

ENGLISH

Photoelectric Reflex Switch

with Teach-in

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.
- For use in NFPA 79 applications only. UL-listed adapters providing field wiring leads are available. Enclosure type 1.

Proper Use

The WL4S-3 Inox photoelectric reflex switch is an opto-elec-tronic sensor and is used for optical, non-contact detection of objects, animals, and people. A reflector is required for operation.

Starting Operation

- Mount reflector at a right angle to the sensor. Light spot must be clearly detectable on the reflector.
- Set sensitivity: There are 2 operating modes:
 - a) Maximum sensitivity:** Sensor is directed to the open air and not to a reflector – hold the teach button pressed down > 2 ... < 8 s – maximum sensitivity is set.
 - b) Switching threshold is at 50 % light attenuation:** Sensor must have an uninterrupted view of the reflector; no object may be in the light beam. Keep the teach button pressed down > 2 ... < 8 s – 50 % threshold is set.
- LED indicator blinks:** Sensor still works perfectly, but it is shortly before the switch-off threshold. Clean the lens surfaces, align the sensor/reflector better or check the range according to the reserve/range chart. (View mode is in operating mode 10 % switching threshold switched off.)

Maintenance

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

WL4S-3 Inox

Australia
Phone +61 (3) 9457 0600

Austria
Phone +43 (0) 2236 62288-0

Belgium/Luxembourg
Phone +32 (0) 2 466 55 66

Brazil
Phone +55 11 3215-4900

Canada
Phone +1 905.771.1444

Czech Republic
Phone +420 2 57 91 18 50

Chile
Phone +56 (2) 2274 7430

China
Phone +86 20 2882 3600

Denmark
Phone +45 45 82 64 00

Finland
Phone +358-9-25 15 800

France
Phone +33 1 64 62 35 00

Germany
Phone +49 (0) 2 11 53 01

Hong Kong
Phone +852 2153 6300

Hungary
Phone +36 1 371 2680

India
Phone +91-22-6119 8900

Israel
Phone +972-4-6881000

Italy
Phone +39 02 27 43 41

Japan
Phone +81 3 5309 2112

Malaysia
Phone +603-8080 7425

Mexico
Phone +52 (472) 748 9451

Netherlands
Phone +31 (0) 30 229 25 44

New Zealand
Phone +64 9 415 0459

Norway
Phone +47 67 81 50 00

Poland
Phone +48 22 539 41 00

Romania
Phone +40 356-17 11 20

Russia
Phone +7 495 283 09 90

Singapore
Phone +65 6744 3732

Slovakia
Phone +421 482 901 201

Slovenia
Phone +386 591 78849

South Africa
Phone +27 (0)11 472 3733

South Korea
Phone +82 2 786 6321

Spain
Phone +34 93 480 31 00

Sweden
Phone +46 10 110 10 00

Switzerland
Phone +41 41 619 29 39

Taiwan
Phone +886-2-2375-6288

Thailand
Phone +66 2 645 0009

Turkey
Phone +90 (216) 528 50 00

United Arab Emirates
Phone +971 (0) 4 88 65 878

United Kingdom
Phone +44 (0)17278 31121

USA
Phone +1 800.325.7425

Vietnam
Phone +85 6744 3732

SICK AG, Erwin-Sick-Strasse 1, D-79183 Waldkirch
Please find detailed addresses and further locations in all major industrial nations at www.sick.com

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Sujet à modification sans préavis
Alterações poderão ser feitas sem prévio aviso
Med forbehold for ændringer og fejl
Contenuti soggetti a modifiche senza preavviso
Wijzigingen en correcties voorbehouden
Sujeito a cambio sin previo aviso
如有更改, 不另行通知

