

Magne-Sonics Series 200

Vibrating fork point level switch



Quality...Reliability...Service
1-800-238-4027

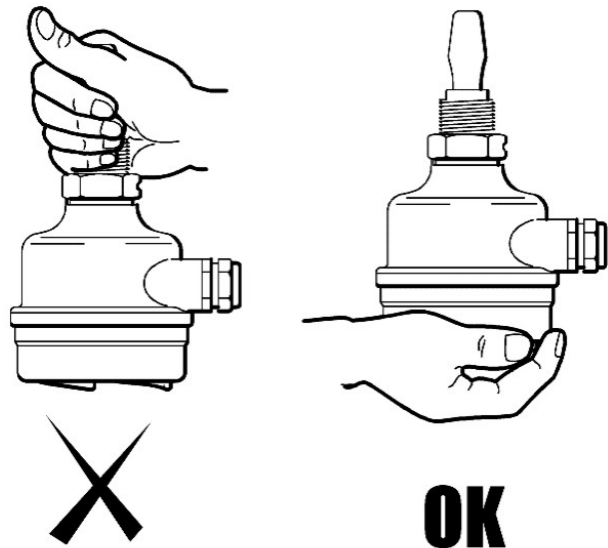
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Houston, TX 77099 U.S.A.
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Fax: (713) 785-1826
E-mail: level@magnesonics.com
www.clark-reliance.com

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Fax: (440) 238-8828

MAGNE-SONICS®

A Division of The Clark-Reliance® Corporation

- GB** Handling
- F** Manipulation
- D** Einsatz
- S** Hantering
- E** Manejo
- NL** Behandeling
- PL** Obsługa



Do not hold Series 200 by forks.
 Ne pas tenir le Series 200 par les lames.
 Series 200 nicht an der Stimmgabel halten.
 Håll ej Series 200 i gaffeln.
 No sujetar el Series 200 por las horquillas
 De Series 200 mag niet aan de vorken vastgehouden worden.
 Nie przenosić Series 200 za widełki.

GB Do not alter Series 200 in any way.

F Ne modifier, en aucune manière, la forme des lames.

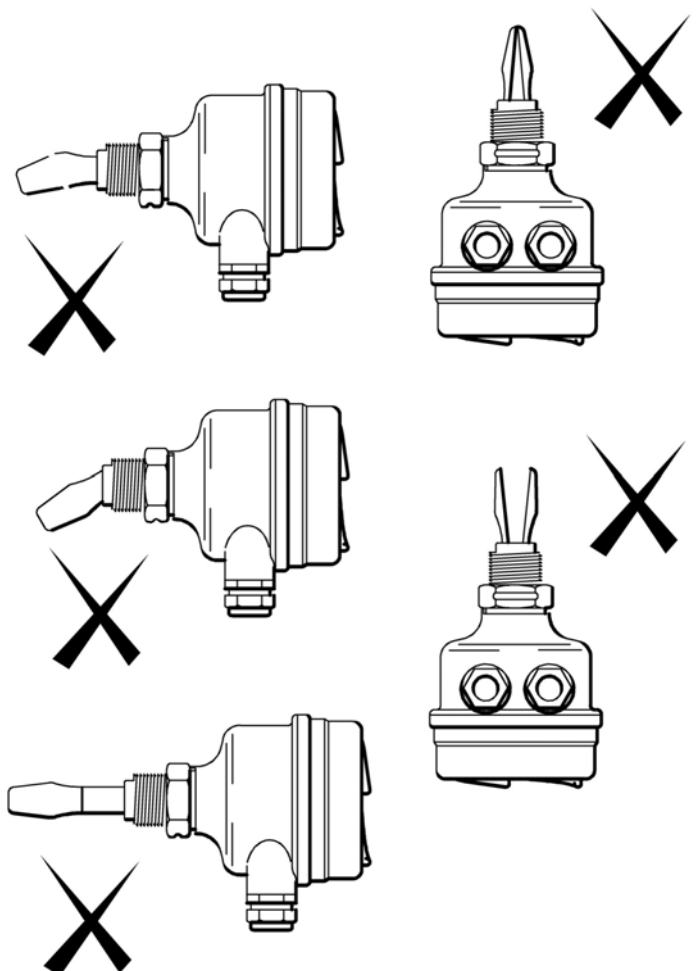
D Series 200 in keiner Weise ändern

S Gaffelbladen på Series 200 får *inte* böjas eller vinklas i någon riktning

E No debe modificarse la forma de las láminas en ningún caso

NL In elk geval mag de Series 200 niet beschadigd worden

PL Nie modyfikować Series 200 w żaden sposób



GB

Installation

F

Installation

D

Installation

S

Installation

E

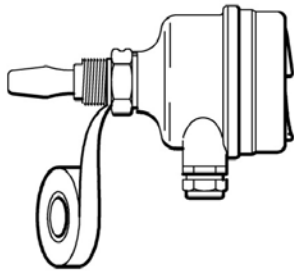
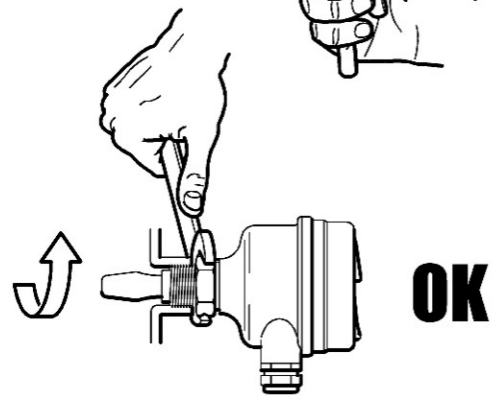
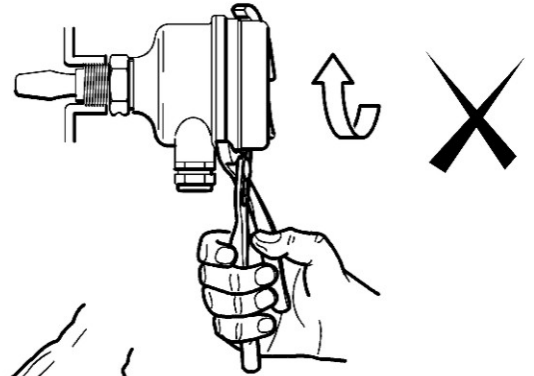
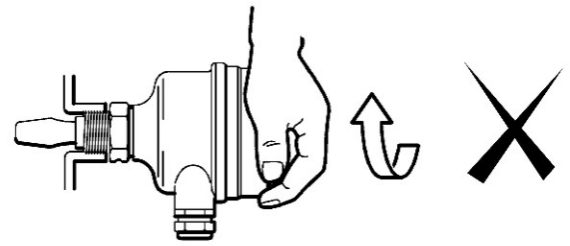
Instalación

