

## UP30-211112 UP30-211114

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Änderungen vorbehalten  
Angegebene Produkteigenschaften und technische Daten stellen keine  
Garantierklärung 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 UP30-211112 und UP30-211114 sind Ultraschallsensoren und werden zur berührungslosen Füllstandserfassung von Flüssigkeiten eingesetzt.

### Inbetriebnahme

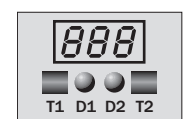
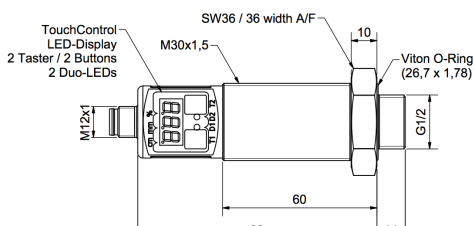
Siehe Ablaufdiagramm C.

### Wartung

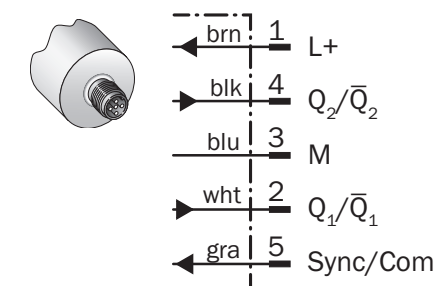
SICK-Sensoren sind wartungsfrei. Wir empfehlen, in regelmäßigen Abständen  
- die Grenzflächen zu reinigen,  
- Verschraubungen und Steckverbindungen zu überprüfen.

## A

UP30-211112 / UP30-211114



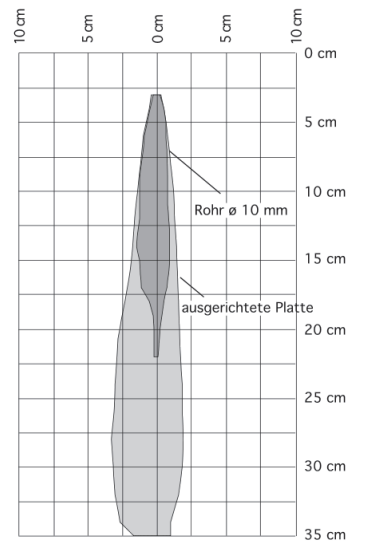
## B



### Werkseinstellung

UP30-Sensoren werden werkseitig mit folgenden Einstellungen ausgeliefert:  
■ Q<sub>1</sub>: Betriebstastweite  
■ Q<sub>2</sub>: ½ Betriebstastweite, Messbereich (Grenztastweite)

