




**NO:** PX-049      **PRODUCT:** E2GN Proximity Sensors  
**DATE:** May 2013      **TYPE:** Discontinuation Notice

E2GN Series Cylindrical Proximity Sensors to be Discontinued March 2014; Replace with E2B Series



Product Discontinuation
Cylindrical Proximity Sensor E2GN Series
<b>Model E2GN-M M12 PW(S/N) series</b>
<b>Model E2GN-M M18 PW(S/N) series</b>
<b>Model E2GN-M M12 CN(S/N) series</b>
<b>Model E2GN-M M18 CN(S/N) series</b>



Recommended Replacement
Cylindrical Proximity Sensor E2B Series
<b>Model E2B-M M12 PW(S/N) series</b>
<b>Model E2B-M M18 PW(S/N) series</b>
<b>Model E2B-M M12 CN(S/N) series</b>
<b>Model E2B-M M18 CN(S/N) series</b>

### Affected Parts

Product discontinuation	Recommended replacement
E2GN-M12KS02-WP-B1 2M	E2B-M12KS02-WP-B1 2M
E2GN-M12KS02-WP-C1 2M	E2B-M12KS02-WP-C1 2M
E2GN-M12KS02-WP-C1 5M	E2B-M12KS02-WP-C1 5M
E2GN-M12KS02-WP-B1 5M	E2B-M12KS02-WP-B1 5M
E2GN-M12KN05-WP-B1 2M	E2B-M12KN05-WP-B1 2M
E2GN-M12KN05-WP-C1 2M	E2B-M12KN05-WP-C1 2M
E2GN-M12KN05-WP-B1 5M	E2B-M12KN05-WP-B1 5M
E2GN-M12KN05-WP-C1 5M	E2B-M12KN05-WP-C1 5M
E2GN-M12KS02-M1-B1	E2B-M12KS02-M1-B1
E2GN-M12KS02-M1-C1	E2B-M12KS02-M1-C1
E2GN-M12KN05-M1-B1	E2B-M12KN05-M1-B1
E2GN-M12KN05-M1-C1	E2B-M12KN05-M1-C1
E2GN-M18KS05-WS-B1 2M	E2B-M18KS05-WP-B1 2M
E2GN-M18KS05-WS-C1 2M	E2B-M18KS05-WP-C1 2M
E2GN-M18KS05-WS-C1 5M	E2B-M18KS05-WP-C1 5M
E2GN-M18KS05-WS-B1 5M	E2B-M18KS05-WP-B1 5M
E2GN-M18KN08-WS-B1 2M	E2B-M18KN10-WP-B1 2M
E2GN-M18KN08-WS-C1 2M	E2B-M18KN10-WP-C1 2M
E2GN-M18KN08-WS-B1 5M	E2B-M18KN10-WP-B1 5M
E2GN-M18KN08-WS-C1 5M	E2B-M18KN10-WP-C1 5M
E2GN-M18KS05-M1-B1	E2B-M18KS05-M1-B1
E2GN-M18KS05-M1-C1	E2B-M18KS05-M1-C1
E2GN-M18KN08-M1-B1	E2B-M18KN10-M1-B1
E2GN-M18KN08-M1-C1	E2B-M18KN10-M1-C1

## Precautions on Applying Recommended Replacement

- The sensing surface color has changed. The E2B-M recommended replacement is black.
- The cable of E2B series is only 4 mm dia.
- The sensing distance of E2B M18 unshielded series is changed to 10 mm.

## Reference Documentation

Description	Media	Publication number
E2GN Data Sheet	PDF	<a href="#">D110-E1-01A</a>
E2B Data Sheet	PDF	<a href="#">D116-E1-01</a>

The following pages provide details about the differences between the series.

