

Catalogue No: 42EF-D1RCAK-A2

DIFF 24-240VAC/DC INFRARED 3-300mm LO NMOS 2m

Field Switching and Sensing > Non Contact Sensors > Photoelectric Sensors > Allen-Bradley Photoelectric Sensors > Digital Diffuse Sensors > Compact Rectangular



PHOTOSWITCH Photoelectric Sensor, RightSight, Standard Diffuse, infrared, AC/DC - Light Operate Only, Sink (NPN) Power MOSFET, 2m (6.5ft) cable

- Comprehensive range of photoelectric sensing technologies available which include retroreflective, through-beam, diffuse, background suppression, clear object detection, colour detection and fibre-optics
- Extensive range of photoelectric sensors with laser light source available suitable for high precision applications
- Extensive range of housing styles and mounting options
- Specialised versions with IP69k rating available for high-pressure washdown applications in the food and beverage industry
- Specialised long-range laser sensors available for distance measurement applications
- Specialised versions available with IO-Link technology. This technology enables the data delivery from the sensor directly into a control system in a very efficient manner

Representative Photo Only
(actual product may vary based on configuration selections)

SPECIFICATIONS

Product Series	42EF RightSight
Component Type Field Switching & Sensing	Photoelectric Sensor
Sensing Mode	Diffuse
Light source type	LED
Illumination Mode	Continuous
Colour, light source	Infrared (880nm)
Beam Angle / Field of View	5 ° (degrees)
Spot Size	48.3 mm at 500mm
Material, Lens	PMMA / Acrylic / Perspex / Plexiglas (Polymethyl methacrylate)
Material, Body / Housing	Mindel material
Shape	Rectangular
Height	69 mm
Width	27 mm
Depth	34.5 mm
Orientation	Straight Through / Right Angle
Mounting (Multiple)	Panel Mount Threaded Nose Threaded Base Mounting Bracket (Ordered Separately)
Thread Size	M18 x 1 size
Teach Mode / Sensitivity Adjustment	Single-Turn Knob / Potentiometer sensitivity
Sensing Distance, Min	3 mm min
Sensing Distance, Max	300 mm max
Operating Range(s)	21.6 ... 264V AC/DC
Ue, Rated Operational Voltage, AC, min	21.6 V AC
Ue, Rated Operational Voltage, AC, max	264 V AC
Ue, Rated Operational Voltage, DC, min	21.6 V DC

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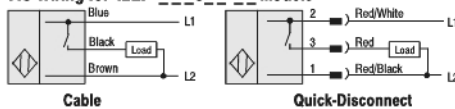
Ue, Rated Operational Voltage, DC, max	264 V DC
Switching Mode	Light Operate
Output Type	NPN (Sink) MOSFET
Load Current	0.1 A
Response Time (Off → On)	1 ms
Response Time (On → Off)	1 ms
Indicators	Green LED Orange LED Yellow
Connection / Termination	Built-in cable with flying leads
Number of Conductors	4 qty
Wire / Conductor Size	22 AWG (0.326 mm ²)
Length, Cable	2 m
Material, cable jacket	PVC material
Colour, Cable Jacket	Black colour
Operating Temperature, Min	-25 °C min
Operating Temperature, Max	70 °C max
Details, Temperature	Operating Temperature; -25 to 55° for ≥ 132V AC/DC; -25 to 70° for ≤ 132V AC/DC
Relative humidity, min	5 %RH
Relative Humidity, Max	95 %RH
Humidity type	Non-condensing
IP Rating	IP67 IP69K
Shock Acceleration (Max.)	30 g
Shock Duration (Max.)	1 ms
Shock Rating	IEC 60947-5-2
Vibration Displacement (Peak to Peak Max.)	1 mm
Vibration Frequency, Operational (Max.)	55 Hz
Vibration Rating	IEC 60947-5-2

REFERENCES

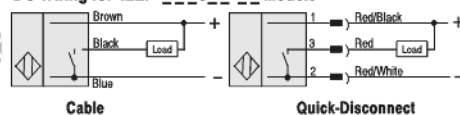
IECEX Certificate	-
Supplier Declaration of Conformity:	-
Installation Guide:	-
User Manual:	-
Manufacturer Datasheet:	42EFD1RCAKA2_ManufacturerDatasheet
Manufacturer Catalogue & Product Selection:	-

21.6...264V AC/DC Sensors

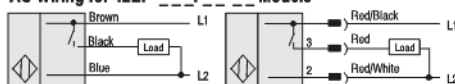
AC Wiring for 42EF-__C__ Models



DC Wiring for 42EF-__C__ Models



AC Wiring for 42EF-__F__ Models

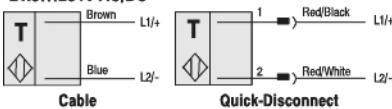


DC Wiring for 42EF-__F__ Models

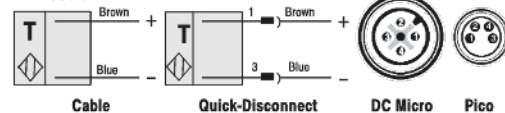


Transmitted Beam Source

21.6...264V AC/DC

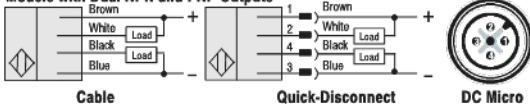


All Models

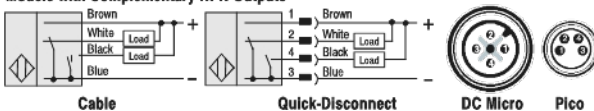


10.8...30V DC Sensors

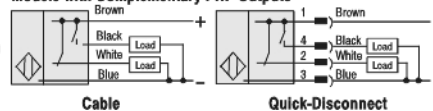
Models with Dual NPN and PNP Outputs



Models with Complementary NPN Outputs



Models with Complementary PNP Outputs

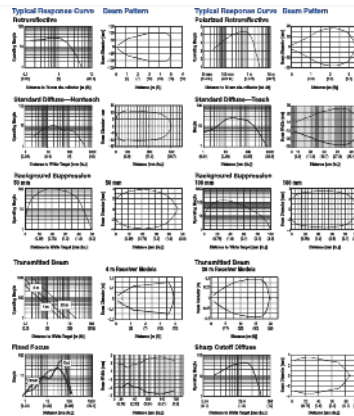


Connection / Wiring Diagram

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Technical Diagram