



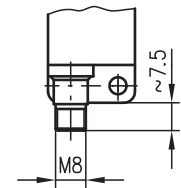
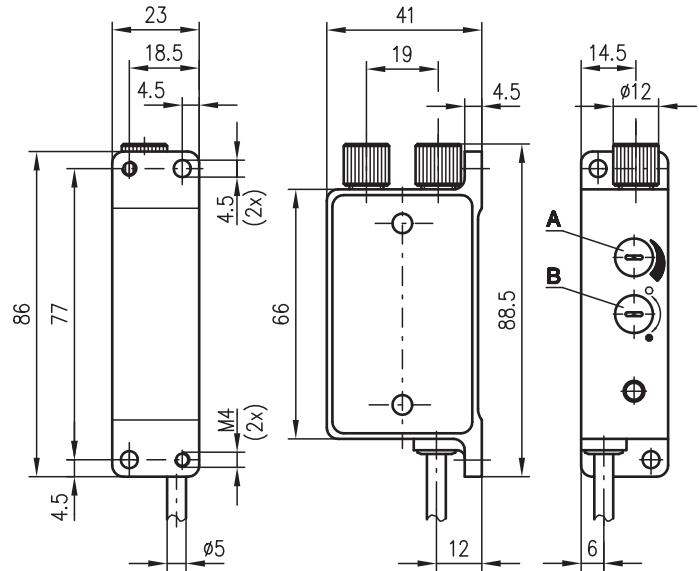
LVS

Fibre optic cable control devices

EN 05-2005/01 50112190

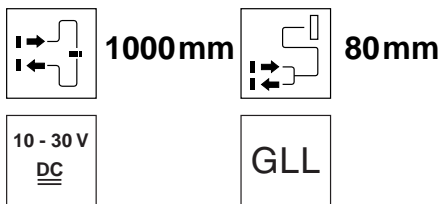


Dimensioned drawing



LVS 19/4 L8

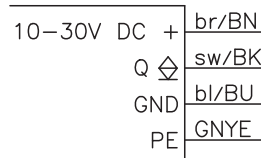
- A Sensitivity adjustment
- B Light/dark switching



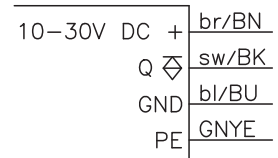
- High switching frequency for detection of fast events
- Light/dark switching and sensitivity adjustment for optimal adaptation to the application
- Extensive selection of fibre optic cables for throughbeam and scanner operation with various lengths and end pieces
- Output is short-circuit proof and polarity reversal protected, thus guaranteeing riskless commissioning
- Separate switching output allows preventive maintenance

Electrical connection

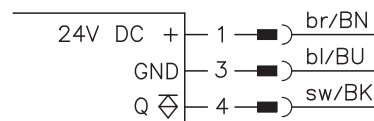
LVS 19/2



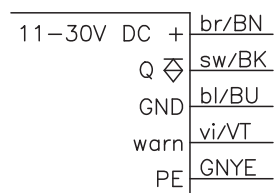
LVS 19/4



LVS 19/4 L8



ILVS 19/4



Accessories:

(available separately)

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

We reserve the right to make changes • lsg_e03e.fm



Specifications

Optical data

Operating range/scanning range ¹⁾
Light source
Wavelength

Throughbeam operation

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

Scanner operation

80mm

Timing

Switching frequency ²⁾
Response time

1000Hz
0.5ms

Electrical data

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

10 ... 30VDC (incl. residual ripple)
 $\leq 10\%$ of U_B
 ≤ 50 mA
PNP or NPN transistor output
light/dark switching via selector switch
 $\geq (U_B - 2V) / \leq 2V$
max. 100mA
adjustable through potentiometer

Multicolour display

LED red

LED red flashing

light path free/reflection
(with performance reserve)
light path free/reflection
(without performance reserve)

Mechanical data

Housing
Weight
Connection

aluminium
200g
M8 connector, 3-pin (LVS 19/4 L8)
cable 2m, 4x0.25mm² (LVS 19/4 and LVS 19/2)
cable 2m, 5x0.25mm² (ILVS 19/4)
screw connection

Fibre optic cable connection

Environmental data

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

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

Options

Warning output autoControl warn
Signal voltage high/low
Output current

PNP transistor, counting principle
 $\geq (U_B - 2V) / \leq 2V$
max. 100mA

1) Scanning range relative to white 90%

2) With a duty cycle of 1:1

3) 2=polarity reversal protection, 3=short-circuit protection for all outputs

Order guide

	Designation	Part No.
With 2m cable, NPN switching output	LVS 19/2	500 08318
With 2m cable, PNP switching output	LVS 19/4	500 08319
With 2m cable, PNP switching output and warning output	ILVS 19/4	500 15635
With M8 connector, PNP switching output	LVS 19/4 L8	500 17772

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
GF 500/1 RT-MS.1	0 ... 10mm

1) Relative to white 90%

Diagrams

Remarks

- The corresponding protective cover must be removed in order to set the sensitivity adjustment and light/dark switching.
- autoControl is a counting principle. The photoelectric sensor is counting switching cycles with reduced performance reserve. After three consecutive cycles with reduced performance reserve (LED flashing), the separate warning output is activated and remains active until corresponding measures (cleaning, alignment etc.) have provided optimum performance reserve.