NL

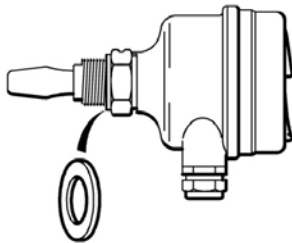
Installatie

PL

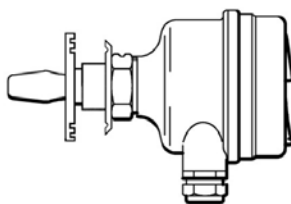
Instalacja



PTFE (Teflon)

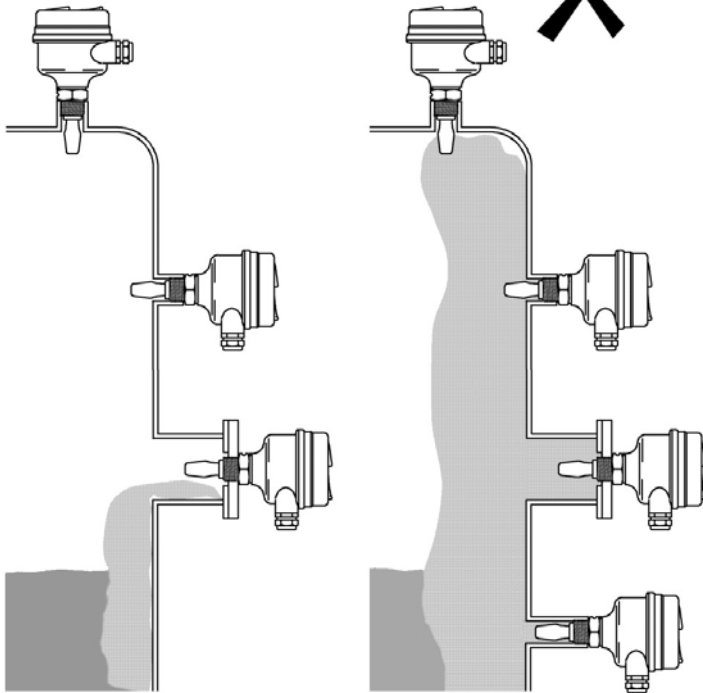


Gasket
Joint
Dichtung
Packning
Junta
Dichting
Podkładka



Seal (supplied in SK266)
Jont (fourni dans SK266)
Dichtung (enthalten in SK266)
Packning (levereras med SK266)
Junta (suministrada con SK266)
Dichting (geleverd met SK266)
Uszczelnienie (dostarczane z SK266)

OK



Avoid product build-up

GB

Eviter des dépôts de matières solides

F

Produktablagerungen vermeiden

D

Undvik uppbyggnad av beläggningar

S

Evitar el almacenamiento de producto

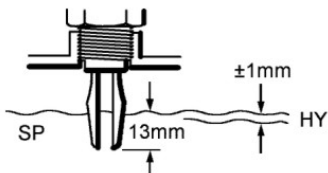
E

Vermijd productaanladingen

NL

Zabojenie zarastaniu czujnika

PL



SP Switchpoint (for H₂O)

HY Switching hysteresis

GB

SP Point de détection (pour de l'eau)

HY Hystérésis

F

SP Schalterpunkt (H₂O)

HY Schalthysterese

D

SP Omkopplingspunkt (H₂O)

HY Omkopplingspunkt Hysteres

S

SP Punto conmutación (H₂O)

HY Histéresis

E

SP Schakelpunt (H₂O)

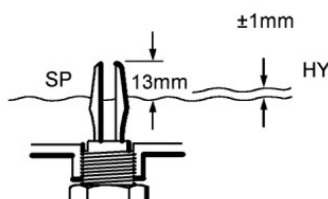
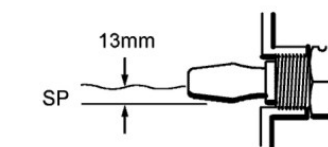
HY Hysteresis

NL

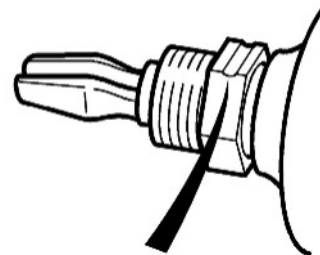
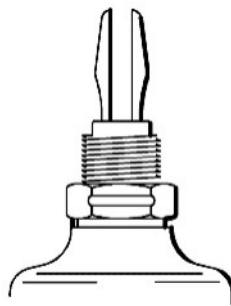
SP Punkt przełączania (H₂O)

