

E2E-X8B1T18 5M



Ratings/Performance

Sensing head size	M18
Type	Cylinder type (with screw), Shielded
Power source	DC Three-wires models
Sensing distance	8 mm $\pm$ 10%
Setting distance	0 to 6.4 mm
Differential distance	15% max. of sensing distance
Sensing object	Ferrous metal (Sensitivity lowers with non-ferrous metals.)
Standard sensing object	Iron 24 x 24 x 1 mm
Response frequency	500 Hz
Power supply voltage	10 to 30 VDC ripple (p-p) 10% included, Class 2
Current consumption	16 mA max.
Control output (Output type)	PNP open collector
Control output (Switching capacity)	200 mA max.
Control output (Residual voltage)	2 V max. (Load current 200 mA with cable length of 2 m)
Communications	IO-Link Ver 1.1 Transmission speed: COM3 (230.4 kbps) Data length: 2 byte (PD Size)/1 byte (M-sequence type: TYPE_2_2) (OD Size) Minimum cycle time: 0.4 ms
Indicator	Standard I/O mode (SIO mode): Operation indicator (orange, lit) and communication indicator (green, not lit) IO-Link mode (COM mode): Operation indicator (orange, lit) and communication indicator (green, blinking at 1 s intervals)
Operation mode	NO
Protective circuit	Output short-cut protection Output reverse polarity protection Power supply reverse polarity protection Surge suppressor
Ambient temperature (Operating)	-40 to 85 °C (with no freezing or condensation)
Ambient temperature (Storage)	-40 to 85 °C (with no freezing or condensation)
Ambient humidity (Operating)	35 to 95 % (with no condensation)
Ambient humidity (Storage)	35 to 95 % (with no condensation)
Temperature influence	$\pm$ 15% max. of sensing distance at 23 °C in the temperature range of -40 to 85 °C $\pm$ 10% max. of sensing distance at 23 °C in the temperature range of -25 to 70 °C

Voltage influence	±1% max. of sensing distance at rated voltage in the rated voltage ±15% range
Insulation resistance	Between charged parts and the case: 50 MΩ min. at 500 VDC
Dielectric strength	Between charged parts and the case: 1,000 VAC 50/60 Hz 1 min
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: 1000 m/s ² 10 times each in X, Y, and Z directions
Degree of protection	IEC: IP67 Company standard: Passed OMRON's Oil-resistant Component Evaluation Standards IP67G (JIS C 0920 Annex 1) IP69K (ISO 20653 (old standard: DIN 40050 PART9))
Connection method	Pre-wired models (5 m)
Material	Case: Brass nickel plating Sensing surface: Polybutylene terephthalate (PBT) Clamping nuts: Brass nickel plating Toothed washers: Iron zinc plating Cable: PVC
Accessories	Instruction manual, Clamping nuts, Toothed washers