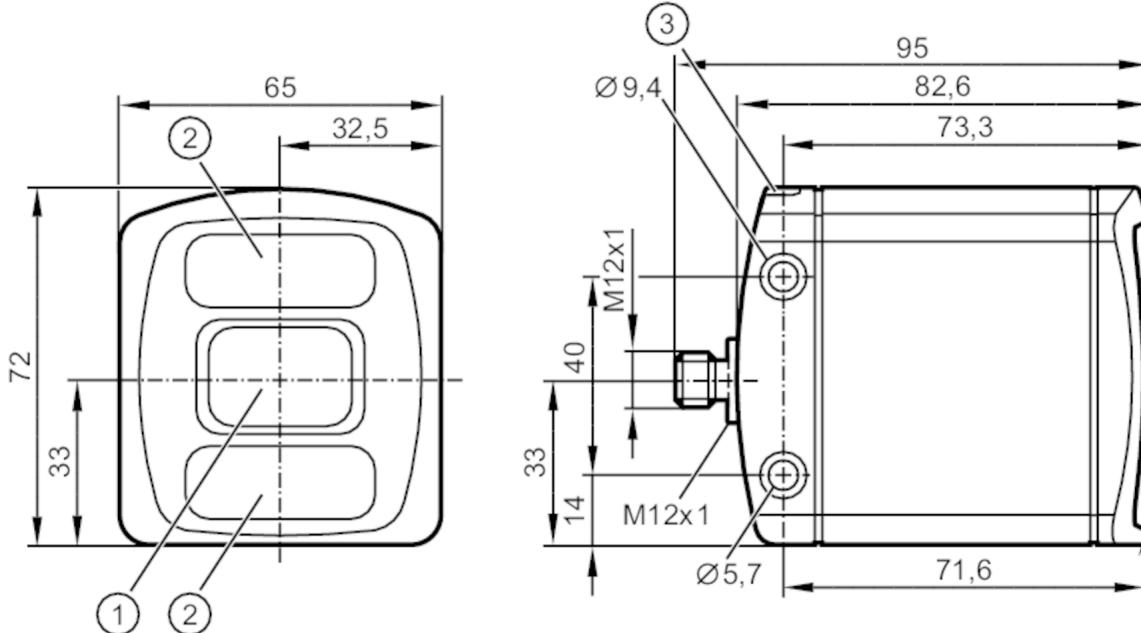


# O3D304



## 3D sensor

O3DIRDKG/E1/GM/W/70



- 1 lens
- 2 Illumination unit
- 3 LED 2-colour 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
-------------	---

## 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)

# O3D304

## 3D sensor

O3DIRDKG/E1/GM/W/70



Outputs		
Total number of outputs		3
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 [°]		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
Max. immunity to extraneous light [klx]		8; (with reduced measuring accuracy and repeatability: < 100)

# O3D304



## 3D sensor

O3DIRDKG/E1/GM/WI/70

Tests / approvals		
EMC	DIN EN 61000-6-4	radiation of interference / industrial environments
	DIN EN 61000-6-2	immunity / industrial environments
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 protection	DIN EN 61010-2-201	electrical supply only via PELV circuits
Mechanical data		
Weight [g]		773.8
Dimensions [mm]		72 x 67.1 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	
Remarks		
Pack quantity	1 pcs.	
Electrical connection - Ethernet		
Connector: 1 x M12; coding: D		
		
1	TD +	
2	RD +	
3	TD -	
4	RD -	

# O3D304

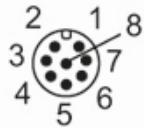


## 3D sensor

O3DIRDKG/E1/GM/WI/70

### Electrical connection - Process connection

Connector: 1 x M12; coding: A



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

### 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