

## UP30-211118

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Änderungen vorbehalten  
Angegebene Produkteigenschaften und technische Daten stellen keine  
Garantieerklärung dar

### 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 UP30-211118 ist ein Ultraschallsensor und wird zur berührungslosen Füllstandserfassung von Flüssigkeiten eingesetzt.

### Inbetriebnahme

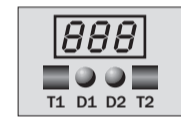
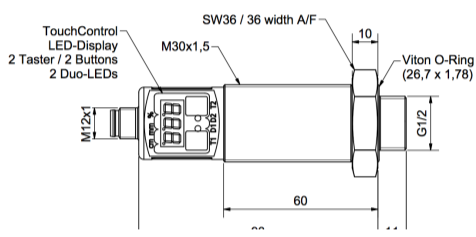
Siehe Ablaufdiagramm C.

### Wartung

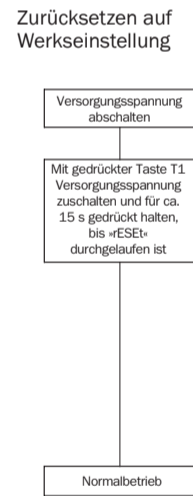
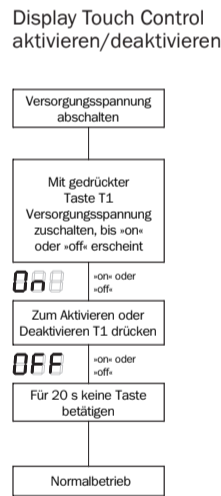
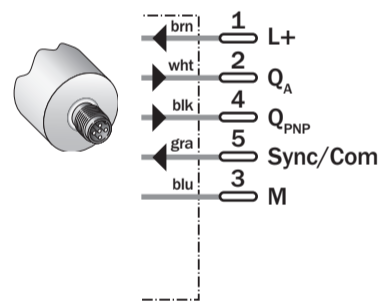
SICK-Sensoren sind wartungsfrei. Wir empfehlen, in regelmäßigen Abständen die Grenzflächen zu reinigen, - Verschraubungen und Steckverbindungen zu überprüfen.

## A

### UP30-211118



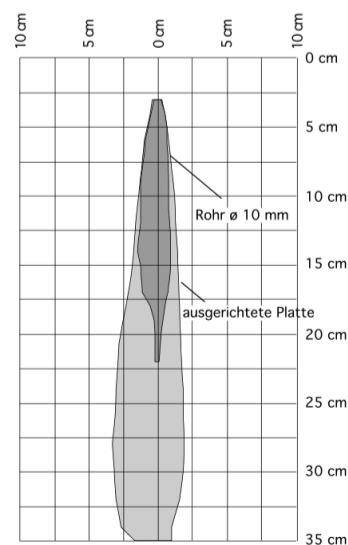
## B



### Werkseinstellung

- UP30-Sensoren werden werksseitig mit folgenden Einstellungen ausgeliefert:
- Steigende Analogkennlinie
  - Fenstergrenzen des Analog signals auf Blindzone und Betriebstastweite
  - Schaltabstand auf Betriebs-tastweite
  - Maximale Tastweite auf Grenztastweite

