



DEUTSCH

Ultraschallsensor
mit Analogausgang
Betriebsanleitung

Sicherheitshinweise

- Vor der Inbetriebnahme die Betriebsanleitung lesen.
- Anschluss, Montage und Einstellung nur durch Fachpersonal.
- Gerät bei Inbetriebnahme vor Feuchte und Verunreinigung schützen.
- Kein Sicherheitsbauteil gemäß EU-Maschinenrichtlinie.

Bestimmungsgemäße Verwendung

Der UM30-21_113 ist ein Ultraschallsensor und wird zum berührungslosen Erfassen von Sachen, Tieren und Personen eingesetzt.

Inbetriebnahme

Siehe Ablaufdiagramm. Default-Werte: Analogausgang von min. bis max. Betriebstastweite; steigende Ausgangscharakteristik.

Wartung

SICK-Sensoren sind wartungsfrei. Wir empfehlen, in regelmäßigen Abständen - die Grenzflächen zu reinigen, - Verschraubungen und Steckverbindungen zu überprüfen.

SICK

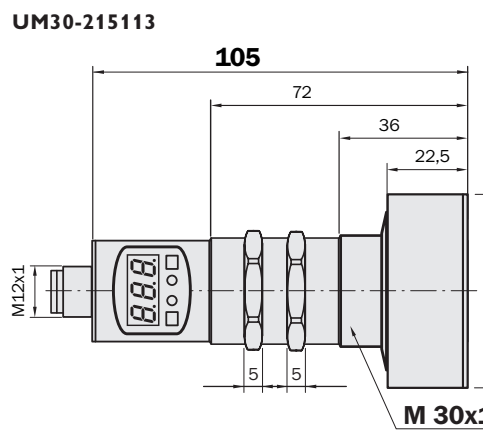
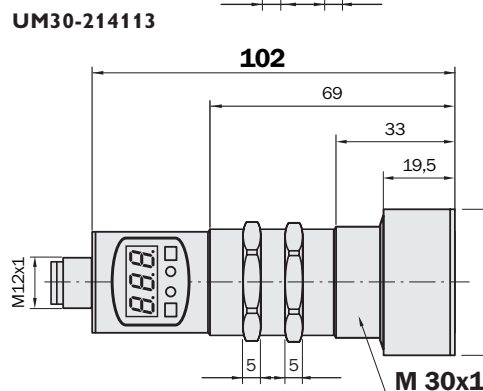
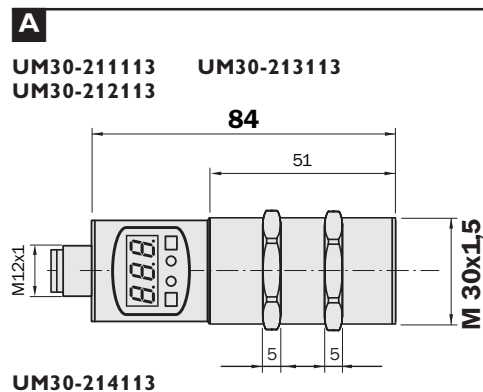
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SENSICK UM30-21_113

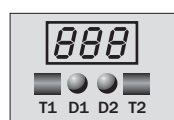
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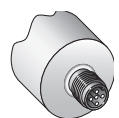
Änderungen vorbehalten
Angewandte Produktigenschaften und technische Daten stellen keine
Garantieerklärung dar



