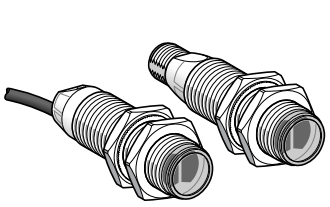
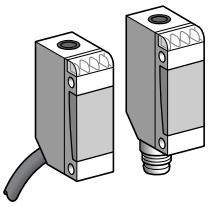
# XUB / XUM / XUK / XUX

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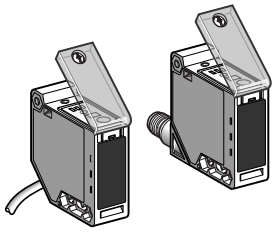
**(en) Osiconcept photo-electric sensors**
**(fr) Détecteurs photo électriques Osiconcept**
**(de) Photoelektronische Sensoren Osiconcept**



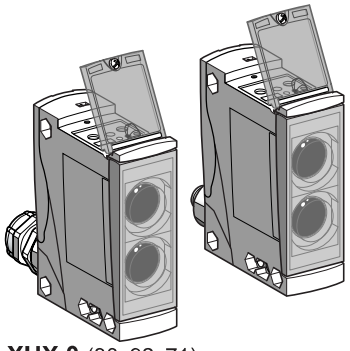
**XUB 0** (M18x64)



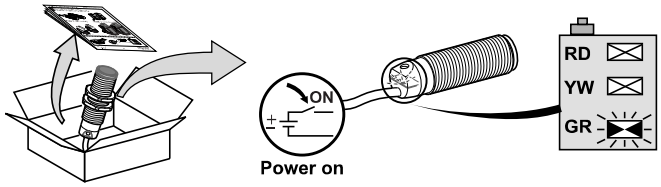
**XUM 0** (12x34x20)



**XUK 0** (18x50x50)



**XUX 0** (30x92x71)




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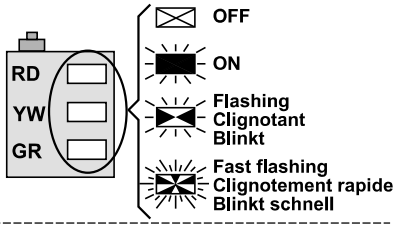
1/2

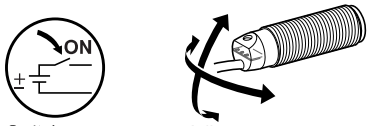
Schneider Electric

## Key / Légende / Legende

| | | | | |
|---|---|---|---|---|
| **RD** | Red | Rouge | Rot | **STAB** |
| **YW** | Yellow | Jaune | Gelb | **OUT** |
| **GR** | Green | Vert | Grün | **RUN** |

**RD-Fault /** Défaut RD / RD-Fehler
**YW-Output /** Sortie YW / YW-Ausgang
**GR-Power supply** (teach status)
**Alimentation GR** (état apprentissage)
**GR-Stromzufuhr** (Teach-Status)

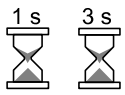



Switch on
Mise sous tension
Einschalten



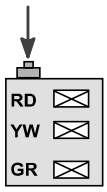
Adjust position
Réglage position
Positionseinstellung



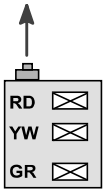

Action duration
Durée de l'action
Dauer d. Aktion



Object
Objet
Objekt




Press button
Appui bouton
Taste drücken




Release button
Relacher le bouton
Taste loslassen

**(en) ⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**
- Disconnect all power before servicing equipment.

**Failure to follow these instructions will result in death or serious injury.**

**(fr) ⚠ DANGER**

**RISQUE D'ELECTROCUTION, D' EXPLOSION OU D' ARC ELECTRIQUE**
- Coupez l'alimentation avant de travailler sur cet appareil.

**Le non-respect de cette instruction entraînera la mort ou des blessures graves.**

**(de) ⚠ GEFAHR**

**STROMSCHLAG-, EXPLOSIONS- ODER LICHTBOGENGEFAHR**
- Vor dem Arbeiten an dem Gerät dessen Stromversorgung abschalten.

**Die Nichtbeachtung dieser Anweisung wird den Tod oder schwere Körperverletzung zur Folge haben.**

(en) Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

(fr) Les équipements électriques doivent être installés, exploités et entretenus par un personnel qualifié. Schneider Electric n'assume aucune responsabilité des