HY Histereza

PL

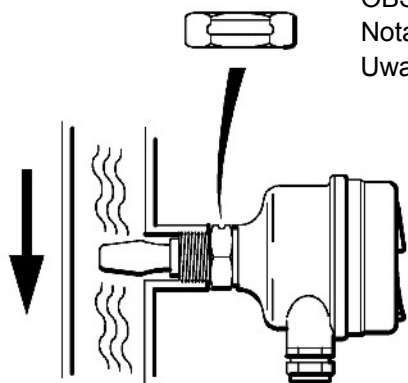


- Ⓒ **GB** Correct fork alignment
- Ⓒ **F** Aligne­ment correct de la fourche
- Ⓒ **D** Richtige
- Ⓒ **S** Korrekt gaffelläge
- Ⓒ **E** Alineación correcta de la horquilla
- Ⓒ **NL** Correcte orientatie van de vork
- Ⓒ **PL** Prawidłowe usytuowanie widełek

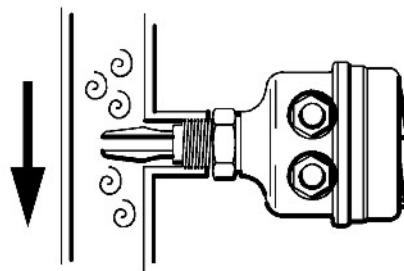


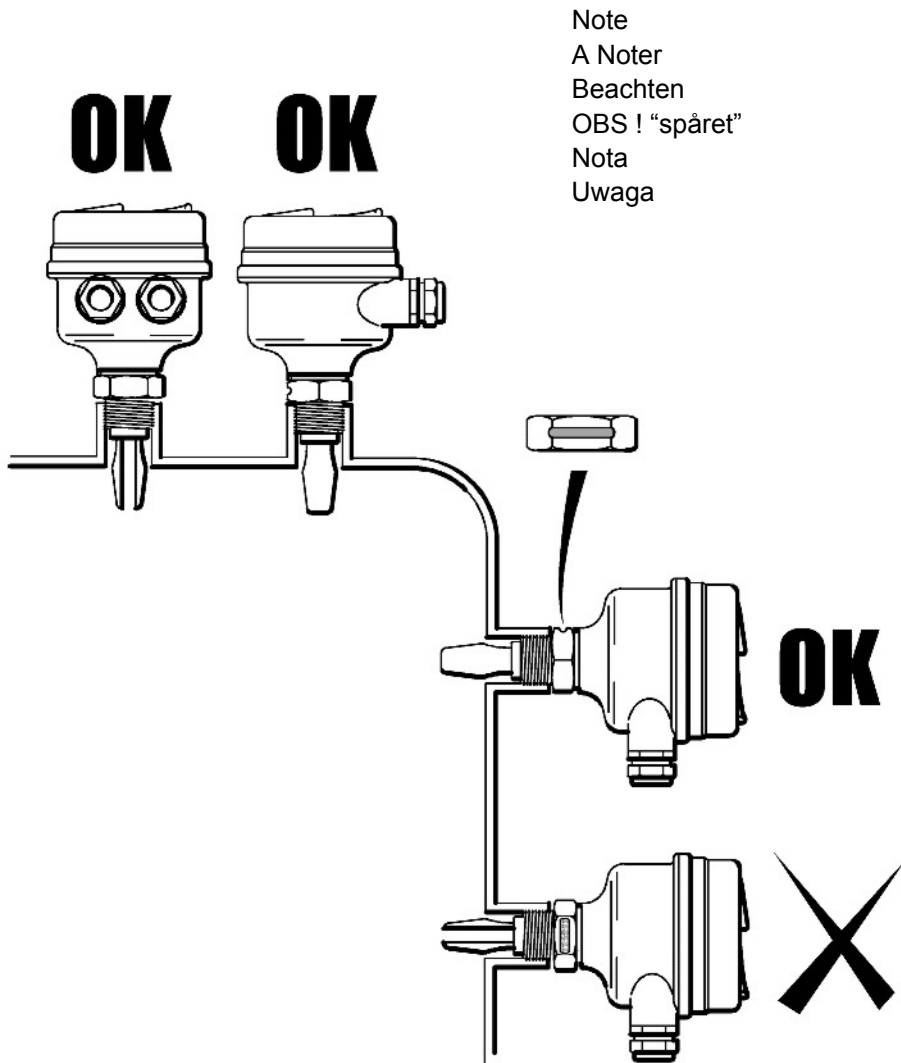
Alignment groove
 Repère d'alignement
 Ausrichtnut
 Indikeringsspår för gaffelläge
 Marca para alineación
 Een inkeping duidt de orientatie van de vork
 Rowek ustawienia

Note
 A Noter
 Beachten
 OBS ! "spåret"
 Nota
 Uwaga

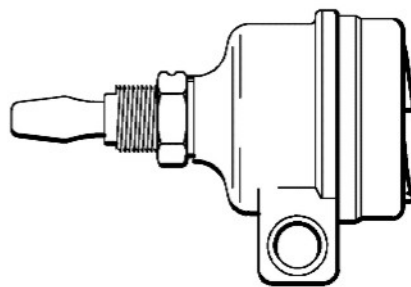
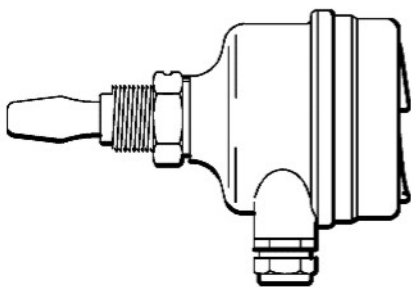


OK





- GB Cable gland orientation
- F Orientation du presse-étoupe
- D Kabeldurchführungs-ausrichtung
- S Kabelglandens läge
- E Orientación del prensaestopas del cable
- NL Orientatie van de wartel
- PL Orientacja dławika kablowego



GB

**Switching time delay
(0.3, 1, 3, 10 or 30 seconds) mode selection**
(5 second delay when switching between modes)

Status Indication (LED)

On continuous	Output ON
One flash per second	Output OFF
One flash every 4 seconds	Load Fault (current too high, short circuit or load omitted)

F

**Temporisation de commutation
Selection mode (0.3, 1, 3, 10 ou 30 secondes)**
(Délai de 5 secondes après modification du mode ou du temps de réponse)