Alle Typen

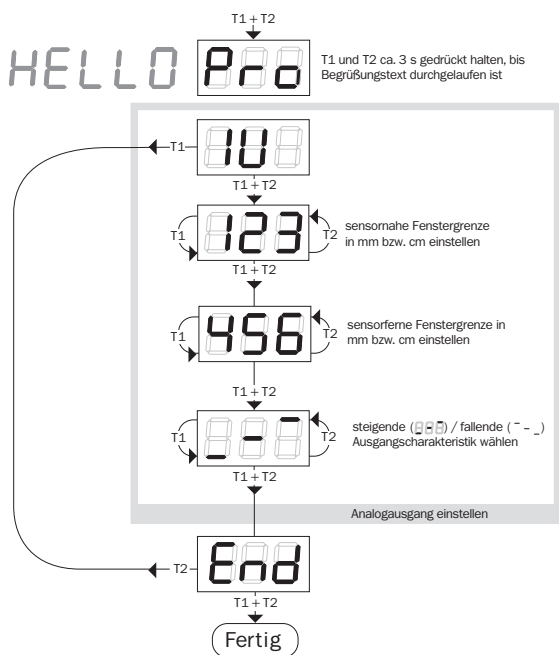


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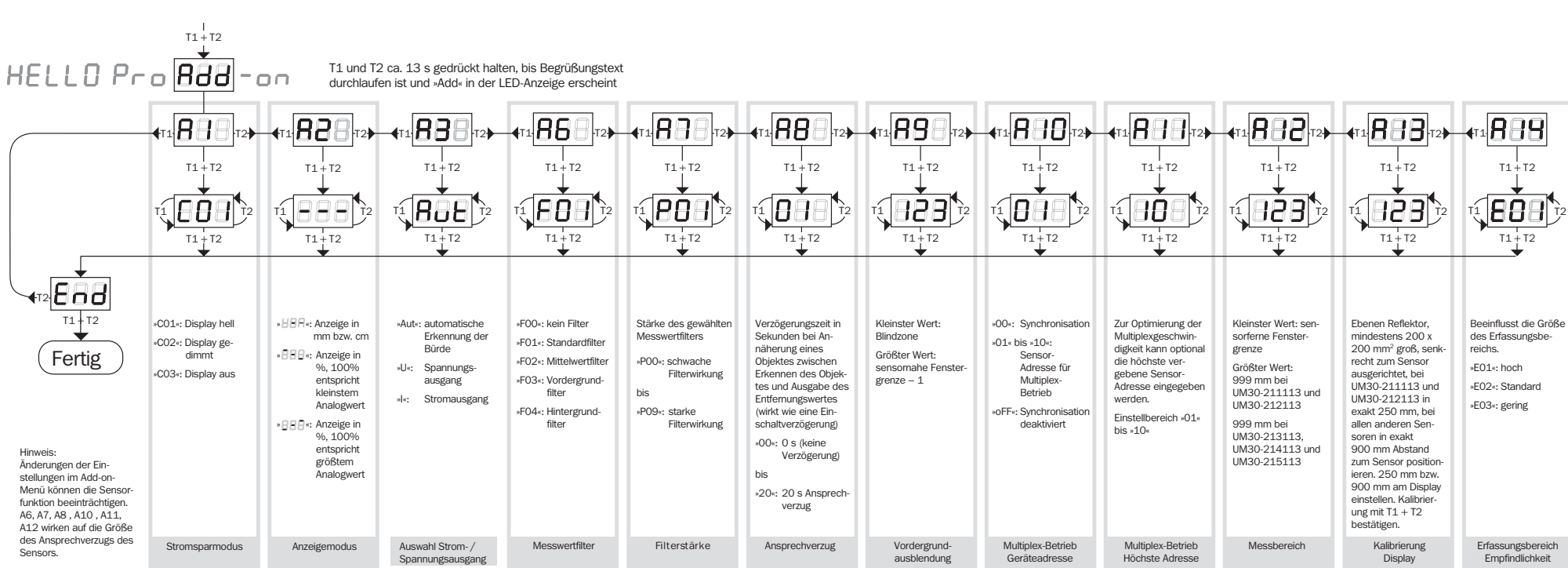


