

XECRO

most reliable sensor technology

inductive • capacitive • optoelectronics • touch 'n indicators



Most Reliable Sensor Technology

- *electric field*
- *inductive*
- *capacitive*
- *optical*



At a Glance

“Talent for innovation and customers orientation are the key factors of our success”

Think for Technology

XECRO is an independent company with more than 15 years of experience in the sensor industry.

During the years XECRO expanded its knowledge and production line to one of the completest range of inductive and capacitive sensors in the automation industry; focusing on the highest performance available.

Our innovations in this technologies results as the thinnest and shortest sensors, quad sensing distances, high pressure and high temperature resistant proximity switches. XECRO develops, produces and commercializes industrial sensors and general industrial electronics worldwide.

Global Organization

XECRO is one of the leading companies in inductive and capacitive technology and serves customers in Europe, North and Latin America, Asia, Africa and Middle East. The organization is regulated in accordance with the strict directives of ISO 9001-2000 .

XECROs headquarter located in Hanover, Germany, represents the focal point; our business counts with highly motivated management and working team: Financial and Sales dept., R & D, Customer Assistance, Shipping dept. and Warehouse are located in a modern 1100 square meter building. Customers can benefit from our synergic organization: the production is made by XECRO in Hanover, Germany and in collaboration with selected strategic production facilities inside the EU.

Dynamic R & D

R & D resources are the heart of the company. Thanks to expertise, gained during the years, in implementing individual solutions for customer applications, we are able to adapt our products to almost any customer needs.

In close cooperation between our business partners and development department, XECRO delivers customized sensor solutions based on the following technologies:

- Electric-Field, human touch devices and touch panels
- Optical
 - dirt resistant
 - miniature construction
 - high temperature resistant
- Capacitive
 - highest performance
 - high temperature resistant
- Inductive
 - highest performance
 - metal face, one piece construction
 - high temperature resistant
 - high pressure proof
 - analog output
 - namur

If special housings are required, we design them in 3D.

XECRO has rapid prototyping service for any shape and can provide IGES or STEP files in advance to check that the later integration is possible.

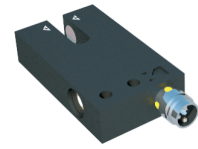
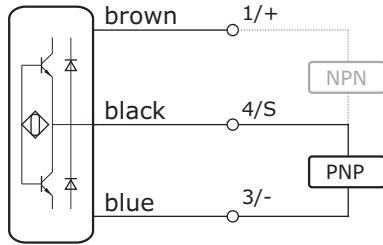
All XECRO products are built with the highest accuracy and are fully tested after production. The CE print on the products confirms with EU and EN standards and directives.



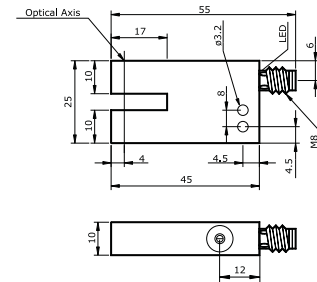
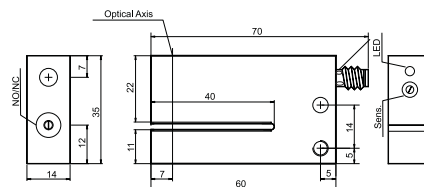
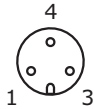
02 mm

05 mm

Output Schematics



Connector M8



SPECIFICATIONS

Operating Voltage
Current Consumption
Current Load Capability
Reverse Polarity Protection
Voltage Drop
Switching Frequency
Short Circuit Protection
Resolution
Adjustment
Switching Hysteresis
Repeatability
Operating Temperature
Ambient Light Immunity
Isolation Voltage
Housing Material
Protection Class
Optical Elements

FLE 02...
10...35 VDC, 3-wire
< 30 mA
200 mA
built-in
2.5 V @ 200 mA
2.5 KHz
built-in - self resetting
Ø 0.5 mm
270° Potentiometer
< 0.2 mm
0.01 mm
-10...+60 °C
70.000 lux
500 V
Aluminum
IP 67
Infrared / Glass Window

