

## Technical data sheet

### Tower light

Part no.: 50149098

TL305-3MC-BZ-IOL-M12

#### Contents

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- Diagrams
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For illustration purposes only



## Technical data

### Basic data

Series	TL 305-IOL
Contains	1x M30 nut 1x rubber flat seal
Type of signaling	Optical and acoustic

### Optical data

Adjustable light intensity	10 ... 100%, via IO-Link
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### Electrical data

#### Performance data

Supply voltage $U_B$	18 ... 30 V, DC
Current consumption, max.	195 mA

#### Inputs

Number of digital switching inputs	3 Piece(s)
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#### Switching inputs

Type	Digital switching input
Switching voltage high, min.	8 V
Switching voltage low, max.	5 V
Voltage type	DC

#### Digital switching input 1

Function	External trigger mode: 8 color presets Trigger 1
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#### Digital switching input 2

Function	External trigger mode: 8 color presets Trigger 2
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#### Digital switching input 3

Function	External trigger mode: 8 color presets Trigger 3
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### Interface

Type	IO-Link
<b>IO-Link</b>	
Function	Four operating modes, color and buzzer configuration
COM mode	COM2
Min. cycle time	COM2 = 5 ms
Frame type	TYPE_2_V
Specification	V1.1
Device ID	5001
SIO-mode support	Yes

### Connection

Number of connections	1 Piece(s)
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### Connection 1

Function	IO-Link Light color via control of pins (external trigger mode) Signal IN Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

### Mechanical data

Design	Cylindrical
Dimension ( $\varnothing$ x L)	50.6 mm x 184 mm
Thread size	M30 x 1.5 mm
Housing material	Metal
Metal housing	Aluminium, anodized
Light area material	Polycarbonate/Plastic
Net weight	310 g
Housing color	Gray
Type of illuminant	LED/24V
Lens modules	3 pieces, ready-made
Signal image	Continuous, blinking, flashing light
Angle of radiation	360°
Sequence of the modules (ascending)	User defined via IO-Link: RGB color space, Factory settings: red, green, yellow, blue, white, orange, pink

### Environmental data

Ambient temperature, operation	0 ... 50 °C
Ambient temperature, storage	0 ... 50 °C

### Certifications

Degree of protection	IP 20
Protection class	III
Approvals	UL

### Acoustic data

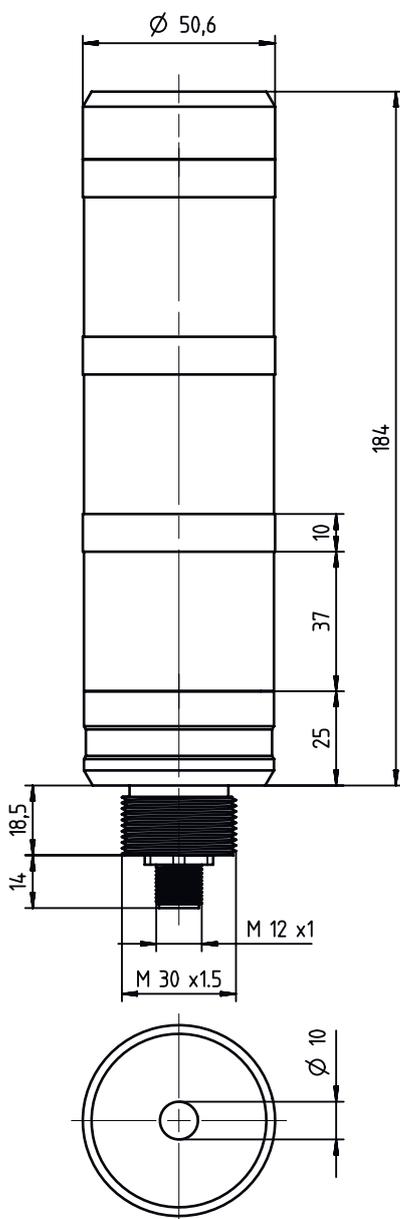
Tone type	Continuous tone, slow intermittent (1 Hz), rapid intermittent (2.5 Hz)
Sound pressure	80 dB
Number of tones	3 Piece(s)

