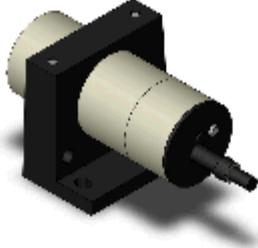


Long-distance type

## E2K-C20MT1 2M

Noise immunity type, Capacitive type, Unshielded, Cylinder type 34 dia., AC/DC 2-wire models, Sensing distance 20 mm, NO, Pre-wired models



Image

<b>Sensing head size</b>	34 dia.
<b>Type</b>	Noise immunity type, Cylinder type, Capacitive type, Unshielded
<b>Power source</b>	AC/DC 2-wire models
<b>Sensing distance</b>	20 mm
<b>Setting distance</b>	3 to 20 mm
<b>Operation mode</b>	NO

### Ratings/Performance

As of February 1, 2021

<b>Sensing head size</b>	34 dia.
<b>Type</b>	Noise immunity type, Cylinder type, Capacitive type, Unshielded
<b>Power source</b>	AC/DC 2-wire models
<b>Sensing distance</b>	20 mm
<b>Setting distance</b>	3 to 20 mm
<b>Differential distance</b>	15% max. of sensing distance (when adjusted to 20 mm $\pm$ 10% with standard object)
<b>Sensing object</b>	Conductor and dielectrics
<b>Standard sensing object</b>	With grounded metal 50 x 50 x 1 mm
<b>Response frequency</b>	DC: 40 Hz (Average value) AC: 25 Hz (Average value)
<b>Power supply voltage</b>	24 to 240 VDC
<b>Operating voltage range</b>	20 to 250 VDC 20 to 250 VAC
<b>Leakage current</b>	at 24 VDC: 1.5 mA max. at 110 VAC 50/60 Hz: 1.7 mA max. at 250 VAC 50/60 Hz: 2.5 mA max.
<b>Control output (Switching capacity)</b>	Resistive load: 5 to 200 mA
<b>Control output (Residual voltage)</b>	10 VAC max. 8 VDC max.
<b>Indicator</b>	Operation indicator (yellow)
<b>Operation mode</b>	NO
<b>Sensitivity setting</b>	Sensitivity adjuster
<b>Ambient temperature (Operating)</b>	-25 to 70 °C
<b>Ambient temperature (Storage)</b>	-25 to 70 °C

<b>Ambient humidity (Operating)</b>	35 to 95% RH
<b>Ambient humidity (Storage)</b>	35 to 95% RH
<b>Temperature influence</b>	±15% max. of sensing distance at 23 °C in the temperature range of -10 to 55 °C ±25% max. of sensing distance at 23 °C in the temperature range of -25 to 70 °C
<b>Voltage influence</b>	±2% max. of sensing distance at rated voltage in the rated voltage ±15% range
<b>Insulation resistance</b>	Between charged parts and the case: 5 MΩ min. at 500 VDC
<b>Dielectric strength</b>	Between charged parts and the case: 1,500 VAC 50/60 Hz 1 min
<b>Vibration resistance</b>	Destruction: 10 to 55 Hz, 1.5 mm double amplitude each in X, Y, and Z directions for 2 h
<b>Shock resistance</b>	Destruction: 500 m/s <sup>2</sup> 10 times each in X, Y, and Z directions
<b>Degree of protection</b>	IEC: IP65
<b>Connection method</b>	Pre-wired models (2 m)
<b>Weight</b>	Package: Approx. 240 g
<b>Material</b>	Case: Polybutylene terephthalate (PBT) Sensing surface: Polybutylene terephthalate (PBT)
<b>Accessories</b>	Instruction manual, Dedicated fixture, M4 screws

