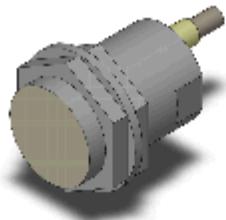




Chip-immune Inductive Proximity Sensor

## E2EZ-X8D1-M1GJ 0.3M



Shielded, Cylinder type (with screw) M30, DC 2-wire models, Sensing distance 8 mm ±10%, NO, Pre-wired M12 connector models (1-4 pin arrangement)

<b>Sensing head size</b>	M30
<b>Type</b>	Cylinder type (with screw), Shielded
<b>Power source</b>	DC 2-wire models
<b>Sensing distance</b>	8 mm ±10%
<b>Setting distance</b>	0 to 6.4 mm
<b>Operation mode</b>	NO

Image

### Ratings/Performance

As of July 16, 2020

<b>Sensing head size</b>	M30
<b>Type</b>	Cylinder type (with screw), Shielded
<b>Power source</b>	DC 2-wire models
<b>Sensing distance</b>	8 mm ±10%
<b>Setting distance</b>	0 to 6.4 mm
<b>Differential distance</b>	20% max. of sensing distance
<b>Sensing object</b>	Ferrous metal (Sensitivity lowers with non-ferrous metals.)
<b>Standard sensing object</b>	Iron 54 x 54 x 1 mm
<b>Response frequency</b>	30 Hz (Average value)
<b>Power supply voltage</b>	12 to 24 VDC ripple (p-p) 10% max.
<b>Operating voltage range</b>	10 to 30 VDC
<b>Leakage current</b>	0.8 mA max.
<b>Control output (Switching capacity)</b>	3 to 100 mA
<b>Control output (Residual voltage)</b>	3 V max. (Load current 100 mA with cable length of 2 m)
<b>Indicator</b>	Operation indicator (red), Operation setting indicator (green)
<b>Operation mode</b>	NO
<b>Protective circuit</b>	Output short-cut protection Surge suppressor
<b>Ambient temperature (Operating)</b>	0 to 50 °C
<b>Ambient temperature (Storage)</b>	0 to 50 °C
<b>Ambient humidity (Operating)</b>	35 to 95% RH
<b>Ambient humidity (Storage)</b>	35 to 95% RH
<b>Temperature influence</b>	±20% max. of sensing distance at 23 °C in the temperature range of 0 to 50 °C
<b>Voltage influence</b>	±2.5% max. of sensing distance at rated voltage in the rated voltage ±10% range

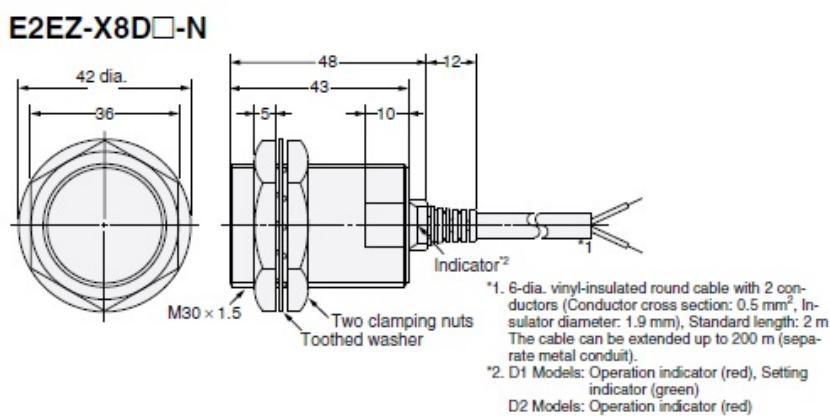
<b>Insulation resistance</b>	Between charged parts and the case: 5 MΩ min. at 500 VDC
<b>Dielectric strength</b>	Between charged parts and the case: 1,000 VAC 50/60 Hz 1 min
<b>Vibration resistance</b>	Destruction: 10 to 55 Hz, 1.5 mm double amplitude each in X, Y, and Z directions for 2 h
<b>Shock resistance</b>	Destruction: $1000 \text{ m/s}^2$ 10 times each in X, Y, and Z directions
<b>Degree of protection</b>	IEC: IP67 Company standard: Oil-proof
<b>Connection method</b>	Pre-wired M12 connector models (1-4 pin arrangement) (0.3 m)
<b>Weight</b>	Package: Approx. 160 g
<b>Material</b>	Case: Brass nickel plating Sensing surface: Polybutylene terephthalate (PBT) Clamping nuts: Iron zinc plating Toothed washers: Iron zinc plating
<b>Accessories</b>	Instruction manual

