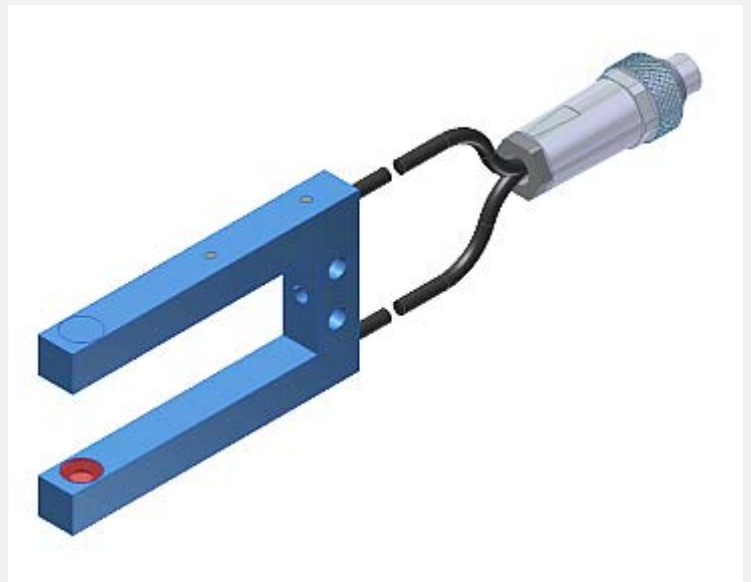


A-LAS Series

▶ A-LAS-N-F08-FOC-...-C

- High-precision triggering and detection of filaments
- Two analog signals (0...+10V and 4...20mA) in connection with the electronic control unit type SPECTRO-1-CONLAS from SPECTRO-1 Series (contrast measurement)
(single operation of the light barrier is not possible)
- Focused, visible red laser beam (<0,4 mW, 670 nm), **laser class 1**
- Various fork sizes available
- Working range = fork width
- Insensitive to outside light due to interference filter
- Compact design, sturdy metal housing, IP67



Design

Product name:

A-LAS-N-F08-FOC-(aperture)*-(fork size)**-C-2m

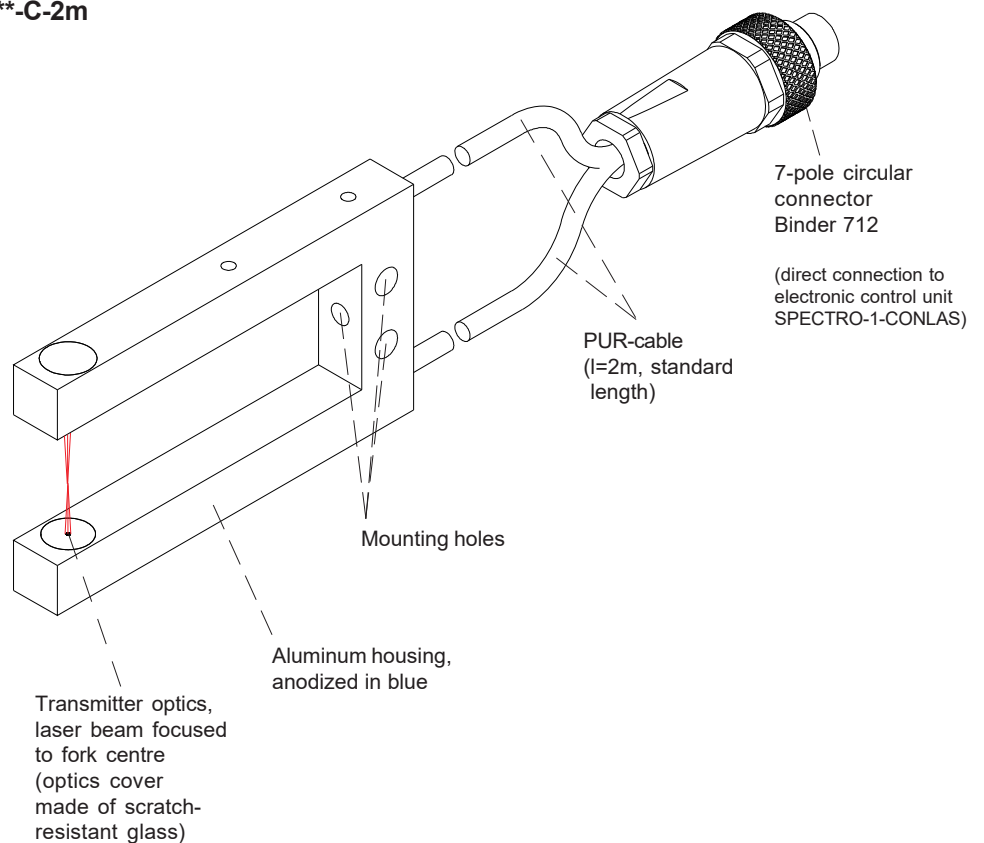
* Available apertures:

Round apertures d... (Ø in mm):

- d0.5
- d1.0

**Available fork sizes:

Fork size	Fork width (mm)	Fork depth (mm)
10/50	10	50
20/50	20	50
20/60	20	60
20/80	20	80
30/50	30	50
30/60	30	60
30/80	30	80
40/50	40	50
40/60	40	60
40/80	40	80
50/50	50	50
50/60	50	60
50/80	50	80
100/50	100	50
100/80	100	80
180/70	180	70



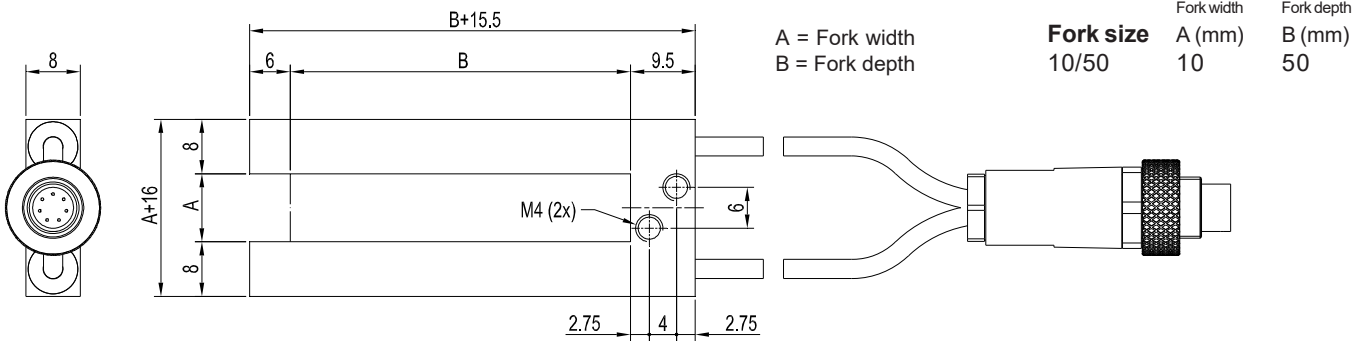


Technical Data

Type	A-LAS-N-F08-FOC-....C
Shape	Laser light barrier in fork shape with 8 mm thick housing. Various round apertures are available.
Laser	Solid-state laser, focused, 670 nm, DC-operation, 0.4 mW max. opt. power, laser class 1 acc. to DIN EN 60825-1. The use of these laser transmitter therefore requires no additional protective measures.
Available aperture sizes	Cf. page 1
Working range	Working range = fork width
Min. detectable object	Typ. 0,1% of aperture size
Reproducibility	With threshold correction (via electronic control unit SPECTRO-1-CONLAS): typ. 0.1% of aperture size
Threshold correction	Can be activated via software-controlled electronics SPECTRO-1-CONLAS
Optical filters	Red light filter RG 630 and interference filter
Voltage supply	Transmitter: +5VDC, receiver: +5VDC
Ambient light (outside light)	With 5000 Lux ambient light around optical receiver unit typ. < 300mV influence on analog signal (0...+10V)
Analog output (2x)	0 ... +10V and 4 ... 20mA (in connection with electronic control unit SPECTRO-1-CONLAS)
Band width analog signal	100 kHz (-3 dB)
Sensitivity setting (switching threshold)	via software-controlled electronics SPECTRO-1-CONLAS
Gain (analog signal)	via software-controlled electronics SPECTRO-1-CONLAS
Current consumption	Transmitter: typ. 50 mA, receiver typ. 20 mA
Operating temperature range	0°C ... +50°C
Storage temperature range	-20°C ... +85°C
Type of connector	7-pole circular connector Binder Series 712
Cable length	2m (standard length)
Housing material	Aluminum, anodized in blue
Housing dimensions	Cf. page 3
Enclosure rating	IP67
EMC test acc. to	DIN EN 60947-5-2

