

# Low Angle Light

Red-cyan light, 130 mm

## LMLX201

Part Number



- 4 sectors selectable
- Bicolor
- No external control required
- Overdrive
- Quick and easy replacement of accessories

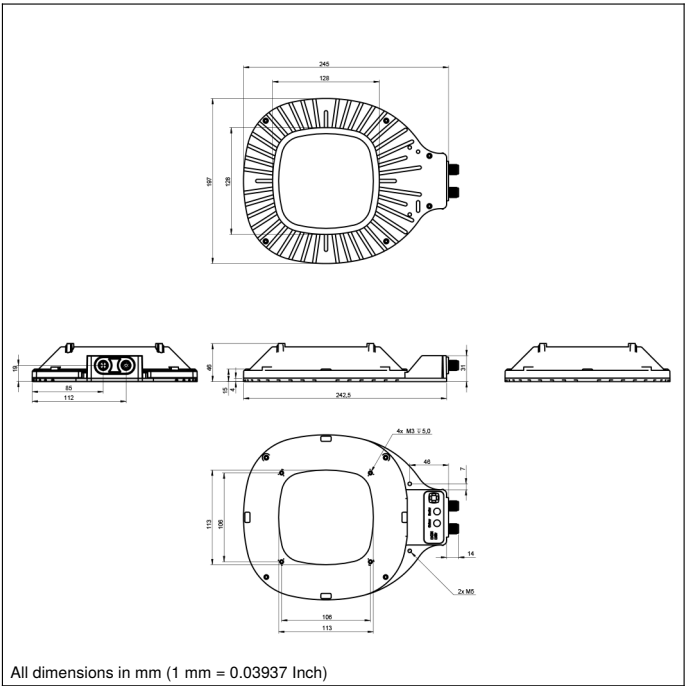
The LMLX lights are a series of low angle lights. In this case, "low angle" means that the light enters with an angle of incidence of 45°. This light is therefore perfect for inspecting edges and scratches on all types of surfaces. The light can be operated in continuous mode or synchronized with the machine vision camera in strobe mode or strobe mode with increased intensity (overdrive).

### Technical Data

| Optical Data                                                        |                              |
|---------------------------------------------------------------------|------------------------------|
| Light Source                                                        | Red-cyan light               |
| Wavelength                                                          | 625...505 nm                 |
| Red light output                                                    | 70 W/m²                      |
| Cyan light output                                                   | 46,2 W/m²                    |
| Measuring point distance                                            | 20 mm                        |
| Environmental conditions                                            |                              |
| Temperature Range                                                   | -10...40 °C                  |
| Storage temperature                                                 | -20...60 °C                  |
| Atmospheric humidity                                                | < 80%, non-condensing        |
| Electrical Data                                                     |                              |
| Supply Voltage                                                      | 21,6...26,4 V DC             |
| Power                                                               | 11,04 W                      |
| Peak power                                                          | 82,08 W                      |
| Current Consumption Continuous Mode (U <sub>b</sub> = 24 V)         | 0,46 A                       |
| Current consumption flash mode overdrive (operating voltage = 24 V) | 3,42 A                       |
| Flash Duration                                                      | 2 ms                         |
| Duty Cycle                                                          | < 0,1                        |
| Rise time                                                           | 15 µs                        |
| Fall time                                                           | 10 µs                        |
| Input signal                                                        | PNP/NPN                      |
| Short Circuit Protection                                            | yes                          |
| Reverse Polarity Protection                                         | yes                          |
| Overload Protection                                                 | yes                          |
| Protection Class                                                    | III                          |
| Dimming                                                             | 0...10 V ± 100...30%         |
| Overdrive                                                           | yes                          |
| Mechanical Data                                                     |                              |
| Housing Material                                                    | Aluminum, anodised           |
| Housing Material                                                    | Plastic, ABS                 |
| Housing Material                                                    | Plastic, PMMA                |
| Degree of Protection                                                | IP65                         |
| Optic Cover                                                         | Plastic, PMMA                |
| Connection                                                          | M12 × 1; 5-pin               |
| Max. cable length                                                   | 40 m                         |
| Camera aperture inner diameter                                      | 130 mm                       |
| Function                                                            |                              |
| Operating modes                                                     | Continuous, Strobe Overdrive |
| Connection Diagram No.                                              | 007                          |
| Control Panel No.                                                   | T18                          |
| Suitable Mounting Technology No.                                    | 927                          |

