

All Metals and Long-distance Types

E2V-X10C1 2M

All Metals and Long-distance Type Proximity Sensor, Shielded, M30, Sensing distance: 10 mm, DC 3-wire, NPN, NO, Pre-wired model, 2 m



Image

Sensing head size	M30
Type	Cylinder type (with screw), Shielded
Power source	DC Three-wires models
Sensing distance	10 mm \pm 10%
Setting distance	0 to 8.0 mm
Operation mode	NO

Ratings/Performance

As of August 8, 2024

Sensing head size	M30
Type	Cylinder type (with screw), Shielded
Power source	DC Three-wires models
Sensing distance	10 mm \pm 10%
Setting distance	0 to 8.0 mm
Differential distance	10% max. of sensing distance
Sensing object	Ferrous metal, Non-ferrous metal (Sensing distance is different according to the material.)
Standard sensing object	Aluminum 30 x 30 x 3 mm
Response frequency	70 Hz (Average value)
Power supply voltage	12 to 24 VDC ripple (p-p) 10% max.
Operating voltage range	10 to 30 VDC
Power consumption	at 30 VDC, current consumption: 15 mA max.: 450 mW
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/blink), Operation setting indicator (yellow/light)
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 %

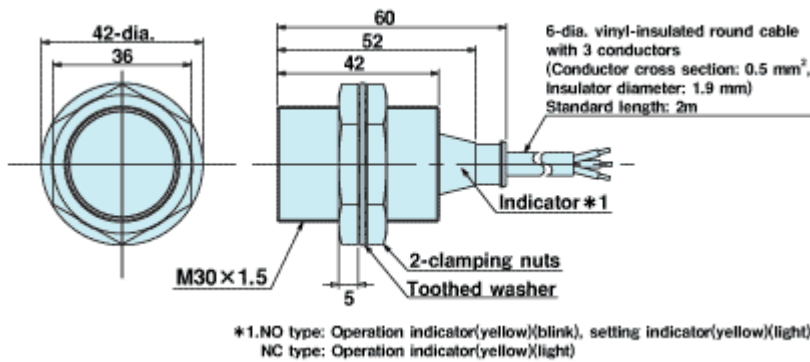
Ambient humidity (Storage)	35 to 95 %
Temperature influence	±10% max. of sensing distance at 23 °C in the temperature range of -25 to 70 °C
Voltage influence	±1.5% max. of sensing distance at rated voltage in the rated voltage ±15% range
Insulation resistance	Between charged parts and the case: 50 MΩ 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 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. 200 g
Material	Case: Brass nickel plating Sensing surface: Heat-resistant ABS resin Mounting nut: Brass nickel plating Toothed washers: Iron zinc plating
Accessories	Instruction manual