### UP30-211118



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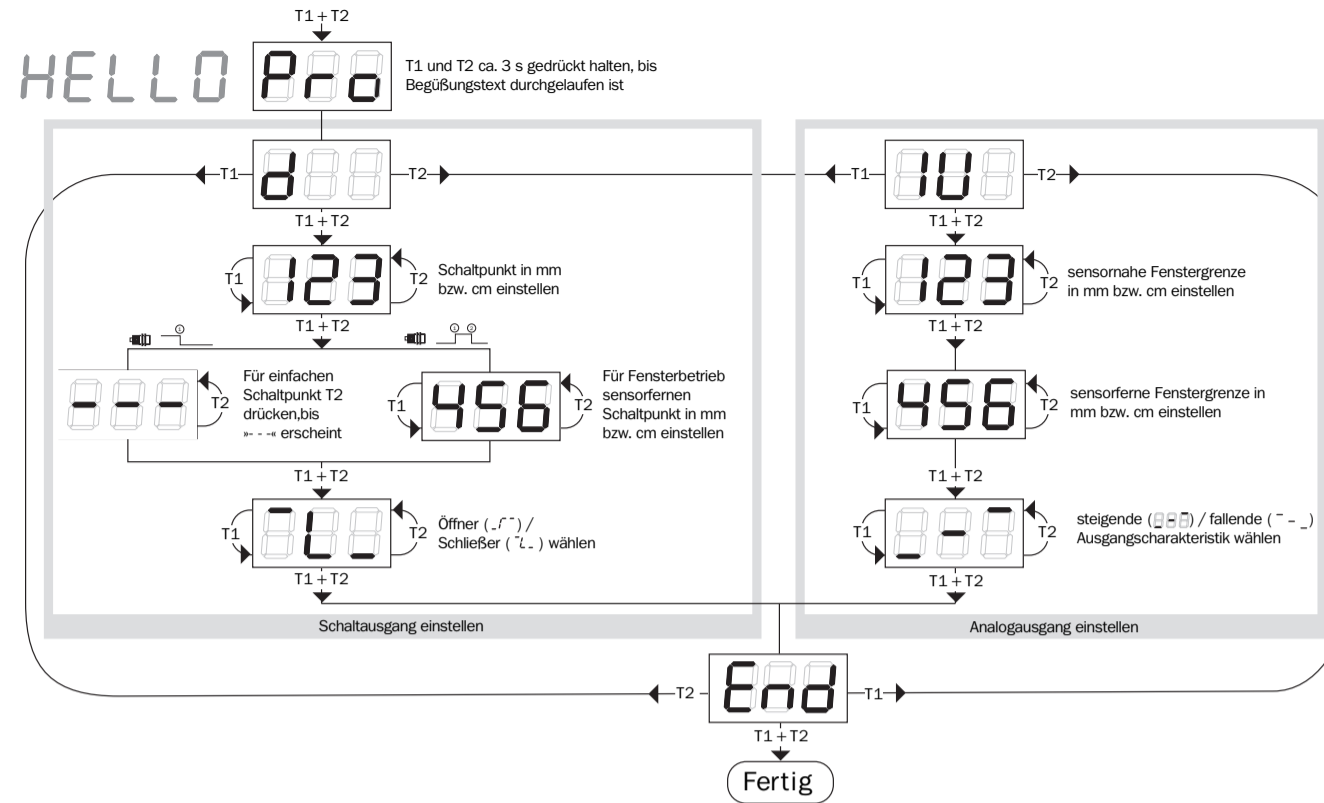
Betriebstastweite (Grenztastweite)	30-500 mm (700mm)
Ultraschallfrequenz	320 kHz
Auflösung	0,18 mm
Reproduzierbarkeit	±0,15 % von Grenztastweite
Genauigkeit	≤ 2 % von Grenztastweite
Versorgungsspannung <sup>1)</sup>	DC 9...30 V
Restwelligkeit	±10 %
Stromaufnahme <sup>2)</sup>	≤ 80 mA
Bereitschaftsverzug	< 300 ms
Ansprechzeit <sup>3)</sup>	110 ms
Analogausgang <sup>4) 5)</sup>	4-20 mA/0-10 V
Anschlussart	M 12, 5-polig
Prozessanschluss	G 1/2
Druckfestigkeit/Einsatzbereich	0,5 - 6 bar Überdruck
Schutzart	IP 67
Betriebsumgebungstemperatur <sup>6)</sup>	-25...+70 °C

