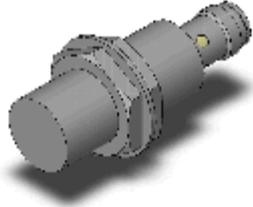


All Metals and Long-distance Types

E2V-X8C1-M1

Shielded, Cylinder type (with screw) M18, DC Three-wires models, Sensing distance 8 mm, NO, NPN open collector, M12 connector models



Image

| | |
|--------------------------|--------------------------------------|
| Sensing head size | M18 |
| Type | Cylinder type (with screw), Shielded |
| Power source | DC Three-wires models |
| Sensing distance | 8 mm \pm 10% |
| Setting distance | 0 to 6.4 mm |
| Operation mode | NO |

Ratings/Performance

As of October 21, 2022

| | |
|--|---|
| Sensing head size | M18 |
| Type | Cylinder type (with screw), Shielded |
| Power source | DC Three-wires models |
| Sensing distance | 8 mm \pm 10% |
| Setting distance | 0 to 6.4 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 24 x 24 x 3 mm |
| Response frequency | 40 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. |
| 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% |

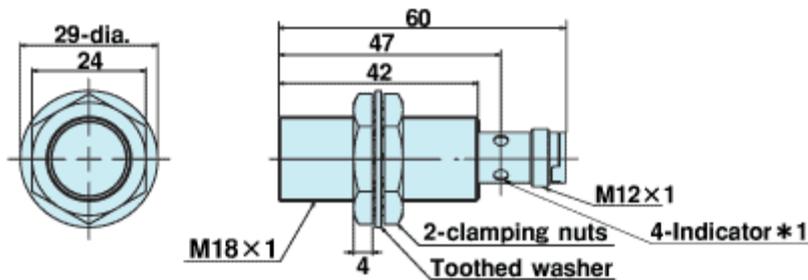
| | |
|------------------------------|---|
| Temperature influence | ±15% max. of sensing distance at 23 °C in the temperature range of -25 to 70 °C |
| Voltage influence | ±1.5% max. of sensing distance at rated voltage in the rated voltage ±15% range |
| Insulation resistance | Between charged parts 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 |
| Connection method | M12 connector models |
| Weight | Package: Approx. 45 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 October 21, 2022

Dimensions

As of October 21, 2022

Dimensions



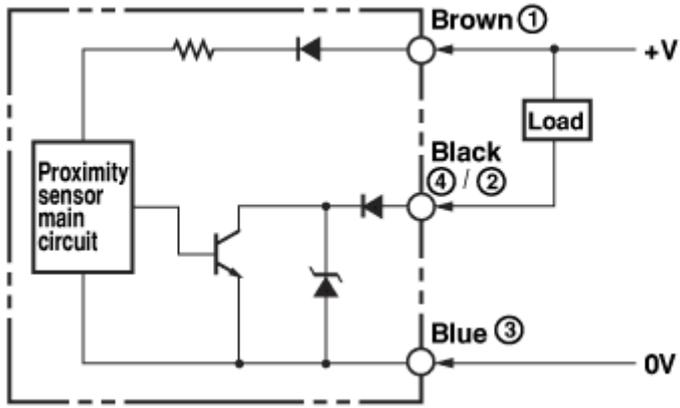
* 1.NO type: Operation indicator(yellow)(blink), setting indicator(yellow)(light)
NC type: Operation indicator(yellow)(light)

As of October 21, 2022

Output circuit

As of October 21, 2022

Output circuit

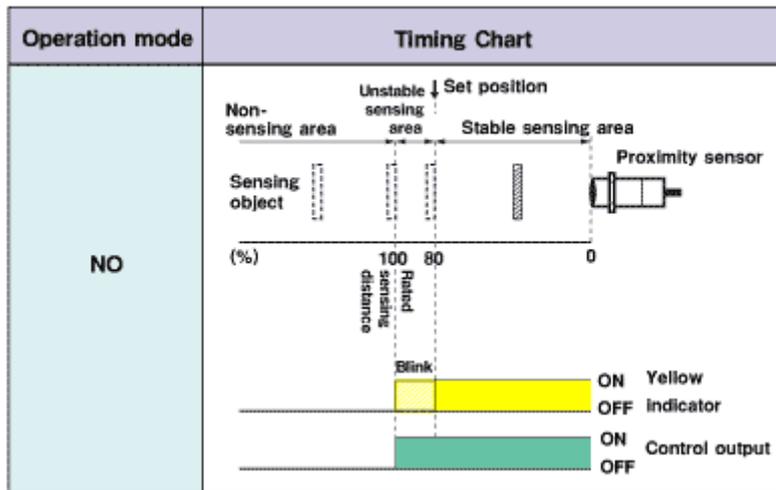


Note. For Connector Models,
 The connection between pins ①, ④ and ③ uses an NO contact.
 The connection between pins ①, ② and ③ uses an NC contact.



