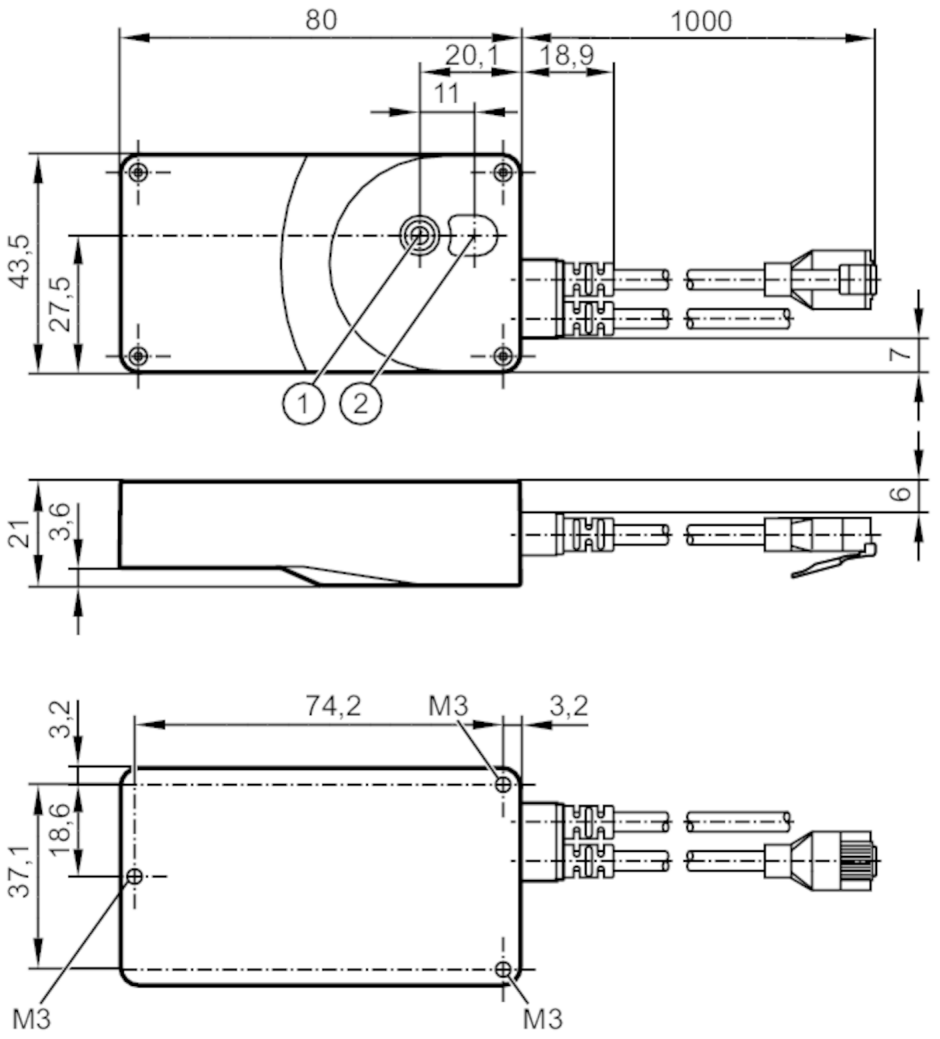
O3X100

3D camera

O3XIOOKG/E1/GM/S/60

Article to be discontinued

Alternative articles: O3X120
When selecting an alternative article and accessories please note that technical data may differ!



1 lens
2 Illumination unit

Product characteristics		
Type of light		Infrared light
Image resolution 3D	[px]	224 x 172
Angle of aperture 3D	[°]	60 x 45
Max. reading rate	[Hz]	20
Application		
Application		output of 3D image data

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Electrical data		
Operating voltage	[V]	20.4...28.8 DC; (EN 61131-2)
Current consumption	[mA]	< 500; (peak current pulsed; typical value: 160)
Power consumption	[W]	3.7
Protection class		III
Type of light		Infrared light
Wave length	[nm]	850
Image sensor		PMD 3D ToF-Chip
Integrated lighting		yes; (infrared: 850 nm invisible radiation LED)
Monitoring range		
Operating distance	[mm]	50...3000
Note on operating distance		object size: 200 x 200 mm reflectivity: 18 %
Image resolution 3D	[px]	224 x 172
Angle of aperture 3D	[°]	60 x 45
Max. reading rate	[Hz]	20
Measuring/setting range		
Measuring range	[m]	< 30; (depending on settings, object size, and reflectivity)
Software / programming		
Parameter setting options		via PC with ifm Vision Assistant or XML-RPC
Interfaces		
Communication interface		Ethernet
Usage type		Parameter setting; Data transmission
Ethernet		
Number of Ethernet interfaces		1
Transmission standard		10Base-T; 100Base-TX
Transmission rate		10; 100
Protocol		TCP/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...40
Note on ambient temperature		Housing: < 45° C see operating instructions
Storage temperature	[°C]	-40...85
Protection		IP 50
Max. immunity to extraneous light	[klx]	8
Tests / approvals		
EMC	DIN EN 61000-6-3	radiation of interference / residential, commercial and light-industrial environments
	DIN EN 61000-6-2	noise 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)
Laser protection class		1	
Notes on laser protection		Caution:	Laser light
		laser class:	1
		IEC 60825-1:2014	
Electrical safety		DIN EN 61010-2-201	electrical supply only via PELV circuits
MTTF	[years]	66	

Mechanical data

Weight	[g]	267.5
Dimensions	[mm]	80 x 43.5 x 21
Material		housing: diecast zinc; front lens: PMMA

Remarks

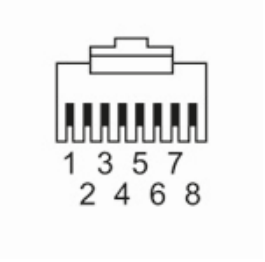
Pack quantity	1 pcs.

Electrical connection

Cable: 1 m, PVC

Connector: 1 x RJ45

Electrical connection - RJ45

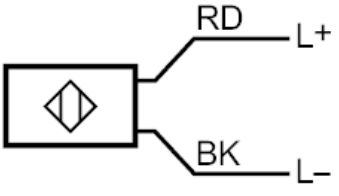


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Connection



	Core colors :
BK =	black
RD =	red

RJ45	Ethernet
1	TD +
2	TD -
3	RD +
6	RD -

Other data

Field of view size

	without lens distortion correction		
Measuring range / distance [m]	Length [m]	Width [m]	
0.50	0.60	0.40	
1.00	1.10	0.80	
1.50	1.70	1.30	
2.00	2.30	1.70	
2.50	2.80	2.10	
3.00	3.40	2.50	

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Repeatability

Measuring range / distance [m]	Exposure time [µs]	Repeatability	Accuracy [mm]
		Measured distance values (1 Sigma) on grey objects	
		reflectivity 18 % [mm]	
0.1...0.25	200	± 5	± 5
0.25...0.5	400	± 5	± 5
0.5...1	1000	± 7	± 10
1...2	2000	± 15	± 20
2...3	2000	± 60	± 40

Repeatability	
based on	distance measurement of an individual pixel
Measured at	center of image with median filter
Ambient temperature	20° C

Temperature drift

-10...+40° C [mm/K]
0.2

Relative accuracy

typical
± 4
measured at a reflectivity of 18% to 90%