

Cylindrical Inductive Proximity Sensor

E2A Single Sensing Distance

High quality for extra long life in daily use

- wide portfolio range through modular concept
- designed and tested for extra long life
- IP67 and IP69k for highest protection in wet environments
- continuously high quality level through specialized manufacturing process
- DC 3-wire and DC 2-wire models
- Normally open (NO), normally closed (NC) and antivalent (NO+NC) models
- Stainless steel and brass housings
- Pre-wired versions with different cable materials and diameters, M8 and M12 connector types, pre-wired types with cable end connectors



Ordering Information

DC 3-wire models (NO + NC: DC 4-wire) *2

Size		Sensing distance	Connec-tion	Body material	Thread length (overall length)	Output confi-guration	Operation mode NO	Operation mode NC
M8	Shiel- ded	1.5 mm	Pre-wired	Stain- less steel*1	27 (40)	PNP	E2A-S08KS01-WP-B1 2M	E2A-S08KS01-WP-B2 2M
						NPN	E2A-S08KS01-WP-C1 2M	E2A-S08KS01-WP-C2 2M
					49 (62)	PNP	E2A-S08LS01-WP-B1 2M	E2A-S08LS01-WP-B2 2M
						NPN	E2A-S08LS01-WP-C1 2M	E2A-S08LS01-WP-C2 2M
			M12 connector		27 (43)	PNP	E2A-S08KS01-M1-B1	E2A-S08KS01-M1-B2
						NPN	E2A-S08KS01-M1-C1	E2A-S08KS01-M1-C2
					49 (65)	PNP	E2A-S08LS01-M1-B1	E2A-S08LS01-M1-B2
						NPN	E2A-S08LS01-M1-C1	E2A-S08LS01-M1-C2
			M8 connector (3-pin)		27 (39)	PNP	E2A-S08KS01-M5-B1	E2A-S08KS01-M5-B2
						NPN	E2A-S08KS01-M5-C1	E2A-S08KS01-M5-C2
					49 (61)	PNP	E2A-S08LS01-M5-B1	E2A-S08LS01-M5-B2
						NPN	E2A-S08LS01-M5-C1	E2A-S08LS01-M5-C2
	M8 connector (4-pin)	27 (39)	PNP		E2A-S08KS01-M3-B1	E2A-S08KS01-M3-B2		
			NPN		E2A-S08KS01-M3-C1	E2A-S08KS01-M3-C2		
		49 (61)	PNP		E2A-S08LS01-M3-B1	E2A-S08LS01-M3-B2		
			NPN		E2A-S08LS01-M3-C1	E2A-S08LS01-M3-C2		
	Non-shiel- ded	2.0 mm	Pre-wired		27 (40)	PNP	E2A-S08KN02-WP-B1 2M	E2A-S08KN02-WP-B2 2M
						NPN	E2A-S08KN02-WP-C1 2M	E2A-S08KN02-WP-C2 2M
					49 (62)	PNP	E2A-S08LN02-WP-B1 2M	E2A-S08LN02-WP-B2 2M
						NPN	E2A-S08LN02-WP-C1 2M	E2A-S08LN02-WP-C2 2M
			M12 connector		27 (43)	PNP	E2A-S08KN02-M1-B1	E2A-S08KN02-M1-B2
						NPN	E2A-S08KN02-M1-C1	E2A-S08KN02-M1-C2
					49 (65)	PNP	E2A-S08LN02-M1-B1	E2A-S08LN02-M1-B2
						NPN	E2A-S08LN02-M1-C1	E2A-S08LN02-M1-C2
			M8 connector (3-pin)		27 (39)	PNP	E2A-S08KN02-M5-B1	E2A-S08KN02-M5-B2
						NPN	E2A-S08KN02-M5-C1	E2A-S08KN02-M5-C2
					49 (61)	PNP	E2A-S08LN02-M5-B1	E2A-S08LN02-M5-B2
						NPN	E2A-S08LN02-M5-C1	E2A-S08LN02-M5-C2
			M8 connector (4 pin)		27 (39)	PNP	E2A-S08KN02-M3-B1	E2A-S08KN02-M3-B2
						NPN	E2A-S08KN02-M3-C1	E2A-S08KN02-M3-C2
					49 (61)	PNP	E2A-S08LN02-M3-B1	E2A-S08LN02-M3-B2
						NPN	E2A-S08LN02-M3-C1	E2A-S08LN02-M3-C2