<sup>1)</sup> Vorpulsicher  
<sup>2)</sup> Ohne Last  
<sup>3)</sup> Erholzeit 32 ms ... 180 ms nach EMV EN 50319  
<sup>4)</sup> Kurzschlussgeschützt, invertierbar  
<sup>5)</sup> Automatische Wahl von Strom- bzw. Spannungsausgang, abhängig von Last 4 ... 20 mA: RL ≤ 100/ bei 9 V ≤ UB ≤ 20 V; RL ≤ 500/ bei UB ≥ 20 V; 0 ... 10 V: RL ≤ 100 k/ bei UB ≥ 15 V, Kurzschlussfest  
<sup>6)</sup> Temperaturkompensiert bei -25...+50 °C, abschaltbar

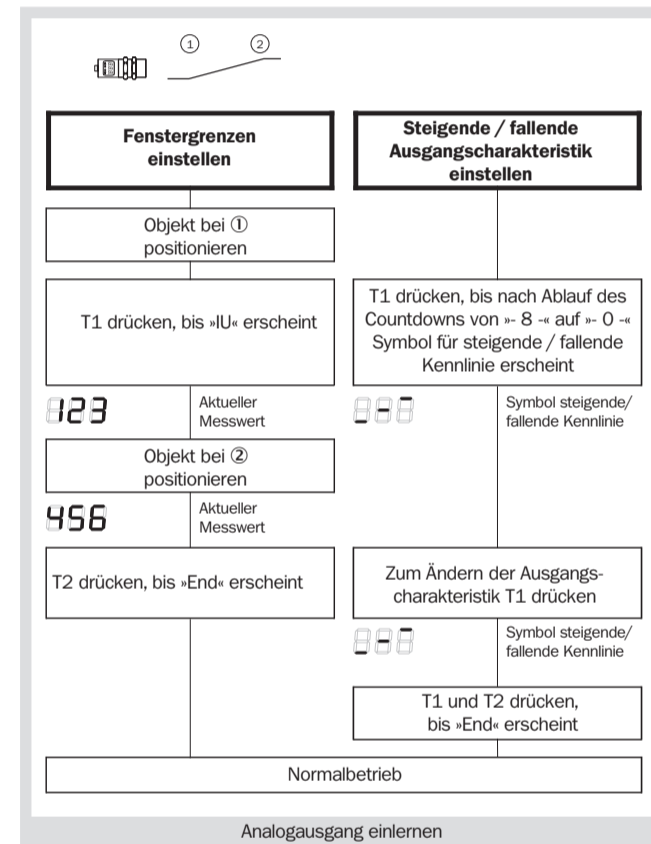
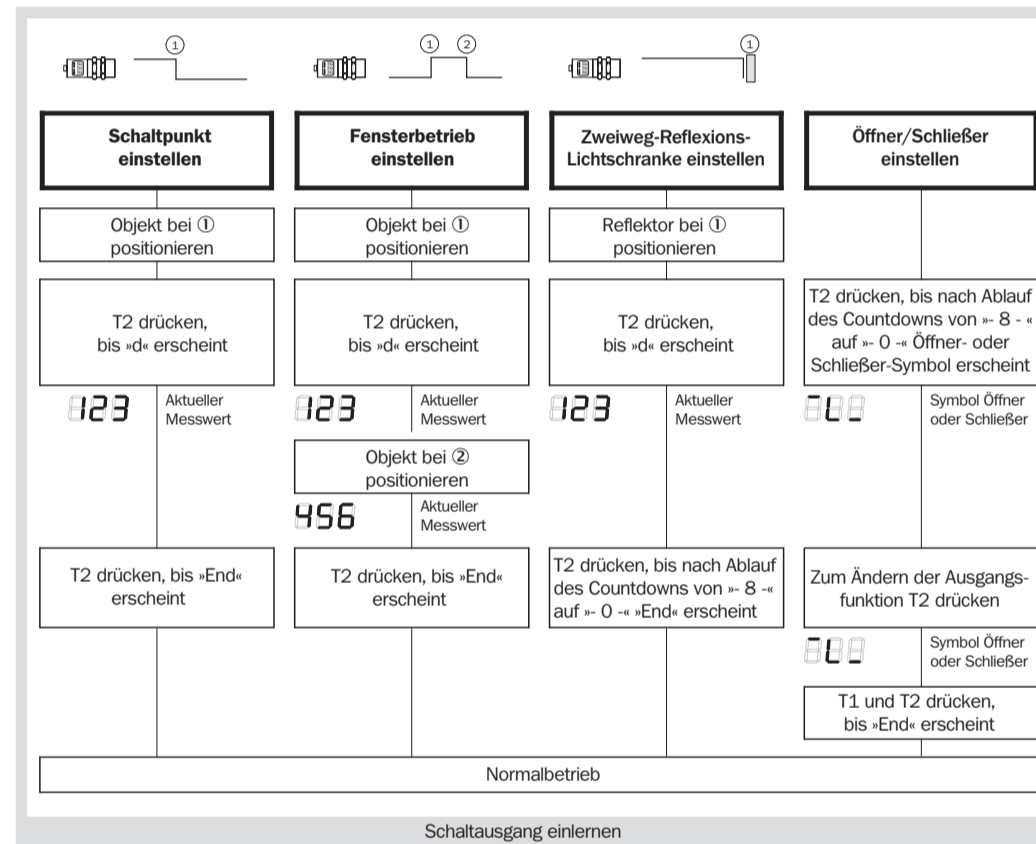
## C

