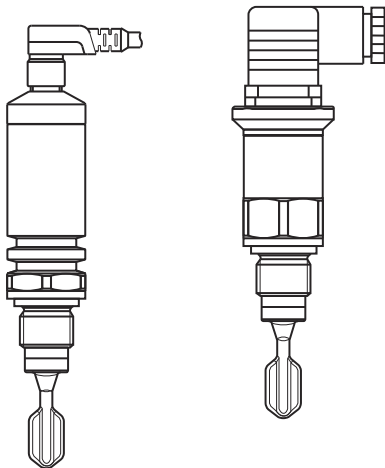


Vibracon Mini **LVL-A***



de Füllstandgrenzschalter

en Level Limit Switch

fr Détecteur de niveau

es Detector de nivel

it Interruttore di livello

nl Niveauschakelaar

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fr Sommaire

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**Achtung!**

= verboten; führt zu fehlerhaftem Betrieb oder Zerstörung.

**Caution!**

= forbidden; leads to incorrect operation or destruction.

**Attention !**

= interdit; peut provoquer des dysfonctionnements ou la destruction.

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¡Atención!

× = Prohibido; peligro de mal funcionamiento o de destrucción.



Attenzione!

× = Vietato; pericolo di malfunzionamento o di distruzione.



Opgelet!

× = verboden; leidt tot foutieve werking of storing.

de Sicherheitshinweise

Der Vibracon LVL-A* darf nur als Füllstandgrenzscharter für Flüssigkeiten verwendet werden.

Bei unsachgemäßem Einsatz können Gefahren von ihm ausgehen.

Das Gerät darf **nur von qualifiziertem und autorisiertem Fachpersonal** unter strenger Beachtung dieser Betriebsanleitung, der einschlägigen Normen, der gesetzlichen Vorschriften und der Zertifikate (je nach Anwendung) eingebaut, angeschlossen, in Betrieb genommen und gewartet werden. In der Gebäudeinstallation ist ein Netzschalter für das Gerät leicht erreichbar in dessen Nähe zu installieren. Er ist als Trennvorrichtung für das Gerät zu kennzeichnen.

en Notes on Safety

The Vibracon LVL-A* is designed for level limit detection in liquids. If used incorrectly it is possible that application-related dangers may arise. The level limit switch may be installed, connected, commissioned, operated and maintained **by qualified and authorised personnel only**, under strict observance of these operating instructions, any relevant standards, legal requirements, and, where appropriate, the certificate.

Install an easily accessible power switch in the proximity of the device.

Mark the power switch as a disconnecter for the device.

fr Conseils de sécurité

Le Vibracon LVL-A* doit être exclusivement utilisé comme détecteur de niveau pour liquides. Il peut être source de danger en cas d'utilisation non conforme aux prescriptions. L'appareil ne doit être installé, raccordé, mis en service et entretenu **que par un personnel qualifié et autorisé**, qui tiendra compte des indications contenues dans la présente mise en service, des normes en vigueur et des certificats disponibles (selon l'application).

Installer un commutateur réseau à proximité immédiate de l'appareil, en veillant à ce qu'il soit facilement accessible.

Marquer ce commutateur comme prise de coupure de l'appareil.

es **Notas sobre seguridad**

El detector de nivel Vibracon LVL-A* ha sido diseñado para la detección de límite en fluidos. Su empleo inapropiado puede resultar peligroso. El equipo deberá ser montado, conectado, instalado y mantenido **única y exclusivamente por personal cualificado y autorizado**, bajo rigurosa observación de las presentes instrucciones de servicio, de las normativas y legislaciones vigentes, así como de los certificados (dependiendo de la aplicación). Instalar un interruptor de fácil acceso en las proximidades del equipo. Identificar el interruptor como desconector del equipo.

it **Note sulla sicurezza**

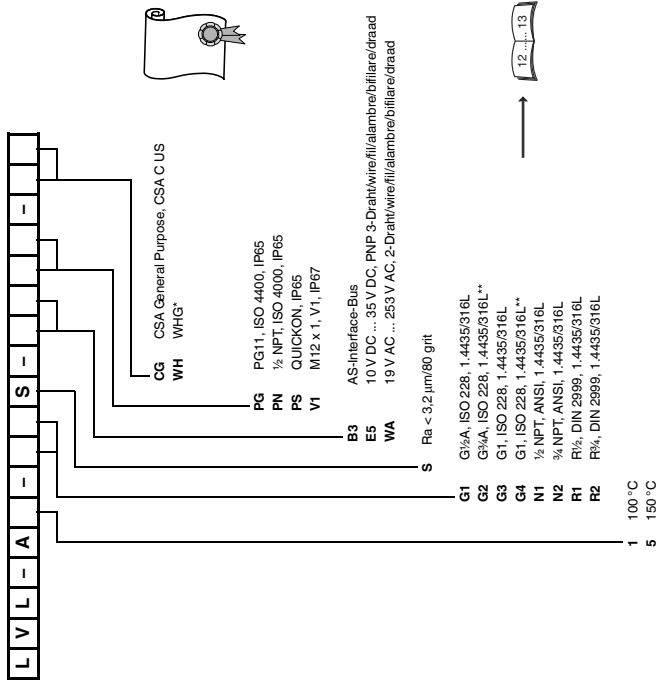
Il Vibracon LVL-A* è particolarmente studiato per l'impiego come soglia di livello in liquidi. Un'installazione non corretta può determinare pericolo. Lo strumento può essere montato **solamente da personale qualificato ed autorizzato**. Il montaggio, il collegamento, la messa in esercizio e la manutenzione devono rispettare le presenti istruzioni, le norme vigenti e i certificati (a seconda dell'applicazione). Installare un interruttore di alimentazione di facile accesso nelle vicinanze dello strumento. Contrassegnare l'interruttore di alimentazione come interruttore di disattivazione dello strumento.

nl **Veiligheidsinstructies**

Gebruik de Vibracon LVL-A* alléén als niveauschakelaar voor vloeistoffen. Indien niet correct gebruikt kunnen gevaarlijke situaties ontstaan. Het instrument **alleen door gekwalificeerd en geautoriseerd personeel** laten inbouwen, aansluiten, in bedrijf nemen en onderhouden. Neem de instructies in deze Inbedrijfstellingsvoorschriften, de desbetreffende normen, de wettelijke voorschriften en eventuele certificaten in acht. Installeer een makkelijk bereikbare voedingschakelaar in de nabijheid van het instrument. Kenmerk de voedingschakelaar specifiek voor het instrument.

