

Product Category

Sensors

Proximity Sensors

Cylindrical

E2A

Item list

Product Category

A to Z Index

Applications

Cautions

Cylindrical Proximity Sensor

E2A-M18KS08-WP-B1 5M



DC 3-Wire Model , Shielded , M18 , Pre-Wired Type , Sensing Distance 8 mm , Operation Mode NO , PNP Open Collector Output

No Image Available

about this Product Family

Inquiry of this Product

Ratings / Performance

Dimensions

Output circuit diagram

Timing chart

Sensing range

Sensing distance vs. size and material of sensing object

Mutual interference

Effects of surrounding metals

As of January 21, 2013

Cylinder type sensing head size	M18
Type	Shielded
Sensing method	Inductive type
Sensing distance	8 mm -10% to +10%
Setting distance	0 to 6.4 mm
Differential distance	10% Max. of sensing distance
Sensing object	Ferrous metal (Sensitivity lowers with non-ferrous metals.)
Standard sensing object	Iron 24*24*1mm
Response frequency	0.5 kHz (average)
Power supply voltage	12 to 24 VDC (ripple(p-p) :10% Max.)
Operating voltage range	10 to 32 VDC
Current consumption	10 mA Max.
Control output (Output type)	PNP open collector output
Control output (Switching capacity)	0 to 200 mA
Control output (Residual voltage)	2 V Max. （under load current with cable length of 2m ）
Indicator	Operation indicator(yellow)
Operation mode	NO
Protective circuit	Surge suppressor Output short-cut protection Output reverse polarity protection Power supply reverse polarity protection
Standard or Different frequency	Standard
Ambient temperature	Operating: -40 to 70 CEL Storage: -40 to 85 CEL (with no icing or condensation)
Ambient humidity	Operating: 35 to 95 %RH Storage: 35 to 95 %RH (with no condensation)
Temperature influence	+10% Max. of sensing distance in temperature range of -25 to +70CEL +15% Max. of sensing distance in temperature range of -40 to +70CEL (As the basis for sensing distance of 23CEL)
Voltage influence	+1% Max. of sensing distance in rated voltage range +-15%. (As the basis for sensing distance at standard power voltage)
Insulation resistance	50 M OHM Min. at 500VDC between charged parts and the case
Dielectric strength	1000 VAC 50/60 Hz for 1 minute between charged parts and the case
Vibration resistance	10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions
Shock resistance	1000m/s2 for 10 times each in X, Y, and Z directions
Degree of protection	IEC60529: IP67
Applicable standard (EC Directive (Low Voltage Directive))	EN60947-1 EN60947-5-2
Applicable standard (EC Directive (EMC Directive))	EMI: EN60947-5-2 Emission Enclosure: CISPR11 Group 1 class A EMS: EN60947-5-2 Immunity ESD: IEC61000-4-2 Immunity RF-interference: IEC61000-4-3 Immunity Conducted Disturbance: IEC61000-4-6 Immunity Burst: IEC61000-4-4 CE marking: Equipped
Applicable standard (CCC mark)	Not equipped
Connection method	Pre-wired models (Cable length: 5 m)
Material (case)	Brass nickel plating
Material (sensing surface)	PBT
Material (clamping nuts)	Brass nickel plating
Material (toothed washer)	Iron zinc plating

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