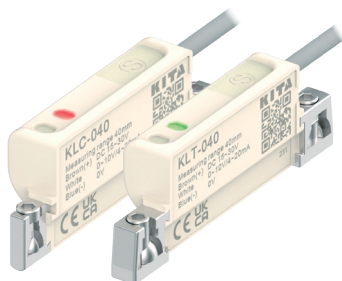


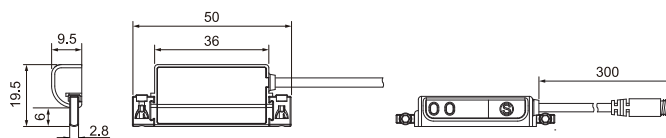
# KLC/KLT SERIES

Patented

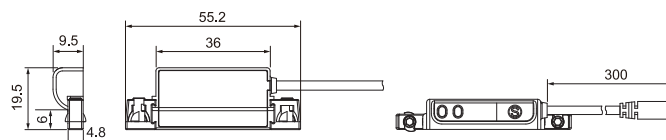


## Dimensions

KLC - 040 / KLC - 040 - QD



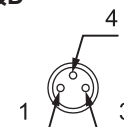
KLT - 040 / KLT - 040 - QD



Unit : mm

## M8 QD Pinout

■ QD



- 1 : DC ( + )
- 3 : DC ( - )
- 4 : Analog output

## Specifications

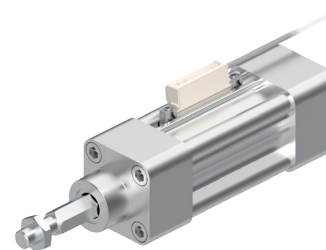
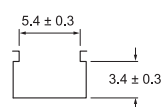
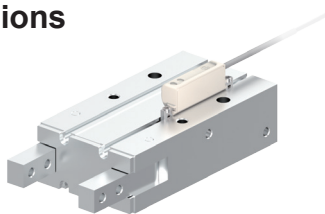
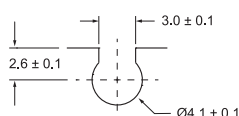
| MODEL                               |                        | KL□ - 040                                                                                                                 |
|-------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Connect Diagram                     | Characteristics        |                                                                                                                           |
|                                     | Measuring Range        | 40 mm, ± 1 mm                                                                                                             |
| Power Supply Voltage                |                        | 15 ~ 30 V DC, Ripple ( P-P ) ≤ 10 %                                                                                       |
| Current Consumption                 |                        | ≤ 15 mA ( with no load )                                                                                                  |
| Displacement Resolution ※1          |                        | 0.001 mm                                                                                                                  |
| Linearity Error ※1                  |                        | ± 0.2 mm @ 25 °C                                                                                                          |
| Repeatability ※1                    |                        | ± 0.01 mm @ 25 °C                                                                                                         |
| Sampling Time                       |                        | ≤ 0.3 ms                                                                                                                  |
| Analog Output ( Voltage Output ) ※2 |                        | Output Voltage : 0 ~ 10 V<br>Min. Load Impedance : 2 KΩ<br>Linearity : ± 0.05 % F.S. @ 25 °C<br>Sensitivity : 0.25 mV/μm  |
| Analog Output ( Current Output ) ※2 |                        | Output Current : 4 ~ 20 mA<br>Max. Load Impedance : 500 Ω<br>Linearity : ± 0.05 % F.S. @ 25 °C<br>Sensitivity : 0.4 μA/μm |
| Magnetic Field Strength ※1, 3       |                        | 20 ~ 200 Gauss                                                                                                            |
| Environment                         | Enclosure              | IEC 60529 IP69                                                                                                            |
|                                     | Ambient Temp. Range    | Operation : 0 ~ 50 °C ; Storage : -10 ~ 60 °C ( No condensation or freezing )                                             |
|                                     | Ambient Humidity Range | Operation / Storage : 35 ~ 85 % RH ( No condensation )                                                                    |
|                                     | Withstand Voltage      | 1000 V AC in 1-min ( between case and lead wire )                                                                         |
|                                     | Insulation Resistance  | ≥ 50 MΩ ( at 500 V DC, between case and lead wire )                                                                       |
|                                     | Shock ※4               | 30 G                                                                                                                      |
|                                     | Vibration ※5           | 10 G                                                                                                                      |
| Protection Circuit ※6               |                        | 3, 4                                                                                                                      |
| Lead Wire                           |                        | Ø2.9 PUR - 26 AWG ( 0.15mm <sup>2</sup> ) - 3 cores                                                                       |
| Weight ( with 2 meter lead wire )   |                        | Approx. 33 g ( KLC-040 ) ; Approx. 37 g ( KLT-040 )                                                                       |

### NOTE

- ※1 : Measuring standard target : Ø15.5 × Ø8 × 5t  
( The movement of anisotropy rubber magnet and piston are from same direction. )
- ※2 : Only one of Analog output can be selected while setting.
- ※3 : The difference of magnetism, environment, and interference of magnetic field can cause the deviation of measurement.