### Ablaufdiagramm

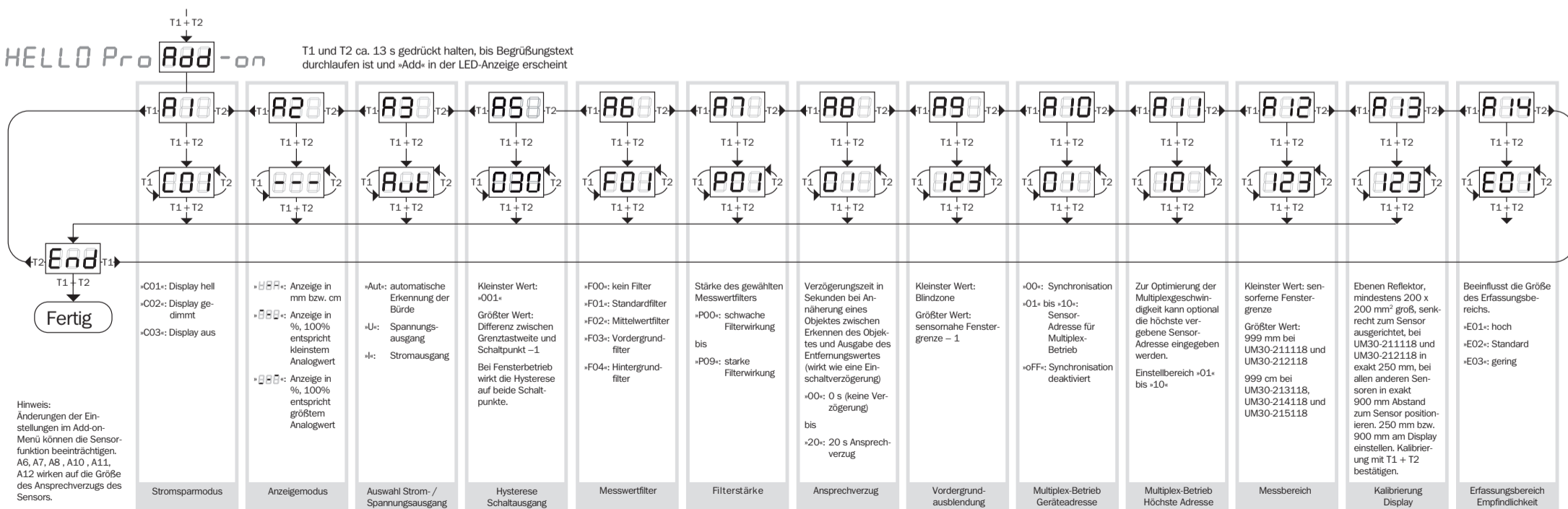
### Numerische Parametrierung über LED-Anzeige



### Parametrierung des Teach-in



### 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.

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We reserve the right to make changes without prior notification

### 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 UP30-211118 is an ultrasonic sensor and is used for non-contact level detection of fluids.

