

A new generation in reliable performance

E2B Proximity Sensors



- » Time and cost savings
- » Perfect fit for standard environments
- » Global delivery and support

E2B Series - Reliability and Innovation

Omron's next generation of proximity sensors provides reliable performance in standard industrial environments with innovative production technology and quality internal components.

Key Features

- » All-around 360° visible output indicator to provide status visibility from any angle
- » Laser etched part numbers allow for ease of identification when specifying parts for replacement during maintenance
- » Water Resistance: IP67
- » Operating Temperature: -25°C to 75°C (-13°F to 167°F)
- » Wide range of models to meet your application needs:
 - Four sizes: M8, M12, M18 and M30
 - Single or Double sensing distances
 - Shielded or Unshielded
 - Short or Long body style
 - Pre-wired or Connector type



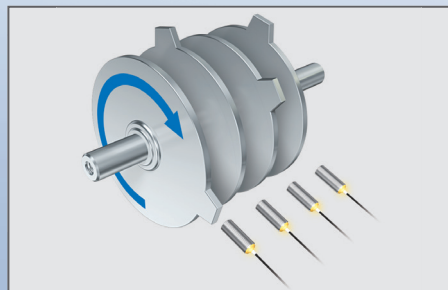
Included on the M12, M18 and M30 E2B sensors. The smaller sizes include 4 LEDs at 90° intervals around the base.

Ideal for a Wide Range of Applications

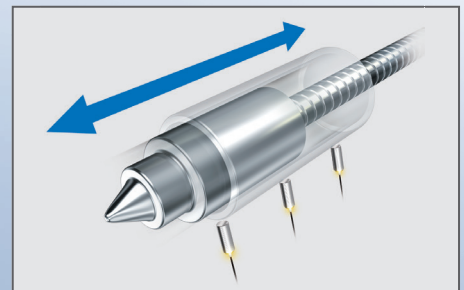
Select among a wide variety of E2B proximity sensors to satisfy the requirements of applications such as cam detection and cylinder positioning.