- de** Geräte-Identifikation
- en** Device Identification
- fr** Désignation de l'appareil
- es** Identificación del equipo
- it** Identificazione dello strumento
- nl** Instrument-identificatie

- * Leckage-Detektion/Leakage detection/
Détection de fuite/Detección de la salida/
Rilevazione di perdita/Lekdetectie
- ** Einbau in Zubehör Einschweißadapter
Installation in accessories welding adapter
Installation dans l'accessoire adaptateur à souder
Instalación en los accesorios que soldan con
autógena el adaptador
Installazione in accessori per adattatore a saldare
Installatie in de toebehoren lasadapter
... andere/others/autres/otros/altri/andere



de **Behandlung**

Am Gehäuse anfassen,
nicht an der Schwinggabel.

en **Handling**

Hold by the housing,
not by the sensor fork.

fr **Manipulation**

Tenir par le boîtier,
et **non** par la fourche.

es **Modo de empleo**

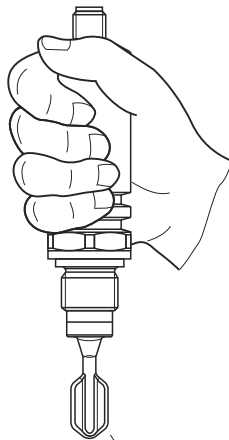
Coger por el cabezal,
no por las horquillas.

it **Accorgimenti**

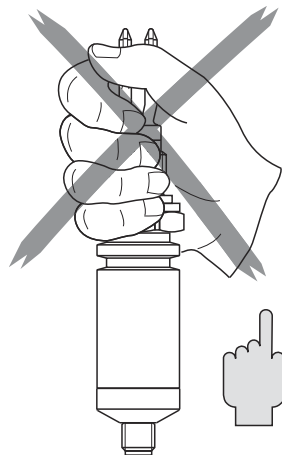
Afferrare la custodia,
non i rebbi.

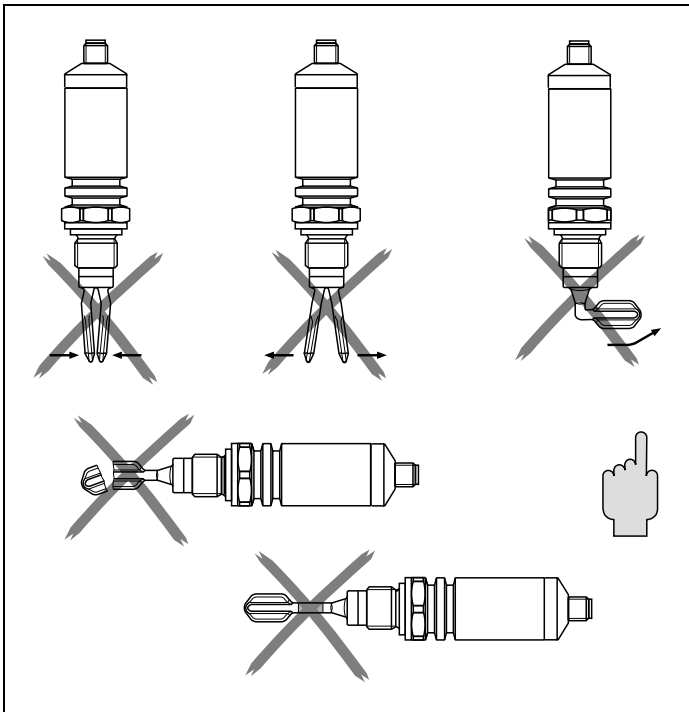
nl **Behandeling**

De behuizing vastpakken,
niet de trilvork.



Ra < 1.5 µm





de Nicht verbiegen
 Nicht kürzen
 Nicht verlängern

en Do **not** bend
 Do **not** shorten
 Do **not** lengthen

fr **Ne pas** déformer
Ne pas raccourcir
Ne pas rallonger

es No torcer
 No acortar
 No alargar

it Non piegare
 Non accorciare
 Non allungare

nl Niet verbuigen
 Niet inkorten
 Niet verlengen

de Einbaubeispiele

A: Schaltpunkt

B: Schalthysterese

en Mounting examples

A: Switchpoint

B: Switching hysteresis

fr Exemples d'implantation

A: Point de commutation

B: Hystérésis de commutation

es Ejemplos de montaje

A: Punto de conmutación

B: Histeresis de conmutación

it Esempi di montaggio

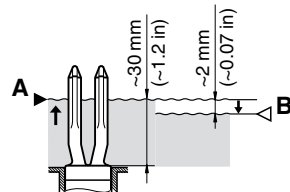
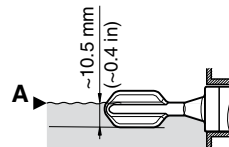
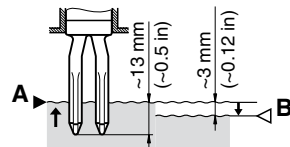
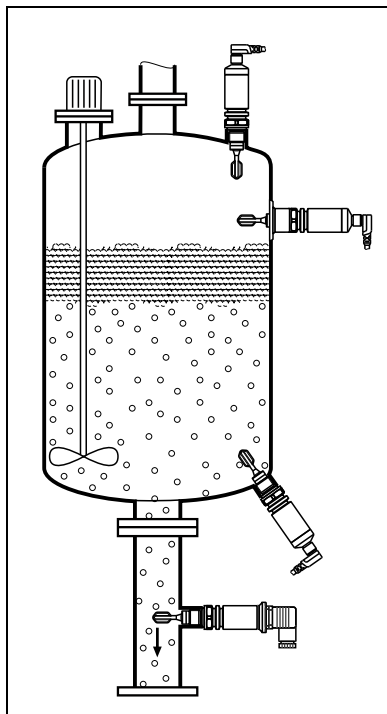
A: Punto di commutazione

