

Czujniki koloru  
CS8

CS84-N1112



Nazwa modelu > CS84-N1112

Numer cz ci > 1028230



#### At a glance

- One (CS8-1) or four (CS8-4) colors can be saved
- 12.5 mm or 60 mm sensing distance
- Fast response time up to 85  $\mu$ s
- High color resolution
- Bar graph display shows the color quality
- Metal housing with two light exits (interchangeable)
- Extremely precise light spot and high resolution

#### Your benefits

- Identify and store up to four colors. No need to reprogram the sensor for changeovers, reducing downtime.
- High resolution colors can be matched exactly for better process reliability
- Maintains the extreme precision of the light spot, enabling a consistent object detection
- A bar graph display provides information about the color quality and detection reliability, ensuring simple process monitoring.
- Broad spectrum of color tolerances enables more flexible use
- Fast response times at high speeds for reliable detection
- Detection reliability is not affected by varying temperatures



#### !Features!

Sensing distance:	12,5 mm (Od przedniej powierzchni soczewki)
Sensing distance tolerance:	$\pm 3$ mm
Nadajnik wiata:	LED (Average service life 100,000 h at Ta = +25 °C)
Rodzaj wiata:	Green, red, Blue
rednica plamki wietnej:	4 mm x 2 mm
Długo fali:	470 nm, 525 nm, 640 nm
Kierunek plamki wietnej:	longitudinal
Wymiary (dł. x szer. x wys.):	53 mm x 30,4 mm x 80 mm

#### !Mechanics/electronics!

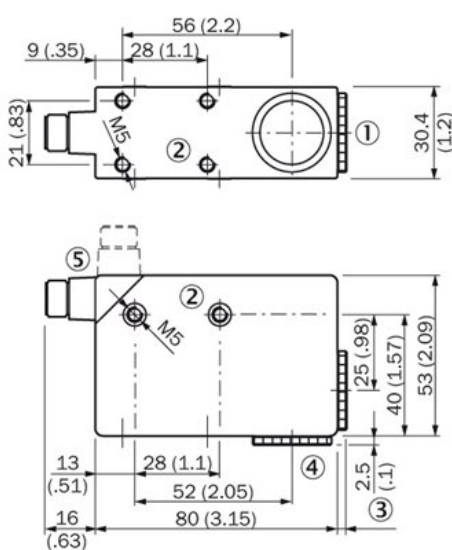
Napi cie zasilania VS:	DC 10 V ... 30 V
T nienia resztkowe:	< 5 V <sub>ss</sub> (May not exceed or fall short of V <sub>S</sub> tolerances)
Pobór pr du:	< 80 mA (Bez obciażenia)
Switching frequency:	adjustable, 0,5 kHz/1 kHz/3,5 kHz (With light/dark ratio 1:1)
Czas reakcji:	1.000 $\mu$ s/500 $\mu$ s/145 $\mu$ s (Signal transit time with resistive load), Adjustable

Switching output voltage:	NPN: HIGH = UV / LOW = < 2 V
Switching output:	NPN
Output (Channel):	4 colors
Czas retencji:	25 ms, non-volatile memory
Opó nienie czasowe:	20 ms (optional), adjustable
Connection type:	Złącze M12, 8-pinowe
VDE protection class:	II (Reference voltage 50V DC)
Układ zabezpieczenia:	A (Vs connections reverse-polarity protected) B (Wyjście Q zabezpieczone przed zwarciami) C (Tłumienie interferencji)
Rodzaj zabezpieczenia:	IP 67
Ci ar:	ca. 400 g
Housing material:	Cynkowa, odlewana
Input, teach-in (ET):	NPN: Teach: U < 2 V Run: U > 10 V ... < Uv (ET > 2 ms)
Input, blanking input (AT):	NPN: blanked: U < 2 V free-running: U > 10 V ... < Uv (AT > 200 µs)
Output current I <sub>max</sub> :	< 120 mA

### !Ambient data!

Ambient temperature:	Operation: -10 ... 55 °C Storage area: -20 ... 75 °C
Shock load:	According to IEC 60068

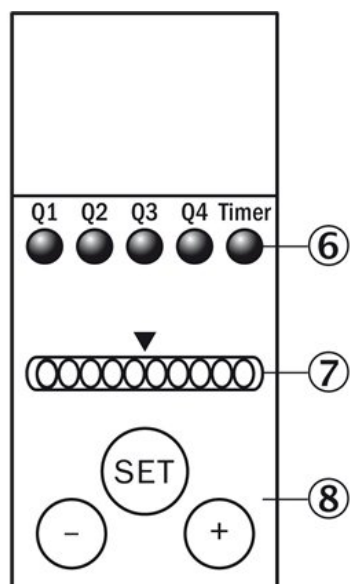
### Rysunek techniczny



All dimensions in mm (inch)

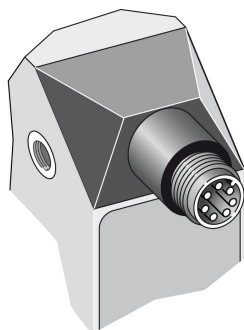
- [1] Lens (light transmission)
- [2] M5 threaded mounting hole, 5.5 mm deep
- [3] See dimensional drawing for lens
- [4] Blind screw can be replaced by lens
- [5] 5-pin, M12 x 1 plug (rotatable through 90°) or 8-pin, M1

## Adjustments



- |6| Function signal indicators (yellow)
- |7| Bar graph (green), Power on left LED
- |8| Teach-in button / "+" and "-" button

## Typ połączenia



## Schemat połączenia



**Australia**

Phone +61 3 9497 4100  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +852-2763 6966  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-999-0590  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**Republic of Korea**

Phone +82-2 786 6321/4  
E-Mail info@sickkorea.net

**Republika Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7 495 775 05 34  
E-Mail info@sick-automation.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 216 587 74 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 4 8865 878  
E-Mail info@sick.ae

**USA/Canada/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
in all major industrial nations at  
[www.sick.com](http://www.sick.com)