FLE 05...
10...35 VDC, 3-wire
< 30 mA
200 mA
built-in
2.5 V @ 200 mA
2.5 KHz
built-in - self resetting
Ø 0.5 mm
270° Potentiometer
< 0.2 mm
0.01 mm
-10...+60 °C
70.000 lux
500 V
Aluminum
IP 67
Infrared / Glass Window

Article Code

PNP, NO
PNP, NC
PNP, NO/NC
NPN, NO
NPN, NC
NPN, NO/NC

FLI02-PS/M8
FLI02-NS/M8

FLI05-PO/M8
FLI05-PC/M8
FLI05-NO/M8
FLI05-NC/M8

Recommended Connecting Cable

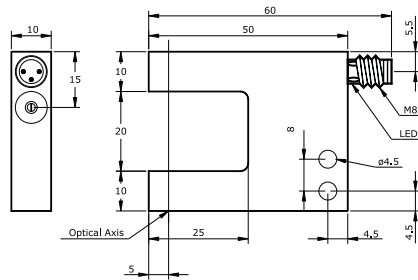
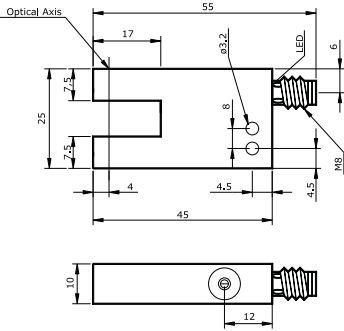
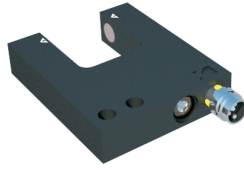
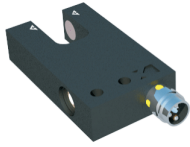
M8/3...

M8/3...

Fork-Light-Barriers

10 mm

20 mm



FLE 10...

10...35 VDC, 3-wire
 < 30 mA
 200 mA
 built-in
 2.5 V @ 200 mA
 2.5 KHz
 built-in - self resetting
 Ø 0.5 mm
 270° Potentiometer
 < 0.2 mm
 0.01 mm
 -10...+60 °C
 70.000 lux
 500 V
 Aluminum
 IP 67
 Infrared / Glass Window

FLE 20...

10...35 VDC, 3-wire
 < 30 mA
 200 mA
 built-in
 2.5 V @ 200 mA
 2.5 KHz
 built-in - self resetting
 Ø0.3mm
 270° Potentiometer
 < 0.2 mm
 0.01 mm
 -10...+60 °C
 70.000 lux
 500 V
 Aluminum
 IP 67
 Red-Light / Glass Window

FLI10-PO/M8
 FLI10-PC/M8

FLE20-PO/M8
 FLE20-PC/M8

FLI10-NO/M8
 FLI10-NC/M8

FLE20-NO/M8
 FLE20-NC/M8

M8/3...

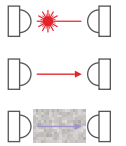
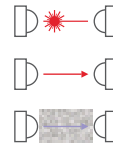
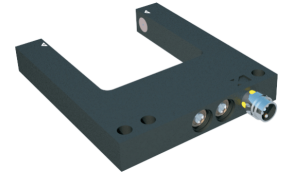
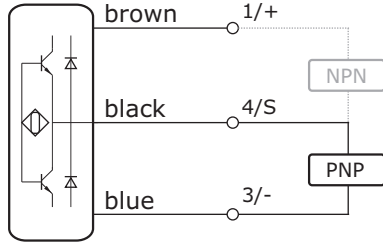
M8/3...

