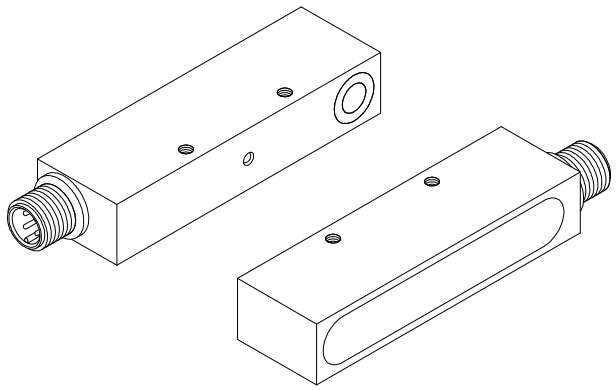
D-LAS Series

D-LAS-63 (detection of CDs)



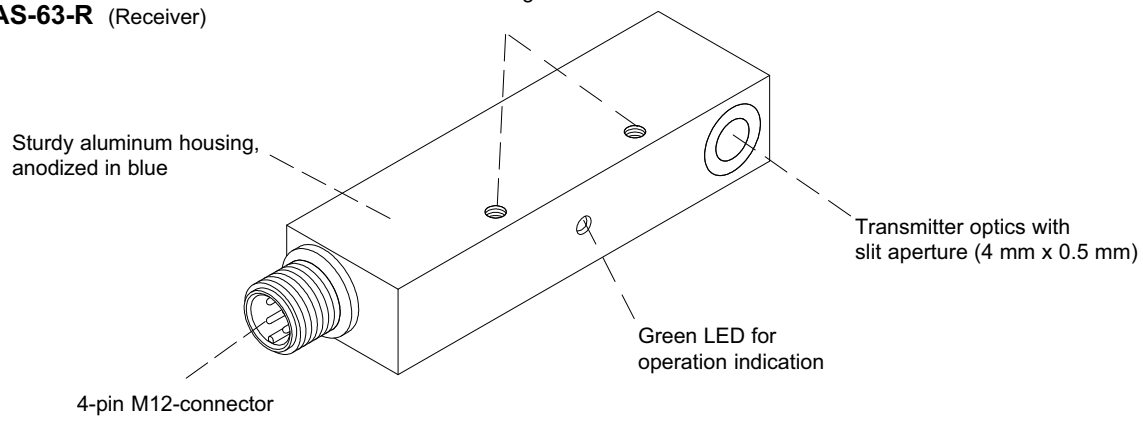
- High switching frequency (typ. 25 kHz)
- Insensitive to outside light due to interference and polarization filter
- Monitor output (0V ... +10V)
- Digital output (npn dark-switching/pnp bright-switching)
- Sturdy aluminum housing
- Enclosure rating IP67
- Switching state indication by means of a bi-color LED

Design

Product name:

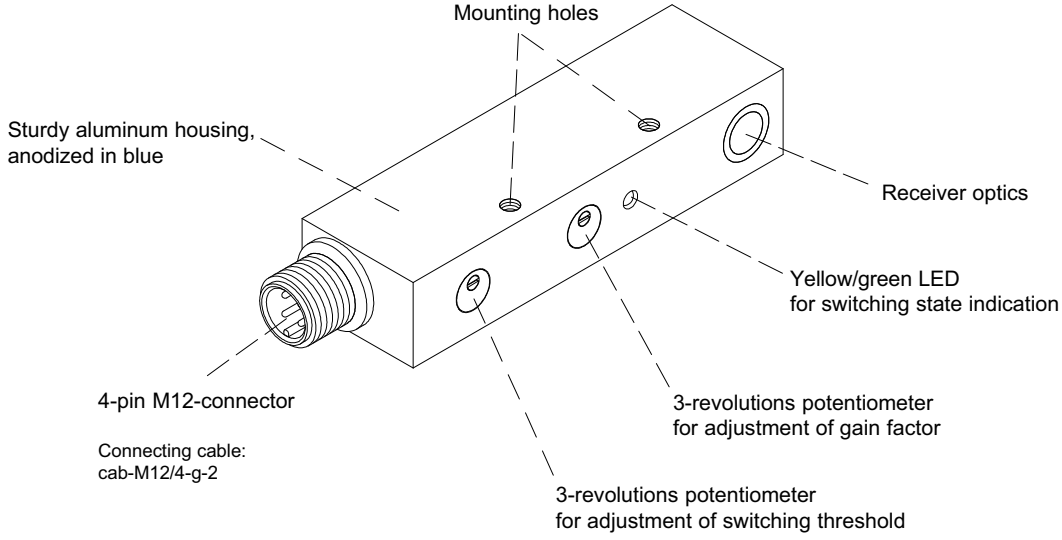
D-LAS-63-T (Transmitter)
D-LAS-63-R (Receiver)