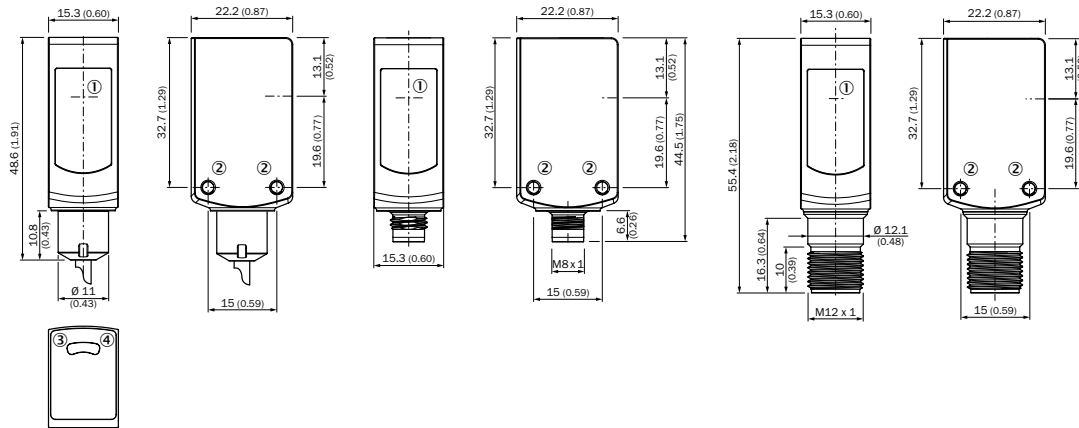


SICK

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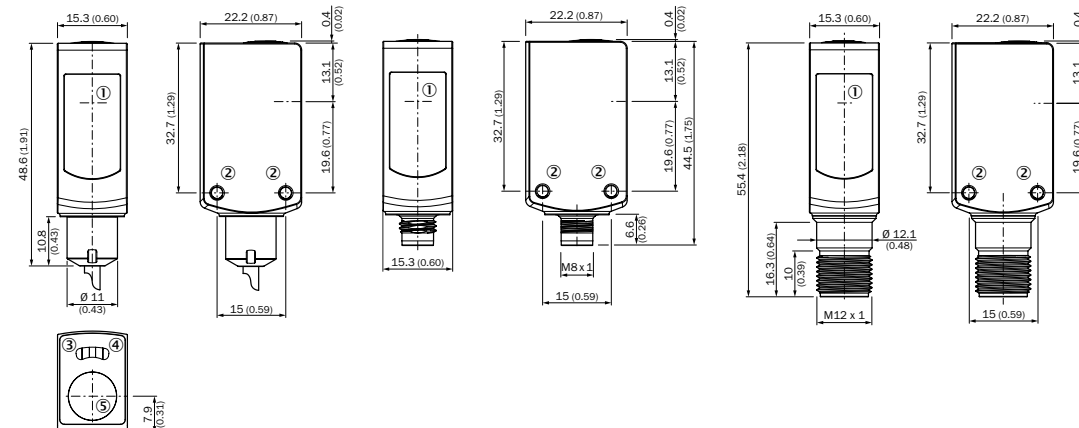
WL4S-3Xxxx0V



All dimensions in mm (inch)

- ① Middle of optical axis sender/receiver
- ② Mounting threads M3 2x
- ③ Display LED, yellow; status light received
- ④ Display LED, green; operating voltage active
- ⑤ Teach-in button

WL4S-3Xxxx2V

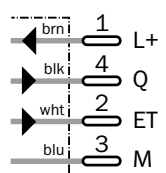
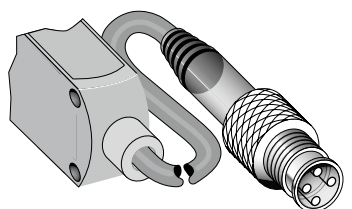


All dimensions in mm (inch)

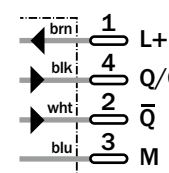
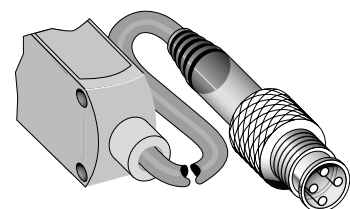
B WL4S-3V

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

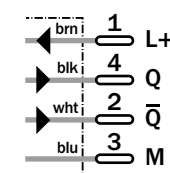
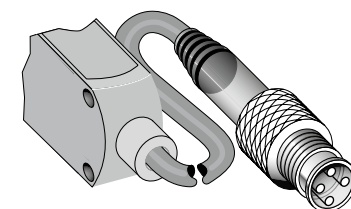
Teach via cable



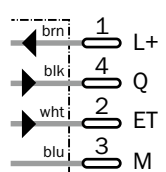
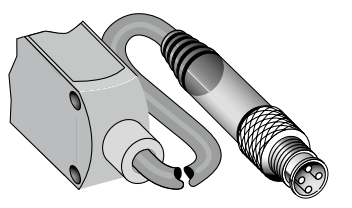
Teach-in button + IO-Link



