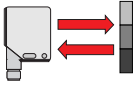


KT 2

Contrast Sensors



0.5 in (13.5 mm)
sensing distance

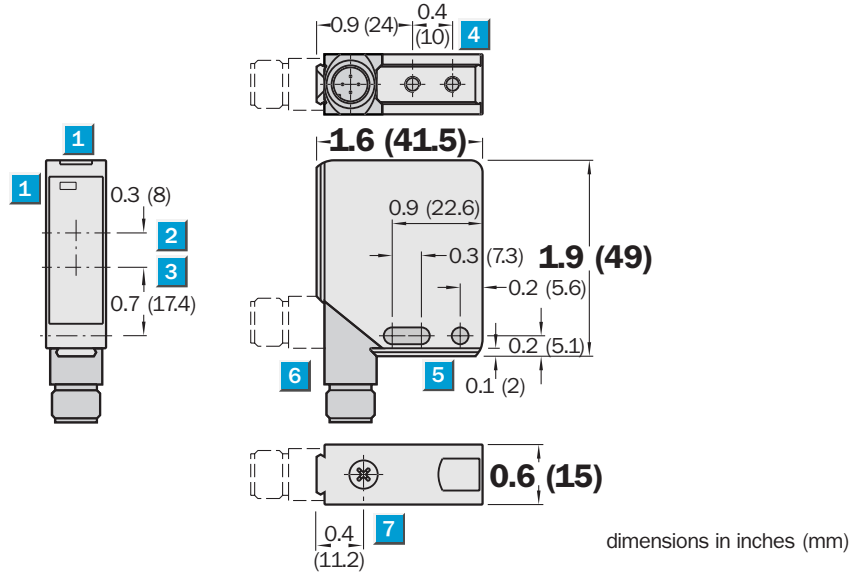
Highlights

- Rugged die cast metal housing
- Red or green light transmitter
- Light or dark switching selectable via control cable
- High switching frequency
- PNP and NPN switching output
- Rotatable quick disconnect via control cable

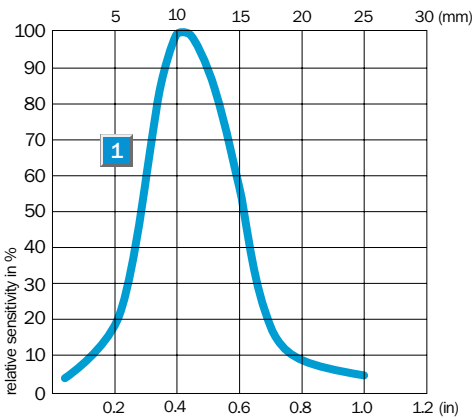
KT 2



Dimensional Drawing



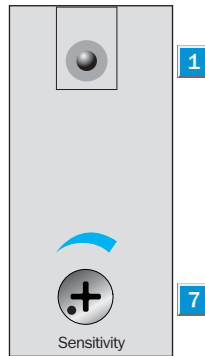
Relative Sensitivity



1 Sensing distance 13.5 mm

Adjustments

All types



- 1 Output indicator
- 2 Optical axis – receiver
- 3 Optical axis – sender
- 4 M4 threaded mounting hole, 4 mm deep
- 5 Through hole Ø 4.2 mm
- 6 Plug M12 (rotatable 90°)
- 7 Sensitivity adjustment

Order Information

Type	Part no.
KT 2R-2B3711	1 016 115
KT 2G-2B3711	1 016 112
KT 2G-2B3721	1 016 114

Accessories

	page
Cables and connectors	909
Dovetail bracket*	921
Mounting brackets	922

* 2 dovetail brackets included with delivery

Technical Data		KT 2-	R-2B 3711	G-2B 3711	R-2B 3721						
Sensing distance	0.5 in (13.5 mm)										
Sensing distance tolerance	± 0.04 in (1 mm)										
Light spot diameter	0.08 in (2 mm)										
Light source³⁾, light type	LED, red										
	LED, green										
Supply voltage V_S	10...30 V DC ²⁾										
Ripple ³⁾	< 5 V _{SS}										
Current consumption ⁴⁾	< 80 mA										
Switching outputs	Light/dark switching, selectable via wire										
	PNP: HIGH = V _S - < 2.9V/LOW = approx. 0 V										
	NPN: HIGH = V _S /LOW = < 1.5 V										
Output current I _A max.	100 mA										
Response time ⁵⁾	≤ 50 μs										
Max. switching frequency ⁶⁾	10 kHz										
Timing options	20 ms OFF delay										
L/D input, light/dark switching	PNP: dark = > 10 V...< V _S light = 0 V or no connection										
	NPN: dark = > 10 V...< V _S light = 0 V or no connection										
Connection type	Plug, M12 5-pin,										
VDE protection class⁷⁾	<input type="checkbox"/>										
Enclosure rating	IP 67/NEMA 6										
Circuit protection⁸⁾	A, B, C										
Ambient temperature T_A	Operation 14...131°F (-10...55°C) Storage -13...167°F (-25...75°C)										
Shock/vibration	To IEC 68										
Approximate weight	14 oz (400 g)										
Housing material	Die cast zinc										

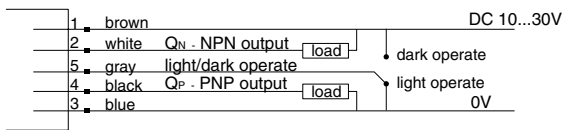
- 1) Average service life 100,000 h at T_A = 25°C
- 2) Limit values
- 3) May not exceed or fall short of V_S tolerances

- 4) Without load
- 5) Signal transit time with resistive load
- 6) With light/dark ratio 1:1
- 7) Reference voltage 50 V DC

- 8) A = V_S connections reverse-polarity protected
B = Output Q short-circuit protected
C = Interference pulse suppression

Connection Diagram

All Models



wire colors refer to standard cable, not included