- 1 L+
- 2 Q_A
- 4 NC
- 5 Sync/Com
- 3 M

Ablaufdiagramm Numerische Parametrierung über LED-Anzeige

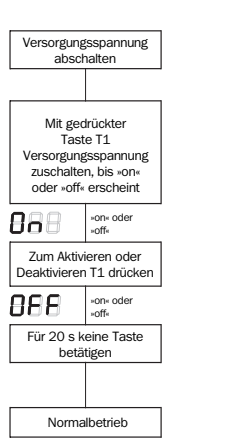


Add-on-Menü: Zusatzfunktionen

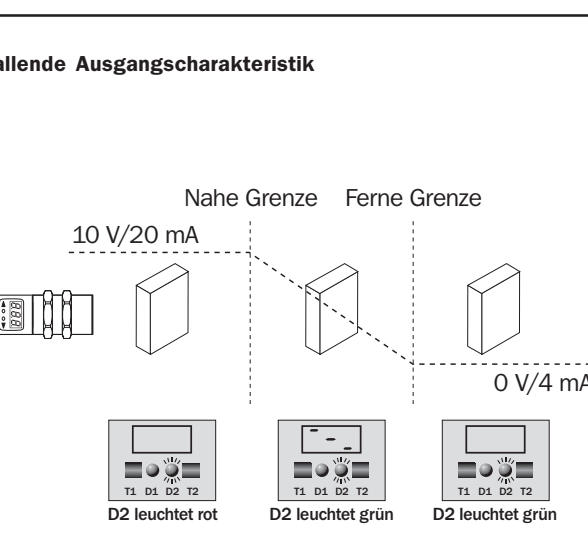
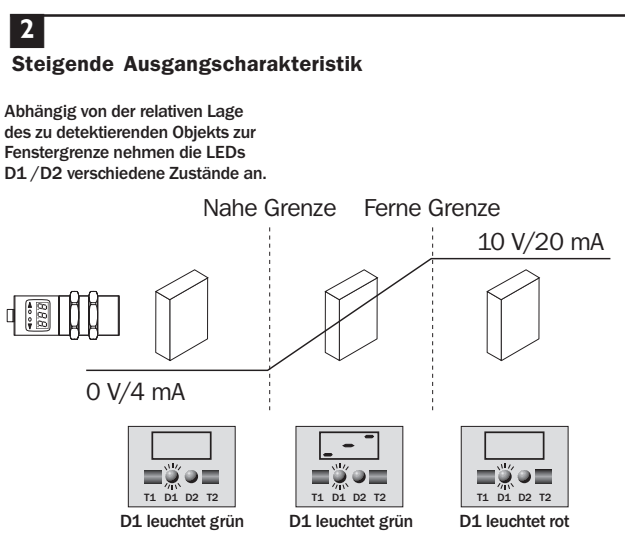
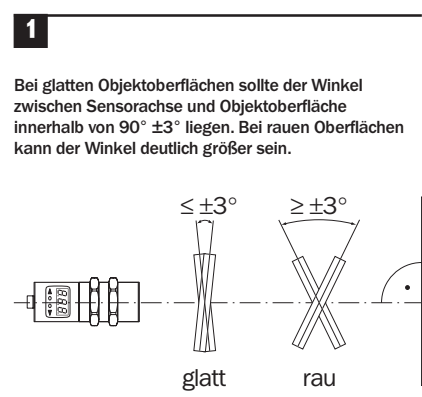
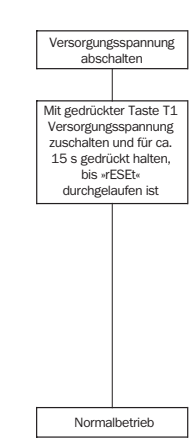


Hinweis:
Änderungen der Einstellungen im Add-on-Menü können die Sensorfunktion beeinträchtigen.
A6, A7, A8, A10, A11, A12 wirken auf die Größe des Ansprechverzugs des Sensors.