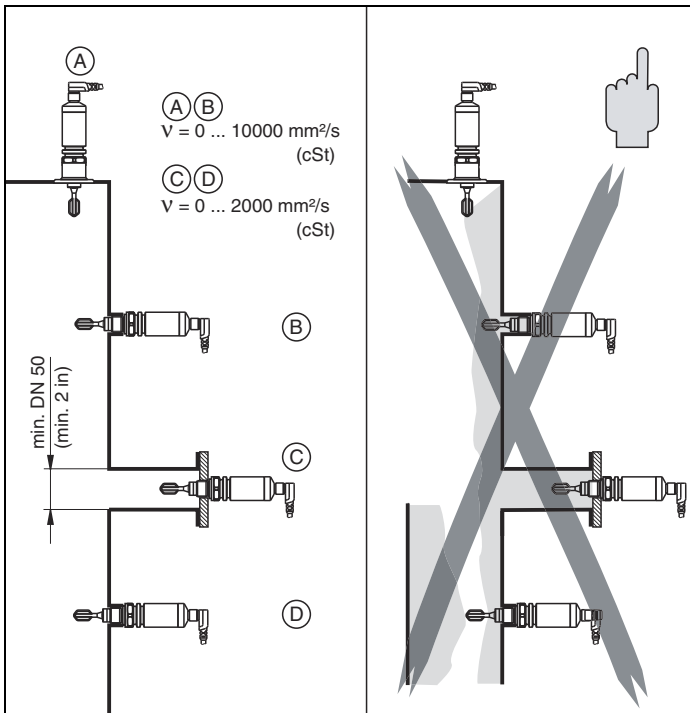
B: Isteresi

nl Inbouwvoorbeelden

A: Schakelpunt

B: Schakelhysterese





- de** Viskositeit und Ansatzbildung berücksichtigen
- en** Take account of viscosity and build-up
- fr** Tenir compte de la viscosité et du colmatage
- es** Tener en cuenta la viscosidad y la formación de adherencias
- it** Attenzione alla viscosità e ai depositi
- nl** Houdt rekening met de viscositeit en de vorming van aangroei

de Einbau

Prozessanschluss
 G $\frac{1}{2}$ A, G $\frac{3}{4}$ A, G1A
 (DIN ISO 228/1)

en Installation

Process connection
 G $\frac{1}{2}$ A, G $\frac{3}{4}$ A, G1A
 (DIN ISO 228/1)

fr Montage

Raccord processus
 G $\frac{1}{2}$ A, G $\frac{3}{4}$ A, G1A
 (DIN ISO 228/1)

es Montaje

Conexión a proceso
 G $\frac{1}{2}$ A, G $\frac{3}{4}$ A, G1A
 (DIN ISO 228/1)

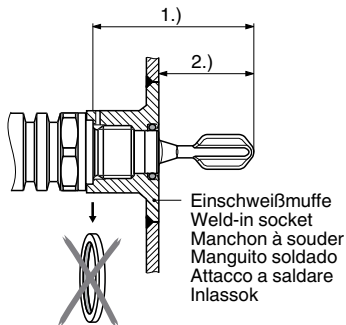
it Montaggio

Attacco al processo
 G $\frac{1}{2}$ A, G $\frac{3}{4}$ A, G1A
 (DIN ISO 228/1)

nl Inbouw

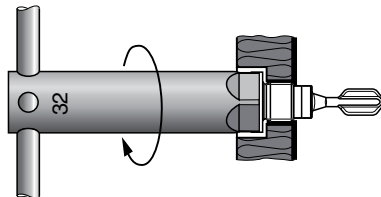
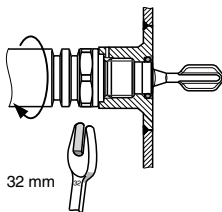
Procesaansluiting
 G $\frac{1}{2}$ A, G $\frac{3}{4}$ A, G1A
 (DIN ISO 228/1)

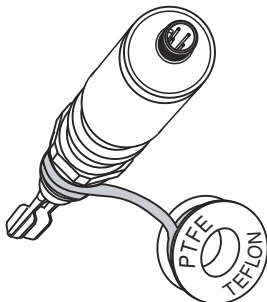
G $\frac{3}{4}$ => 1.) ~63.9 mm/~2.6 in 2.) ~ 38.0 mm/~1.5 in
 G1 => 1.) ~78.0 mm/~3.7 in 2.) ~ 48.0 mm/~1.9 in



max. 150 °C/25 bar
 (max. 423 K/360 psi)

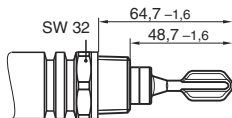
max. 100 °C/40 bar
 (max. 373 K/580 psi)





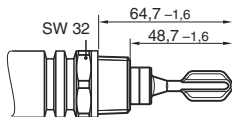
½ NPT (316L): max. 40 bar (580 psi)
max. 150°C (423 K)

¾ NPT (316L): max. 40 bar (580 psi)
max. 150°C (423 K)



R½ (316L): max. 40 bar (580 psi)
max. 150°C (423 K)

R¾ (316L): max. 40 bar (580 psi)
max. 150°C (423 K)



de ½ NPT, ¾ NPT
ANSI B 1.20.1
R½, R¾
DIN 2999

en ½ NPT, ¾ NPT
ANSI B 1.20.1
R½, R¾
DIN 2999

fr ½ NPT, ¾ NPT
ANSI B 1.20.1
R½, R¾
DIN 2999

es ½ NPT, ¾ NPT
ANSI B 1.20.1
R½, R¾
DIN 2999

it ½ NPT, ¾ NPT
ANSI B 1.20.1
R½, R¾
DIN 2999

nl ½ NPT, ¾ NPT
ANSI B 1.20.1
R½, R¾
DIN 2999

de Schwinggabel ausrichten
Markierung beachten ▼

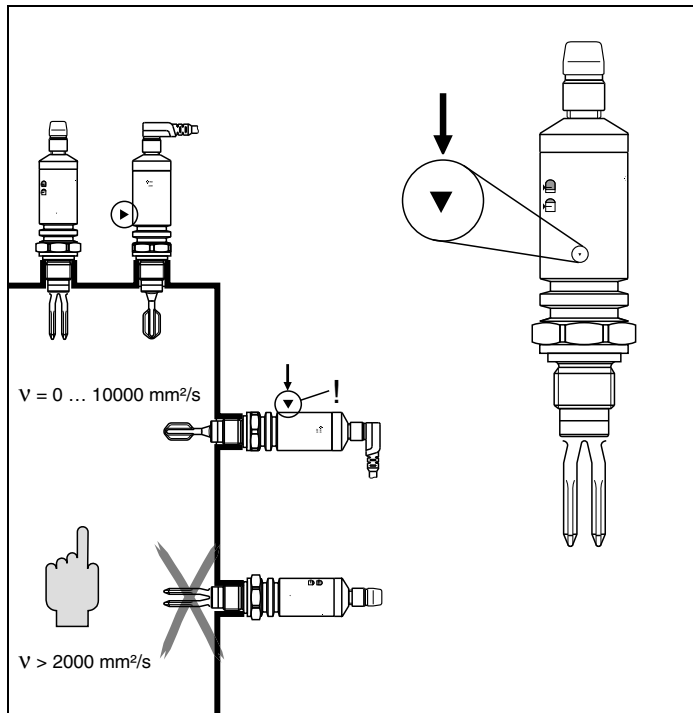
en Align sensor fork
Note mark ▼

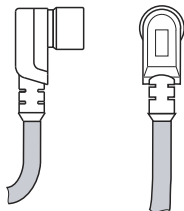
fr Orienter la fourche
Tenir compte du repère ▼

es Orientación de las horquillas
Atención a la marca ▼

it Orientare il rebbio
Osservare il contrassegno ▼

nl Trilvork uitrichten
Let op de markering ▼





Nummer = Farbe
Number = Colour
Numéro = Couleur
Número = Color
Numero = Colore
Nummer = Kleur

