

## Mini Digital Display

## MLD22 Series

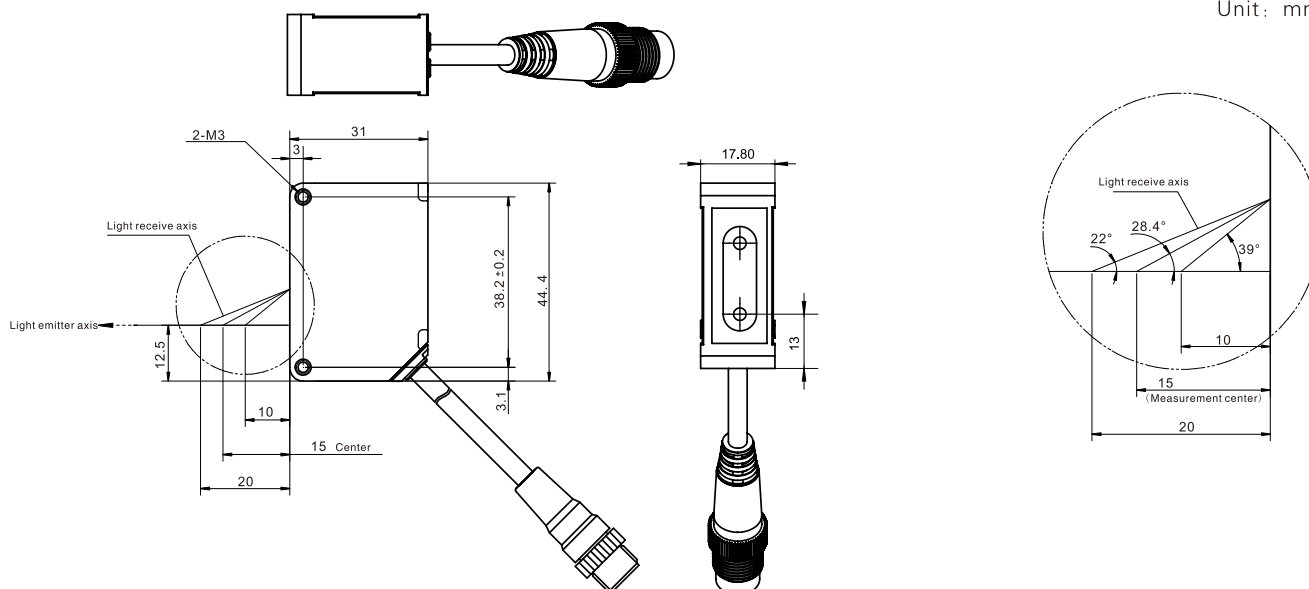


Appearance

|                            |                      |                                                                                                            |                           |
|----------------------------|----------------------|------------------------------------------------------------------------------------------------------------|---------------------------|
| Sensing type               |                      | Diffuse reflection                                                                                         |                           |
| Center of sensing distance |                      | 15mm                                                                                                       | 35mm100mm                 |
| Sensing distance           |                      | 10~20mm                                                                                                    | 20~50mm50~150mm           |
| F.S                        |                      | 10mm                                                                                                       | 30mm100mm                 |
| Light source               | Medium. Wave length  | Red Semi-conductor laser Wave length: 655nm                                                                |                           |
|                            | Max. output power    | 390 μ W                                                                                                    | 1mW                       |
| Laser class                | IEC/JIS              | Class1                                                                                                     | Class2                    |
|                            | FDA                  | Class2                                                                                                     |                           |
| Beam size                  |                      | 0.5*0.7mm                                                                                                  | 0.45*0.8mm0.6*0.7mm       |
| Linearity                  |                      | ± 0.1 % F.S.                                                                                               |                           |
| Repeat accuracy            |                      | 1 μ m                                                                                                      | 6 μ m20 μ m               |
| Sampling period            |                      | 500 μ s/1000 μ s/2000 μ s/4000 μ s/AUTO                                                                    |                           |
| Temperature drift          |                      | ± 0.02 % F.S./°C                                                                                           | ± 0.05 % F.S./°C          |
| Indicator                  |                      | Laser emission indicator (green)/zero reset indicator (red)/output indicator (orange)/mode indicator (red) |                           |
| External input             |                      | Laser OFF, teaching, sample & hold, one-shot, zero reset (selectable)                                      |                           |
| Output                     | Analog current       | 4~20mA output, load impedance≤300 Ω                                                                        |                           |
|                            | Analog voltage       | 0~10v output impedance, output resistance 100 Ω                                                            |                           |
| Switch output              |                      | NPN/PNP open collector (selectable by setting), Max. 100 mA / 30 VDC, residual voltage 1.8 V               |                           |