Size		Sensing distance	Connection	Body material	Thread length (overall length)	Output configuration	Operation mode NO	Operation mode NC	Operation mode NO + NC
M12	Shielded	2.0 mm	Pre-wired	Brass ⁺³	34 (50)	PNP	E2A-M12KS02-WP-B1 2M	E2A-M12KS02-WP-B2 2M	E2A-M12KS02-WP-B3 2M
						NPN	E2A-M12KS02-WP-C1 2M	E2A-M12KS02-WP-C2 2M	E2A-M12KS02-WP-C3 2M
					56 (72)	PNP	E2A-M12LS02-WP-B1 2M	E2A-M12LS02-WP-B2 2M	E2A-M12LS02-WP-B3 2M
						NPN	E2A-M12LS02-WP-C1 2M	E2A-M12LS02-WP-C2 2M	E2A-M12LS02-WP-C3 2M
			M12 connector	Brass ⁺³	34 (48)	PNP	E2A-M12KS02-M1-B1	E2A-M12KS02-M1-B2	E2A-M12KS02-M1-B3
						NPN	E2A-M12KS02-M1-C1	E2A-M12KS02-M1-C2	E2A-M12KS02-M1-C3
					56 (70)	PNP	E2A-M12LS02-M1-B1	E2A-M12LS02-M1-B2	E2A-M12LS02-M1-B3
						NPN	E2A-M12LS02-M1-C1	E2A-M12LS02-M1-C2	E2A-M12LS02-M1-C3
			M8 connector (3-pin)	Brass ⁺³	34 (48)	PNP	E2A-M12KS02-M5-B1	E2A-M12KS02-M5-B2	n.a.
						NPN	E2A-M12KS02-M5-C1	E2A-M12KS02-M5-C2	n.a.
					56 (70)	PNP	E2A-M12LS02-M5-B1	E2A-M12LS02-M5-B2	n.a.
						NPN	E2A-M12LS02-M5-C1	E2A-M12LS02-M5-C2	n.a.
			M8 connector (4-pin)	Brass ⁺³	34 (48)	PNP	E2A-M12KS02-M3-B1	E2A-M12KS02-M3-B2	n.a.
						NPN	E2A-M12KS02-M3-C1	E2A-M12KS02-M3-C2	n.a.
					56 (70)	PNP	E2A-M12LS02-M3-B1	E2A-M12LS02-M3-B2	n.a.
						NPN	E2A-M12LS02-M3-C1	E2A-M12LS02-M3-C2	n.a.
	Non-shielded	5.0 mm	Pre-wired	Brass ⁺³	34 (50)	PNP	E2A-M12KN05-WP-B1 2M	E2A-M12KN05-WP-B2 2M	E2A-M12KN05-WP-B3 2M
						NPN	E2A-M12KN05-WP-C1 2M	E2A-M12KN05-WP-C2 2M	E2A-M12KN05-WP-C3 2M
					56 (72)	PNP	E2A-M12LN05-WP-B1 2M	E2A-M12LN05-WP-B2 2M	E2A-M12LN05-WP-B3 2M
						NPN	E2A-M12LN05-WP-C1 2M	E2A-M12LN05-WP-C2 2M	E2A-M12LN05-WP-C3 2M
			M12 connector	Brass ⁺³	34 (48)	PNP	E2A-M12KN05-M1-B1	E2A-M12KN05-M1-B2	E2A-M12KN05-M1-B3
						NPN	E2A-M12KN05-M1-C1	E2A-M12KN05-M1-C2	E2A-M12KS05-M1-C3
					56 (70)	PNP	E2A-M12LN05-M1-B1	E2A-M12LN05-M1-B2	E2A-M12LS05-M1-B3
						NPN	E2A-M12LN05-M1-C1	E2A-M12LN05-M1-C2	E2A-M12LS05-M1-C3
			M8 connector (3-pin)	Brass ⁺³	34 (48)	PNP	E2A-M12KN05-M5-B1	E2A-M12KN05-M5-B2	n.a.
						NPN	E2A-M12KN05-M5-C1	E2A-M12KN05-M5-C2	n.a.
					56 (70)	PNP	E2A-M12LN05-M5-B1	E2A-M12LN05-M5-B2	n.a.
						NPN	E2A-M12LN05-M5-C1	E2A-M12LN05-M5-C2	n.a.
			M8 connector (4-pin)	Brass ⁺³	34 (48)	PNP	E2A-M12KN05-M3-B1	E2A-M12KN05-M3-B2	n.a.
						NPN	E2A-M12KN05-M3-C1	E2A-M12KN05-M3-C2	n.a.
					56 (70)	PNP	E2A-M12LN05-M3-B1	E2A-M12LN05-M3-B2	n.a.