As of July 16, 2020

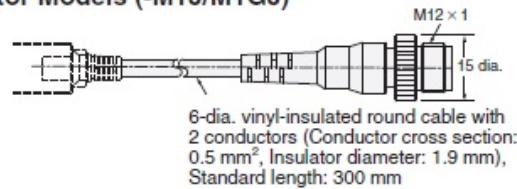
## Dimensions

As of July 16, 2020

Dimensions



## Pre-wired Connector Models (-M1J/M1GJ)

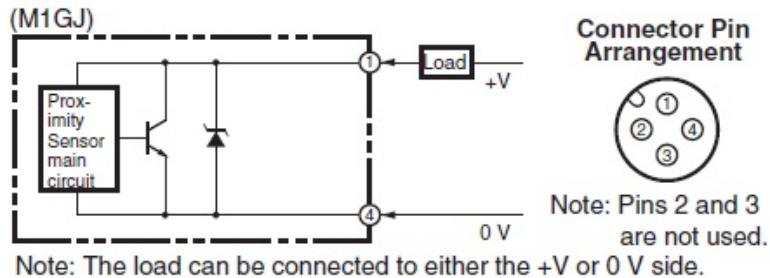


As of July 16, 2020

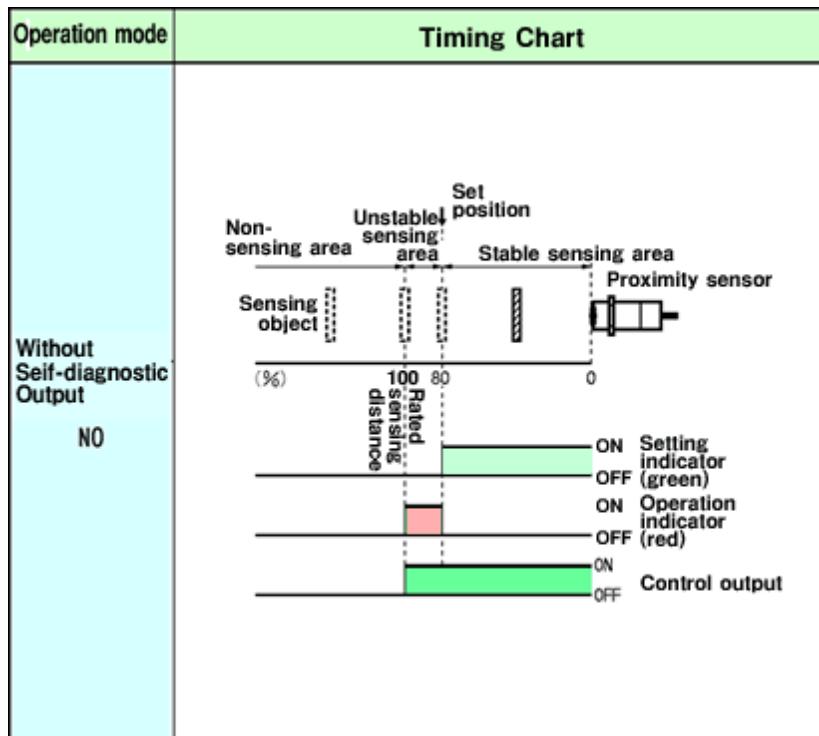
## Output circuit

As of July 16, 2020

Output circuit



Timing chart

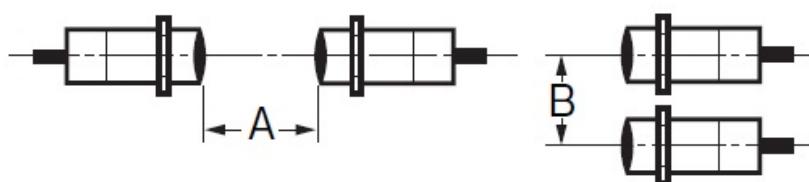


As of July 16, 2020

## Mutual interference

As of July 16, 2020

Mutual interference

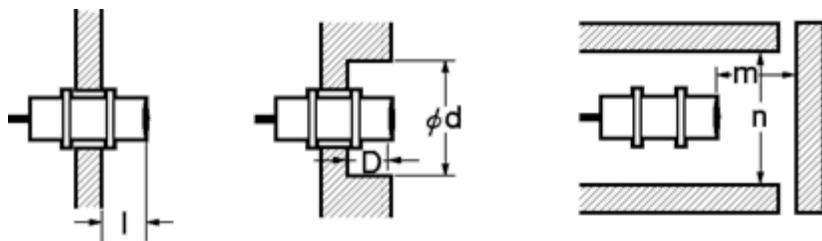


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## Effects of surrounding metals

As of July 16, 2020

Effects of surrounding metals



## Iron

l: 0 mm min., dia. d: 30 mm min., D: 0 mm min., m: 32 mm min., n: 45 mm min.