Display Touch Control aktivieren/deaktivieren



Zurücksetzen auf Werkseinstellung



UM 30	-211113	-212113	-213113	-214113	-215113
Betriebstastweite (Grenztastweite)	30-250 mm (350)	60-350 mm (600)	200-1300 mm (2000)	350-3400 mm (5000)	800-6000 mm (8000)
Ultraschallfrequenz	320 kHz	400 kHz	200 kHz	120 kHz	80 kHz
Auflösung	0,18 mm				
Reproduzierbarkeit	±0,15 % von Grenztastweite				
Genauigkeit	≤ 2 % von Grenztastweite				
Versorgungsspannung ¹⁾	DC 9...30 V				
Restwelligkeit	±10 %				
Stromaufnahme ²⁾	≤ 80 mA				
Bereitschaftsverzug	< 300 ms				
Ansprechzeit ³⁾	50 ms	70 ms	110 ms	180 ms	240 ms
Analogausgang ⁴⁾	4-20 mA/0-10 V				
Anschlussart	M 12, 5-polig				
Schutzart	IP 67				
Betriebsumgebungstemperatur ⁵⁾	-25...+70 °C				

¹⁾ Verpolsicher
²⁾ Ohne Last
³⁾ Erholzeit 32 ms ... 180 ms nach EMV EN 50319
⁴⁾ Kurzschlussgeschützt, invertierbar
⁵⁾ Temperaturkompensiert bei -25...+50 °C, abschaltbar

00 02 #m32: The specified product features and technical data do not represent any guarantee



ENGLISH

Ultrasonic sensor
with analogue output
Operating Instructions

Safety Specifications

- No safety component in accordance with EU machine guidelines.
- Read the operating instructions before starting operation.
- Connection, assembly, and settings only by competent technicians.
- Protect the device against moisture and soiling when operating.

Proper Use

The UM30-21_113 is an ultrasonic sensor and is used for non-contact detection of objects, animals, and people.

Starting Operation

See flow chart. Default values: Analogue output of min. to max. operating scanning distance; increasing output characteristic.

Maintenance

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

SICK

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SENSICK UM30-21_113

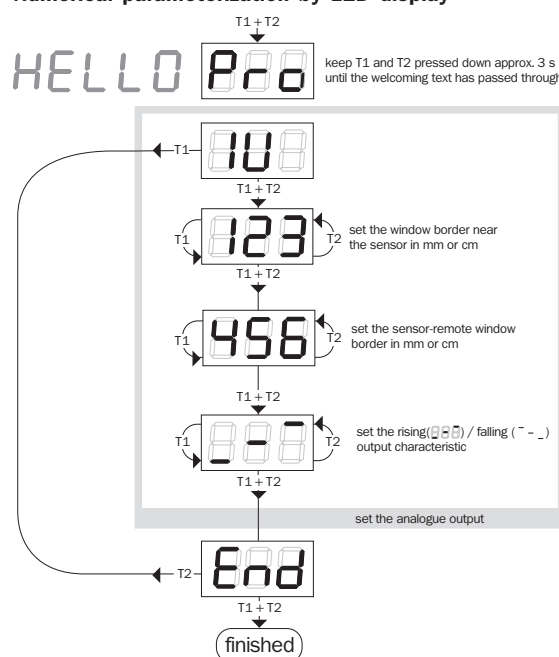
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Suomi Phone +358 9 25 15 800
E-Mail: sick@sick.fi
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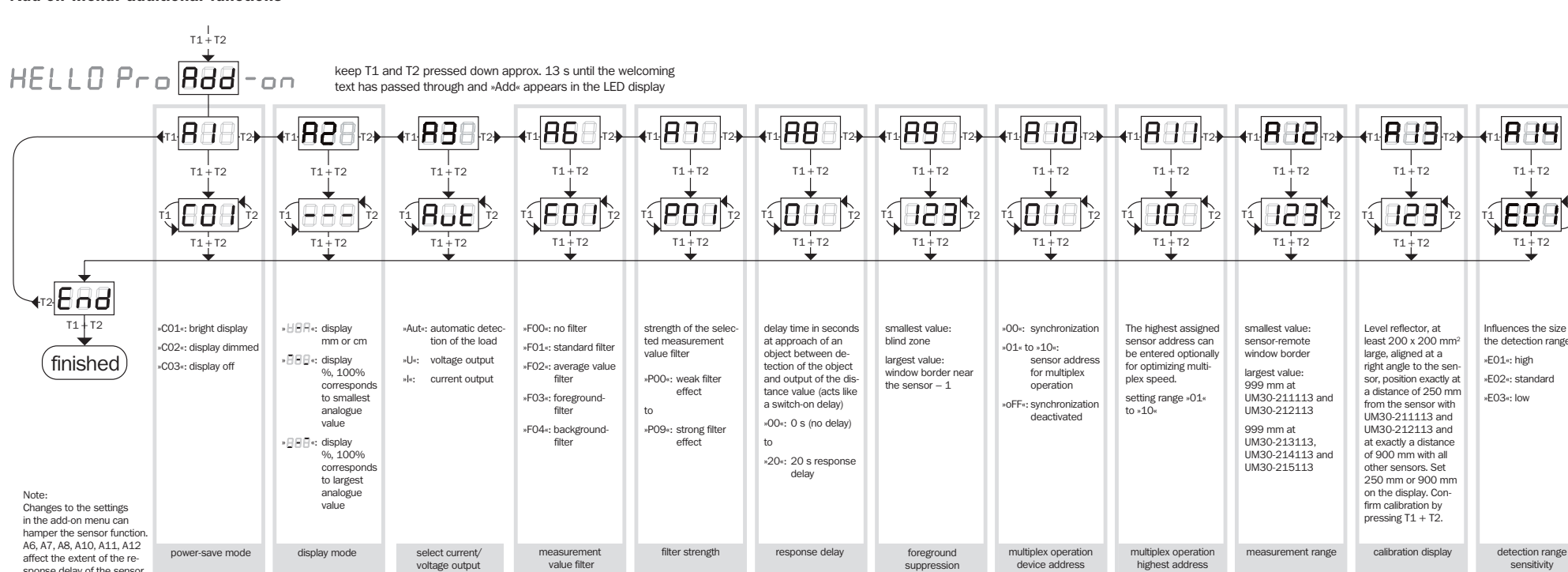
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We reserve the right to make changes without prior notification