Fork-Light-Barriers

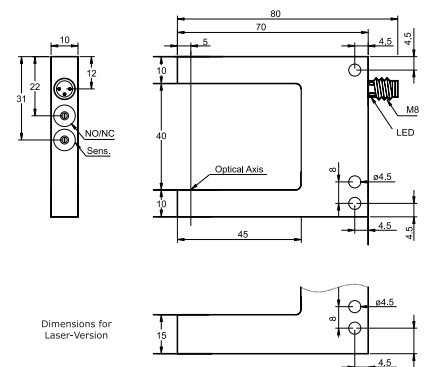
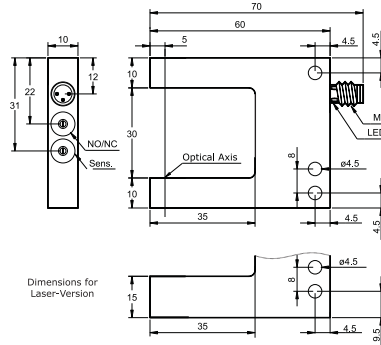
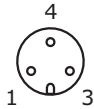
30 mm

40 mm

Output Schematics



Connector M8



SPECIFICATIONS

Operating Voltage
Current Consumption
Current Load Capability
Reverse Polarity Protection
Voltage Drop
Switching Frequency
Short Circuit Protection
Resolution
Adjustment
Switching Hysteresis
Repeatability
Operating Temperature
Ambient Light Immunity
Isolation Voltage
Housing Material
Protection Class
Optical Elements

FLx 30...

10...35 VDC, 3-wire
< 30 mA
200 mA
built-in
2.5 V @ 200 mA
Red-light: 2.5 kHz | laser: 10 kHz
built-in - self resetting
Red-light: Ø0.3mm | laser: Ø0.03 mm
270° Potentiometer
< 0.2 mm
0.01 mm
-10...+60 °C
50.000 lux
500 V
Aluminum
IP 67
Red-Light / Laser Glass Window

FLx 40...

10...35 VDC, 3-wire
< 30 mA
200 mA
built-in
2.5 V @ 200 mA
Red-light: 2.5 kHz | laser: 10 kHz
built-in - self resetting
Red-light: Ø0.3mm | laser: Ø0.03 mm
270° Potentiometer
< 0.2 mm
0.01 mm
-10...+60 °C
50.000 lux
500 V
Aluminum
IP 67
Red-Light / Laser Glass Window

Article Code

PNP, NO / NC - Red-Light
NPN, NC / NC - Red-Light
PNP, NO / NC - Laser
NPN, NO / NC - Laser
PNP, NO / NC - Dirt Immune
NPN, NO / NC - Dirt Immune

FLE30-PS/M8
FLE30-NS/M8
FLA30-PS/M8
FLA30-NS/M8
FLD30-PS/M8
FLD30-NS/M8

FLE40-PS/M8
FLE40-NS/M8
On Request
On Request
FLD40-PS/M8
FLD40-NS/M8

Recommended Connecting Cable

M8/3...

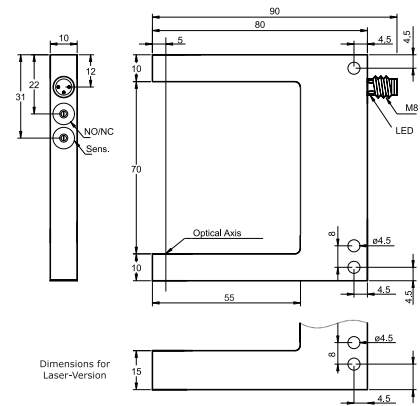
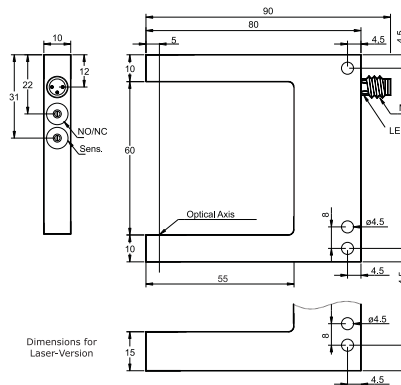
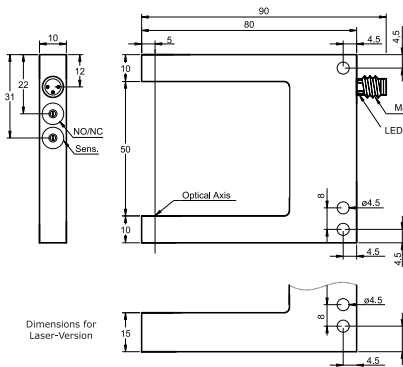
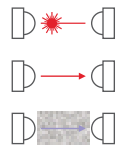
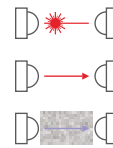
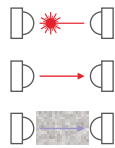
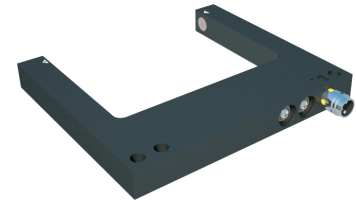
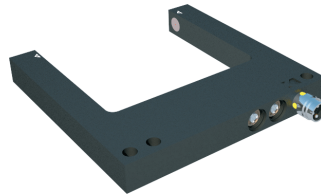
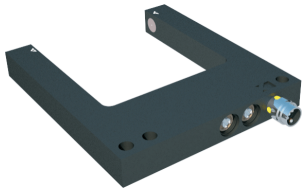
M8/3...

