

ENGLISH

Photoelectric Proximity Switch energy type Operating Instructions

Safety Specifications

- Read the operating instructions before starting operation. Connection, assembly, and settings only by competent technicians. Protect the device against moisture and soiling when operating. No safety component in accordance with EU machine guidelines.

Proper Use

The WT 160 photoelectric proximity switch is an optoelectronic sensor and is used for detection of optical, non-contact detection of objects, animals, and people.

Starting Operation

Select operating mode: L: Light-switching; if light received, output (Q) switches. D: dark-switching, if light interrupted, output (Q) switches.

WT 160-F only: Q=PNP=positive-switching; WT 160-E only: Q=NPN=negative-switching.

With following connectors only:

Connect and secure cable receptacle tension-free. Only for versions with connecting cable: The following apply for connection in B: brm=brown, blu=blue, blk=black, wht=white. Connect cables.

Use mounting holes to mount sensor to holders (supplied).

Connect photoelectric proximity switch to operating voltage (see type label).

Check application conditions such as scanning distance, object size and background, and compare with characteristic in diagram. (x=scanning distance, y=operating reserve).

Reflectance: 6%=black; 18%=gray; 90%=white (with respect to standard white according to DIN 5033).

Adjustment light reception: LED grn(=green): light reception with function reserve >1.1; LED ora(=orange): switching output Q active. Set the control knob to max.

Determine switch-on and switch-off points of the orange LED by swivelling the photoelectric switch horizontally and vertically. Select middle position. At optimum reception, the green LED lights up. If the orange LED does not change, too little or no light at all is being received. Re-adjust or clean the photoelectric proximity switch or check the operating conditions.

Setting object detection:

Remove object. The orange LED (switch output Q) must change (position A=max.) If not, turn the control knob (range 270°) in the direction of min. until the orange LED (switch output Q) changes (e.g. position A). Set the knob to min. Position the object. Turn knob in direction max. until the green LED lights up (e.g. position B).

Select middle position (e.g. position C). Check overall function. If function is o.k. the setting procedure is concluded. If the setting is not o.k. check the operating conditions and re-adjust. If position A<position B: Background influence too great. Check the operating conditions and re-adjust.

Maintenance

SICK photoelectric switches do not require any maintenance. We recommend that you clean the optical interfaces and check the screw connections and plug-in connections at regular intervals.

SICK

1102 GO

SENSICK WT 160

Country-specific contact information for SICK AG and various international branches including Austria, Belgium, Brazil, China, Czech Republic, Denmark, Finland, France, Great Britain, Italy, Japan, Korea, Netherlands, Norway, Poland, Singapore, Spain, Sweden, Switzerland, Taiwan, USA/Canada/Mexico.

We reserve the right to make changes without prior notification. Änderungen vorbehalten. Garantieerklärung dar...

Leitungen anschließen. Sensor mit Befestigungsbohrungen an Halter (beiliegend) montieren.

Lichttaster an Betriebsspannung legen (s. Typenaufdruck). Einsatzbedingungen wie Tastweite, Objektgröße und Hintergrundeinfluss überprüfen...

Justage Lichtempfang: LED grn(=grün): Lichtempfang mit Funktionsreserve >1.1; LED ora(=orange): Schaltausgang Q aktiv.

Objekt positionieren. Ein-Ausschaltpunkte der LED orange durch horizontales und vertikales Schwenken der Lichtschränke ermitteln.

Einstellung Objekterfassung: Objekt entfernen, die LED orange (Schaltausgang Q) muss wechseln (Position A=Max.). Wenn nicht, Drehknopf (Drehbereich 270°) in Richtung Min. drehen...

Wenn Position B<Position A: Mittelstellung wählen (z.B. Position C). Gesamtfunktion überprüfen. Funktion o.k., Einstellung beendet.

Wartung

SICK-Lichttaster sind wartungsfrei. Wir empfehlen, in regelmäßigen Abständen die optischen Grenzflächen zu reinigen.