Indication état (LED)

Allumé en continu	Sortie ON
Clignote une fois par seconde	Sortie OFF
Clignote toutes les 4 secondes	Défaut (courant trop fort, court circuit ou charge omis)

D

**Schaltzeitverzögerung
(0,3, 1, 3, 10 oder 30 Sekunden) modusauswahl**
(5 Sekunden Verzögerung nach Modus- oder Verzögerungszeitwechsel)

Statusanzeige (LED)

Dauerbetrieb	Ausgang Ein
Ein Blitz pro Sekunde	Ausgang AUS
Ein Blitz alle 4 Sekunden	Lastfehler (zu hohe Stromstärke Kurzschluß oder überschlagen)

S

**Tidsfördröjning
(0,3, 1, 3, 10 eller 30 sekunder) lägesval**
(5 s fördröjning vid ändring av arbetssätt eller larmfördröjning)

Statusindikering (LED)

Lyser kontinuerligt	Utgång TILL
En blinkning per sekund	Utgång FRÅN
En blinkning var 4:e sekund	Belastningsfel (för hög-ström, kortslutning eller Inkopplad last)

E

**Demora del tiempo de conmutación
(0,3, 1, 3, 10 ó 30 segundos) mode selección**
(5 segundos de atraso após mudança do modo ou tempo de atraso)

Indicador de Estado (LED)

En continuo	Salida ON
Un destello por segundo	Salida OFF
Un destello cada 4 segundos	Fallo de carga (corriente demasiado alta, cortocircuito u omitida)

NL

**Schakelvertraging
(0,3, 1, 3, 10 of 30 sec.) instelling**
(5 seconden vertraging na het wijzen van de mode of vertragingstijd)

Toestandsindicatie (LED)

Continu aan	Uitgang AAN
Een flits per seconde	Uitgang UIT
Een flits per 4 seconden	Belastingsfout (stroom te hoog, kortsluiting of niet aangesloten)

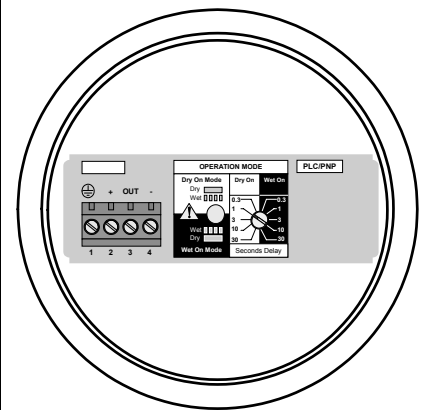
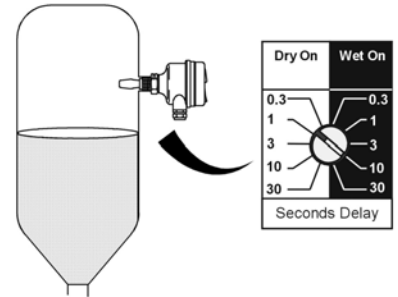
PL

**Ustawienie czasu opóźnienia
Wybór modu pracy (0,3, 1, 3, 10 lub 30 sekund)**
(5 sekund opóźnienia jeżeli przełączamy mod pracy)

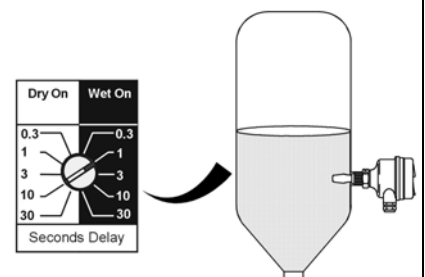
Wkaźnik statusu (LED)

“Włączony” ciągle	wyjście “Włączony”
Miganie raz na sekundę	wyjście “Wyłączony”
Miganie raz na 4 sekundy	błąd obciążenia (za duży prąd, zwarcie, brak obciążenia)

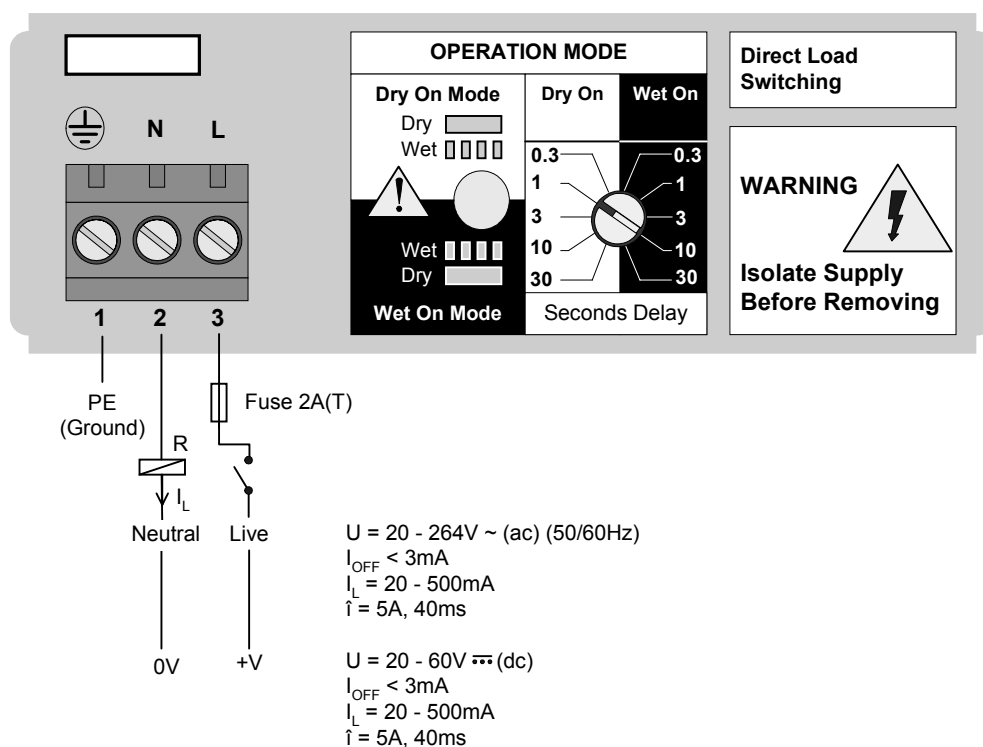
Mode = Dry On
Niveau haut Sec = Passant
TROCKEN = EIN Oberer Begrenzer
Hög nivå TORR = TILL
Nivel alto SECO= ON
Hoog niveau DROOG = AAN
Mod pracy = wynurzony, włączony