As of August 8, 2024

Dimensions

As of August 8, 2024

Dimensions

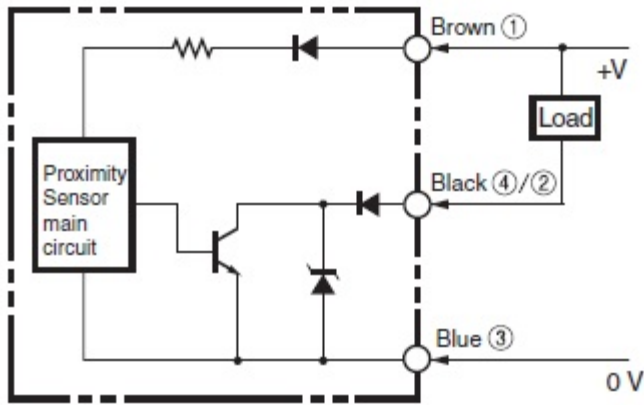


As of August 8, 2024

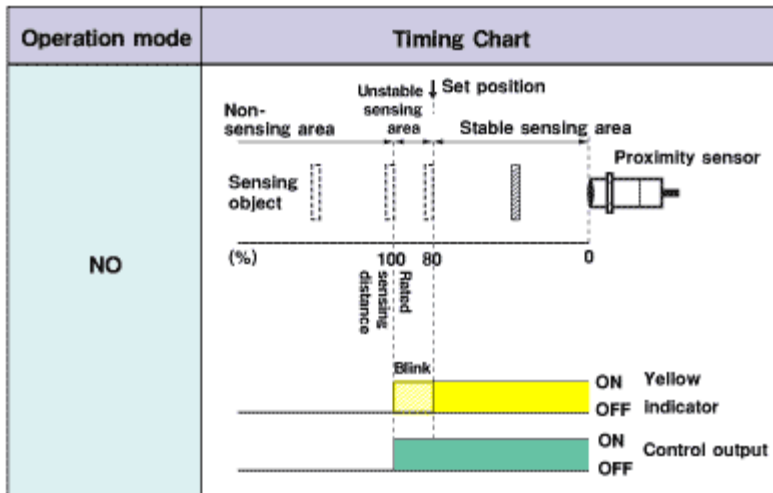
Output circuit

As of August 8, 2024

Output circuit



Timing chart

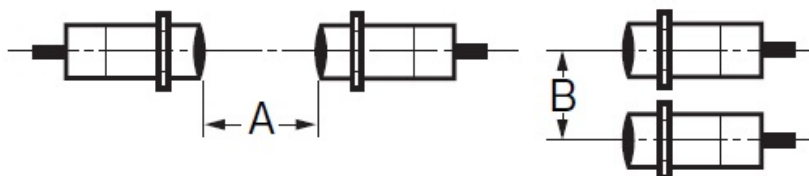


As of August 8, 2024

Mutual interference

As of August 8, 2024

Mutual interference



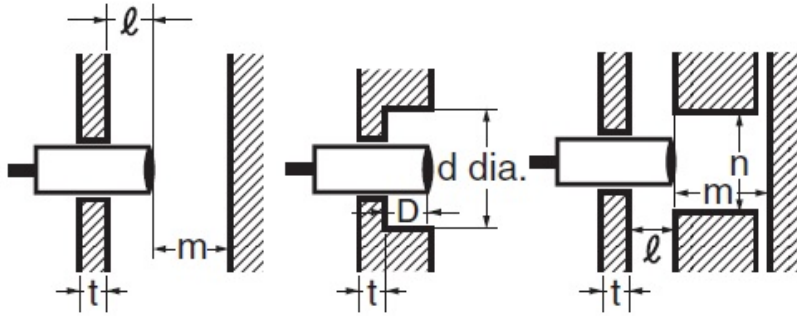
A: 100 mm min., B: 50 mm min.

As of August 8, 2024

Effects of surrounding metals

As of August 8, 2024

Effects of surrounding metals



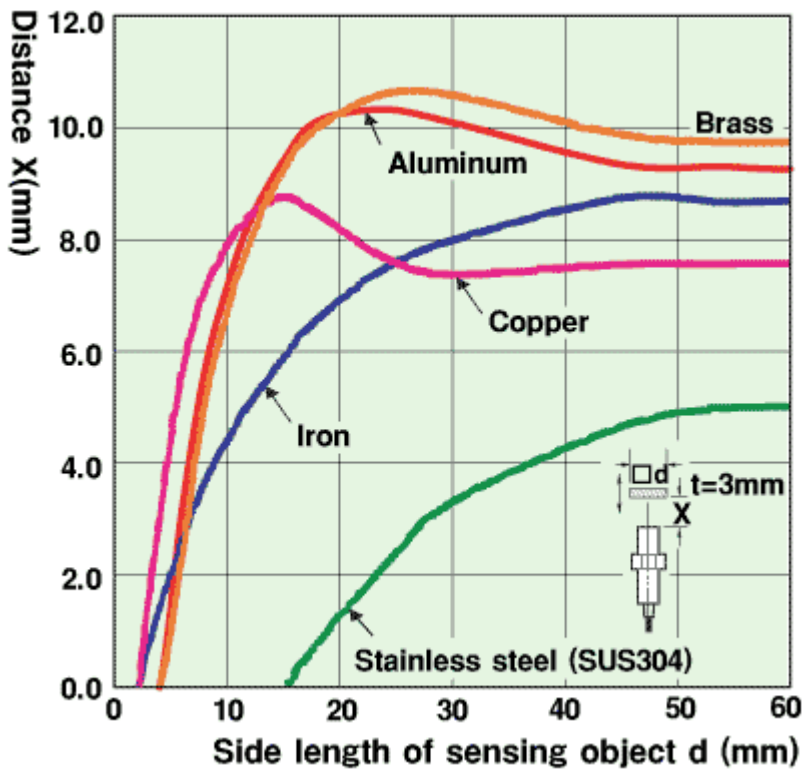
l: 0 mm min., dia. d: 30 mm min., D: 0 mm min., m: 45 mm min., n: 45 mm min.

