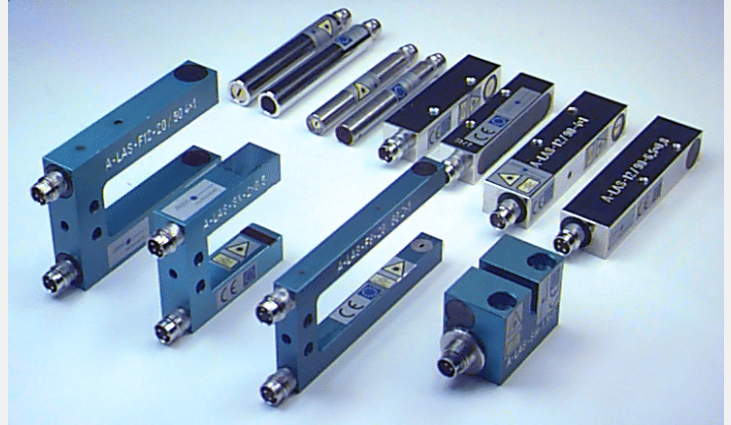


A-LAS Series

▶ Laser Analog Light Barriers

Parallel laser light with homogeneous light distribution in round or rectangular cross-section is used for measuring, positioning, and detection of objects starting from a size of 0.01 mm.

- Visible laser beam (laser class 2)
- Apertures available from 0.15 mm to 30 mm
- High reproducibility starting from 0.5 µm
- High analog band width (300 kHz)
- Optics and optics cover made of glass
- Various electronic control units available (partly parameterisable under Windows® via RS232)



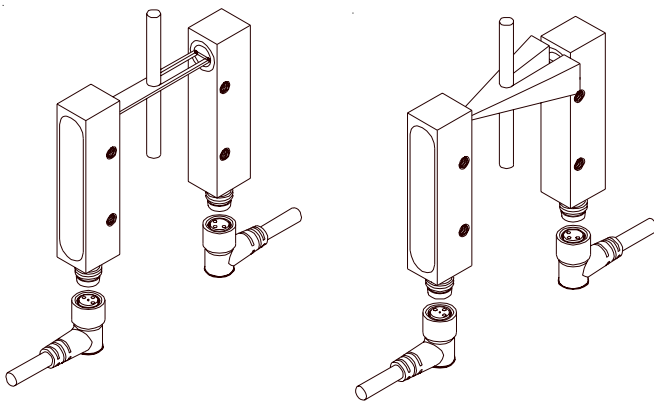
Characteristics

Collimated laser beam

The laser light beam that is emitted by a high-precision optical unit (aspherical surface made of glass) allows the detection of smallest objects (e.g. threads) even in case of a large transmitter/receiver distance (distances up to 100m, depending on the aperture).

Advantages:

- telecentric design
- Exact shadow projection onto the receiver
- The distance of measuring object from the transmitter or receiver has no influence on the measuring signal.

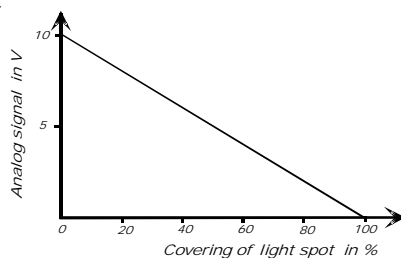


Light barrier of A-LAS Series

Conventional light barrier

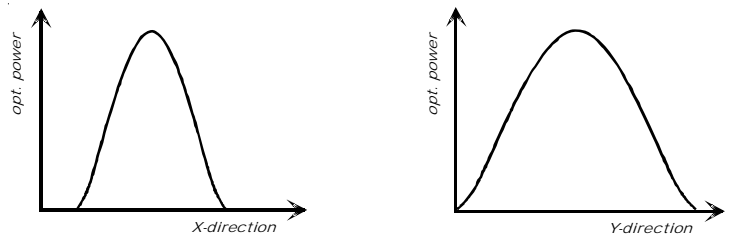
Measuring principle

Partial covering of the laser beam leads to a voltage at the analog output that is proportional to the degree of covering.

