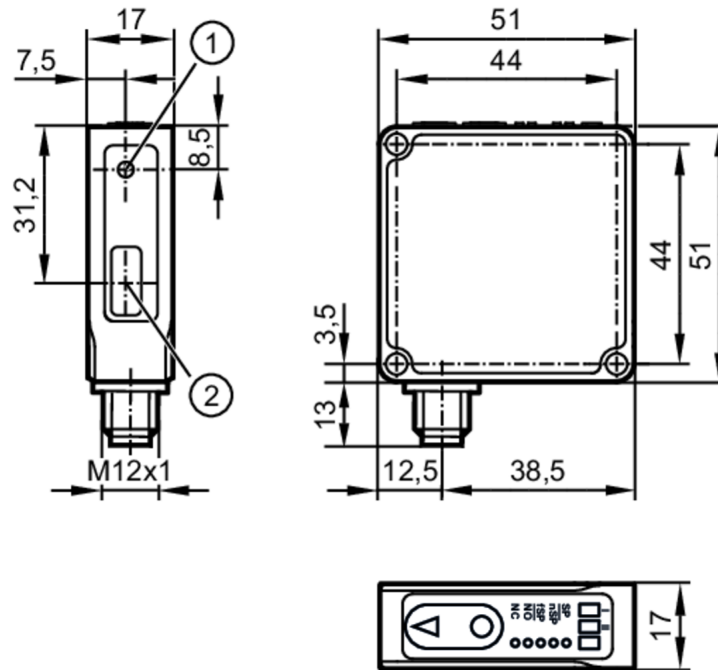


# OMH554



## Laser distance sensor

OMHLFCKG/IO-Link/US



- 1 transmitter
- 2 receiver



### Product characteristics

Type of light	red light
Laser protection class	1
Housing	rectangular

### Electrical data

Operating voltage	[V]	18...30 DC; (cULus - Class 2 source required)
Current consumption	[mA]	< 60
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 0.3
Type of light		red light
Wave length	[nm]	630
Typ. lifetime	[h]	50000

### Inputs / outputs

Number of inputs and outputs	Number of digital inputs: 1; Number of digital outputs: 2
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### Inputs

Inputs	Laser On/ Off
Number of digital inputs	1

### Outputs

Total number of outputs	2
Electrical design	PNP/NPN; (configurable)

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## Laser distance sensor

OMHLFCKG/IO-Link/US

Number of digital outputs	2												
Output function	normally open / closed; (configurable)												
Max. voltage drop switching output DC [V]	2.2												
Permanent current rating of switching output DC [mA]	100												
Switching frequency DC [Hz]	150												
Notes on switching frequency [Hz]	standard												
Short-circuit protection	yes												
Overload protection	yes												
<b>Monitoring range</b>													
Range adjustable	yes												
Max. light spot diameter [mm]	1												
Light spot dimensions refer to	at maximum range												
<b>Measuring/setting range</b>													
Measuring range [m]	0.05...0.5; (6...90% remission)												
<b>Accuracy / deviations</b>													
Temperature compensation	yes												
Notes on the accuracy / deviation	The indicated values are reached after a warm-up time of 20 minutes.												
<b>Measuring range (50... 300 mm)</b>													
Repeatability [mm]	0.3												
Resolution [mm]	0,3												
<b>Measuring range (300..500 mm)</b>													
Repeatability [mm]	1												
Resolution [mm]	0,5												
<b>Software / programming</b>													
Parameter setting options	hysteresis / window / 2-point; Switch-on and switch-off delay; switch-on operations; Teach function; filter; light-on/dark-on mode; laser switch-off; Type of operation												
<b>Interfaces</b>													
Communication interface	IO-Link												
Transmission type	COM2 (38,4 kBaud)												
IO-Link revision	1.1												
SDCI standard	IEC 61131-9												
Profiles	<table border="1"> <tr> <td>Smart Sensor - SSP 4.1.1</td> <td>Measuring and Switching Sensor, 1 channel</td> </tr> <tr> <td>Common - I&amp;D</td> <td>Identification and Diagnosis</td> </tr> <tr> <td>Extension</td> <td>Sensor control</td> </tr> <tr> <td>Extension</td> <td>Teach two point</td> </tr> <tr> <td>Function</td> <td>Locator</td> </tr> <tr> <td>Function</td> <td>ProductURI</td> </tr> </table>	Smart Sensor - SSP 4.1.1	Measuring and Switching Sensor, 1 channel	Common - I&D	Identification and Diagnosis	Extension	Sensor control	Extension	Teach two point	Function	Locator	Function	ProductURI
Smart Sensor - SSP 4.1.1	Measuring and Switching Sensor, 1 channel												
Common - I&D	Identification and Diagnosis												
Extension	Sensor control												
Extension	Teach two point												
Function	Locator												
Function	ProductURI												
SIO mode	yes												
Required master port class	A												
Min. process cycle time [ms]	3.2												

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## Laser distance sensor

OMHLFCKG/IO-Link/US

IO-Link process data (cyclical)	<b>Function</b>	<b>bit length</b>
	process value	16
	device status	4
	binary switching information	2
IO-Link functions (acyclical)	application specific tag; operating hours counter	
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	default	1570
Note	For further information please see the IODD PDF file at "Downloads"	

Operating conditions		
Ambient temperature	[°C]	0...60
Storage temperature	[°C]	-10...65
Protection		IP 65; IP 67

Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / plastics 8 kV AD / metal
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-6 HF conducted	10 V
	EN 61000-4-4 Burst	2 kV
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	(10-55) Hz 1 mm amplitude, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	30 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Laser protection class		1
Notes on laser protection	Caution:	Laser light
	laser class:	1
		EN/IEC 60825-1 2007
		EN/IEC 60825-1 2014
		Complies with 21 CFR 1040.10 except for conformance with IEC 60825-1 Ed. 3, as described in Laser Notice No. 56, dated May 8, 2019.
MTTF	[years]	572
UL approval	voltage supply	Class 2

Mechanical data		
Weight	[g]	127.5
Housing		rectangular
Dimensions	[mm]	51 x 51 x 17
Material		housing: diecast zinc; front lens: plastics
Tightening torque	[Nm]	5

Displays / operating elements		
Display	Switching status	2 LED, yellow
	supply voltage	1 LED, green
	Operating mode	5 LED, white
Teach function		yes

Remarks		
Remarks		

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## Laser distance sensor

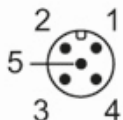
OMHLFCKG/IO-Link/US

Pack quantity

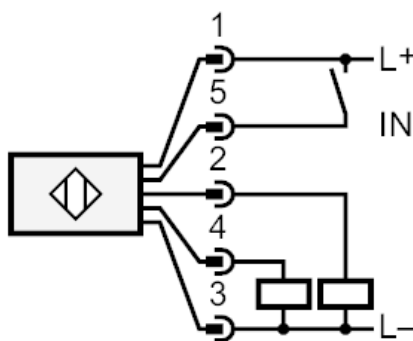
1 pcs.

### Electrical connection

Connector: 1 x M12; coding: A



### Connection



- 2: OUT2: Switching output
- 4: OUT1: switching output or IO-Link
- 5: IN1: Laser On/ Off