



Luminescence sensors LUT3, LUT3-8

LUT3-820



Model Name > LUT3-820
Part No. > 1012868



Features

Dimensions (L x W x H):	80 mm x 30.4 mm x 53 mm
Sensing distance ¹⁾ :	20 mm
Light source ^{2), 3)} :	UV-LED
Light spot size:	3 mm x 9 mm
Receiving filters:	KV 418 (standard)
Receiving range:	450 nm ... 750 nm
Adjustment:	Manual (potentiometer)
Output function:	Light switching

¹⁾ From front edge of lens ²⁾ Average service life of 100,000 h at $T_A = +25^\circ\text{C}$ ³⁾ Wave length: 375 nm

Mechanics/electronics

Supply voltage V_S ¹⁾ :	DC 12 V ... 30 V
Ripple ²⁾ :	< 2 Vpp
Power consumption ³⁾ :	< 60 mA
Switching frequency ⁴⁾ :	1.5 kHz
Response time ⁵⁾ :	350 μs
Output type:	PNP: HIGH = $V_S - \leq 3\text{ V}$ / LOW = approx. 0 V NPN: HIGH = approx. V_S / LOW $\leq 2\text{ V}$
Switching mode:	PNP/NPN
Output current I_{max} :	100 mA
Connection type:	Connector M12, 5-pin
Protection class ⁶⁾ :	II
Circuit protection:	Output Q short-circuit protected Interference suppression VS connections reverse-polarity protected
Enclosure rating:	IP 67
Weight:	Ca. 400 g
Housing material:	Zinc diecast

¹⁾ Limit values: operation in short-circuit protected network max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ With light/dark ratio 1:1 ⁵⁾

Signal transit time with resistive load ⁶⁾ Reference voltage DC 50 V

Ambient data

Ambient temperature:

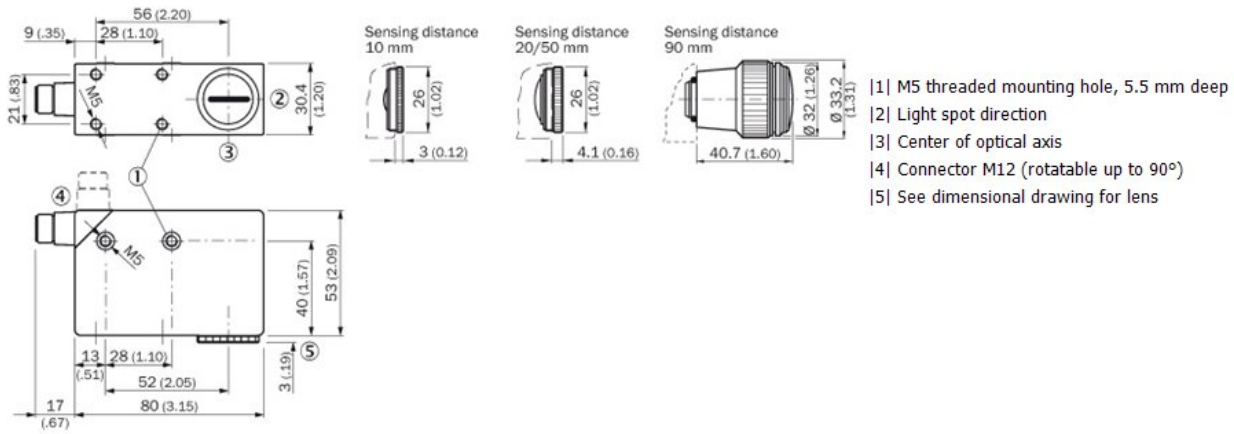
Operation: -10 ... 55 °C

Storage: -25 ... 75 °C

Shock load:

