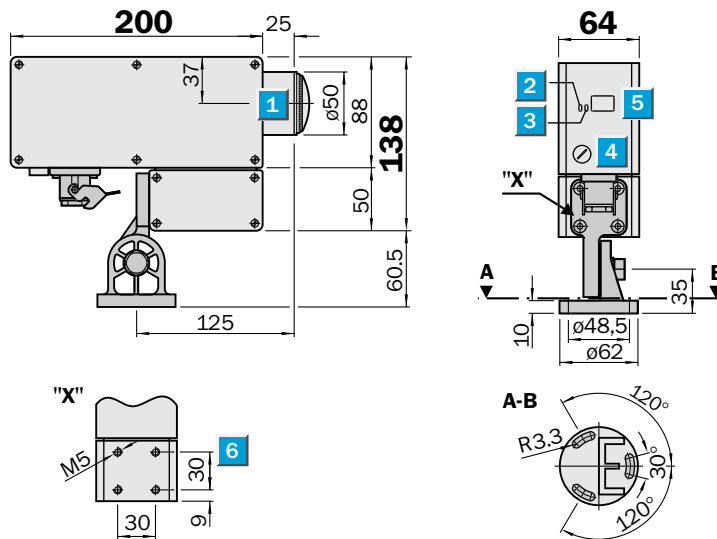



Scanning distance
 10...90 mm

Luminescence scanners

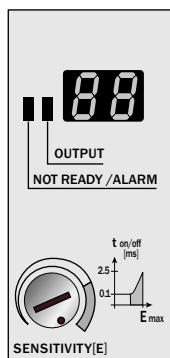
- UV semi-conductor light source with high-pressure mercury vapour lamp
- Scanning distance selectable by using interchangeable lenses
- Fibre-optic connection
- Additional optical filter

Dimensional drawing

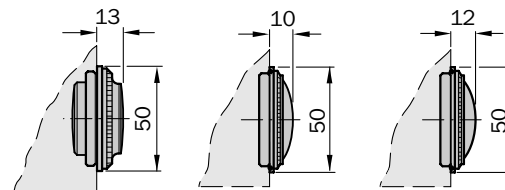


Adjustments possible

All types



LUT 1-410	LUT 1-430	LUT 1-450
LUT 1-420	LUT 1-440	

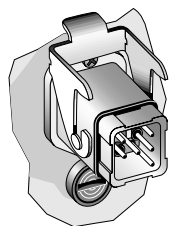


- 1 Lens, see dimensional drawing
- 2 Readiness indicator
- 3 Status indicator
- 4 Sensitivity adjustment
- 5 Digital intensity signal
- 6 Threaded mounting hole, 12 mm deep

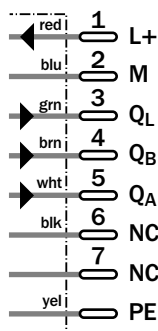
Connection type

Bridge

LUT 1-4



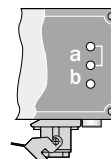
7-pin + PE



Truth table LUT 1-4

Internal jumper	o a o b o			o a o b o		
	Delivered state					
Switching type	Light-switching			Dark-switching		
Sender lamp	off	started		off	started	
Luminescence	-	yes	no	-	yes	no
Output Q _B (PNP)	LOW	HIGH		LOW	HIGH	
Readiness indicator (red)	on	off/flashing*		an	off/flashing*	
Output Q _L (PNP)	LOW	HIGH	LOW	LOW	LOW	HIGH
Status indicator (green)	off	on	off	off	on	off

* Flashing: lamp power still sufficient for operation



Accessories	page
Cable receptacles	496
Fibre-optic cable	552
Lenses	556

Technical Data		LUT 1-	400	410	420	430	440	450
Scanning distance^{1)/}	10 mm/∅ 3 mm							
light spot diameter	20 mm/∅ 4 mm							
	50 mm/∅ 8 mm							
	125 mm/∅ 15 mm							
	300 mm/∅ 40 mm							
With fibre-optic cable, no lens	8 mm/∅ 10 mm							
With fibre-optic cable, with 144 lens	15 mm/∅ 6 mm							
With fibre-optic cable, with 144 lens and diaphragm	15 mm/∅ 3 x 6 mm							
Light source	High-pressure mercury vapour lamp							
Light type, wavelength	UV, 365 nm							
Average service life	4000 h							
Supply voltage V_S	18...30 V DC ²⁾							
Ripple ³⁾	2 V							
Current consumption ⁴⁾	700 mA							
Switching outputs Q_L⁵⁾ and Q_B⁶⁾	Light-/dark-switching, selectable PNP: HIGH = V _S - <2 V/LOW = 0 V							
Output current I _A max.	200 mA							
Max. switching frequency ⁷⁾	5 kHz							
At max. sensitivity	200 Hz							
Response time	0.1 ms							
At max. sensitivity	2.5 ms							
Analogue output Q_A	0...1.5 V							
Connection type	Plug							
VDE protection class⁸⁾	□							
Circuit protection⁹⁾	A, B, C							
Enclosure rating	IP 63							
Ambient temperature	Operation 0 °C...+ 45 °C Storage - 25 °C...+ 75 °C							
Weight	2.5 kg							
Housing material/surface	Die-cast metal							

- 1) From front edge of lens
- 2) Limit values
- 3) May not exceed or fall short of V_S
- 4) Without load
- 5) Q_L = signal output
- 6) Q_B = operational readiness
- 7) With light/dark ratio 1:1
- 8) Reference voltage DC 50 V
- 9) A = V_S connections reverse-polarity protected
B = Outputs Q_L, Q_B and Q_{LU} short-circuit protected
C = Interference pulse suppression

Scanning distance

Order information	Part no.
Type LUT 1-400	1 007 626
Type LUT 1-410	1 005 935
Type LUT 1-420	1 005 936
Type LUT 1-430	1 005 937
Type LUT 1-440	1 005 938
Type LUT 1-450	1 005 939

Special accessories		
Colour filter		
Type	Wavelength	Part no.
OBF-OG 570-4	570...750 nm	4 005 810
OBF-RG 610-4	610...750 nm	4 012 735
OBF-RG 630-4	630...750 nm	4 014 153
OBF-RG 665-4	665...750 nm	4 014 154
Spare lamp		
SLA-LUT 1-4		1 002 262