

## **ABB** Sensors Product index

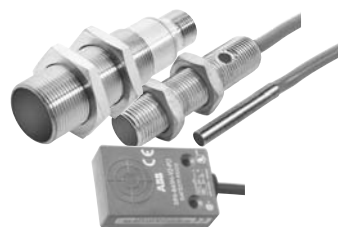
### General information



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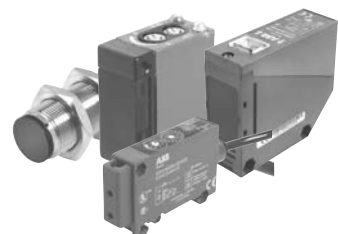
### Proximity

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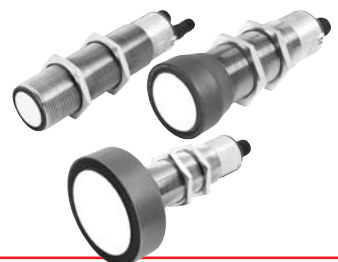
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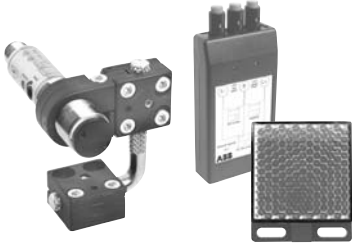
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# Sensors

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# Proximity • Photoelectric • Ultrasonic Sensors



**Sensors**  
Proximity  
Photoelectric  
Ultrasonic



10

## General information

### Proximity sensors

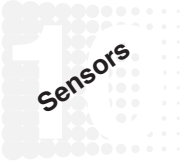
- Inductive & capacitive
  - Non-contact sensing
  - Extremely long life
  - High speed switching frequency
  - Short circuit protection
  - AC & DC models
- Inductive
  - Metallic objects only
  - Sensing distances from 0.8 to 50mm
  - Large selection of 2 wire, 3 wire and 4 wire models
  - Choice of quick disconnect, cable or terminal connection
  - Stainless steel, Nickel-plated brass or Crastin housings
- Capacitive
  - Nonmetallic objects (paper, cardboard, plastic, etc.)
  - Fluids & metallic objects
  - 10mm sensing range
  - Objects may be sensed through glass or plastic
  - Choice of quick disconnect or cable
  - Stainless steel housing

### Photoelectric sensors

- Diffused mode
  - Sensing distances up to 800mm
  - Subcompact, compact and cylindrical models
  - Choice of quick disconnect, cable or terminal connection
  - Light on or dark on operation
- Retro-reflective mode
  - Sensing distances up to 5 m
  - Subcompact, compact and cylindrical models
  - Choice of quick disconnect, cable or terminal connection
  - Light on or dark on operation
- Fiber-optic cable for use with small objects
  - Retro-reflective and thru-beam








### Ultrasonic sensors

- Switch or analog outputs
- Sensing distances up to 6m
- Stainless steel housing
- Quick disconnect



## General information

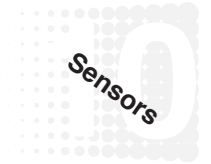
### Inductive proximity sensors








Item	Mounting		Connection			Output				
	Shielded	Unshielded	Cable	Quick Disconnect	Terminal	2 wire DC	2 wire AC	3 wire DC	4 wire DC	4 wire AC
<b>.8mm Sensing range</b> <b>4mm Cylindrical</b>  SIF0.8Z4NU2P0	● —	— —	● —	● —	— —	— —	— —	● —	— —	— —
<b>1.5mm Sensing range</b> <b>6mm Cylindrical</b>  SIF1.5Z6NC8P0	●	—	●	●	—	—	—	●	—	—
<b>1.5mm Sensing range</b> <b>8mm Cylindrical</b>  SIF1.5M8NV2P0	● ●	— —	● ●	— ●	— —	● —	— —	— ●	— —	— —
<b>2mm Sensing range</b> <b>8mm Cylindrical</b>  SIN2M8NC1P0	—	●	●	●	—	—	—	●	—	—
<b>2mm Sensing range</b> <b>12mm Cylindrical</b>  SIF2M12NV2P0	● ● ● ●	— — — —	● ● ● ●	— ● ● —	— — — —	● — — —	— ● — —	— — ● —	— — — ●	— — — —
<b>2mm Sensing range</b> <b>28mm Block</b>  SIF2B28NV0.1P0	●	—	●	—	—	—	—	●	—	—
<b>3mm Sensing range</b> <b>8mm Cylindrical</b>  SIN3M8NV2P0	—	●	●	●	—	—	—	●	—	—

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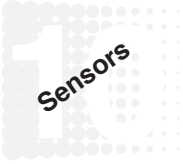
# General information

