

Photoelectric proximity switch
with background suppression
Operating instructions

Safety notes

- Not a safety component in accordance with EU Machinery Directive.
- Read the operating instructions before commissioning.
- Connection, mounting, and setting is only to be performed by trained specialists.
- When commissioning, protect the device from moisture and contamination.

Correct use

The VTB180-2 is an photoelectric proximity sensor with background suppression for the optical, non-contact detection of objects, animals and persons. The sender and receiver are integrated into a single housing unit. Due to the angled arrangement between the sender and the receiver, it is possible to blank objects that are outside the scanning range. The light beam output by the sender is reflected by the object to be detected. The receiver evaluates the reflected light.

Starting operation

- 1 Check the application conditions such as size and reflectance capacity of the object as well as background influences and compare with the sensitivity characteristic curve of the VTB180-2.
- 2 Direct scanner onto the object to be probed. In the horizontal / vertical direction, determine the on / off switching point (Display - LED orange) and select the central position.
Remove object and set sensitivity to "max."
Background is not detected: setting is completed.
Background is detected: reduce sensitivity until switching output changes. Position object.
If object is not detected, turn sensitivity control in the direction of "max." until the switching output changes.
Remove object. Switching output changes: setting is completed.
Switching output does not change: background influence too strong.
Check setting and application.

Maintenance

SICK light barriers are maintenance-free. We recommend doing the following regularly:
- Clean the external lens surfaces.
- Check the screw connections and plug-in connections.

No modifications may be made to devices.

Installation instructions

The included mounting nuts can be used to secure the different housing versions due to the M18 thread type.

SICK

8015295.XB95 0413 CV

VTB180-2

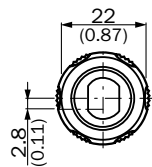
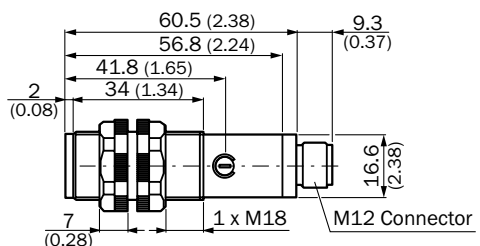
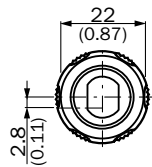
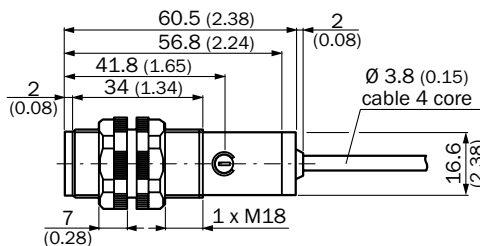
Australia Phone +61 3 9457 0600	Österreich Phone +43 (0)22 36 62 28 8-0
Belgium/Luxembourg Phone +32 (0)2 466 55 66	Norge Phone +47 67 81 50 00
Brasil Phone +55 11 3215-4900	Polka Phone +48 22 837 40 50
Canada Phone +1(952) 941-6780	România Phone +40 356 171 120
Česká Republika Phone +420 2 57 91 18 50	Russia Phone +7 495-775-05-30
China Phone +86 4000 121 000 +852-2153 6300	Schweiz Phone +41 41 619 29 39
Danmark Phone +45 45 82 64 00	Singapore Phone +65 6744 3732
Deutschland Phone +49 211 5301-301	Slovenija Phone +386 (0)1-47 69 990
España Phone +34 93 480 31 00	South Africa Phone +27 11 472 3733
France Phone +33 1 64 62 35 00	South Korea Phone +82 2 786 6321/4
Great Britain Phone +44 (0)1727 831121	Suomi Phone +358-9-25 15 800
India Phone +91-22-4033 8333	Sverige Phone +46 10 110 10 00
Italia Phone +39 02 27 43 41	Taiwan Phone +886-2-2375-6288
Japan Phone +81 (0)3 3358 1341	Türkiye Phone +90 (216) 528 50 00
Magyarország Phone +36 1 371 2680	United Arab Emirates Phone +971 (0) 4 8865 878
Niederlande Phone +31 (0)30 229 25 44	USA/Mexico Phone +1(952) 941-6780