Flow chart Numerical parameterization by LED display

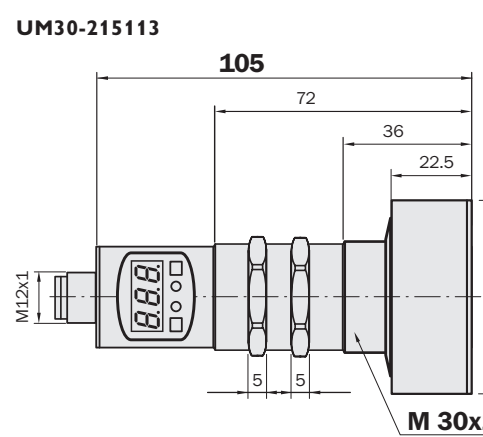
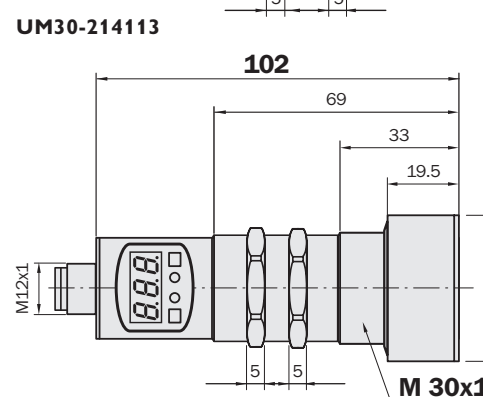
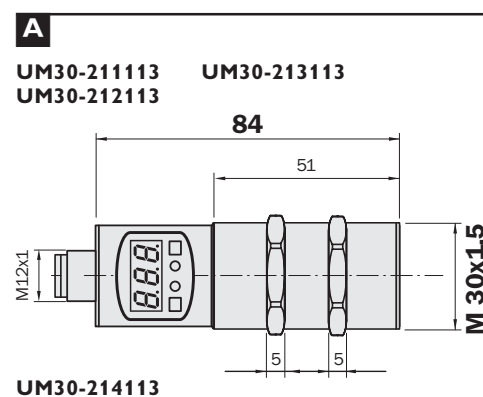
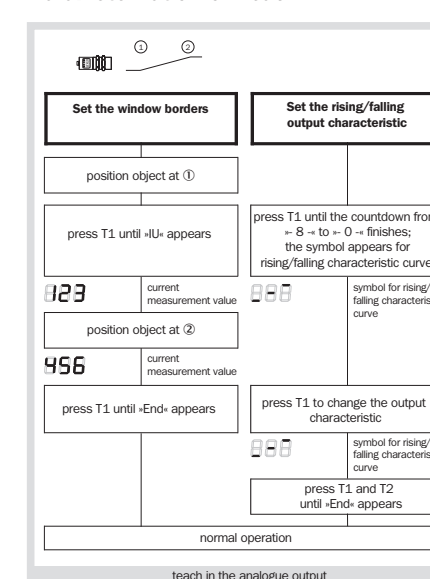


