



Contrast sensors KT6, KT6-2

KT6W-2N6116



Model Name > [KT6W-2N6116](#)
Part No. > [1046012](#)



At a glance

- 3-color RGB LED technology
- 2-point teach-in (mark and background)
- Tough, metal housing
- Automatic gloss adjustment for highly reflective materials
- 10 mm sensing distance
- Light exits at end or side, based on model
- Common mounting footprint

Your benefits

- 3-color RGB LED for all registration mark applications - one sensor fits all
- Tough, metal housing for long service life
- Reliable operation, even with high-gloss reflective and jittering materials
- Easy setup - detect all marks with one sensor



Features

Dimensions (L x W x H):	80 mm x 30.4 mm x 53 mm
Sensing distance:	10 mm
Sensing distance tolerance:	± 3 mm
Light source ¹⁾ : ²⁾ :	LED red, green, blue
Light emission:	Long side of housing
Light spot size:	1.5 mm x 6.5 mm
Light spot direction ³⁾ :	Vertical
Adjustment:	Static 2-point teach-in

¹⁾ Average service life of 100,000 h at $T_A = +25\text{ °C}$ ²⁾ Wave length: 470 nm, 525 nm, 640 nm ³⁾ In relation to long side of housing

Mechanics/electronics

Supply voltage V_s ¹⁾ :	DC 10 V ... 30 V
Ripple ²⁾ :	≤ 5 Vpp
Power consumption ³⁾ :	< 40 mA
Switching frequency ⁴⁾ :	5 kHz
Response time:	100 µs
Output type:	NPN: HIGH = approx. V_S / LOW ≤ 2 V
Switching mode:	NPN
Retention time (ET):	25 ms, non-volatile memory
Connection type:	Connector M12, 4-pin

Protection class ⁵⁾ :	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:	Die-cast zinc
Output current I _{max} :	100 mA

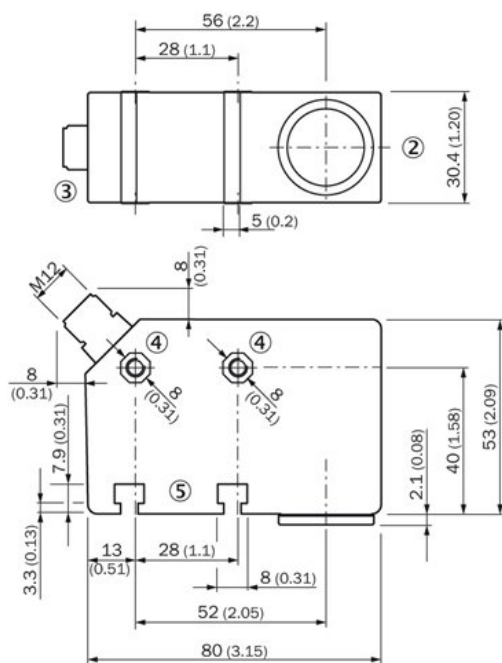
¹⁾ Limit values: operation in short-circuit protected network max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ With light/dark ratio 1:1 ⁵⁾

Reference voltage DC 50 V

Ambient data

Ambient temperature:	Operation: -10 ... 55 °C, Storage: -25 ... 75 °C
Shock load:	According to IEC 60068

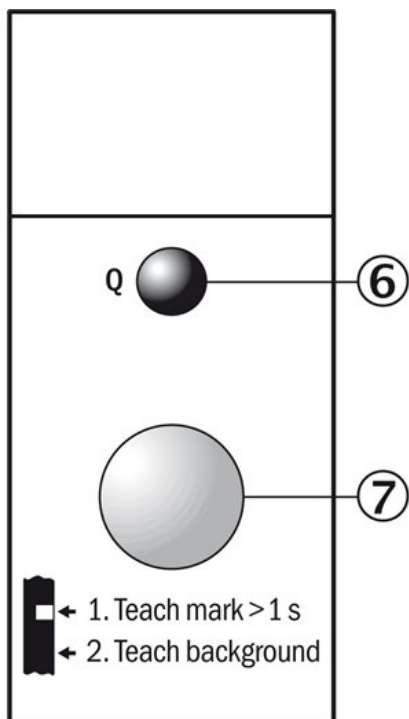
Dimensional drawing



- [2] Lens (light transmission), length side
- [3] Connector M12
- [4] SW8 mounting hole for M5 nut
- [5] SW8 T-slot for M5 nut

