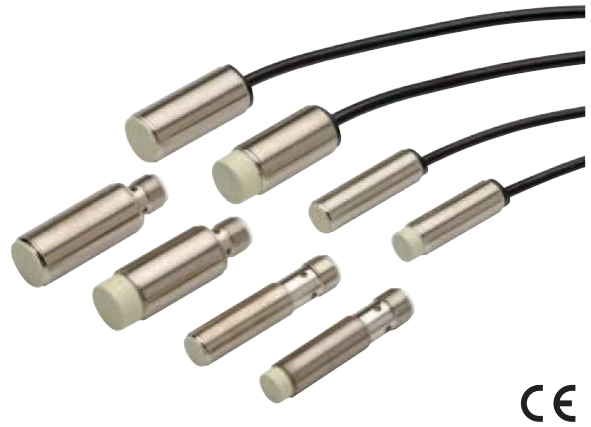


# Cylindrical Proximity Sensor

## E2GN

### High quality at exceptional cost

- M12 and M18 models with standard sensing range.



CE

### Ordering Information

Size		Sensing Distance		Connection	Body Material	Model Operation Mode : NO	
						Output Configuration: PNP	Output Configuration: NPN
Shielded	M12	2 mm		Pre-wired	Brass	E2GN-M12KS02-WP-B1	E2GN-M12KS02-WP-C1
				Connector		E2GN-M12KS02-M1-B1	E2GN-M12KS02-M1-C1
	M18	5 mm		Pre-wired		E2GN-M18KS05-WS-B1	E2GN-M18KS05-WS-C1
				Connector		E2GN-M18KS05-M1-B1	E2GN-M18KS05-M1-C1
Non-Shielded	M12	5 mm		Pre-wired		E2GN-M12KN05-WP-B1	E2GN-M12KN05-WP-C1
				Connector		E2GN-M12KN05-M1-B1	E2GN-M12KN05-M1-C1
	M18	8 mm		Pre-wired		E2GN-M18KN08-WS-B1	E2GN-M18KN08-WS-C1
				Connector		E2GN-M18KN08-M1-B1	E2GN-M18KN08-M1-C1

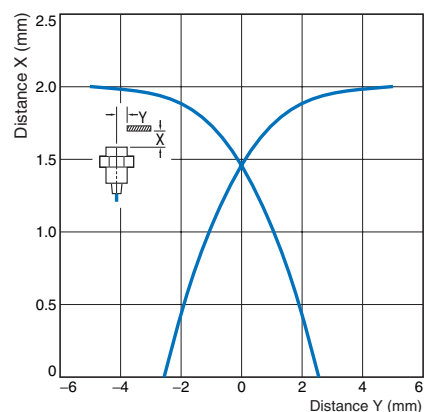
### Ratings and Specifications (DC 3-wire Models)

Item	Size	M12		M18	
		Shielded	Non-Shielded	Shielded	Non-Shielded
		Model	Model	Model	Model
		E2GN-M12KS02-□□-B1	E2GN-M12KN05-□□-B1	E2GN-M18KS05-□□-B1	E2GN-M18KN08-□□-B1
		E2GN-M12KS02-□□-C1	E2GN-M12KN05-□□-C1	E2GN-M18KS05-□□-C1	E2GN-M18KN08-□□-C1
<b>Sensing distance</b>		2mm	5mm	5mm	8mm
<b>Power supply voltage</b>		10 to 30 VDC, Ripple (p-p): 10% max.			
<b>Output type</b>		-B1 models: PNP open collector -C1 models: NPN open collector			
<b>Control output</b>	<b>Load current</b>	200 mA max.			
	<b>Residual voltage</b>	3 V max. (load current: 200 mA, cable length: 2 m)			
<b>Indicator</b>		Operation indicator (Red)			
<b>Operation mode (with sensing object approaching)</b>		NO			
<b>Protection circuits</b>		Reversed power supply polarity protection, Output short-circuit protection, Reversed output polarity protection			
<b>Ambient temperature range</b>		Operating/Storage: -25 °C to 70 °C (with no icing or condensation)			
<b>Ambient humidity range</b>		Operating/Storage: 35% to 95% (with no icing or condensation)			
<b>Degree of protection</b>		IEC60529: IP67, EN60947-5-2: EMC			
<b>Mounting torque</b>		10 N·m			

