

Model Name > [WLL180T-F434S05](#)
Part No. > [6045340](#)



At a glance

- Selectable response time up to 16 µs
- Sensing range up to 20 m, sensing distance up to 1400 mm
- Bus-compatible with anti-interference
- 2 x 4-digit display
- Adjustable hysteresis
- Rotatable display screen
- High-resolution signal processing
- Programmable time delays

Your benefits

- Extremely rapid processes are detected reliably
- Workpieces are detected reliably even under the most difficult of ambient conditions such as dust, spray or mist
- No mutual effects from fiber-optic heads mounted in close proximity due to bus communication
- Easy monitoring of process parameters
- Hysteresis can be adapted to suit the application, e.g. when detecting tiny or transparent objects
- The display is easy to read, even under difficult installation conditions
- Tiny objects can be detected due to the high-resolution signal processing
- Time delays can be adjusted individually to suit the application



Features

Device type:	Expansion unit
Dimensions (W x H x D):	10.5 mm x 34.6 mm x 71.9 mm
Sensing range max.::	0 m ... 20 m, through-beam system ^{1) 2)}
Sensing range::	9, 2) m ... 1,400 mm, proximity system
Light source:	LED ⁵⁾
Type of light:	Visible red light
Wave length:	650 nm
Adjustment:	adjustable
Sensitivity adjustment:	Cable Cable
Adjustment of operating distance:	Cable, +/- increment button, manual, Teach-Taste
Teach-in:	Menu-controlled

Time type:	Without time delay time delay off switch on delay ON and OFF delay one shot
Delay time:	Programmable: 0 ... 9,999 ms
Indication:	Display
Sensor/detection principle:	Fiber-optic photoelectric sensor
Housing design (light emission):	Rectangular

With correctly attached fibre-optic cable LL3 and closed protection hood;

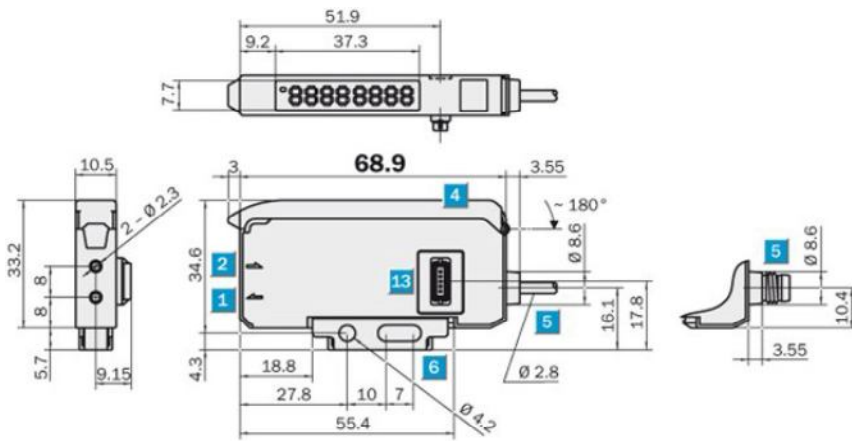
¹⁾ Scanning range with 8 ms response time. Scanning range reduction with shorter response time (see tables LL3/WLL180T) ²⁾ LL3-TX01 ³⁾ Objects to be sensed with 90% reflectivity (based on DIN 5033 white standard). sensing distance with 8 ms response time. sensing distance reduction with shorter response time (see tables LL3/WLL180T) ⁴⁾ LL3-DK06 ⁵⁾ Average service life 100,000 h at Ta = +25 °C

Mechanics/electronics

Enclosure rating:	IP 50
Supply voltage:	12 V DC ... 24 V DC ¹⁾
Ripple:	≤ 10 % ²⁾
Current consumption:	≤ 50 mA ³⁾
Output type:	PNP, light/dark-switching, manually selectable, open collector
Output current I _{max} :	≤ 100 mA
Response time:	≤ 2 ms ≤ 8 ms ≤ 16 µs ≤ 70 µs ≤ 250 µs ⁴⁾
Switching frequency:	31.2 kHz 7.1 kHz 2 kHz 250 Hz 62.5 Hz
Connection type:	Cable with plug, M8, 4-pin 0.2 m ⁵⁾
Protection class:	III
Circuit protection:::	A B C ⁶⁾ ⁷⁾ ⁸⁾ ⁹⁾ D
Special device:	1
Housing material:	ABS/PC
Ambient operating temperature:	-25 °C ... 55 °C
Ambient storage temperature:	-25 °C ... 70 °C
Special features:	M8, 3-pin, 200 mm Pigtail
Angle of dispersion:	Ca. 65° ¹⁰⁾

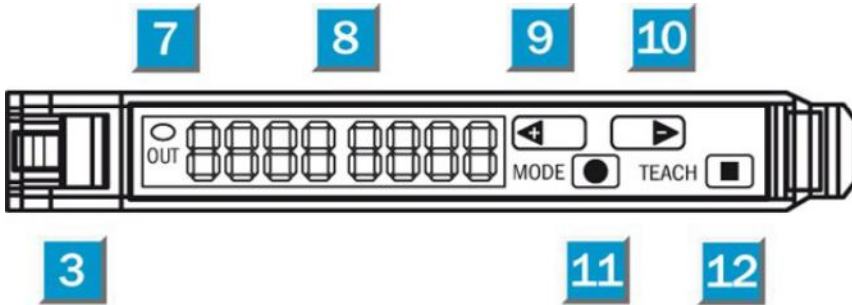
¹⁾ +/- 10% ²⁾ May not exceed or fall short of V ³⁾ Without load ⁴⁾ Selectable ⁵⁾ Do not bend below 0 °C ⁶⁾ A = VS connections reverse-polarity protected ⁷⁾ B = inputs and output reverse-polarity protected ⁸⁾ C = interference suppression ⁹⁾ D = outputs overcurrent and short-circuit protected ¹⁰⁾ See LL3 fiber-optic data

Dimensional drawing



- |1| Sender LED, installation of LL3 fibre-optic cable (sender fibre)
- |2| Receiver, installation of LL3 fibre optic cable (receiver fibre)
- |3| Locking the fiber-optic cables
- |4| Protective hood, can be raised at both ends
- |5| Connection
- |6| Mounting bracket, included

Adjustment possible



- |3| Locking the fiber-optic cables
- |7| LED indicator orange, lights up when switching output is active
- |8| Numeric display 2 x 4-digit; green: switching threshold, operating mode; red: actual value, Teach-in and function parameter
- |9| Step-button > (manual switching threshold: higher; or next function parameter)
- |10| Step-button < (manual switching threshold: lower; or previous function parameter)
- |11| Mode/Enter-button
- |12| "Teach-in" push button