### UP30-211112/ UP30-211114

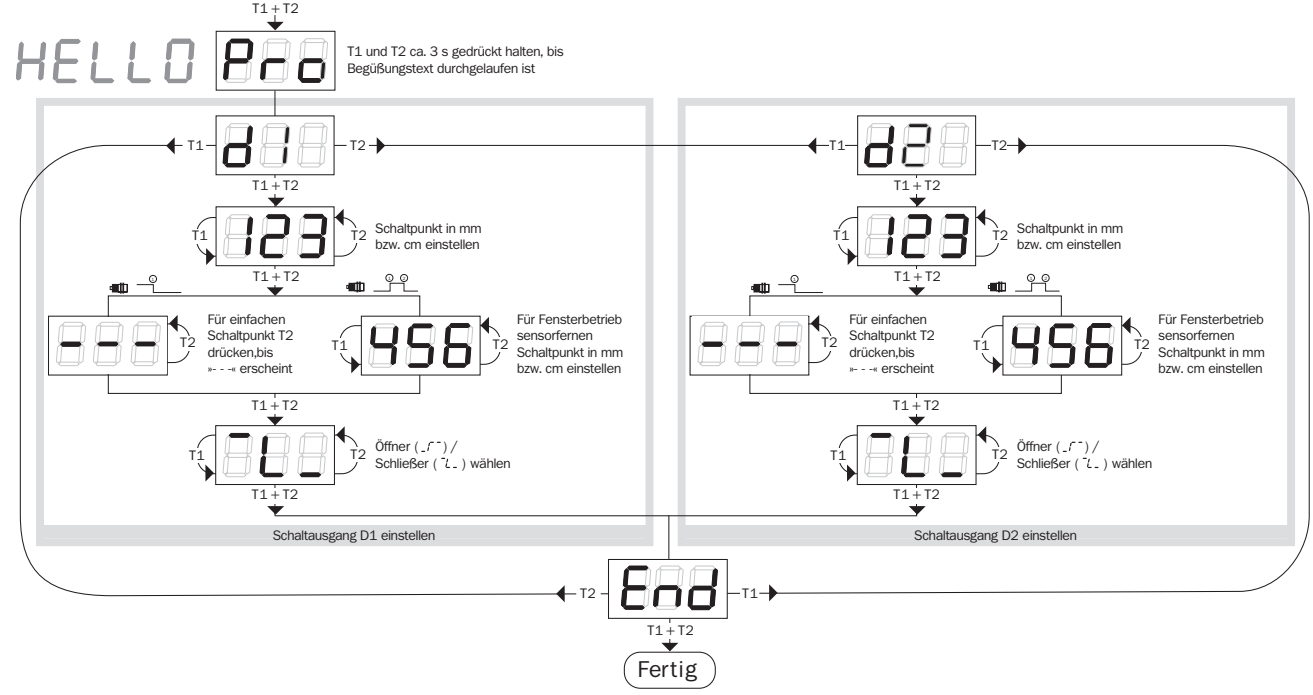


	UP30-211112	UP30-211114
Betriebstastweite (Grenztastweite)	30-500 mm (700mm)	30-500 mm (700mm)
Ultraschallfrequenz	320 kHz	320 kHz
Auflösung	0,18 mm	0,18 mm
Reproduzierbarkeit	±0,15 % von Grenztastweite	±0,15 % von Grenztastweite
Genauigkeit	≤ 2 % von Grenztastweite	≤ 2 % von Grenztastweite
Versorgungsspannung <sup>1)</sup>	DC 9...30 V	DC 9...30 V
Restwelligkeit	±10 %	±10 %
Stromaufnahme <sup>2)</sup>	≤ 80 mA	≤ 80 mA
Bereitschaftsverzug	< 300 ms	< 300 ms
Ansprechzeit <sup>3)</sup>	110 ms	110 ms
Schaltausgang	Q1, Q2: PNP	Q1, Q2: NPN
Anschlussart	M 12, 5-polig	M 12, 5-polig
Prozessanschluss	G 1/2	G 1/2
Druckfestigkeit/Einsatzbereich	0,5 - 6 bar Überdruck	0,5 - 6 bar Überdruck
Schutzart	IP 67	IP 67
Betriebsumgebungstemperatur <sup>4)</sup>	-25...+70 °C	-25...+70 °C

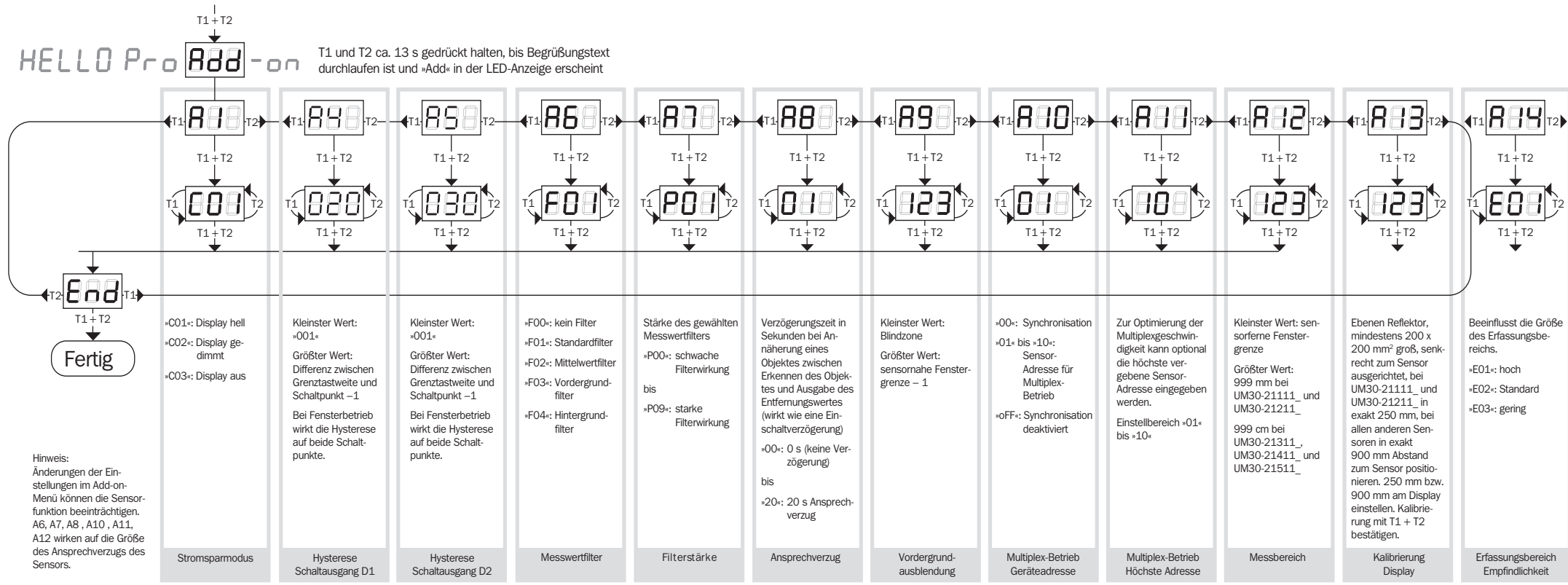
<sup>1)</sup> Vervollständigt  
<sup>2)</sup> Ohne Last  
<sup>3)</sup> Erholzeit 32 ms ... 180 ms nach EMV EN 50319  
<sup>4)</sup> Temperaturkompensiert bei -25 ... +50 °C, abschaltbar