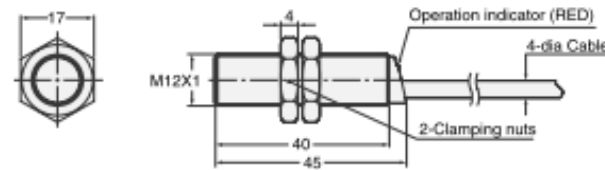
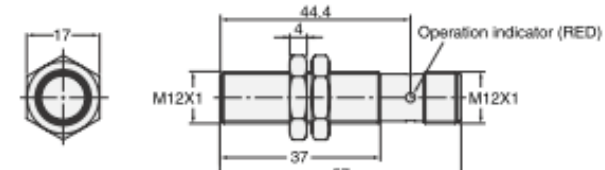
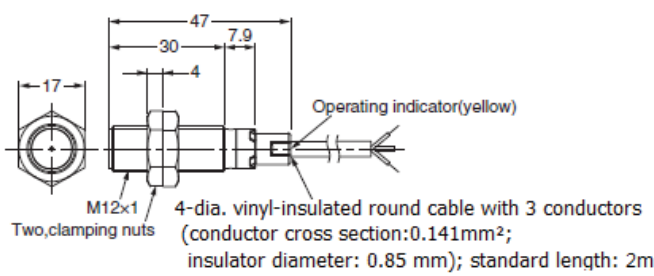
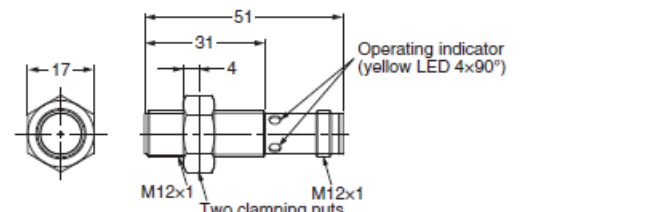
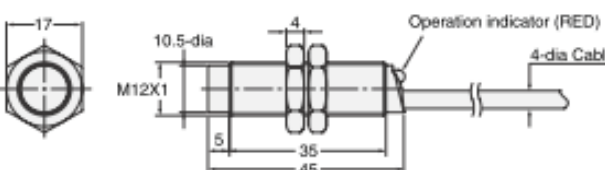
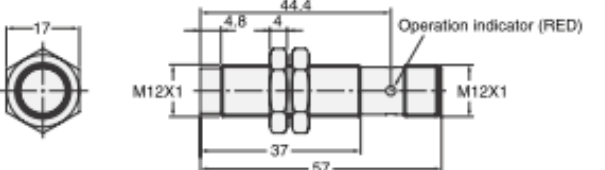
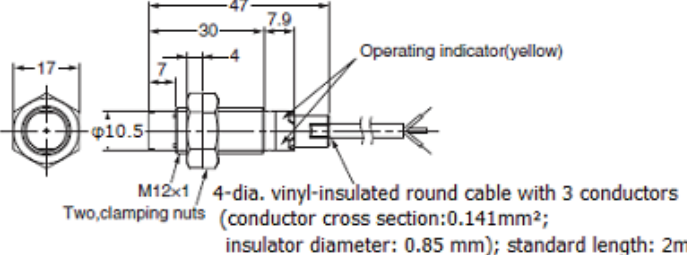
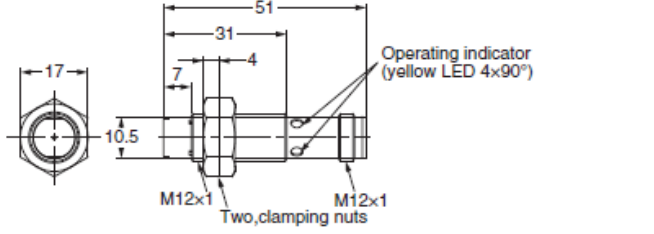
## Body Color

Discontinued product Model E2GN	Recommended replacement Model E2B
Sensing Surface: Light green	Sensing Surface: Black

