



LS4/LS10 series Light screen system

Wave length

IR (infrared) 880 nm

Resolution

Minimum object size
 LS4ELQ5 and LS4RLQ5: 38 mm
 LS10ESRQDH and LS10RSRQDH: 5,6 mm
 LS10EQDH and LS10RQDH: 7,6 mm

Supply

Supply voltage 10...30 V dc (LS4)
 12...30 V dc (LS10)
 Ripple V_{pp} $\leq 10\%$

	LS4	LS10
No load current	emitter 40 mA	70 mA
	receiver 30 mA	45 mA
Delay upon power up	100 ms	

Protection

reverse polarity
 short-circuit (pulsed)

Output

Function dark operate
 Continuous load current ≤ 125 mA
 Switching frequency ≤ 1 kHz
 1 ms on, 1 ms off
 > 10 ms between parts
 5 ms

OFF-delay

Material

Housing PBT
 Lens acrylic
 Protection class IP54
 Temperature range 0...+50 °C
 Connector eurocon (M12 x 1)

Indicator LED's

Red on receiver beam broken
 Red on emitter power-on

Accessories

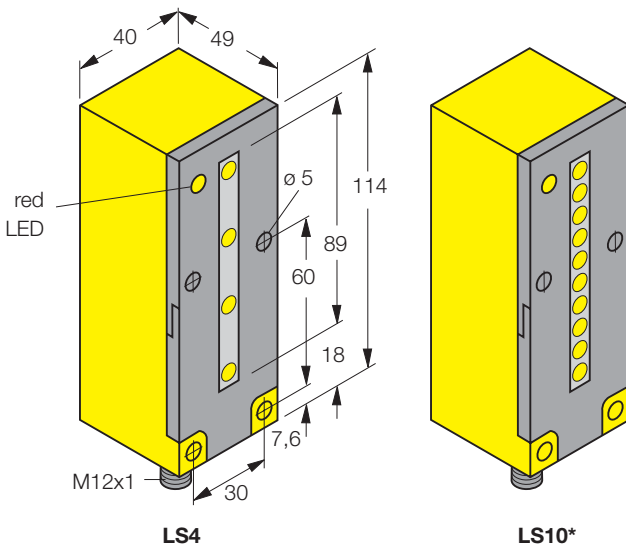
Connectors

WAK4-2/P00	80 070 46	straight type
WWAK4-2/P00	80 071 48	right-angled type

Replacement lenses

UCLS4EL	30 446 79	for LS4ELQ5
UCLS4RL	30 446 84	for LS4RLQ5
UCLS10	37 868 00	for E/RQDH
UCLS10SR	34 154 00	for ESR/RSRQDH

Dimensions [mm]



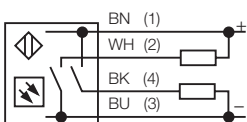
LS4

LS10*

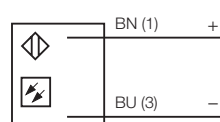
* dimensions of LS4 and LS10 are identical

Wiring

emitter



receiver



LS4/LS10 series

Light screen system

	<i>Max. range</i>	<i>Light source</i>	<i>Output function</i>	<i>Connection</i>	<i>Type</i>	<i>Ident number</i>
— Opposed	0,5...2,3 m	IR	(emitter) pnp, npn	connector connector	LS4ELQ5 LS4RLQ5	30 434 48 30 434 49
	0,1...0,2 m	IR	(emitter) pnp, npn	connector connector	LS10ESRQDH LS10RSRQDH	37 177 02 37 178 02
	0,1...1,2 m	IR	(emitter) pnp, npn	connector	LS10EQDH	37 177 01
				connector	LS10RQDH	37 178 01

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These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.