Fork-Light-Barriers

50 mm

60 mm

70 mm



FLx 50...

10...35 VDC, 3-wire
 < 30 mA
 200 mA
 built-in
 2.5 V @ 200 mA
 Red-light: 2.5 kHz | laser: 10 kHz
 built-in - self resetting
 Red-light: Ø0.3mm | laser: Ø0.03 mm
 270° Potentiometer
 < 0.2 mm
 0.01 mm
 -10...+60 °C
 50.000 lux
 500 V
 Aluminum
 IP 67
 Red-Light / Laser Glass Window

FLE50-PS/M8
 FLE50-NS/M8
 FLA50-PS/M8
 FLA50-NS/M8
 FLD50-PS/M8
 FLD50-NS/M8

M8/3...

FLx 60...

10...35 VDC, 3-wire
 < 30 mA
 200 mA
 built-in
 2.5 V @ 200 mA
 Red-light: 2.5 kHz | laser: 10 kHz
 built-in - self resetting
 Ø 0.03 mm
 270° Potentiometer
 < 0.2 mm
 0.01 mm
 -10...+60 °C
 50.000 lux
 500 V
 Aluminum
 IP 67
 Red-Light / Laser Glass Window

FLE60-PS/M8
 FLE60-NS/M8
 On Request
 On Request
 FLD60-PS/M8
 FLD60-NS/M8

M8/3...

FLx 70...

10...35 VDC, 3-wire
 < 30 mA
 200 mA
 built-in
 2.5 V @ 200 mA
 Red-light: 2.5 kHz | laser: 10 kHz
 built-in - self resetting
 Red-light: Ø0.3mm | laser: Ø0.03 mm
 270° Potentiometer
 < 0.2 mm
 0.01 mm
 -10...+60 °C
 50.000 lux
 500 V
 Aluminum
 IP 67
 Red-Light / Laser Glass Window

FLE70-PS/M8
 FLE70-NS/M8
 On Request
 On Request
 FLD70-PS/M8
 FLD70-NS/M8

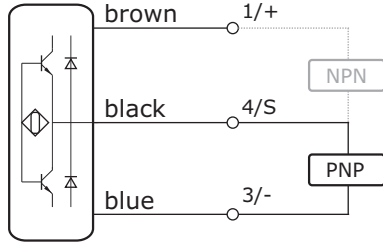
M8/3...

