

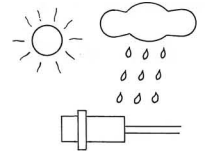
Type **E2K-X**
STATIC CAPACITY TYPE PROXIMITY SWITCH

INSTRUCTION MANUAL

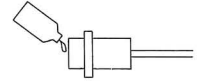
Type	E2K-X4ME1 E2K-X4ME2 E2K-X4MF1 E2K-X4MF2	E2K-X8ME1 E2K-X8ME2 E2K-X8MF1 E2K-X8MF2	E2K-X15ME1 E2K-X15ME2 E2K-X15MF1 E2K-X15MF2	E2K-X4MY1 E2K-X4MY2	E2K-X8MY1 E2K-X8MY2	E2K-X15MY1 E2K-X15MY2
Detecting distance	4mm	8mm	15mm	4mm	8mm	15mm
Rated voltage (Supply)	12 to 24VDC (10 to 30VDC)			100 to 220VAC (90 to 250VAC)		
Current consumption	15mA max.			2.2mA max.		
Control output	200 mA max.			10 to 200mA		
Response frequency	100Hz min.			10Hz min.		
Ambient operating temperature	- 25 to 70°C	- 10 to 55°C	- 25 to 70°C	- 10 to 55°C		
Ambient operating humidity	35 to 85 %					

● Ambient conditions (installation place)

a) Do not use in outdoor places exposed to sunlight, rain, etc.



b) Do not use, in places exposed to chemicals such as organic solvent.
(The material of case is heat-resistant ABS.)



■ PRECAUTIONS FOR USE

● Connection and operation mode

Type	Connection diagram	Operation mode
E2K-X□MY□		<p>E2K-X□MY1 E2K-X□MY2</p> <p>Detectable object Present Absent</p> <p>Load Operate Release</p> <p>Operation indicator (LED) on off</p> <p>No polarity. Reversal of white and black connections is allowed.</p>
E2K-X□ME□	<p>(1) Load</p> <p>(2) Logic</p> <p>Proximity switch output resistance to be taken as 4.7 kohms.</p>	<p>E2K-X□ME1 E2K-X□ME2</p> <p>Detectable object Present Absent</p> <p>Load Operate Release</p> <p>Output Voltage (red-white-black) H L</p> <p>Operation indicator (LED) on off</p> <p>On Logic use, be careful because approx. 20mS of pulse will come out when power switch on.</p>
E2K-X□MF□		<p>E2K-X□MF1 E2K-X□MF2</p> <p>Detectable object Present Absent</p> <p>Load Operate Release</p> <p>Operation indicator (LED) on off</p>

● Notes on connection

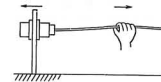
- a) Any type of this series has no built-in overcurrent protective circuit. So be careful never to make any load short-circuit.
- b) The cord length should be shorter than 200 m.

● Wiring

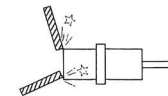
If a power line or the line is near the proximity switch cord, lay the cord separately in a conduit to prevent from surge or noise influence.



● Handling



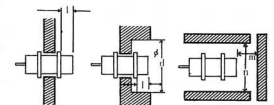
b) Do not pull the cord forcibly.



c) Do not hit or damage the sensor head.

● Influence by nearby metal

Be sure to space a nearby metal from the sensor at a distance greater than that shown below, to prevent malfunctions.

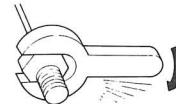


Nearly metal clearance (unit: mm)

Type Distance	E2K-X4M□□	E2K-X8M□□	E2K-X15M□□
l	20	20	10
d	50	50	50
m	8	12	25
n	60	60	60

● Installation

a) Do not overtighten.



Allowable tightening torque

Type	Strength	Torque (kg-l-cm)
E2K-X4M□□		20
E2K-X8M□□		40
E2K-X15M□□		135

● Mutual interference

Be sure to space the two sensor at a distance greater than that shown below, to prevent mutual interference.

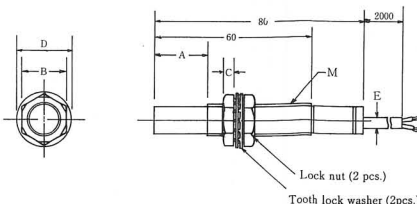


(Unit: mm)

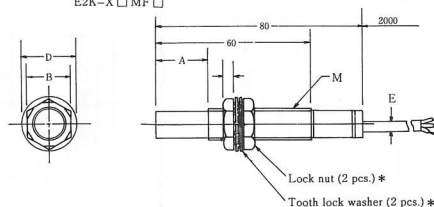
Type	Distance	A	B
E2K-X4M□□		80	70
E2K-X8M□□		150	110
E2K-X15M□□		300	200

■ OUTLINE DRAWINGS OF DIMENSION

E2K-X□MY□



E2K-X□ME□
E2K-X□MF□



* E2K-X□MF□ type uses plastic nuts and washers.

(Unit: mm)

Type	Dimension	M	A	B	C	D	E
E2K-X4M□	M12×1	20	17	4	21	4	
E2K-X8M□	M18×1	20	24	4	29	6	
E2K-X15M□	M30×1.5	10	36	5	42	6	