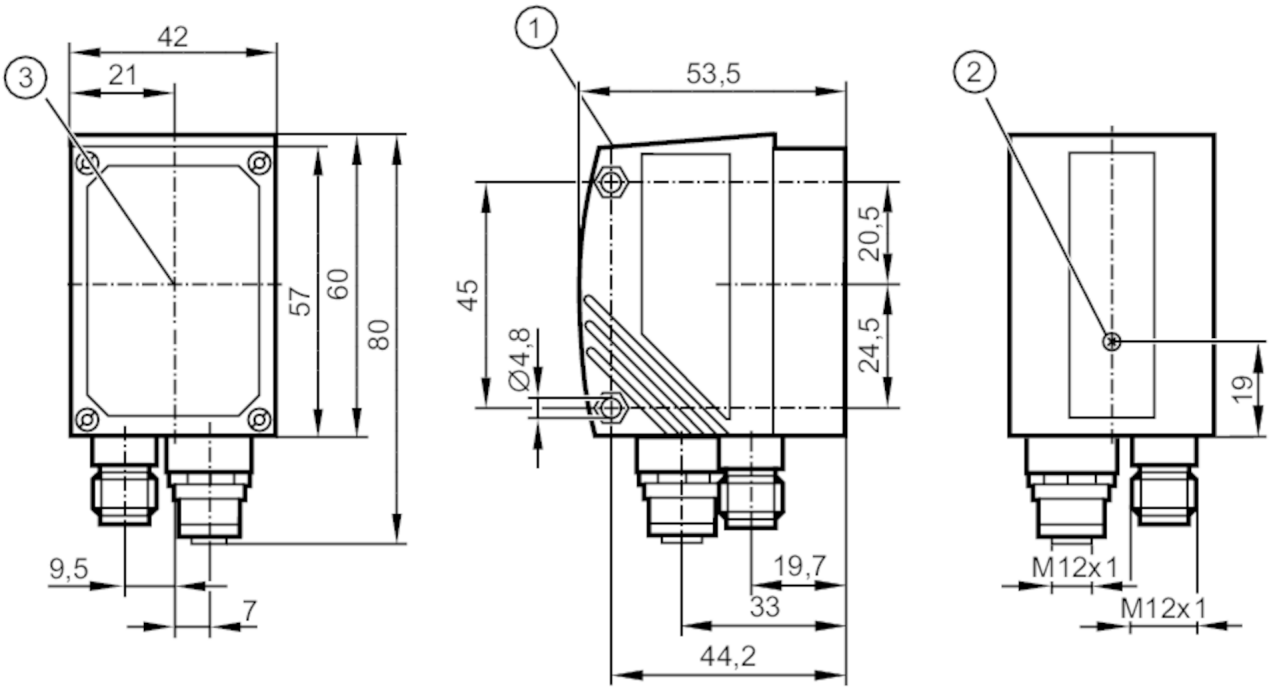
O2D220

Object recognition sensor

O2DIRPKG/K

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



1 Display
2 focus adjustment screw
3 centre of the lens axes

Product characteristics		
Type of light		infrared light
Image resolution	[px]	640 x 480
Max. reading rate	[Hz]	20
Electrical data		
Operating voltage tolerance	[%]	10
Operating voltage	[V]	24 DC
Current consumption	[mA]	300
Protection class		III
Reverse polarity protection		yes
Type of light		infrared light
Wave length	[nm]	850
Image sensor		CMOS image sensor black/white
Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 2; Number of digital outputs: 5
Inputs		
Trigger		24 V PNP (IEC 61131-2 Typ 1); internal
Number of digital inputs		2

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Input circuit of digital inputs		24 V PNP; (configurable; IEC 61131-2 Typ 1)			
Outputs					
Total number of outputs		5			
Number of digital outputs		5; (configurable)			
Output function		24 V PNP			
Max. voltage drop switching output DC	[V]	2			
Max. current load per output	[mA]	100			
Short-circuit protection		yes			
Overload protection		yes			
Detection zone					
Field of view size	[mm]	Operating distance	field of view	Smallest detectable object	Resolution
		50	16 x 12	0,1	0,025
		75	24 x 18	0,2	0,05
		100	32 x 24	0,3	0,075
		200	64 x 48	0,4	0,1
		400	128 x 96	0,8	0,2
		1000	320 x 240	2,0	0,5
		2000	640 x 480	4,0	1,0
Image resolution	[px]	640 x 480			
Lens type		standard			
Max. reading rate	[Hz]	20			
Software / programming					
Parameter setting options		via two pushbuttons and 10-segment display or via PC / notebook with operating software			
Interfaces					
Communication interface		Ethernet			
Ethernet					
Number of Ethernet interfaces		1			
Transmission standard		10Base-T; 100Base-TX			
Transmission rate		10; 100			
Protocol		TCP/IP; EtherNet/IP			
Factory settings		IP address: 192.168.0.49			
		subnet mask: 255.255.255.0			
		gateway IP address: 192.168.0.201			
		MAC address: see type label			
Operating conditions					
Ambient temperature	[°C]	-10...60			
Storage temperature	[°C]	-40...85			
Protection		IP 67			
Tests / approvals					
EMC		radiation of interference		EN 61326	
		immunity		EN 61326	
Shock resistance		IEC 60028-2-27			
Vibration resistance		IEC 60028-2-6			

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MTTF	[years]	90

Mechanical data

Weight	[g]	442.5
Dimensions	[mm]	60 x 42 x 53.5
Materials		housing: diecast zinc powder-coated; front pane: glass; LED window: PC

Displays / operating elements

Display	function	3 x LED, green
	switching status	4 x LED, yellow
		10-segment display, 4-digit

Accessories

Accessories (optional)	Operating software
	Mounting accessories

Remarks

Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.

Electrical connection - Ethernet

Connector: 1 x M12; coding: D

1	TD+
2	RD+
3	TD-
4	RD-

Electrical connection - Process connection

Connector: 1 x M12; coding: A

1	U+
2	trigger input
3	0 V
4	switching output 5 / trigger output
5	switching output 3 / Ready
6	switching output 4 / OUT
7	switching output 1 / input 1
8	switching output 2 / input 2