



All Metals and Long-distance Types

E2V-X15B1-M1TJ 0.3M

Shielded, Cylinder type (with screw) M30, DC Three-wires models, Sensing $\,$ distance 15 mm, NO, PNP open collector, Prewired M12 smart click connector model (0.3 m)



Sensing head size	M30		
Туре	Cylinder type (with screw), Shielded		
Power source	DC Three-wires models		
Sensing distance	15 mm ±10%		
Setting distance	0 to 12.0 mm		
Operation mode	NO		

Image

Ratings/Performance

As of October 21, 2022

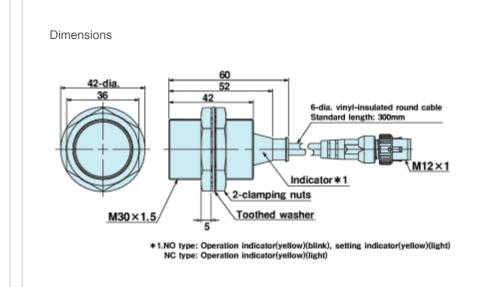
Sensing head size	M30			
Туре	Cylinder type (with screw), Shielded			
Power source	DC Three-wires models			
Sensing distance	15 mm ±10%			
Setting distance	0 to 12.0 mm			
Differential distance	10% max. of sensing distance			
Sensing object	Ferrous metal, Non-ferrous metal (Sensing distance is different according to the material.)			
Standard sensing object	Aluminum 45 x 45 x 3 mm			
Response frequency	30 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)	PNP 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 ℃			
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 Company standard: Oil-proof			
Connection method	Prewired M12 smart click connector model (0.3 m)			
Weight	Package: Approx. 140 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			

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Dimensions

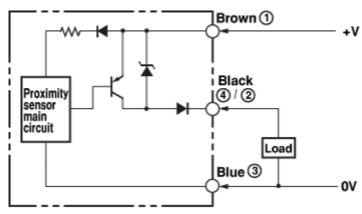


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Output circuit

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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 applicatable connector cable of our company : XS5F series XS2F series

Timing chart

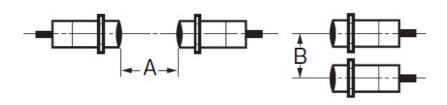
Operation mode	Timing Chart					
	Non- Sensing Stable		Set position Stable sensing			
	Sensing object		(2000)	Proximity sensor		
NO	(%)	100 80 Rated distance	(Ó		
		Blink		ON Yellow OFF indicator ON Control output		

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Mutual interference

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Mutual interference



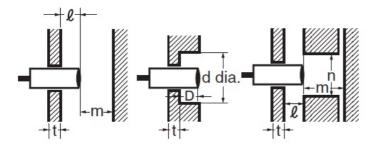
A: 120 mm min., B: 70 mm min.

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Effects of surrounding metals

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Effects of surrounding metals



* If the thickness of the mounting bracket (t) exceeds 5 mm, be sure to install the Sensor so that $\ell \geq 2$, d (dia.) ≥ 45 , and D ≥ 2 .

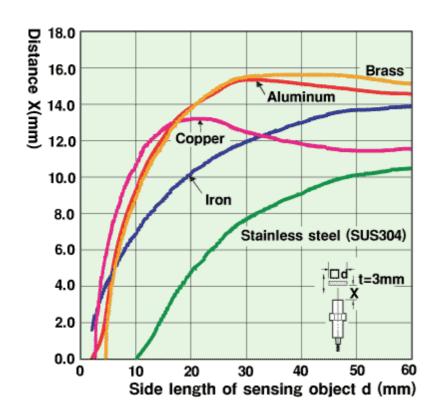
I: 0 mm min., dia. d: 30 mm min., D: 0 mm min., m: 45 mm min., n: 45 mm min.

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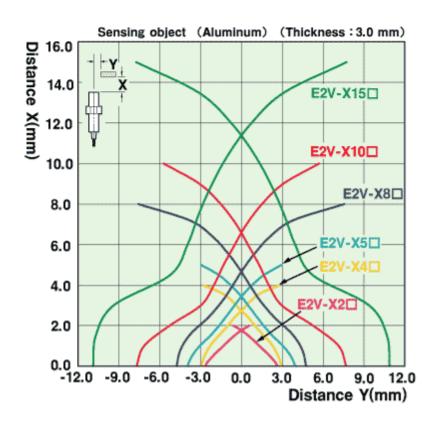
Characteristic chart

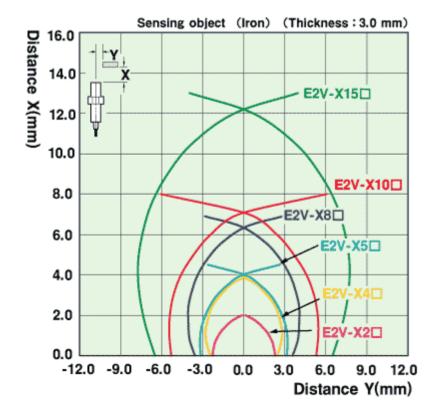
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Sensing distance vs. size and material of sensing object



Sensing range





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