



Fotoprzełączniki W12-2 Laser, Fotoprzełącznik odbiciowy, Tłumienie tła

WT12L-2B550T01



Nazwa modelu > **WT12L-2B550T01**

Numer części > **1018582**



At a glance

- Laser protection class 1 or 2
- Precise background suppression
- Rugged sensors for industrial use
- Highly visible laser light spot for versatile object detection
- Rugged die-cast zinc housing with optional Teflon® coating
- Versatile mounting options due to dovetail mounting - mounting holes and oblong holes
- Highly visible status LEDs
- Sensing range adjustment via potentiometer

Your benefits

Precise background suppression reduces false readings caused by stray background reflections

High immunity to optical interference ensures fewer false readings and less downtime

Highly visible laser light spot provides quick and easy setup

Highly visible status LEDs simplify sensing distance adjustments and reduce installation time

Rugged metal housing (optional Teflon® coating available) requires fewer maintenance costs due to its resistance to high-pressure cleaning environments

Laser protection class 1 or 2 for eye safety

Rotatable connector provides easy installation



Cechy

Zasada działania czujnika/Sposób detekcji:	Fotoprzełącznik odbiciowy, Tłumienie tła
Wymiary (Szer. x Wys. x Głęb.):	15 mm x 49 mm x 41,5 mm
Housing design (light emission):	Prostopadłościenna
Maks. strefa działania:	30 mm ... 200 mm ¹⁾
Rodzaj światła:	Widzialne światło czerwone
Nadajnik światła:	Laser ²⁾
Light spot (distance):	0,2 mm (100 mm)
Długość fali:	650 nm
Nastawienie czułości:	Potentiometer

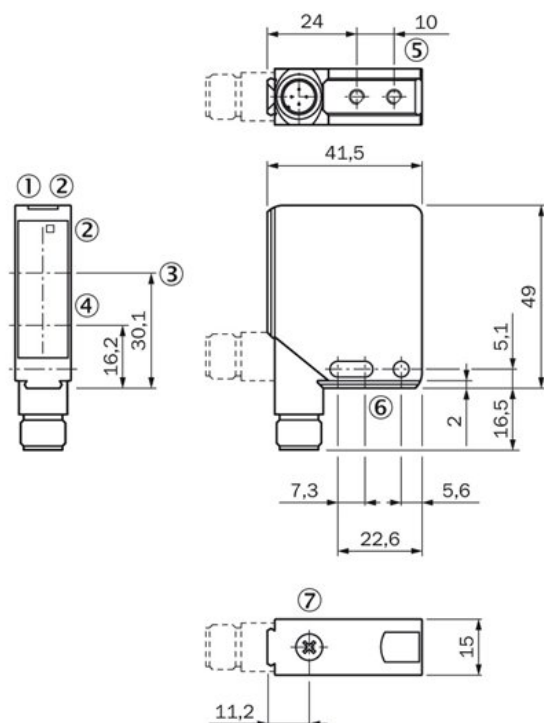
¹⁾ Objects to be sensed with 18 % reflectivity (based on DIN 5033 white standard) ²⁾ Average service life 50,000 h at Ta = +25 °C

Mechanika/elektronika

Napięcie zasilania:	10 V DC ... 30 V DC ¹⁾
Tętnienia resztkowe:	$\leq 5 V_{ss}$ ²⁾
Pobór prądu:	$\leq 55 \text{ mA}$ ³⁾
Wyjście przełączające:	NPN, Dark-switching, 0 V oder unbeschaltet, hell-schaltend, PNP, Light-switching, Selectable via L/D control wire, Uv, dark-switching
Napięcie sygnału PNP HIGH/LOW:	Uv - < 2 V, Uv/0 V, $\leq 1,5 \text{ V}$
Napięcie sygnału NPN HIGH/LOW:	Uv - < 2 V, Uv/0 V, $\leq 1,5 \text{ V}$
Output current I _{max} :	100 mA
Czas reakcji:	$\leq 200 \mu\text{s}$ ⁴⁾
Switching frequency:	2.500 Hz ⁵⁾
Sposób przyłączenia:	Wtyk M12, 5-pinowe
Układ zabezpieczenia:::	A, C, D ⁶⁾ ⁷⁾ ⁸⁾
Klasa ochrony:	II
Ciężar:	130 g
Rodzaj zabezpieczenia:	IP 67 IP 69K
Funkcje specjalne:	Teflon coated housing
Ambient operating temperature:	-10 °C ... 50 °C
Ambient storage temperature:	-25 °C ... 75 °C
UL File-No.:	UL No. NRKH.E181493, CDRH-Konform (0312012-00)

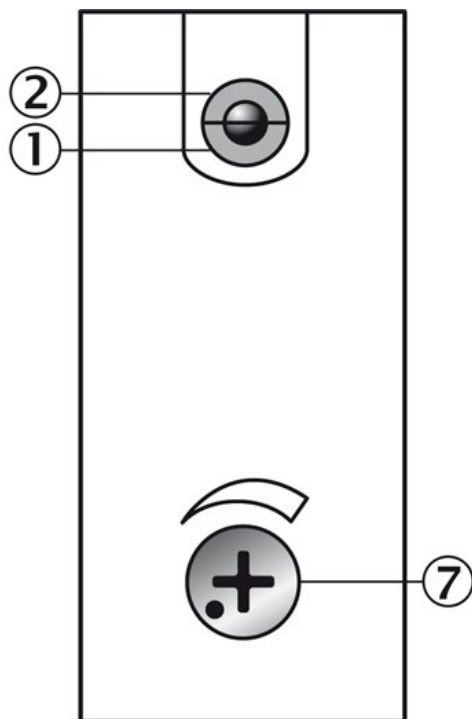
¹⁾ Limit values ²⁾ May not exceed or fall short of V_S ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ A = V_S connections reverse-polarity protected ⁷⁾ C = interference suppression ⁸⁾ D = outputs overcurrent and short-circuit protected

