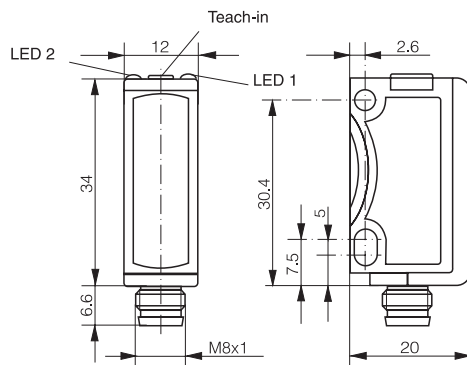


80 mm

- ✓ Miniature housing
- ✓ High precision
- ✓ Settable outputs
- ✓ Almost surface-independent detection



| OPTICAL DATA | | INTERFACE | |
|----------------------------|-------------------------|-----------------------|----------------------|
| Measurement range | 20...80 mm ¹ | Adjustment | Teach button |
| Resolution | 0.12 mm | Indicator LED, green | Supply voltage state |
| Linearity | ± 0.4 mm ² | Indicator LED, yellow | Sensing state |
| Repeatability | < 0.4 mm ² | IO-Link | No |
| Light source | LED, red 632 nm | | |
| Light spot size (distance) | □ 5 mm (50 mm) | | |

¹Object with 6%...90% reflectance (standard black to white paper)

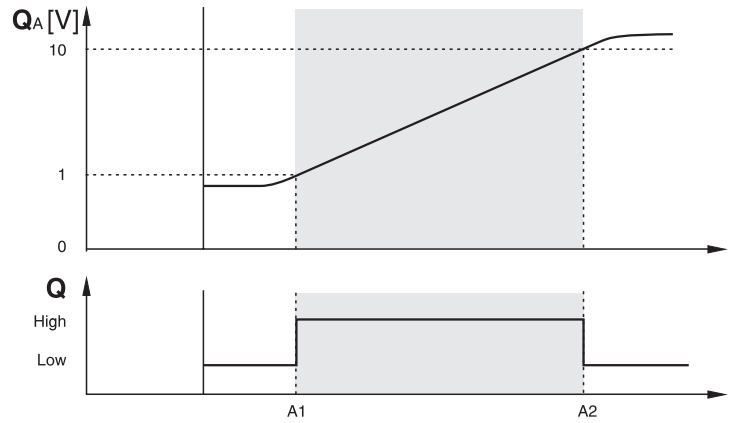
²Object with 18% reflectance (standard gray paper), constant ambient conditions

| ELECTRICAL DATA | | MECHANICAL DATA | |
|--|---|-------------------------------|---------------|
| Supply voltage range (U _b) | 13...30 VDC | Enclosure rating | IP67 & IP69K |
| Analog output | 1...10 V / max. 3 mA | Ambient temperature operation | -20...+60°C |
| Output current | ≤ 100 mA | Shock and vibration | IEC 60947-5-2 |
| Signal PNP high/low | ≤ (U _b -2.0 V) / approx. 0 V | Weight (connector version) | 10 g |
| Signal NPN high/low | Approx. U _b / ≤ 2.0 V | Weight (cable version) | - |
| Power consumption (no load) | ≤ 30 mA | Housing material | ABS |
| Response time (analog) | 0.4 ms | Window material | PMMA |
| Switching frequency | ≤ 1 kHz | Connection cable | - |
| Short circuit protection | ✓ | Connector type | M8 4-pin |
| Voltage reversal protection | ✓ | | |

MEASUREMENT RANGE

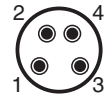
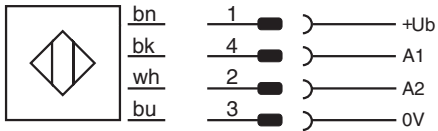
CHARACTERISTIC CURVE (INVERTIBLE & ADJUSTABLE)

| Target | Measurement range |
|--------|-------------------|
| 90% | 20...80 mm |
| 18% | 20...80 mm |
| 6% | 20...80 mm |