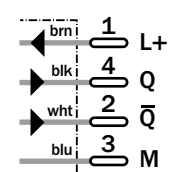
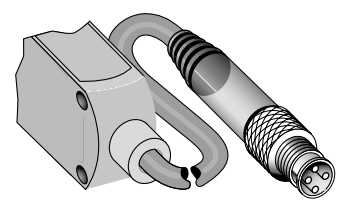
Teach-in button or fix adjustment



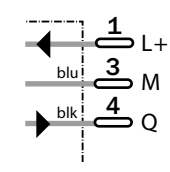
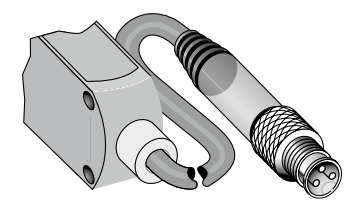
Teach via cable



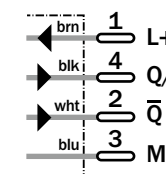
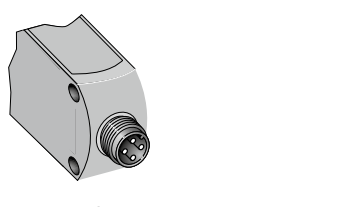
Teach-in button or fix adjustment



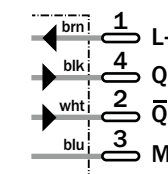
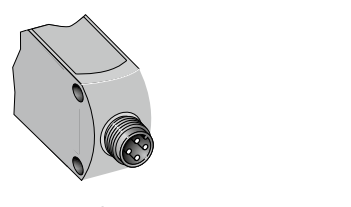
Teach-in button or fix adjustment



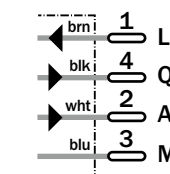
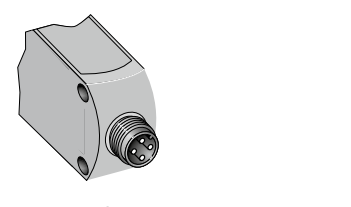
Teach via cable



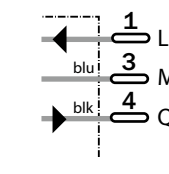
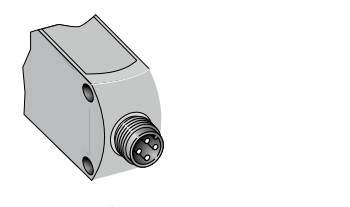
Teach-in button + IO-Link



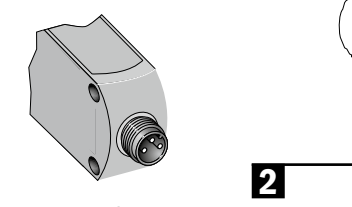
Teach-in button or fix adjustment



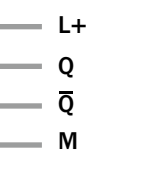
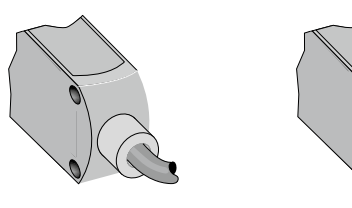
Teach-in button + alarm output



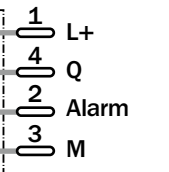
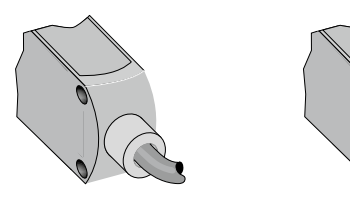
Teach-in button or fix adjustment



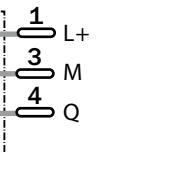
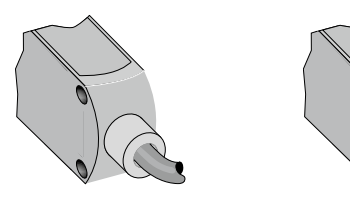
Teach via cable



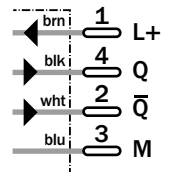
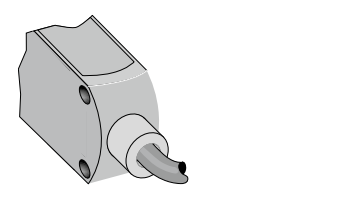
Teach-in button or fix adjustment