SICK AG, Erwin-Sick-Strasse 1, D-79183 Waldkirch

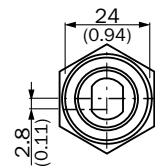
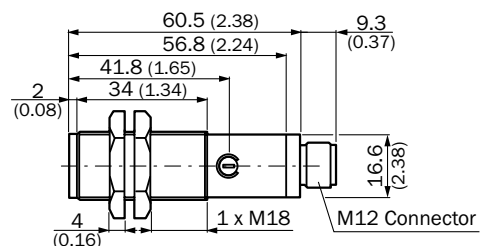
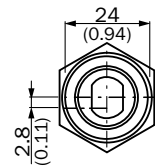
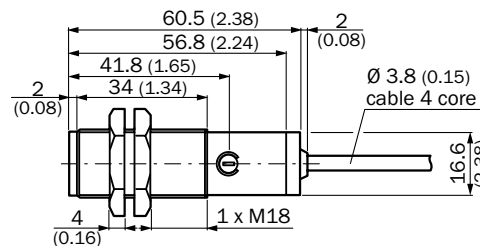
Please find detailed addresses and additional representatives and agencies in all major industrial nations at www.sick.com

BE 11839

A VTB180-2 Plastic / VTB180-2 Kunststoff



VTB180-2 Metal / VTB180-2 Metall



More representatives and agencies at www.sick.com - Subject to change without notice - The specified product features and technical data do not represent any guarantee.

Weitere Niederlassungen finden Sie unter www.sick.com - Irrtümer und Änderungen vorbehalten - Angegebene Produkteigenschaften und technische Daten stellen keine Garantieerklärung dar.

Plus de représentations et d'agences à l'adresse www.sick.com - Sujet à modification sans préavis - Les caractéristiques de produit et techniques indiquées ne constituent pas de déclaration de garantie.

Para mais representantes e agências, consulte www.sick.com - Alterações poderão ser feitas sem prévio aviso - As características do produto e os dados técnicos apresentados não constituem declaração de garantia.

Altri rappresentanti ed agenzie si trovano su www.sick.com - Contenuti soggetti a modifiche senza preavviso - Le caratteristiche del prodotto e i dati tecnici non rappresentano una dichiarazione di garanzia.

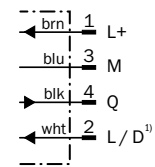
Más representantes y agencias en www.sick.com - Sujeto a cambio sin previo aviso - Las características y los datos técnicos especificados no constituyen ninguna declaración de garantía.

欲了解更多代表机构和代理商信息，请登录 www.sick.com - 如有更改，不另行通知 - 对所给出的产品特性和技术参数的正确性不予保证。

その他の営業所は www.sick.com よりご覧ください - 予告なしに変更されることがあります - 記載されている製品機能および技術データは保証を明示するものではありません。



B VTB180-2P / N424xx

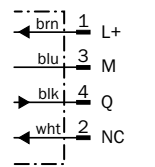


Wiring colors: 1 / brn = brown; 2 / wht = white; 3 / blu = blue; 4 / blk = black

¹) L / D, switching type: control line
L / D = + U_v: light-switching L.ON
L / D = 0 V: dark-switching D.ON

Switching type control line L / D open:
NPN = light-switching L.ON
PNP = dark-switching D.ON