## (en) Troubleshooting help Defects - Causes - Remedies

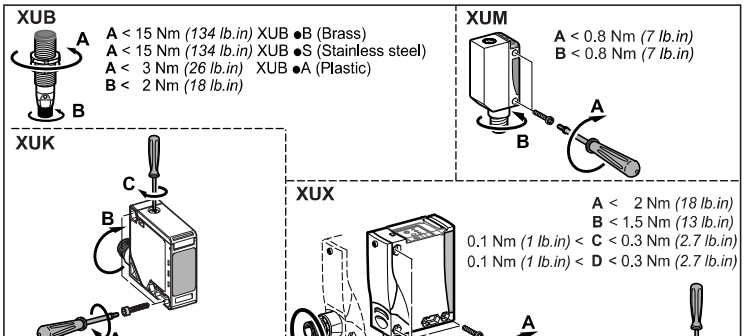
| Status | Diagnostic | Causes | Actions |
|---|---|---|---|
| **Setting** | | | |
| Green | Init mode or press < 3 s | – | Press > 3 s |
| Red | Environment is incorrect | Range limit (Reflex, obstacle) | Review the alignment conditions + restart learning (press > 3 s) |
| Red | Alignment is incorrect | Off limit | Review the setting |
| | Setting limit | Range limit | Review the setting |
| **Operation** | | | |
| Red | Fine setting failed | Object is absent | Position the object or reset (press > 9 s) |
| | Fine setting failed | Object is too clear | Reset (press > 9 s) |
| | Fine BGS setting failed | Too close to background | Reset (press > 9 s) |
| | Fine direct REFLEX setting failed (Proxi) | Insufficient threshold level | Reset (press > 9 s) |
| Red | Clogging | "Lens polluted" | Optical cleaning; preventive maintenance |

## (fr) Aide aux dépannages Défaut - Causes - Remèdes

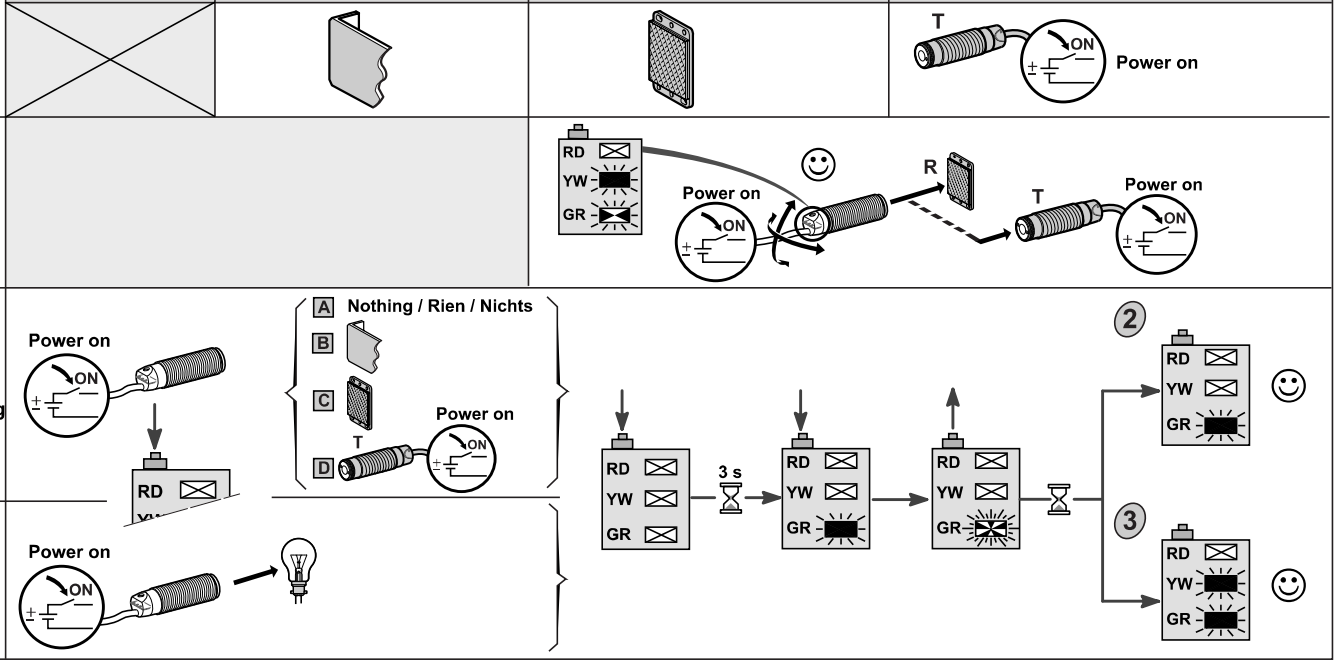
| Etat | Diagnostic | Causes | Actions |
|---|---|---|---|
| **Réglage** | | | |
| Vert | Mode Init ou appui < 3 s | – | Appui > 3 s |
| Rouge | Environnement incorrect | Limite de portée (Réflex, Barrage) | Revoir conditions d'alignement + Relance apprentissage (appui > 3 s) |
| Rouge | Alignement incorrect | Hors limite | Revoir montage |
| | Limite de réglage | Limite de portée | Revoir réglage |
| **Fonctionnement** | | | |
| Rouge | Echec réglage fin | Objet absent | Positionner l'objet ou reset (appui > 9 s ) |
| | Echec réglage fin | Objet trop transparent | Reset (appui > 9 s ) |
| | Echec réglage fin EFFAR | Trop près de l'arrière plan | Reset (appui > 9 s ) |
| | Echec réglage fin Réflexion direct (Proxi) | Niveau de seuil insuffisant | Reset (appui > 9 s ) |
| Rouge | Encrassement | "Pollution lentille" | Nettoyage optique, maintenance préventive |