## C

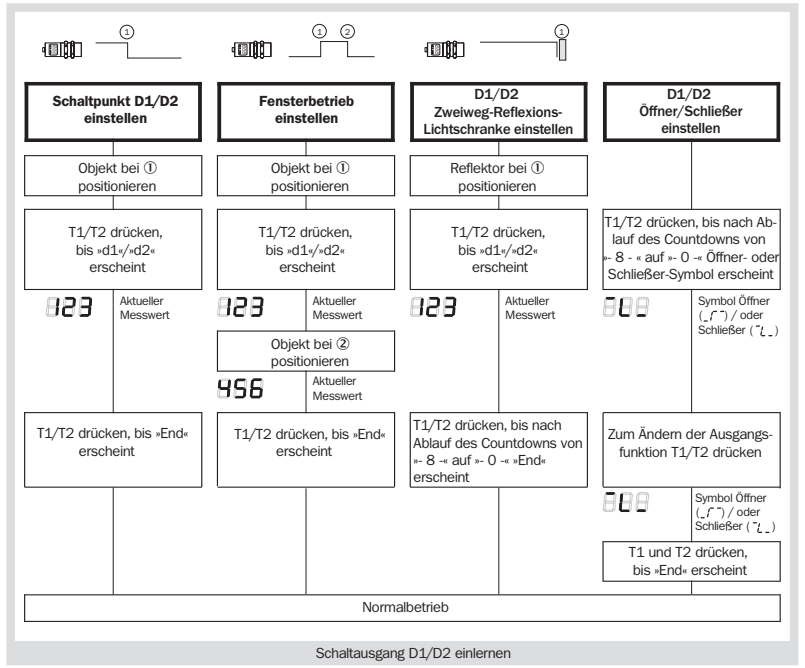
### Ablaufdiagramm Numerische Parametrierung über LED-Anzeige