VTB180-2P / N324xx

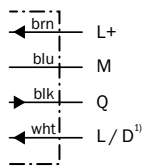


Adernfarben: 1 / brn = braun; 2 / wht = weiß; 3 / blu = blau; 4 / blk = schwarz

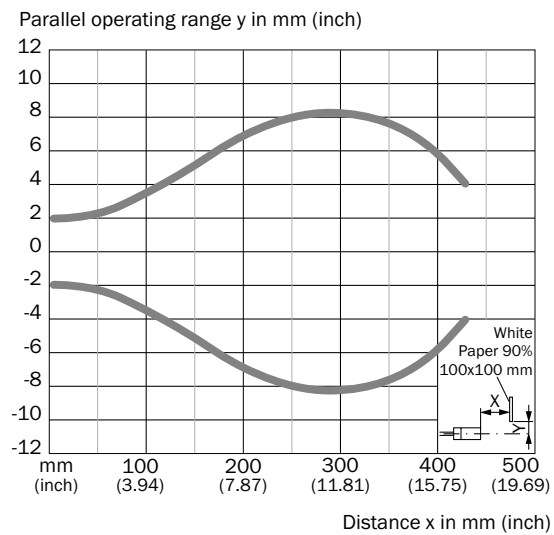
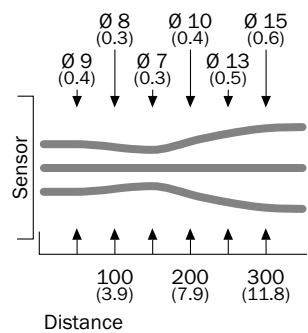
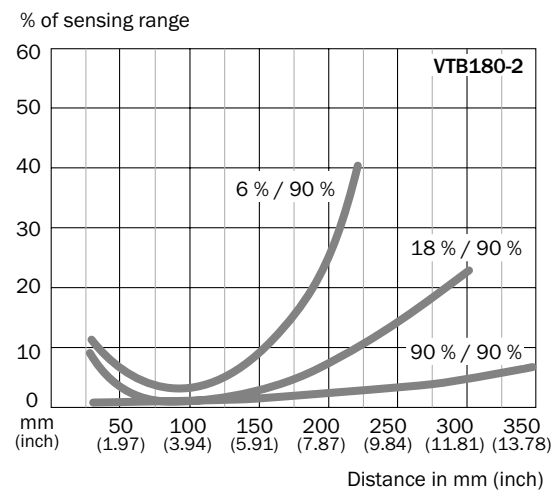
¹) L / D, Steuerleitung: Schaltart
L / D = + U_v: hellschaltend L.ON
L / D = 0 V: dunkelschaltend D.ON

Steuerleitung L / D offen:
NPN = hellschaltend L.ON
PNP = dunkelschaltend D.ON

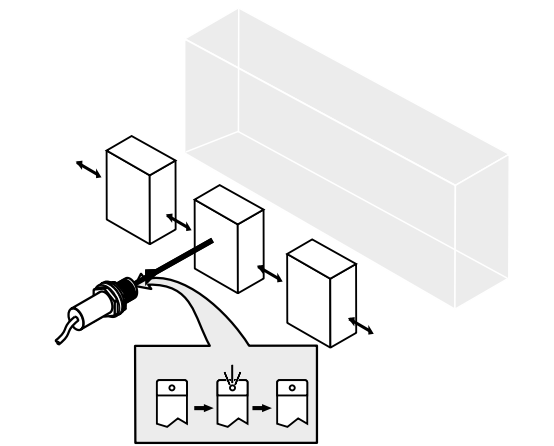
VTB180-2P / N411xx



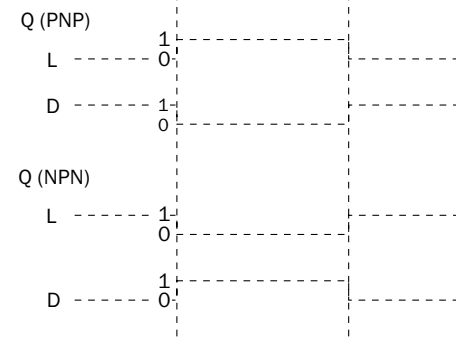
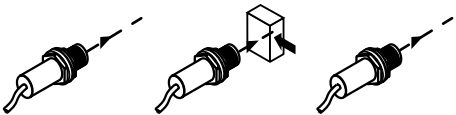
1



2a VTB180-2



2b VTB180-2



2c VTB180-2