Add-on menu: additional functions

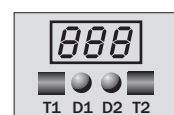


Note:
Changes to the settings in the add-on menu can hamper the sensor function. A6, A7, A8, A10, A11, A12 affect the extent of the response delay of the sensor.

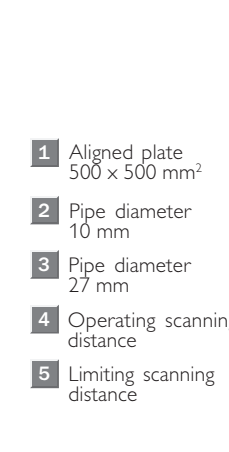
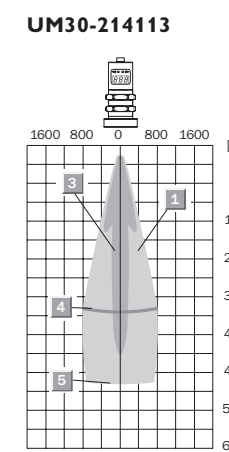
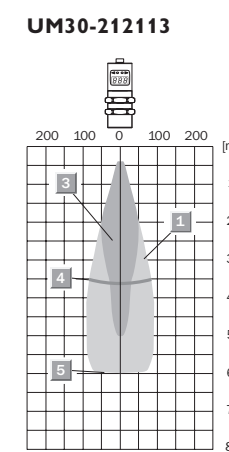
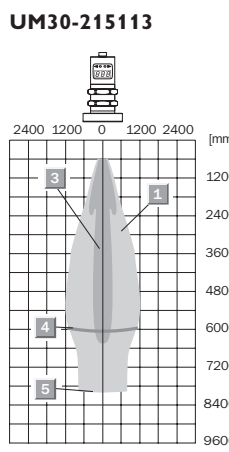
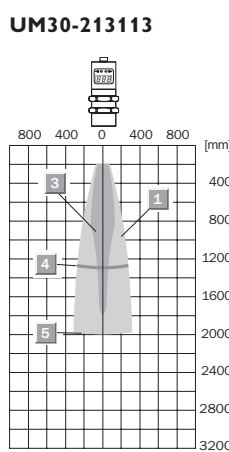
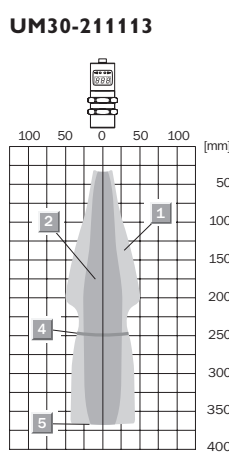
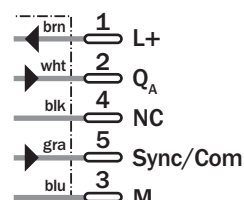
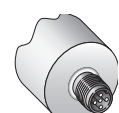
Parameterization of Teach-in