Mode = Wet On
Niveau bas Mouillé = Passant
NASS = EIN Unterer Begrenzer
Låg nivå VÅT = TILL
Nivel bajo HUMEDO = ON
Laag niveau NAT = AAN
Mod pracy = zanurzony, włączony



- GB** Direct load switching (2 Wire) (Red)
- F** Commutation de charge directe (2 fils) (rouge)
- D** Direktlastschaltung (2-adrig) (Rot)
- S** Direktkopplad last (2 ledare) (röd)
- E** Conmutación carga directa (2 hilos) (Rojo)
- NL** Direct geschakelde belasting (2-draads) (rood)
- PL** Bezpośrednie przełączanie obciążenia – wersja 2 przewodowa. Moduł elektroniki - czerwony

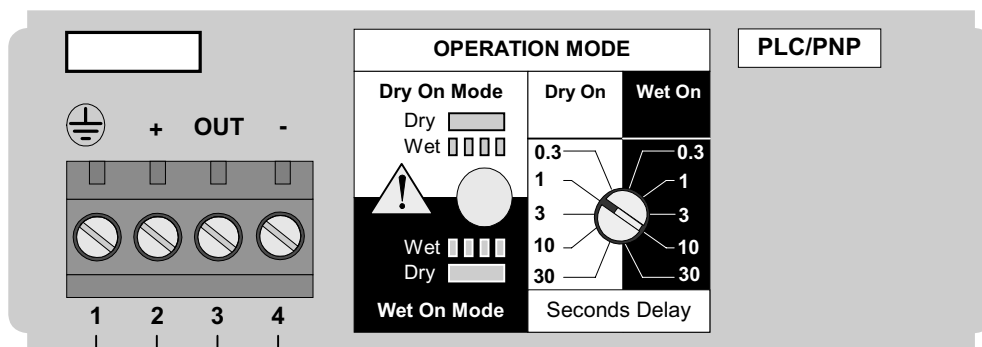


- GB** R = External load (must be fitted)
- F** R = Charge externe (impératif)
- D** R = Externe Last (muß installiert sein)
- S** R = Extern last (måste monteras som visas)
- E** R = Carga exterior (debeinstalarse)
- NL** R = Externe belasting (moetaangesloten zijn)
- PL** R = Zewnętrzne obciążenie (musi być podłączone)

= Load on. = Relais excité = Last ein. = Belastning till. = Carga on. = Belasting aan. = Pod napięciem.	= Load off. = Relais au repos = Last aus. = Belastning från. = Carga off. = Belasting uit. = Bez napięcia.

<p>High level DRY = ON Niveau haut Sec = Passant TROCKEN = EIN Oberer Begrenzer Hög nivå TORR = TILL Nivel alto SECO=ON Hoog niveau DROOG = AAN Poziom wysoki, czujnik wynurzony = włączony</p>	<table border="1" style="width: 100%;"> <tr> <th style="width: 50%;">Dry On</th> <th style="width: 50%;">Wet On</th> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">0.3</td> <td style="text-align: center;">0.3</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">30</td> </tr> <tr> <td colspan="2" style="text-align: center;">Seconds Delay</td> </tr> </table>	Dry On	Wet On			0.3	0.3	1	1	3	3	10	10	30	30	Seconds Delay		<p>Low level WET = ON Niveau bas Mouillé = Passant NASS = EIN Unterer Begrenzer Låg nivå VÅT = TILL Nivel bajo HUMEDO = ON Laag niveau NAT = AAN Poziom niski, czujnik zanurzony = włączony</p>	<table border="1" style="width: 100%;"> <tr> <th style="width: 50%;">Dry On</th> <th style="width: 50%;">Wet On</th> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">0.3</td> <td style="text-align: center;">0.3</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">30</td> </tr> <tr> <td colspan="2" style="text-align: center;">Seconds Delay</td> </tr> </table>	Dry On	Wet On			0.3	0.3	1	1	3	3	10	10	30	30	Seconds Delay	
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 ΔU 12V I_L Fuse 2A(T) N 0V L +V	 $<3mA$ I_L Fuse 2A(T) N 0V L +V	 ΔU 12V I_L Fuse 2A(T) N 0V L +V	 $<3mA$ I_L Fuse 2A(T) N 0V L +V																																
 LED on continuously Voyant fixe LED leuchtet dauernd LED ligado em contínuo LED lyser konstant LED constant aan LED światło ciągłe	 LED flashes every second Voyant clignotant à 1 Hz LED blinkt jede Sekunde LED pisca todos os segundos LED blinkar varje sekund LED knippert iedere seconde LED miga raz na sekundę	 LED on continuously Voyant fixe LED leuchtet dauernd LED ligado em contínuo Statusvisande LED med kontinuerligt LED constant aan LED światło ciągłe	 LED flashes every second Voyant clignotant à 1 Hz LED blinkt jede Sekunde LED pisca todos os segundos Statusvisande LED med alternativt blinkande 1 Hz LED knippert iedere seconde LED miga raz na sekundę																																