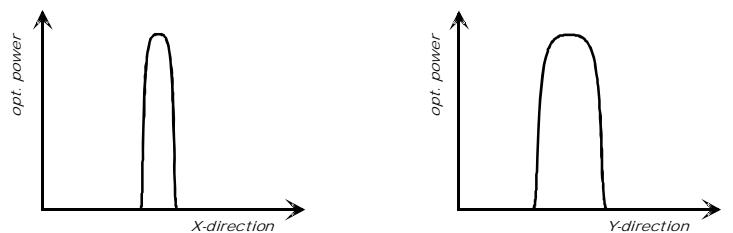


Homogeneous light distribution

The use of high-precision apertures in the transmitters ensures optimum adaptation to the respective application. Apart from a large variety of standard apertures special apertures can also be realised. The aperture guarantees a homogeneous light distribution on the beam and a sharp beam limitation.



Conventional design: Beam profile in the two main axes



A-LAS Series: Beam profile in the two main axes

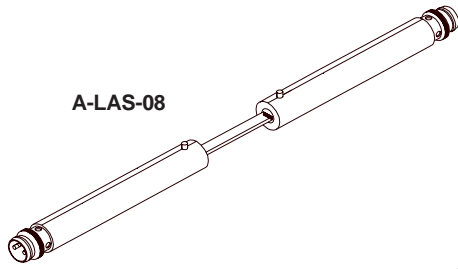
Compact and sturdy metal housing

With their sturdy metal housing and their high type of protection the laser light barriers of series A-LAS are designed for demanding applications in machine construction. With respect to the housing size the A-LAS-90 sensor type with integrated laser driver and pre-amplifier electronics, for example, can be compared with conventional sensor types, and it can be installed and mounted without any problems.

