

E2E-C04N03-WC-C1 2M

Small-diameter Proximity Sensor, Cylinder type, Outer diameter 4 mm, Unshielded, Sensing distance: 3 mm, DC 3-wire, NPN open-collector output, NO, PVC Pre-wired models, 2 m



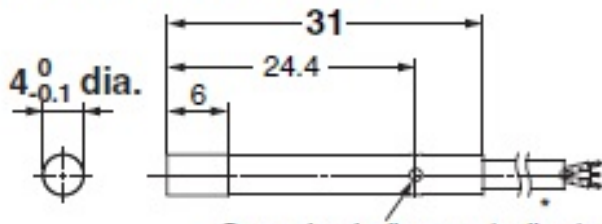
Ratings/Performance

Sensing head size	4 dia.
Type	Cylinder type, Unshielded
Power source	DC Three-wires models
Sensing distance	3 mm $\pm$ 10%
Setting distance	0 to 2.1 mm
Differential distance	15% max. of sensing distance
Sensing object	Ferrous metal (Sensitivity lowers with non-ferrous metals.)
Standard sensing object	Iron 9 x 9 x 1 mm
Response frequency	2 kHz
Power supply voltage	10 to 30 VDC ripple (p-p) 10% included
Operating voltage range	10 to 30 VDC
Current consumption	10 mA max.
Control output (Output type)	NPN open collector
Control output (Switching capacity)	100 mA max.
Control output (Residual voltage)	2 V max. (Load current 100 mA with cable length of 2 m)
Indicator	Operation indicator (yellow)
Operation mode	NO
Protective circuit	Output short-cut protection Output reverse polarity protection Power supply reverse polarity protection Surge suppressor
Ambient temperature (Operating)	-25 to 70 °C
Ambient temperature (Storage)	-25 to 70 °C
Ambient humidity (Operating)	35 to 95 %
Ambient humidity (Storage)	35 to 95 %
Temperature influence	$\pm$ 15% max. of sensing distance at 23 °C in the temperature range of -25 to 70 °C
Voltage influence	$\pm$ 2.5% max. of sensing distance at rated voltage in the rated voltage $\pm$ 15% range
Insulation resistance	Between charged parts and the case: 50 M Ω min. at 500 VDC

Dielectric strength	Between charged parts and the case: 500 VAC 50/60 Hz 1 min
Vibration resistance	Destruction: 10 to 55 Hz, 1.5 mm double amplitude each in X, Y, and Z directions for 2 h
Shock resistance	Destruction: 500 m/s ² 10 times each in X, Y, and Z directions
Degree of protection	IEC: IP67 Company standard: Oil-proof
Connection method	Pre-wired models (2 m)
Weight	Package: Approx. 35 g
Material	Case: SUS303 (EN1.4305) Sensing surface: Heat-resistant ABS resin Cable: PVC
Accessories	Instruction manual, Model label

Dimensions

E2E-C04N03-WC-□□

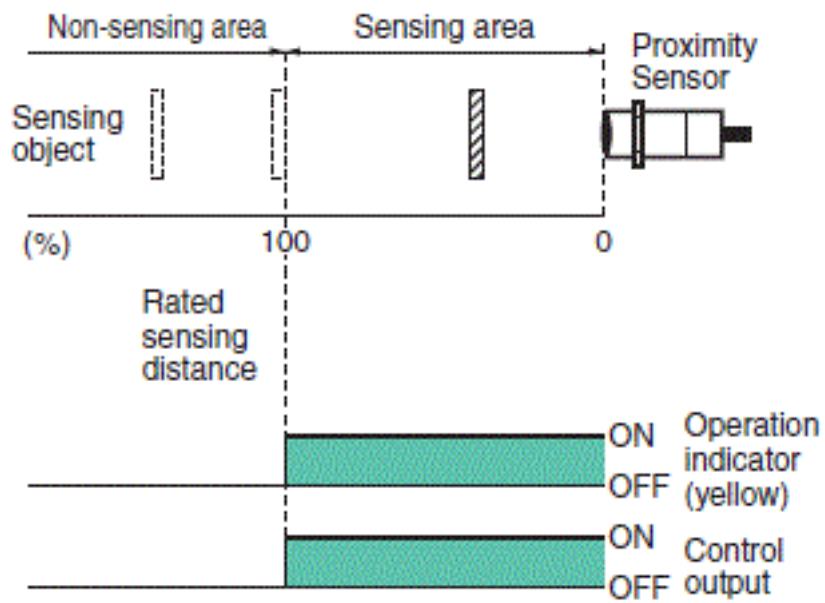


Operation indicators (yellow) 4 × 90°

- * 2.9-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.14 mm², Insulator diameter: 0.8 mm), Standard length: 2 m
Model with robot (bending-resistant) cable: 2.9-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.15 mm², Insulator diameter: 1.05 mm), Standard length: 2 m

