

EV-112U

Main Unit, Unshielded Type, M12

CE

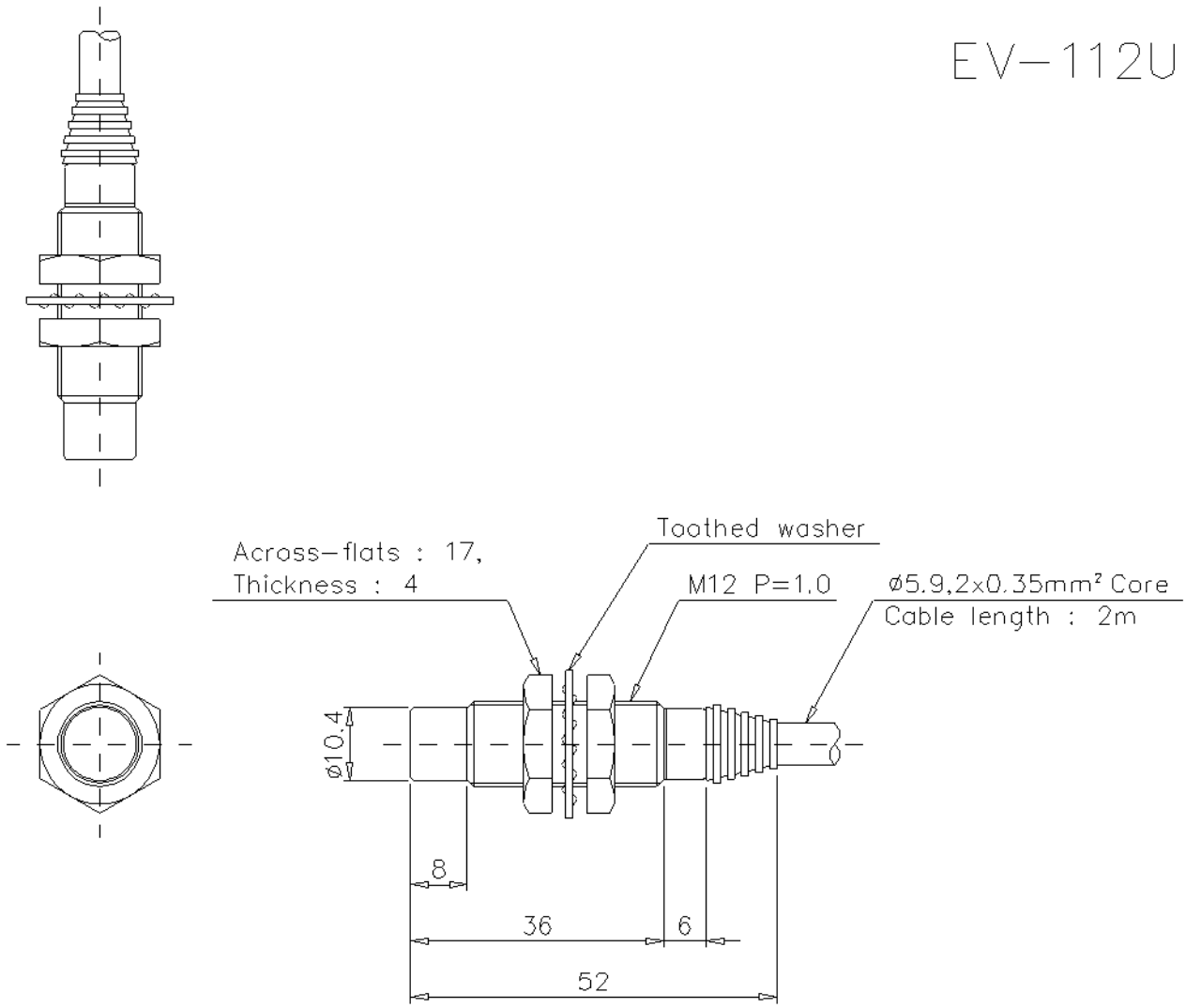
*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model		EV-112U
Type		Non-shielded
Shape		M12
Detecting distance		8 mm 0.31" ±10%
Detectable object		Ferrous metals (see Characteristics for nonferrous metals)
Standard target (iron, t=1 mm 0.04")		30 x 30 mm 1.18" x 1.18"
Hysteresis		20% max. of detecting distance, within -10 to +70°C 14 to 158°F
Response frequency		600 Hz
Operation mode		N.O.
Temperature characteristics		±10% max. of detecting distance, within -10 to +70°C 14 to 158°F
Control output (switching capacity)		5 to 200 mA
Protection circuit		Reversed polarity, short-circuit, surge voltage
Cable length		2 m 6.6'
Rating	Power voltage	12 to 24 VDC, Ripple (P-P) 20 % or less
	Current consumption (leakage current)	Current consumption (leakage current): 1.0 mA max., Residual voltage: 3.6 V max. (with 2-m 6.6' cable)
	Residual voltage	Residual voltage: 3.6 V max. (with 2-m 6.6' cable)
Environmental resistance	Enclosure rating	IP67
	Ambient temperature	-25 to +80 °C -13 to 176 °F (No freezing)
	Relative humidity	35 to 95 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions
	Shock resistance	500 m/s², 3 times in each of the X, Y, and Z directions
Case material		Nickel-plated brass
Accessories		Nut × 2, toothed washer × 1, instruction manual
Weight		Approx. 110 g