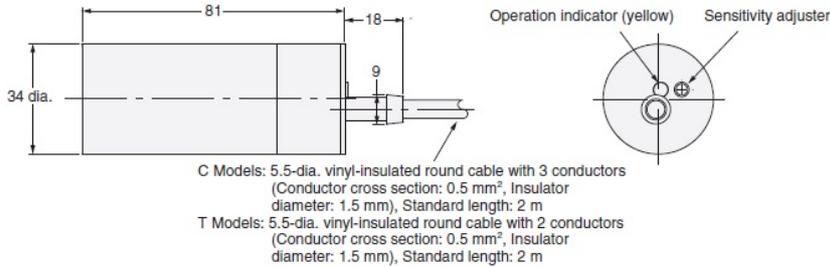
As of February 1, 2021

Dimensions

As of February 1, 2021

Dimensions

**E2K-C20M□□**

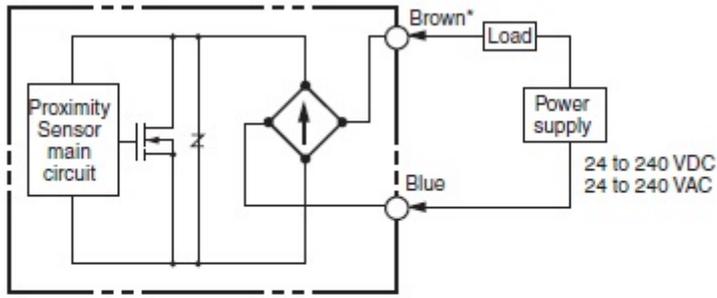


As of February 1, 2021

Output circuit

As of February 1, 2021

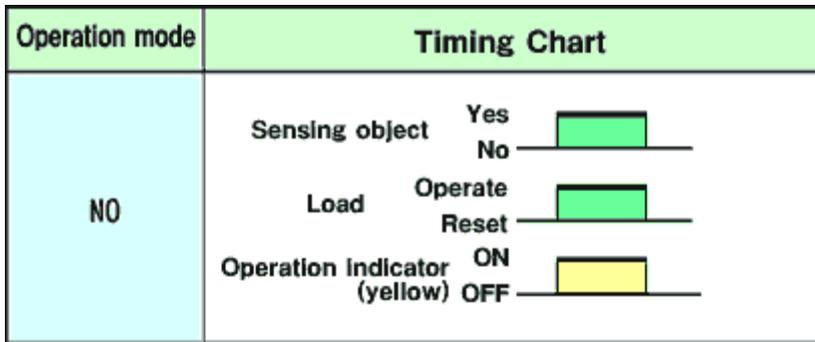
Output circuit



\* Load current: 200 mA max.

Note: The load can be connected to either the +V or 0 V side.  
There is no need to be concerned about the polarity (brown/blue) of the Proximity Sensor.

Timing chart

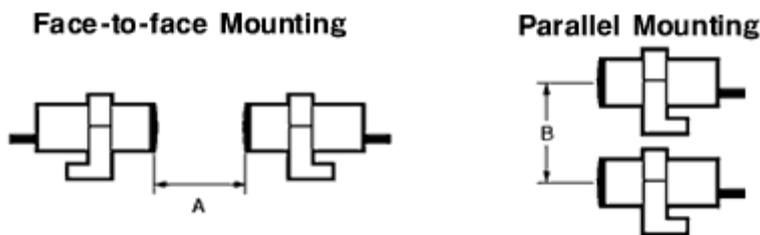


As of February 1, 2021

Mutual interference

As of February 1, 2021

Mutual interference



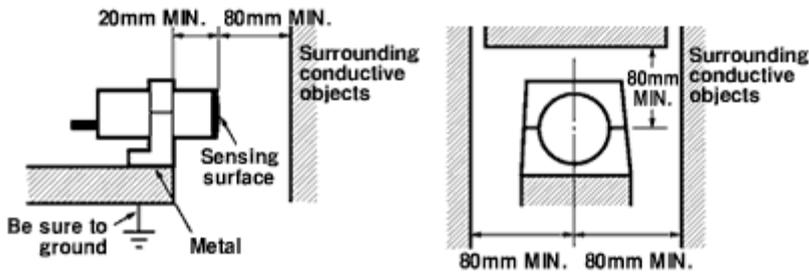
A: 100 mm min., B: 105 mm min.