Machine tools



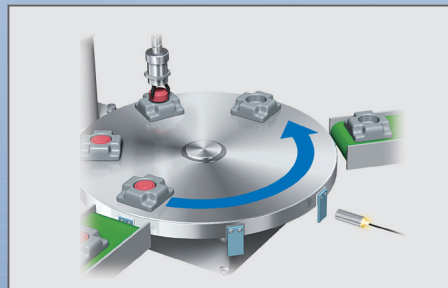
Cam detection



Position detection of cylinder



Packaging machines



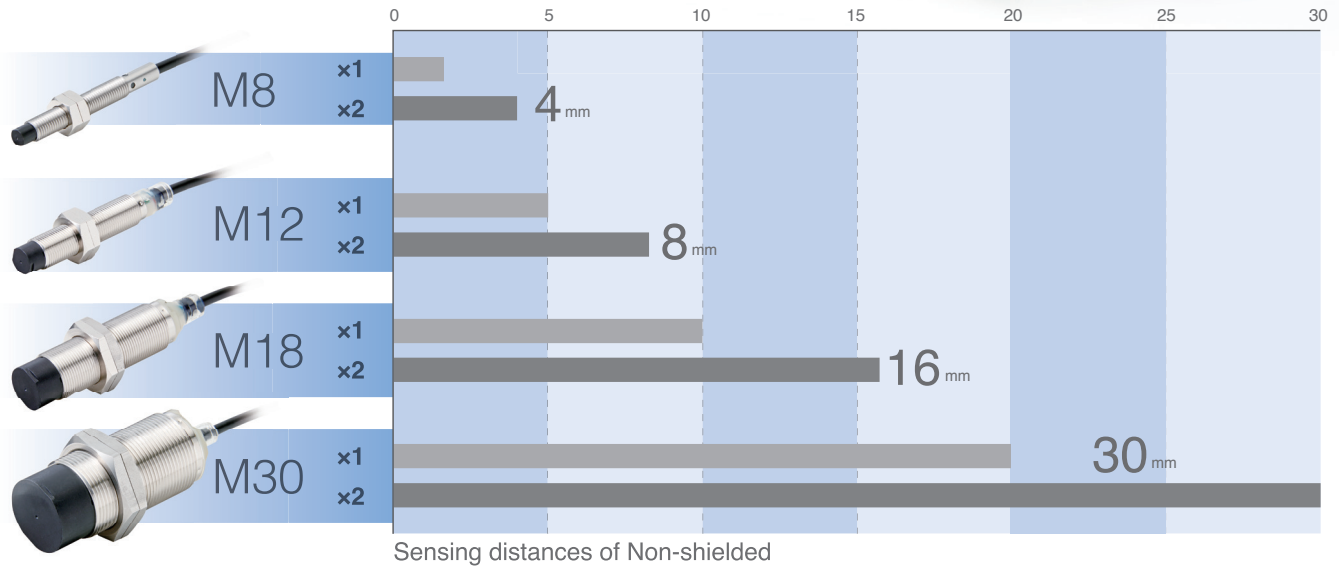
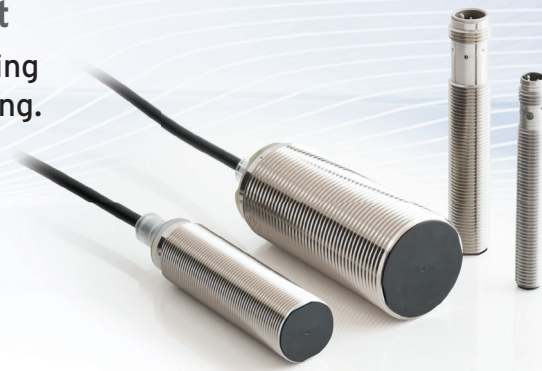
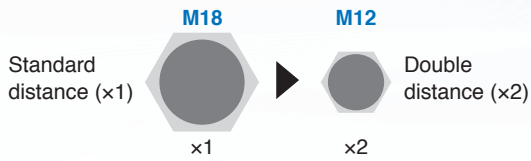
Positioning on index tables



Tension control

“Double sensing distance” saves space and reduces cost





With the double sensing distance models, similar sensing distances can be achieved with a smaller sensor housing.



Ordering Information

Accessories (Order separately)

Connector Cables: An I/O connector is not provided with the sensor. Be sure to order a connector separately.

Size	Appearance	Cable Type		Model
M8 3-pin	Straight 	2 m	3-wire	XS3F-M8PVC3S2M
		5 m		XS3F-M8PVC3S5M
	Angle 	2 m		XS3F-M8PVC3A2M
		5 m		XS3F-M8PVC3A5M
M12 4-pin	Straight 	2 m	4-wire	XS2F-M12PVC4S2M
		5 m		XS2F-M12PVC4S5M
	Angle 	2 m		XS2F-M12PVC4A2M
		5 m		XS2F-M12PVC4A5M