## Aluminum

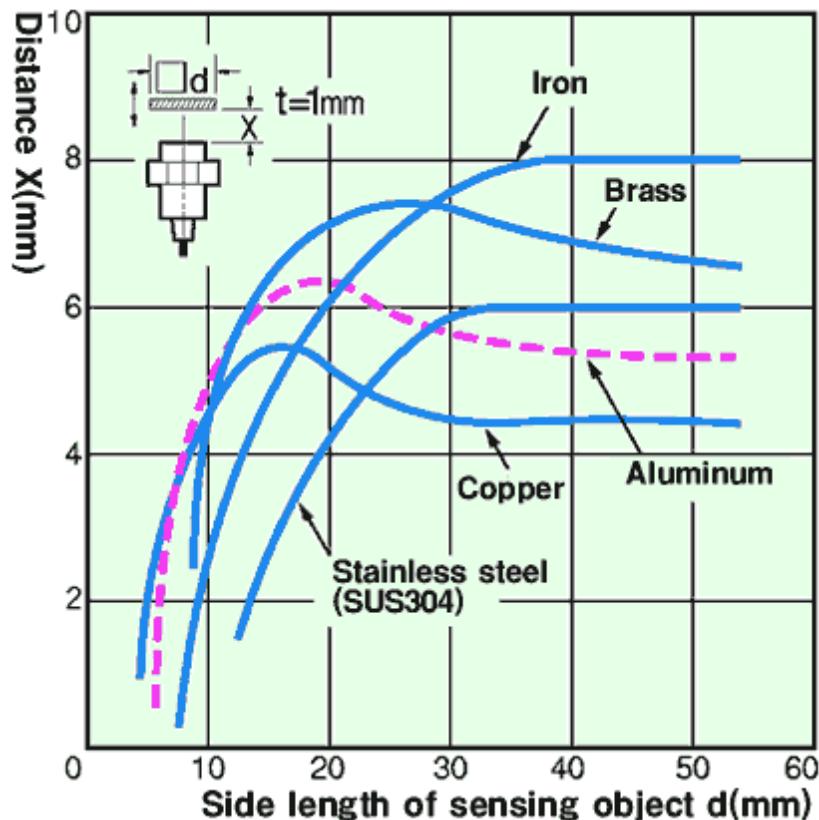
l: 10 mm min., dia. d: 70 mm min., D: 10 mm min., m: 32 mm min., n: 90 mm min.

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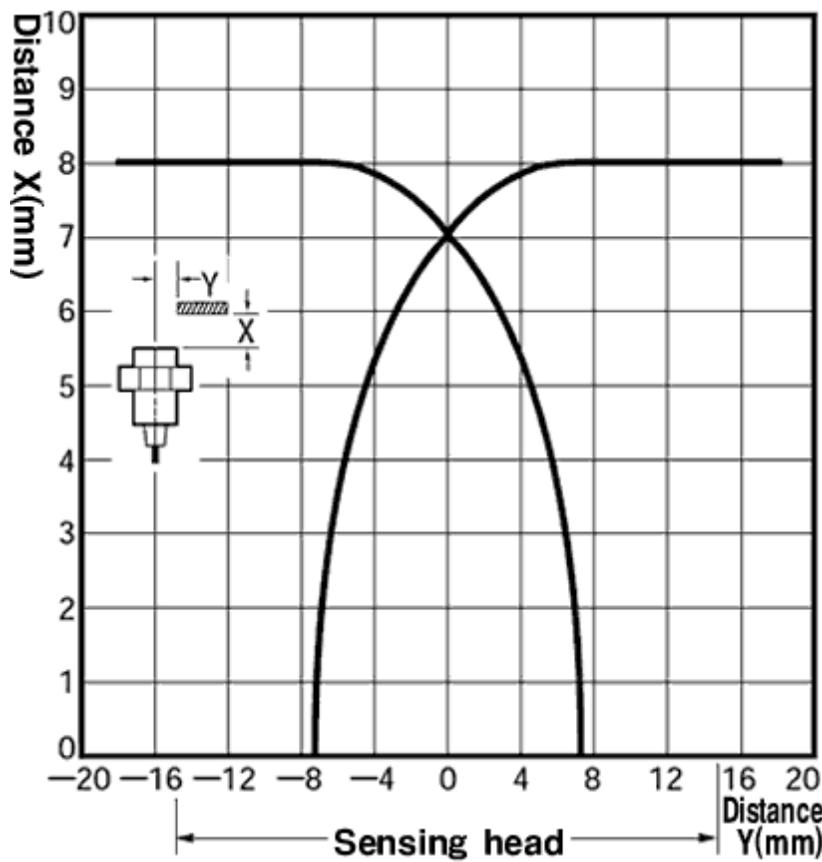
## Characteristic chart

As of July 16, 2020

Sensing distance vs. size and material of sensing object



## Sensing range



As of July 16, 2020