Fork-Light-Barriers

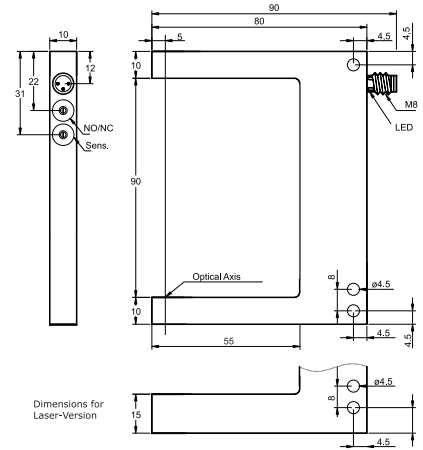
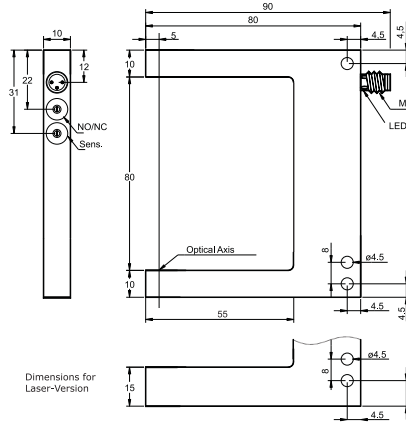
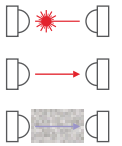
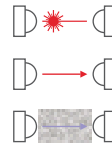
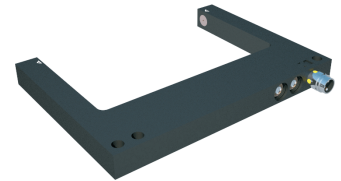
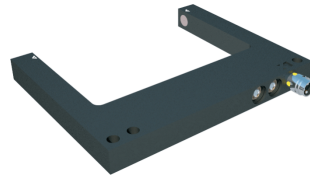
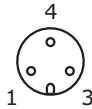
80 mm

90 mm

Output Schematics



Connector M8



SPECIFICATIONS

Operating Voltage
Current Consumption
Current Load Capability
Reverse Polarity Protection
Voltage Drop
Switching Frequency
Short Circuit Protection
Resolution
Adjustment
Switching Hysteresis
Repeatability
Operating Temperature
Ambient Light Immunity
Isolation Voltage
Housing Material
Protection Class
Optical Elements

FLx 80...

10...35 VDC, 3-wire
< 30 mA
200 mA
built-in
2.5 V @ 200 mA
Red-light: 2.5 kHz | laser: 10 kHz
built-in - self resetting
Red-light: Ø0.3mm | laser: Ø0.03 mm
270° Potentiometer
< 0.2 mm
0.01 mm
-10...+60 °C
50.000 lux
500 V
Aluminum
IP 67
Red-Light / Laser Glass Window

FLx 90...

10...35 VDC, 3-wire
< 30 mA
200 mA
built-in
2.5 V @ 200 mA
Red-light: 2.5 kHz | laser: 10 kHz
built-in - self resetting
Red-light: Ø0.3mm | laser: Ø0.3 mm
270° Potentiometer
< 0.2 mm
0.01 mm
-10...+60 °C
70.000 lux
500 V
Aluminum
IP 67
Red-Light / Laser Glass Window

Article Code

PNP, NO / NC - Red-Light
NPN, NC / NC - Red-Light
PNP, NO / NC - Laser
NPN, NO / NC - Laser
PNP, NO / NC - Dirt Immune
NPN, NO / NC - Dirt Immune

FLE80-PS/M8
FLE80-NS/M8
FLA80-PS/M8
FLA80-NS/M8
FLD80-PS/M8
FLD80-NS/M8

FLE90-PS/M8
FLE90-NS/M8
On Request
On Request
FLD90-PS/M8
FLD90-NS/M8

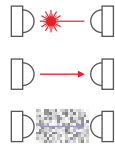
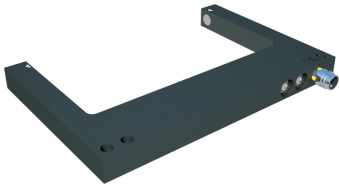
Recommended Connecting Cable

M8/3...

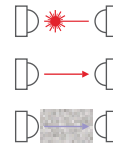
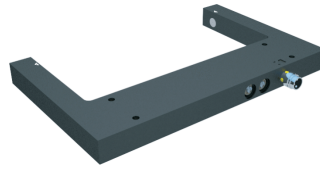
M8/3...