As of February 1, 2021

Effects of surrounding metals

As of February 1, 2021

Effects of surrounding metals



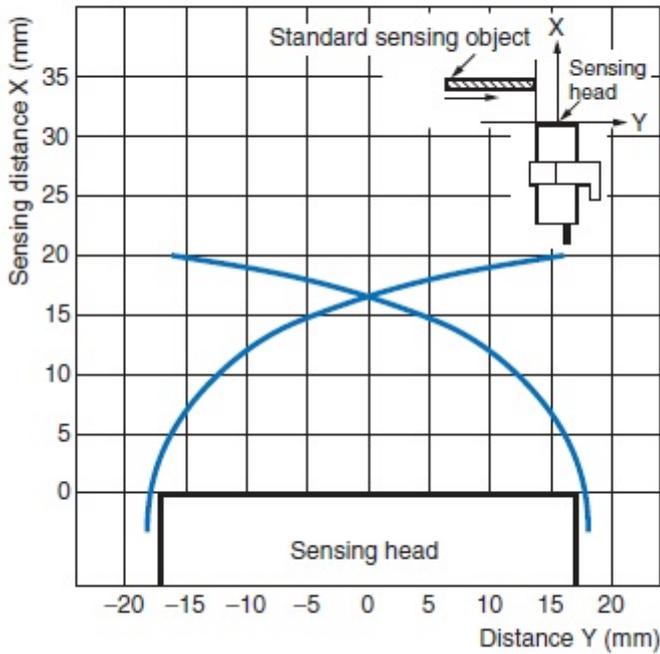
As of February 1, 2021

Characteristic chart

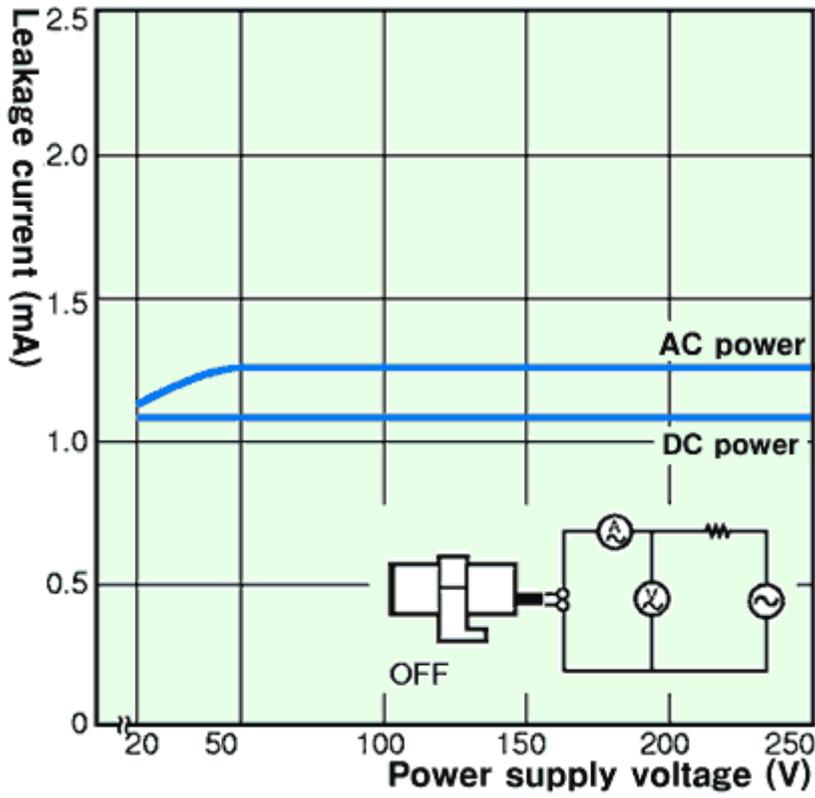
As of February 1, 2021

Sensing range

E2K-C20M□□

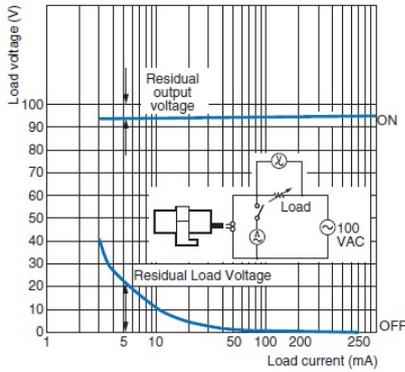


Leakage current

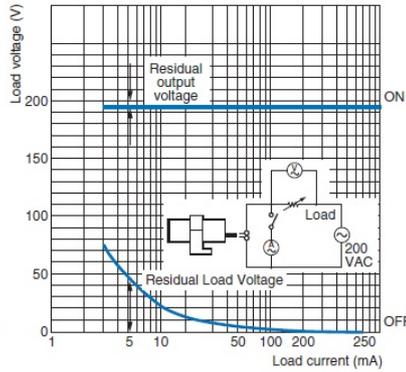


Residual voltage

E2K-C20MT at 100 VAC



E2K-C20MT at 200 VAC



As of February 1, 2021