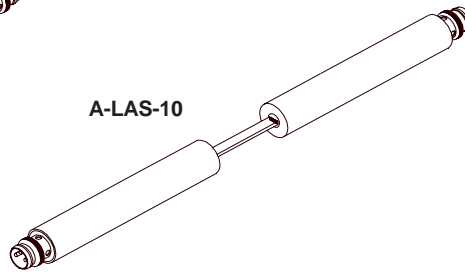


Product Line

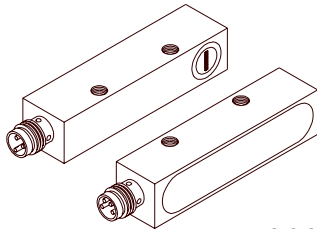
Light Barriers



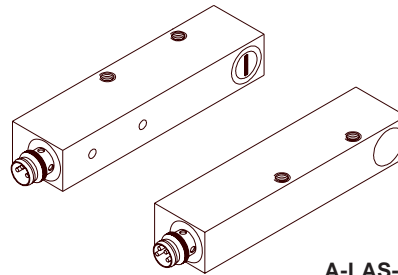
A-LAS-08



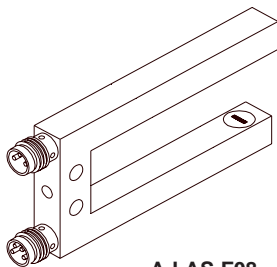
A-LAS-10



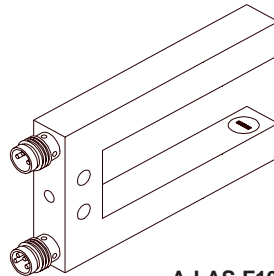
A-LAS-90



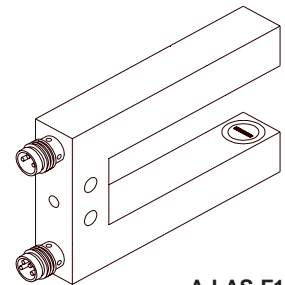
A-LAS-12/90



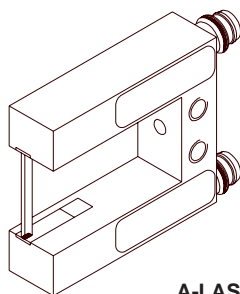
A-LAS-F08



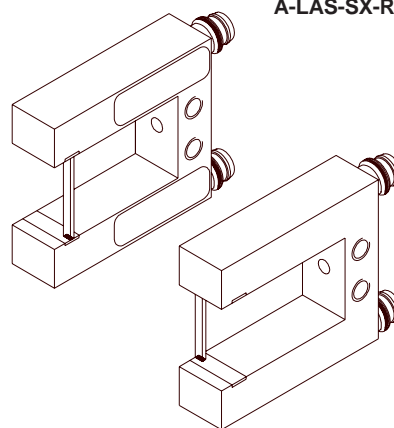
A-LAS-F10



A-LAS-F12



A-LAS-SY



A-LAS-SX-R

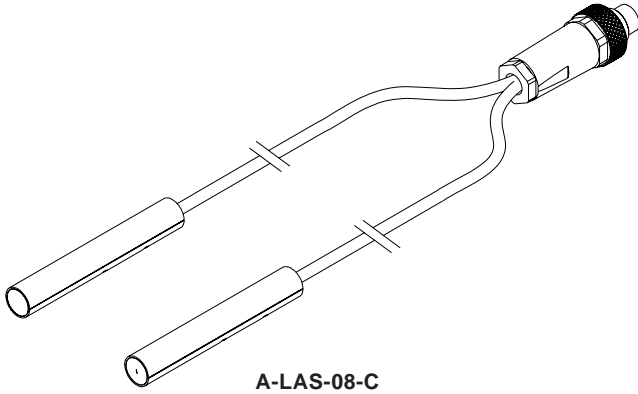
A-LAS-SX-L



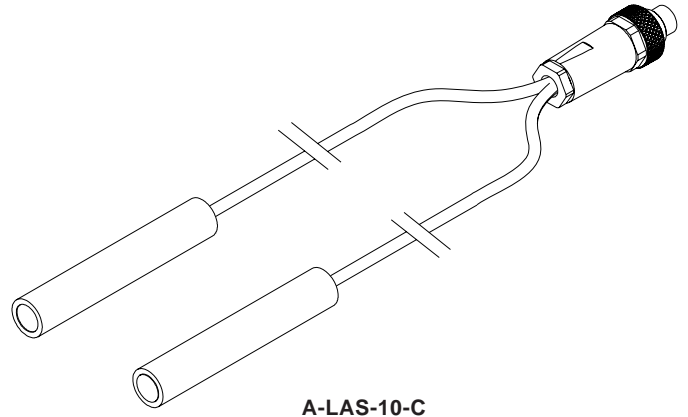
Product Line

Light Barriers

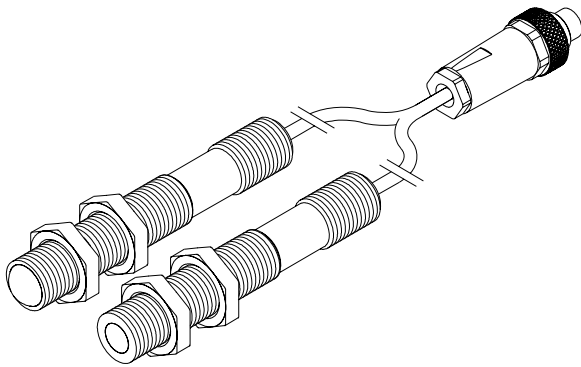
(suitable for connection to electronic control units AGL4, AGL4-HS, AGL-DIF, SI-CON11, SI-CON34, A-LAS-CON1, A-LAS-CON1-JET)