### Starting Operation

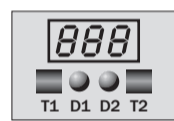
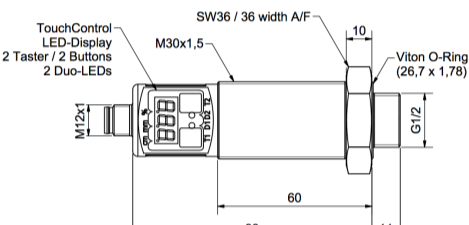
See flow chart C.

### Maintenance

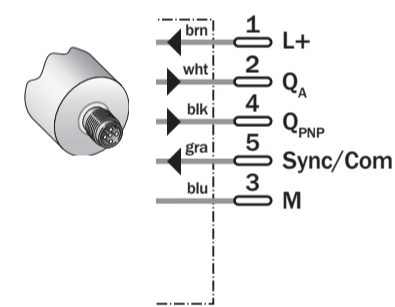
SICK sensors do not require any maintenance. We recommend that you clean the external lens surfaces and check the screw connections and plug-in connections at regular intervals.

## A

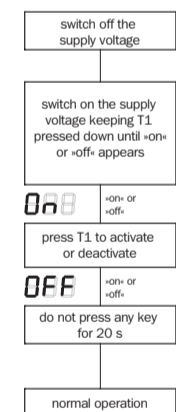
UP30-211118



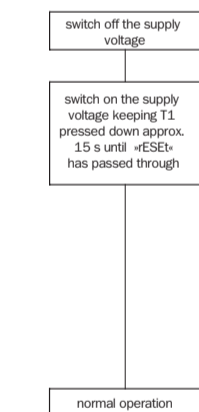
## B



### Activate/deactivate display touch control



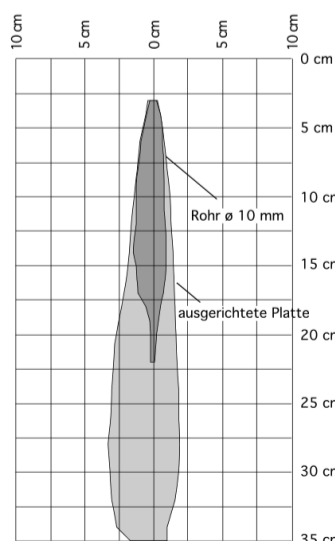
### Restore default settings



### Standard factory settings of UP30 are:

- Rising analog characteristic
- Window function for the analog output set to blind zone and operating range
- Switching signal is set as normally open
- Switching signal set on maximum operating range
- Measurement range set to maximum range