Fork-Light-Barriers

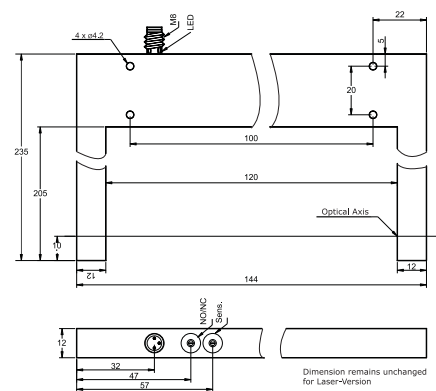
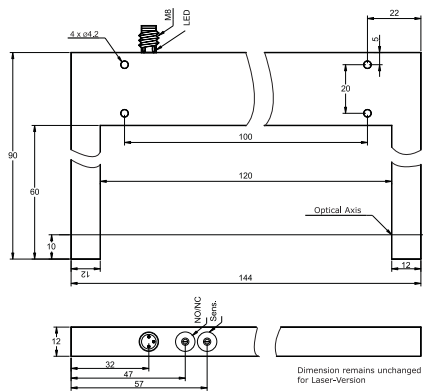
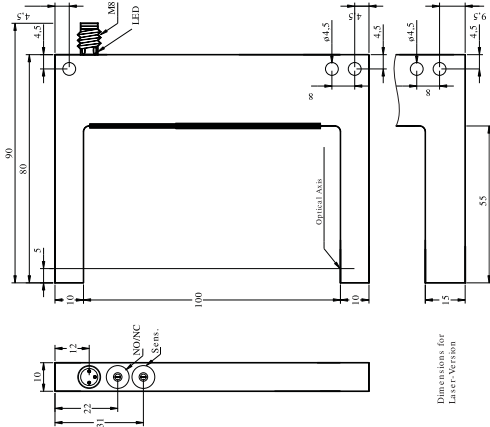
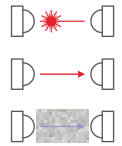
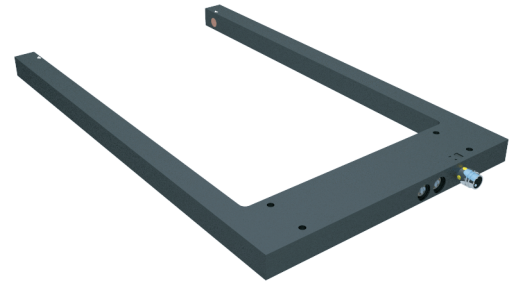
100 mm



120 mm



120/205 mm



FLx 100...

- 10...35 VDC, 3-wire
- < 30 mA
- 200 mA
- built-in
- 2.5 V @ 200 mA
- Red-light: 2.5 kHz | laser: 10 kHz
- built-in - self resetting
- Red-light: Ø0.3mm | laser: Ø0.3 mm
- 270° Potentiometer
- < 0.2 mm
- 0.01 mm
- 10...+60 °C
- 70.000 lux
- 500 V
- Aluminum
- IP 67
- Red-Light / Laser Glass Window

FLx 120...

- 10...35 VDC, 3-wire
- < 30 mA
- 200 mA
- built-in
- 2.5 V @ 200 mA
- Red-light: 2.5 kHz | laser: 10 kHz
- built-in - self resetting
- Ø 0.03 mm
- 270° Potentiometer
- < 0.2 mm
- 0.01 mm
- 10...+60 °C
- 50.000 lux
- 500 V
- Aluminum
- IP 67
- Red-Light / Laser Glass Window

FLx 120/205...

- 10...35 VDC, 3-wire
- < 30 mA
- 200 mA
- built-in
- 2.5 V @ 200 mA
- Red-light: 2.5 kHz | laser: 10 kHz
- built-in - self resetting
- Red-light: Ø 0.3mm | laser: Ø0.03 mm
- 270° Potentiometer
- < 0.2 mm
- 0.01 mm
- 10...+60 °C
- 50.000 lux
- 500 V
- Aluminum
- IP 67
- Red-Light / Laser Glass Window

- FLE100-PS/M8
- FLE100-NS/M8
- On Request
- On Request
- FLD100-PS/M8
- FLD100-NS/M8

- FLE120-PS/M8
- FLE120-NS/M8
- FLA120-PS/M8
- FLA120-NS/M8
- FLD120-PS/M8
- FLD120-NS/M8

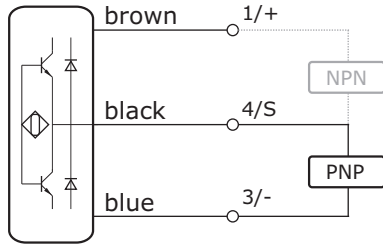
- FLE12-/205 PS/M8
- FLE12-/205 NS/M8
- FLA12-/205 PS/M8
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- FLD12-/205 PS/M8
- FLD12-/205 NS/M8

M8/3...

