP/NPN; (type 3 (IEC 61131-2))			
Outputs					
Electrical design		PNP/NPN; (configurable)			
Number of digital outputs		5; (configurable)			
Output function		configurable			
Max. voltage drop switching output DC	[V]	1			
Max. current load per output	[mA]	100			
Short-circuit protection		yes			
Type of short-circuit protection		yes (non-latching)			
Overload protection		yes			
Monitoring range					
Field of view size	[mm]	Operating distance	Field of view		
		85	28 x 21		
		300	92 x 69		
		500	152 x 114		
		1000	302 x 227		
		1500	453 x 340		
		2000	603 x 452		
		2500	753 x 564		
Operating distance	[mm]	> 85			
Image resolution	[px]	1280 x 960			
Lens type		standard			
Bewegungsgeschwindigkeit	[m/s]	7			
Max. reading rate	[Hz]	40			
Software / programming					
Parameter setting options		via PC with ifm Vision Assistant			
Interfaces					
Communication interface		Ethernet			
Ethernet					
Number of Ethernet interfaces		1			
Transmission standard		10Base-T; 100Base-TX			
Transmission rate		10 MBit/s; 100 MBit/s			
Protocol		TCP/IP; EtherNet/IP			

O2D520



Object recognition sensor

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Factory settings	IP address: 192.168.0.69
	subnet mask: 255.255.255.0 (Class C)
	gateway IP address: 192.168.0.201
	MAC address: see type label
Usage type	Parameter setting; Data transmission

Operating conditions		
Ambient temperature	[°C]	-10...50
Storage temperature	[°C]	-40...70
Max. relative air humidity	[%]	90; (non condensing)
Max. height above sea level	[m]	4000
Protection		IP 65
Pollution degree		3

Tests / approvals		
EMC	EN IEC 61000-6-4 radiation of interference	industrial environments
	EN IEC 61000-6-2 noise immunity	industrial environments
Shock resistance	EN 60068-2-27	50 g 11 ms / not repetitive
	EN 60068-2-27	40 g 6 ms / repetitive
Vibration resistance	EN 60068-2-6	2 g (10 ... 150 Hz)
Photobiological safety		exempt group; (EN 62471)
Electrical safety	EN IEC 61010-2-201	electrical supply only via PELV circuits
MTTF	[years]	54
UL approval	Ta	-10...50 °C
	Enclosure type	1
	voltage supply	Limited Energy
	File number UL	E364788

Mechanical data		
Weight	[g]	588.2
Type of mounting		screw mounting; (bore hole M4 x 7mm)
Dimensions	[mm]	45 x 45 x 86
Material		housing: diecast zinc powder-coated; front lens: gorilla glass; LED window: PC; pushbuttons: POM
Sealing material		FKM
Tightening torque	[Nm]	2.1

Displays / operating elements		
Display	Function	2 x LED, green
	Function	2 x LED, yellow
	Multi-function button	2 x LED, green/yellow
Operating elements	1	Multi-function button

Accessories		
Accessories (optional)		Mounting accessories
		Protective panes

Remarks		
Pack quantity		1 pcs.

O2D520



Object recognition sensor

O2DIRDKG/E1/E2/EF/GM/TB/S/16

Electrical connection - Ethernet

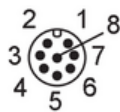
Connector: 1 x M12; coding: D; Contacts: 4; Moulded body: stainless steel; sealing: FKM



1	TxD+
2	RxD+
3	TxD-
4	RxD-
	shield connected

Electrical connection - supply

Connector: 1 x M12; coding: A; Contacts: 8; Moulded body: stainless steel



1	24 V DC
2	trigger input
3	GND
4	Switching output OUT5
5	Switching output OUT3 Ready
6	Switching output OUT4
7	Switching output OUT1 / IN1
8	Switching output OUT2 / IN2