						NPN	E2A-M12LN05-M3-C1	E2A-M12LN05-M3-C2	n.a.
M18	Shielded	5.0 mm	Pre-wired	Brass ⁺³	39 (59)	PNP	E2A-M18KS05-WP-B1 2M	E2A-M18KS05-WP-B2 2M	E2A-M18KS05-WP-B3 2M
						NPN	E2A-M18KS05-WP-C1 2M	E2A-M18KS05-WP-C2 2M	E2A-M18KS05-WP-C3 2M
					61 (81)	PNP	E2A-M18LS05-WP-B1 2M	E2A-M18LS05-WP-B2 2M	E2A-M18LS05-WP-B3 2M
						NPN	E2A-M18LS05-WP-C1 2M	E2A-M18LS05-WP-C2 2M	E2A-M18LS05-WP-C3 2M
			M12 connector	Brass ⁺³	39 (53)	PNP	E2A-M18KS05-M1-B1	E2A-M18KS05-M1-B2	E2A-M18KS05-M1-B3
						NPN	E2A-M18KS05-M1-C1	E2A-M18KS05-M1-C2	E2A-M18KS05-M1-C3
					61 (75)	PNP	E2A-M18LS05-M1-B1	E2A-M18LS05-M1-B2	E2A-M18LS05-M1-B3
						NPN	E2A-M18LS05-M1-C1	E2A-M18LS05-M1-C2	E2A-M18LS05-M1-C3
			M8 connector (3-pin)	Brass ⁺³	39 (53)	PNP	E2A-M18KS05-M5-B1	E2A-M18KS05-M5-B2	n.a.
						NPN	E2A-M18KS05-M5-C1	E2A-M18KS05-M5-C2	n.a.
					61 (75)	PNP	E2A-M18LS05-M5-B1	E2A-M18LS05-M5-B2	n.a.
						NPN	E2A-M18LS05-M5-C1	E2A-M18LS05-M5-C2	n.a.
			M8 connector (4-pin)	Brass ⁺³	39 (53)	PNP	E2A-M18KS05-M3-B1	E2A-M18KS05-M3-B2	n.a.
						NPN	E2A-M18KS05-M3-C1	E2A-M18KS05-M3-C2	n.a.
					61 (75)	PNP	E2A-M18LS05-M3-B1	E2A-M18LS05-M3-B2	n.a.
						NPN	E2A-M18LS05-M3-C1	E2A-M18LS05-M3-C2	n.a.
	Non-shielded	10.0 mm	Pre-wired	Brass ⁺³	39 (59)	PNP	E2A-M18KN10-WP-B1 2M	E2A-M18KN10-WP-B2 2M	E2A-M18KN10-WP-B3 2M
						NPN	E2A-M18KN10-WP-C1 2M	E2A-M18KN10-WP-C2 2M	E2A-M18KN10-WP-C3 2M
					61 (81)	PNP	E2A-M18LN10-WP-B1 2M	E2A-M18LN10-WP-B2 2M	E2A-M18LN10-WP-B3 2M
						NPN	E2A-M18LN10-WP-C1 2M	E2A-M18LN10-WP-C2 2M	E2A-M18LN10-WP-C3 2M
			M12 connector	Brass ⁺³	39 (53)	PNP	E2A-M18KN10-M1-B1	E2A-M18KN10-M1-B2	E2A-M18KN10-M1-B3
						NPN	E2A-M18KN10-M1-C1	E2A-M18KN10-M1-C2	E2A-M18KS10-M1-C3
					61 (75)	PNP	E2A-M18LN10-M1-B1	E2A-M18LN10-M1-B2	E2A-M18LS10-M1-B3
						NPN	E2A-M18LN10-M1-C1	E2A-M18LN10-M1-C2	E2A-M18LS10-M1-C3
			M8 connector (3-pin)	Brass ⁺³	39 (53)	PNP	E2A-M18KN10-M5-B1	E2A-M18KN10-M5-B2	n.a.
						NPN	E2A-M18KN10-M5-C1	E2A-M18KN10-M5-C2	n.a.
					61 (75)	PNP	E2A-M18LN10-M5-B1	E2A-M18LN10-M5-B2	n.a.
						NPN	E2A-M18LN10-M5-C1	E2A-M18LN10-M5-C2	n.a.
			M8 connector (4-pin)	Brass ⁺³	39 (53)	PNP	E2A-M18KN10-M3-B1	E2A-M18KN10-M3-B2	n.a.
						NPN	E2A-M18KN10-M3-C1	E2A-M18KN10-M3-C2	n.a.
					61 (75)	PNP	E2A-M18LN10-M3-B1	E2A-M18LN10-M3-B2	n.a.
						NPN	E2A-M18LN10-M3-C1	E2A-M18LN10-M3-C2	n.a.