- GB** PNP output for load switching and direct PLC switching (Yellow)
- F** Sortie PNP pour commande directe d'une charge ou d'un automate (Jaune)
- D** PNP-Ausgang für Lastschalter und direkte SPS-Schaltung (Gelb)
- S** PNP-utgång för brytning av last och direkt PLC-inkoppling (Gul)
- E** Salida PNP para conmutación de carga y conmutación PLC directa (Amarillo)
- NL** PNP uitgang voor directe lastschakeling en PLC-aansturing (Geel)
- PL** Wersja z wyjściem PNP/PLC, moduł elektroniki (żółty)



Earth
(Ground)

+V O/P 0V

$U = 20 - 60V \overline{\text{dc}}$
 $I < 4mA + I_L$

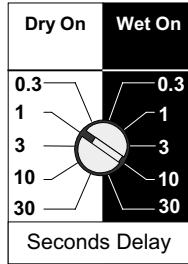
$I_{L(MAX)} = 0 - 500mA$
 $\hat{i} = 5A, 40ms$

$U_{OUT(ON)} = U - 2.5V$

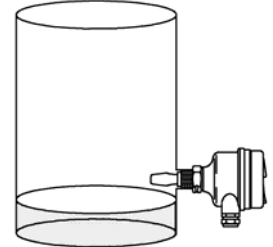
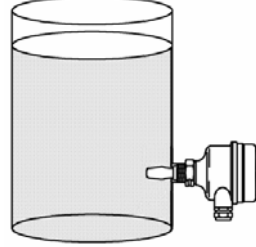
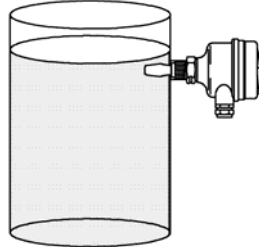
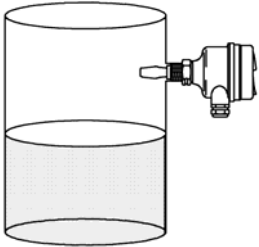
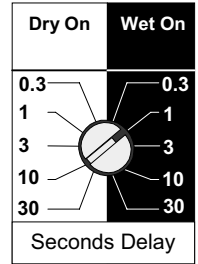
$I_{L(OFF)} < 100\mu A$

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= Pod napięciem	= Bez napięcia.

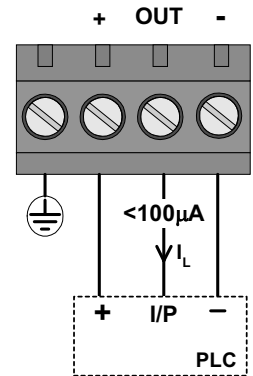
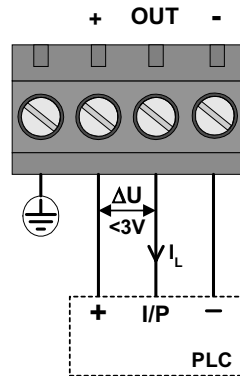
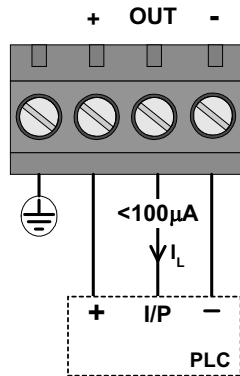
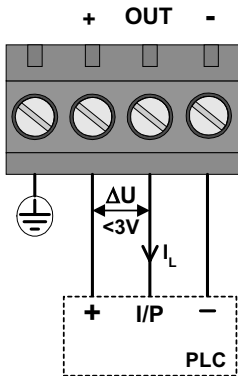
High level DRY = ON
 Niveau haut Sec = Passant
 TROCKEN = EIN Oberer Begrenzer
 Hög nivå TORR = TILL
 Nivel alto SECO=ON
 Hoog niveau DROOG = AAN
 Poziom wysoki, czujnik wynurzony
 = włączony



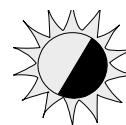
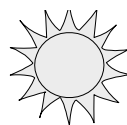
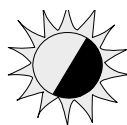
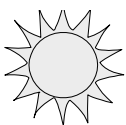
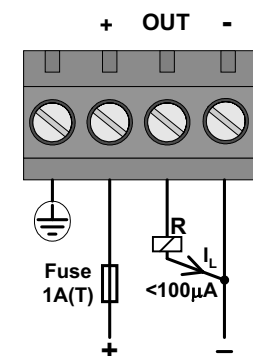
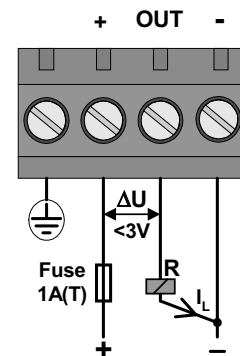
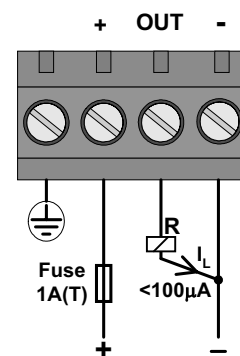
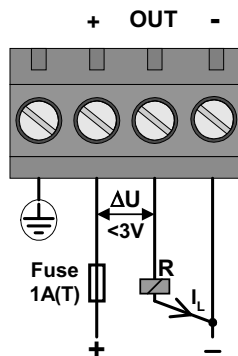
Low level WET = ON
 Niveau bas Mouillé = Passant
 NASS = EIN Unterer Begrenzer
 Låg nivå VÅT = TILL
 Nivel bajo HUMEDO = ON
 Laag niveau NAT = AAN
 Poziom niski, czujnik zanurzony
 = włączony