The applicable connector cable of our company : XS5F series
 XS2F series

Timing chart

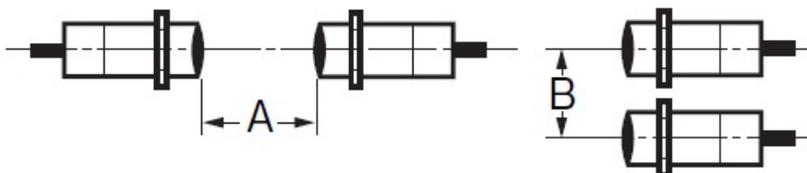


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Mutual interference

As of October 21, 2022

Mutual interference



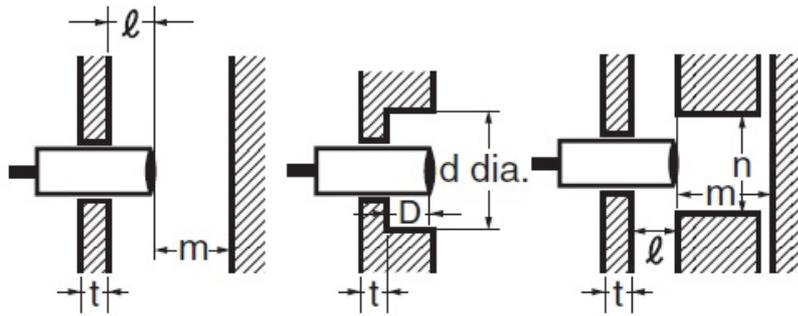
A: 60 mm min., B: 35 mm min.

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Effects of surrounding metals

As of October 21, 2022

Effects of surrounding metals



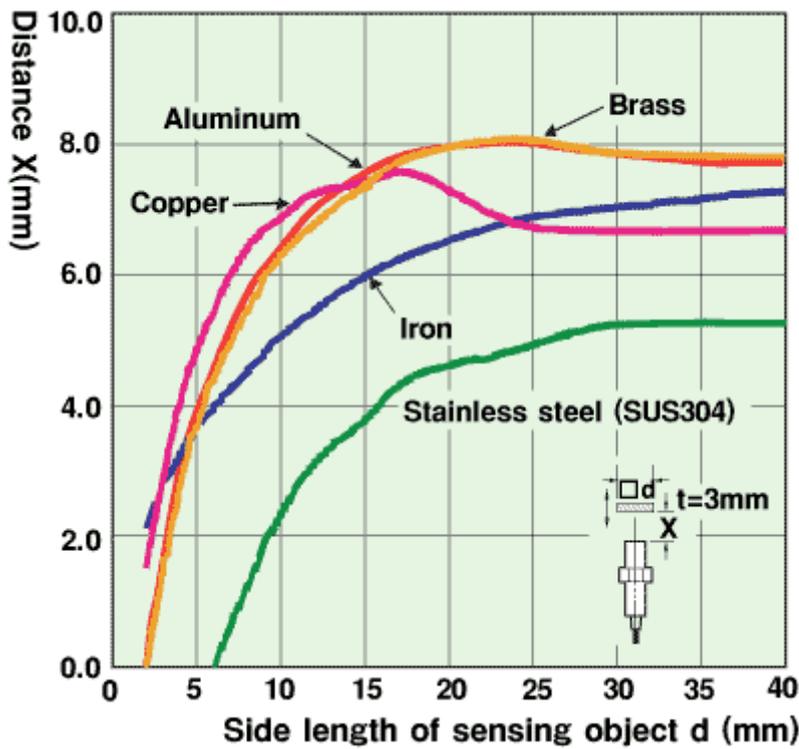
l: 0 mm min., dia. d: 18 mm min., D: 0 mm min., m: 24 mm min., n: 27 mm min.

