

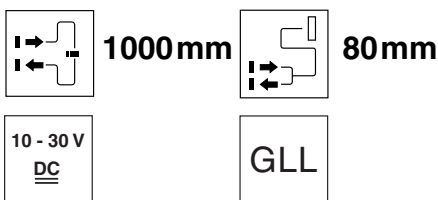


LVS

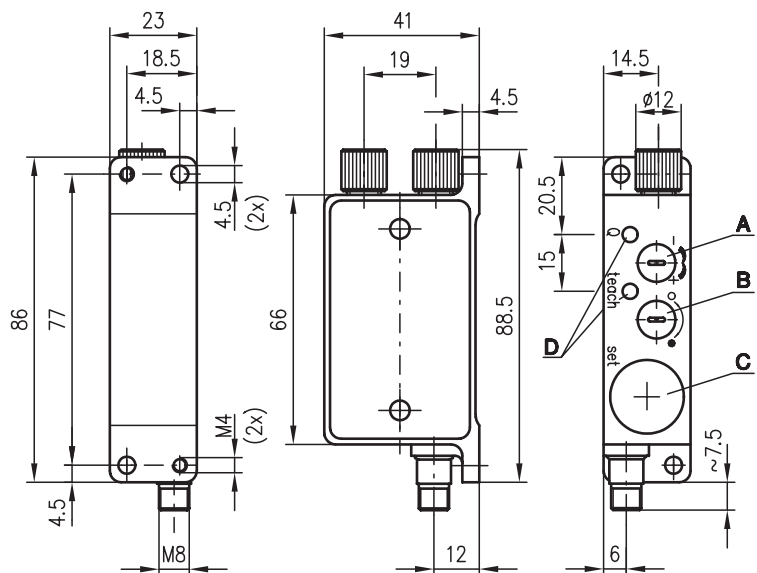
Fibre optic cable control devices



Dimensioned drawing



- Easy calibration with calibration button for optimum sensitivity adjustment (teach-in)
- The adjusted sensitivity value is preserved even with the operating voltage switched off
- External calibration input for remote control
- High switching frequency for detection of fast events



- A Sensitivity adjustment
- B Light/dark switching
- C Calibration button
- D Indicator diodes

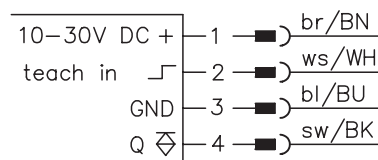
Electrical connection



Accessories:

(available separately)

- Glass fibre optic cable
- M8 connectors (KD ...)
- Ready-made cables (KB ...)



We reserve the right to make changes • LSG_e04e.fm



Specifications

Optical data

Operating range/scanning range ¹⁾
Light source
Wavelength

Timing

Switching frequency ²⁾
Response time

Electrical data

Operating voltage U_B
Residual ripple
Bias current
Switching output
Function characteristics
Signal voltage high/low
Output current

Sensitivity

Display

LED yellow
LED red

Mechanical data

Housing
Weight
Connection
Fibre optic cable connection

Environmental data

Ambient temp. (operation/storage)
Protective circuit ³⁾
Protection class

Options

External calibration input

Teach-in, active/not active
Pulse length

Throughbeam operation

1000mm
LED (modulated light)
880nm (infrared)

1000Hz
0.5ms

10 ... 30VDC (incl. residual ripple)
 $\leq 10\%$ of U_B
 ≤ 35 mA
PNP transistor output
light/dark switching via selector switch
 $\geq (U_B - 2V) \leq 2V$
max. 200mA
adjustment by pressing the calibration button
correctable through potentiometer (\pm)

light path free/reflection
failure during teach-in event
remains on if light path is not free,
or working distance is to big

aluminium
200g
M8 connector, 4-pin
screw connection

-20°C ... +60°C/-30°C ... +70°C
2, 3
IP 65

$\geq 6V/L \leq 2V$ or not connected
 ≥ 200 ms

Scanner operation

80mm

Tables

Throughbeam operation

Type	Operating range
GF 500/1 LS-...	200mm
GF 500/4 LS-...	600mm
GF 1000/1 LS-...	200mm
GF 1000/4 LS-...	1000mm

Scanner operation

Type	Scanning range ¹⁾
GF 500/1 RT-...	0 ... 50mm
GF 500/4 RT-...	0 ... 80mm
GF 1000/1 RT-...	0 ... 50mm
GF 1000/4 RT-...	0 ... 80mm

1) Relative to white 90%

Diagrams

Remarks

- The corresponding protective cover must be removed when manually setting the sensitivity for light/dark switching.
- Sensitivity adjustment
In scanner operation:
position object and shortly press calibration button.
In throughbeam operation:
shortly press calibration button without object.
Event successful,
if red LED extinguishes.
- Using the potentiometer Pos. 1, a sensitivity correction of approx. $\pm 2\%$ can be performed.
Example in scanner operation: Levelling of ranges with different diffuse reflection e.g. printing.
Example in throughbeam operation: for detection of half transparent media e.g. foils, glass etc. Before the teach-in event, the potentiometer is set to "+". After the teach-in event it is set into direction "-" until the object causes a switching procedure.

Order guide

Designation	Part No.
LVS 19/4T L8	500 80664