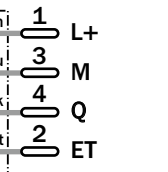
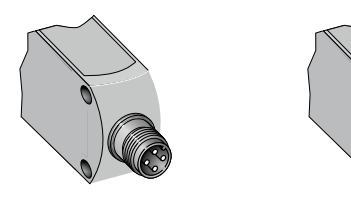
Teach-in button + alarm output



Teach-in button or fix adjustment

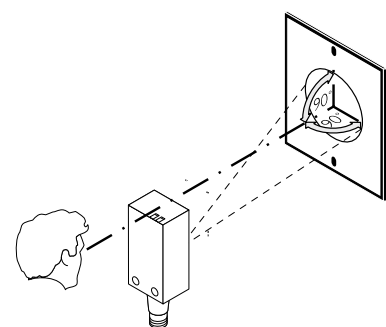


Teach-in button or fix adjustment

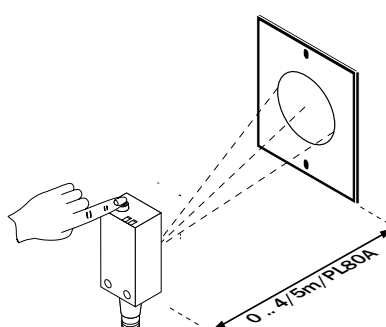


Teach via cable

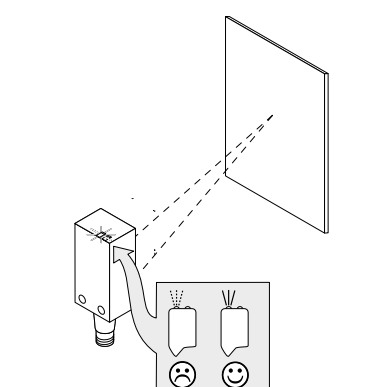
1



2



3



FRANÇAIS
Barrière réflex <p>avec apprentissage</p> Instructions de Service

Conseils de sécurité

- Lire les Instructions de Service avant la mise en marche.
- Installation, raccordement et réglage ne doivent être effectués que par du personnel qualifié.
- Lors de la mise en service, protéger l’appareil de l’humidité et des saletés.
- N’est pas un composant de sécurité au sens de la directive européenne concernant les machines. Pour utilisation dans des applications NFPA 79 uniquement. Des adaptateurs repertoriés UL fournissant des fils de câblage de terrain sont disponibles. Enclosure type 1.

Utilisation correcte

La barrière réflex WL4S-3 Inox est un capteur optoélectronique qui s’utilise pour la saisie optique de choses, d’animaux et de personnes sans aucun contact. Pour son fonctionnement, il est nécessaire de disposer d’un réflecteur.

Mise en service

- Installer le réflecteur perpendiculairement au capteur. Le spot lumineux doit être clairement visible sur le réflecteur.
- Réglage sensibilité : Il existe 2 modes de fonctionnement :
 - Sensibilité maximale** : Le capteur regarde dans le vide, pas vers un réflecteur – Maintenir appuyé le bouton Apprentissage > 2 ... < 8 s – on a réglé sur la sensibilité maximale.
 - Le seuil de commutation est de 50 % de l’atténuation de la lumière** : Le capteur doit avoir une bonne vue du réflecteur, il ne doit y avoir aucun objet dans la trajectoire du rayon lumineux. Maintenir appuyé le bouton Apprentissage > 2 ... < 8 s – le seuil de commutation est réglé sur 50 %. La LED de réception jaune est allumée.**Réglage au moyen du câble (ET) :** Appliquer L+ (PNP) ou M (NPN) respectivement au câble blanc ou à la broche 2 pendant > 2 ... < 8 s en fonction de la sensibilité souhaitée.
- La LED témoins clignote** : Le capteur fonctionne encore de façon parfaite, mais se trouve juste devant le seuil de débranchement. Nettoyer les surfaces optiques, améliorer l’orientation du capteur/réflecteur ou contrôler la portée conformément au diagramme Réserve/Portée. (Le mode clignotement est débranché dans le mode de fonctionnement Seuil de commutation à 10 %.)

Maintenance

Les détecteurs de lumière SICK ne nécessitent pas d’entretien. Nous recommandons, à intervalles réguliers
- de nettoyer les surfaces optiques,
- de contrôler les assemblages vissés et les connexions à fiche et à prise.