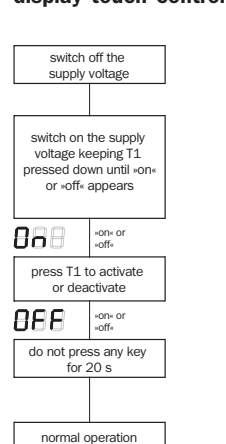
All types



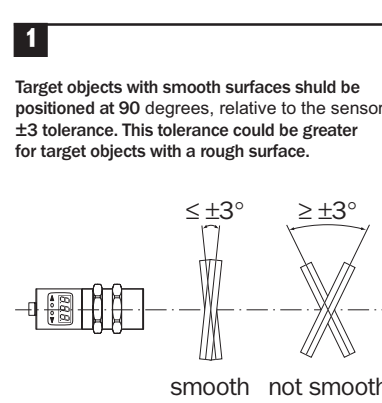
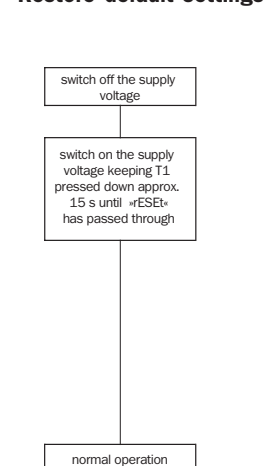
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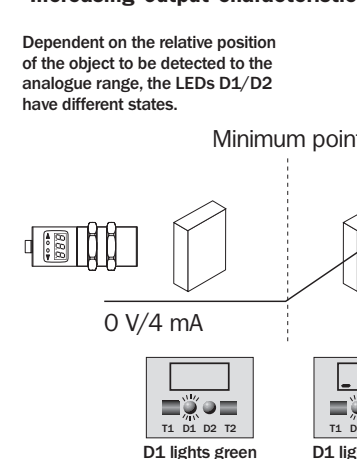
Activate/deactivate display touch control



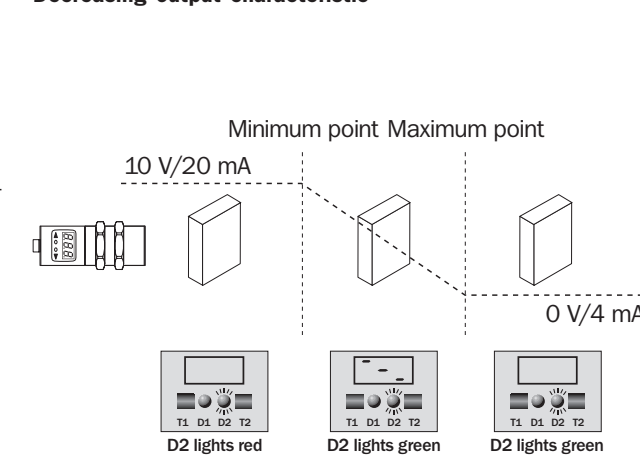
Restore default settings



Increasing output characteristic



Decreasing output characteristic



UM 30	-211113	-212113	-213113	-214113	-215113
Operating scanning dist. (limiting scanning dist.)	30-250 mm (350)	60-350 mm (600)	200-1300 mm (2000)	350-3400 mm (5000)	800-6000 mm (8000)
Ultrasound frequency	320 kHz	400 kHz	200 kHz	120 kHz	80 kHz
Resolution	0.18 mm				
Reproducibility	±0.15 % of limiting scanning distance				
Accuracy	≤ 2 % of limiting scanning distance				
Supply voltage ¹⁾	9...30 V DC				
Ripple	±10 %				
Current consumption ²⁾	≤ 80 mA				
Standby delay	< 300 ms				
Response time ³⁾	50 ms	70 ms	110 ms	180 ms	240 ms
Analogue output ⁴⁾	4-20 mA/0-10 V				
Connection type ⁵⁾	M 12, 5-pin				
Enclosure rating	IP 67				
Ambient operating temperature ⁵⁾	-25...+70 °C				

¹⁾ Reverse-polarity protected
²⁾ Without load
³⁾ Recovery time 32 ms ... 180 ms according to EMC EN 50319
⁴⁾ Short-circuit protected, reversible
⁵⁾ Temperature compensation at -25 ... +50 °C, can be switched off