## Technical data

<b>ECLASS 5.1.4</b>	27371230
<b>ECLASS 8.0</b>	27371230
<b>ECLASS 9.0</b>	27371230
<b>ECLASS 10.0</b>	27371230
<b>ECLASS 11.0</b>	27371230
<b>ECLASS 12.0</b>	27371230
<b>ECLASS 13.0</b>	27371230
<b>ECLASS 14.0</b>	27371230
<b>ECLASS 15.0</b>	27371230
<b>ECLASS 16.0</b>	27371230
<b>ETIM 5.0</b>	EC001042
<b>ETIM 6.0</b>	EC001042
<b>ETIM 7.0</b>	EC001042
<b>ETIM 8.0</b>	EC001042
<b>ETIM 9.0</b>	EC001042
<b>ETIM 10.0</b>	EC001042

## Dimensioned drawings

All dimensions in millimeters



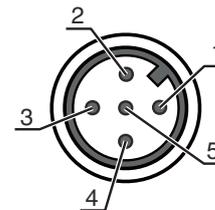
## Electrical connection

### Connection 1

Function	IO-Link
	Light color via control of pins (external trigger mode)
	Signal IN
	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

## Electrical connection

Pin	Pin assignment	Conductor color
1	+	Brown
2	Trigger 1	White
3	-	Blue
4	Trigger 3 & IO-Link	Black
5	Trigger 2	Gray



## Diagrams

External Trigger Mode: Activation of the eight pre-sets via the three trigger inputs

Trigger Inputs			Pre-Sets	Factory Settings						
				TL305-3MC			TL305-3MC-BZ			
1	2	3		Seg. 1	Seg. 2	Seg. 3	Seg. 1	Seg. 2	Seg. 3	Buzzer
0	0	0	1	--	--	--	--	--	--	
1	0	0	2	--	--	Red	--	--	Red	
0	1	0	3	Green	--	--	Green	--	--	
1	1	0	4	--	Yellow	--	--	Yellow	--	
0	0	1	5	Blue	--	--	Blue	--	--	
1	0	1	6	White	--	--	White	--	--	
0	1	1	7	--	--	Red (slowly flashing)	--	--	Red (slowly flashing)	Buzzer (1 Hz)
1	1	1	8	--	--	Red (rapidly flashing)	--	--	Red (rapidly flashing)	Buzzer (2.5 Hz)

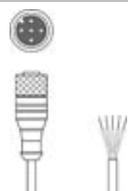
All trigger inputs have a delay of ~50 ms. Pre-sets can be defined via IO-Link.

## Accessories

### Connection technology - Connection unit

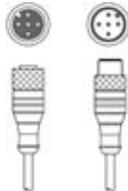
	Part no.	Designation	Article	Description
	50144900	MD 798i-11-82/L5-2222	IO-Link master	Current consumption, max.: 11,000 mA Interface: IO-Link, Automatic protocol detection, EtherNet IP, Modbus TCP, PROFINET Connections: 12 Piece(s) Sensor connections: 8 Piece(s) Degree of protection: IP 67, IP 65, IP 69K
	50121098	SET MD12-US2-IL1.1 + Zub.	Diagnostics set	Supply voltage: DC Interface: USB Connections: 2 Piece(s) Degree of protection: IP 20

### Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50132079	KD U-M12-5A-V1-050	Connection cable	Application: Chemical resistant Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC

## Accessories

### Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50133298	KDS U-M12-5A-M12-5A-V1-050	Interconnection cable	Application: Chemical resistant Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: No Cable length: 5,000 mm Sheathing material: PVC

### Mounting

	Part no.	Designation	Article	Description
	50149110	TL305-AC.EP.100	Tower light element	Design: Cylindrical Version: Extension pipe Fastening, at system: Screw type
	50149111	TL305-AC.MB1	Tower light element	Design: L shape Version: Angle, L-shape Fastening, at system: Screw type
	50149109	TL305-AC.MF.65	Tower light element	Design: Cylindrical Version: Mounting base Fastening, at system: Screw type

#### Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.