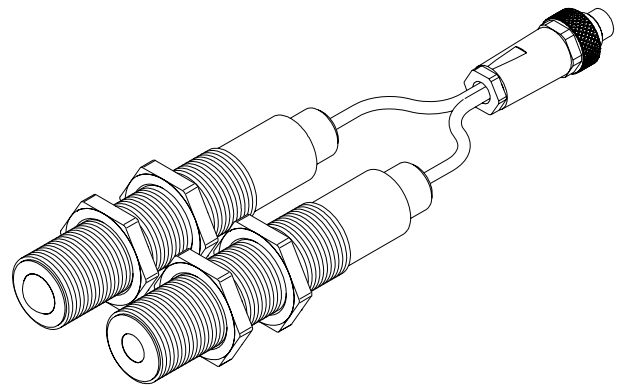
A-LAS-08-C



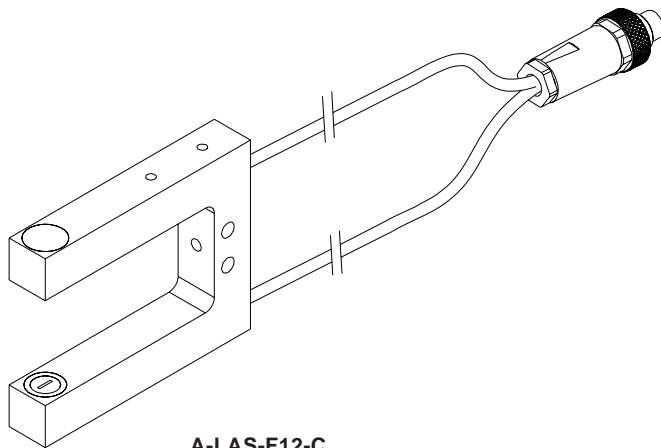
A-LAS-10-C



A-LAS-M12-C



A-LAS-M18-C

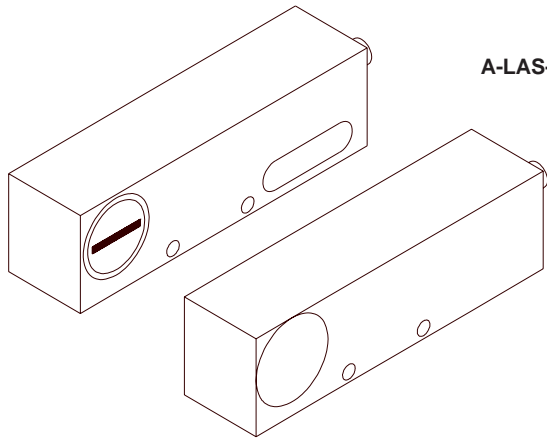


A-LAS-F12-C

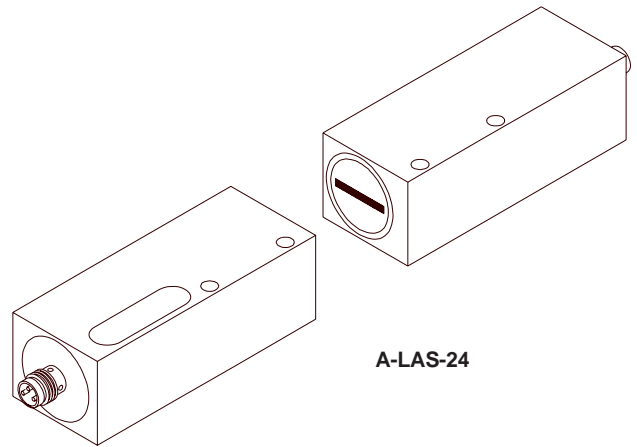