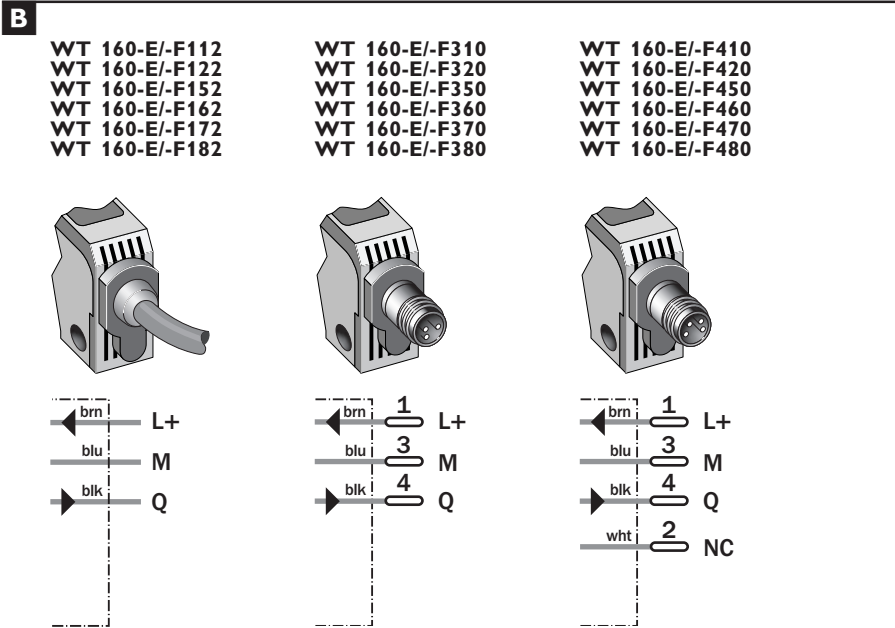
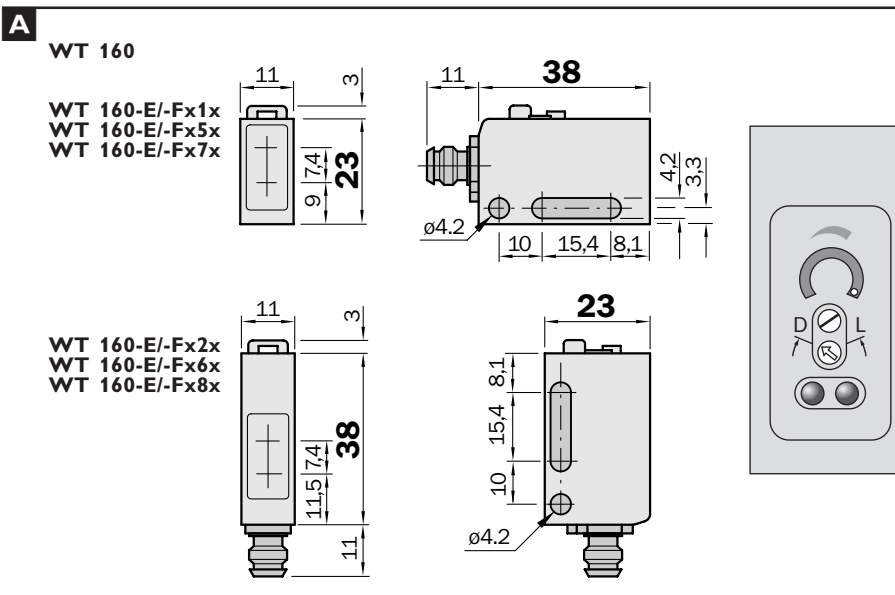