WIRING DIAGRAM

PIN ASSIGNMENT

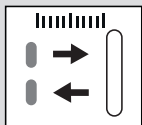


AVAILABLE TYPES

| Part number | Part reference | Polarity | Connection | Output (A1) | Output (A2) |
|-------------|-------------------|----------|--------------------|---------------|-------------|
| 628 000 693 | DTR-C23PB-TMS-139 | PNP | Connector M8 4-pin | Light/Dark-on | 1...10 V |
| 628 000 694 | DTR-C23PB-TMS-129 | NPN | Connector M8 4-pin | Light/Dark-on | 1...10 V |

Note: additional suffix can appear to indicate a revision version or a special version.

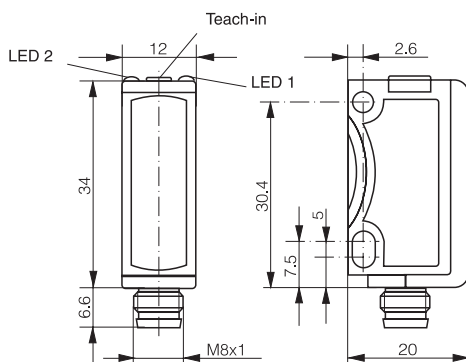
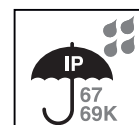
These proximity switches **must not be used** in applications where the **safety of people** is dependent on their functioning. Terms of delivery and rights to change design reserved.



80 mm

- ✓ Boîtier miniature
- ✓ Haute précision
- ✓ Sorties réglables

- ✓ Détection quasiment indépendante de la surface



| DONNÉES OPTIQUES | | INTERFACE | |
|-----------------------------------|-------------------------|-----------------------|-----------------------------------|
| Domaine de mesure | 20...80 mm ¹ | Réglage | Bouton 'teach' |
| Résolution | 0.12 mm | Indicateur LED, vert | État de la tension d'alimentation |
| Linéarité | ± 0.4 mm ² | Indicateur LED, jaune | État de détection |
| Répétabilité | < 0.4 mm ² | IO-Link | Non |
| Source lumineuse | LED, rouge 632 nm | | |
| Taille tache lumineuse (distance) | □ 5 mm (50 mm) | | |

¹Objet avec 6%...90% réflectance (papier noir...blanc standard)

²Objet avec 18% réflectance (papier gris standard), conditions ambiantes constantes

| DONNÉES ÉLECTRIQUES | | DONNÉES MÉCANIQUES | |
|--|--------------------------------------|------------------------------|---------------|
| Tension d'alimentation (U _b) | 13...30 VDC | Indice de protection | IP67 & IP69K |
| Sortie analogique | 1...10 V / max. 3 mA | Temp. ambiante d'utilisation | -20...+60°C |
| Courant de sortie | ≤ 100 mA | Chocs et vibrations | IEC 60947-5-2 |
| Signal PNP high/low | ≤ (U _b -2.0 V) / env. 0 V | Poids (version connecteur) | 10 g |
| Signal NPN high/low | env. U _b / ≤ 2.0 V | Poids (version câble) | - |
| Consommation (hors charge) | ≤ 30 mA | Matériau du boîtier | ABS |
| Temps de réponse (analogique) | 0.4 ms | Matériau de la fenêtre | PMMA |
| Fréquence de commutation | ≤ 1 kHz | Câble de raccordement | - |
| Protection contre les courts circuits | ✓ | Type de connecteur | M8 4 pins |
| Protection contre les inversions | ✓ | | |

DOMAINE DE MESURE

CARACTÉRISTIQUE DE LA COURBE (INVERSIBLE & RÉGLABLE)

| Cible | Domaine de mesure |
|-------|-------------------|
| 90% | 20...80 mm |
| 18% | 20...80 mm |
| 6% | 20...80 mm |