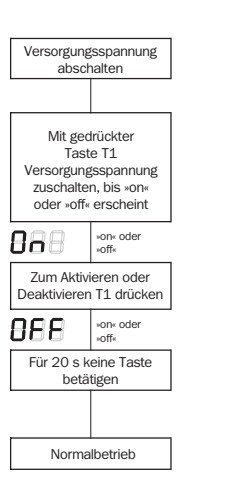
### Add-on-Menü: Zusatzfunktionen



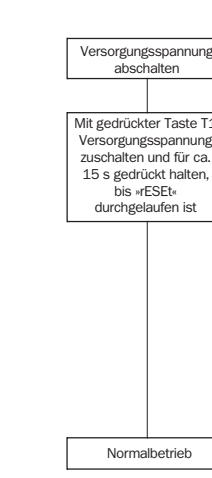
### Parametrierung des Teach-in



### Display Touch Control aktivieren/deaktivieren

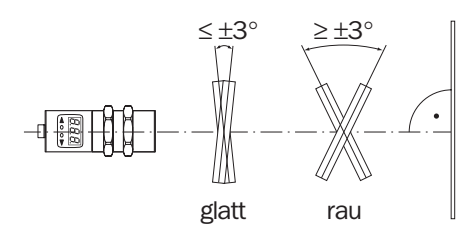


### Zurücksetzen auf Werkseinstellung

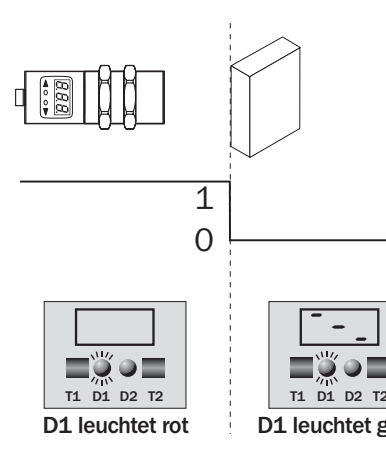


### 1

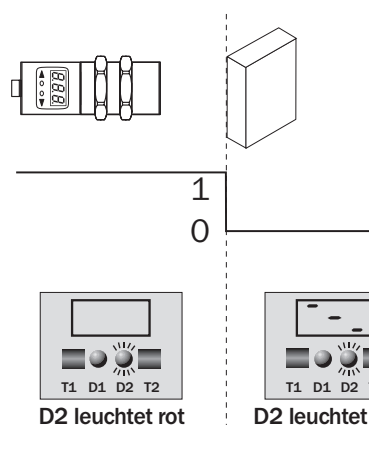
Bei glatten Objektoberflächen sollte der Winkel zwischen Sensorachse und Objektoberfläche innerhalb von 90° ±3° liegen. Bei rauen Oberflächen kann der Winkel deutlich größer sein.



### 2 Schaltausgang Q1



### Schaltausgang Q2



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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 UP30-211112 and UP30-211114 are ultrasonic sensors and is used for non-contact level detection of fluids.

### Starting Operation

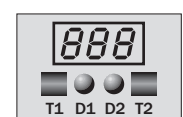
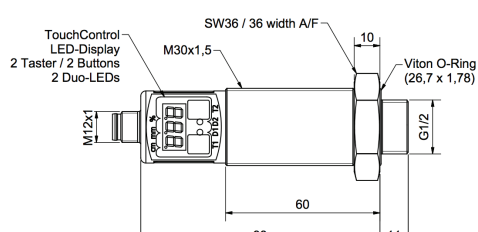
See flow chart C.

### Maintenance

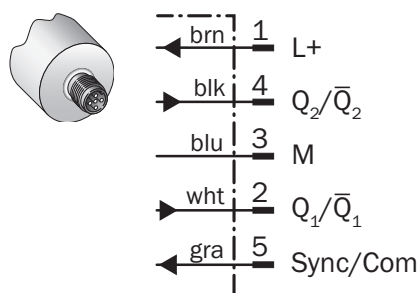
SICK sensors do not require any maintenance. We recommend that you clean the external lens surfaces and check the screw connections and plug-in connections at regular intervals.

## A

UP30-211112 / UP30-211114



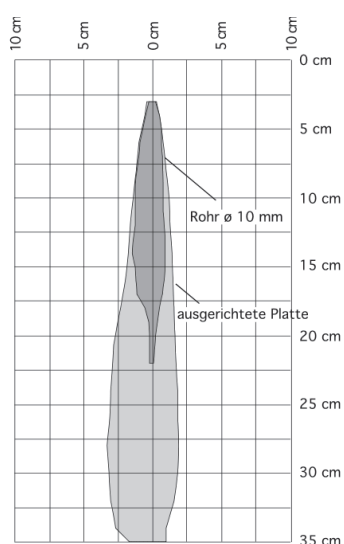
## B



### Standard factory settings of UP30 are:

- $Q_1$ : operating scanning range
- $Q_2$ :  $\frac{1}{2}$  of operating scanning range, measurement range (scanning distance limit)