- ※4 : Sin wave / X , Y , Z 3 directions / 3 times each direction / 11 ms each time.
- ※5 : Double amplitude 1.5 mm or 10 G / 10 Hz ~ 55 Hz ~ 10 Hz ( Sweep 1 min ) / X, Y, Z 3 directions / 2 hours each time.
- ※6 : 1 = None / 2 = Short-circuit / 3 = Power Source Reverse polarity / 4 = Surge Suppression

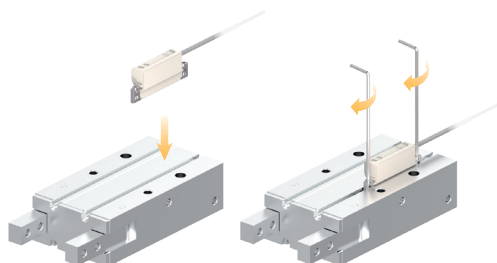
## Groove Dimensions



Unit : mm

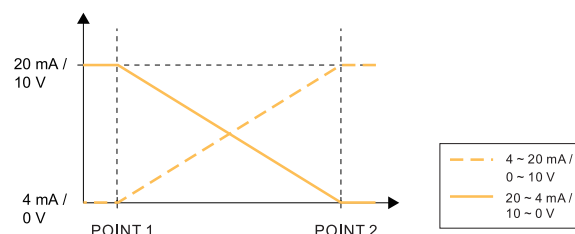
## Features Highlight

### 1 Quick Installation

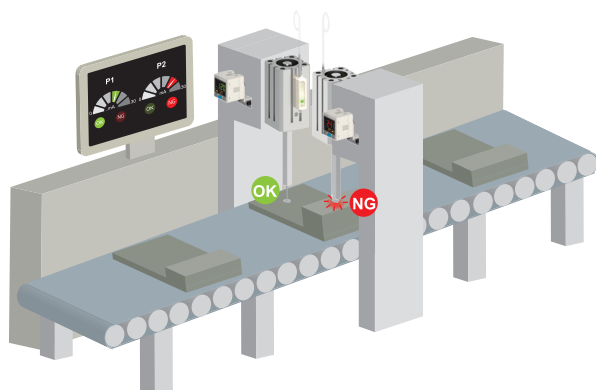


### 2 Analog Output Function

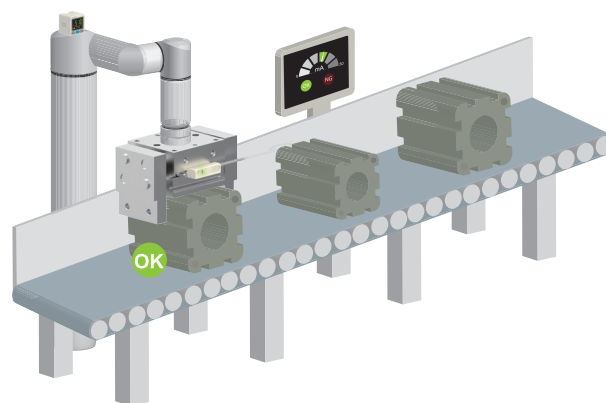
- Analog voltage / current output can be switched.
- Analog output can be inverted.



### 3 Thickness Differentiation

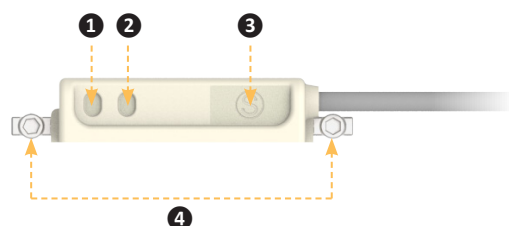


### 4 Dimension Measurement

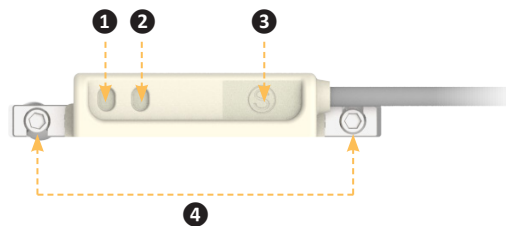


## Panel Description

### ■ KLC - 040 - □



### ■ KLT - 040 - □



| No. | Content                                   |
|-----|-------------------------------------------|
| ①   | Mode Indicator                            |
| ②   | Information Indicator                     |
| ③   | Setting Button                            |
| ④   | Mounting screw, Hexagon wrench ( 2.0 mm ) |

## Ordering Information

K L C - 0 4 0 - □

### Cylinder Type

C : C slot  
T : T slot

### Measuring Range

040 : 40 mm

### Cable Length / Connector

Blank : 2M  
QD : With M8 3Pin male connector