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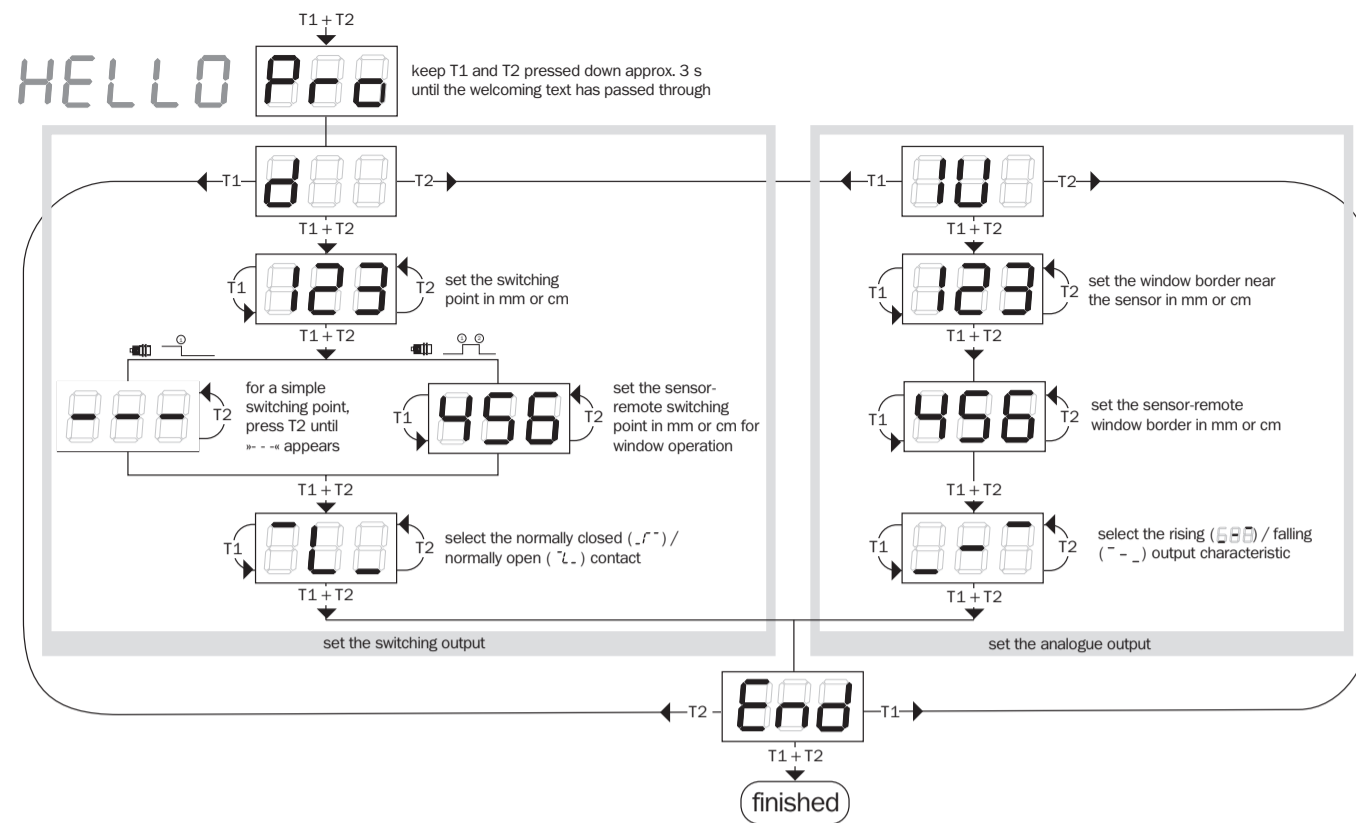
Operating scanning dist. (limiting scanning dist.)	30-500mm (700mm)
Ultrasound frequency	320kHz
Resolution	0.18 mm
Reproducibility	±0.15 % of limiting scanning distance
Accuracy	≤ 2 % of limiting scanning distance
Supply voltage <sup>1)</sup>	9...30 V DC
Ripple	±10 %
Current consumption <sup>2)</sup>	≤ 80 mA
Standby delay	< 300 ms
Response time <sup>3)</sup>	110 ms
Analogue output <sup>4) 5)</sup>	4-20 mA/0-10 V
Connection type	M 12, 5-pin
Process connection	G 1/2
Pressure resistance/ area of use	0,5 - 6 bar gauge pressure
Enclosure rating	IP 67
Ambient operating temperature <sup>6)</sup>	-25...+70 °C

