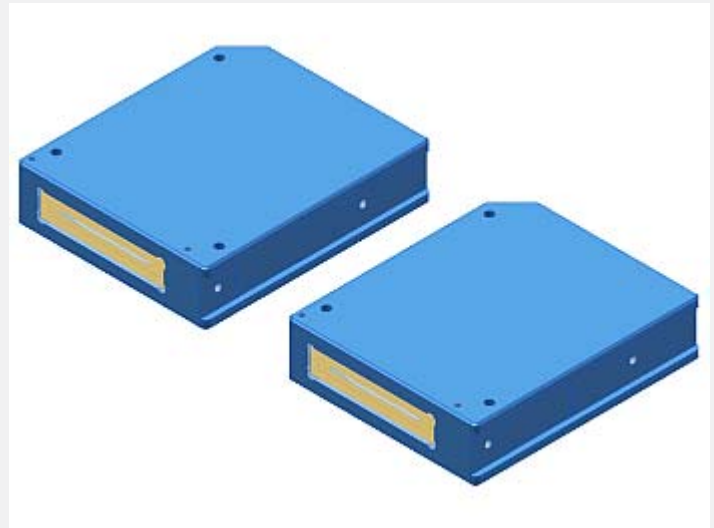


A-LAS Series

▶ A-LAS-50-...

- Analog signal (0...+10V) in connection with an electronic control unit type AGL4, AGL4-HS, AGL-DIF, SI-CON11 (without PC connection) or SI-CON8, SI-CON34, A-LAS-CON1 (with PC connection and software) *(stand-alone operation of the light barrier is not possible)*
- Parallel aligned, visible red laser beam (<0.39 mW, 670 nm), **laser class 1**
- Measuring range typ. 50 mm
- Working range max. 2 m
- Insensitive to outside light due to interference filter
- Sturdy aluminum housing, suitable for industry, IP54