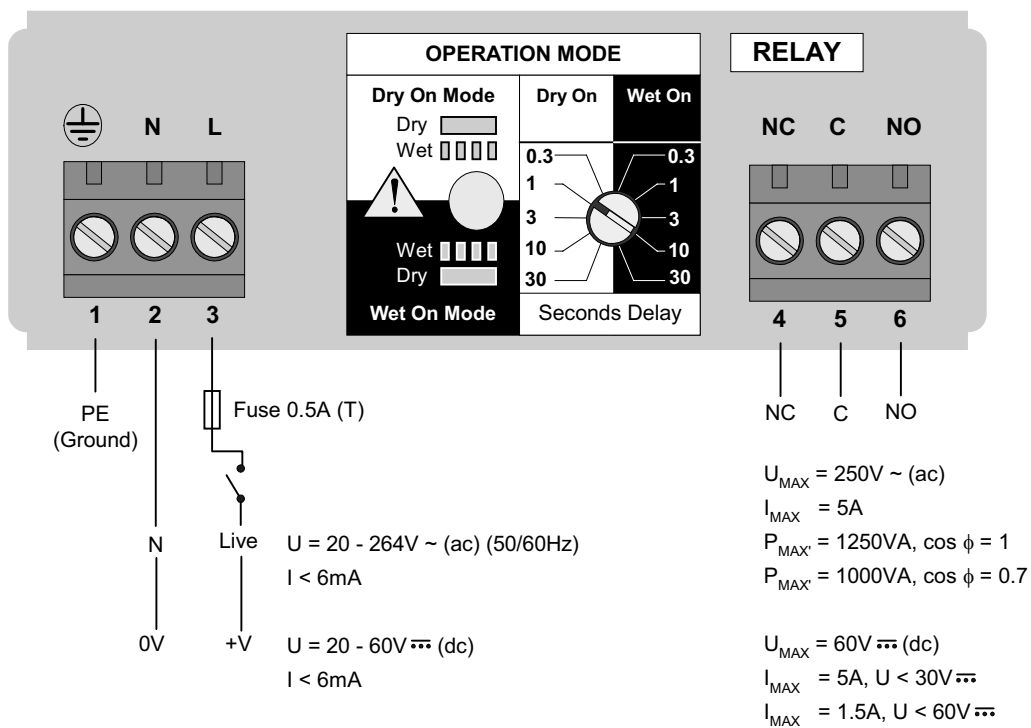
PLC (positive input)
 Automate pour entrée positive
 Positiver Eingang für SPS
 Positiv PLC-utgång
 PLC para entrada positiva
 PLC voor positieve input
 Połączenie dla PLC

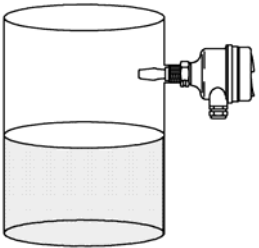
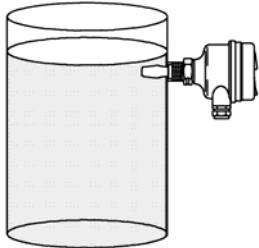
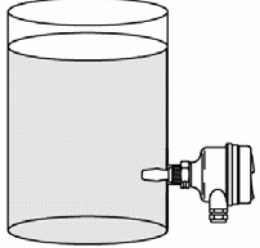
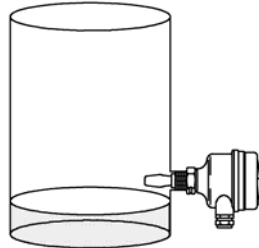
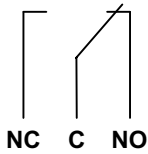
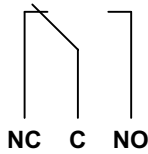
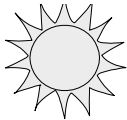
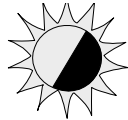
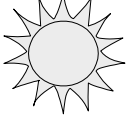
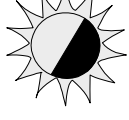


PNP dc
 Sortie PNP
 PNP Ausgang
 PNP-utgång
 Salida PNP
 PNP uitgang
 Wyjście PNP