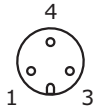
M8/3...

M8/3...

Output Schematics

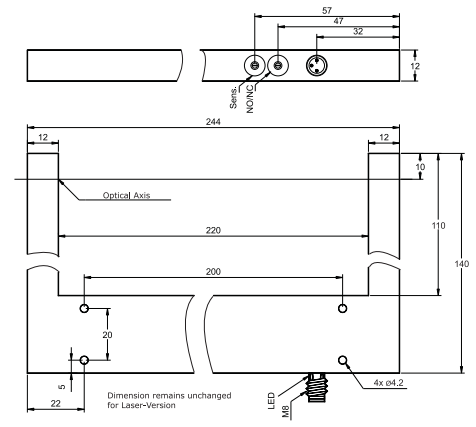
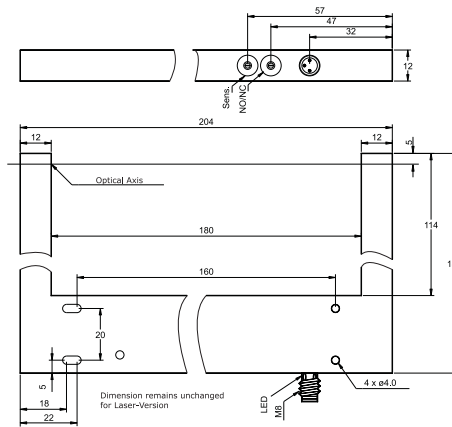
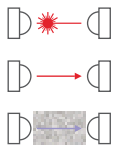
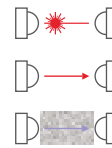
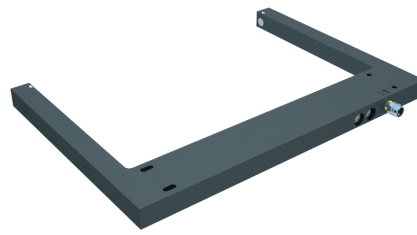


Connector M8



180 mm

220 mm



SPECIFICATIONS

- Operating Voltage
- Current Consumption
- Current Load Capability
- Reverse Polarity Protection
- Voltage Drop
- Switching Frequency
- Short Circuit Protection
- Resolution
- Adjustment
- Switching Hysteresis
- Repeatability
- Operating Temperature
- Ambient Light Immunity
- Isolation Voltage
- Housing Material
- Protection Class
- Optical Elements

FLx 180...

- 10...35 VDC, 3-wire
- < 30 mA
- 200 mA
- built-in
- 2.5 V @ 200 mA
- Red-light: 2.5 kHz | laser: 10 kHz
- built-in - self resetting
- Red-light: Ø0.3mm | laser: Ø0.03 mm
- 270° Potentiometer
- < 0.2 mm
- 0.01 mm
- 10...+60 °C
- 50.000 lux
- 500 V
- Aluminum
- IP 67
- Red-Light / Laser Glass Window

FLx 220...

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Article Code

- PNP, NO / NC - Red-Light
- NPN, NC / NC - Red-Light
- PNP, NO / NC - Laser
- NPN, NO / NC - Laser
- PNP, NO / NC - Dirt Immune
- NPN, NO / NC - Dirt Immune

- FLE180-PS/M8
- FLE180-NS/M8
- FLA180-PS/M8
- FLA180-NS/M8
- FLD180-PS/M8
- FLD180-NS/M8

- FLE220-PS/M8
- FLE220-NS/M8
- FLA220-PS/M8
- FLA220-NS/M8
- FLD220-PS/M8
- FLD220-NS/M8

Recommended Connecting Cable

M8/3...

