

KT-1000D SERIES

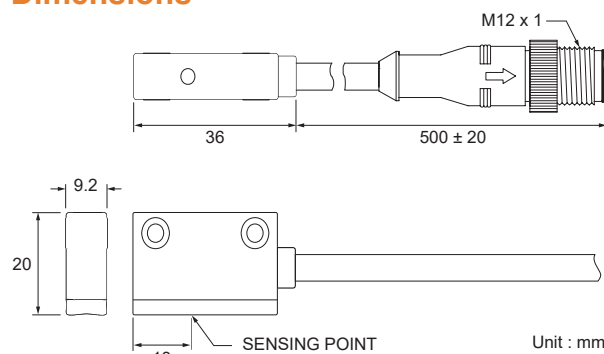
Weld-Field Immune Sensor



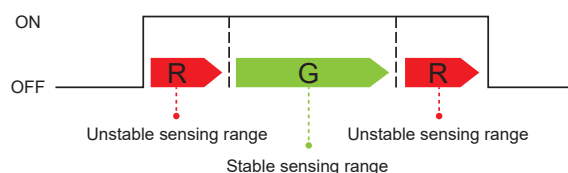
Magnetic Field Resistant



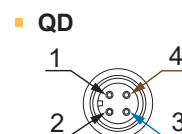
Dimensions



SW Out



QD Pinout



1 : Not Used
2 : Not Used
3 : Blue
4 : Brown

EQD



1 : Brown
2 : Not Used
3 : Not Used
4 : Blue

- Dual Color LED allow more precise positioning

Specifications

MODEL	KT-1000D
Connect Diagram	
Characteristics	
Wiring Method	2-Wire Type
Switching Logic	Solid State Output, Normally Open
Sensor Type	-
Operating Voltage	10 ~ 28 V DC
Switching Current	5 ~ 50 mA max.
Contact Rating ※1	1.5 W max.
Voltage Drop ※2	5 V max.
Leakage Current ※2	1 mA max.
Indicator	Red LED : unstable sensing range ; Green LED : stable sensing range
Lead Wire	Ø5.4 PVC - 20 AWG (0.5 mm ²) - 2 cores
Operating Time	50 ms max.
Magnetic Field Resistance ※3	16000 A
Magnet Requirement ※2, 4	85 Gauss
Temperature Range	-10 ~ 60 °C
Shock ※5	30 G
Vibration ※6	9 G
Enclosure	IEC 60529 IP67
Protection Circuit ※7	3, 4

NOTE

- ※1 : WARNING : Never exceed rating (Watt = Voltage × Amperage). Permanent damage to sensor will occur.
- ※2 : It bases on conditions of voltage 24 V DC, ambient temp. 25 °C and 2 meters cable of sensor.
Voltage drop increases in pace with cable length.
- ※3 : The operational distance can be 0 mm between KT-1000D and welding gun (welding conductor or cable) when the welding current less than 16000 A.
- ※4 : Measuring standard target : Ø15.5 × Ø8 × 5t (Anisotropy rubber magnet)
- ※5 : Sin wave / X, Y, Z 3 directions / 3 times each direction / 11 ms each time.
- ※6 : Double amplitude 1.5 mm / 10 Hz ~ 55 Hz ~ 10 Hz (Sweep 1 min) / X, Y, Z 3 directions / 1 hour each time.
- ※7 : 1 = None / 2 = Short-circuit / 3 = Power Source Reverse polarity / 4 = Surge Suppression

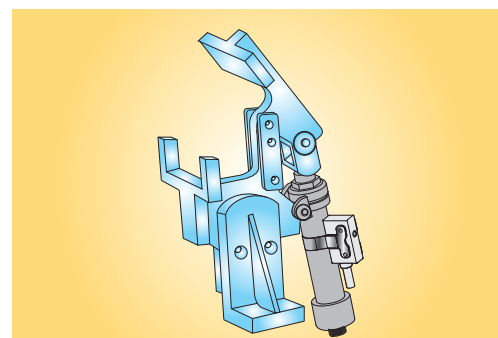
Ordering Information

KT - 1000D -

Cable Length / Connector

Blank : With 3 meter cable
QD : With M12 4Pin male connector

Application Mounting



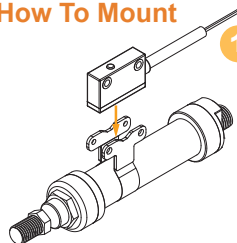
- KT-1000D detects the position of the cylinder piston and it is especially suitable for clamp cylinder.