UP30-211112 / UP30-211114



	UP30-211112	UP30-211114
Operating scanning dist.	30-500mm (700mm)	30-500mm (700mm)
Ultrasonic frequency	320kHz	320kHz
Resolution	0.18 mm	0.18 mm
Reproducibility	±0.15 % of limiting scanning	±0.15 % of limiting scanning
Accuracy	≤ 2 % of limiting scanning	≤ 2 % of limiting scanning
Supply voltage <sup>1)</sup>	9...30 V DC	9...30 V DC
Ripple	±10 %	±10 %
Current consumption <sup>2)</sup>	≤ 80 mA	≤ 80 mA
Standby delay	< 300 ms	< 300 ms
Response time <sup>3)</sup>	110 ms	110 ms
Switching output	Q1, Q2: PNP	Q1, Q2: NPN
Connection type	M 12, 5-pin	M 12, 5-pin
Process connection	G 1/2	G 1/2
Pressure resistance/ area of use	0.5 - 6 bar gauge pressure	0.5 - 6 bar gauge pressure
Enclosure rating	IP 67	IP 67
Ambient operating temperature <sup>4)</sup>	-25 ... +70 °C	-25 ... +70 °C

<sup>1)</sup> Reverse-polarity protected

<sup>2)</sup> Without load

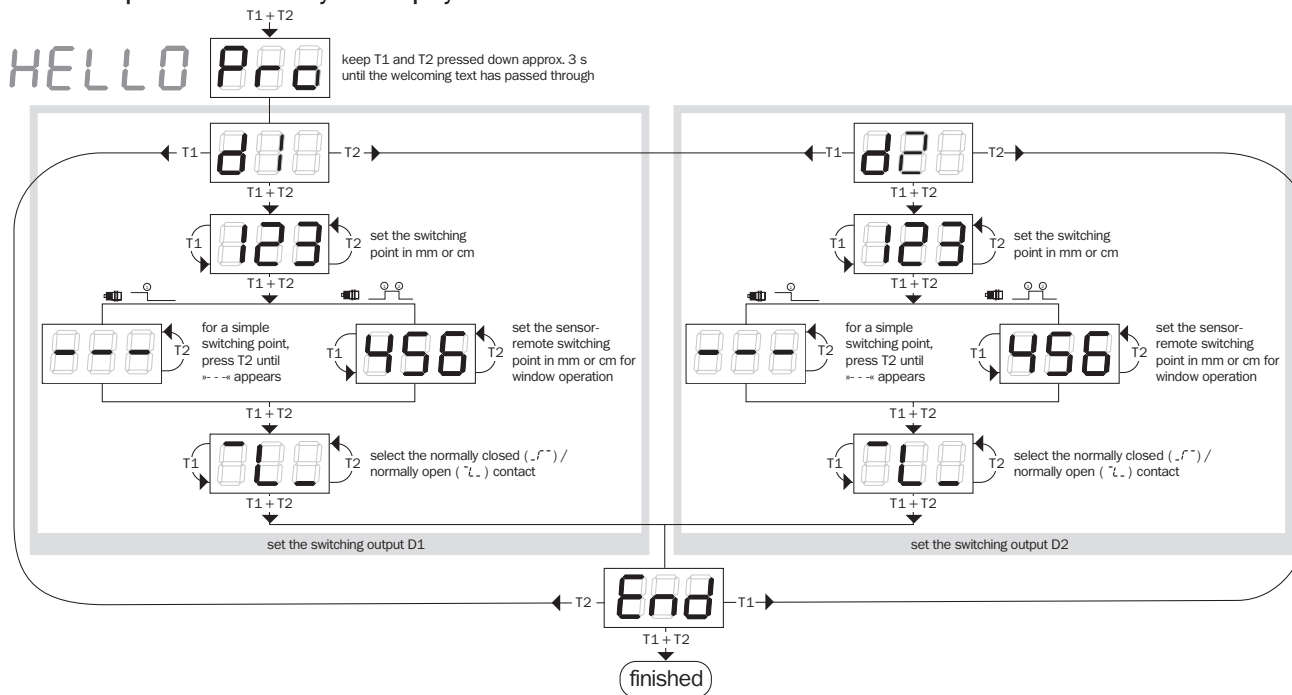
<sup>3)</sup> Recovery time 32 ms ...180 ms according to EMC EN 50319

