

Ripple	$\leq 5 V_{pp}$ ²⁾
Power consumption	$\leq 70 \text{ mA}$ ³⁾
Output type	PUSH/PULL, PNP, NPN ⁴⁾
Number of switching outputs	2 (Q1, Q2) ⁴⁾
Switching mode	Light switching ⁴⁾
Output current I_{max}	$\leq 100 \text{ mA}$
Response time	$\leq 16.7 \text{ ms}$ ⁵⁾
Switching frequency	30 Hz ⁶⁾
Analog output	-
Input	L/D = light/dark switching
Connection type	Male connector M12, 5-pin
Circuit protection	A ⁷⁾ B ⁸⁾ C ⁹⁾
Protection class	III
Weight	48 g
Housing material	Plastic, VISTAL®, Plastic, PMMA
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	$-35 \text{ °C} \dots +50 \text{ °C}$ ¹⁰⁾
Ambient storage temperature	$-40 \text{ °C} \dots +70 \text{ °C}$
Warm-up time	$< 15 \text{ min}$ ¹¹⁾
Initialization time	$< 300 \text{ ms}$
UL File No.	NRKH.E181493

1) Limit values. Operated in short-circuit protected network: max. 8 A.

2) May not exceed or fall below U_v tolerances.

3) Without load. At $V_S = 24 \text{ V}$.

4) Q1, Q2 = 2 switching thresholds, light switching.

5) Signal transit time with resistive load.

6) With light/dark ratio 1:1.

7) A = V_S connections reverse-polarity protected.

8) B = inputs and output reverse-polarity protected.

9) C = interference suppression.

10) As of $T_a = 45 \text{ °C}$, a max.load current $I_{max} = 50 \text{ mA}$ is permitted.

11) Below $T_a = -10 \text{ °C}$ a warm-up time is required.

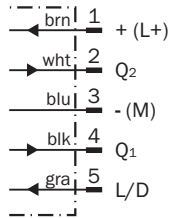
Classifications

ECl@ss 5.0	27270904
ECl@ss 5.1.4	27270904
ECl@ss 6.0	27270904
ECl@ss 6.2	27270904
ECl@ss 7.0	27270904
ECl@ss 8.0	27270904
ECl@ss 8.1	27270904

ECl@ss 9.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
UNSPSC 16.0901	39121528

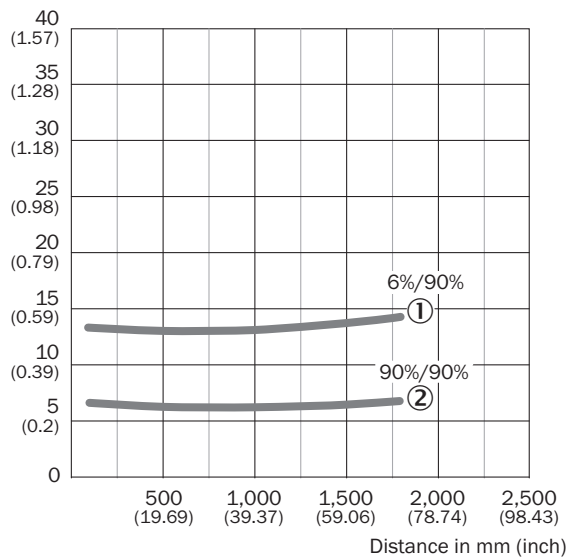
Connection diagram

Cd-286



Characteristic curve

Min. distance from object to background in mm (inch)



- ① Sensing range on black, 6% remission
- ② Sensing range on white, 90% remission