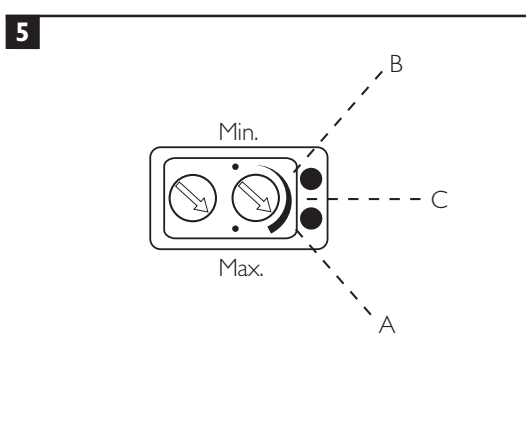
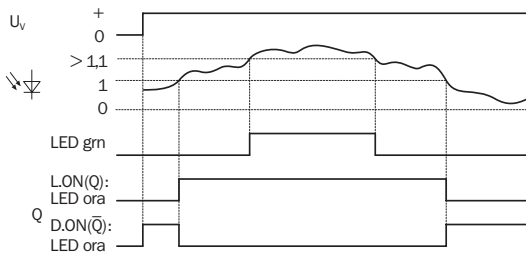
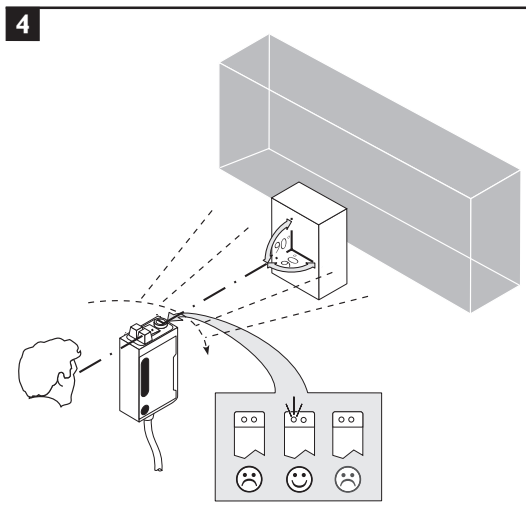
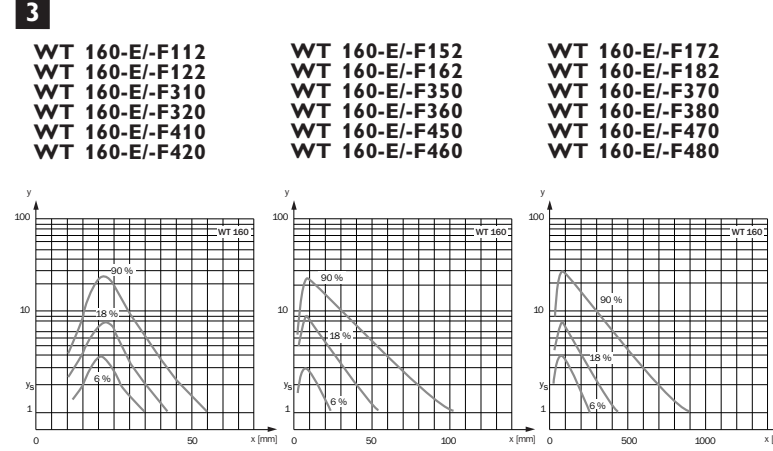
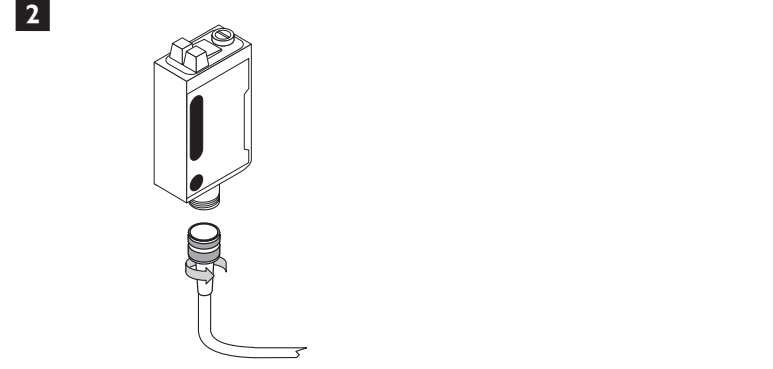
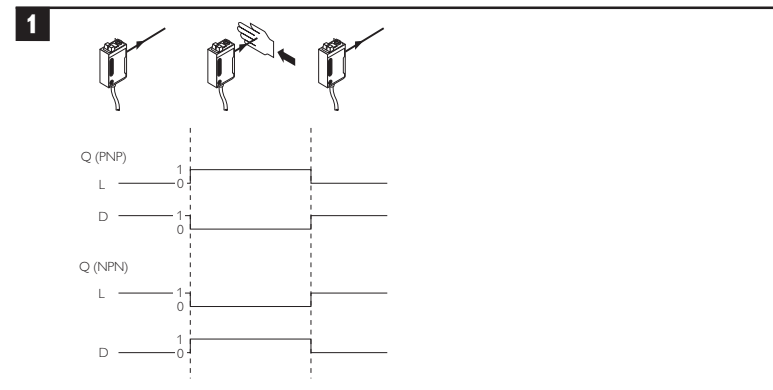
Table with 7 columns: WT 160, -E/-Fx1/2x, -E/-Fx5/6x, -E/-Fx7/8x. Rows: Scanning range TW, Light spot diameter, Distance, Sende LED, Supply voltage, Output current, Signal sequence, Response time, Enclosure rating, VDE protection class, Circuit protection, Ambient operating temperature.