## Inductive proximity sensors










Item	Mounting		Connection			Output				
	Shielded	Unshielded	Cable	Quick Disconnect	Terminal	2 wire DC	2 wire AC	3 wire DC	4 wire DC	4 wire AC
<b>4mm Sensing range</b> <b>12mm Cylindrical</b>  SIN4M12NV2P0	—	●	●	—	—	●	—	—	—	—
	—	●	●	●	—	—	●	—	—	—
	—	●	●	●	—	—	—	●	—	—
	—	●	●	—	—	—	—	—	●	—
<b>5mm Sensing range</b> <b>18mm Cylindrical</b>  SIF5M18NV2P0	●	—	●	—	—	●	—	—	—	—
	●	—	●	●	—	—	●	—	—	—
	●	—	●	●	—	—	—	●	—	—
	●	—	●	—	—	—	—	—	●	—
<b>6mm Sensing range</b> <b>12mm Cylindrical</b>  SIN6M12NV2P0	—	●	●	●	—	—	—	●	—	—
<b>6mm Sensing range</b> <b>45mm Block</b>  SIF6B45NV2P0	●	—	●	—	—	—	—	●	—	—
<b>8mm Sensing range</b> <b>18mm Cylindrical</b>  SIN8M18NV2P0	—	●	●	—	—	●	—	—	—	—
	—	●	●	●	—	—	●	—	—	—
	—	●	●	●	—	—	—	●	—	—
	—	●	●	—	—	—	—	—	●	—
<b>10mm Sensing range</b> <b>30mm Cylindrical</b>  SIF10M30NV2P0	●	—	●	—	—	●	—	—	—	—
	●	—	●	●	—	—	●	—	—	—
	●	—	●	●	—	—	—	●	—	—
	●	—	●	—	—	—	—	—	●	—
<b>12mm Sensing range</b> <b>18mm Cylindrical</b>  SIN12M18NC1P0	—	●	●	●	—	—	—	●	—	—

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# General information

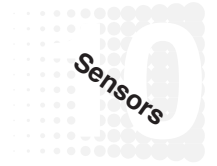
## Inductive proximity sensors


Item	Mounting		Connection			Output				
	Shielded	Unshielded	Cable	Quick Disconnect	Terminal	2 wire DC	2 wire AC	3 wire DC	4 wire DC	4 wire AC
<b>15mm Sensing range</b> <b>30mm Cylindrical</b>  SIN15M30NV2P0	—	●	●	—	—	●	—	—	—	—
<b>15mm Sensing range</b> <b>30mm Block</b>  SIN15Q30NTA0	—	●	—	—	●	—	●	—	—	—
<b>15mm Sensing range</b> <b>40mm Block</b>  SIF15Q40NTP0	●	—	—	●	●	—	—	●	—	—
<b>20mm Sensing range</b> <b>40mm Block</b>  SIF20Q40NTP0	●	—	—	●	●	—	—	●	—	—
<b>30mm Sensing range</b> <b>40mm Block</b>  SIN30Q40NTP0	—	●	—	●	●	—	—	●	—	—
<b>40mm Sensing range</b> <b>80mm Block</b>  SIF40Q80NTPK	●	—	—	—	●	—	—	—	●	—
<b>50mm Sensing range</b> <b>80mm Block</b>  SIN50Q80NTP0	—	●	—	—	●	—	—	●	—	—

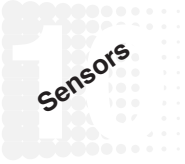
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## General information







### Capacitive proximity sensors



Item	Mounting		Connection			Output				
	Shielded	Unshielded	Cable	Quick Disconnect	Terminal	2 wire DC	2 wire AC	3 wire DC	4 wire DC	4 wire AC
<b>10mm Sensing range</b> <b>30mm Cylindrical</b>  SCF10M30NV2P0	● ●	— —	● ●	— ●	— —	— —	● —	— ●	— —	— —



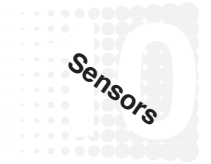
## General information Photoelectric



Item	Connection			Output 3 wire DC	Mode		
	Cable	Quick Disconnect	Terminal		Diffused	Retro-reflective	Fiber optic
<b>200mm Sensing range 18mm Cylindrical</b>  SOD200M18NC1P0	—	●	—	●	●	—	—
<b>400mm Sensing range 26mm Block</b>  SOD400B26NU2P0	●	—	—	●	●	—	—
<b>800mm Sensing range 75mm Block</b>  SOD800B75NTPOS	—	—	●	●	●	—	—
<b>2000mm Sensing range 26mm Block</b>  SOR2000B26NU2P0	●	—	—	●	—	●	—
<b>2000mm Sensing range 40mm Block</b>  SOD2000B75NTKK	●	●	—	●	—	●	—
<b>3000mm Sensing range 18mm Cylindrical</b>  SOR3000M18NC1P0	—	●	—	●	—	●	—

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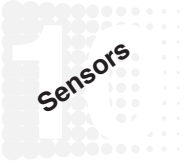
# General information

## Photoelectric







Item	Connection			Output	Mode		
	Cable	Quick Disconnect	Terminal		Diffused	Retro-reflective	Fiber optic
<b>5000mm Sensing range</b> <b>75mm Block</b>  SOR5000B75NTPOS	—	—	●	●	—	●	—
<b>Fiber optic</b> <b>18mm Cylindrical</b>  SOLXM18NV2P0	—	●	—	●	—	—	●
<b>Fiber optic</b> <b>50mm Block</b>  SOLXB50NU2POS	●	—	—	●	—	—	●

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## General information

### Ultrasonic

Item	Connection	Output		
		PNP 3 wire DC	NPN 3 wire DC	Analog 4 – 20mA / 0 – 10VDC
<b>500mm Sensing range</b> <b>30mm Cylindrical</b>  SUD500M30NC1POS	● ●	● —	● —	— ●
<b>2000mm Sensing range</b> <b>30mm Cylindrical</b>  SUD2000M30NC1POS	● ●	● —	● —	— ●
<b>4000mm Sensing range</b> <b>30mm Cylindrical</b>  SUD4000M30NC1POS	● ●	● —	● —	— ●
<b>6000mm Sensing range</b> <b>30mm Cylindrical</b>  SUD6000M30NC1POS	● ●	● —	● —	— ●

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