

Rectangular Proximity Sensor

E2Q6

Freely Change the Sensing Direction

- Change between any of five sensing directions: front or 90° up, down, left, or right.
- Four indicators show the operating status of the Sensor from many directions.



Refer to *Safety Precautions* on page 4.

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Ordering Information

Sensors [Refer to *Dimensions* on page 6]

DC Models

Shielded/ Unshielded	Sensing distance	Connection method	Operation mode	Model	
				NPN output	PNP output
Shielded 	 20 mm	Terminal block	NO + NC	E2Q6-N20E3-H	E2Q6-N20F3-H
Unshielded 	 30 mm			E2Q6-N30ME3-H	E2Q6-N30MF3-H

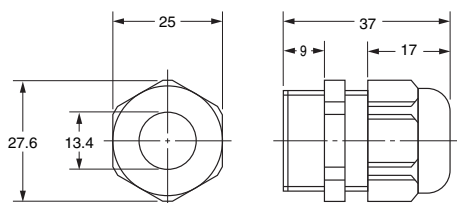
Accessories (Sold Separately)

Recommended Cable Gland (ST Type) (Manufactured by LAPP)

Purchase a cable gland to maintain a water-resistant structure.

Product number	Color	Screw size	Applicable cable outer diameter
ST-M20 × 1.5	Black	M20 × P1.5	7 to 13 dia.

Dimensions (Unit: mm)



For details or to make purchases, contact your OMRON sales representative.

Note: A seal packing is not included.

Applicable seal packing

GPM20

Note: Purchase a seal packing to maintain water resistance.

Ratings and Specifications

Item	Shielding Model	Shielded	Unshielded
		E2Q6-N20□3-H	E2Q6-N30M□3-H
Sensing distance		20 mm ±10%	30 mm ±10%
Set distance		0 to 16 mm	0 to 24 mm
Differential travel		15% max. of sensing distance	
Detectable object		Ferrous metal (The sensing distance decreases with non-ferrous metal. Refer to <i>Engineering Data (Reference Value)</i> on page 3.)	
Standard sensing object		Iron, 60 × 60 × 1 mm	Iron, 90 × 90 × 1 mm
Response frequency *1		150 Hz	100 Hz
Power supply voltage (operating voltage range)		10 to 30 VDC, including 10% ripple (p-p)	
Current consumption		20 mA max.	
Control output	Load current	200 mA max.	
	Residual voltage	2 V max. (at 200 mA load current)	
Indicators		Power indicator (green), detection indicator (yellow)	
Operation mode		NO + NC	
Protection circuits		Power supply reverse polarity protection, output reverse polarity protection, and load short-circuit protection	
Ambient temperature range		Operating and storage: –25 to 70°C (with no icing or condensation)	
Ambient humidity range		Operating and storage: 35% to 95% (with no condensation)	
Temperature influence		±15% max. of sensing distance at 23°C in the temperature range of –25 to 70°C	
Voltage influence		±2% max. of sensing distance at 24 VDC in the range of 24 VDC ±15% ±2% max. of sensing distance at 12 VDC in the range of 12 VDC ±15%	
Insulation resistance		50 MΩ min. (at 500 VDC) between current-carrying parts and case	
Dielectric strength		1,000 VAC, at 50/60 Hz for 1 min. between current-carrying parts and case	
Vibration resistance (destruction)		10 to 55 Hz with a 1.5-mm double amplitude in X, Y, and Z directions	
Shock resistance (destruction)		300 m/s ² 3 times each in six directions	
Degree of protection		IEC IP67 *2	
Connection method		Terminal block	
Weight (packed state/Sensor only)		Approx. 250 g/approx. 230 g	
Materials	Case	Polyamide (PA)	
	Sensing surface	Polyamide (PA)	
	Terminal base	Polyamide (PA)	
Accessories		Instruction manual	

*1. The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.

*2. When the recommended cable gland is used.