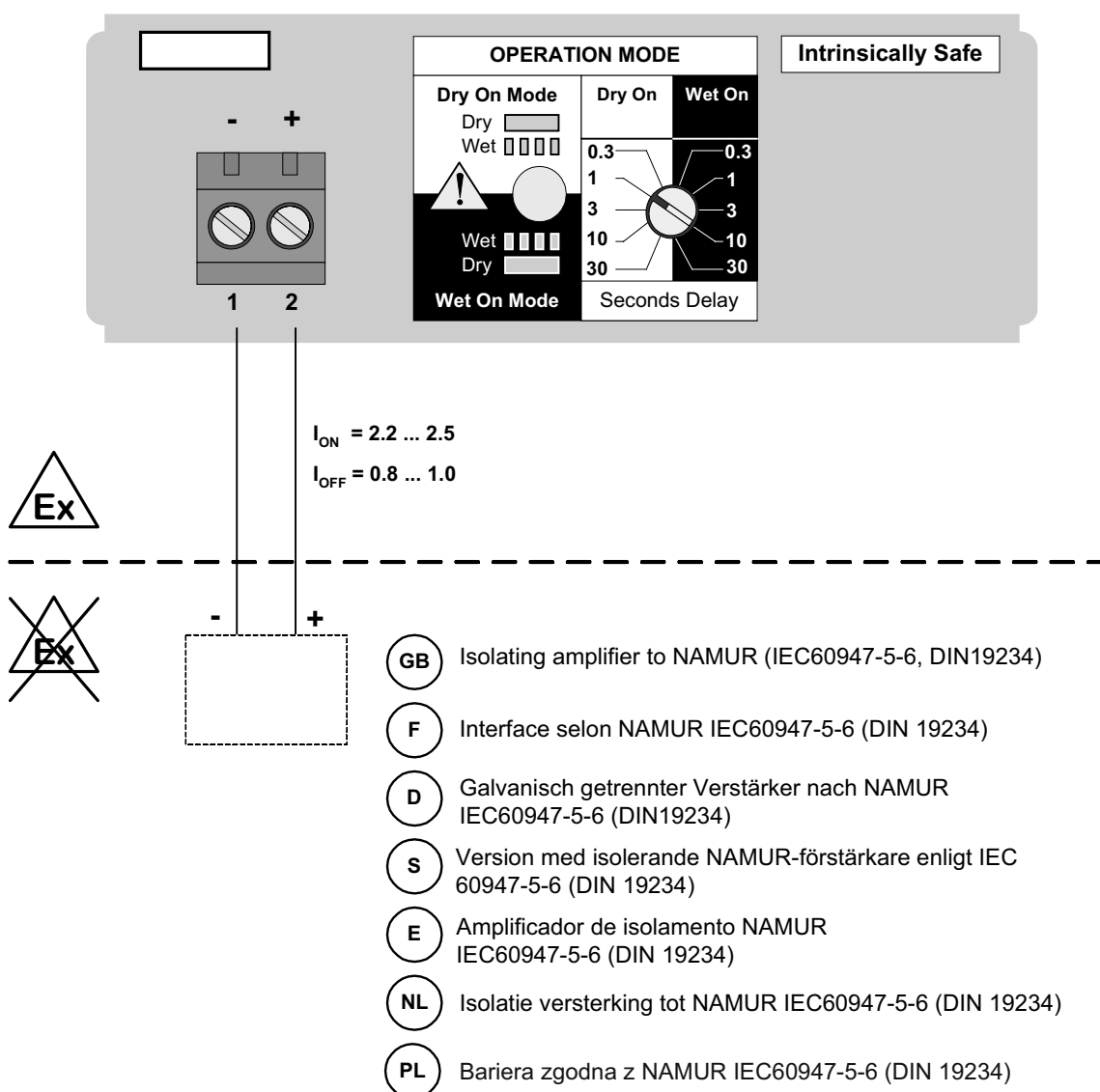


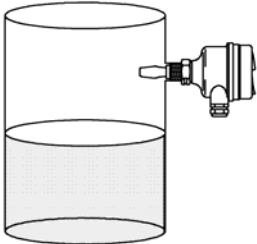
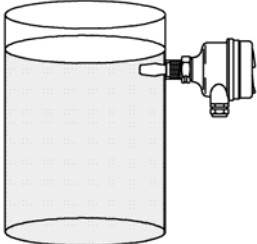
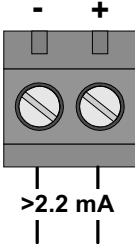
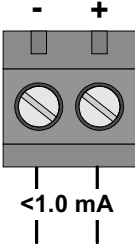
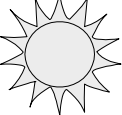
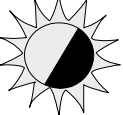
- GB Relay output, SPCO, (Green)
- F Sortie relais, SPCO, (Vert)
- D Relaisausgang, wechsler, (Grün)
- S Reläutgång, SPCO, (Grön)
- E Salida de relé, SPCO, (Verde)
- NL Relais uitgang, eenpolig wisselcontact (SPCO), (Groen)
- PL Wyjście przekaźnikowe, moduł elektroni, (Zielony)



<p>High level DRY = ON Niveau haut Sec = Passant TROCKEN = EIN Oberer Begrenzer Hög nivå TORR = TILL Nivel alto SECO = ON Hoog niveau DROOG = AAN Poziom wysoki, czujnik wynurzony = włączony</p>	<p>Low level WET = ON Niveau bas Mouillé = Passant NASS = EIN Unterer Begrenzer Låg nivå VÅT = TILL Nivel bajo HUMEDO = ON Laag niveau NAT = AAN Poziom niski, czujnik zanurzony = włączony</p>
 	 
 <p>NC C NO</p>	 <p>NC C NO</p>
 <p>LED on continuously Voyant fixe LED leuchtet dauernd LED ligado em continuo LED lyser konstant LED constant aan LED światło ciągłe</p>	 <p>LED flashes every second Voyant clignotant à 1 Hz LED blinkt jede Sekunde LED pisca todos os segundos LED blinkar varje sekund LED knippert iedere seconde LED miga raz na sekundę</p>
 <p>LED on continuously Voyant fixe LED leuchtet dauernd LED ligado em continuo Statusvisande LED med kontinuerligt LED constant aan LED światło ciągłe</p>	 <p>LED flashes every second Voyant clignotant à 1 Hz LED blinkt jede Sekunde LED pisca todos os segundos Statusvisande LED med alternativt blinkande 1 Hz LED knippert iedere seconde LED miga raz na sekundę</p>

- GB** Intrinsically Safe NAMUR (Blue)
- F** Sécurité Intrinsèque NAMUR (Blue)
- D** Eigensicher NAMUR (Blau)
- S** Version med egensäker NAMUR (Utgång)
- E** Segurança Intrínseca NAMUR (Azul)
- NL** Intrinsiek veilig NAMUR (Blauw)
- PL** Wersja iskrobezpieczna, moduł elektroniki (Niebieski)



<p>High level DRY = ON Niveau haut Sec = Passant TROCKEN = EIN Oberer Begrenzer Hög nivå TORR = TILL Nivel alto SECO=ON Hoog niveau DROOG = AAN Poziom wysoki, czujnik wynurzony = włączony</p>	<p>Low level WET = ON Niveau bas Mouillé = Passant NASS = EIN Unterer Begrenzer Låg nivå VÅT = TILL Nivel bajo HUMEDO = ON Laag niveau NAT = AAN Poziom niski, czujnik zanurzony = włączony</p>
	
	
 <p>LED on continuously Voyant fixe LED leuchtet dauernd LED ligado em contínuo LED lyser konstant LED constant aan LED światło ciągłe</p>	 <p>LED flashes every second Voyant clignotant à 1 Hz LED blinkt jede Sekunde LED pisca todos os segundos LED blinkar varje sekund LED knippert iedere seconde LED miga raz na sekundę</p>