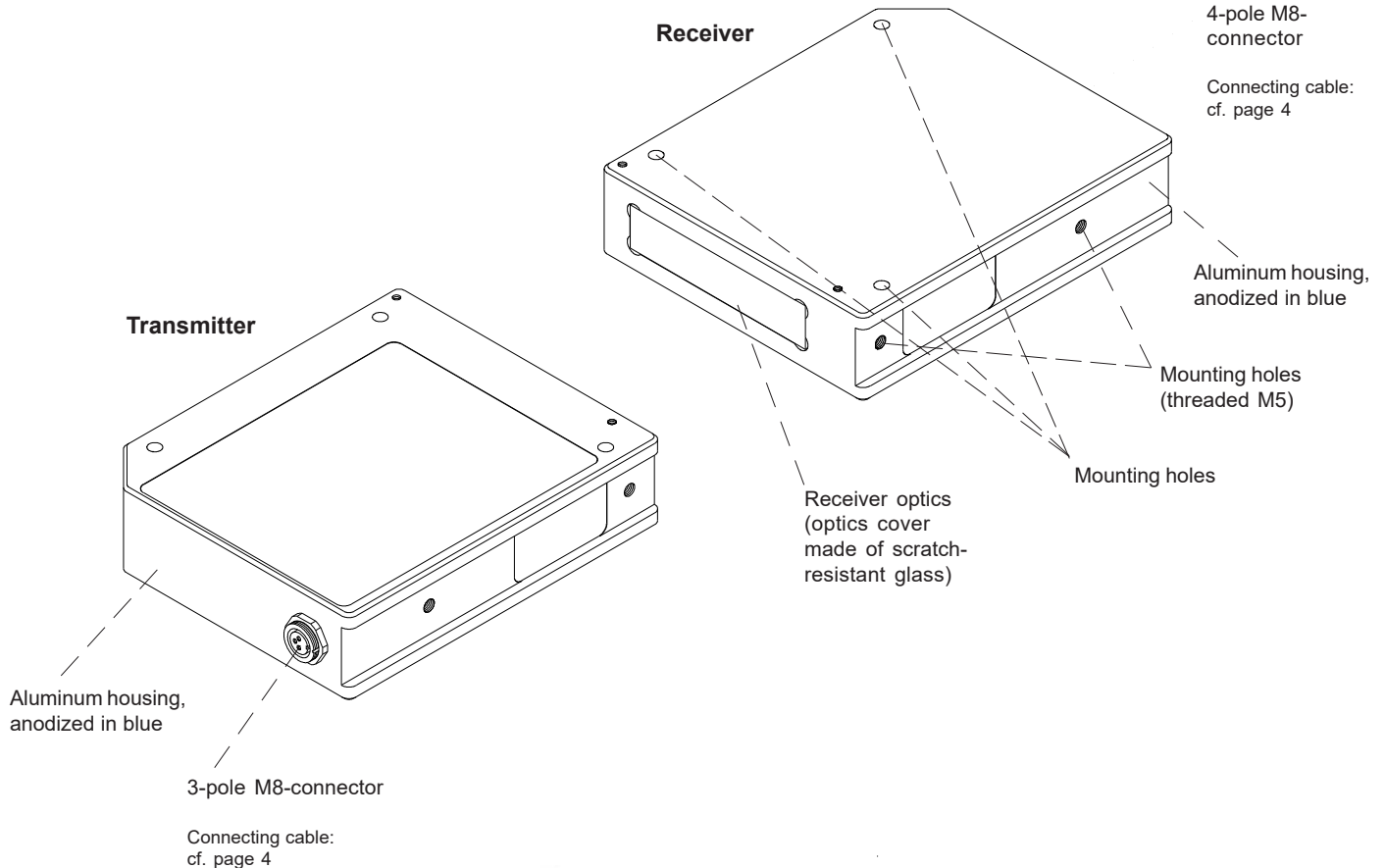
Design

Product name:

A-LAS-50-T (Transmitter)
A-LAS-50-R (Receiver)


Accessories: (cf. page 6)

TRA-L-LAS-TB-L...
 (Mounting plate)





Technical Data

Type	A-LAS-50
Shape	Split laser light barrier
Laser	Solid-state laser, 670 nm, DC-operation, 0.39 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.
Aperture size	Transmitter: 50 mm x 2 mm Receiver: 50 mm x 2 mm
Linearity deviation	typ. 2%
Measuring range	Up to 50 mm
Working range	Max. 2 m
Min. detectable object	Typ. 0.5% of aperture size
Reproducibility	Typ. 0.5% of aperture size, with threshold correction (via electronic control unit): typ. 0.1% of aperture size
Threshold correction	Can be activated via a software-controlled electronics of type A-LAS-CON1, SI-CON8, or SI-CON34
Optical filter	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	0 ... +10V (in connection with any electronic control unit of A-LAS Series)
Band width analog signal	100 kHz (-3 dB)
Current control input (I-CONTROL)	0V ... 5V, laser power decreases linear to increase of voltage: 0V: full power, 5V: laser off
Sensitivity setting (switching threshold)	Via software (with control electronics A-LAS-CON1, SI-CON34, or SI-CON8) or via potentiometer (with control electronics AGL4 or AGL4-HS)
Gain (analog signal)	Via software (with control electronics A-LAS-CON1, SI-CON34, or SI-CON8) or via potentiometer (with control electronics AGL4, AGL4-HS, AGL-DIF, or SI-CON11)
Current consumption	Transmitter: typ. 30 mA, receiver typ. 10 mA
Operating temperature range	0°C ... +50°C
Storage temperature range	-20°C ... +85°C
Type of connector	Transmitter: 3-pole M8-connector, receiver: 4-pole M8-connector
Housing material	Aluminum, anodized in blue
Housing dimensions	Transmitter: LxWxH approx. 125 mm x 105 mm x 30 mm Receiver: LxWxH approx. 125 mm x 105 mm x 30 mm
Enclosure rating	IP67
EMC test acc. to	DIN EN 60947-5-2 