Table with 7 columns: WT 160, -E/-Fx1/2x, -E/-Fx5/6x, -E/-Fx7/8x. Rows: Portata di ricezione, Impulsengte, Driftsømgivelsestemperatur, Object 90% reflection, Bei Tastweite TW, Grenzwerte, Restvolligkeit max. ±10%, Polarity protected, Inputs/outputs reverse polarity protected, Interference pulse suppression, Outputs protected against excess current and short circuits.

Table with 7 columns: WT 160, -E/-Fx1/2x, -E/-Fx5/6x, -E/-Fx7/8x. Rows: Portata di ricezione, Diametro punto luminoso, Alcance de palpación, 探测距离, Diametero punto luminoso, Lichtvlekdiameter, Área de alcance, 光点直径/距离, Distancia de palpación, Lichtvlekdiameter, Bereich, Distancia de mancha de luz.

Table with 7 columns: WT 160, -E/-Fx1/2x, -E/-Fx5/6x, -E/-Fx7/8x. Rows: Tensione di alimentazione, Corrente di uscita, Sequenza segnali min., Tempo di risposta, Tipo di protezione, Classe di protezione VDE, Commutazioni di protezione, Temperatura ambiente circostante, Voedingsspanning, Uitgangsstroom Imax., Signalenreeks min., Aanspreektijd, Beveiligingswijze, Beveiligingsklasse, Bedrijfsomgevingstemperatuur, Voedingsspanning, Uitgangsstroom Imax., Signaalreeks min., Aanspreektijd, Beveiligingswijze, Beveiligingsklasse, Bedrijfsomgevingstemperatuur.

Table with 7 columns: WT 160, -E/-Fx1/2x, -E/-Fx5/6x, -E/-Fx7/8x. Rows: Oggetto 90% remissione, Con portata TW, Valori limite, Ondulation residua max. ±10%, A = Uv-collegamenti con protez., B = entrate/uscite con protezione contro inversione di poli, C = soppressione impulsi di disturbo, D = uscite a prova di sovracorrente e corto circuito.



DEUTSCH Reflexions-Lichttaster Typ energetisch Betriebsanleitung

Sicherheitshinweise

- Vor der Inbetriebnahme die Betriebsanleitung lesen. Anschluss, Montage und Einstellung nur durch Fachpersonal. Gerät bei Inbetriebnahme vor Feuchte und Verunreinigung schützen. Kein Sicherheitsbauteil gemäß EU-Maschinenrichtlinie.

Bestimmungsgemäße Verwendung

Der Reflexions-Lichttaster WT 160 ist ein optoelektronischer Sensor und wird zum optischen, berührungslosen Erfassen von Sachen, Tieren und Personen eingesetzt.

Inbetriebnahme

Betriebsart wählen: L: hellerschaltend, bei Lichtempfang schaltet Ausgang (Q). D: dunkelschaltend, bei Lichtunterbrechung schaltet Ausgang (Q). Nur WT 160-F: Q=PNP=plusschaltend, Nur WT 160-E: Q=NPN=minusschaltend.

Nur bei den Steckerversionen:

Leitungsdose spannungsfrei aufstecken und festschrauben. Nur bei den Versionen mit Anschlussleitung: Für Anschluss in B gilt: brm=braun, blu=blau, blk=schwarz, wht=weiß.