## (de) Hilfe zur Störungsbeseitigung Fehler - Ursache - Abhilfe

| Status | Diagnose | Ursache | Aktionen |
|---|---|---|---|
| **Einstellung** | | | |
| Grün | Modus Init oder < 3 s drücken | – | > 3 s drücken |
| Rot | Umgebung nicht OK | Tastweite erreicht (Reflex, Sperre) | Ausrichtungsbedingungen überprüfen + Teach-in neu starten (> 3 s drücken) |
| Rot | Falsche Ausrichtung | Außerhalb der Tastweite | Montage überprüfen |
| | Eistellungsgrenze | Tastweite erreicht | Einstellung berprüfen |
| **Betrieb** | | | |
| Rot | Fehler Feineinstellung | Kein Objekt | Objekt positionieren oder Reset (> 9 s drücken) |
| | Fehler Feineinstellung | Objekt zu transparent | Reset (> 9 s drücken) |
| | Fehler Feineinstellung BGS | Zu nahe am Hintergrund | Reset (> 9 s drücken) |
| | Fehler Feineinstellung direkte Reflexion (Proxi) | Schwellenhöhe unzureichend | Reset (> 9 s drücken) |
| Rot | Verschmutzung | "Verschmutzung der Linse" | Optik reinigen, vorbeugende Wartung |



| Sensing mode<br>Mode de détection<br>Erfassungsmodus | Diffuse / Proximité / Reflexions-Lichttasters | | Polarized reflex / Reflex polarisé<br>Polarisierte Reflex | Thru-beam / Barrage / Lichtschranke |
|---|---|---|---|---|
| | **A** Diffuse mode<br>Mode proximité<br>Direkter (diffuser) Modus | **B** Background suppression*<br>Effacement arrière plan*<br>Ausblendung Hintergrund* | **C** With reflector **R**<br>Avec reflecteur **R**<br>Mit Reflektor **R** | **D** With transmitter **T**<br>Avec émetteur **T**<br>Mit Transmitter **T** |




* In this mode **B**, steps 2 and 3 are mandatory and the overwriting function does not exist.

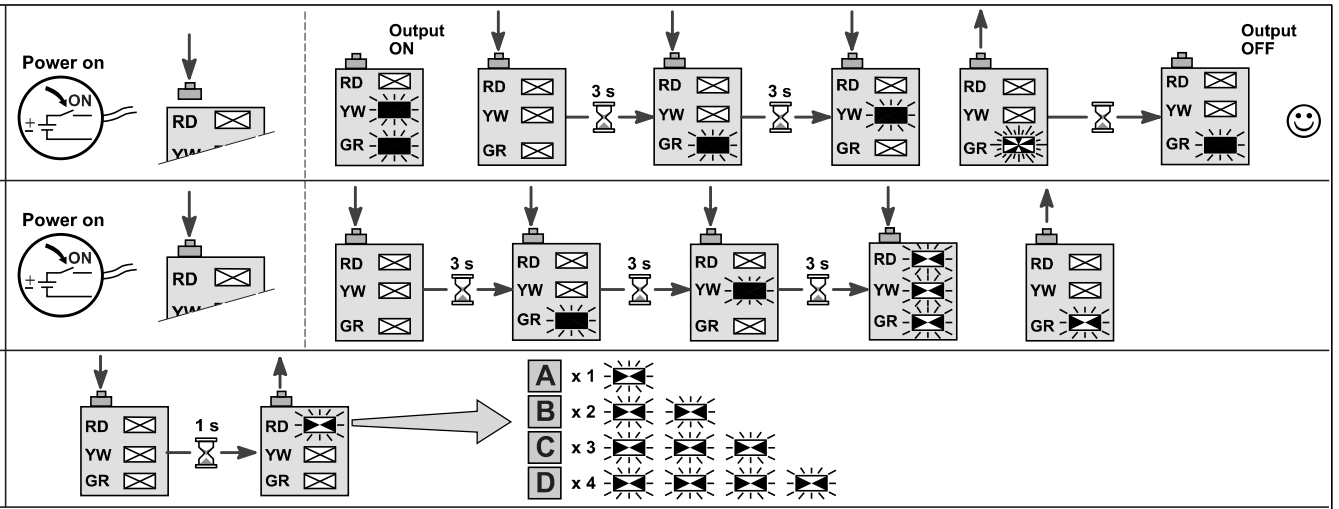
* Dans ce mode **B**, les étapes 2 et 3 sont obligatoires et la fonction d'encrassement n'existe pas.