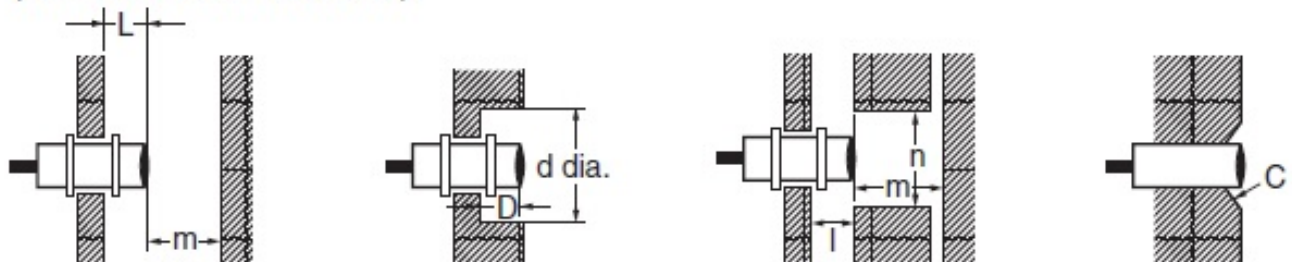
Output circuit

Timing chart



Effects of surrounding metals

〈Shielded Models〉

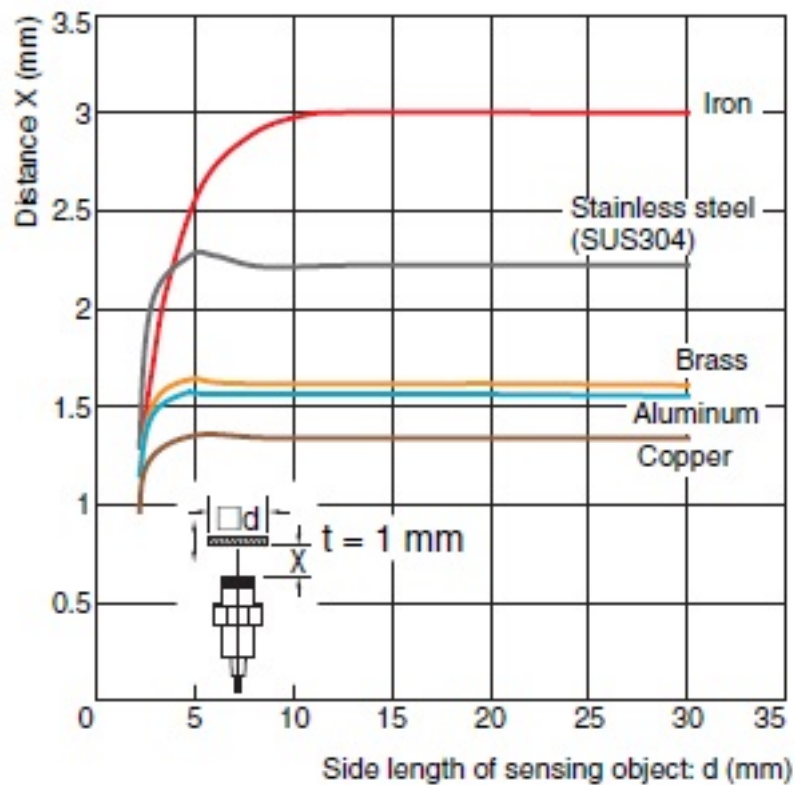


L: 6 mm min., dia. d: 12 mm min., m: 9 mm min., D: 6 mm min., n: 20 mm min.

Characteristic chart

Sensing distance vs. size and material of sensing object

E2E-C04N03□/E2E-S05N03□



Sensing range

E2E-C/S□N□