## Wiring Diagrams

Discontinued product	Recommended replacement								
<p><b>PNP output</b></p> <table border="0"> <tr> <td>E2GN-M12KS02-WP-B1</td> <td>E2GN-M12KN05-WP-B1</td> </tr> <tr> <td>E2GN-M12KS02-M1-B1</td> <td>E2GN-M12KN05-M1-B1</td> </tr> <tr> <td>E2GN-M18KS05-WS-B1</td> <td>E2GN-M18KN08-WS-B1</td> </tr> <tr> <td>E2GN-M18KS05-M1-B1</td> <td>E2GN-M18KN08-M1-B1</td> </tr> </table> <p>Note: ① ③ ④ are the pins' numbers of the Connector.</p>	E2GN-M12KS02-WP-B1	E2GN-M12KN05-WP-B1	E2GN-M12KS02-M1-B1	E2GN-M12KN05-M1-B1	E2GN-M18KS05-WS-B1	E2GN-M18KN08-WS-B1	E2GN-M18KS05-M1-B1	E2GN-M18KN08-M1-B1	<p><b>E2B-M18□-□-B□</b> <b>E2B-M12□-□-B□</b></p> <p>M12 Connector 4Pin Arrangement</p>
E2GN-M12KS02-WP-B1	E2GN-M12KN05-WP-B1								
E2GN-M12KS02-M1-B1	E2GN-M12KN05-M1-B1								
E2GN-M18KS05-WS-B1	E2GN-M18KN08-WS-B1								
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<p><b>NPN output</b></p> <table border="0"> <tr> <td>E2GN-M12KS02-WP-C1</td> <td>E2GN-M12KN05-WP-C1</td> </tr> <tr> <td>E2GN-M12KS02-M1-C1</td> <td>E2GN-M12KN05-M1-C1</td> </tr> <tr> <td>E2GN-M18KS05-WS-C1</td> <td>E2GN-M18KN08-WS-C1</td> </tr> <tr> <td>E2GN-M18KS05-M1-C1</td> <td>E2GN-M18KN08-M1-C1</td> </tr> </table>	E2GN-M12KS02-WP-C1	E2GN-M12KN05-WP-C1	E2GN-M12KS02-M1-C1	E2GN-M12KN05-M1-C1	E2GN-M18KS05-WS-C1	E2GN-M18KN08-WS-C1	E2GN-M18KS05-M1-C1	E2GN-M18KN08-M1-C1	<p><b>E2B-M18□-□-C□</b> <b>E2B-M12□-□-C□</b></p> <p>M12 Connector 4Pin Arrangement</p>
E2GN-M12KS02-WP-C1	E2GN-M12KN05-WP-C1								
E2GN-M12KS02-M1-C1	E2GN-M12KN05-M1-C1								
E2GN-M18KS05-WS-C1	E2GN-M18KN08-WS-C1								
E2GN-M18KS05-M1-C1	E2GN-M18KN08-M1-C1								

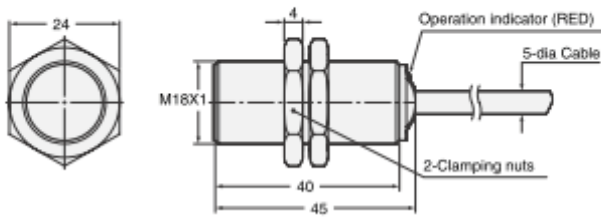
# Dimensions

Discontinued product Model E2GN	Recommended replacement Model E2B
<p><b>E2GN-M12KS02-WP-B1</b> <b>E2GN-M12KS02-WP-C1</b></p>  <p><b>E2GN-M12KS02-M1-B1</b> <b>E2GN-M12KS02-M1-C1</b></p> 	<p><b>E2B-M12KS02-WP-□□/E2B-M12KS04-WP-□□</b></p>  <p><b>E2B-M12KS02-M1-□□/E2B-M12KS04-M1-□□</b></p> 
<p><b>E2GN-M12KN05-WP-B1</b> <b>E2GN-M12KN05-WP-C1</b></p>  <p><b>E2GN-M12KN05-M1-B1</b> <b>E2GN-M12KN05-M1-C1</b></p> 	<p><b>E2B-M12KN05-WP-□□/E2B-M12KN08-WP-□□</b></p>  <p><b>E2B-M12KN05-M1-□□/E2B-M12KN08-M1-□□</b></p> 