* In diesem Modus **B**, sind die Etappen 2 und 3 obligatorisch. Die Verschmutzungsfunktion existiert nicht.

In modes **C** and **D**, step 3 is optional, except for transparent materials.

Dans les modes **C** et **D**, l'étape 3 est optionnelle sauf matériaux transparents.

In den Modi **C** und **D**, ist die Etappe 3 optional, außer bei transparenten Objekten.




**Version M12/M8 / Version M12/M8**
**Version M12/M8**

**M12 connector**



3 (-)
1 (+)
4 OUT/Output
2 Alarm or Beam break input *(1)*

**M 8 connector**



3 (-)
1 (+)
4 OUT/Output
2 Beam break input *(1)*

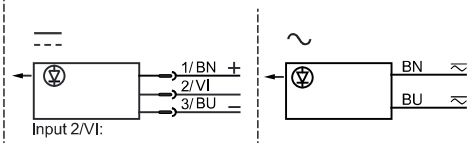
*(1) Beam break input on thru-beam transmitter only.*

**Version L2 / Version L2**
**Version L2**

**Pre-cabled, PNP/NPN**
(–) BU (Blue)
(+) BN (Brown)
OUT/Output BK (Black)
Alarm / WH (White)
Beam break input *(1)* VI (Violet)

**Pre-cabled, relay output**
(≂) BU (Blue),
(≂) BN (Brown)
Relay common/GY (Grey)
NO BK (Black)
NC WH (White)

**Transmitter for the thru-beam mode**
**Emetteur de la fonction barrage**
**Transmitter der Lichtschrankenfunktion**




Input 2/VI:
- not connected: *beam active*
- connected to –: *beam broken*

**XUX: Terminal block T 16 version**
**Version bornier T 16**
**Version Klemmleiste T 16**

| PNP / NPN ⎓ | | Relay output ≂ | |
|---|---|---|---|
| Terminal | | Terminal | |
| 1 | + | 1 | ≂ |
| 2 | – | 2 | ≂ |
| 3 | Output | 3 | NO |
| 4 | Alarm | 4 | Relay common |
| | | 5 | N/C |

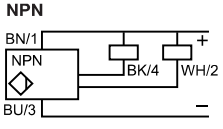
| Transmitter ⎓ | | Transmitter ≂ | |
|---|---|---|---|
| Terminal | | Terminal | |
| 1 | + | 1 | ≂ |
| 2 | – | 2 | ≂ |
| 3 | Beam broken input *(1)* | | |

*(1) Beam break input on thru-beam transmitter only.*

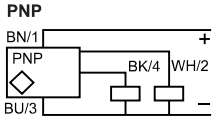
**XUK - XUX**



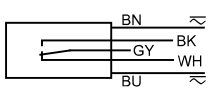

**NPN**



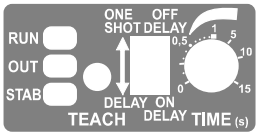

**PNP**




**Relay output**




**XUK 0ARCTL2**

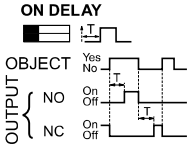



**XUK 0AKSAL2 / M12**

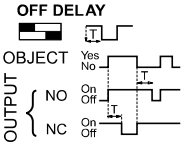



**TIMER**

**ON DELAY**



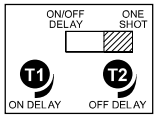

**OFF DELAY**



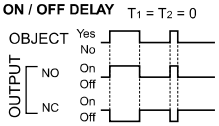

**ONE SHOT**
(XUK0… AC/DC only)



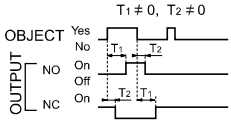

**XUX 0ARCTT16 únicamente / Solo XUX 0ARCTT16 / Apenas XUX 0ARCTT16**
Opción: **temporización** / Opzione: **Temporizzazione** / Opção: **Temporização**