Size	Sensing distance	Connec-tion	Body material	Thread length (overall length)	Output confi-guration	Operation mode NO	Operation mode NC	Operation mode NO + NC
M30	Shielded	Pre-wired	Brass ^{*3}	44 (64)	PNP	E2A-M30KS10-WP-B1 2M	E2A-M30KS10-WP-B2 2M	E2A-M30KS10-WP-B3 2M
					NPN	E2A-M30KS10-WP-C1 2M	E2A-M30KS10-WP-C2 2M	E2A-M30KS10-WP-C3 2M
				66 (86)	PNP	E2A-M30LS10-WP-B1 2M	E2A-M30LS10-WP-B2 2M	E2A-M30LS10-WP-B3 2M
					NPN	E2A-M30LS10-WP-C1 2M	E2A-M30LS10-WP-C2 2M	E2A-M30LS10-WP-C3 2M
		M12 connector	Brass ^{*3}	44 (58)	PNP	E2A-M30KS10-M1-B1	E2A-M30KS10-M1-B2	E2A-M30KS10-M1-B3
					NPN	E2A-M30KS10-M1-C1	E2A-M30KS10-M1-C2	E2A-M30KS10-M1-C3
				66 (80)	PNP	E2A-M30LS10-M1-B1	E2A-M30LS10-M1-B2	E2A-M30LS10-M1-B3
					NPN	E2A-M30LS10-M1-C1	E2A-M30LS10-M1-C2	E2A-M30LS10-M1-C3
		M8 connector (3-pin)	Brass ^{*3}	44 (58)	PNP	E2A-M30KS10-M5-B1	E2A-M30KS10-M5-B2	n.a.
					NPN	E2A-M30KS10-M5-C1	E2A-M30KS10-M5-C2	n.a.
				66 (80)	PNP	E2A-M30LS10-M5-B1	E2A-M30LS10-M5-B2	n.a.
					NPN	E2A-M30LS10-M5-C1	E2A-M30LS10-M5-C2	n.a.
		M8 connector (4-pin)	Brass ^{*3}	44 (58)	PNP	E2A-M30KS10-M3-B1	E2A-M30KS10-M3-B2	n.a.
					NPN	E2A-M30KS10-M3-C1	E2A-M30KS10-M3-C2	n.a.
				66 (80)	PNP	E2A-M30LS10-M3-B1	E2A-M30LS10-M3-B2	n.a.
					NPN	E2A-M30LS10-M3-C1	E2A-M30LS10-M3-C2	n.a.
	Non-shielded	Pre-wired	Brass ^{*3}	44 (64) (See note.)	PNP	E2A-M30KN18-WP-B1 2M	E2A-M30KN18-WP-B2 2M	E2A-M30KN18-WP-B3 2M
					NPN	E2A-M30KN18-WP-C1 2M	E2A-M30KN18-WP-C2 2M	E2A-M30KN18-WP-C3 2M
				66 (86)	PNP	E2A-M30LN18-WP-B1 2M	E2A-M30LN18-WP-B2 2M	E2A-M30LN18-WP-B3 2M
					NPN	E2A-M30LN18-WP-C1 2M	E2A-M30LN18-WP-C2 2M	E2A-M30LN18-WP-C3 2M
		M12 connector	Brass ^{*3}	44 (58) (See note.)	PNP	E2A-M30KN18-M1-B1	E2A-M30KN18-M1-B2	E2A-M30KN18-M1-B3
					NPN	E2A-M30KN18-M1-C1	E2A-M30KN18-M1-C2	E2A-M30KN18-M1-C3
				66 (80)	PNP	E2A-M30LN18-M1-B1	E2A-M30LN18-M1-B2	E2A-M30LN18-M1-B3
