



EV-108M

Main Unit, Shielded Type, M8



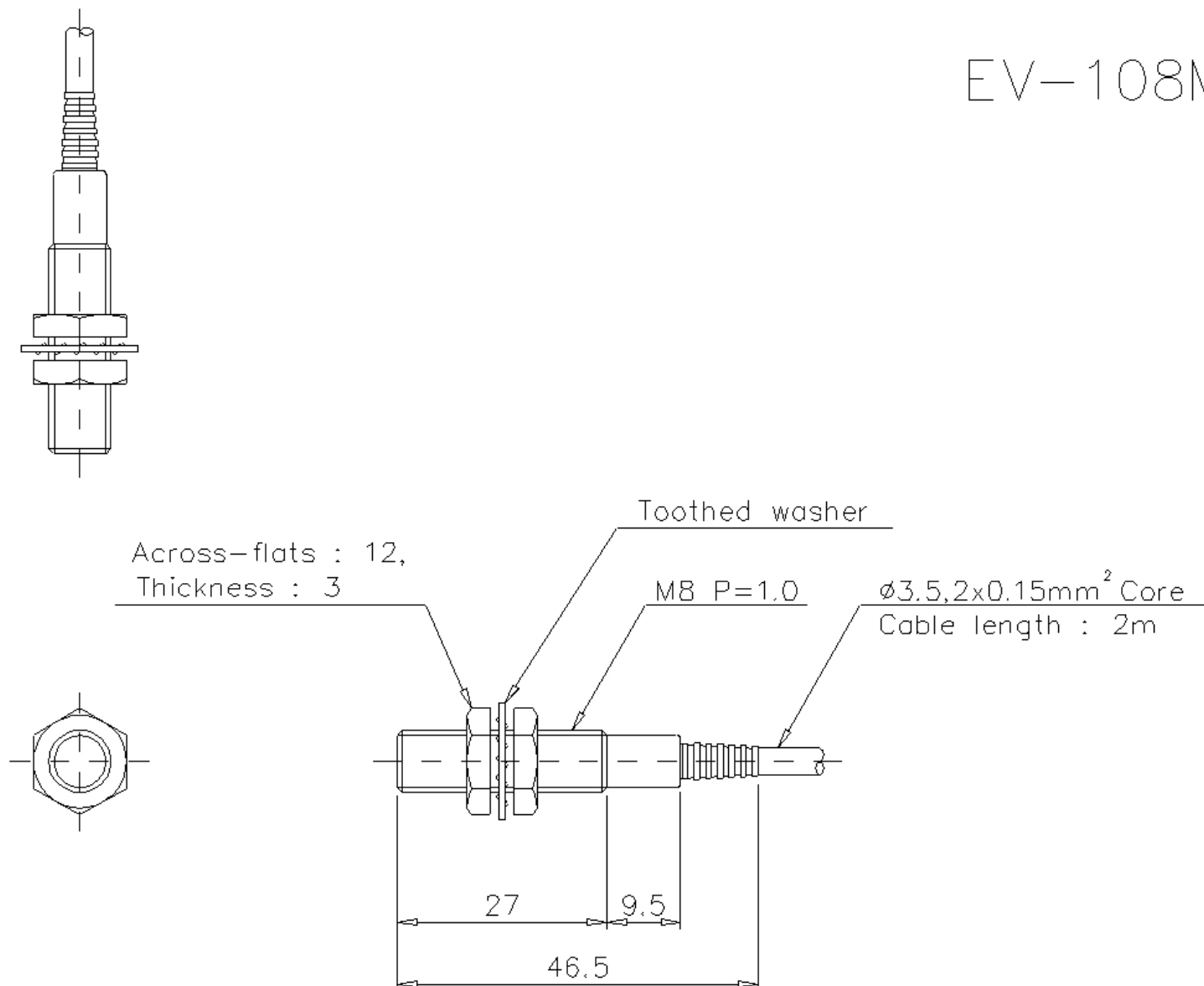
## SPECIFICATIONS

Model		EV-108M
Type		DC , Shielded
Shape		M8
Detecting distance		1.5 mm $\pm$ 10%
Detectable object		Ferrous metals (see Characteristics for nonferrous metals)
Standard target (iron, t=1 mm)		10 x 10 mm
Hysteresis		10% max. of detecting distance
Response frequency		800 Hz
Operation mode		N.O.
Temperature characteristics		$\pm$ 10% max. of detecting distance at +23°C, within -25 to +70°C
Control output (switching capacity)		5 to 80 mA
Protection circuit		Reversed polarity,surge voltage
Cable length		2 m
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 cable)
	Residual voltage	Residual voltage: 3.6 V max. (with 2-m cable)
Environmental resistance	Enclosure rating	IP67
	Ambient temperature	-25 to +80 °C (No freezing)
	Relative humidity	35 to 95 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm, 2 hours in each of the X, Y, and Z directions
	Shock resistance	500 m/s <sup>2</sup> , 3 times in each of the X, Y, and Z directions
Case material		Stainless steel (SUS304)
Accessories		Nut $\times$ 2, toothed washer $\times$ 1, instruction manual
Weight		Approx. 42 g