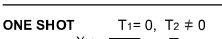

**ON / OFF DELAY** $T_1 = T_2 = 0$



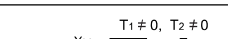

$T_1 \neq 0,\ T_2 \neq 0$




**ONE SHOT** $T_1 = 0,\ T_2 \neq 0$



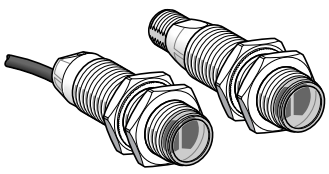

$T_1 \neq 0,\ T_2 \neq 0$



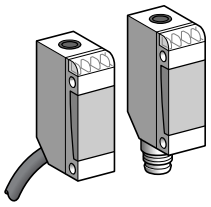
# XUB / XUM / XUK / XUX

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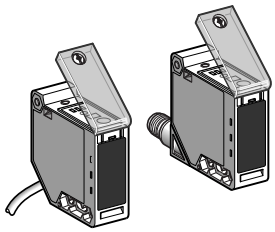
**(es) Detectores fotoélectricos Osiconcept**
**(it) Interruttori fotoelettrici Osiconcept**
**(pt) Detectores fotoélectricos Osiconcept**



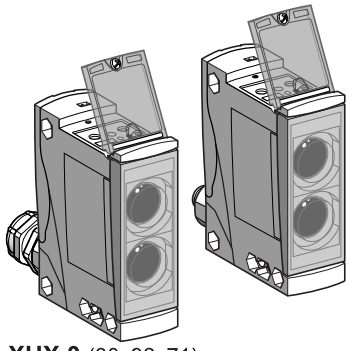
**XUB 0** (M18x64)



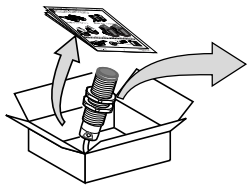
**XUM 0** (12x34x20)

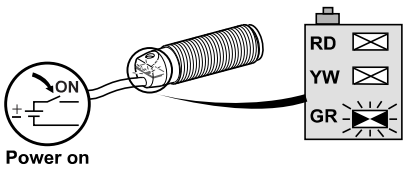


**XUK 0** (18x50x50)



**XUX 0** (30x92x71)






Power on

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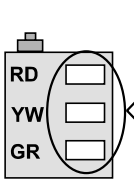
2/2

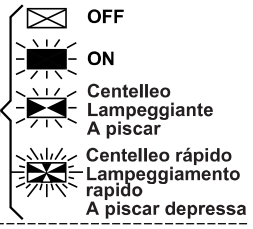
Schneider Electric

## Leyendas / Legenda / Legenda

| | | | | |
|---|---|---|---|---|
| **RD** | Rojo | Rosso | Vermello | **STAB** |
| **YW** | Amarillo | Giallo | Amarelo | **OUT** |
| **GR** | Verde | Verde | Verde | **RUN** |

Defecto RD / RD-Guasto / RD-Falha
Salida YW / YW-Uscita / YW-Saída
Alimentación GR (estado aprendizaje)
GR-Alimentazione (apprendimento)
GR-Fonte de alimentação (estado ensinar)



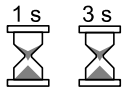




Puesta bajo tensión
Accensione
Ligado



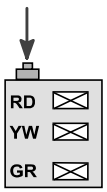
Ajustar la posición
Regolazione posizione
Posição de regulação



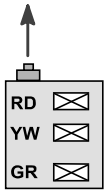

Duración de la acción
Durata dell'azione
Tempo de acção



Objeto
Oggetto
Objecto




Pulsar el botón
Premere il pulsante
Premir botão




Liberar el botón
Rilasciare il pulsante
Libertar botão

**(es) ⚠ PELIGRO**

**RIESGO DE ELECTROCUCIÓN, EXPLOSIÓN O ARCO ELÉCTRICO**
- Desconecte toda alimentaciónantes de realizar el servicio.

**Si no se respetan estas instrucciones, se producirán graves daños corporales o la muerte.**

**(it) ⚠ PERICOLO**

**RISCHIO DI SCOSSA ELETTRICA, DI ESPLOSIONE O DI OFTALMIA DA FLASH**
- Scollegare l'apparecchio dalla presa di corrente prima di qualsiasi intervento.

**La mancata osservanza di questa istruzione comporta gravi rischi per la vita e l'incolumità personale.**

**(pt) ⚠ PERIGO**

**RISCO DE CHOQUE ELÉCTRICO, EXPLOSÃO OU FAÍSCA**
- Desligue a alimentação antes de trabalhar neste aparelho.

**O não respeito destas instruções causará a morte ou lesões graves.**

(es) Sólo el personal de servicio cualificado podrá instalar, utilizar, reparar y mantener el equipo eléctrico. Schneider Electric no asume las responsabilidades que pudieran surgir como consecuencia de la utilización de este material.

