E2K-F10MC1 2M



Product Overview

Proximity sensor, capacitive, flat, unshielded, 10mm, DC, 3-wire, NPN-NO, 2m cable

Specifications

Specifications

Updated: 2026/03/28

Sensing head size	50 mm
Sensing head size	10.1 mm
Sensing head size	20 mm
Type	Capacitive type
Type	Unshielded
Type	Square type
Power source	DC Three-wires models
Sensing distance	10 mm ±10%
Setting distance	0 to 7.5 mm
Differential distance	15% max. of sensing distance
Sensing object	Conductor and dielectrics
Standard sensing object	With grounded metal 50 x 50 x 1 mm
Response frequency	100 Hz
Power supply voltage	12 to 24 VDC ripple (p-p) 10% max.
Operating voltage range	10 to 30 VDC
Current consumption	10 mA max.(at 24 VDC)
Control output (Output type)	NPN open collector
Control output (Switching capacity)	(at 30 VDC) 100 mA max.
Control output (Residual voltage)	1.5 V max.(Load current 100 mA with cable length of 2 m)
Indicator	Detection indicator (red)
Operation mode	NO

Protective circuit	Reverse polarity protection;Surge suppressor
Ambient temperature (Operating)	-10 to 55 °C
Ambient temperature (Storage)	-10 to 55 °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 -10 to 55 °C
Voltage influence	±2.5% max. of sensing distance at rated voltage in the rated voltage ±10% range
Insulation resistance	50 MΩ min. at 500 VDC(Between charged parts and the case)
Dielectric strength	500 VAC 50/60 Hz 1 min(Between charged parts and the case)
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) 500 m/s^2 3 times each in X, Y and Z directions
Degree of protection	IP66(IEC)
Connection method	2 m
Connection method	Pre-wired models
Weight	Approx. 35 g(Package)
Material	(Case) Heat-resistant ABS resin / (Sensing surface) Heat-resistant ABS resin
Accessories	Instruction manual;Adjustment Driver

Standards certification

Standards certification

Updated: 2026/11/04 18:01

UL	No
CSA	No
CE	Yes
CCC	N/A
Marine	No

Yes: Certified / Conform No: Not certified / Not conform N/A: Out of Scope

©OMRON Corporation 2026 All Rights Reserved.
Specifications are subject to change without notice.