Laser Information

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

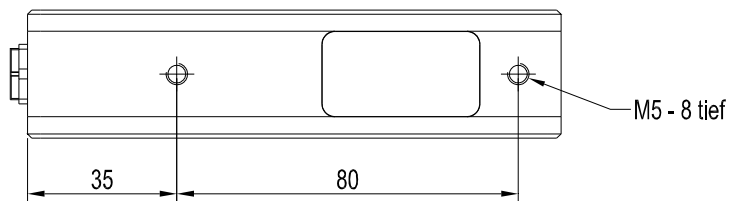
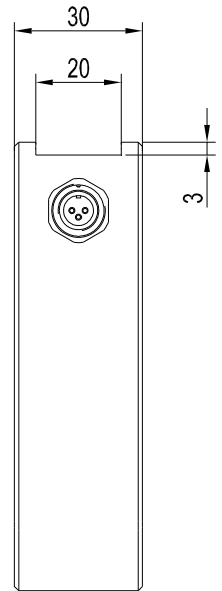
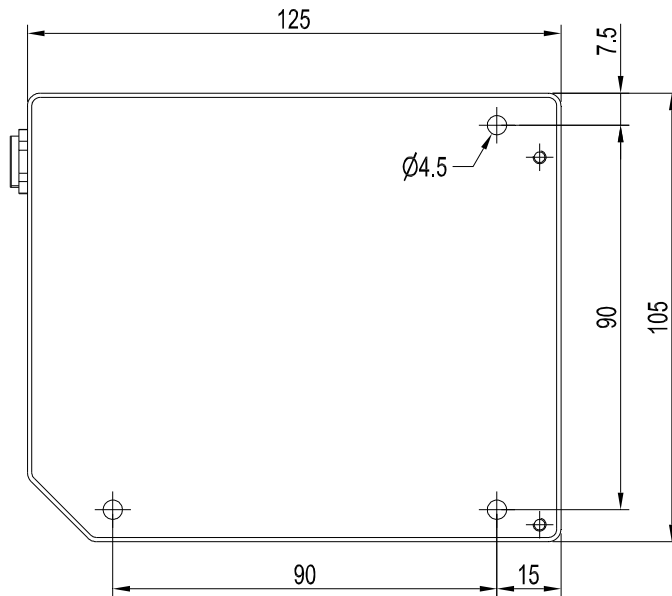
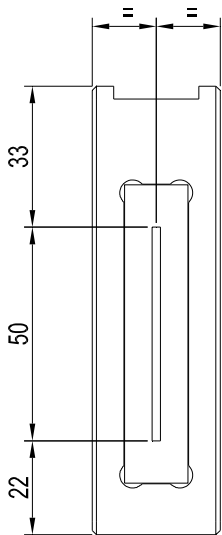


Class 1 Laser Product
IEC 60825-1: 2014
P<0.39 mW; λ=670 nm
COMPLIES WITH 21 CFR 1040.10 AND 1040.11
EXCEPT FOR CONFORMANCE WITH IEC 60825-1
ED. 3, AS DESCRIBED IN
LASER NOTICE NO. 56, DATED MAY 8, 2019.



Dimensions

A-LAS-50-...-T (Transmitter):