<sup>4)</sup> Temperature compensation at -25 ...+50 °C, can be switched off

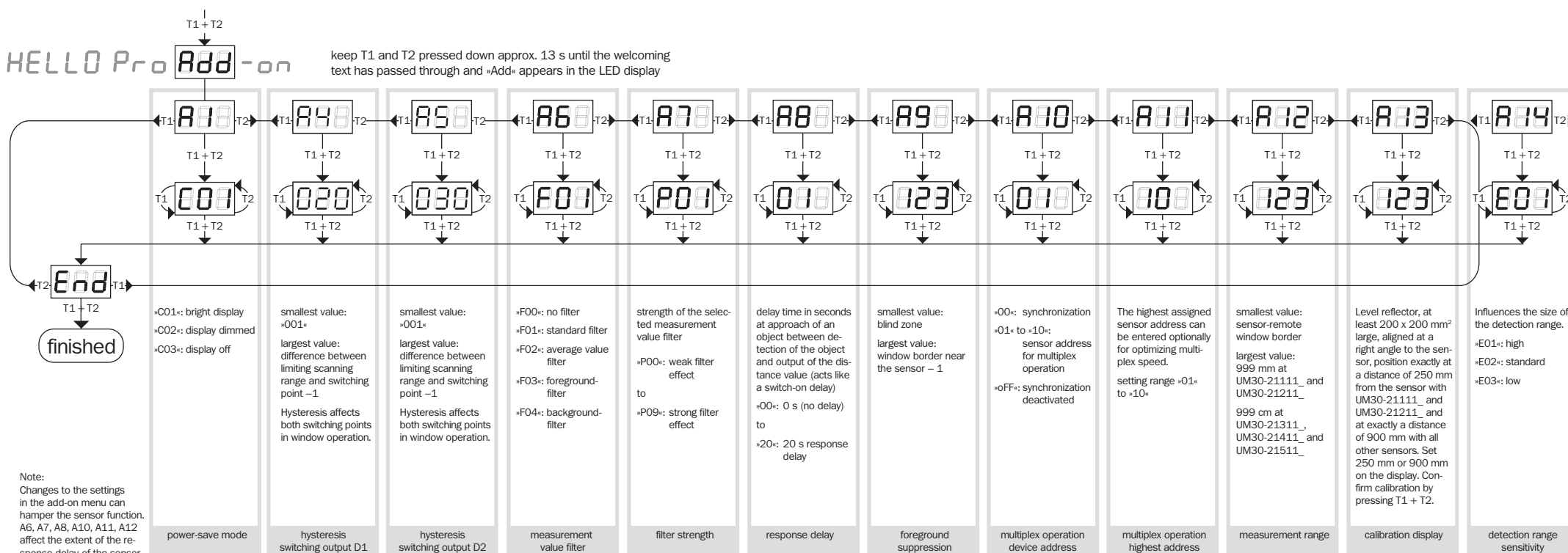
## C

### Flow chart

### Numerical parameterization by LED display

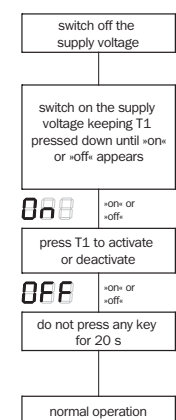


### Add-on-Menü: Additional functions

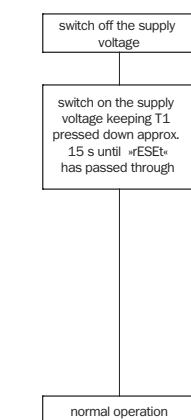


Note:  
Changes to the settings in the add-on menu can hamper the sensor function. A6, A7, A8, A10, A11, A12 affect the extent of the response delay of the sensor.

### Activate/deactivate display touch control

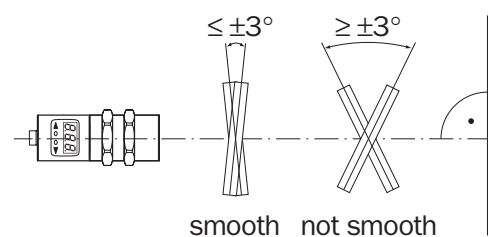


### Restore default settings

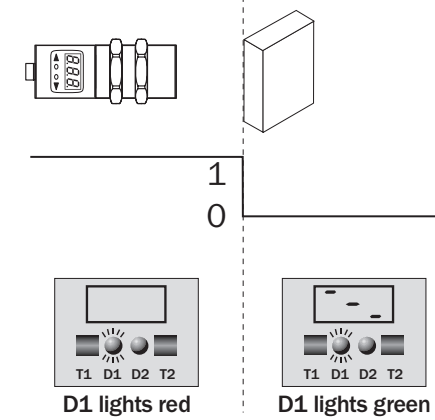


### 1

Target objects with smooth surfaces should be positioned at 90 degrees, relative to the sensor, ±3 tolerance. This tolerance could be greater for target objects with a rough surface.



### 2 Switching output Q1



### Switching output Q2