Dimensions

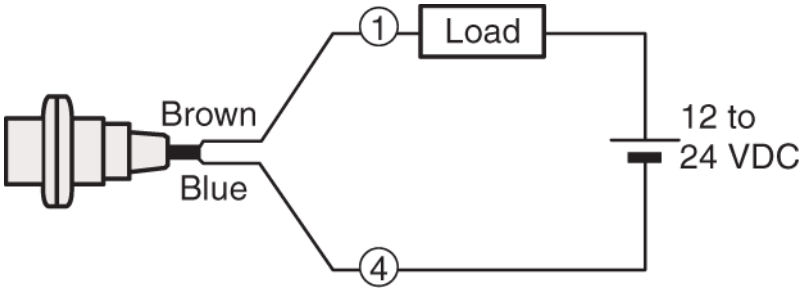
* Download CAD file or product manual for larger image/text and more detail.



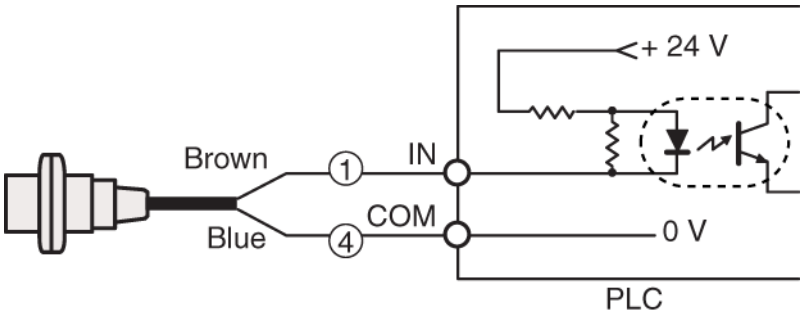
I/O Circuit Connection diagram

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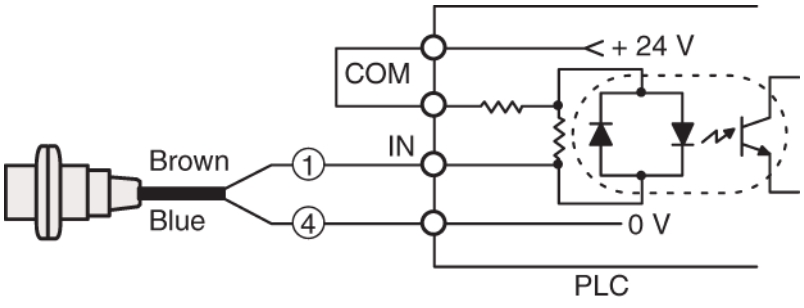
Connection to built-in DC power supply type PLC (externally connected power supply



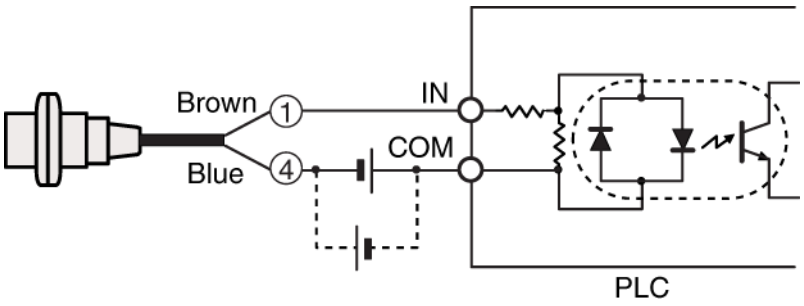
Connection to built-in DC power supply type PLC (internally connected power supply