PORTUGUÉS
Barreira de luz com reflexão por espelho <p>com teach-in</p> Instruções de operação
Instruções de segurança <ul style="list-style-type: none">Antes do comissionamento dev ler as instruções de operação. Conexões, montagem e ajuste devem ser executados exclusivamente por pessoal devidamente qualificado. Guardar o aparelho ao abrigo de umidade e sujidade. Não se trata de elemento de segurança segundo a Diretiva Máquinas da União Europeia. Somente para o uso em aplicações NFPA 79. Estão disponíveis adaptadores listados pela UL com fios de cabeamento de campo. Enclosure type 1.
Utilização devida <p>A barreira de luz com reflexão por espelho WL4S-3 Inox é um sensor opto-eletrônico que é utilizado para a análise ótica, sem contato, de objetos, animais e pessoas. O seu funcionamento requer um refletor.</p>
Comissionamento <ol style="list-style-type: none">Montar o refletor perpendicularmente ao sensor. O ponto luminoso deve ser nitidamente reconhecível no refletor. Ajuste da sensibilidade: Existem 2 modos operacionais: <ol style="list-style-type: none"> sensibilidade máxima: o sensor está livre e não sobre um refletor – manter apertado o botão Teach > 2 ... < 8 s – sensibilidade máxima está ajustada. o limiar de comutaçção situa-se em 50 % de atenuação lumínosa: O sensor deverá ter visão aberta sobre o refletor, nenhum objeto poderá estar no trajeto do raio luminoso. Manter apertado o botão Teach > 2 ... < 8 s – o limiar 50 % está ajustado. Ajuste mediante condutor (ET): Aplicar condutor branco ou PIN 2 a L+ (PNP) ou a M (NPN) segundo a sensibilidade desejada > 2 ... < 8 s.
LED de indicação pisca : <p>Sensor ainda funciona perfeitamente, mas encontra-se pouco antes do limiar de desconexão. Limpar as superfícies ópticas, alinhar melhor o sensor/refletor ou verificar o alcance de acordo com o diagrama de reserva/de alcances. (o modo de visão, no modo operacional, está desconectado 10 % do limiar de desconexão.)</p>

ITALIANO
Sensore luminoso a riflessione <p>con teach-in</p> Istruzioni per l'uso

ITALIANO
Sensore luminoso a riflessione <p>con teach-in</p> Istruzioni per l'uso

Avvertimenti di sicurezza

- Leggere prima della messa in esercizio.
- Allacciamento, montaggio e regolazione solo da parte di personale qualificato.
- Durante la messa in esercizio proteggere da umidità e sporczia.
- Non componente di sicurezza secondo la Direttiva macchine EN. Solo per utilizzo in applicazioni NFPA 79. Sono disponibili adattatori elencati in UL per terminali dei cablaggi di campo. Enclosure type 1.

Impiego conforme allo scopo

Il sensore luminosa a riflessione WL4S-3 Inox è un sensore optoelettronico che viene impiegato per il rilevamento ottico a distanza di oggetti, animali e persone. Per l’esercizio è necessario un riflettore.

Messa in esercizio

- Montare il riflettore ad angolo retto rispetto al sensore. Il punto luminoso deve essere chiaramente visibile sul riflettore.
- Impostazione della sensibilità

Ci sono 2 modi operativi:

 - Sensibilità massima**: il sensore è rivolto verso un'area libera, non verso un riflettore – tenere premuto il tasto Teach > 2 ... < 8 s – è impostata la sensibilità massima.
 - Soglia di commutazione al 50 % di smorzamento luminoso**: Il sensore deve avere la vista libera fino al riflettore, senza nessun oggetto nel fascio luminoso. Tenere premuto il tasto Teach > 2 ... < 8 s – è impostata la soglia del 50 %. Si accende il LED giallo di ricezione.**Impostazione via cavo (ET)**: a seconda della sensibilità desiderata > 2 ... < 8 s collegare il cavo bianco o risp. PIN 2 a L+ (PNP) o risp. M (NPN).
- La spia LED lampeggia**: il sensore lavora ancora senza problemi, ma è prossimo alla soglia di disinserzione. Pulire le superfici ottiche, correggere l’orientamento del sensore/riflettore o controllare la portata sulla base del diagramma di riserva/portata (nel modo operativo con soglia di commutazione del 10 % la modalità Sguardo è disinserita.)