**Dimensions**

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

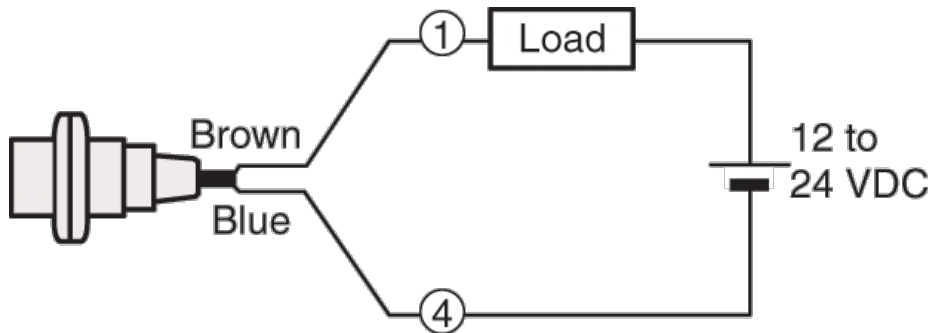
EV-108M



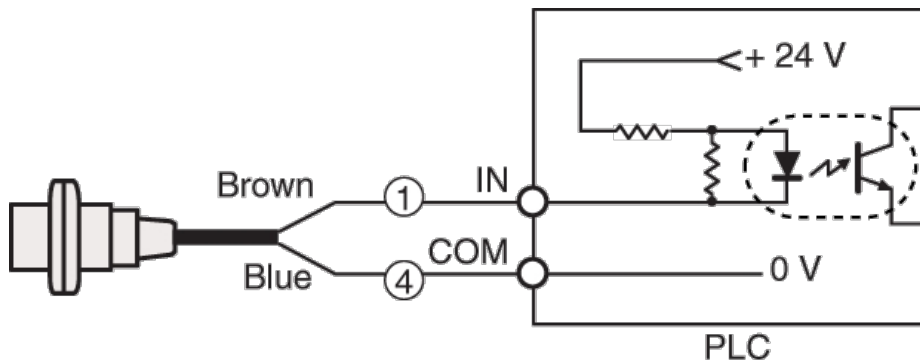
## I/O Circuit Connection diagram

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

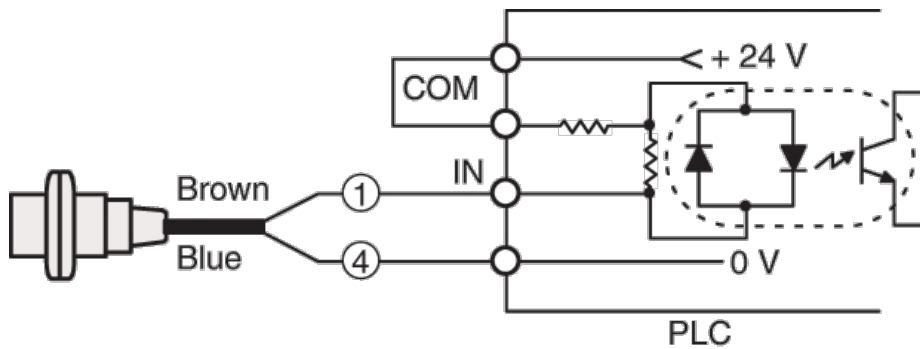
### Connection to built-in DC power supply type PLC (externally connected power supply)



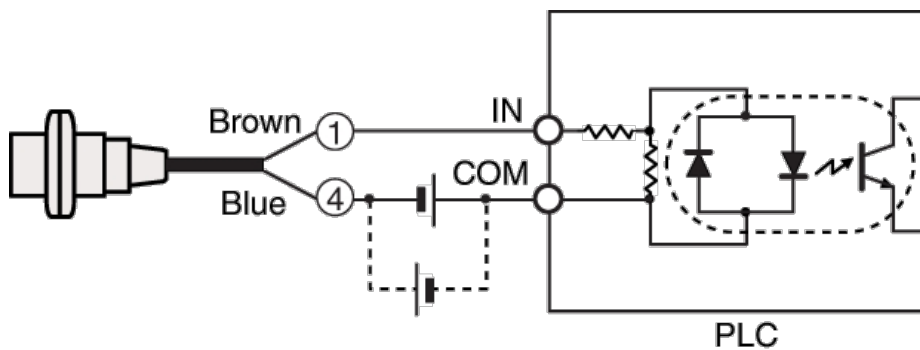
### Connection to built-in DC power supply type PLC (internally connected power supply)