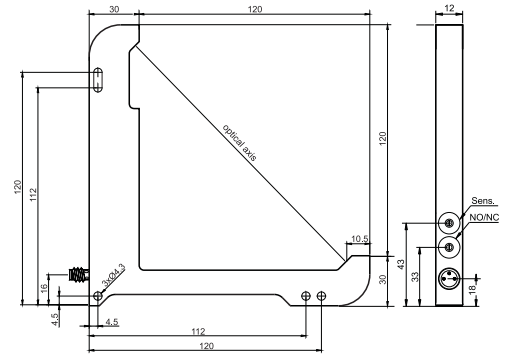
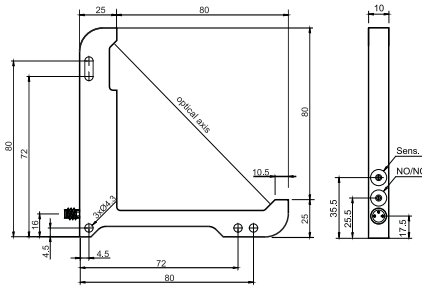
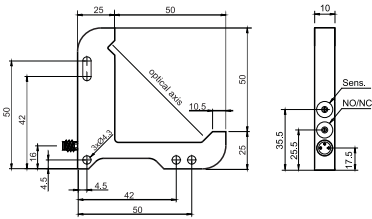
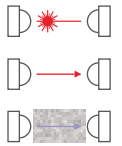
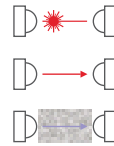
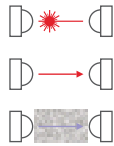
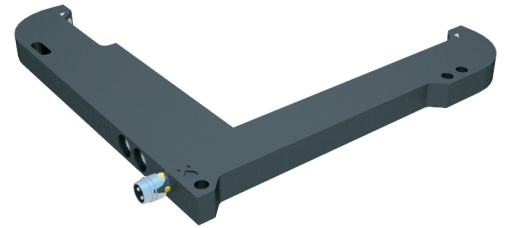
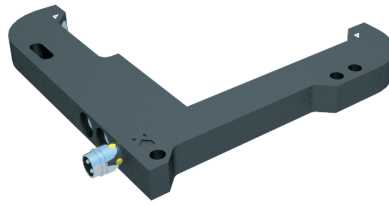
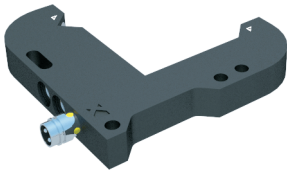
M8/3...

Fork-Light-Barriers

50 mm

80 mm

120 mm



LLx50...	LLx 80...	LLx 120...
10...35 VDC, 3-wire < 30 mA 200 mA built-in 2.5 V @ 200 mA Red-light, IR: 2.5 kHz laser: 10 kHz built-in - self resetting	10...35 VDC, 3-wire < 30 mA 200 mA built-in 2.5 V @ 200 mA Red-light, IR: 2.5 kHz laser: 10 kHz built-in - self resetting	10...35 VDC, 3-wire < 30 mA 200 mA built-in 2.5 V @ 200 mA Red-light, IR: 2.5 kHz laser: 10 kHz built-in - self resetting
270° Potentiometer < 0.2 mm 0.01 mm -10...+60 °C 50.000 lux 500 V Aluminum IP 67 Infrared / Red-Light / Laser Glass Window	270° Potentiometer < 0.2 mm 0.01 mm -10...+60 °C 50.000 lux 500 V Aluminum IP 67 Infrared / Red-Light / Laser Glass Window	270° Potentiometer < 0.2 mm 0.01 mm -10...+60 °C 50.000 lux 500 V Aluminum IP 67 Infrared / Red-Light / Laser Glass Window

LLE50-PS/M8 LLE50-NS/M8 LLA50-PS/M8 LLA50-NS/M8 LLD50-PS/M8 LLD50-NS/M8	LLE80-PS/M8 LLE80-NS/M8 LLA80-PS/M8 LLA80-NS/M8 LLD80-PS/M8 LLD80-NS/M8	LLE120-PS/M8 LLE120-NS/M8 LLA120-PS/M8 LLA120-NS/M8 LLD120-PS/M8 LLD120-NS/M8
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M8/3... M8/3... M8/3...