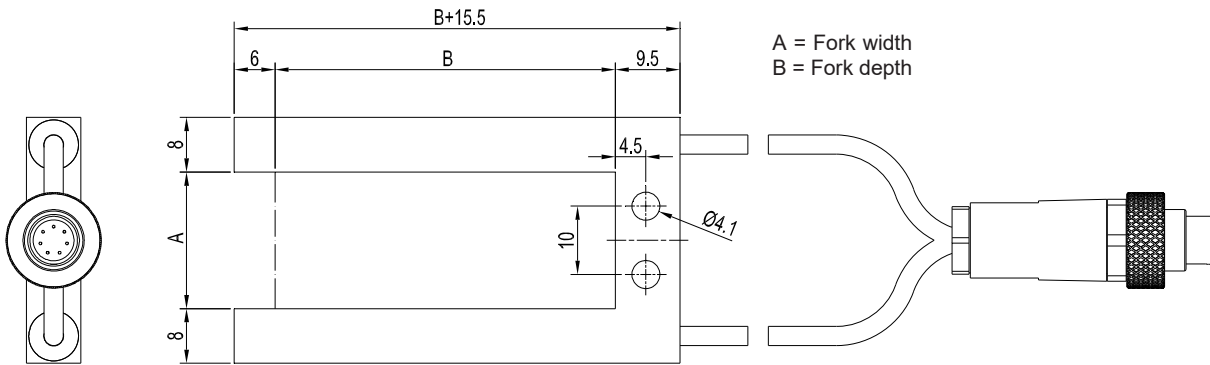
Dimensions

A-LAS-N-F08-FOC-...-C with fork size 10/50:



A-LAS-N-F08-FOC-...-C from fork size 20/50:

All dimensions in mm



Fork size	Fork width A (mm)	Fork depth B (mm)	Fork size	Fork width A (mm)	Fork depth B (mm)	Fork size	Fork width A (mm)	Fork depth B (mm)
20/50	20	50	40/50	40	50	100/50	100	50
20/60	20	60	40/60	40	60	100/80	100	80
20/80	20	80	40/80	40	80	180/70	180	70
30/50	30	50	50/50	50	50			
30/60	30	60	50/60	50	60			
30/80	30	80	50/80	50	80			

Laser Information

For the use of sensor front ends of the A-LAS-N series in conjunction with the control electronics SPECTRO-1-CONLAS please note:

The laser transmitters of A-LAS-N series comply with laser class 1 according to EN 60825-1. Under reasonably foreseeable conditions a class 1 laser is safe. The reasonably foreseeable conditions are kept during specified normal operation. The use of these laser transmitters therefore requires no additional protective measures.

The laser transmitters of A-LAS-N series series are supplied with an information label „CLASS 1 Laser Product“.

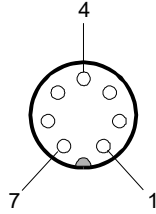
CLASS 1 Laser Product
IEC 60825-1: 2008-05
THIS LASER PRODUCT COMPLIES
WITH 21 CFR 1040 AS APPLICABLE



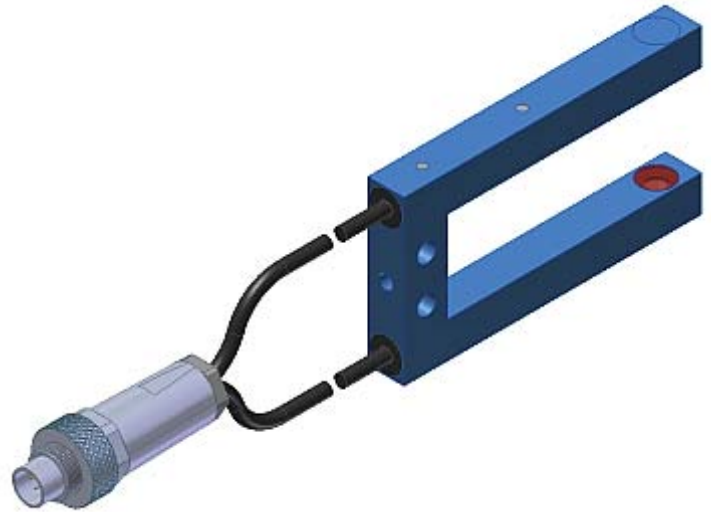
Connector Assignment

Connection to electronic control unit SPECTRO-1-CONLAS via 7-pole circular connector Binder Series 712:

Pin-No.:	Assignment:
1	0V (GND)
2	+5V
3	I-CONTROL (0V...+5V)
4	+5V
5	ANALOG
6	not connected
7	0V (GND)



Connection directly to electronic control unit SPECTRO-1-CONLAS

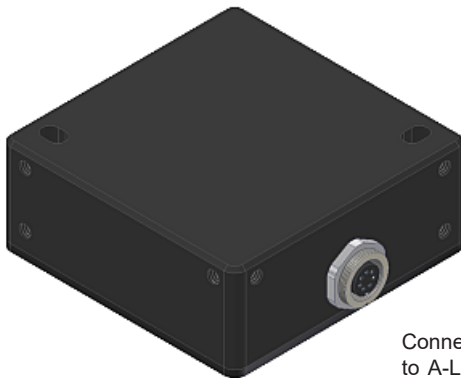
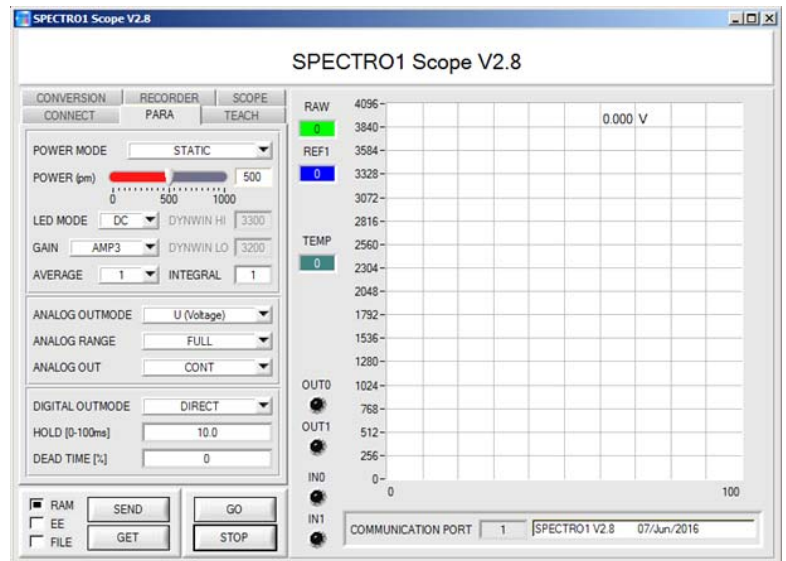


Electronic Control Unit

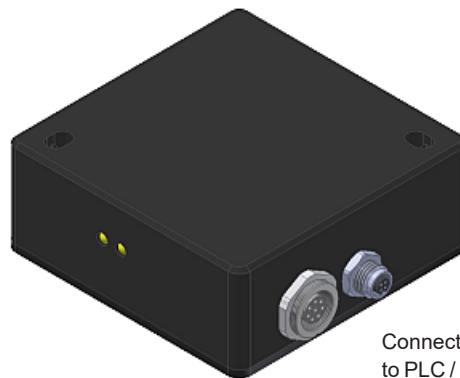
Electronic control unit SPECTRO-1-CONLAS with Windows® software SPECTRO1-Scope

(The current software version is available for download on our website.)

- High switching frequency (max. 200kHz in DC- or OFF-operation)
- Gray scale detection (12-bit resolution)
- Insensitive to outside light (in AC-operation)
- Brightness correction can be activated (STAT/DYN)
- Averaging can be activated (from 1 up to over 32000 values)
- TEACH via PC or PLC
- 2 digital inputs (0V/+Ub)
- 2 digital outputs (60 kHz switching frequency)
- 2 analog outputs (0V ... +10V and 4 ... 20mA)
- Switching state indication by means of 2 yellow LEDs
- RS232 interface (USB or ETHERNET adapter available)
- Parameterizable via Windows® software, scope function
- Temperature compensated (from 0°C to 60°C)
- Automatic threshold correction can be activated
- Switching threshold can be parameterized relative or absolute
- Various switching threshold functions (window, upper/lower threshold)
- For connection of laser analog light barriers of A-LAS-N Series



Connection side to A-LAS-N-...



Connection side to PLC / to PC