					NPN	E2A-M30LN18-M1-C1	E2A-M30LN18-M1-C2	E2A-M30LN18-M1-C3
		M8 connector (3-pin)	Brass ^{*3}	44 (58) (See note.)	PNP	E2A-M30KN18-M5-B1	E2A-M30KN18-M5-B2	n.a.
					NPN	E2A-M30KN18-M5-C1	E2A-M30KN18-M5-C2	n.a.
				66 (80)	PNP	E2A-M30LN18-M5-B1	E2A-M30LN18-M5-B2	n.a.
					NPN	E2A-M30LN18-M5-C1	E2A-M30LN18-M5-C2	n.a.
		M8 connector (4-pin)	Brass ^{*3}	44 (58) (See note.)	PNP	E2A-M30KN18-M3-B1	E2A-M30KN18-M3-B2	n.a.
					NPN	E2A-M30KN18-M3-C1	E2A-M30KN18-M3-C2	n.a.
				66 (80)	PNP	E2A-M30LN18-M3-B1	E2A-M30LN18-M3-B2	n.a.
					NPN	E2A-M30LN18-M3-C1	E2A-M30LN18-M3-C2	n.a.

*1. Material specifications for stainless steel housing case: 1.4305 (W.-No.), SUS 303 (AISI), 2346 (SS). Please contact your OMRON representative for other stainless steel materials.

*2. Please contact your OMRON representative for DC 2-wire models.

*3. Stainless steel models are also available. Please contact your OMRON representative.

Note: M30 non-shielded Models with double sensing distance and short barrels cannot be mounted due to the necessary separation distance from the surrounding metal. Standard sensing models are thus available.

Connectivity

The E2A sensors are available with the following connectors and cable materials:

Pre-wired models



Standard cable lengths are 2m and 5m.
For other cable lengths please contact your OMRON representative.

Standard cable material: PVC (dia 4mm)

Other available cable materials and sizes:

- PVC (dia 6mm)
- PUR/PVC – PUR jacket (dia 4mm)
- PUR/PVC – PUR jacket (dia 6mm)
- PVC robotic cable (dia 4mm)

Pre-wired models with cable end connectors



All pre-wired models can be fitted with cable and connectors.

Standard cable end connectors:

- M12
- M8 (4 pin)
- M8 (3 pin)

Other cable end connectors are available on request.

Connector models



Standard connectors: M12, M8 (4 or 3 pin) -M1, -M3, -M5