(it) Le apparecchiature elettriche devono essere installate, usate e riparate solo da personale qualificato. Schneider Electric non assume nessuna responsabilità per

## (es) Ayuda a la reparación de averías Fallos - Causas - Soluciones

| Estado | Diagnóstico | Causas | Acciones |
|---|---|---|---|
| **Ajuste** | | | |
| Verde | Modo Init o pulsar < 3 s | – | (pulsar > 3 s) |
| Rojo | Entorno incorrecto | Límite de alcanze (Reflex, Obstáculo) | Revisar las conditiones de Alineación + rearrancar el aprendizaje (pulsar > 3 s) |
| Rojo | Alineación incorrecta | Fuera de límite | Revisar el ajuste |
| | Límite de ajuste | Límite de alcanze | Revisar el ajuste |
| **Funcionamiento** | | | |
| Rojo | Fracaso de ajuste fino | Objeto ausente | Posicionar el objeto o reinicializar (pulsar > 9 s) |
| | Fracaso de ajuste fino | Objeto demasiado transparente | Reinicialización (pulsar > 9 s) |
| | Fracaso de ajuste fino BGS | Demasiado cercano del fondo | Reinicialización (pulsar > 9 s) |
| | Fracaso de ajuste Reflex directo | Nivel de umbral insuficiente | Reinicialización (pulsar > 9 s) |
| Rojo | Ensuciamiento | "Lente contaminada" | Limpieza óptica; mantenimiento preventivo |

## (it) Soluzione dei problemi Guasto - Causa - Soluzione

| Stato | Diagnostica | Cause | Azioni |
|---|---|---|---|
| **Regolazione** | | | |
| Verde | Modalità Iniz o pressione < 3 s | – | Pressione > 3 s |
| Rosso | Ambiente incorretto | Limite di portata (Riflessione, Sbarramento) | Rivedere le condizioni di allineamento + Riavvio apprendimento (pressione > 3 s) |
| Rosso | Allineamento errato | Fuori limite | Rivedere il montaggio |
| | Limite di regolazione | Limite di portata | Rivedere la regolazione |
| **Funzionamento** | | | |
| Rosso | Regolazione fine fallita | Oggetto mancante | Posizionare l'oggetto o reset (pressione > 9 s) |
| | Regolazione fine fallita | Oggetto troppo trasparente | Reset (pressione > 9 s) |
| | Regolazione fine BGS fallita | Troppo vicino allo sfondo | Reset (pressione > 9 s) |
| | Regolazione fine fallita Riflessione diretta (Proxi) | Livello di soglia insufficiente | Reset (pressione > 9 s) |
| Rosso | Ostruzione | "Lente sporca" | Pulizia ottica, manutenzione preventiva |

## (pt) Ajuda às avarias Falhas - Causas - Soluções

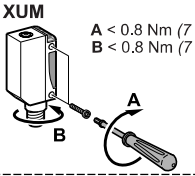
| Estado | Diagnóstico | Causas | Acções |
|---|---|---|---|
| **Regulação** | | | |
| Verde | Modo Inic ou pressão < 3 s | – | Pressão > 3 s |
| Vermello | Ambiente incorrecto | Limite de alcance (Reflexo, Barragem) | Rever condições de alinhamento + Relançar aprendizagem (pressão > 3 s) |
| Vermello | Alinhamento incorrecto | Fora do limite | Rever montagem |
| | Limite de regulação | Limite de alcance | Rever regulação |
| **Funcionamento** | | | |
| Vermello | Falha regulação fina | Objecto ausente | Posicionar o objecto ou reset (pressão > 9 s) |
| | Falha regulação fina | Objecto demasiado transparente | Reset (pressão > 9 s) |
| | Falha regulação fina BGS | Demasiado próximo do pano-de-fundo | Reset (pressão > 9 s) |
| | Falha regulação fina Reflexão directa (Proxi) | Nível de limiar insuficiente | Reset (pressão > 9 s) |
| Vermello | Obstrução | "Poluição lente" | Limpeza óptica, manutenção preventiva |

**XUB**



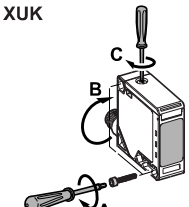

**A** < 15 Nm *(134 lb.in)* XUB ●B (Brass)
**A** < 15 Nm *(134 lb.in)* XUB ●S (Stainless steel)
**A** < 3 Nm *(26 lb.in)* XUB ●A (Plastic)
**B** < 2 Nm *(18 lb.in)*