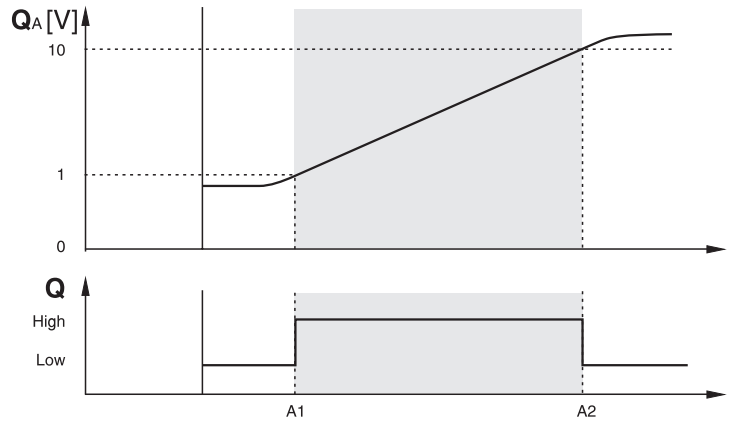
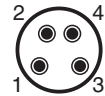
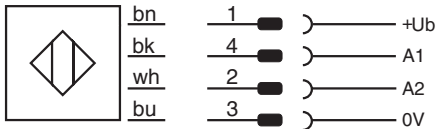


SCHÉMA DE RACCORDEMENT

ATTRIBUTION DES PINS

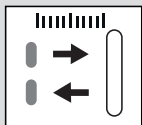


TYPES DISPONIBLES

| No. d'article | Désignation | Polarité | Raccordement | Sortie (A1) | Sortie (A2) |
|---------------|-------------------|----------|----------------------|-------------------|-------------|
| 628 000 693 | DTR-C23PB-TMS-139 | PNP | Connecteur M8 4 pins | en/sans réception | 1...10 V |
| 628 000 694 | DTR-C23PB-TMS-129 | NPN | Connecteur M8 4 pins | en/sans réception | 1...10 V |

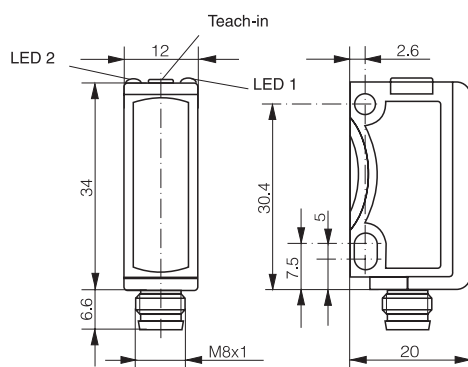
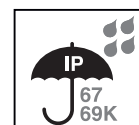
Remarque: la présence d'un suffixe supplémentaire indique une version révisée ou une version spéciale.

Ces détecteurs **ne peuvent être utilisés** dans des applications où la **protection** ou la **sécurité de personnes** est concernée. Sous réserve de modifications et de possibilités de livraison.



80 mm

- ✓ Miniaturgehäuse
- ✓ Hohe Präzision
- ✓ Ausgänge einstellbar
- ✓ Erfassung fast unabhängig der Oberfläche



| OPTISCHE DATEN | | INTERFACE | |
|-------------------------------|-------------------------|-------------------|-----------------------------|
| Messbereich | 20...80 mm ¹ | Einstellung | Teach-Taste |
| Auflösung | 0.12 mm | Anzeige-LED, grün | Versorgungsspannungs-Status |
| Linearität | ± 0.4 mm ² | Anzeige-LED, gelb | Erfassungsstatus |
| Wiederholgenauigkeit | < 0.4 mm ² | IO-Link | Nein |
| Lichtquelle | LED, rot 632 nm | | |
| Lichtfleckgrösse (Entfernung) | □ 5 mm (50 mm) | | |