<sup>1)</sup> Reverse-polarity protected  
<sup>2)</sup> Without load  
<sup>3)</sup> Recovery time 32 ms ...180 ms according to EMC EN 50319  
<sup>4)</sup> Short-circuit protected, reversible  
<sup>5)</sup> Automatic switching between voltage and current outputs dependet on load 4 ... 20 mA: RL ≤ 100Ω at 9 V ≤ UB ≤ 20 V; RL ≤ 500Ω at UB ≥ 20 V; 0 ... 10 V: RL ≥ 100 kΩ at UB ≥ 15 V, short-circuit protected  
<sup>6)</sup> Temperature compensation at -25 ...+50 °C, can be switched off

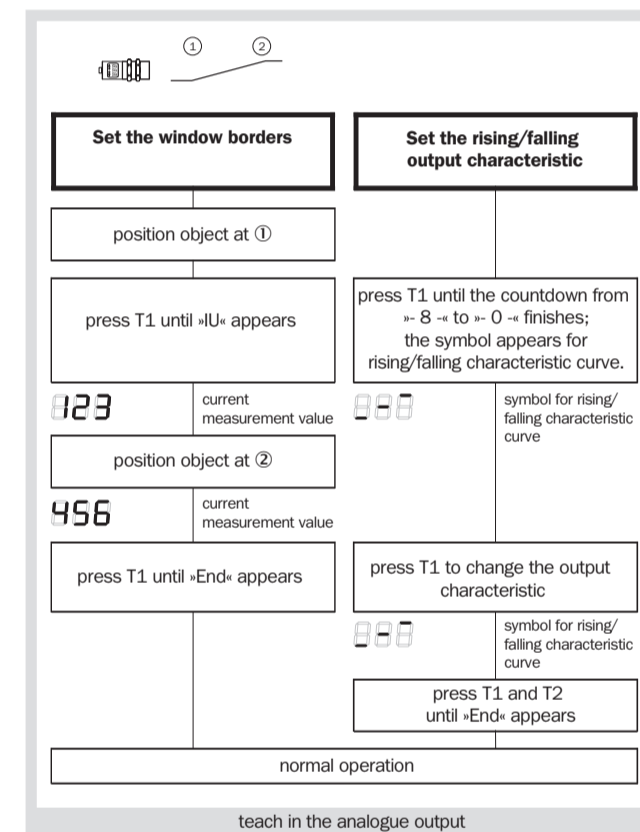
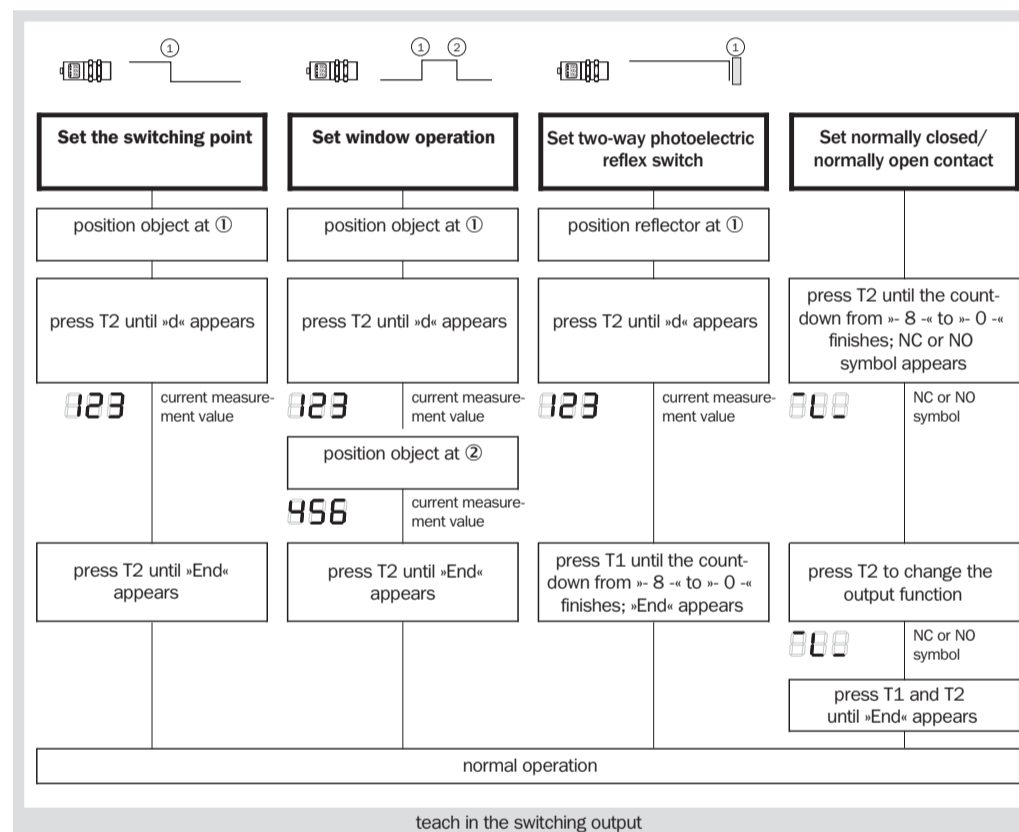
## C