**XUM**

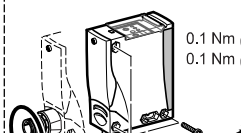



**A** < 0.8 Nm *(7 lb.in)*
**B** < 0.8 Nm *(7 lb.in)*

**XUK**




**XUX**



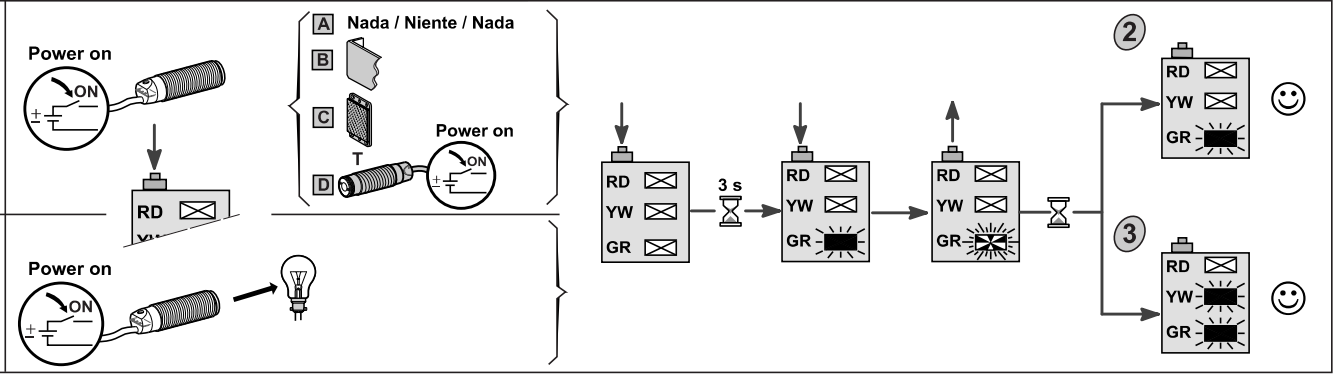

**A** < 2 Nm *(18 lb.in)*
**B** < 1.5 Nm *(13 lb.in)*
0.1 Nm *(1 lb.in)* < **C** < 0.3 Nm *(2.7 lb.in)*
0.1 Nm *(1 lb.in)* < **D** < 0.3 Nm *(2.7 lb.in)*

| Modo de detección<br>Modo di rilevamento<br>Modo de detecção | Proximidad / Riflessione diretta / Proximidade | | REFLEX polarizado / Riflessione polarizzata / Reflexo polarizado | Barrera / Sbarramento / Barragem |
|---|---|---|---|---|
| | **A** Modo proximidad<br>Modo prossimità<br>Modo proximidade | **B** Borrado de fondo*<br>Soppressione di sfondo*<br>Supressão pano-de-fundo* | **C** Con reflector **R**<br>Con catarifrangente **R**<br>Com reflector **R** | **D** Con emisor **T**<br>Con Trasmettitore **T**<br>Com transmissor **T** |

**1** Alineamiento / Allineamento / Alinhamento

**2** Ajuste estándar / Regolazione standard / Regulação standard

**3** Ajuste fino del objeto / Regolazione fine / Regulação de objectos finos




* En este modo **B**, las etapas 2 y 3 deben aplicarse y la función de sobregrabación no existe.

* In questa modalità **B**, le fasi 2 e 3 sono obbligatorie e la funzione di ostruzione non esiste.

* Neste modo **B**, as etapas 2 e 3 são obrigatórias e a função de obstrução não existe.

En los modos **C** y **D**, a etapa 3 es opcional, salvo en caso de materiales transparentes.

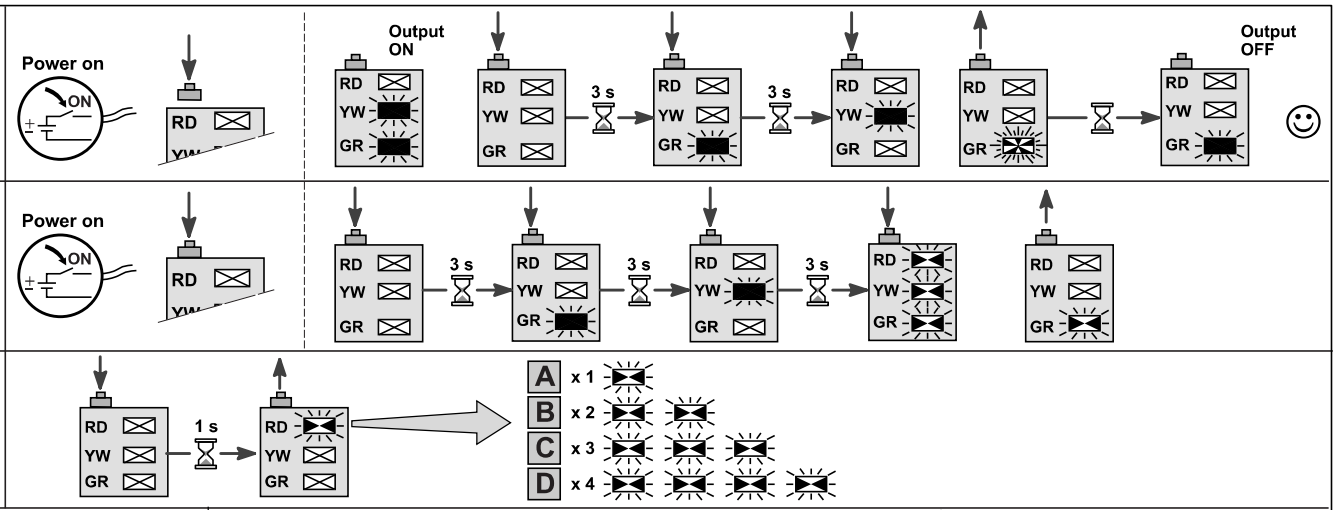
Nelle modalità **C** e **D**, la fase 3 è opzionale tranne per i materiali trasparenti.