Ordering Information

Double sensing distance, DC 3-wire models

Size		Sensing distance	Connection	Body material	Body length	Output	Operation mode NO	Operation mode NC
M8	Shielded	2 mm	Pre-wired	Stainless steel	Short	PNP	E2B-S08KS02-WP-B1 2M	E2B-S08KS02-WP-B2 2M
						NPN	E2B-S08KS02-WP-C1 2M	E2B-S08KS02-WP-C2 2M
					Long	PNP	E2B-S08LS02-WP-B1 2M	E2B-S08LS02-WP-B2 2M
			NPN			E2B-S08LS02-WP-C1 2M	E2B-S08LS02-WP-C2 2M	
			M8 connector (3-pin)		Short	PNP	E2B-S08KS02-MC-B1	E2B-S08KS02-MC-B2
						NPN	E2B-S08KS02-MC-C1	E2B-S08KS02-MC-C2
	Long	PNP			E2B-S08LS02-MC-B1	E2B-S08LS02-MC-B2		
		NPN	E2B-S08LS02-MC-C1		E2B-S08LS02-MC-C2			
	Non-Shielded	4 mm	Pre-wired		Short	PNP	E2B-S08KN04-WP-B1 2M	E2B-S08KN04-WP-B2 2M
						NPN	E2B-S08KN04-WP-C1 2M	E2B-S08KN04-WP-C2 2M
					Long	PNP	E2B-S08LN04-WP-B1 2M	E2B-S08LN04-WP-B2 2M
			NPN			E2B-S08LN04-WP-C1 2M	E2B-S08LN04-WP-C2 2M	
			M8 connector (3-pin)		Short	PNP	E2B-S08KN04-MC-B1	E2B-S08KN04-MC-B2
						NPN	E2B-S08KN04-MC-C1	E2B-S08KN04-MC-C2
	Long	PNP			E2B-S08LN04-MC-B1	E2B-S08LN04-MC-B2		
		NPN	E2B-S08LN04-MC-C1		E2B-S08LN04-MC-C2			
M12	Shielded	4 mm	Pre-wired	Brass	Short	PNP	E2B-M12KS04-WP-B1 2M	E2B-M12KS04-WP-B2 2M
						NPN	E2B-M12KS04-WP-C1 2M	E2B-M12KS04-WP-C2 2M
					Long	PNP	E2B-M12LS04-WP-B1 2M	E2B-M12LS04-WP-B2 2M
			NPN			E2B-M12LS04-WP-C1 2M	E2B-M12LS04-WP-C2 2M	
			M12 connector (4-pin)		Short	PNP	E2B-M12KS04-M1-B1	E2B-M12KS04-M1-B2
						NPN	E2B-M12KS04-M1-C1	E2B-M12KS04-M1-C2
	Long	PNP			E2B-M12LS04-M1-B1	E2B-M12LS04-M1-B2		
		NPN	E2B-M12LS04-M1-C1		E2B-M12LS04-M1-C2			
	Non-Shielded	8 mm	Pre-wired		Short	PNP	E2B-M12KN08-WP-B1 2M	E2B-M12KN08-WP-B2 2M
						NPN	E2B-M12KN08-WP-C1 2M	E2B-M12KN08-WP-C2 2M
					Long	PNP	E2B-M12LN08-WP-B1 2M	E2B-M12LN08-WP-B2 2M
			NPN			E2B-M12LN08-WP-C1 2M	E2B-M12LN08-WP-C2 2M	