Transmitter



Connecting cable:
cab-M12/4-g-2

Receiver



Connecting cable:
cab-M12/4-g-2

Technical Data

Model	D-LAS-63
Laser	Solid state laser, 670 nm, DC operation, 1 mW max. opt. power, Laser class 2 acc. to DIN EN 60825. The use of these laser sensors therefore requires no additional protective measures.
Reproducibility	typ. 1‰ of aperture size
Optical filter	Interference filter + polarisation filter
Voltage supply	+12VDC ... +32VDC, protected against polarity reversal, overload protected
Pulsating light/direct light operation	DC-operation
Ambient light	up to 5000 Lux
Sensitivity setting (switching threshold)	adjustable by means of an integrated potentiometer (3 revolutions)
Amplifier gain (analogsignal)	adjustable by means of an integrated potentiometer (3 revolutions)
Current consumption	typ. 90 mA
Size of aperture	4 mm x 0.5 mm
Monitoring output (analog output)	0V ... +10V (typ. 100 kHz band width)
Type of protection	IP67
Operating temp. range	-20°C to +50°C
Storage temperature range	-20°C to +85°C
Housing material	Aluminum, anodized in blue
Housing dimensions	Transmitter and receiver: approx. 80 mm x 24 mm x 16 mm
Type of connector	Transmitter and receiver: 4-pin M12- connector
Max. switching current	100 mA, short-circuit-proof
EMC test acc. to	IEC - 801... CE
Switching state indication	by means of an integrated yellow/green-LED (at receiver)
Operation indication	by means of a green LED (at transmitter)
Switching frequency	typ. 25 kHz

