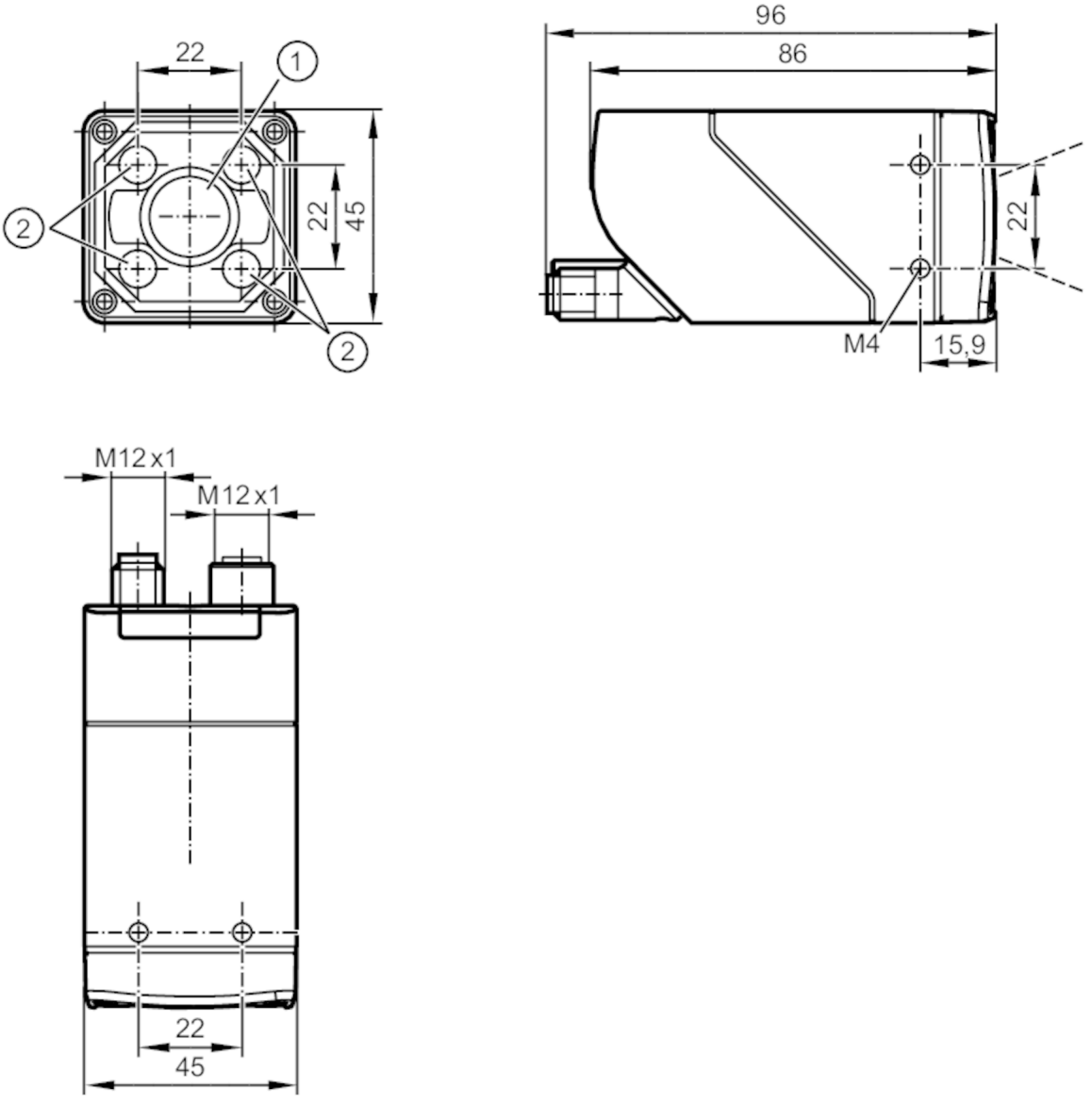
O2D500

Object recognition sensor

O2DCRDKG/E1/E2/EF/GM/TB/S/16



1 lens
2 Illumination unit

Product characteristics		
Type of light		RGBW
Image resolution	[px]	1280 x 960
Max. reading rate	[Hz]	40
Application		
Special feature		polarisation filter
Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 400; (24V DC; with switched outputs: < 900 mA)
Protection class		III
Reverse polarity protection		yes

O2D500

Object recognition sensor

O2DCRDKG/E1/E2/EF/GM/TB/S/16

Type of light		RGBW
Wave length	[nm]	625; 525; 453
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; (parameterisable)
Number of digital outputs		5; (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		pulsed
Overload protection		yes
Detection zone		
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
Polarisation filter available		yes
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

O2D500

Object recognition sensor

O2DCRDKG/E1/E2/EF/GM/TB/S/16

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		2	
Tests / approvals			
EMC		EN IEC 61000-6-4 radiation of interference	industrial environments
		EN IEC 61000-6-2 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		risk group 1; (EN 62471)	
Electrical protection		EN IEC 61010-2-201	electrical supply only via PELV circuits
Mechanical data			
Weight	[g]	620.1	
Type of mounting		screw mounting; (bore hole M4 x 7mm)	
Dimensions	[mm]	45 x 45 x 86	
Materials		housing: diecast zinc powder-coated; front pane: Gorillaglas; LED window: PC; pushbutton: 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.	

O2D500

Object recognition sensor

O2DCRDKG/E1/E2/EF/GM/TB/S/16

Electrical connection - Ethernet

Connector: 1 x M12; coding: D; Moulded body: stainless steel; Sealing: FKM

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

Electrical connection - supply

Connector: 1 x M12; coding: A; 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