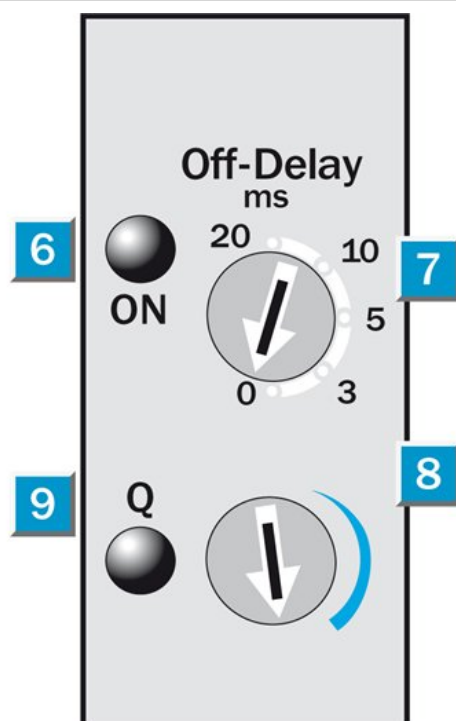
According to IEC 60068

Dimensional drawing



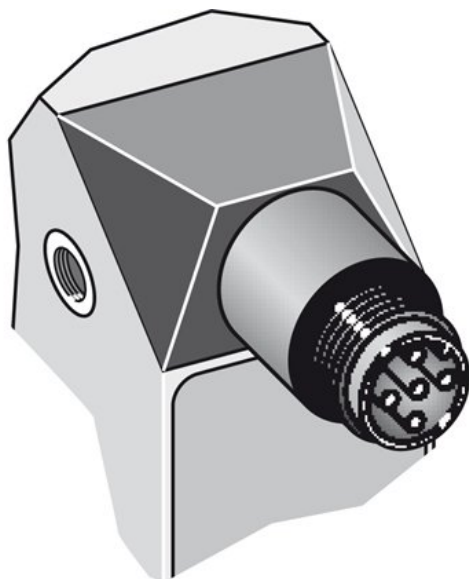
All dimensions in mm (inch)

Adjustments

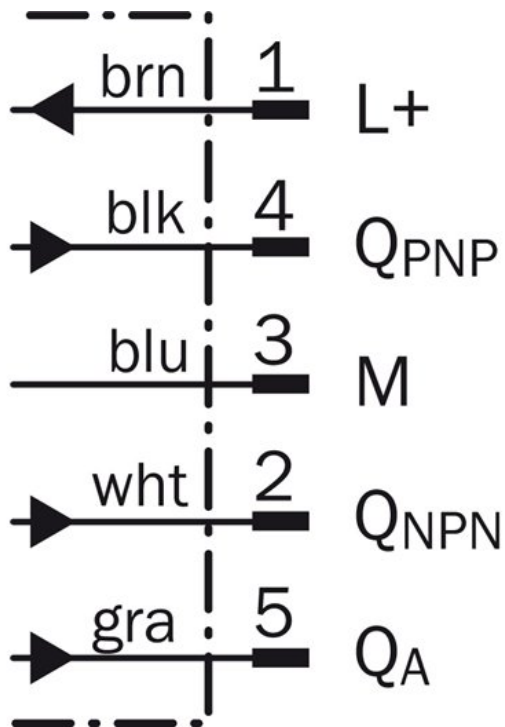


- |6| Operating indicator
- |7| time delay selector switch
- |8| Sensitivity adjustment
- |9| Output indicator

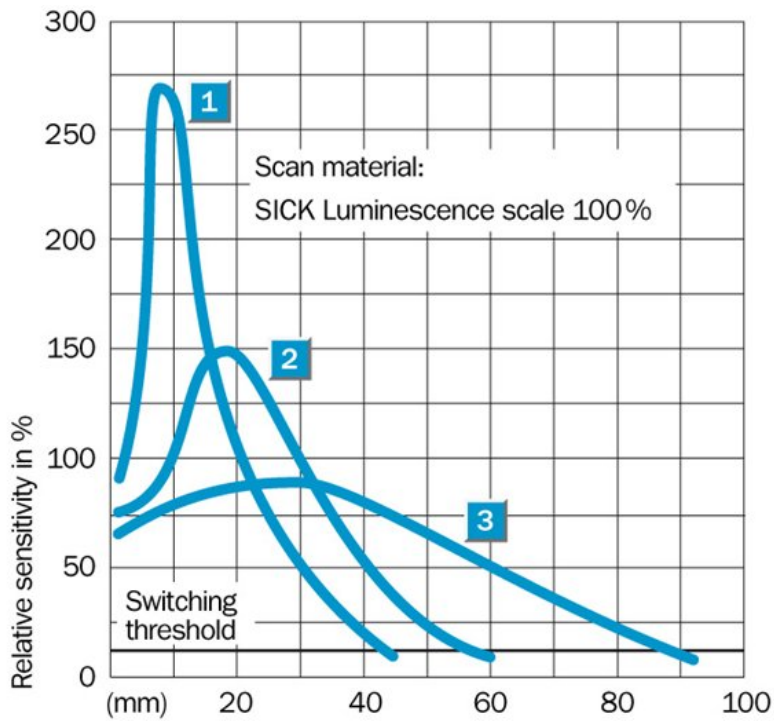
Connection type



Connection diagram



Characteristic curve



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