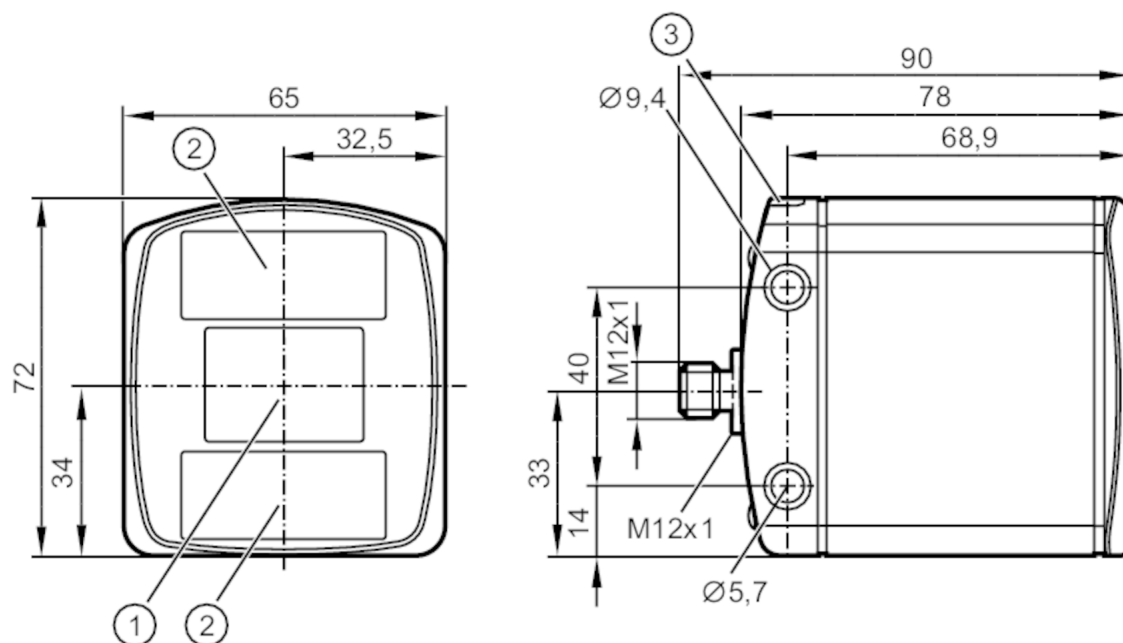


3D sensor

O3DIRDKG/E1/GM/W/70



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

Product characteristics

Image resolution 3D	[px]	176 x 132
Angle of aperture 3D	[°]	70 x 51; (nominal value without lens distortion correction)
Max. reading rate	[Hz]	25

Application

Application	Dimensioning of the object; Completeness monitoring; Level monitoring; distance monitoring; volume monitoring
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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; (PELV)
Image sensor		PMD 3D ToF-Chip
Integrated 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 analog outputs: 1
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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
Number of digital outputs	3; (configurable)



3D sensor

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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 analog outputs	1	
Analog current output [mA]	4...20	
Max. load [Ω]	500	
Analog voltage output [V]	0...10	
Min. load resistance [Ω]	10000	
Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	
Monitoring range		
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 [°]	70 x 51; (nominal value without lens distortion correction)	
Max. reading rate [Hz]	25	
Measuring/setting range		
Measuring range [m]	< 30	
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; 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; IP 69K	
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	noise immunity / industrial environments

O3D314



3D sensor

O3DIRDKG/E1/GM/W/70

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

Mechanical data

Weight	[g]	1137.5
Dimensions	[mm]	72 x 67.1 x 82.6
Material	housing: stainless steel (1.4404 / 316L); front lens: Gorilla Glass; Function display: PA	

Displays / operating elements

Display	Function	2 x LED, green Ethernet Power
	Switching status	2 x LED, yellow OUT 1 OUT 2

Accessories

Items supplied	USB memory stick with software and documentation	
	Protective covers	

Remarks

Pack quantity	1 pcs.
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Electrical connection - Ethernet

Connector: 1 x M12; coding: D



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

O3D314

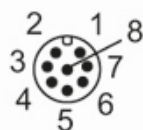


3D sensor

O3DIRDKG/E1/GM/W/70

Electrical connection - Process connection

Connector: 1 x M12; coding: A



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

Other data

Field of view size with lens distortion correction

Measuring range / distance [m]	Length [m]	Width [m]
0.50	0.40	0.55
1.00	0.80	1.10
2.00	1.60	2.20
3.00	2.40	3.30
4.00	3.20	4.40
5.00	4.00	5.50