

D-LAS Series

► D-LAS90-S, D-LAS90-L

Laser oneway light barriers (two models available):

D-LAS90-S: Aperture \varnothing 0.7 mm, max. range typ. 1 m

D-LAS90-L: Aperture typ. 3 mm x 1 mm, max. range typ. 60 m

- Minimal detectable object typ. 0.5 mm respectively 3 mm
- Interference filter
- Switching frequency 1 kHz
- Sturdy aluminum housing
- Class 2 laser product



Design

Product name:

For short range: D-LAS90-S

with integrated plastic optics and aperture \varnothing 0.7 mm

Transmitter: D-LAS90-S-T

Receiver: D-LAS90-S-Q-R or
D-LAS90-S-Qinv-R

For wide range: D-LAS90-L

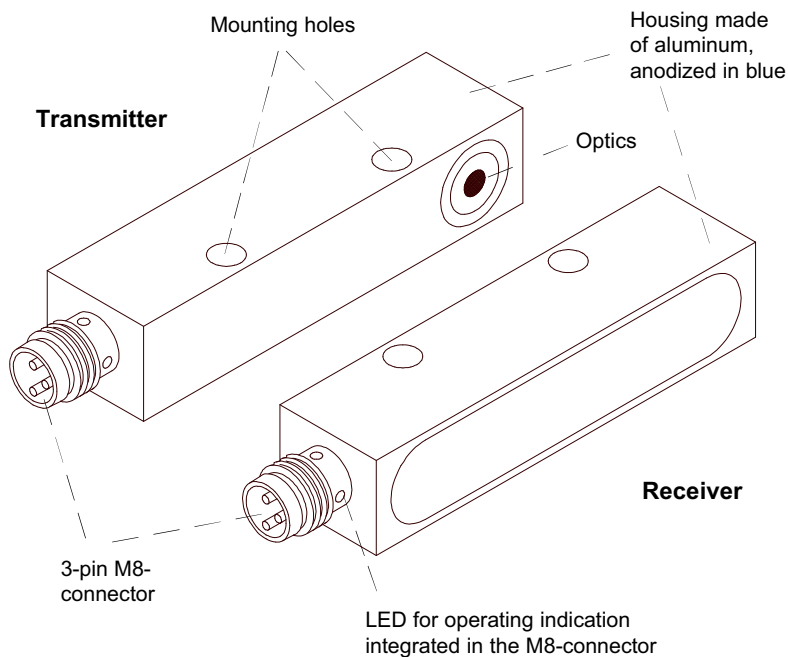
with integrated plastic optics and aperture typ. 3 mm x 1 mm

Transmitter: D-LAS90-L-T

Receiver: D-LAS90-L-Q-R or
D-LAS90-L-Qinv-R


Q = Switching output:
nnp dark-switching (nnp n.o.)/
pnp bright-switching (pnp n.c.)

Qinv = Switching output:
pnp dark-switching (pnp n.o.)/
nnp bright-switching (nnp n.c.)





Technical Data

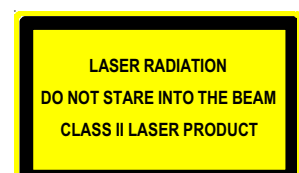
Model	D-LAS90-S	D-LAS90-L
Laser	Solid-state laser, 670 nm, AC-operation, 1 mW max. opt. power, Laser class 2 acc. to DIN EN 60825. The use of these laser transmitters therefore requires no additional protective measures.	
Max. range	1 m	60 m
Min. detectable object	typ. 1% of aperture size	
Reproducibility	typ. 1% of aperture size	
Optical filter	Interference filter	
Voltage supply	+12VDC ... +32VDC, protected against polarity reversal, overload protected	
Pulsating light / constant light operation	Pulsating light operation, 100 kHz	
Ambient light	Up to 5000 Lux	
Current consumption	Transmitter: typ. 60 mA	Receiver: typ. 30 mA
Aperture size	Ø 0.7 mm	typ. 3 mm x 1 mm
Type of protection	IP67	
Operating temperature 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. 55 mm x 14 mm x 12 mm	
Connector type	3-pin M8-connector	
Max. switching current	100 mA, short-circuit-proof	
EMC test acc. to	IEC - 801... 	
Switching frequency	typ. 1 kHz	