Nos modos **C** e **D**, a etapa 3 é opcional, excepto para os materiais transparentes.

**Salida inversion NO / NC**
**Inversione uscita NO / NC**
**Inversão saída NO / NC**

**Reinicialización**
**Reset**
**Reinicialização**

**Visualización modo**
**Modo visualizza-zione**
**Visualização do modo**




**Versión M12/M8 / Versione M12/M8 / Versão M12/M8**

**M12 connector**



3 (-)
1 (+)
4 OUT/Output
2 Alarm or Beam break input *(1)*

**M 8 connector**



3 (-)
1 (+)
4 OUT/Output
2 Beam break input *(1)*

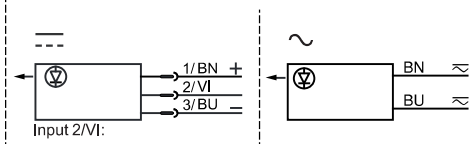
*(1) Beam break input on thru-beam transmitter only.*

**Versión L2 / Versione L2 / Versão L2**

**Pre-cabled, PNP/NPN**
(–) BU (Blue)
(+) BN (Brown)
OUT/Output BK (Black)
Alarm / WH (White)
Beam break input *(1)* VI (Violet)

**Pre-cabled, relay output**
(≂) BU (Blue),
(≂) BN (Brown)
Relay common/GY (Grey)
NO BK (Black)
NC WH (White)

**Transmisor de la función obstáculo**
**Trasmettitore della funzione sbarramento**
**Transmissor da função barragem**




**XUX: Versión bloque terminal T 16**
**Versione morsettiera T 16**
**Versão terminal T 16**

| PNP / NPN ⎓ Terminal | | Relay output ≂ Terminal | |
|---|---|---|---|
| 1 | + | 1 | ≂ |
| 2 | – | 2 | ≂ |
| 3 | Output | 3 | NO |
| 4 | Alarm | 4 | Relay common |
| | | 5 | N/C |

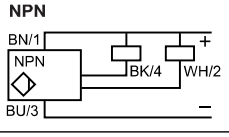
| Transmitter ⎓ Terminal | | Transmitter ≂ Terminal | |
|---|---|---|---|
| 1 | + | 1 | ≂ |
| 2 | – | 2 | ≂ |
| 3 | Beam broken input *(1)* | | |

*(1) Beam break input on thru-beam transmitter only.*

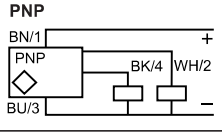
**XUK - XUX**



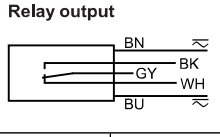

**NPN**



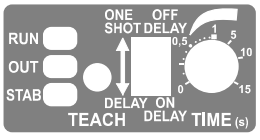

**PNP**




**Relay output**



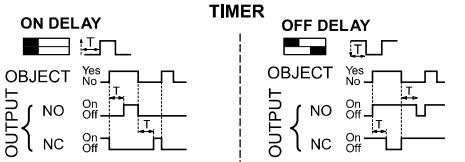

**XUK 0ARCTL2**




**XUK 0AKSAL2 / M12**



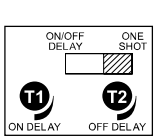

**TIMER**



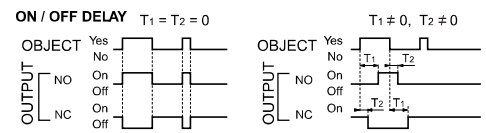

**ONE SHOT**
(XUK0... AC/DC only)




**XUX 0ARCTT16 únicamente / Solo XUX 0ARCTT16 / Apenas XUX 0ARCTT16**
Opción: **temporización** / Opzione: **Temporizzazione** / Opção: **Temporização**




**ON / OFF DELAY** $T_1 = T_2 = 0$ | $T_1 \neq 0,\ T_2 \neq 0$




**ONE SHOT** $T_1 = 0,\ T_2 \neq 0$ | $T_1 \neq 0,\ T_2 \neq 0$

