



## 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  $\leq 125$  mA  
 Switching frequency  $\leq 1$  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

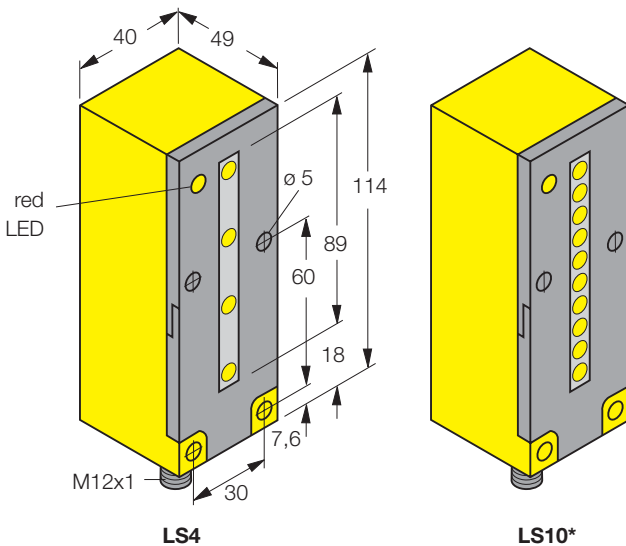
### Connectors

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

### Replacement lenses

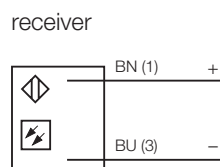
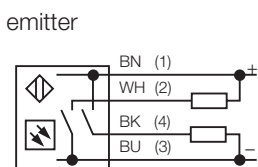
UCLS4EL	30 446 79	for LS4ELQ5
UCLS4RL	30 446 84	for LS4RLQ5
UCLS10	37 868 00	for E/RQDH
UCLS10SR	34 154 00	for ESR/RSRQDH

## Dimensions [mm]



\* dimensions of LS4 and LS10 are identical

## Wiring



# 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>
— <b>Opposed</b>	0,5...2,3 m	IR	(emitter) pnp, npn	connector connector	<b>LS4ELQ5</b> <b>LS4RLQ5</b>	30 434 48 30 434 49
	0,1...0,2 m	IR	(emitter) pnp, npn	connector connector	<b>LS10ESRQDH</b> <b>LS10RSRQDH</b>	37 177 02 37 178 02
	0,1...1,2 m	IR	(emitter) pnp, npn	connector	<b>LS10EQDH</b>	37 177 01
				connector	<b>LS10RQDH</b>	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.