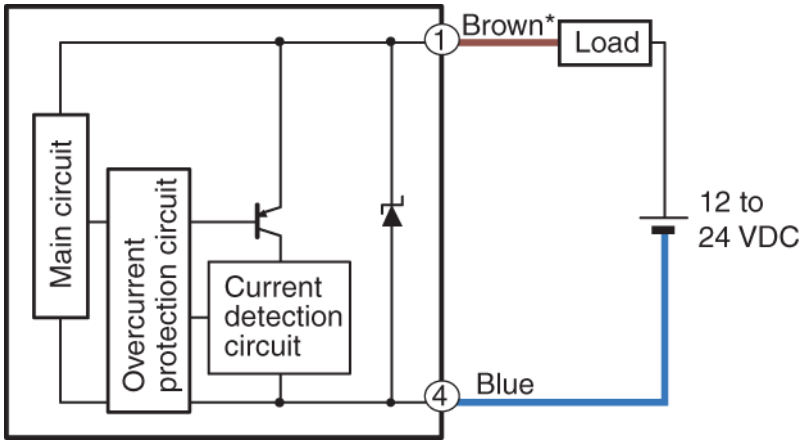
Connection to PLC having no internal DC power supply



For connections indicated by the dotted lines,
reverse brown and blue sensor wires



EV Series
DC 2-wire type

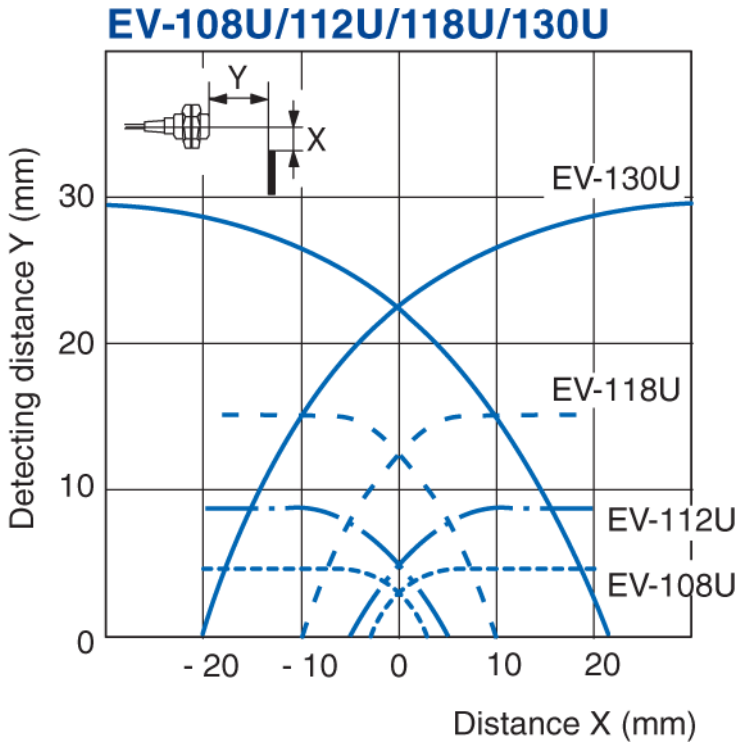


* Load can also be connected between blue wire and negative terminal of power supply.
The M8 sensor does not contain short-circuit protection or a current detection circuit.
1 and 4 in the circuit diagram shows the pin number of the connector type.

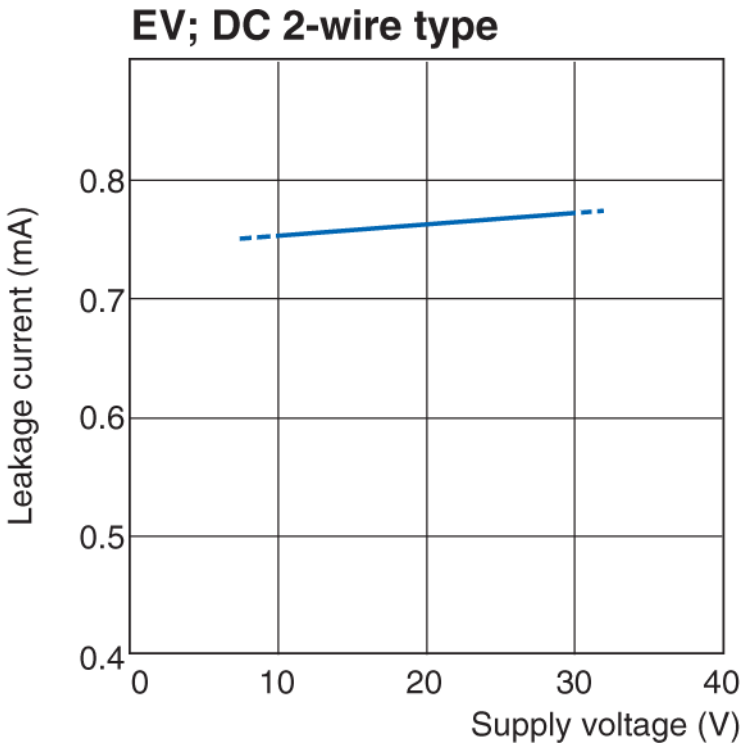
Characteristic

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Detecting range (Typical)
DC 2-wire type



Leakage current (Typical)



Detecting distance vs. size and material of target (Typical)
DC 2-wire type

