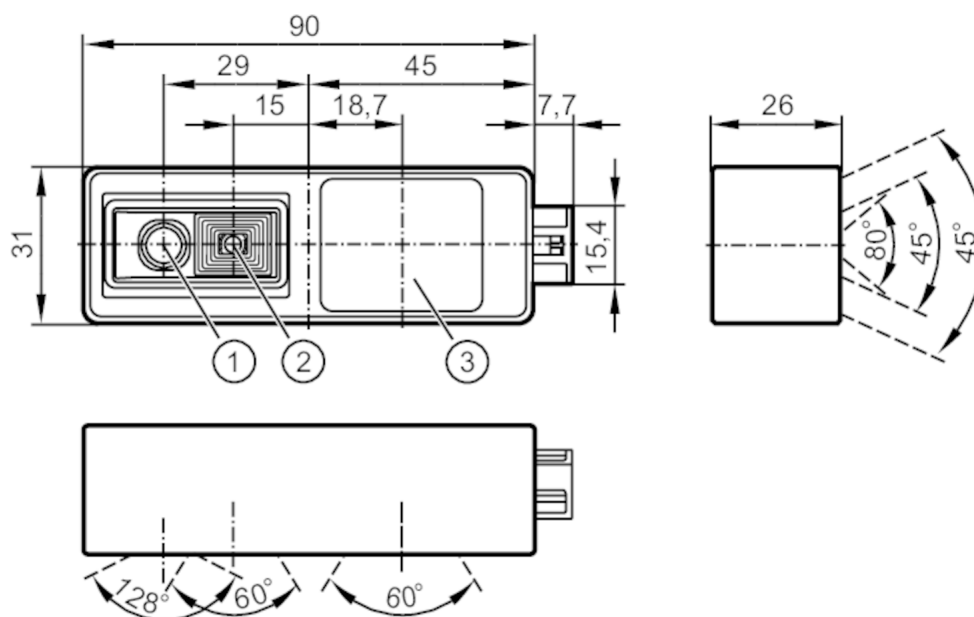




## 3D camera

O3RI00KG/2D3D/ZN/O/S/60



- 1 2D camera
- 2 3D sensor
- 3 Illumination unit



## Product characteristics

Image resolution	[px]	1280 x 800
Image resolution 3D	[px]	224 x 172
Angle of aperture	[°]	128 x 80
Angle of aperture 3D	[°]	60 x 45
Image repetition frequency	[Hz]	20
Image repetition frequency 3D	[Hz]	20

## Electrical data

Operating voltage	[V]	19.2...28.8 DC
Max. current consumption	[mA]	800
Power consumption	[W]	8.6; ((FPS x 0,32) + 2,2; FPS = Framerate Head)
Image sensor		PMD 3D ToF-Chip / 2D Chip
Internal lighting		yes; (infrared: 940 nm invisible radiation)

## Detection zone

Image resolution	[px]	1280 x 800
Image resolution 3D	[px]	224 x 172
Angle of aperture	[°]	128 x 80
Angle of aperture 3D	[°]	60 x 45
Image repetition frequency	[Hz]	20
Image repetition frequency 3D	[Hz]	20



## 3D camera

O3R100KG/2D3D/ZN/O/S/60

Interfaces		
Transmission standard	FPD-Link	
Connector type	HFM (Mini-Fakra)	
Operating conditions		
Ambient temperature	[°C]	-10...40
Storage temperature	[°C]	-40...85
Protection	IP 54	
Tests / approvals		
EMC	EN IEC 61000-6-4	radiation of interference / residential, commercial and light-industrial environments
	EN IEC 61000-6-2	immunity / industrial environments
Shock resistance	EN 60068-2-27	50 g / (11 ms) not repetitive
	EN 60068-2-27	40 g / (6 ms) repetitive
Vibration resistance	EN 60068-2-6	2 g / (10...150 Hz)
	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
		EN / IEC60825-1:2014
		Complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.
Electrical protection	EN 61010-2-201	electrical supply only via PELV circuits
Mechanical data		
Weight	[g]	187.9
Dimensions	[mm]	90 x 31 x 26
Materials	housing: diecast zinc coated; Cover: PMMA; window: glass / PMMA; rear of the housing: aluminium coated	
Tightening torque	[Nm]	< 0.8
Remarks		
Pack quantity	1 pcs.	
Electrical connection - 2D/3D camera		
Connector: 1 x Dual-HFM (AMK142-1M4Z5-A)		
Other data		
Field of view size		
measuring range / distance [m]	Length [m]	Width [m]
1.00	1.15	0.80
2.00	2.30	1.65
3.00	3.45	2.50
4.00	4.60	3.30
5.00	5.80	4.15
6.00	6.95	4.95
7.00	8.10	5.80

**3D camera**

O3R100KG/2D3D/ZN/O/S/60

**repeatability of the distance measurement of an individual pixel**

measuring range / distance [m]	repeatability of the measured distance values on grey objects (18% reflectivity) [mm]	accuracy [mm]
	typical value	typical value
0...1	± 5	± 9
1...2	± 6	± 10
2...3	± 9	± 12
3...4	± 13	± 13
4...5	± 19	± 15
5...6	± 27	± 16
6...7	± 36	± 18

object in centre of the image

Ambient temperature

20° C

measured at a reflectivity of 18% to 90%

The repeatability can be optimised with filter functions

**Temperature drift**

Temperature range	-10...40 °C
Temperature drift [mm/K]	0.1