



Stainless Steel Sensors Offer Exceptional Durability to Reduce Your Maintenance Costs

- One-piece 303 stainless steel face/barrel construction resists damage caused by work piece contact, scouring abrasion, and harsh chemicals
- Up to 0.8 mm thick sensing face for superior mechanical durability, wear resistance
- Operation not influenced by the build-up of aluminum or iron cutting chips and weld slag on the sensing face
- 20% longer sensing range (10 mm) with M30 models versus the CENELEC standard 8 mm
- Wrench flats for easy installation
- 3-wire DC models have built-in connectors; 2-wire DC models have a 0.3 m pig-tail lead with connector
- Thick insulation protects pig-tail lead for increased endurance in harsh environments
- Surge suppressor, load short-circuit protection

Reduce Your Maintenance Costs

- M12 connectors simplify installation, shorten service time
- Thick sensing face withstands repeated scouring to remove weld spatter
- Chemical-resistant 303 stainless steel case reduces failure from corrosion
- Rated IP67 for washdown
- Flush mountable in ferrous materials to protect sensor from side impact damage



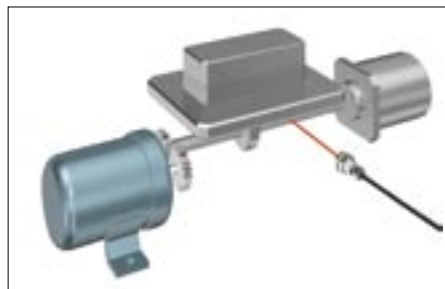
Applications

AUTO BODY WELDING



- ***Sensing face resists weld splatter***
- ***Withstands repeated scouring abrasion***

METAL PROCESSING



- ***Resists coolants and lubricants***
- ***Resists impact from workpiece collisions***
- ***Ignores build-up of metal cuttings on sensing face***

FOOD PACKAGING



- ***Resists water and chemical washdown***
- ***Mounts flush in conveyor rails***

Specifications

- Voltage range: 10 to 30 VDC operating range
- Output type:
 - PNP-NO or NPN-NO (3-wire DC)
 - NO with polarity or NO without polarity (2-wire DC)
- Load rating:
 - 200 mA at 30 VDC max.; 2 V residual voltage (3-wire DC);
 - 3 to 100 mA; 3 V residual voltage with polarity (2-wire DC)
 - 3 to 100 mA, 5 V residual voltage without polarity (2-wire DC)
- Current consumption: 10 mA max. (3-wire DC)
- Leakage current: 0.8 mA (2-wire DC)
- Circuit protection:
 - 3-wire DC: Reversed power supply polarity protection, Surge suppressor, Load short-circuit protection, and Reversed output polarity protection (except M8 size)
 - 2-wire DC: Surge suppressor, Load short-circuit protection
- Differential travel: 15% max. of sensing distance
- Operating ambient: -25° to 70°C, 35% to 95% RH

Ordering Information

DC 2-Wire Proximity Sensors, Pigtail with M12 Connector

Type	Size	Sensing distance	Output configuration	Operation mode	Model
Shielded	M8	1.5 mm	Polarity: Yes; Pin arrangement: 1-4	N.O.	E2FM-X1R5D1-M1GJ
			Polarity: No; Pin arrangement: 3-4		E2FM-X2D1-M1GJ
	M12	2 mm	Polarity: Yes; Pin arrangement: 1-4		E2FM-X2D1-M1GJ-T
			Polarity: No; Pin arrangement: 3-4		E2FM-X5D1-M1GJ
	M18	5 mm	Polarity: Yes; Pin arrangement: 1-4		E2FM-X5D1-M1GJ-T
			Polarity: No; Pin arrangement: 3-4		E2FM-X10D1-M1GJ
	M30	10 mm	Polarity: Yes; Pin arrangement: 1-4		E2FM-X10D1-M1GJ-T
			Polarity: No; Pin arrangement: 3-4		

DC 3-Wire Proximity Sensors, M12 Connector

Type	Size	Sensing distance	Operation mode	Model	
				PNP Output	NPN Output
Shielded	M8	1.5 mm	N.O.	E2FM-X1R5B1-M1	E2FM-X1R5C1-M1
	M12	2 mm		E2FM-X2B1-M1	E2FM-X2C1-M1
	M18	5 mm		E2FM-X5B1-M1	E2FM-X5C1-M1
	M30	10 mm		E2FM-X10B1-M1	E2FM-X10C1-M1

Connector Cordsets and Weld Jackets

Connector type	Keyway	Cable size	Shape	Length	Part number
3-wire DC, female MicroChange® socket	Single	22 AWG	Straight connector	2 m (6.56 ft)	Y96E-43SD2
				5 m (16.40 ft)	Y96E-43SD5
				10 m (32.8 ft)	Y96E-43SD10
			Right angle connector	2 m (6.56 ft)	Y96E-43RD2
				5 m (16.40 ft)	Y96E-43RD5
				10 m (32.8 ft)	Y96E-43RD10
Weld jacket slips over cable and connector to protect against spatter	-	1/2" jacket diameter	-	36 inch	Y92E-WJ12X36IN
	-	3/4" jacket diameter	-	36 inch	Y92E-WJ34X36IN

Note: Specifications are subject to change.

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