1 = BN = braun/brown/brun/marron/marrone/bruin
2 = WT = weiß/white/blanc/blanco/bianco/wit
3 = BU = blau/blue/bleu/azul/blu/blauw
4 = BK = schwarz/black/noir/negro/nero/zwart

de Anschluss
Stecker M12 x 1

en Connection
Plug M12 x 1

fr Raccordement
Prise M12 x 1

es Conexiones
Enchufe M12 x 1

it Collegamento
Spina M12 x 1

nl Aansluiting
Stop M12 x 1

de Anschluss E5 (DC-PNP)

Stecker M12 x 1

en Connection E5 (DC-PNP)

Plug M12 x 1

fr Raccordement E5 (DC-PNP)

Prise M12 x 1

es Conexiones E5 (DC-PNP)

Enchufe M12 x 1

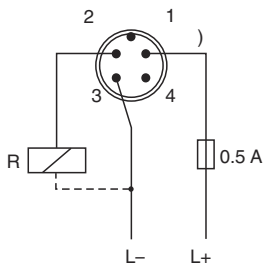
it Collegamento E5 (DC-PNP)

Spina M12 x 1

nl Aansluiting E5 (DC-PNP)

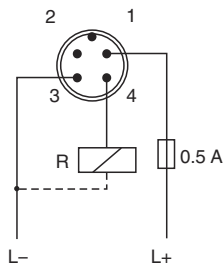
Stop M12 x 1

MAX




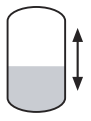
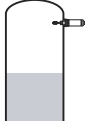
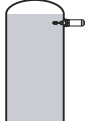
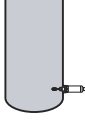
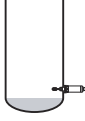
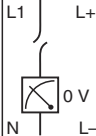







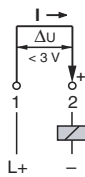
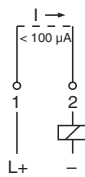
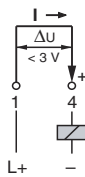
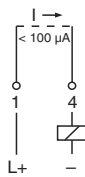
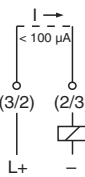
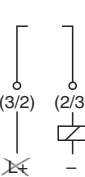
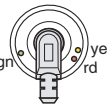






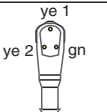






R = externe Last
external load
charge externe
carga exterior
carico esterno
externe belasting

MIN






$I_{max.}$ 250 mA
 $U_{..}$ 10 V ... 35 V

1 = BN
2 = WT
3 = BU
4 = BK

	MAX		MIN		⌋	
					Störung Fault Défaut Fallo Guasto Storing	
U _{...} (DC)						
 (PNP)						
						
						

- de** Funktion
- en** Function
- fr** Fonction
- es** Funcionamiento
- it** Funzione
- nl** Functie

-  leuchtet/lights up/allumé/
iluminado/acceso/aan
-  blinkt/flashes/clignote/
parpadea/lampeggia/knippert
-  aus/off/éteint/
apagado/spendo/uit

de Anschluss E5 (DC-PNP)

Ventilstecker

en Connections E5 (DC-PNP)

Valve plug

fr Raccordement E5 (DC-PNP)

Prise de valve

es Conexiones E5 (DC-PNP)

Enchufe de válvula

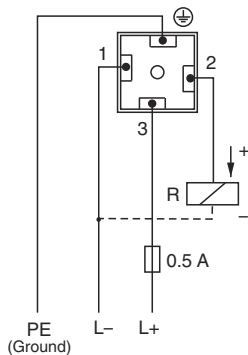
it Collegamento E5 (DC-PNP)

Connettore valvola

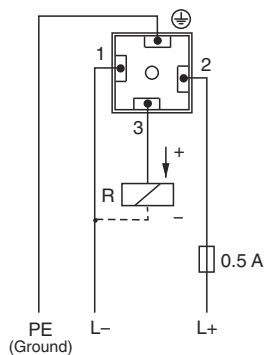
nl Aansluiting E5 (DC-PNP)

De stop van de klep

MAX



MIN



R = externe Last
external load
charge externe
carga exterior
carico esterno
externe belasting

$I_{max.} 250 \text{ mA}$
 $U \dots 10 \text{ V} \dots 35 \text{ V}$

	MAX		MIN		⚡		
					Störung Fault Défaut Fallo Guasto Storing		
U... (DC)							
(PNP)							
	<p> = leuchtet/lights up/allumé/iluminado/acceso/aan</p> <p> = blinkt/flashes/clignote/parpadea/lampeggia/knippert</p> <p> = aus/off/éteint/apagado/spento/uit</p>						

- de** Funktion
- en** Function
- fr** Fonction
- es** Funcionamiento
- it** Funzione
- nl** Functie

de Anschluss WA (AC)

Ventilstecker

en Connections WA (AC)

Valve plug

fr Raccordement WA (AC)

Prise de valve

es Conexiones WA (AC)

Enchufe de válvula

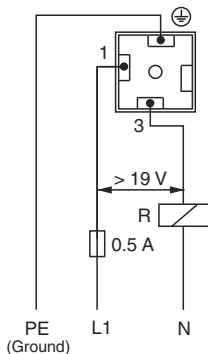
it Collegamento WA (AC)

Connettore valvola

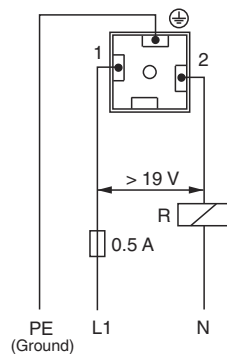
nl Aansluiting WA (AC)