¹Objekt mit 6...90% Reflexion (standardschwarzes...-weisses Papier)

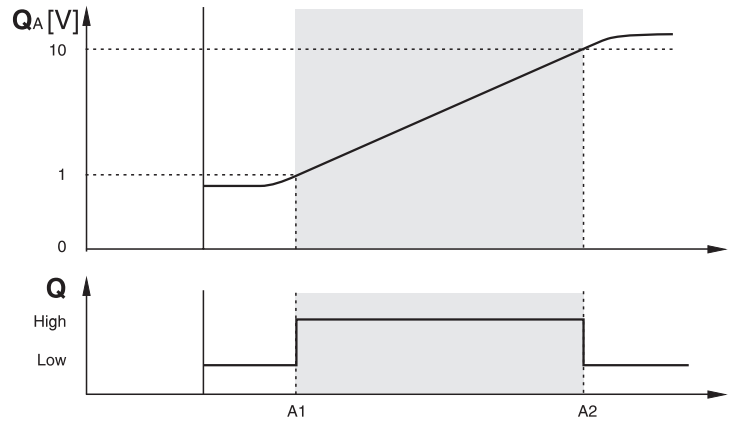
²Objekt mit 18% Reflexion (standardgraues Papier), konstante Umgebungsbedingungen

| ELECTRISCHE DATEN | | MECHANISCHE DATEN | |
|------------------------------|------------------------|-----------------------------|---------------|
| Versorgungsspannungsber (Ub) | 13...30 VDC | Schutzart | IP67 & IP69K |
| Analogausgang | 1...10 V / max. 3 mA | Umgebungstemperatur Betrieb | -20...+60°C |
| Ausgangsstrom | ≤ 100 mA | Schocks und Vibrationen | IEC 60947-5-2 |
| PNP-Signal high/low | ≤ (Ub-2.0 V) / ca. 0 V | Gewicht (Steckerversion) | 10 g |
| NPN-Signal high/low | ca. Ub / ≤ 2.0 V | Gewicht (Kabelversion) | - |
| Stromaufnahme (ohne Last) | ≤ 30 mA | Gehäusematerial | ABS |
| Ansprechzeit (analog) | 0.4 ms | Fenstermaterial | PMMA |
| Schaltfrequenz | ≤ 1 kHz | Anschlusskabel | - |
| Kurzschlusschutz | ✓ | Anschlussstecker | M8 4-Pin |
| Verpolungsschutz | ✓ | | |

MESSBEREICH

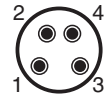
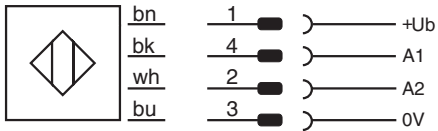
KENNLINIE (INVERTIERBAR UND EINSTELLBAR)

| Objekt | Messbereich |
|--------|-------------|
| 90% | 20...80 mm |
| 18% | 20...80 mm |
| 6% | 20...80 mm |



ANSCHLUSSSCHEMA

STECKERBELEGUNG



VERFÜGBARE TYPEN

| Art.-Nummer | Bezeichnung | Polarität | Anschluss | Ausgang (A1) | Ausgang (A2) |
|-------------|-------------------|-----------|------------------|-----------------------|--------------|
| 628 000 693 | DTR-C23PB-TMS-139 | PNP | Stecker M8 4-Pin | hell-/dunkelschaltend | 1...10 V |
| 628 000 694 | DTR-C23PB-TMS-129 | NPN | Stecker M8 4-Pin | hell-/dunkelschaltend | 1...10 V |

Hinweis: Im Fall einer überarbeiteten Version oder Sonderausführung kann die Bezeichnung auch durch eine Endung ergänzt werden.

Der Einsatz dieser Geräte in Anwendungen, wo die **Sicherheit von Personen** von deren Funktion abhängt, ist **unzulässig**. Änderungen und Liefermöglichkeiten vorbehalten.