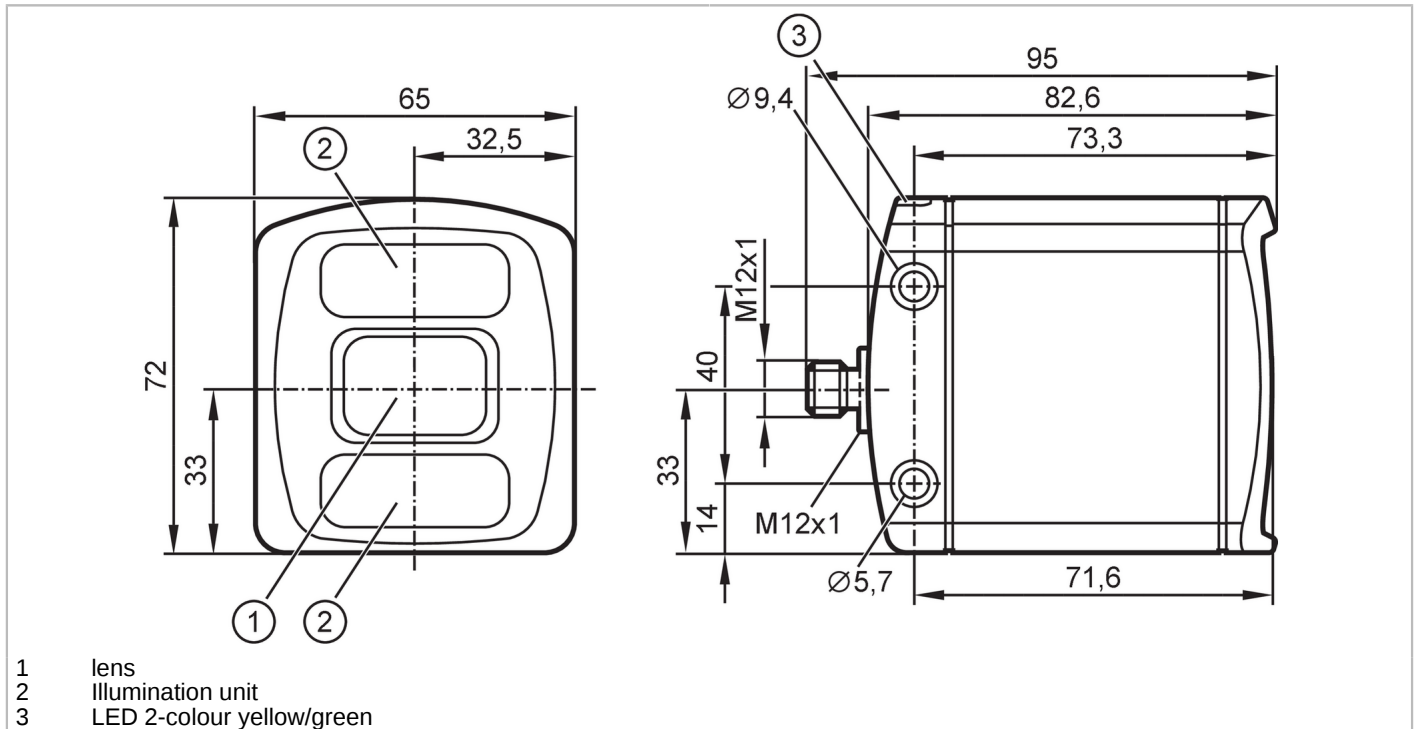


O3D302



3D sensor

O3DIRDKG/E1/GM/S/60



- 1 lens
- 2 illumination unit
- 3 LED 2-colour yellow/green



Product characteristics	
Image resolution 3D	[px] 176 x 132
Angle of aperture 3D	[°] 60 x 45; (nominal value without lens distortion correction)
Max. reading rate	[Hz] 25
Housing	rectangular
Application	
Application	dimensioning of the object; completeness monitoring; Level monitoring; distance monitoring; volume monitoring
Electrical data	
Operating voltage	[V] 20.4...28.8 DC; (EN 61131-2)
Current consumption	[mA] < 2400; (peak current pulsed; typical value: 420; maximum value: 1600)
Power consumption	[W] 10; (typical value)
Protection class	III
Image sensor	PMD 3D ToF-Chip
Internal lighting	yes; (infrared: 850 nm invisible radiation LED)
Inputs / outputs	
Number of inputs and outputs	Number of digital inputs: 2; Number of digital outputs: 3; Number of analogue outputs: 1
Inputs	
Trigger	24 V PNP/NPN (IEC 61131-2 Typ 3)
Number of digital inputs	2
Input circuit of digital inputs	24 V PNP/NPN; (configurable; IEC 61131-2 Typ 3)
Outputs	
Total number of outputs	3

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Number of digital outputs		3; (configurable)
Output function		24 V PNP/NPN; (EN 61131-2)
Max. voltage drop switching output DC	[V]	1
Max. current load per output	[mA]	100
Number of analogue outputs		1
Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Analogue voltage output	[V]	0...10
Min. load resistance	[Ω]	10000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Detection zone

Operating distance	[mm]	300...8000
Note on operating distance		object size: 200 x 200 mm reflectivity: 18 %
Image resolution 3D	[px]	176 x 132
Angle of aperture 3D	[°]	60 x 45; (nominal value without lens distortion correction)
Max. reading rate	[Hz]	25

Measuring/setting range

Measuring range	[m]	< 30
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Software / programming

Parameter setting options		via PC with ifm Vision Assistant
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Interfaces

Communication interface		Ethernet
Ethernet		
Number of Ethernet interfaces		1
Transmission standard		10Base-T; 100Base-TX