De stop van de klep

MAX




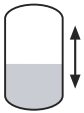
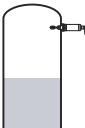
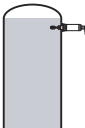
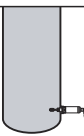

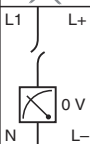






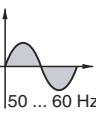
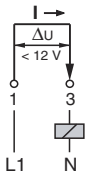
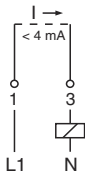
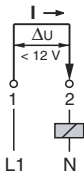
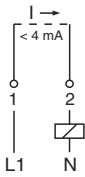
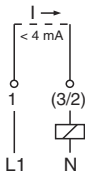
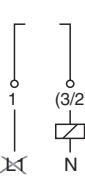
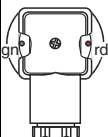









MIN



R = externe Last
external load
charge externe
carga exterior
carico esterno
externe belasting

min. 2.5 VA/253 V (10 mA)
min. 0.5 VA/24 V (20 mA)

I max. 250 mA
U ~ 19 V AC ... 253 V AC

	MAX		MIN		⚡	
					Störung Fault Défaut Fallo Guasto Storing	
U~ (AC)						
						
						
	 = leuchtet/lights up/allumé/iluminado/acceso/aan  = blinkt/flashes/clignote/parpadea/lampeggia/knipper  = aus/off/éteint/apagado/spento/uit					

- de** Funktion
- en** Function
- fr** Fonction
- es** Funcionamiento
- it** Funzione
- nl** Functie

de Anschluss B3
(AS-interface-Bus)

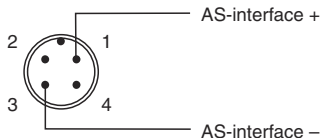
en Connection B3
(AS-interface-Bus)

fr Raccordement B3
(AS-interface-Bus)

es Conexiones B3
(AS-interface-Bus)

it Collegamento B3
(AS-interface-Bus)

nl Aansluiting B3
(AS-interface-Bus)



1: BN

3: BU

AS-interface-Profil: S-3.A.1 (EN 50295, IEC 62026-2)

Die Adresse ist voreingestellt auf 0 (HEX), änderbar über Busmaster oder Programmiergerät.
The address is preset to 0 (HEX), can be changed via Busmaster or programming device.
L'adresse est prééglée sur 0 (HEX) et modifiable via le maître bus ou l'appareil de programmation.

La dirección está preajustada a 0 (HEX) y puede modificarse mediante el Busmaster o el aparato de programación.

L'indirizzo è preimpostato su 0 e può essere modificato tramite il Busmaster o lo strumento di programmazione.

Het adres is default 0 (HEX) en kan worden gewijzigd via de Busmaster of programmeereenheid.

Datenbit: Parameterbits (P0 ... P3) werden nicht verwendet

Data bit: Parameter bits (P0 ... P3) are not used

Bit d'information : les bits de paramètres (P0 ... P3) ne sont pas employés

Bit de datos: El pedacito del parámetro (P0 ... P3) no se utiliza

Bit di dati: I bit di parametro (P0 a P3) non sono utilizzati

Databit: parameterbits (P0 ... P3) worden niet gebruikt

D0:1		D1:1	Status Status Statut Estado Condizione Status	✓	gut good bon bueno buon goed
D0:0		D1:0	Status Status Statut Estado Condizione Status	⚡	Störung Fault Défaut Fallo Guasto Storing
D2 und D3 werden nicht verwendet/D2 and D3 are not used/ D2 et D3 ne sont pas employés/D2 y D3 no se utilizan/ D2 e D3 non sono usati/D2 en D3 worden niet gebruikt					



Sie müssen sicherstellen, dass keine gefährlichen Prozesse an der Anlage ausgelöst werden.

You must ensure that no hazardous processes on the system are triggered.

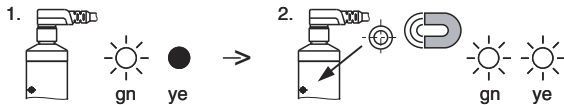
Vous devez vous assurer qu'aucun processus dangereux n'est déclenché sur l'installation.

Deberá asegurarse de que no pueda activarse ningún proceso peligroso en la instalación.

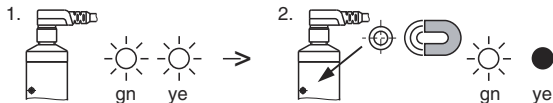
Assicurarsi che non si generino processi pericolosi nell'impianto.

Zorg ervoor dat er geen gevaarlijke processen in de installatie worden gestart.

MAX



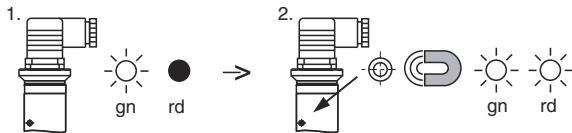
MIN



MAX



MIN



de Test
mit Prüfmagnet

en Test
with test magnet

fr Test
avec aimant de contrôle

es Comprobación
prueba magnética

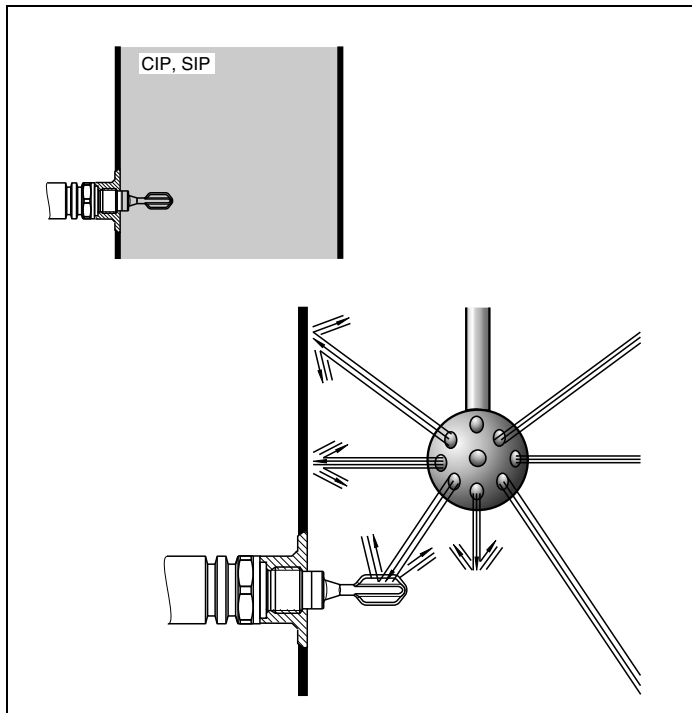
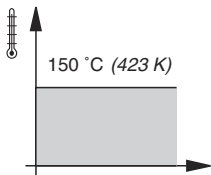
it Test
con magnete di prova