Dimensional drawing



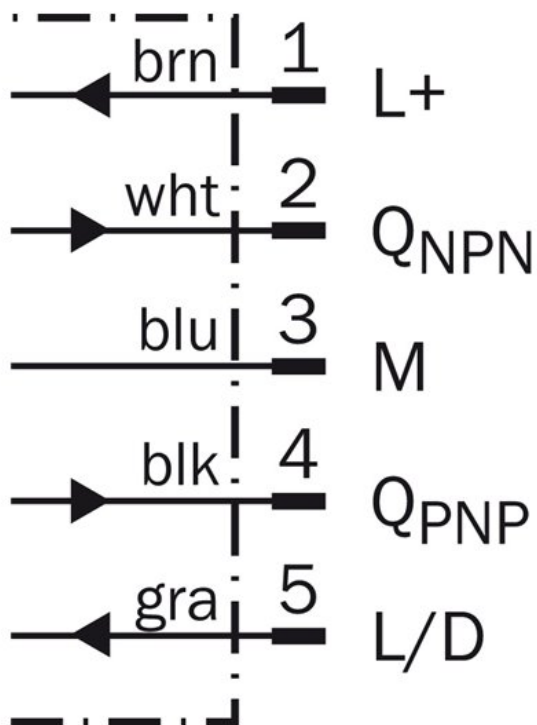
- |1| Operating indicator, green
- |2| LED reception indicator, yellow
- |3| Optical axis, receiver
- |4| Optical axis, sender
- |6| Mounting hole, Ø 4.2 mm
- |7| Sensing distance adjustment

Adjustments possible

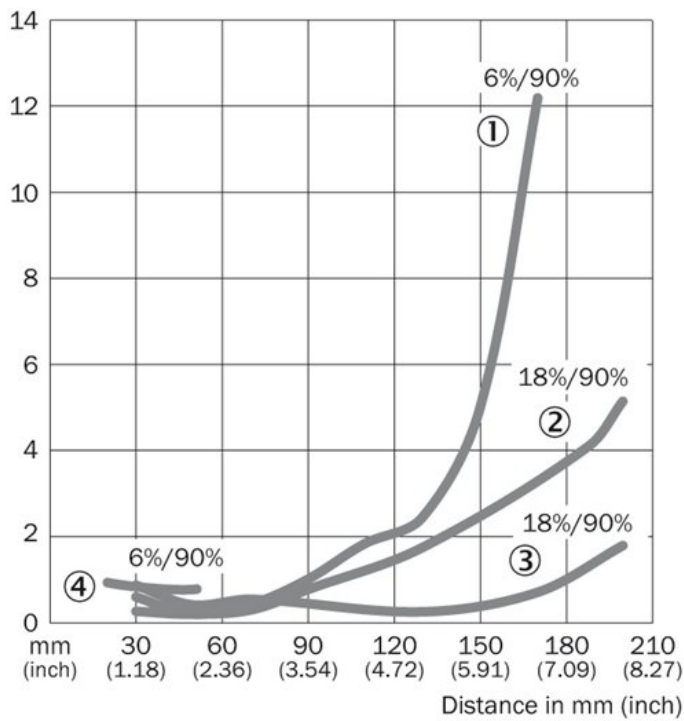


- |1| Operating indicator, green
- |2| LED reception indicator, yellow
- |7| Sensing distance adjustment

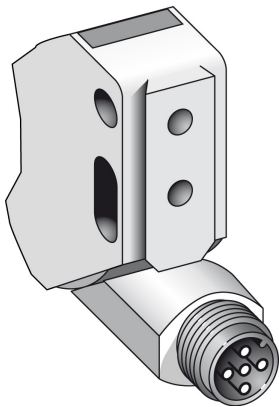
Connection diagram



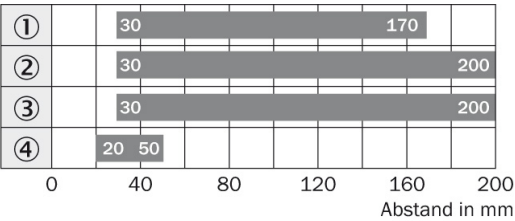
Characteristic curve



Connection type



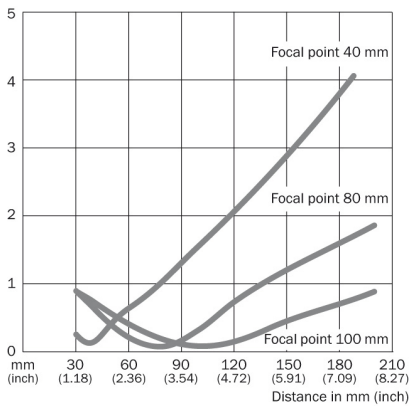
Sensing range diagram



Schaltabstand

- ① Tastbereich auf Schwarz, 6 % Remission
- ② Tastbereich auf Grau, 18 % Remission
- ③ Tastbereich auf Weiß, 90 % Remission
- ④ Tastbereich auf Schwarz, 6 % Remission, fix

Light spot size



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