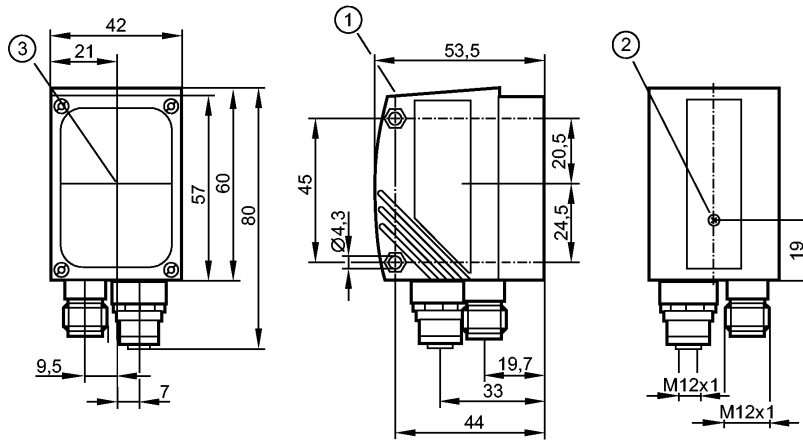


**O2V101**

O2VWRNKG/ON/GM/E1/E2/S

Object recognition

**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 setting
- 3: Centre of the lens axes

Made in Germany



**Product characteristics**

Object inspection sensor

Max. field of view size: 640 x 480 mm

Illumination: white light

**Electrical data**

Operating voltage [V]	24 DC ± 10 %
Current consumption [mA]	< 300
Type of light	White light
Protection class	III
Reverse polarity protection	yes
Connection external illumination [V]	24 V DC
Type of sensor	CMOS image sensor B/W, VGA resolution 640 x 480

**Inputs**

Circuit	max. 2 (configurable) / 24 V NPN to IEC 61131-2 type 2
Trigger	external; 24 V NPN to IEC61131-2 type 2 internal

**Outputs**

Output	max. 5 (configurable) / 24 V NPN
Max. current load per output [mA]	100
Voltage drop [V]	< 2
Short-circuit protection	yes
Overload protection	yes

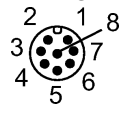
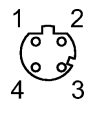
**Range**

Operating distance [mm]	50, 75, 100, 200, 400, 1000, 2000							
Field of view size [mm]	16 x 12	24 x 18	32 x 24	64 x 48	128 x 96	320 x 240	640 x 480	
Resolution [mm]	0.1	0.2	0.3	0.4	0.8	2.0	4.0	
Detection rate [Hz]	≤ 20							
Motion speed [m/s]	typ. 1							

**O2V101**

O2VWRNKG/ON/GM/E1/E2/S

**Object recognition**

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/IP; 10Base-T / 100Base-TX
Process interface	Ethernet TCP/IP (Port: 50010), EtherNet/IP
IP address	192 .168 .0 .59
subnet mask	255.255.255.0 (Class C)
gateway IP address	192 .168 .000 .201
MAC address	see type label
Environment	
Ambient temperature [°C]	-10...60
Storage temperature [°C]	-40...85
Protection	IP 67
Tests / approvals	
EMC	radiation of interference to EN 61326 noise immunity to EN 61326
Shock resistance	EN 60947-5-2, 7.4.1 IEC 60068-2-27
Vibration resistance	EN 60947-5-2, 7.4.2 IEC 60028-2-6:
Mechanical data	
Housing materials	housing: diecast zinc powder-coated; window: glass; LED window: polycarbonate
Weight [kg]	0.395
Displays / operating elements	
Display	Function display 3 x LED green 4 x LED yellow Display unit / status 4-digit 10-segment display
Electrical connection	
Connection	M12 plug, 8 poles M12 socket, 4 poles
<p><b>Wiring</b></p>   	<p>M12: Process connection</p> <ul style="list-style-type: none"> <li>1: U+</li> <li>2: trigger input</li> <li>3: 0 V</li> <li>4: Switching output 5 / trigger output</li> <li>5: Switching output 3 / Ready</li> <li>6: Switching output 4 / OUT</li> <li>7: Switching output 1 / Input 1</li> <li>8: Switching output 2 / Input 2</li> </ul> <p>Ethernet: parameter setting/process connection</p> <ul style="list-style-type: none"> <li>1: TD+</li> <li>2: RD+</li> <li>3: TD-</li> <li>4: RD-</li> </ul>
Accessories	
Accessories (optional)	Operating software; Mounting accessories
Remarks	



## O2V101

O2VWRNKG/ON/GM/E1/E2/S

Object recognition

Remarks	cULus - Class 2 source required
Pack quantity [piece]	1

ifm electronic gmbh • Friedrichstraße 1 • 45128 Essen — We reserve the right to make technical alterations without prior notice. — GB — O2V101 — 15.12.2010

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