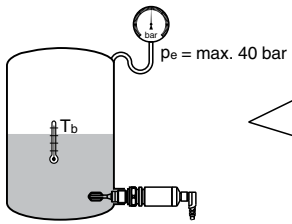
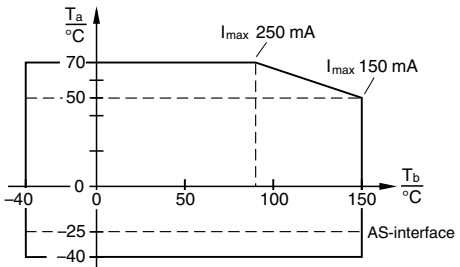
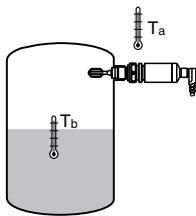
nl Test
met testmagneet

AS-interface:

D0 wird invertiert/D0 is inverted/D0 est inversé/D0 se inverte/D0 è invertito/D0 is omgekeerd

- de Reinigung
- en Cleaning
- fr Nettoyage
- es Limpieza
- it Pulizia
- nl Reiniging



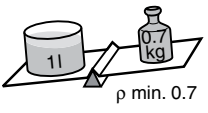


$x \text{ } ^\circ\text{C} = (x \text{ } ^\circ\text{C} + 273) \text{ K}$
 $1 \text{ bar} = 14.5 \text{ psi}$



Prozessanschluss
 Process connection
 Raccord process
 Conexión a proceso
 Attacco al processo
 Procesaansluiting

Dichte ρ
 Density ρ
 Densité ρ
 Densidad ρ
 Densità ρ
 Dichtheid ρ



$\rho \text{ min. } 0.7$

Viskosität ν
 Viscosity ν
 Viscosità ν
 Viscosidad ν
 Viscosità ν
 Viskositeit ν



$\nu \text{ max. } 10000 \text{ mm}^2/\text{s}$
 $(\nu \text{ max. } 10000 \text{ cSt})$

de Technische Daten

Umgebungstemperatur T_U
 Betriebstemperatur T_B
 Betriebsdruck p_e

en Technical data

Ambient temperature T_U
 Operating temperature T_B
 Operating pressure p_e

fr Caractéristiques techniques

Température ambiante T_U
 Température de service T_B
 Pression de service p_e

es Datos técnicos

Temperatura ambiente T_U
 Temperatura de trabajo T_B
 Presión de trabajo p_e

it Dati tecnici

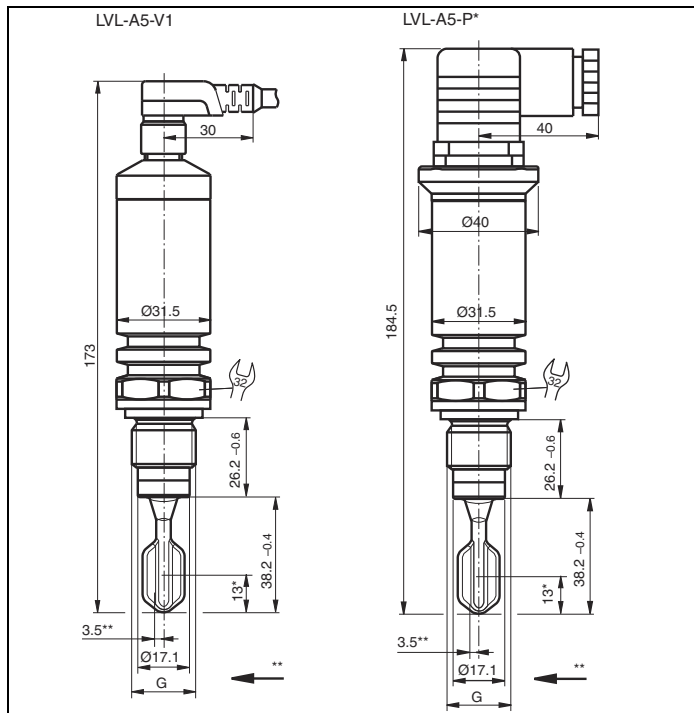
Temperatura ambiente T_U
 Temperatura d'esercizio T_B
 Pressione d'esercizio p_e

nl Technische gegevens

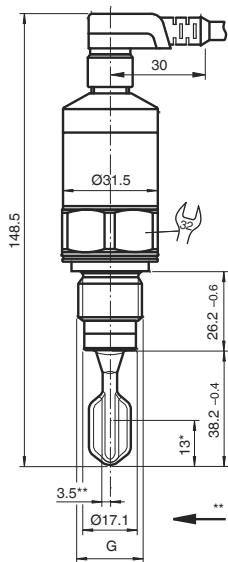
Omgevingstemperatuur T_U
 Precestemperatuur T_B
 Procesdruk p_e

- de** Abmessungen LVL-A5
150 °C (423 K) in mm
- en** Dimensions LVL-A5
150 °C (423 K) in mm
- fr** Dimensions LVL-A5
150 °C (423 K) en mm
- es** Dimensiones LVL-A5
150 °C (423 K) en mm
- it** Dimensioni LVL-A5
150 °C (423 K) in mm
- nl** Afmetingen LVL-A5
150 °C (423 K) in mm

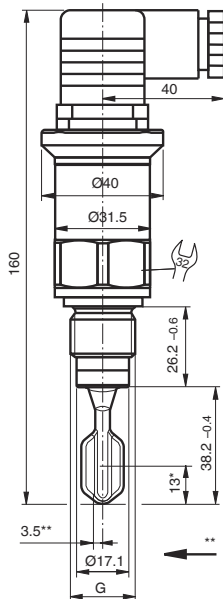
100 mm = 3.94 in



LVL-A1-V1



LVL-A1-P*



- de** Abmessungen LVL-A1
100 °C (373 K) in mm
- en** Dimensions LVL-A1
100 °C (373 K) in mm
- fr** Dimensions LVL-A1
100 °C (373 K) en mm
- es** Dimensiones LVL-A1
100 °C (373 K) en mm
- it** Dimensioni LVL-A1
100 °C (373 K) in mm
- nl** Afmetingen LVL-A1
100 °C (373 K) in mm