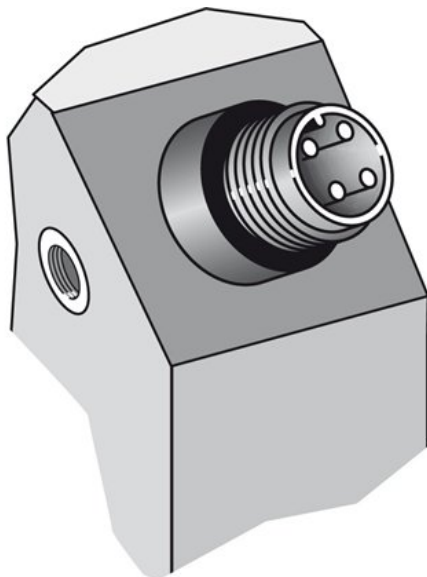
All dimensions in mm (inch)

Adjustments

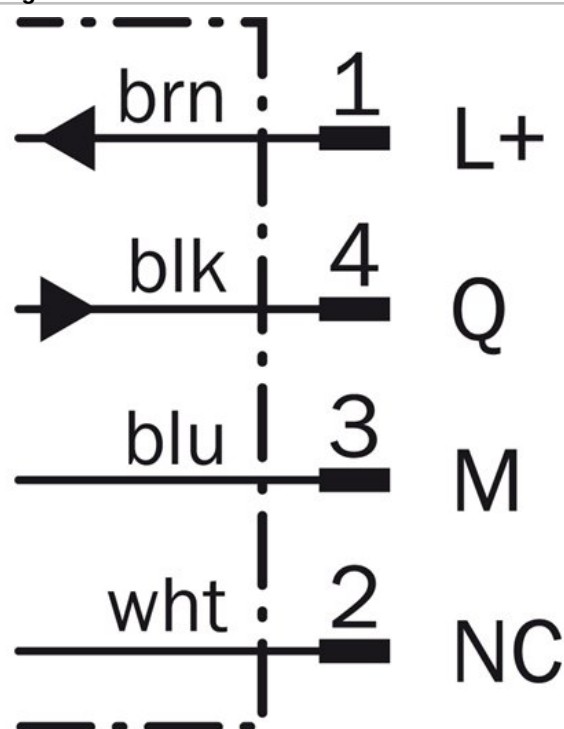


- |6| Function signal indicator
- |7| Teach-in button

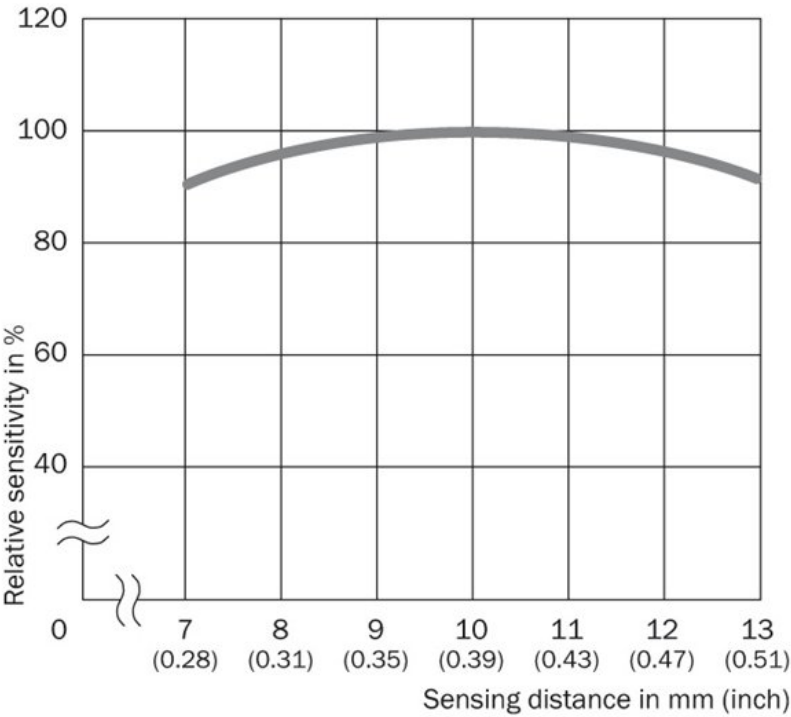
Connection type



Connection diagram



Sensing distance



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