Laser Warning

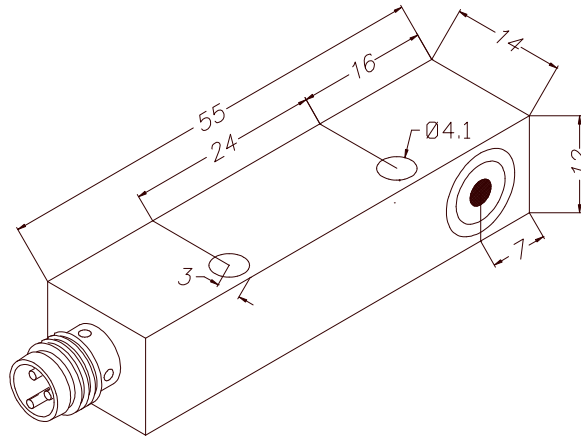
The transmitters of the laser one-way light barriers of D-LAS Series comply with laser class 2 according to EN 60825. The use of these laser transmitters therefore requires no additional protective measures.

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



Dimensions

D-LAS90-S (transmitter and receiver)
 D-LAS90-L (transmitter and receiver)



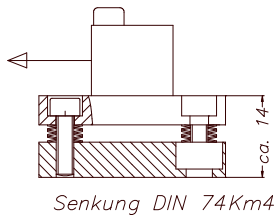
(All dimensions in mm)

Mounting

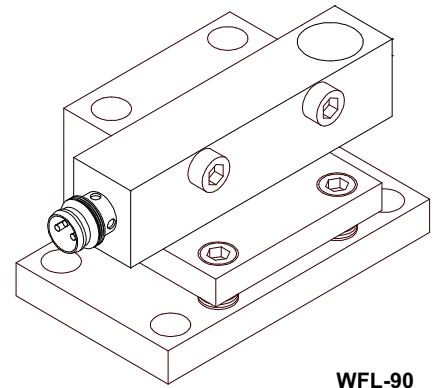
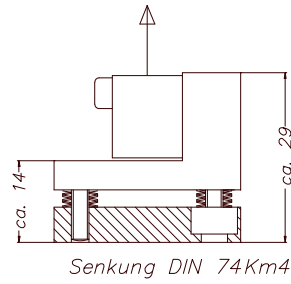
Mounting accessories:
 (please order separately)

Mounting flange FL-90
Mounting flange WFL-90

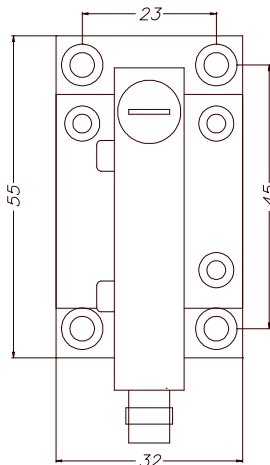
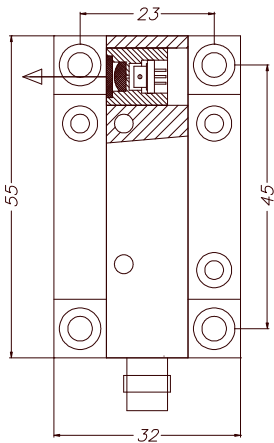
FL-90



WFL-90



WFL-90



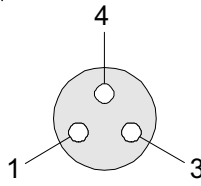
(All dimensions in mm)

Connector Assignment

Receiver
(3-pin M8-connector)

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

Pin No.:	Color:	Assignment:
1	brn	+12VDC...+32VDC
3	blu	GND (0V)
4	blk	OUTPUT



Transmitter
(3-pin M8-connector)

Pin No.:	Color:	Assignment:
1	brn	+12VDC...+32VDC
3	blu	GND (0V)
4	blk	I-CONTROL (0...+24V)

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

Pin No.:	Color:	Assignment:
1	brn	+12VDC...+32VDC
3	blu	GND (0V)
4	blk	OUTPUT INV

Connecting Cables

Available connecting cables:

cab-M8/3-g-2	Length: 2m	Outer jacket: PUR	
cab-M8/3-g-5	Length: 5m	Outer jacket: PUR	
cab-M8/3-w-2	Length: 2m	Outer jacket: PUR	angle type
cab-M8/3-w-5	Length: 5m	Outer jacket: PUR	angle type
cab-M8/3-w-npn-2	Length: 2m	Outer jacket: PUR	angle type, LED
cab-M8/3-w-npn-5	Length: 5m	Outer jacket: PUR	angle type, LED
cab-M8/3-w-pnp-2	Length: 2m	Outer jacket: PUR	angle type, LED
cab-M8/3-w-pnp-5	Length: 5m	Outer jacket: PUR	angle type, LED