100 mm = 3.94 in

de **Zubehör**
Ersatzteile
Abmessungen in mm

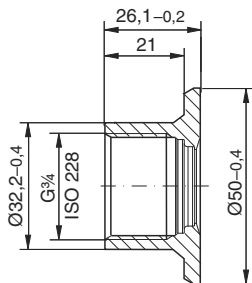
en **Accessories**
Spare parts
Dimensions in mm

fr **Accessoires**
Pièces de rechange
Dimensions en mm

es **Accesorios**
Repuestos
Dimensiones en mm

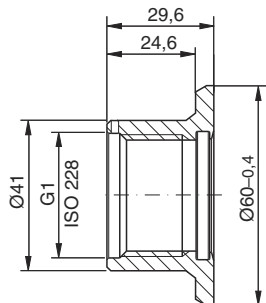
it **Accessori**
Ricambi
Dimensioni in mm

nl **Toebehoren**
Reserve-onderdelen
Afmetingen in mm



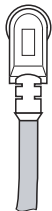
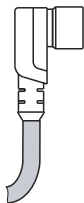
G $\frac{3}{4}$
LVL-Z66

Einschweißmuffe
Weld-in socket
Manchon à souder
Manguito soldado
Attacco a saldare
Inlassok



G1
LVL-Z101

100 mm = 3.94 in



M12 gewinkelt
M12, angled
M12 coudé
M12, acodado
ad angolo M12
M12 haaks

Kabel 4 x 0,34
Cable 4 x 0.34
Câble 4 x 0,34
Cable 4 x 0,34
Cavo 4 x 0,34
Kabel 4 x 0,34

de **Zubehör**
Ersatzteile
Abmessungen in mm

en **Accessories**
Spare parts
Dimensions in mm

fr **Accessoires**
Pièces se rechange
Dimensions en mm

es **Accesorios**
Repuestos
Dimensiones en mm

it **Accessori**
Ricambi
Dimensioni in mm

nl **Toebehoren**
Reserve-onderdelen
Afmetingen in mm

de **Zubehör**
Ersatzteile
Dichtungen

en **Accessories**
Spare parts
Seals

fr **Accessoires**
Pièces se rechange
Joints

es **Accesorios**
Repuestos
Juntas

it **Accessori**
Ricambi
Guarnizioni

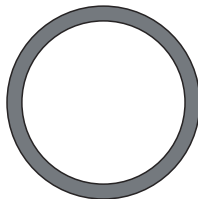
nl **Toebehoren**
Reserve-onderdelen
Afdichtingen

FPM-O-Ring für Einschweißmuffe
FPM O-ring for weld-in socket
Joint torique FPM pour manchon à souder
Junta en FPM para manguito soldado
O-ring in FPM per attacco a saldare
FPM O-ring voor inlasadapter

G³/₄

G1

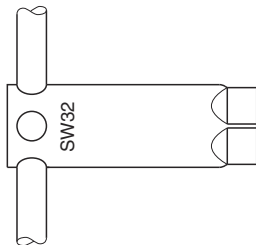
MVQ-Dichtung für Prozessanschluss 1"
MVQ seal for process connection 1"
Joint MVQ pour raccord processus 1"
Sello en MVQ para conexión a proceso 1"
Guarnizione in MVQ per attacco al processo 1"
MVQ-afdichting voor procesaansluiting 1"



LVL-Z73

LVL-Z65

Steckschlüssel SW32 für Prozessanschluss
Socket spanner AF32 for process connection
Clé de 32 pour raccord processus
Llave de fijación SW32 para conexión a proceso
Chiave a tubo 32 per attacco al processo
Pijpsleutel SW32 voor procesaansluiting



LVL-Z15

Prüfmagnet
Test magnet
Aimant de contrôle
Imán de control
Magnete di prova
Testmagneet



de **Zubehör**
Ersatzteile
Für Montage und Test

en **Accessories**
Spare parts
For mounting and test

fr **Accessoires**
Pièces se rechange
Pour montage et test

es **Accesorios**
Repuestos
Para montaje y comprobación

it **Accessori**
Ricambi
Di montaggio e verifica

nl **Toebehoren**
Reserve-onderdelen
Voor montage en test

Varianten AC und DC-PNP mit Ventilstecker		
Fehlfunktion	Ursache	Maßnahme
Grünes Licht leuchtet nicht	Keine Spannungsversorgung	Stecker, Kabel und Spannungsversorgung prüfen
Rotes Licht blinkt	Überlast oder Kurzschluss im Laststromkreis	Kurzschluss beheben Maximalen Laststrom auf unter 250 mA reduzieren
	Interner Sensorfehler oder Sensor korrodiert	Gerät austauschen

Varianten AS-interface und DC-PNP mit M12 x 1-Stecker		
Fehlfunktion	Ursache	Maßnahme
Rotes Licht leuchtet (AS-interface)	Adresse 0 eingestellt oder Kommunikationsfehler	Adressierung durchführen
		Slave projektieren
		Ggf. Leitungslänge reduzieren (< 100 m Gesamtlänge)
Rotes Licht leuchtet (DC-PNP)	Überlast oder Kurzschluss im Laststromkreis	Kurzschluss beheben
		Maximalen Laststrom auf unter 250 mA reduzieren
Grünes Licht leuchtet nicht	Keine Spannungsversorgung	Stecker, Kabel und Spannungsversorgung prüfen
Rotes Licht blinkt (2 Hz)	Interner Sensorfehler oder Sensor korrodiert	Gerät austauschen

AC and DC-PNP versions with valve plug		
Fault	Reason	Remedy
Green light does not light up	No voltage supply	Check plug, cable and voltage supply
Red light flashes	Overload or short-circuit in the load-current circuit	Rectify short-circuit Reduce maximum load current to under 250 mA
	Internal sensor error or sensor corroded	Replace device

AS-interface and DC-PNP versions with M12 x 1 plug		
Fault	Reason	Remedy
Red light lights up (AS-interface)	Address 0 set or communication error	Carry out addressing
		Configure slave
		If necessary, reduce cable length (< 100 m total length)
Red light lights up (DC-PNP)	Overload or short-circuit in the load-current circuit	Rectify short-circuit
		Reduce maximum load current to under 250 mA
Green light does not light up	No voltage supply	Check plug, cable and voltage supply
Red light flashes (2 Hz)	Internal sensor error or sensor corroded	Replace device

