



Proximity Sensor Ideal for High Temperatures and Cleaning Processes

# E2EH-X12D1-T 2M





Sensing head size	M30
Туре	Cylinder type (with screw), Shielded
Power source	DC 2-wire models
Sensing distance	12 mm ±10%
Setting distance	0 to 9.6 mm
Operation mode	NO

Image

Ratings/Performance

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Sensing head size	M30
Туре	Cylinder type (with screw), Shielded
Power source	DC 2-wire models
Sensing distance	12 mm ±10%
Setting distance	0 to 9.6 mm
Differential distance	15% max. of sensing distance
Sensing object	Ferrous metal (Sensitivity lowers with non-ferrous metals.)
Standard sensing object	Iron 36 x 36 x 1 mm
Response frequency	100 Hz (Average value)
Power supply voltage	12 to 24 VDC ripple (p-p) 10% max.
Operating voltage range	10 to 32 VDC
Leakage current	0.8 mA max.
Control output (Switching capacity)	3 to 100 mA
Control output (Residual voltage)	5 V max.(Load current 100 mA with cable length of 2 m)
Indicator	Operation indicator (red), Operation setting indicator (yellow)
Operation mode	NO
Polarity	No polarity
Protective circuit	Output short-cut protection Surge suppressor
Ambient temperature (Operating)	0 to 100 °C
Ambient temperature (Storage)	-25 to 70 °C
Ambient humidity (Operating)	35 to 95 %
Ambient humidity (Storage)	35 to 95 %
Temperature influence	±10% max. of sensing distance at 23 °C in the temperature range of 0 to 70 °C

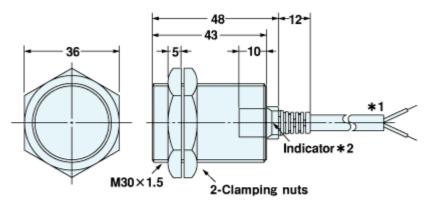
	±15% max. of sensing distance at 23 °C in the temperature range of +70 to +100 °C
Voltage influence	±10% max. of sensing distance at rated voltage in the rated voltage ±15% range
Insulation resistance	Between charged parts and the case: 50 MΩ min. at 500 VDC
Dielectric strength	Between charged parts and the case: 1,000 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: 1000 m/s <sup>2</sup> 10 times each in X, Y, and Z directions
Degree of protection	IEC: IP67 DIN40050-9 IP69K
Connection method	Pre-wired models (2 m)
Weight	Package: Approx. 220 g
Material	Case: Stainless steel (SUS316L) Sensing surface: Polybutylene terephthalate (PBT) Clamping nuts: Stainless steel (SUS316L) Cable: Heat-resistant PVC cable
Accessories	Instruction manual

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#### **Dimensions**

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#### Dimensions



- \*1. 6-dia. heat-resistant PVC cable with 2 conductors (conductor cross section: 0.5mm², insulator diameter: 1.9mm) Standard length: 2m 6-dia. heat-resistant PVC cable with 3 conductors (conductor cross section: 0.5mm², insulator diameter: 1.9mm) Standard length: 2m \*2. D1 type: Operation indicator(red), Setting indicator(yellow) D2,B,C type: Operation indicator(yellow)

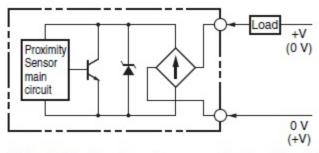
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## **Output circuit**

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### Output circuit

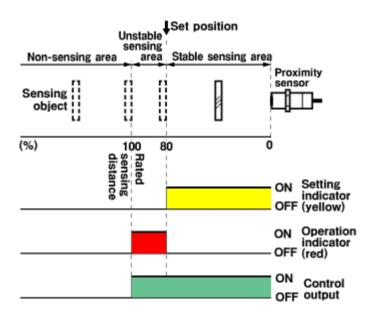
# Polarity: None



Note: 1. The load can be connected to either the +V or 0 V side.

The E2EH-X□D□-T has no polarity.
 Therefore, you do not need to consider the polarity.

# Timing chart

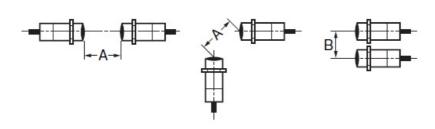


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Mutual interference

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Mutual interference



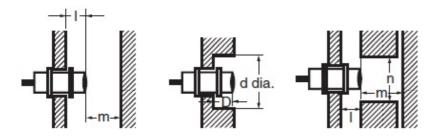
A: 110 mm min., B: 90 mm min.

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Effects of surrounding metals

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Effects of surrounding metals



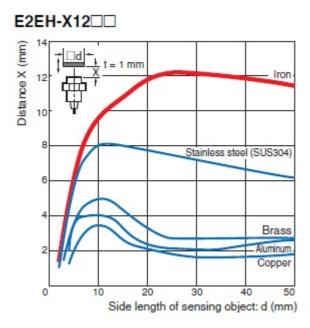
I: 6 mm min., dia. d: 50 mm min., D: 6 mm min., m: 45 mm min., n: 50 mm min.

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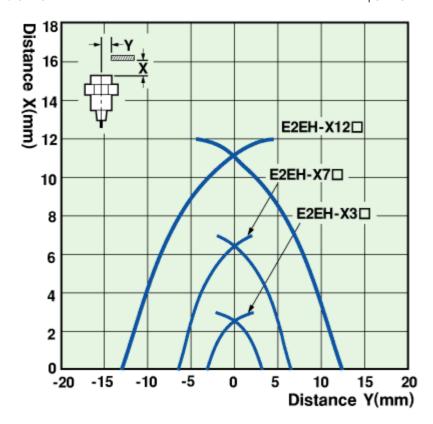
**Characteristic chart** 

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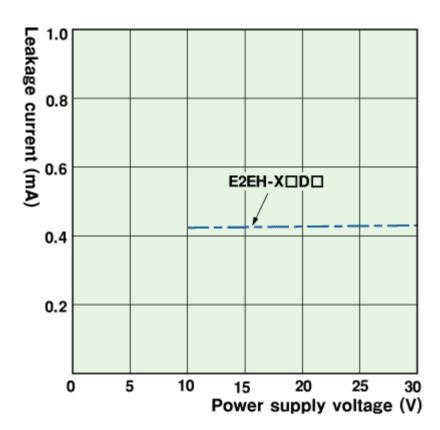
Sensing distance vs. size and material of sensing object



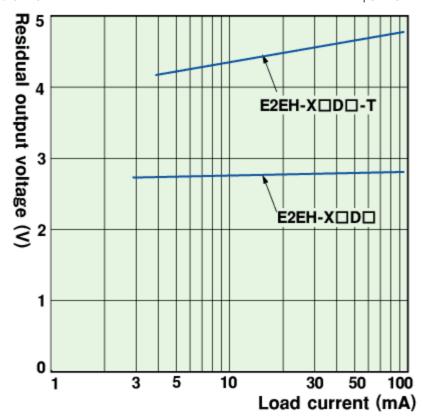
Sensing range



Leakage current



Residual voltage



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