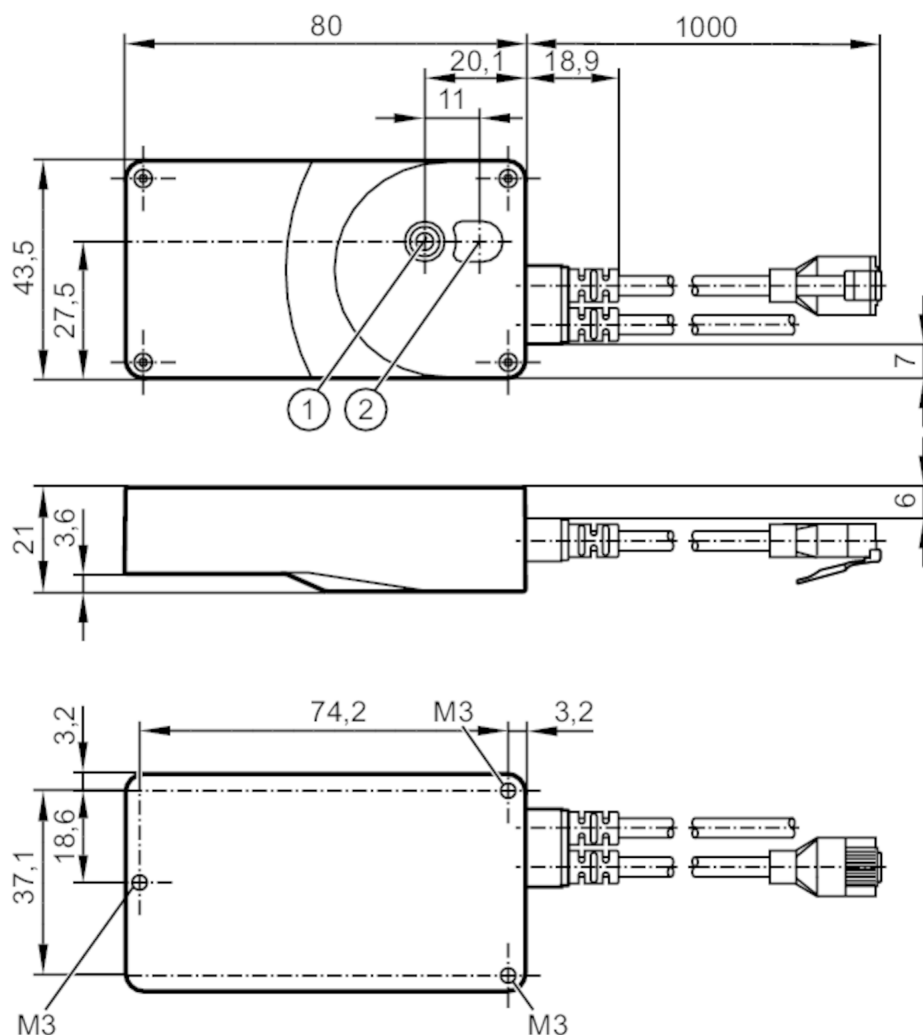


O3X100

3D camera

O3X100KG/E1/GM/S/60



- 1 lens
- 2 illumination unit



Application

Application output of 3D image data

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
Internal lighting		yes

O3X100



3D camera

O3XI00KG/E1/GM/S/60

Detection zone									
Operating distance		[mm]		50...3000					
Note on operating distance		object size: 200 x 200 mm							
		reflectivity: 18 %							
Image resolution		[pixels]		224 x 172					
Angle of aperture		60 x 45; (horizontal x vertical)							
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			
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 protection		DIN EN 61010-2-201				electrical supply only via			

O3X100



3D camera

O3XI00KG/E1/GM/S/60

					PELV circuits			
--	--	--	--	--	------------------	--	--	--

Mechanical data

Weight	[g]	266.5
Dimensions	[mm]	80 x 43.5 x 21
Materials	housing: diecast zinc; front lens: PMMA	
Sensorart	PMD 3D ToF-Chip	

Remarks

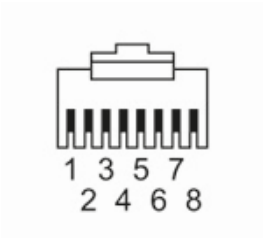
Pack quantity	1 pcs.
---------------	--------

Electrical connection

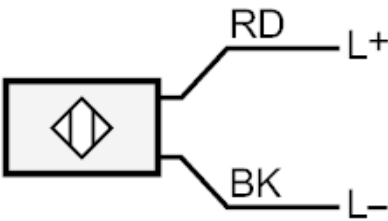
Cable: 1 m, PVC

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

Connector: 1 x RJ45



Connection



	Core colours :
BK =	black
RD =	red

O3X100



3D camera

O3XI00KG/E1/GM/S/60

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		

Repeatability

measuring range / distance [m]	Exposure time	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

referred to

distance measurement of an individual pixel

Measured at

centre of image with median filter

Ambient temperature

20° C

Temperature drift

-10...+40° C [mm/K]

0.2

Relative accuracy

typical

± 4

Measured at

reflectivity 18...90 %