BP Clamp

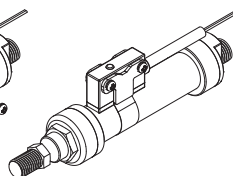
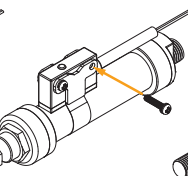
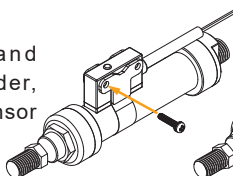
Clamp is designed for mounting KT-1000D on round cylinder.

How To Mount



1 Step 1

Wrap the band around cylinder, and place sensor on cylinder.



2 Step 2

Insert screw into clamp. Adjust sensor to the sensing position and tighten.

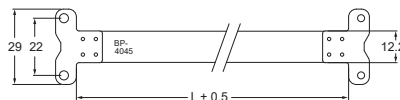
B P - 4 0 4 5

Cylinder I.D.

40 : Ø40 round cylinder
50 : Ø50 round cylinder
63 : Ø63 round cylinder

Cylinder O.D.

45 : Ø45 round cylinder
47 : Ø47 round cylinder
⋮
72 : Ø72 round cylinder



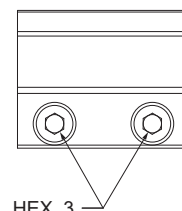
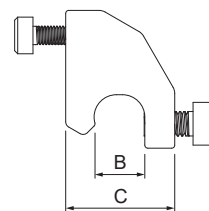
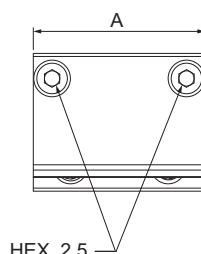
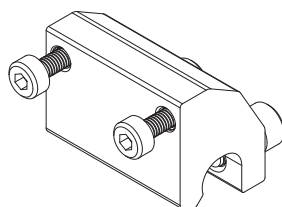
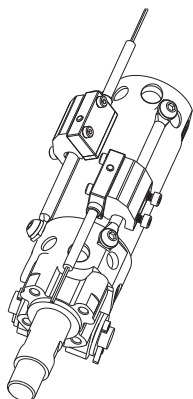
Cylinder Chart

MODEL	" L "	I.D.	O.D.
BP-4045	154	Ø40	Ø45
BP-4047	161	Ø40	Ø47
BP-5055	188	Ø50	Ø55
BP-5058	197	Ø50	Ø58
BP-6368	228	Ø63	Ø68
BP-6372	240	Ø63	Ø72

Unit : mm

PMB Bracket

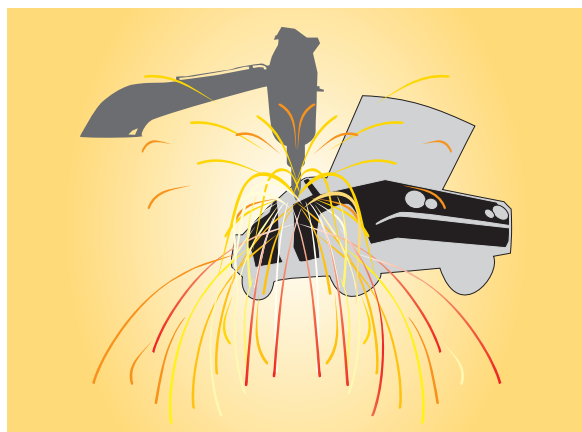
Bracket is designed for mounting KT-1000D on round cylinder.



MODEL	DIM.	A	B	C
PMB-040		28.15	8.15	17.85

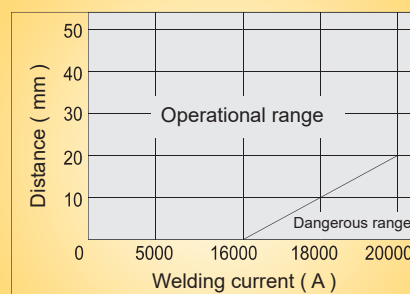
Unit : mm

Application Environment



- KT-1000D can be applied in the strong magnetic field environment such as automotive manufacturing or areas near welding machine.
- When KT-1000D detects the magnetic AC field (50 or 60 Hz), it will keep the status of output without being affected.

Weld-Field Immune



- The operational distance can be 0 mm between KT-1000D and welding gun (welding conductor or cable) when the welding current less than 16000 A.