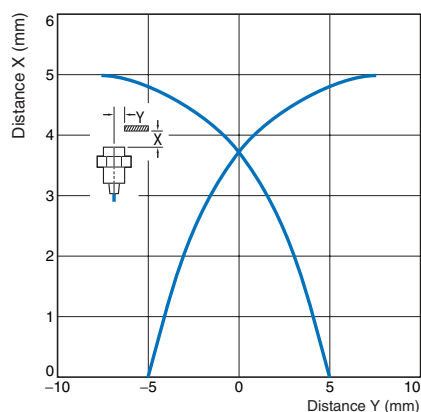
## Engineering Data (Typical)

### Shielded Models

#### E2GN-M12KS02

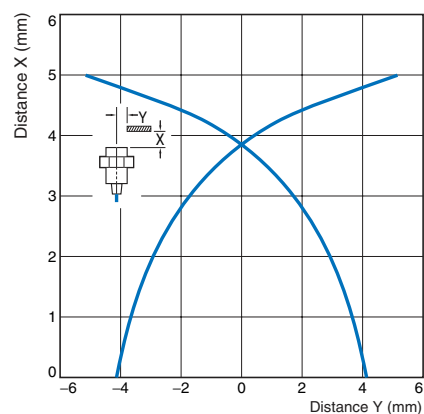


#### E2GN-M18KS05

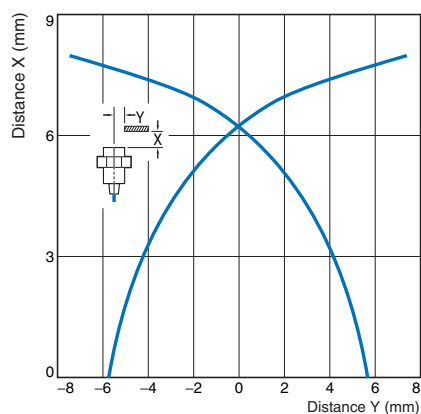


### Non-Shielded Models

#### E2GN-M12KN05-WP-B1



#### E2GN-M18KN08-WS-B1



## I/O Circuit Diagrams

### PNP output

E2GN-M12KS02-WP-B1

E2GN-M12KS02-M1-B1

E2GN-M18KS05-WS-B1

E2GN-M18KS05-M1-B1

E2GN-M12KN05-WP-B1

E2GN-M12KN05-M1-B1

E2GN-M18KN08-WS-B1

E2GN-M18KN08-M1-B1

### NPN output

E2GN-M12KS02-WP-C1

E2GN-M12KS02-M1-C1

E2GN-M18KS05-WS-C1

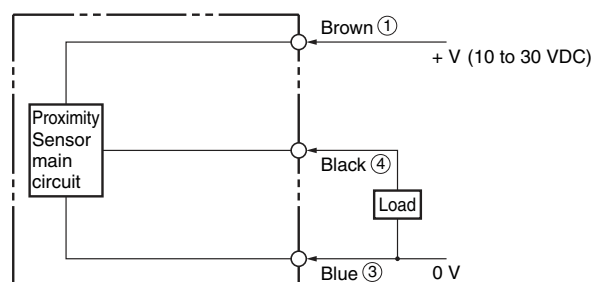
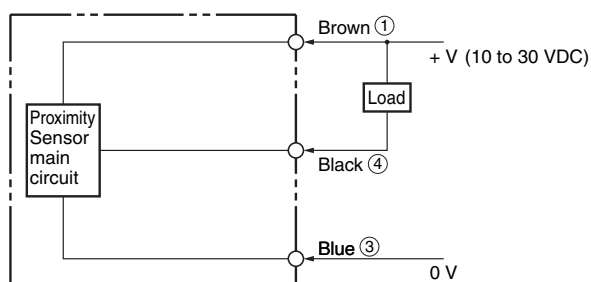
E2GN-M18KS05-M1-C1