Variantes AC et DC-PNP pour prise de valve		
Défaut	Cause	Mesure
Le témoin vert n'est pas allumé	Pas de tension d'alimentation	Vérifier la prise, le câble et l'alimentation en tension
Le témoin rouge clignote	Surcharge ou court-circuit dans le circuit de courant de charge	Éliminer le court-circuit Réduire le courant de charge maximal à moins de 250 mA
	Défaut interne de capteur ou capteur corrodé	Remplacer l'appareil

Variantes AS-interface et DC-PNP avec prise M12 x 1		
Défaut	Cause	Mesure
Le témoin rouge est allumé (AS-interface))	Adresse 0 paramétrée ou défaut de communication	Exécuter l'adressage
		Configurer l'esclave
		Réduire le cas échéant la longueur de câble (< 100 m de longueur totale)
Le témoin rouge est allumé (DC-PNP)	Surcharge ou court-circuit dans le circuit de courant de charge	Éliminer le court-circuit
		Réduire le courant de charge maximal à moins de 250 mA
Le témoin vert n'est pas allumé	Pas de tension d'alimentation	Vérifier la prise, le câble et l'alimentation en tension
Le témoin rouge clignote (2 Hz)	Défaut interne de capteur ou capteur corrodé	Remplacer l'appareil

Variantes AC y DC-PNP con enchufe de válvula		
Fallo	Causa	Solución
La luz verde no se enciende	No hay suministro de tensión	Comprobar enchufe, cable y suministro de tensión
La luz roja parpadea	Sobrecarga o cortocircuito en la corriente de carga	Subsanar el cortocircuito
		Reducir la corriente de carga por debajo de 250 mA
	Error interno del sensor o sensor corroído	Sustituir el aparato

Variantes AS-interface y DC-PNP con enchufe M12 x 1		
Fallo	Causa	Solución
La luz roja se enciende (AS-interface)	Dirección 0 ajustada o error de comunicación	Efectuar direccionamiento
		Proyectar esclavo
		Reducir longitud del cable (<100 m longitud total)
La luz roja se enciende (DC-PNP)	Sobrecarga o cortocircuito en la corriente de carga	Subsanar el cortocircuito
		Reducir la corriente de carga por debajo de 250 mA
La luz verde no se enciende	No hay suministro de tensión	Comprobar enchufe, cable y suministro de tensión
La luz roja parpadea (2 Hz)	Error interno del sensor o sensor corroído	Sustituir el aparato

it Individuazione e
eliminazione delle anomalie

Varianti CA e CC -PNP con connettore valvola		
Guasto	Motivo	Rimedio
La luce verde non si accende	Nessuna alimentazione	Controllare le spine, i cavi e l'alimentazione
La luce rossa lampeggia	Sovraccarico o cortocircuito nel circuito della corrente di carico	Eliminare il cortocircuito Ridurre la corrente di carico massimo al di sotto di 250 mA
	Guasto interno al sensore o corrosione del sensore	Sostituire lo strumento

Varianti AS-interface e CC -PNP con spina M12 x 1		
Guasto	Motivo	Rimedio
La luce rossa è accesa (AS-interface)	Impostato indirizzo 0 oppure errore di comunicazione	Assegnazione indirizzo
		Registrazione slave
		Ev. ridurre la lunghezza della linea (< 100 m lunghezza totale)
La luce rossa è accesa (CC-PNP)	Sovraccarico o cortocircuito nel circuito della corrente di carico	Eliminare il cortocircuito
		Ridurre la corrente di carico massimo al di sotto di 250 mA
La luce verde non si accende	Nessuna alimentazione	Controllare le spine, i cavi e l'alimentazione
La luce rossa lampeggia (2 Hz)	Guasto interno al sensore o corrosione del sensore	Sostituire lo strumento

Varianten AC- en DC- PNP met klepstop		
Fout	Oorzaak	Maatregelen
Groene lampje brandt niet	Geen voedingsspanning	Steker, kabel en voedingsspanning controleren
Rode lampje knippert	Overbelasting of kortsluiting in laststroomkring	Kortsluiting opheffen
		Maximale belastingsstroom reduceren tot onder 250 mA
	Interne sensorstoring of sensor gecorrodeerd	Instrument vervangen

Varianten AS-interface en DC- PNP met M12 x 1 stop		
Fout	Oorzaak	Maatregelen
Rode lampje gaat aan (AS-interface)	Adres 0 ingesteld, of communicatiefout	Adressring uitvoeren
		Slave projecteren
		Indien nodig kabellengte inkorten (< 100 m totale lengte)
Rode lampje gaat aan (DC-PNP)	Overbelasting of kortsluiting in laststroomkring	Kortsluiting opheffen
		Maximale belastingsstroom reduceren tot onder 250 mA
Groene lampje brandt niet	Geen voedingsspanning	Steker, kabel en voedingsspanning controleren
Rode lampje knippert (2 Hz)	Interne sensorstoring of sensor gecorrodeerd	Instrument vervangen

de Ergänzende Dokumentation

en Supplementary documentation

fr Documentation complémentaire

es Documentación adicional

it Documentazione supplementare

nl Aanvullende documentatie

Technische Information/Technical information/
Information technique/Información técnica/
Informazioni tecniche/Technische informatie
TI364O

Betriebsanleitung/Operating instruction/
Mise en service/Instrucciones de funcionamiento/
Istruzioni operative/Inbedrijfstellingsvoorschrift

KA032O G1A
(Einschweißmuffe/Weld-in socket/Manchon à souder/
Manguito soldado/Tronchetto a saldare/Inlassok)

KA219O G $\frac{3}{4}$ A
(Einschweißmuffe/Weld-in socket/Manchon à souder/
Manguito soldado/Tronchetto a saldare/Inlassok)

Zertifikat/Certificate/Certificat/Certificado/Certificato/Certificaat
ZE247O (WHG) Z-65.11-314
ZE248O (Leckage) Z-65.40-315

www.pepperl-fuchs.com

Worldwide Headquarters

Pepperl+Fuchs GmbH
68307 Mannheim · Germany
Tel. +49 621 776-0
E-mail: info@de.pepperl-fuchs.com

USA Headquarters

Pepperl+Fuchs Inc.
Twinsburg, Ohio 44087 · USA
Tel. +1 330 4253555
E-mail: sales@us.pepperl-fuchs.com

Asia Pacific Headquarters

Pepperl+Fuchs Pte Ltd.
Company Registration No. 199003130E
Singapore 139942
Tel. +65 67799091
E-mail: sales@sg.pepperl-fuchs.com

www.pepperl-fuchs.com

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