Transmission rate		10; 100
Protocol		TCP/IP; PROFINET IO; EtherNet/IP
Factory settings		IP address: 192.168.0.69 subnet mask: 255.255.255.0 gateway IP address: 192.168.0.201

Operating conditions

Ambient temperature	[°C]	-10...50
Storage temperature	[°C]	-40...85
Protection		IP 65; IP 67
Max. immunity to extraneous light	[klx]	8; (with reduced measuring accuracy and repeatability: < 100)

Tests / approvals

EMC	DIN EN 61000-6-4	radiation of interference / industrial environments
	DIN EN 61000-6-2	immunity / industrial environments

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Shock resistance	DIN EN 60068-2-27	50 g / (11 ms) not repetitive
	DIN EN 60068-2-27	40 g / (6 ms) repetitive
Vibration resistance	DIN EN 60068-2-6	2 g / (10...150 Hz)
	DIN EN 60068-2-64	2.3 g RMS / (10...500 Hz)
Photobiological safety	exempt group; (DIN EN 62471)	
Electrical safety	DIN EN 61010-2-201	electrical supply only via PELV circuits
MTTF [years]	43.08	

Mechanical data

Weight [g]	772.35	
Housing	rectangular	
Dimensions [mm]	72 x 65 x 82.6	
Materials	housing: diecast aluminium; front pane: gorilla glass; function display: PA	

Displays / operating elements

Display	function	2 x LED, green Ethernet operation
	switching status	2 x LED, yellow OUT 1 OUT 2

Accessories

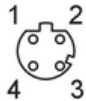
Items supplied	Protective covers
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Remarks

Pack quantity	1 pcs.
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Electrical connection - Ethernet

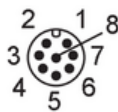
Connector: 1 x M12; coding: D; Contacts: 4



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

Electrical connection - Process connection

Connector: 1 x M12; coding: A; Contacts: 8



1	U+
2	trigger input
3	GND
4	switching output 1 (digital or analogue)
5	switching output 3 Ready
6	switching output 2 (digital)
7	switching input 1
8	switching input 2

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Other data

field of view size with lens distortion correction

measuring range / distance [m]	Length [m]	Width [m]
0.50	0.37	0.50
1.00	0.75	1.00
2.00	1.50	2.00
3.00	2.25	3.00
4.00	3.00	4.00
5.00	3.75	5.00