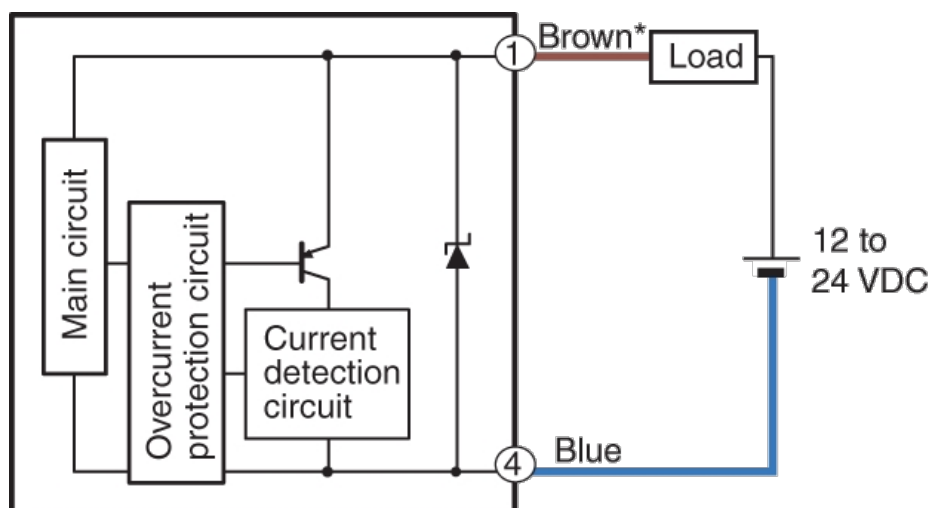
### Connection to PLC having no internal DC power supply



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



EV Series  
DC 2-wire type

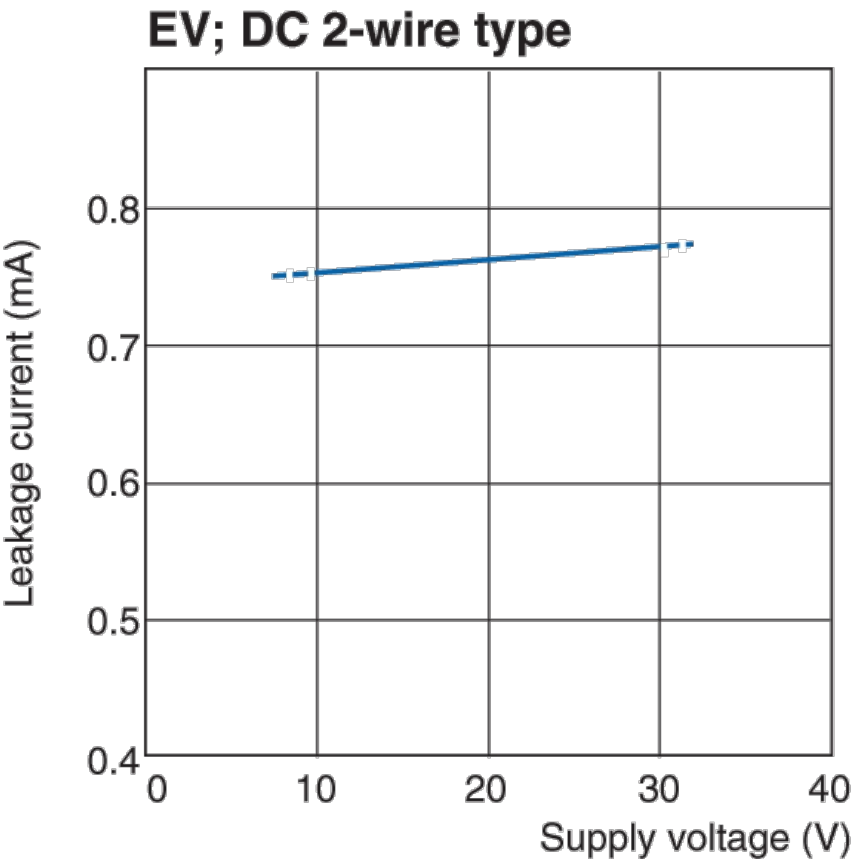


\* Load can also be connected between blue wire and negative terminal of power supply.  
The M8 sensor does not contain short-circuit protection or a current detection circuit.  
1 and 4 in the circuit diagram shows the pin number of the connector type.

Characteristic

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

Leakage current (Typical)



Detecting range (Typical)  
DC 2-wire type