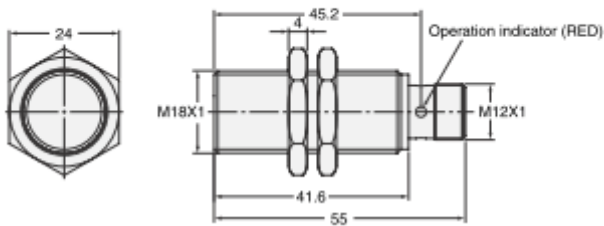
Dimensions continued

**Discontinued product  
Model E2GN**

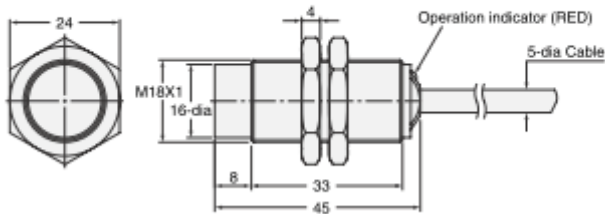
**E2GN-M18KS05-WS-B1  
E2GN-M18KS05-WS-C1**



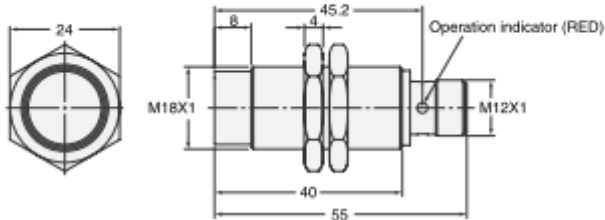
**E2GN-M18KS05-M1-B1  
E2GN-M18KS05-M1-C1**