Product Line

Light Barriers

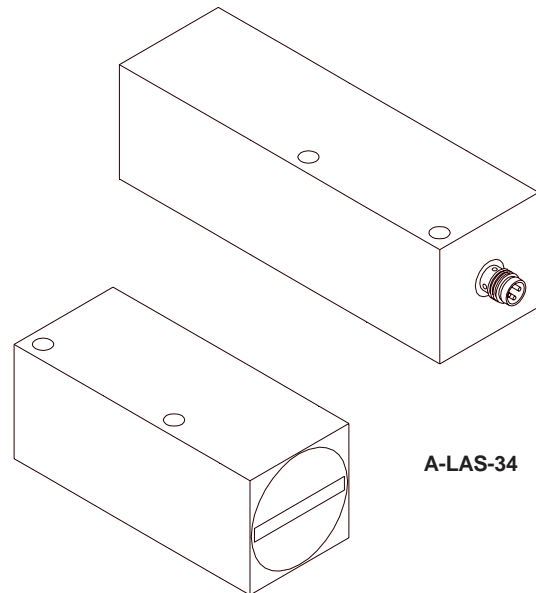
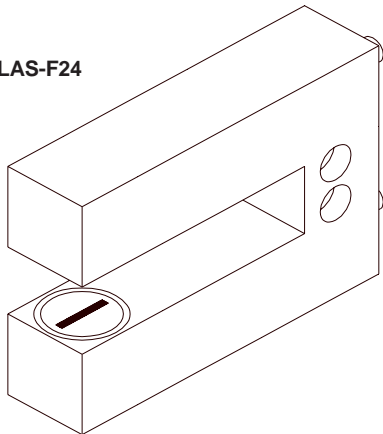


A-LAS-24/90



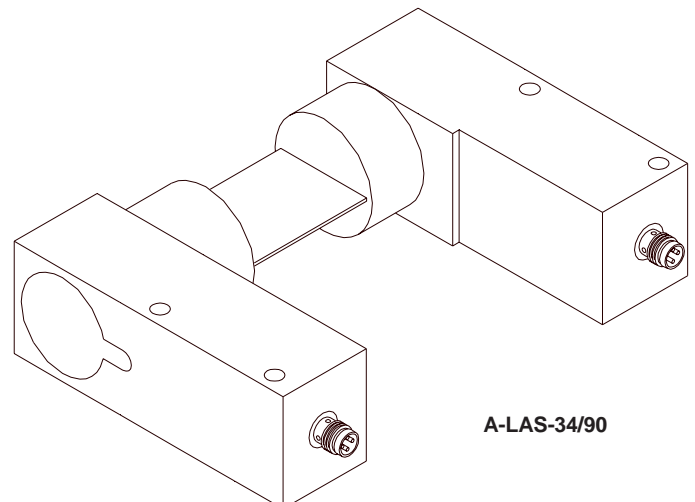
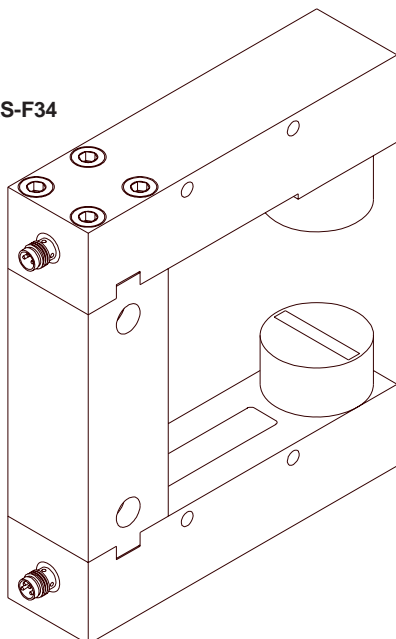
A-LAS-24