Manutenzione

Le barriere luminose SICK non richiedono manutenzione. Si consiglia
- di pulire regolarmente le superfici ottiche limite,
- di controllare regolarmente gli avvitamenti e i collegamenti a spina.

ESPANOL
Barrera de luz de reflexión <p>con teach-in</p> Manual de Servicio

ESPANOL
Barrera de luz de reflexión <p>con teach-in</p> Manual de Servicio

Observaciones sobre seguridad

- Leer el Manual de Servicio antes de la puesta en macrcha.
- Conexión, montaje y ajuste solo por personal técnico.
- A la puesta en marcha proteger el aparato contra humedad y suciedad.
- No es elemento constructivo de seguridad según la Directiva UE sobre maquinaria. Para uso exclusivo en aplicaciones NFPA 79. Hay disponibles adaptadores con homologación UL para el cableado de campo. Enclosure type 1.

Empleo para usos debidos

La barrera de luz de reflexión WL4S-3 Inox es un sensor optoelectrónico para la detección óptica y sin contacto de objetos, animales y personas. Para el servicio es necesario un reflector.

Puesta en marcha

- Montar el reflector en ángulo recto con el sensor. El punto luminoso debe poderse apreciar claramente en el reflector.
- Ajuste de sensibilidad: Hay 2 modos de servicio:
 - Sensibilidad máxima**: El sensor mira hacia afuera y no hacia un reflector – mantener pulsado el botón Teach > 2 ... < 8 s – la sensibilidad máxima queda ajustada.
 - La onda de conmutación se halla en un 50 % de amortiguación de luz**: El sensor debe tener vista libre hacia el reflector, no debe hallarse objeto alguno en el recorrido del haz luminoso. Mantener pulsado el botón Teach > 2 ... < 8 s – está ajustado un umbral del 50 %. Se enciende el LED amarillo de recepción.**Ajuste por medio de conductor (ET)**: Colocar el conductor blanco o el PIN 2 de acuerdo a la sensibilidad deseada > 2 ... < 8 s en L+ (PNP) o en M (NPN).

- Parpadea el LED de indicación**: El sensor trabaja aún correctamente, pero se halla a poca distancia del umbral de desconexión. Limpiar las superficies de la óptica, ajustar mejor el sensor/reflector o controlar el alcance de acuerdo al diagrama de reserva/Alcance. (El modo visual está desconectado en modo de servicio en un 10 % del umbral de conmutación.)

Mantenimiento

Los palpadore de luz SICK están exentos de mantenimiento. Recomendamos a intervalos regulares
- limpiar las superficies ópticas
- controlar las prensaestopas y las bases de conexión.

汉语
镜面反射型光电器 <p>Teach-in</p> 操作规程

- 使用前阅读操作規程。
- 只允许专业人员进行接线、安装及调整。
- 使用时应防潮、防尘、防腐。
- 按照 EU-机器规程先保护元件。只用于 NFPA 79 应用。可提供 UL 列出的适配器（带现场配线引线）。Enclosure type 1。

參量使用

WL4S-3 Inox 镜面反射型光电器是一种光斑传感器 该传感器可对物体、动物和人进行无接触的 光学的检测。该装置的工作状态需要 — 反射片(附带)

投入使用

- 安装反射器，使其与传感器成直角。在反射器上必须能够清楚识别光斑。
- 灵敏度设置：有 2 个操作方式：a) 灵敏度最大：传感器不对向反射器，而是对向空处- 按住 Teach 键超> 2... < 8 s - 最大灵敏度就已设定。黄色受光灯亮起 b) 开关阈在光线弱化的 50 % 处: 传感器与反射器之间不应有遮挡。光路中不应有物件放置。按住 Teach 键超 > 2 ... < 8 s ? 50 % 的阈值便已设定。黄色受光灯亮起。通过导线设置 (ET): 将白色号线或与所需灵敏度 > 2 ... < 8 s 相适宜的 PIN 2 与 L+ (PNP) 或与 M (NPN) 连接。
- 指示灯闪亮: 传感器还在正常运行，但已接近关闭。需清洁光镜表面，更好地校正传感器和反射器。还需根据有关储备及有效距离的图示检测有效距离。（闪动模式已在操作模式 10 % 开关阈处关闭。）

维护

SICK-漫反射型光电开关全部免维护 我们建议，
- 定期地清洁光学反光面，
- 检查螺丝拧紧和插头。