			M12 connector (4-pin)		Short	PNP	E2B-M12KN08-M1-B1	E2B-M12KN08-M1-B2
						NPN	E2B-M12KN08-M1-C1	E2B-M12KN08-M1-C2
	Long	PNP			E2B-M12LN08-M1-B1	E2B-M12LN08-M1-B2		
		NPN	E2B-M12LN08-M1-C1		E2B-M12LN08-M1-C2			
M18	Shielded	8 mm	Pre-wired	Brass	Short	PNP	E2B-M18KS08-WP-B1 2M	E2B-M18KS08-WP-B2 2M
						NPN	E2B-M18KS08-WP-C1 2M	E2B-M18KS08-WP-C2 2M
					Long	PNP	E2B-M18LS08-WP-B1 2M	E2B-M18LS08-WP-B2 2M
			NPN			E2B-M18LS08-WP-C1 2M	E2B-M18LS08-WP-C2 2M	
			M12 connector (4-pin)		Short	PNP	E2B-M18KS08-M1-B1	E2B-M18KS08-M1-B2
						NPN	E2B-M18KS08-M1-C1	E2B-M18KS08-M1-C2
	Long	PNP			E2B-M18LS08-M1-B1	E2B-M18LS08-M1-B2		
		NPN	E2B-M18LS08-M1-C1		E2B-M18LS08-M1-C2			
	Non-Shielded	16 mm	Pre-wired		Short	PNP	E2B-M18KN16-WP-B1 2M	E2B-M18KN16-WP-B2 2M
						NPN	E2B-M18KN16-WP-C1 2M	E2B-M18KN16-WP-C2 2M
					Long	PNP	E2B-M18LN16-WP-B1 2M	E2B-M18LN16-WP-B2 2M
			NPN			E2B-M18LN16-WP-C1 2M	E2B-M18LN16-WP-C2 2M	
			M12 connector (4-pin)		Short	PNP	E2B-M18KN16-M1-B1	E2B-M18KN16-M1-B2
						NPN	E2B-M18KN16-M1-C1	E2B-M18KN16-M1-C2
	Long	PNP			E2B-M18LN16-M1-B1	E2B-M18LN16-M1-B2		
		NPN	E2B-M18LN16-M1-C1		E2B-M18LN16-M1-C2			
M30	Shielded	15 mm	Pre-wired	Brass	Short	PNP	E2B-M30KS15-WP-B1 2M	E2B-M30KS15-WP-B2 2M
						NPN	E2B-M30KS15-WP-C1 2M	E2B-M30KS15-WP-C2 2M
					Long	PNP	E2B-M30LS15-WP-B1 2M	E2B-M30LS15-WP-B2 2M
			NPN			E2B-M30LS15-WP-C1 2M	E2B-M30LS15-WP-C2 2M	
			M12 connector (4-pin)		Short	PNP	E2B-M30KS15-M1-B1	E2B-M30KS15-M1-B2
						NPN	E2B-M30KS15-M1-C1	E2B-M30KS15-M1-C2
	Long	PNP			E2B-M30LS15-M1-B1	E2B-M30LS15-M1-B2		
		NPN	E2B-M30LS15-M1-C1		E2B-M30LS15-M1-C2			
	Non-Shielded	30 mm	Pre-wired		Long	PNP	E2B-M30LN30-WP-B1 2M	E2B-M30LN30-WP-B2 2M
						NPN	E2B-M30LN30-WP-C1 2M	E2B-M30LN30-WP-C2 2M
					Long	PNP	E2B-M30LN30-M1-B1	E2B-M30LN30-M1-B2
			NPN			E2B-M30LN30-M1-C1	E2B-M30LN30-M1-C2	