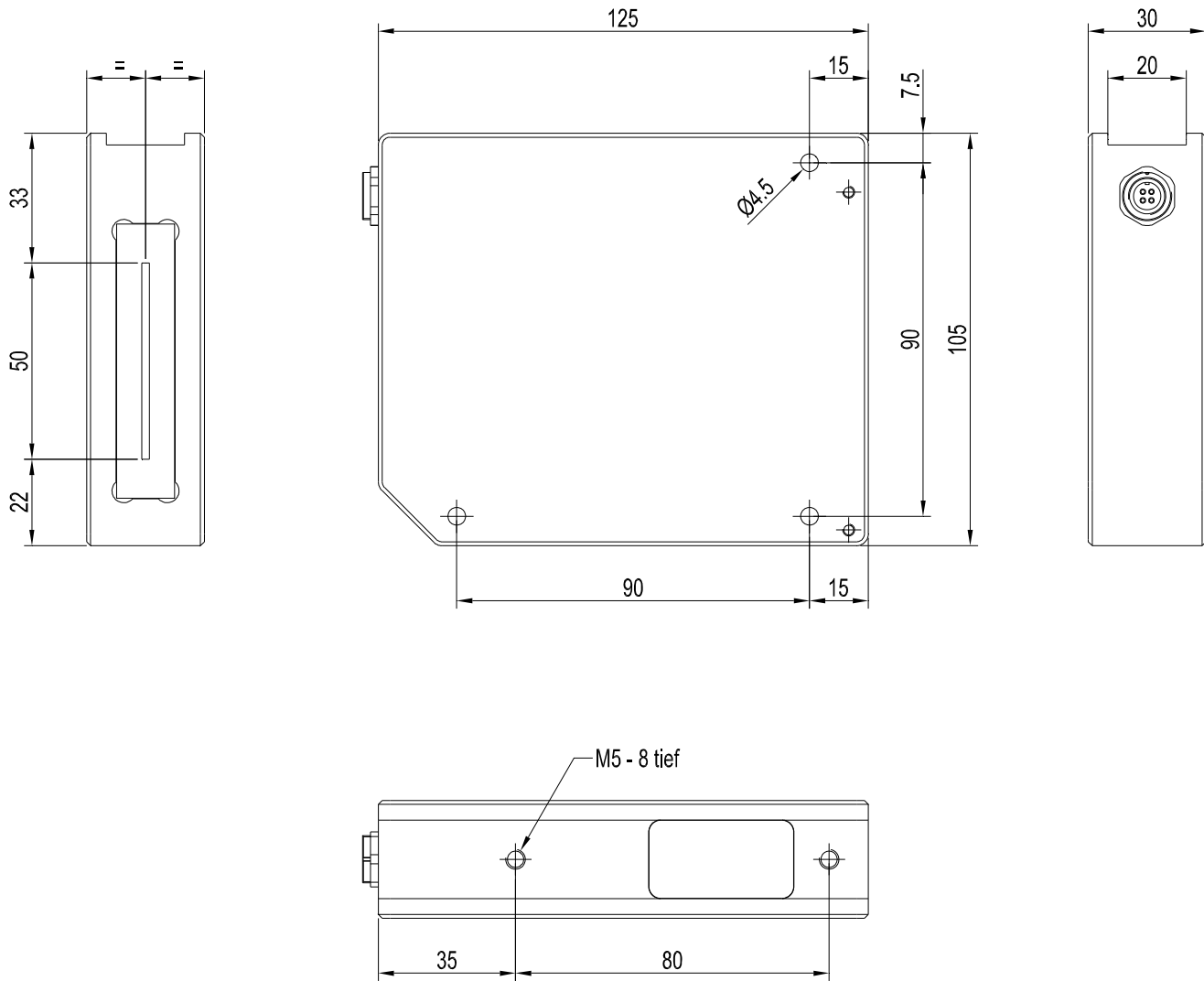


All dimensions in mm



Dimensions

A-LAS-50-...-R (Receiver):



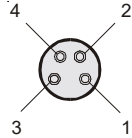
All dimensions in mm



Connector Assignment

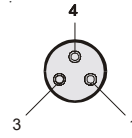
Receiver: 4-pole M8 female connector

Pin-No.:	Assignment:
1	+5 VDC
2	GND (0V)
3	SHIELD
4	ANALOG



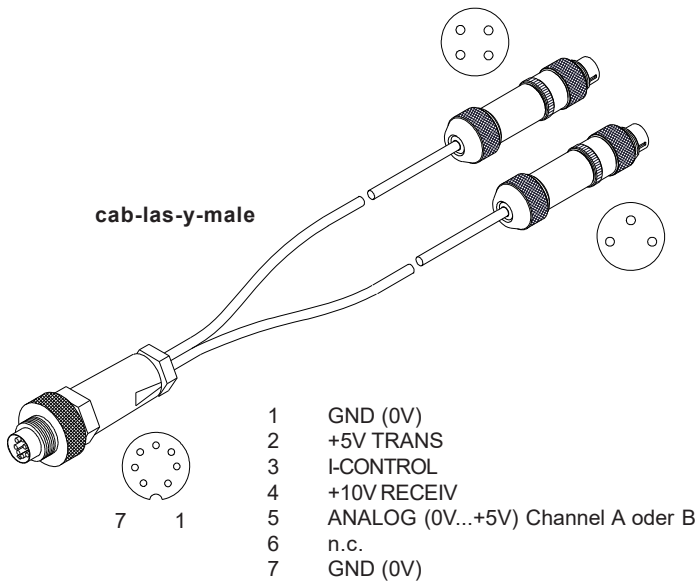
Transmitter: 3-pole M8 female connector

Pin-No.:	Assignment:
1	+5 VDC
3	GND (0V)
4	I-CONTROL (0V...+5V)



