# RLG series

## MAGNETIC POSITION **SENSOR**

mindman



## Order example

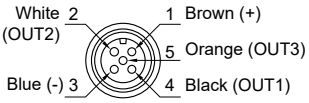
RLG — 3N — 2M

- MODEL
- **3N**: 3 NPN
  **3P**: 3 PNP
- WIRE LENGTH
  **2M**: L=2000mm
  **QD**: M12, 5 Pin connector

* Special order is available.

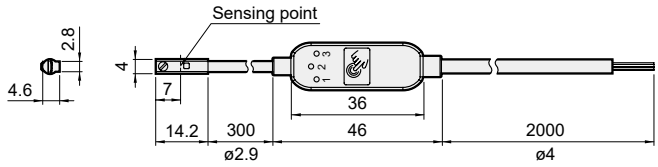
## Wiring of the QD

• 5 wire QD wiring

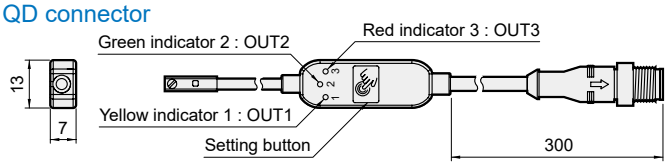



## Dimension

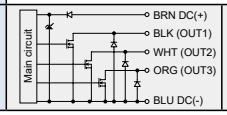
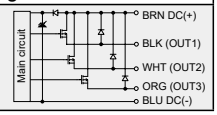
Standard lead wire




QD connector




## Specification

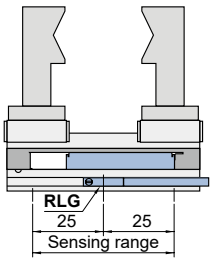
| Model | RLG-3N | RLG-3P |
|---|---|---|
| Measuring range (*1) | 50 mm | |
| Switching logic | Solid state output, normally open / normally close switchable | |
| Switch type | 3 NPN current sinking | 3 PNP current sourcing |
| Operating voltage | 5 ~ 30 V DC | |
| Switching current (*2) | 150 mA max. | |
| Power supply voltage (*2) | 30 V DC | |
| Contact rating (*2) | 4.5 W max. | |
| Current consumption | 20 mA @ 24 V DC max. | |
| Voltage drop (*2) | 1.5 V max. ( with resistive load ) | |
| Leakage current | 0.01 mA max. | |
| Repeatability | ≤ 0.01 mm | |
| Indicator | Yellow LED, Green LED, Red LED | |
| Cable | ø4 PVC - 26 AWG ( 0.15mm² ) - 5 cores | |
| Operating frequency | 50 Hz | |
| Magnet requirement (*3) | 40 ~ 1000 Gauss | |
| Temperature range | -10 ~ 70 °C | |
| Shock (*4) | 50 G | |
| Vibration (*5) | 9 G | |
| Enclosure classification | IEC 60529 IP69 | |
| Protection circuit (*6) | 2, 3, 4 | |
| Weight | 54 g | |
| Connect diagram |  |  |



*1. The difference of magnetism, environment, and interference of magnetic field can cause the deviation of measurement.
*2. The standard is for each output.
*3. Measuring standard target: ø15.5 × ø8 × 5t ( Anisotropy rubber magnet )
*4. Sin wave / X , Y , Z 3 directions / 3 times each direction / 11 ms each time.
*5. Double amplitude 1.5 mm / 10 Hz ~ 55 Hz ~ 10 Hz ( Sweep 1 min ) / X , Y , Z 3 directions / 1 hour each time.
*6. 1=None / 2=Short-circuit / 3=Power source reverse polarity / 4=Surge suppression.

## Setting example

**State 1**
Gripper open

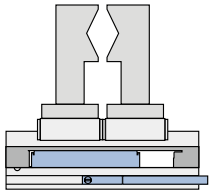



**Setting procedure example for state 3**

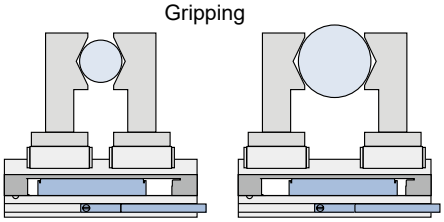
1. Press button once, then long press until three indicators flash.
2. Keep press button till indicator 3 flashes, then adjust gripper to gripping position.
3. Long press button to finish.

* Check manual for more details.

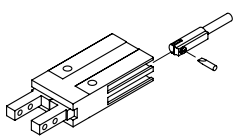
**State 2**
Gripper close



**State 3**
Gripping



## Assembling style

| Cylinder type | Mounting clamp |
|---|---|
| **MCJU, MCFB, MCMJP, MCGS2, MCDJ, MCSF-5, MCSF2-5, MSBE, MCRJ-S*, MCRQ*, MCRQ2*, MCRQ-S, MCRQ2-S, MCHC2-6, MCHD*, MCHH, MCHU, MCHU2, MCHS, MCHS2, MCHX2, MCHG2, MCHJ, MCHJ2, MCHY2, MEQI** |  |

* To ensure good repeatability MCRJ-S, MCRQ(2)-12, MCHD require special specification orders, must use single magnet specification, refer to order example of special cylinder when ordering.

## Order example of special cylinder

**Standard model no.** — XZ1

- Suitable for RLG series

* Special cylinder, please contact us