A-LAS-F24



A-LAS-34

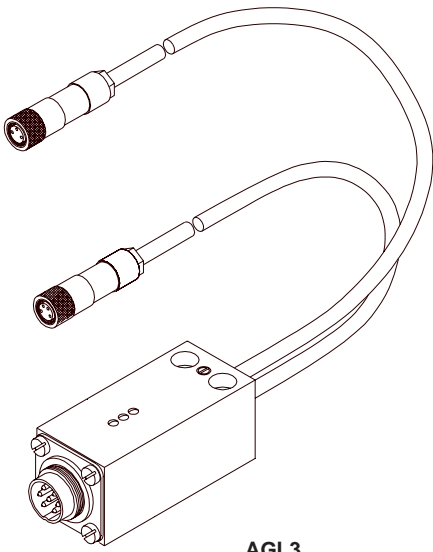
A-LAS-F34



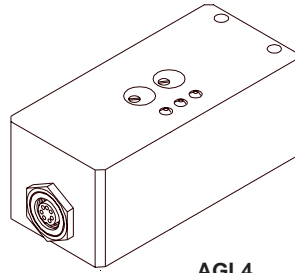
A-LAS-34/90

Product Line

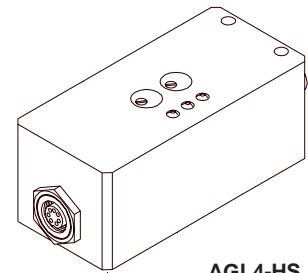
Electronic control units



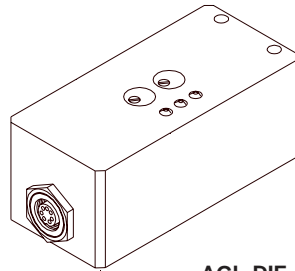
AGL3



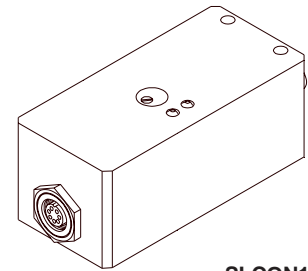
AGL4



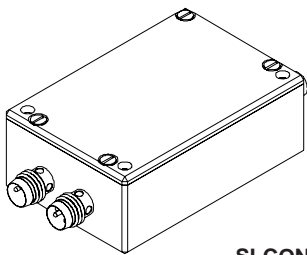
AGL4-HS



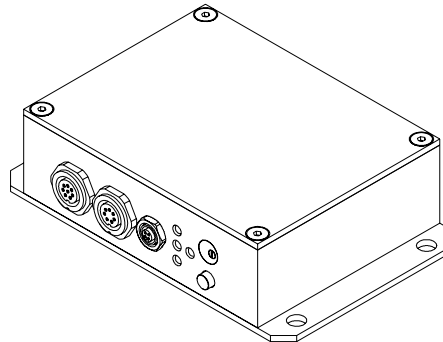
AGL-DIF



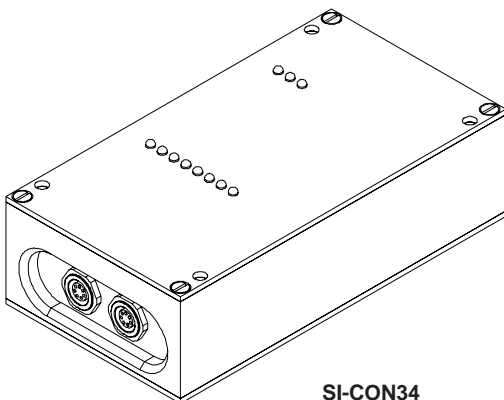
SI-CON11



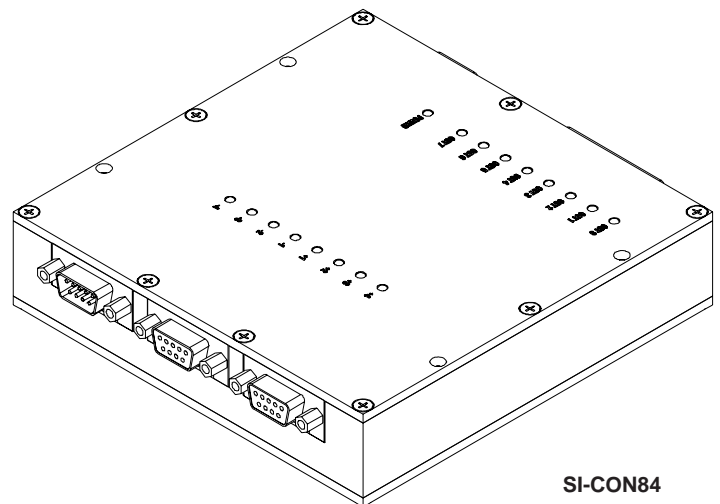
SI-CON4



A-LAS-CON1
A-LAS-CON1-JET



SI-CON34



SI-CON84