As of August 8, 2024

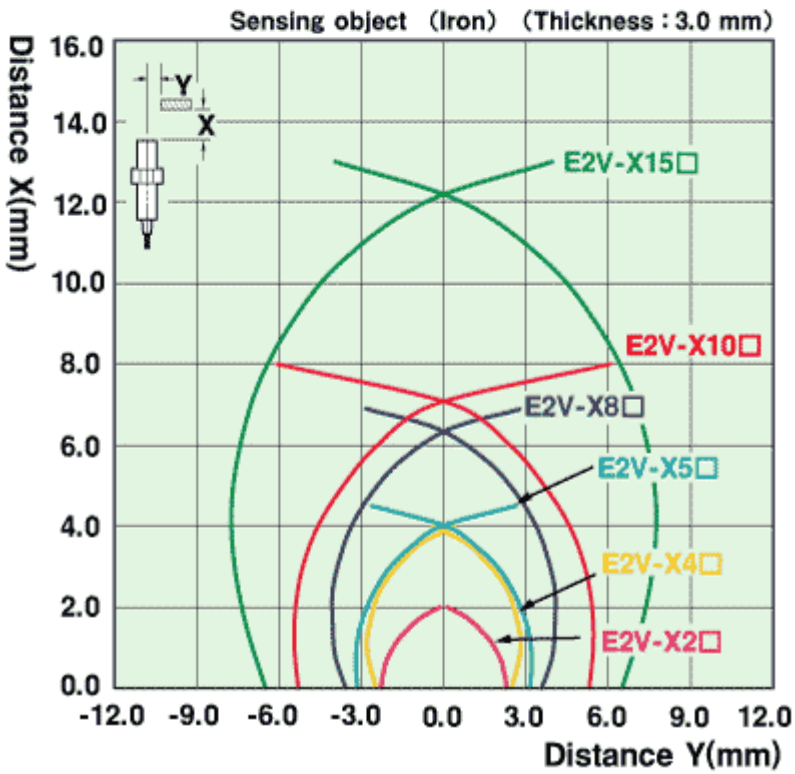
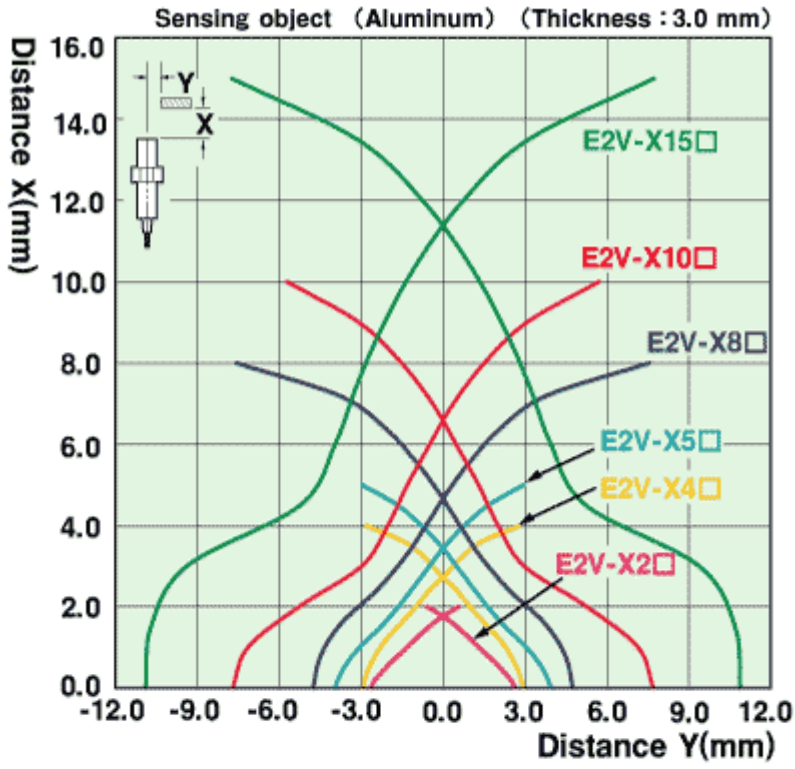
Characteristic chart

As of August 8, 2024

Sensing distance vs. size and material of sensing object



Sensing range



As of August 8, 2024