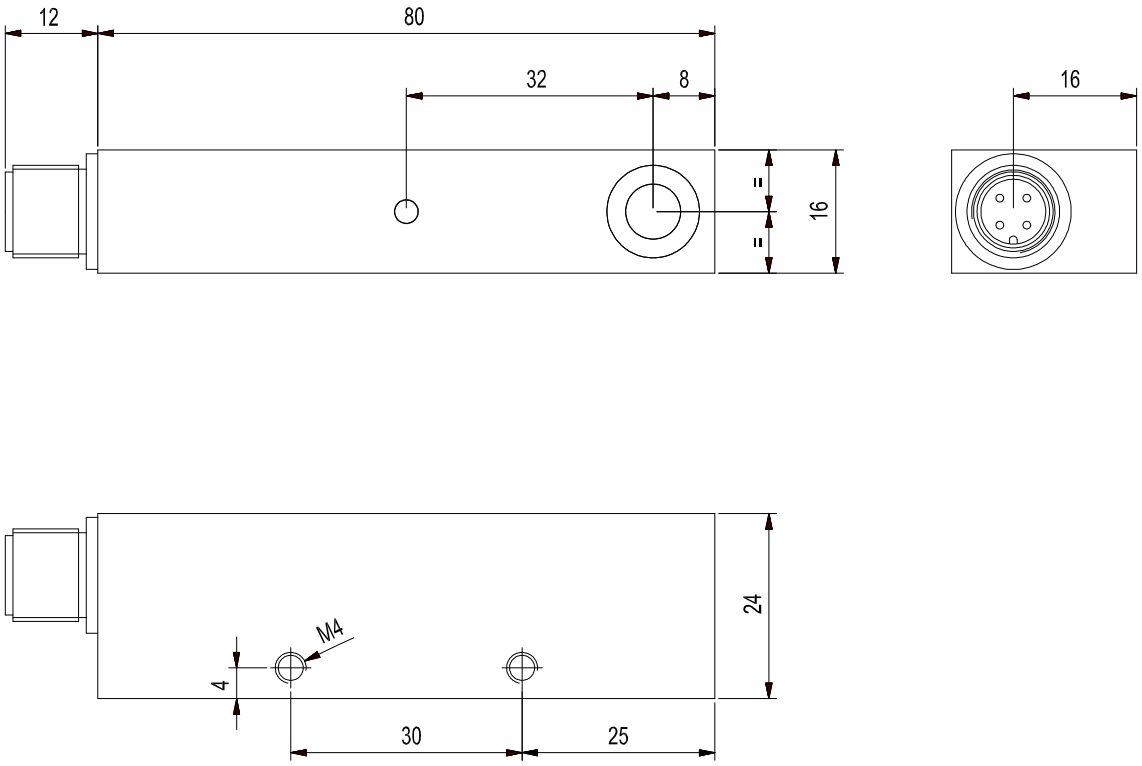
Laser Warning

The transmitters of the laser one-way light barriers of D-LAS Series comply with laser class 2 according to EN 60825. The use of these laser transmitters therefore requires no additional protective measures.

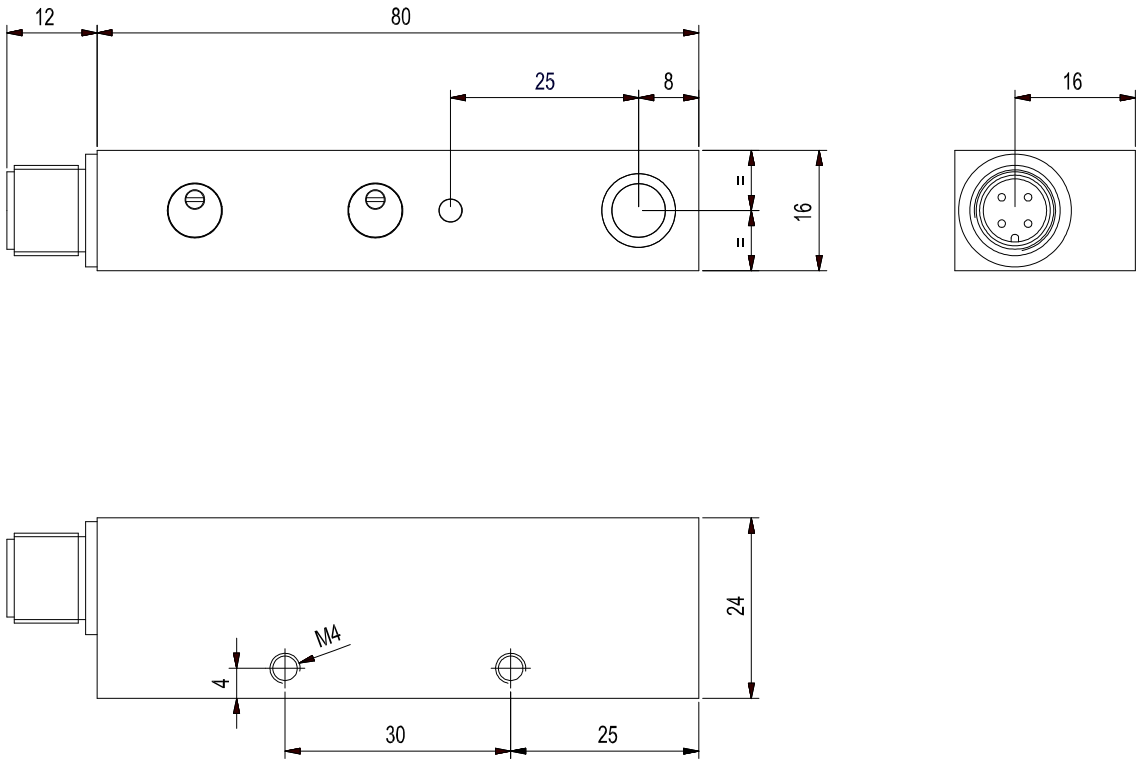
The transmitters of the D-LAS Series are supplied with a laser warning label.