### Flow chart

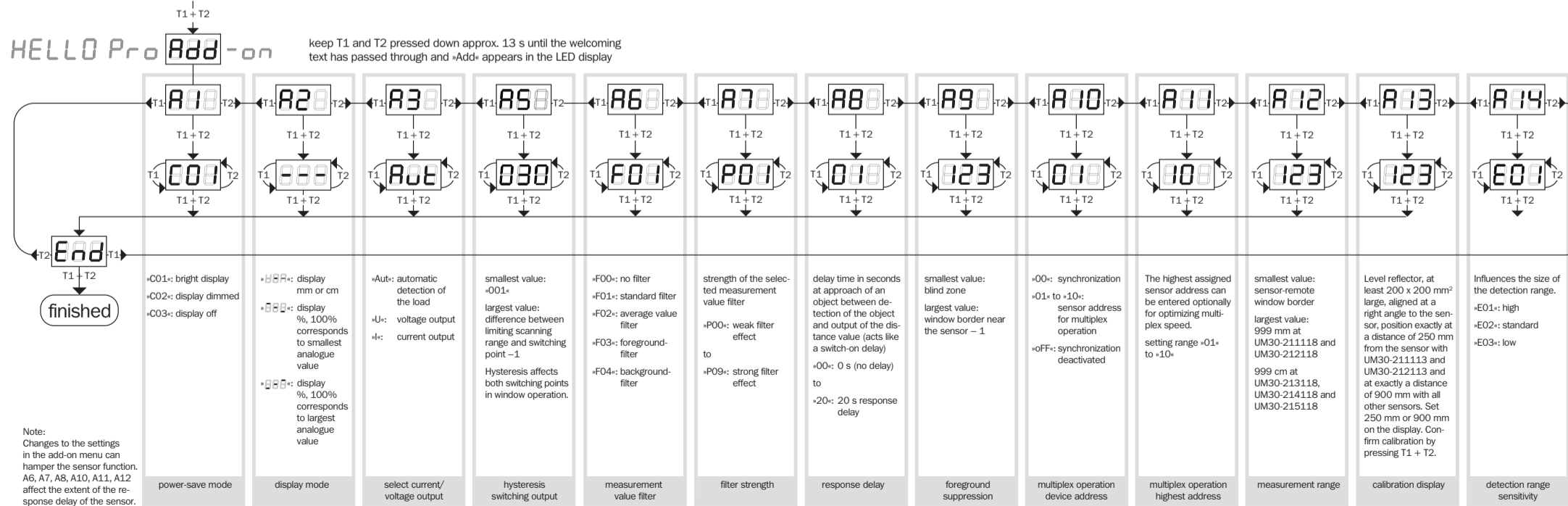
### Numerical parameterization by LED display



### Parameterization of Teach-in



### Add-on-Menü: 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.