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

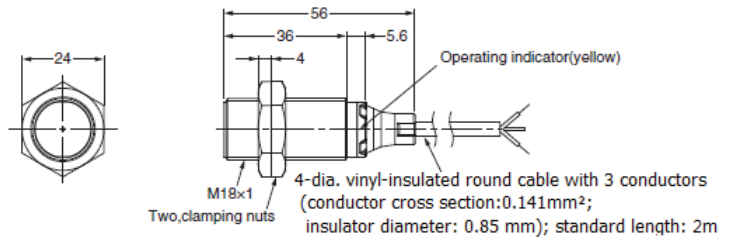


**E2GN-M18KN08-M1-B1  
E2GN-M18KN08-M1-C1**

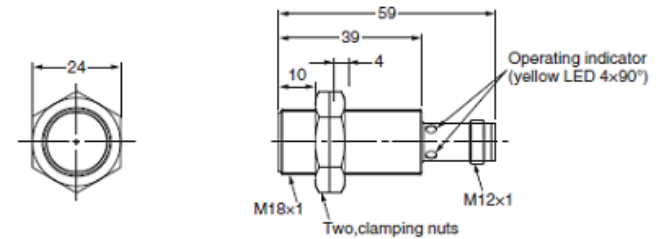


**Recommended replacement  
Model E2B**

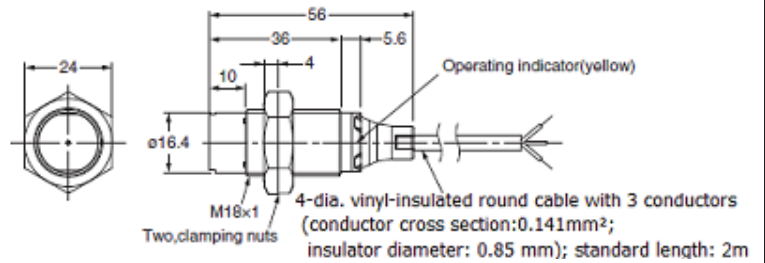
**E2B-M18KS05-WP-□□/E2B-M18KS08-WP-□□**



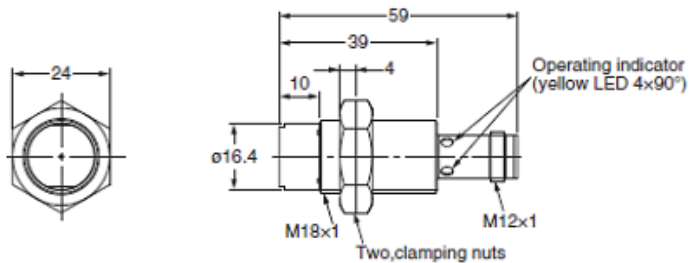
**E2B-M18KS05-M1-□□/E2B-M18KS08-M1-□□**



**E2B-M18KN10-WP-□□/E2B-M18KN16-WP-□□**



**E2B-M18KN10-M1-□□/E2B-M18KN16-M1-□□**



## Specifications

Item	Product discontinuation Model E2GN-M	Recommendable replacement Model E2B-M
Sensing distance	E2GN-M12KS02□□ 2 mm	E2B-M12KS02□□ 2 mm
	E2GN-M12KN05□□ 5 mm	E2B-M12KN05□□ 5 mm
	E2GN-M18KS05□□ 5 mm	E2B-M18KS05□□ 5 mm
	E2GN-M18KN08□□ 8 mm	E2B-M18KN10□□ 10 mm
Power supply voltage	10 to 30 VDC, Ripple (p-p): 10% max.	10 to 30 VDC, Ripple (p-p): 10% max.
Output type	-B1 models: PNP open collector	-B models: PNP open collector
	-C1 models: NPN open collector	-C models: NPN open collector
Residual voltage	3 V max. (load current: 200 mA, cable length: 2 m)	2 V max. (load current: 200 mA, cable length: 2 m)
Indicator	Red	Yellow
Operation mode	NO	-B1/-C1 models: NO
Protection circuits	Reversed power supply polarity protection, Output short-circuit protection, Reversed output polarity protection	Output reverse polarity protection, Power source circuit reverse polarity protection, Surge suppressor, Short-circuit protection
Degree of protection	IEC60529: IP67, EN60947-5-2: EMC	IP67

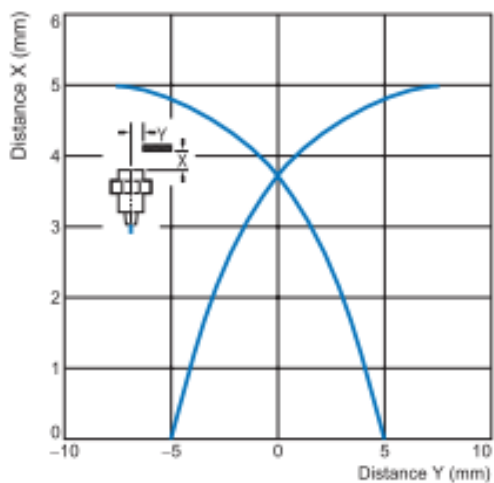
## Operation Ratings

Discontinued product Model E2GN	Recommended replacement Model E2B
<p><b>M12 Shielded Models (Typical)</b></p> <p><b>E2GN-M12KS02</b></p> <p><b>M12 Unshielded Models</b></p> <p><b>E2GN-M12KN05-WP-B1</b></p>	<p><b>M12 Shielded Models &amp; Unshielded Models</b></p> <p><b>E2B-M12</b></p>

**Discontinued product  
Model E2GN**

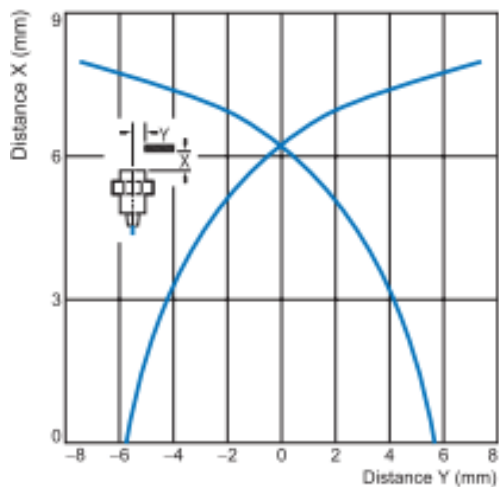
**M18 Shielded Models (Typical)**

**E2GN-M18KS05**



**M18 Unshielded Models**

**E2GN-M18KN08-WS-B1**



**Recommended replacement  
Model E2B**

**M18 Shielded Models & Unshielded Models  
E2B-M18**

