

# Sensors Datasheet

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## MachineMotion Sensors



Name	<a href="#">Non-Flush Inductive Proximity Sensor</a>	<a href="#">Flush Inductive Proximity Sensor</a>
Part Number	CE-SN-004-0001	CE-SN-004-0003
Applications	<ul style="list-style-type: none"> <li>• Homing sensor</li> <li>• End-stop sensor</li> <li>• Object detection</li> </ul>	<ul style="list-style-type: none"> <li>• Homing sensor</li> <li>• End-stop sensor</li> <li>• Object detection</li> </ul>
Presence Detection Material	Steel, Aluminum and other metals	Steel, Aluminum and other metals
Detection Range	<ul style="list-style-type: none"> <li>• 10 mm for Steel &amp; other ferrous material</li> <li>• 4mm for Aluminum</li> </ul>	<ul style="list-style-type: none"> <li>• 8 mm for Steel &amp; other ferrous material</li> <li>• 3mm for Aluminum</li> </ul>
Sensor Type	Inductive proximity	Inductive proximity
Output Type	NC, NPN	NC, NPN

Operating Voltage	10 - 30 V	10 - 30 V
Current Consumption	10 mA	10 mA
Voltage Drop	< 2.5 V	< 2.5 V
Cable Color	Black	Black
Cable Material	PUR	PUR
Cable Length	5 m	5 m
Sensor Side Connector	M12 4-pin quick-disconnect	M12 4-pin quick-disconnect
Controller Side Connector	M12 4-pin quick-disconnect	M12 4-pin quick-disconnect
Operating Temperature	- 40C to + 80C	- 40C to + 85C
Housing Material	Brass white bronze coated	Brass white bronze coated
Ingress Protection	IP65	IP65
Detection LED	Yes, orange visible through connector	Yes, orange visible through connector
Body Thread	M18	M18
Diameter	18 mm	18 mm
Sensor Length	60 mm	45 mm
Weight	0.3 kg	0.3 kg

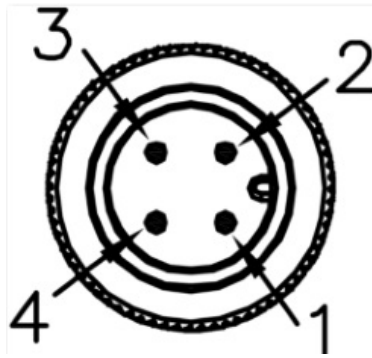
## NPN Photoelectric Sensors (Compatible with Digital I/O Module V2)



<b>Name</b>	<a href="#">Retro-Reflective Photo-Electric Sensor</a>	<a href="#">Through-Beam (Receiver &amp; Transmitter) Photo-Electric Sensor</a>	<a href="#">Diffuse Photo-Electric Sensor</a>	<a href="#">Keyence PR-G M18 NPN/PNP Diffuse Sensor (Sn 500)</a>
<b>Part Number</b>	CE-SN-003-0001 v2 CE-SN-003-0004 v2	CE-SN-006-0001 v2 CE-SN-006-0004 v2	CE-SN-007-0001 v2 CE-SN-007-0004 v2	CE-SN-007-0007
<b>Applications</b>	<ul style="list-style-type: none"> <li>Object detection</li> <li>Presence detection</li> </ul>	<ul style="list-style-type: none"> <li>Mostly used for conveyors for object detection</li> </ul>	<ul style="list-style-type: none"> <li>Object detection</li> <li>Presence detection</li> </ul>	<ul style="list-style-type: none"> <li>Object detection</li> <li>Presence detection</li> </ul>

<b>Presence Detection Material</b>	Non-transparent materials	Non-transparent materials	Metals and plastics (except for IR invisible materials)	Non-transparent materials
<b>Detection Range</b>	2500 mm	6000 mm	15 - 300 mm	500 mm
<b>Sensor Type</b>	Retro-Reflective	Photo-electric, Through Beam	Photo-Electric, Diffuse	Photo-Electric, Diffuse
<b>Sensing Type</b>	Programmable light-on/dark-on	Programmable light-on/dark-on	Programmable light-on/dark-on	Programmable light-on/dark-on
<b>Output Type</b>	CE-SN-003-0001 v2 NPN CE-SN-003-0004 v2 PNP	CE-SN-006-0001 v2 NPN CE-SN-006-0004 v2 PNP	CE-SN-007-0001 v2 NPN CE-SN-007-0004 v2 PNP	Bipolar (NPN & PNP)
<b>Operating Voltage</b>	10 - 36 V	10 - 36 V	10 - 36 V	10 - 30 V
<b>Current Consumption</b>	20 mA	20 mA	25 mA	15 mA
<b>Voltage Drop</b>	< 2.5 V	< 2.5 V	< 2.5 V	< 2.5 V
<b>Cable Color</b>	Black	Black	Black	Black
<b>Cable Material</b>	PUR	PUR	PUR	PUR
<b>Cable Length</b>	5 m	5 m	5 m	5 m
<b>Sensor Side Cable Connector</b>	M12 4-pin female quick-disconnect	M12 4-pin female quick-disconnect	M12 4-pin female quick-disconnect	M12 4-pin female quick-disconnect
<b>I/O Module Side Cable Connector</b>	M12 4-pin male quick-disconnect (signal on pin #2)	M12 4-pin male quick-disconnect (receiver signal on pin #2)	M12 4-pin male quick-disconnect (signal on pin #2)	M12 4-pin male quick-disconnect (signal on pin #2)
<b>Operating Temperature</b>	- 25C to + 80C	- 25C to + 80C	- 25C to + 80C	- 20C to + 70C
<b>Housing Material</b>	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
<b>Ingress Protection</b>	IP67	IP67	IP67	IP68 & IP69K
<b>Detection Indicator</b>	Orange LED	Orange LED	Orange LED	7-segment display (0 to 999), Orange LED
<b>Mounting Thread</b>	M18	M18	M18	M18 or 2x M3
<b>Face Dimension</b>	M18 diameter	M18 diameter	M18 diameter	30.5 mm x 15.4 mm
<b>Sensor Length</b>	72 mm	72 mm	72 mm	44.6 mm
<b>Weight</b>	0.3 kg	0.3 kg	0.3 kg	0.45 kg

## Pinout of Vention's sensors



### Inductive and photoelectric sensors (M12, A-coded, male cable end) :

Pin	Description
1	24 VDC
2	Sensor signal output
3	Ground
4	NC

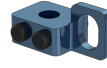
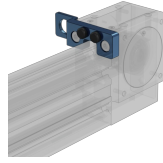
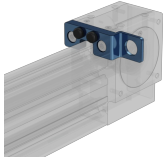
### Inductive sensors (M12, A-coded, no cable) :

Pin	Description
1	24 VDC
2	Sensor signal output
3	Ground
4	NC

### Photoelectric sensors (M12, A-coded, no cable) :

Pin	Description
1	24 VDC
2	NC
3	Ground
4	Sensor signal output

## Mounting Hardware



<b>Name</b>	<a href="#">Left Timing Belt Sensor Bumper</a>	<a href="#">Right Timing Belt Sensor Bumper</a>	<a href="#">Universal M18 Sensor Bracket</a>	<a href="#">M18 Threaded Sensor Bracket</a>	<a href="#">M18 Sensor Bracket</a>
<b>Part Number</b>	MO-LM-015-0001 v2	MO-LM-015-0002 v2	CE-HW-001-0002	CE-HW-001-0003	CE-HW-001-0003 v2
<b>Compatibility</b>	All sensors	All sensors	All sensors	All sensors except CE-SN-007-0007	All sensors