E2GN-M12KN05-WP-C1

E2GN-M12KN05-M1-C1

E2GN-M18KN08-WS-C1

E2GN-M18KN08-M1-C1



**Note:** ① ③ ④ are the pins' numbers of the Connector.

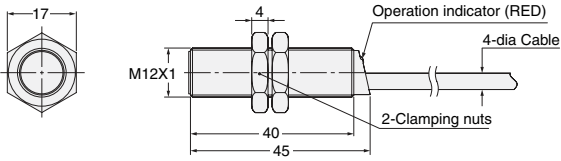
# E2GN

## Dimensions

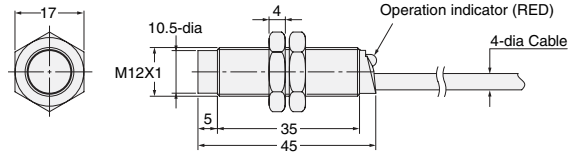
(Unit: mm)

Tolerance class IT16 applies to dimensions in this data sheet unless otherwise specified.

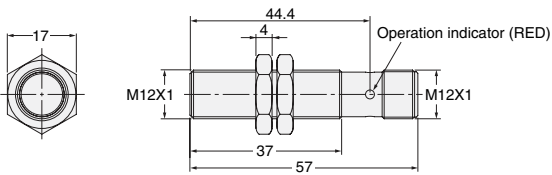
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**E2GN-M12KS02-WP-C1**



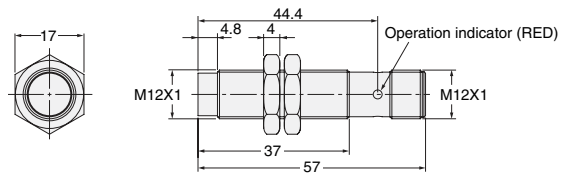
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**E2GN-M12KN05-WP-C1**



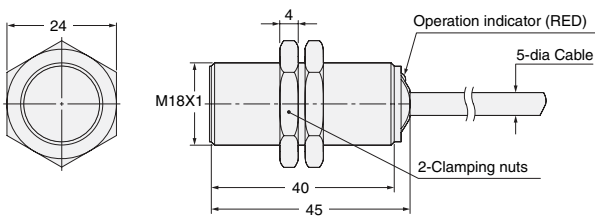
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**E2GN-M12KS02-M1-C1**



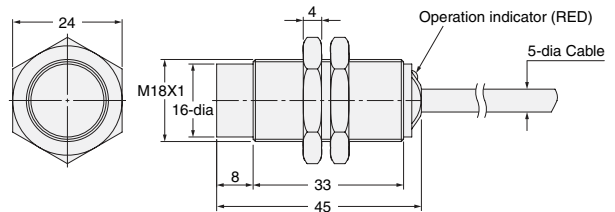
**E2GN-M12KN05-M1-B1**  
**E2GN-M12KN05-M1-C1**



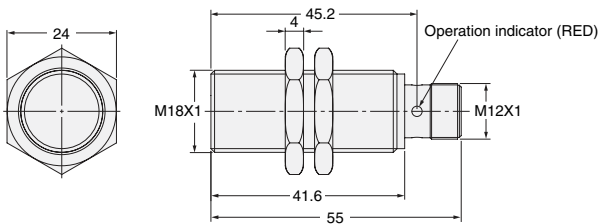
**E2GN-M18KS05-WS-B1**  
**E2GN-M18KS05-WS-C1**



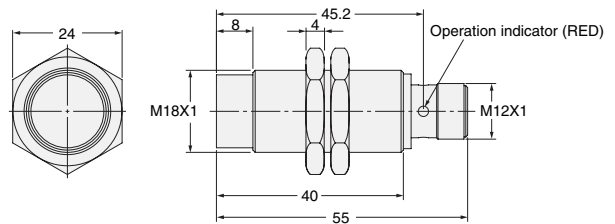
**E2GN-M18KN08-WS-B1**  
**E2GN-M18KN08-WS-C1**



**E2GN-M18KS05-M1-B1**  
**E2GN-M18KS05-M1-C1**



**E2GN-M18KN08-M1-B1**  
**E2GN-M18KN08-M1-C1**



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