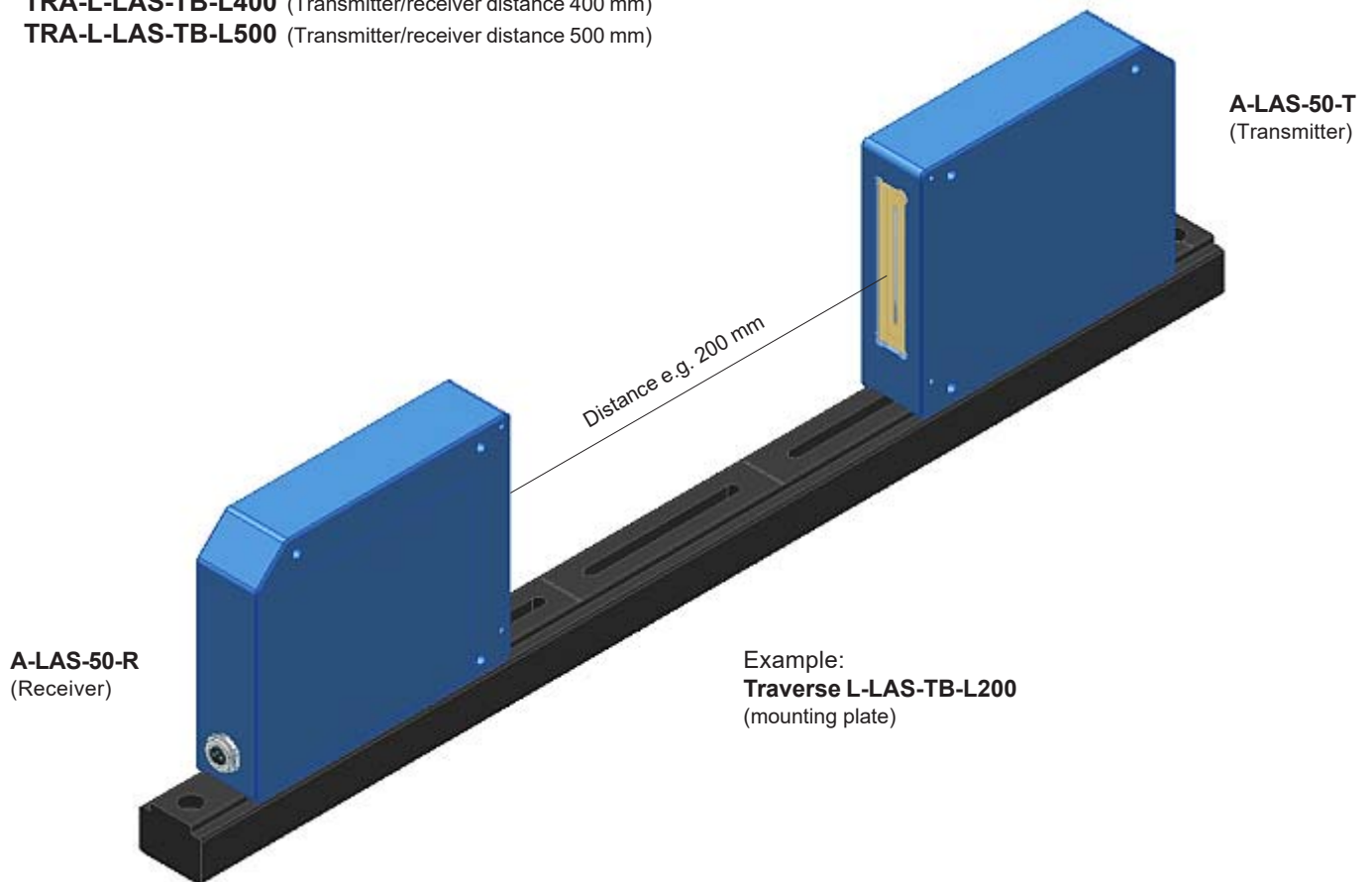
Connecting cable:

For use with AGL4, AGL4-HS, AGL-DIF, SI-CON11, SI-CON8, SI-CON34, A-LAS-CON1:
 cab-las-y-male-(length)
 (standard length 1m, also available lengths: 2m, 3m, 5m)



**Mounting Accessories****Mounting plate for A-LAS-50-T and A-LAS-50-R:**

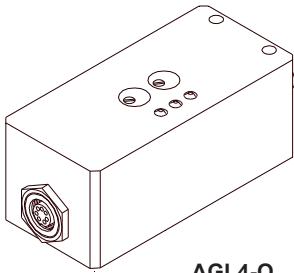
(please order separately)

TRA-L-LAS-TB-L100 (Transmitter/receiver distance 100 mm)**TRA-L-LAS-TB-L200** (Transmitter/receiver distance 200 mm)**TRA-L-LAS-TB-L300** (Transmitter/receiver distance 300 mm)**TRA-L-LAS-TB-L400** (Transmitter/receiver distance 400 mm)**TRA-L-LAS-TB-L500** (Transmitter/receiver distance 500 mm)

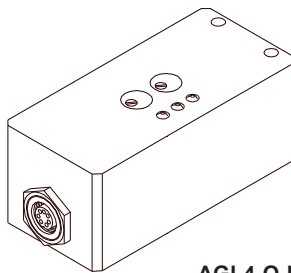


Electronic Control Units

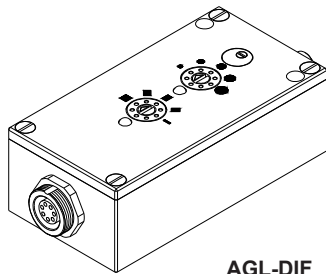
Suitable electronic control units for A-LAS-50:



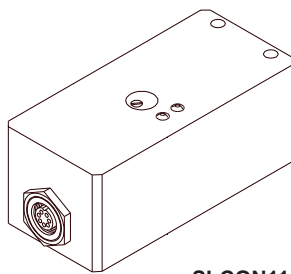
AGL4-Q
AGL4-Qinv
AGL4-Qinv-200ms



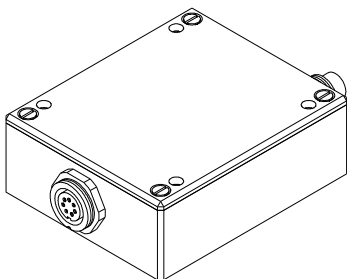
AGL4-Q-HS-500kHz-24V_LED
AGL4-Qinv-HS-500kHz-24V_LED



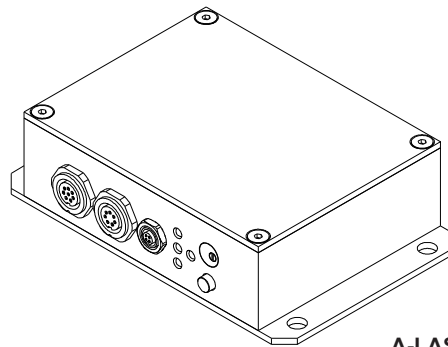
AGL-DIF



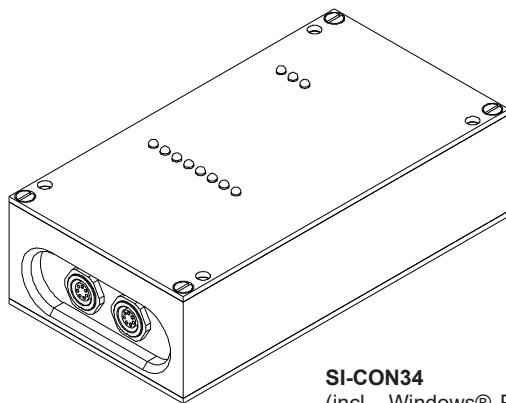
SI-CON11-0/20
SI-CON11-0/20-5V
SI-CON11-0/20-IC
SI-CON11-4/20
SI-CON11-4/20-IC
SI-CON11-5/25
SI-CON11-5/25-IC



SI-CON8
(incl. Windows® PC software
SI-CON8-Scope)



A-LAS-CON1
(incl. Windows® PC software
A-LAS-CON1-Scope)



SI-CON34
(incl. Windows® PC software
SCOPE34)