Dimensions

D-LAS-63-T (Transmitter):



D-LAS-63-R (Receiver):



(All dimensions in mm)

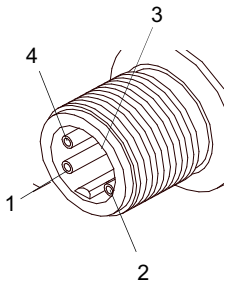
Connector Assignment

Pin assignment:

RECEIVER
(4-pin M12-connector, shielded)

Type Q (npn dark-switching/pnp bright-switching):

Pin No.:	Color:	Assignment:
1	brn	+12VDC...+32VDC
2	wht	ANALOG (0V...+10V)
3	blu	GND (0V)
4	blk	OUTPUT
Shield		Housing



Type Qinv (pnp dark-switching/npn bright-switching):

Pin No.:	Color:	Assignment:
1	brn	+12VDC...+32VDC
2	wht	ANALOG (0V...+10V)
3	blu	GND (0V)
4	blk	OUTPUT INV
Shield		Housing

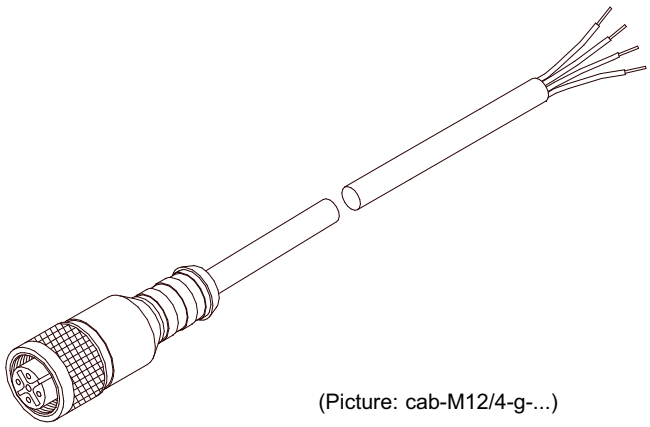
TRANSMITTER
(4-pin M12-connector, shielded)

Pin No.:	Color:	Assignment:
1	brn	+12VDC...+32VDC
2	wht	I-CONTROL (0...+5V)
3	blu	GND (0V)
4	blk	GND (0V)
Shield		HOusing

Connecting Cables

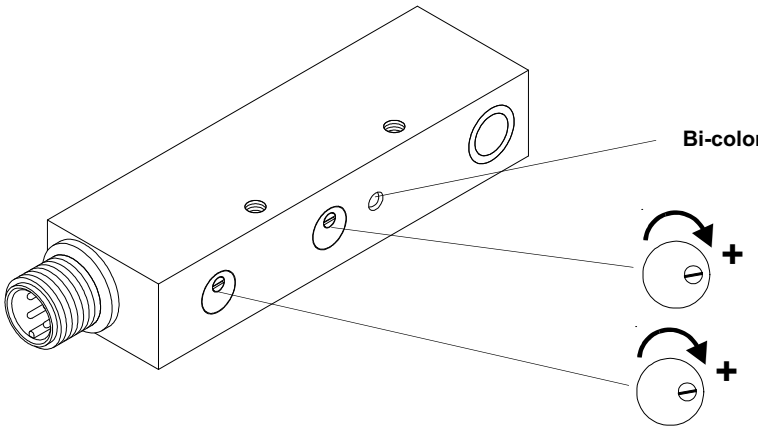
Available connecting cables:

cab-M12/4-g-2	Length: 2m	Outer jacket: PUR
cab-M12/4-g-5	Length: 5m	Outer jacket: PUR
cab-M12/4-w-2	Length: 2m	Outer jacket: PUR, angle-type
cab-M12/4-w-5	Length: 5m	Outer jacket: PUR, angle-type



(Picture: cab-M12/4-g-...)

Setting



Bi-color LED yellow/green: yellow = laser beam covered
green = laser beam free

3-revolutions potentiometer for adjustment of gain factor
Rotation clockwise: Increase of analog signal

3-revultions potentiometer for adjustment of switching threshold
Rotation clockwise: Zunahme der Empfindlichkeit