| Operating voltage          |                      | Analog current: 12~24V Dc ± 10%; Analog voltage: 18~24V DC ± 10%                                           |                           |
| Current consumption        |                      | < 70mA                                                                                                     |                           |
| Connectors                 |                      | Cable with M12, 5-pin connector, 300 mm length                                                             |                           |
| Protective circuit         |                      | Reverse polarity Over-current                                                                              |                           |
| Ambient parameters         | Degree of protection | IP67                                                                                                       |                           |
|                            | Ambient temperature  | -10℃~+50℃, No freezing                                                                                     |                           |
|                            | Ambient humidity     | 35%~85%RH, No condensation                                                                                 |                           |
|                            | Ambient brightness   | Sunlight≤20000Lux, Incandescent lamp≤3000Lux                                                               |                           |
|                            | Vibration resistance | 10~55Hz Double amplitude1.5mm, XYZ three directions, 2 hours each                                          |                           |
|                            | Shock resistance     | 3 times in each of the X, Y, and Z directions                                                              |                           |
| Material                   |                      | Housing: die-cast aluminum; Front cover: PPSU; Display: PET; Cable: Oil-proof PVC                          |                           |
| Weight                     |                      | Approx.60G(Including cable)                                                                                |                           |
| Analog current output      |                      | MLD22-15A               | MLD22-35AMLD22-100A       |
| Analog voltage output      |                      | MLD22-15V                                                                                                  | MLD22-35VMLD22-100V       |
| RS485                      |                      | MLD22-15-485                                                                                               | MLD22-35-485MLD22-100-485 |
| Remarks                    |                      | Optional Cable: CA12 Series                                                                                |                           |

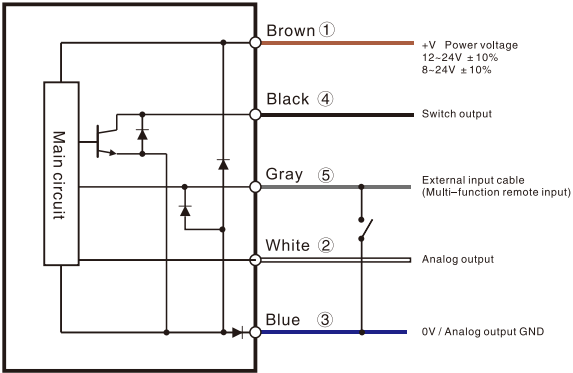
## Dimensions

Unit: mm

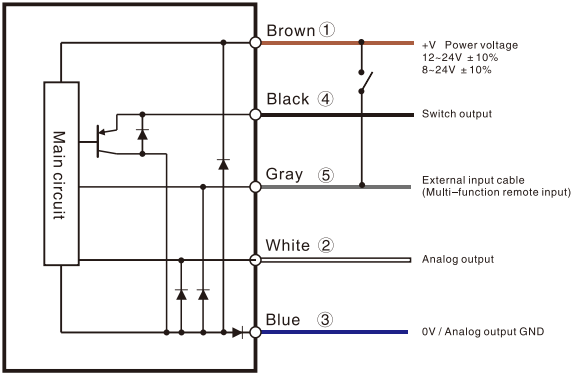


- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vibration
- Temperature
- Cables
- Tester

NPN



PNP

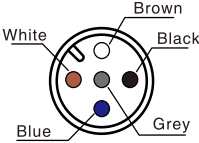


485

The pin configuration of the cable and cable connector is as follows:

| Cable color | Function       |
|-------------|----------------|
| Brown       | DC12-24V ± 10% |
| Blue        | 0V             |
| Grey        | (N.C.)         |
| Black       | RS-485(A)      |
| White       | RS-485(B)      |

Connector pin configuration (sensor side)  
M12 connector



Guidance

Displacement

- TOF measurement
- Mini digital display
- Built-in controller
- Linear measurement
- Magnetic displacement
- LIDAR Scanner
- Color confocal