### Complementary Products

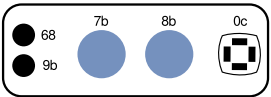
|                          |
|--------------------------|
| ZC4G003 connection cable |
| ZDCG004 connection cable |
| ZDCG005 connection cable |



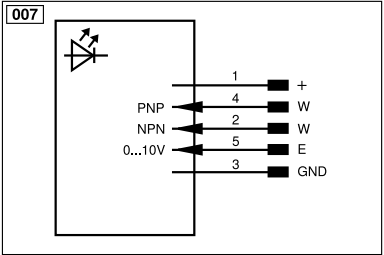
All dimensions in mm (1 mm = 0.03937 Inch)

## Ctrl. Panel

T18



0c = sector selection indicator  
68 = supply voltage indicator  
7b = Color Selection Button  
8b = Sector Selection Button  
9b = Strobe Mode Indicator



| Legend    |                                            |                                        |                                |
|-----------|--------------------------------------------|----------------------------------------|--------------------------------|
| +         | Supply Voltage +                           | nc                                     | Not connected                  |
| -         | Supply Voltage 0 V                         | U                                      | Test Input                     |
| ~         | Supply Voltage (AC Voltage)                | Ū                                      | Test Input inverted            |
| A         | Switching Output (NO)                      | W                                      | Trigger Input                  |
| Ā         | Switching Output (NC)                      | W-                                     | Ground for the Trigger Input   |
| V         | Contamination/Error Output (NO)            | O                                      | Analog Output                  |
| Ȳ         | Contamination/Error Output (NC)            | O-                                     | Ground for the Analog Output   |
| E         | Input (analog or digital)                  | BZ                                     | Block Discharge                |
| T         | Teach Input                                | Amv                                    | Valve Output                   |
| Z         | Time Delay (activation)                    | a                                      | Valve Control Output +         |
| S         | Shielding                                  | b                                      | Valve Control Output 0 V       |
| RxD       | Interface Receive Path                     | SY                                     | Synchronization                |
| TxD       | Interface Send Path                        | SY-                                    | Ground for the Synchronization |
| RDY       | Ready                                      | E+                                     | Receiver-Line                  |
| GND       | Ground                                     | S+                                     | Emitter-Line                   |
| CL        | Clock                                      | ±                                      | Grounding                      |
| E/A       | Output/Input programmable                  | SnR                                    | Switching Distance Reduction   |
| IO-Link   | IO-Link                                    | Rx+/-                                  | Ethernet Receive Path          |
| PoE       | Power over Ethernet                        | Tx+/-                                  | Ethernet Send Path             |
| IN        | Safety Input                               | Bus                                    | Interfaces-Bus A(+)/B(-)       |
| OSSD      | Safety Output                              | La                                     | Emitted Light disengageable    |
| Signal    | Signal Output                              | Mag                                    | Magnet activation              |
| BL_D+/-   | Ethernet Gigabit bidirect. data line (A-D) | RES                                    | Input confirmation             |
| ENo RS422 | Encoder 0-pulse 0/0 (TTL)                  | EDM                                    | Contact Monitoring             |
| PT        | Platinum measuring resistor                | ENARs422                               | Encoder A/Ā (TTL)              |
|           |                                            | ENBRs422                               | Encoder B/B̄ (TTL)             |
|           |                                            | ENA                                    | Encoder A                      |
|           |                                            | ENb                                    | Encoder B                      |
|           |                                            | AMIN                                   | Digital output MIN             |
|           |                                            | AMAX                                   | Digital output MAX             |
|           |                                            | AOK                                    | Digital output OK              |
|           |                                            | SY In                                  | Synchronization In             |
|           |                                            | SY OUT                                 | Synchronization OUT            |
|           |                                            | OLT                                    | Brightness output              |
|           |                                            | M                                      | Maintenance                    |
|           |                                            | rsv                                    | Reserved                       |
|           |                                            | Wire Colors according to DIN IEC 60757 |                                |
|           |                                            | BK                                     | Black                          |
|           |                                            | BN                                     | Brown                          |
|           |                                            | RD                                     | Red                            |
|           |                                            | OG                                     | Orange                         |
|           |                                            | YE                                     | Yellow                         |
|           |                                            | GN                                     | Green                          |
|           |                                            | BU                                     | Blue                           |
|           |                                            | VT                                     | Violet                         |
|           |                                            | GY                                     | Grey                           |
|           |                                            | WH                                     | White                          |
|           |                                            | PK                                     | Pink                           |
|           |                                            | GNYE                                   | Green/Yellow                   |