*1. Material specifications for stainless steel housing case: 1.4305 (W.-No.), SUS 303 (AISI), 2346 (SS).

Single sensing distance, DC 3-wire models

Size		Sensing distance	Connection	Body material	Body length	Output	Operation mode NO	Operation mode NC
M8	Shielded	1 mm	Pre-wired	Stainless steel	Short	PNP	E2B-S08KS01-WP-B1 2M	E2B-S08KS01-WP-B2 2M
						NPN	E2B-S08KS01-WP-C1 2M	E2B-S08KS01-WP-C2 2M
						PNP	E2B-S08LS01-WP-B1 2M	E2B-S08LS01-WP-B2 2M
			Long		NPN	E2B-S08LS01-WP-C1 2M	E2B-S08LS01-WP-C2 2M	
					Short	PNP	E2B-S08KS01-MC-B1	E2B-S08KS01-MC-B2
						NPN	E2B-S08KS01-MC-C1	E2B-S08KS01-MC-C2
	Long	PNP	E2B-S08LS01-MC-B1			E2B-S08LS01-MC-B2		
		NPN	E2B-S08LS01-MC-C1		E2B-S08LS01-MC-C2			
		Non-Shielded	2 mm		Pre-wired	Short	PNP	E2B-S08KN02-WP-B1 2M
	NPN						E2B-S08KN02-WP-C1 2M	E2B-S08KN02-WP-C2 2M
	PNP						E2B-S08LN02-WP-B1 2M	E2B-S08LN02-WP-B2 2M
	Long				NPN	E2B-S08LN02-WP-C1 2M	E2B-S08LN02-WP-C2 2M	
Short				PNP	E2B-S08KN02-MC-B1	E2B-S08KN02-MC-B2		
				NPN	E2B-S08KN02-MC-C1	E2B-S08KN02-MC-C2		
	Long	PNP	E2B-S08LN02-MC-B1	E2B-S08LN02-MC-B2				
NPN		E2B-S08LN02-MC-C1	E2B-S08LN02-MC-C2					
M12		Shielded	2 mm	Pre-wired	Brass	Short	PNP	E2B-M12KS02-WP-B1 2M
	NPN						E2B-M12KS02-WP-C1 2M	E2B-M12KS02-WP-C2 2M
	PNP						E2B-M12LS02-WP-B1 2M	E2B-M12LS02-WP-B2 2M
	Long			NPN		E2B-M12LS02-WP-C1 2M	E2B-M12LS02-WP-C2 2M	
				Short		PNP	E2B-M12KS02-M1-B1	E2B-M12KS02-M1-B2
						NPN	E2B-M12KS02-M1-C1	E2B-M12KS02-M1-C2
	Long	PNP	E2B-M12LS02-M1-B1			E2B-M12LS02-M1-B2		
		NPN	E2B-M12LS02-M1-C1	E2B-M12LS02-M1-C2				
		Non-Shielded	5 mm	Pre-wired		Short	PNP	E2B-M12KN05-WP-B1 2M
	NPN						E2B-M12KN05-WP-C1 2M	E2B-M12KN05-WP-C2 2M
	PNP						E2B-M12LN05-WP-B1 2M	E2B-M12LN05-WP-B2 2M
	Long			NPN		E2B-M12LN05-WP-C1 2M	E2B-M12LN05-WP-C2 2M	
Short				PNP	E2B-M12KN05-M1-B1	E2B-M12KN05-M1-B2		
				NPN	E2B-M12KN05-M1-C1	E2B-M12KN05-M1-C2		
	Long	PNP	E2B-M12LN05-M1-B1	E2B-M12LN05-M1-B2				
NPN		E2B-M12LN05-M1-C1	E2B-M12LN05-M1-C2					
M18		Shielded	5 mm	Pre-wired	Brass	Short	PNP	E2B-M18KS05-WP-B1 2M
	NPN						E2B-M18KS05-WP-C1 2M	E2B-M18KS05-WP-C2 2M
	PNP						E2B-M18LS05-WP-B1 2M	E2B-M18LS05-WP-B2 2M
	Long			NPN		E2B-M18LS05-WP-C1 2M	E2B-M18LS05-WP-C2 2M	
				Short		PNP	E2B-M18KS05-M1-B1	E2B-M18KS05-M1-B2
						NPN	E2B-M18KS05-M1-C1	E2B-M18KS05-M1-C2
	Long	PNP	E2B-M18LS05-M1-B1			E2B-M18LS05-M1-B2		
		NPN	E2B-M18LS05-M1-C1	E2B-M18LS05-M1-C2				
		Non-Shielded	10 mm	Pre-wired		Short	PNP	E2B-M18KN10-WP-B1 2M
	NPN						E2B-M18KN10-WP-C1 2M	E2B-M18KN10-WP-C2 2M
	PNP						E2B-M18LN10-WP-B1 2M	E2B-M18LN10-WP-B2 2M
	Long			NPN		E2B-M18LN10-WP-C1 2M	E2B-M18LN10-WP-C2 2M	
Short				PNP	E2B-M18KN10-M1-B1	E2B-M18KN10-M1-B2		
				NPN	E2B-M18KN10-M1-C1	E2B-M18KN10-M1-C2		
	Long	PNP	E2B-M18LN10-M1-B1	E2B-M18LN10-M1-B2				
NPN		E2B-M18LN10-M1-C1	E2B-M18LN10-M1-C2					
M30		Shielded	10 mm	Pre-wired	Brass	Short	PNP	E2B-M30KS10-WP-B1 2M
	NPN						E2B-M30KS10-WP-C1 2M	E2B-M30KS10-WP-C2 2M
	PNP						E2B-M30LS10-WP-B1 2M	E2B-M30LS10-WP-B2 2M
	Long			NPN		E2B-M30LS10-WP-C1 2M	E2B-M30LS10-WP-C2 2M	
				Short		PNP	E2B-M30KS10-M1-B1	E2B-M30KS10-M1-B2
						NPN	E2B-M30KS10-M1-C1	E2B-M30KS10-M1-C2
	Long	PNP	E2B-M30LS10-M1-B1			E2B-M30LS10-M1-B2		
		NPN	E2B-M30LS10-M1-C1	E2B-M30LS10-M1-C2				
		Non-Shielded	20 mm	Pre-wired		Short	PNP	E2B-M30KN20-WP-B1 2M
	NPN						E2B-M30KN20-WP-C1 2M	E2B-M30KN20-WP-C2 2M
	PNP						E2B-M30LN20-WP-B1 2M	E2B-M30LN20-WP-B2 2M
	Long			NPN		E2B-M30LN20-WP-C1 2M	E2B-M30LN20-WP-C2 2M	
Short				PNP	E2B-M30KN20-M1-B1	E2B-M30KN20-M1-B2		
				NPN	E2B-M30KN20-M1-C1	E2B-M30KN20-M1-C2		
	Long	PNP	E2B-M30LN20-M1-B1	E2B-M30LN20-M1-B2				
NPN		E2B-M30LN20-M1-C1	E2B-M30LN20-M1-C2					

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