

Catalogue No: 42KL-F2LBL-F4

FF-DIFF 11-30VDC RED 43mm PNP/NPN DC-MICRO-4

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



PHOTOSWITCH Photoelectric Sensor, MiniSight, Fixed Focus Diffuse, 43mm (1.7in), 10.8-30V DC - LO or DO selectable, 4-pin DC Micro QD on 152mm (6in) pigtail

- 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	42KL MiniSight
Component Type Field Switching & Sensing	Photoelectric Sensor
Sensing Mode	Diffuse - Fixed Focus
Light source type	LED
Colour, light source	Red (660nm)
Material, Lens	PMMA / Acrylic / Perspex / Plexiglas (Polymethyl methacrylate)
Material, Body / Housing	Noryl 190X material
Shape	Rectangular
Height	30.7 mm
Width	12.7 mm
Depth	54.6 mm
Orientation	Straight Through
Mounting (Multiple)	Threaded Nose Panel Mount Mounting Bracket (Ordered Separately)
Thread Size	M18 x 1 size
Sensing Distance, Max	43 mm max
Sensing Direction	Face
Operating Range(s)	10.8 ... 30V DC
Switching Mode	Light or Dark Operate Selectable
Output Type	NPN & PNP
Load Current	0.1 A
Response Time (Off → On)	1 ms
Response Time (On → Off)	1 ms
Indicators	Green LED Amber LED Orange LED

Catalogue No: **42KL-F2LBL-F4**

FF-DIFF 11-30VDC RED 43mm PNP/NPN DC-MICRO-4

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



Connection / Termination	M12 x 1, DC Micro, 4-pin
Number of Conductors	4 qty
Operating Temperature, Min	-20 °C min
Operating Temperature, Max	70 °C max
Relative humidity, min	5 %RH
Relative Humidity, Max	95 %RH
Humidity Type	Non-condensing
IP Rating	IP67
Shock Acceleration (Max.)	30 g
Shock Duration (Max.)	1 ms
Shock Rating	IEC 60947-5-2
Vibration Displacement (Peak to Peak Max.)	0.5 mm
Vibration Frequency, Operational (Max.)	55 Hz
Vibration Rating	IEC 60947-5-2

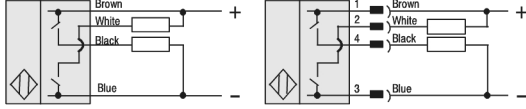
REFERENCES

IECEX Certificate	-
Supplier Declaration of Conformity:	-
Installation Guide:	-
User Manual:	-
Manufacturer Datasheet:	42KLF2LBLF4_ManufacturerDatasheet
Manufacturer Catalogue & Product Selection:	-



11...30V DC Sensors

NPN/PNP

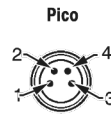


Cable

Quick-Disconnect



Micro



Pico

Transmitted Beam Source

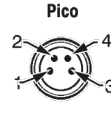


Cable

Quick-Disconnect



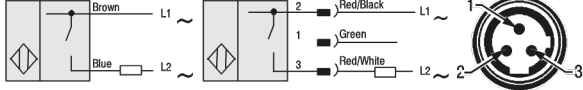
Micro



Pico

22...250V AC/DC Sensors

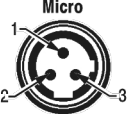
AC Wiring



Cable

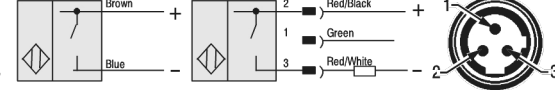
Quick-Disconnect

Note: Load can be switched to pin 2 or brown.



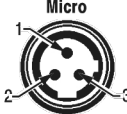
Micro

DC Wiring



Cable

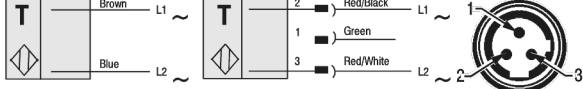
Quick-Disconnect



Micro

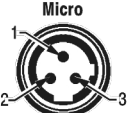
Transmitted Beam Source

AC Wiring



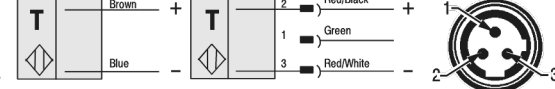
Cable

Quick-Disconnect



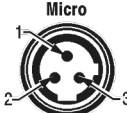
Micro

DC Wiring



Cable

Quick-Disconnect



Micro

- ❶ For Rockwell Automation programmable controller compatible interface, refer to *PHOTOSWITCH® Photoelectric Sensors and Programmable Controller Interface Manual* at www.ab.com/literature.
- ❷ Quick-disconnect wiring codes shown are valid for Rockwell Automation cables only.

Connection / Wiring Diagram