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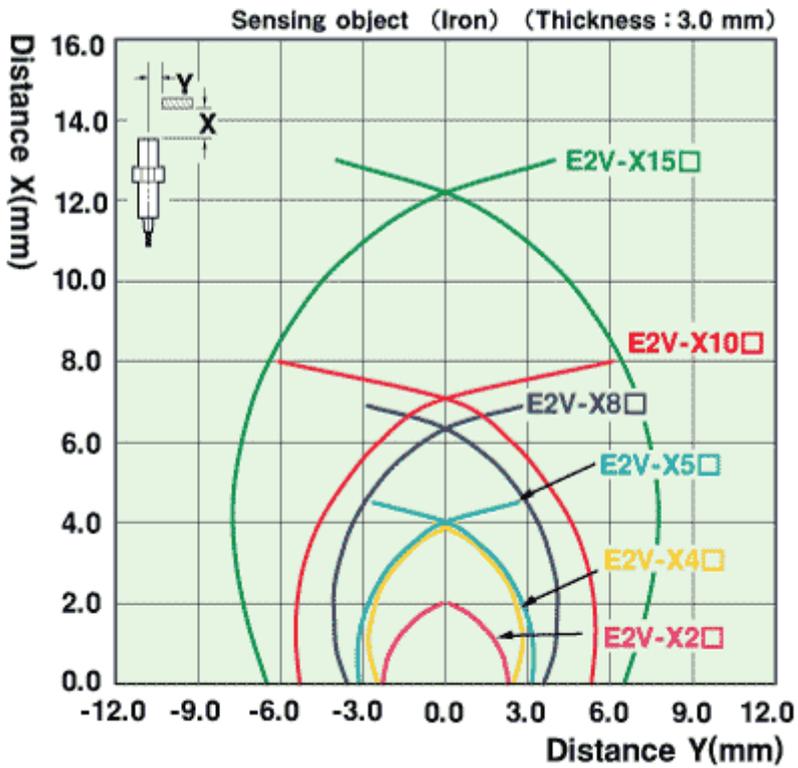
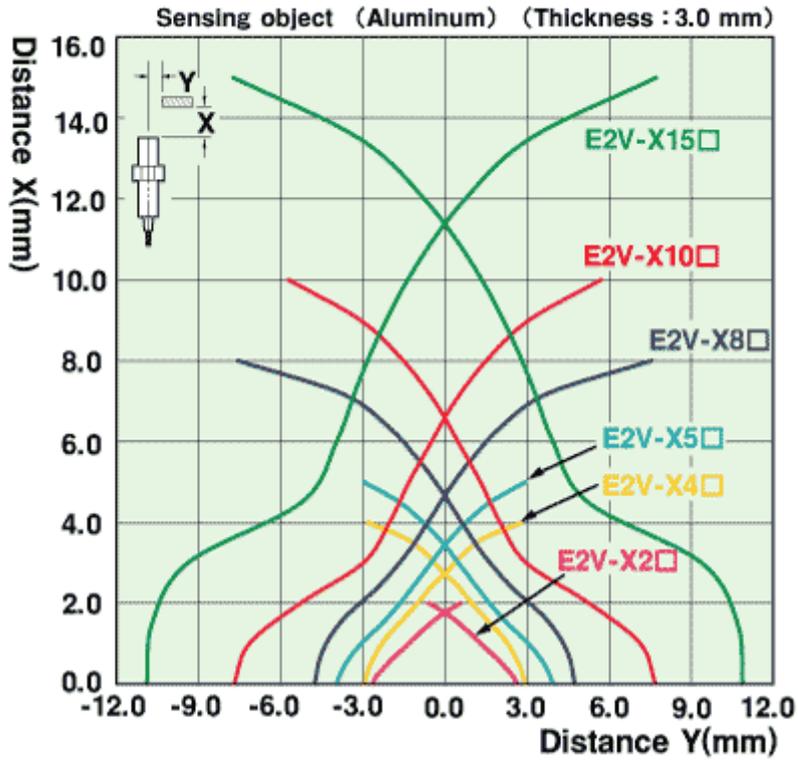
Characteristic chart

As of October 21, 2022

Sensing distance vs. size and material of sensing object



Sensing range



As of October 21, 2022