Product Information NSL-F-02, NSL-FR-02 **FOOD**

Potentiometric level sensor NSL-F(R)-02 double rod design

Range of application

- Continuous level measurement in non-metallic vessels
- Level measurement of foaming media
- Minimum product conductivity typically from 50 µS/cm (available on request for lower values)
- Hygienic substitute for float sensors

Application examples

- Process such as ballance tanks and fillers
- Level measurement in storage vessels
- Level monitoring in pressurized vessels

Hygienic design/Process connection

- Hygienic process connection with CLEANadapt
- All wetted materials are FDA-conform
- Sensor completely made of stainless steel
- Complete overview of process connections: see order code
- The Anderson-Negele CLEANadapt system offers a flow-optimized, hygienic and easily sterilizable installation solution for sensors.

Features

- CIP-/SIP-cleaning up to 143 °C / max. 120 minutes
- Protection class IP 69 K (with cable connection)
- Short response time for precise measured values with fast level changes
- Due to the potentiometric measuring principle, no new adjustment is necessary when changing the medium
- Insensitive to adhesion
- Adjustment of the display by means of the twistable sensor head
- Current signal for measurement range, dry signal and error signal adjustable
- Display module Simple User Interface (SUI) and Large User Interface (LUI)
- Remote version with cable length up to 30 m

Communication

IO-Link 4...20 mA

Government-funded

Supported by:

Federal Ministry of Economics and Technology

ZIM impulse für wachstum Zentrales Innovationsprogramm Mittelstand

on the basis of a decision by the German Bundestag

NSL-F-02

FDA

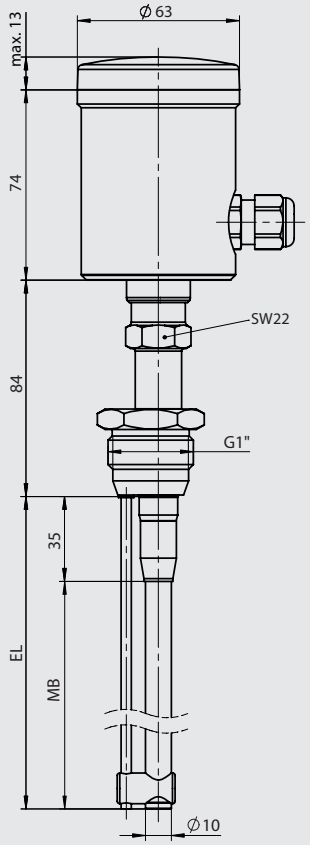
Head unit remote version (HUR)

Large User Interface (LUI)

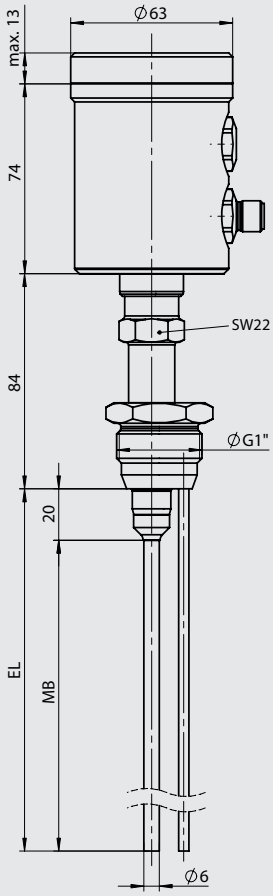
Note

This product information is a supplement to Product Information NSL-F-00.
Except for the rod length of 200 mm up to max. 1500 mm, the NSL-F-02 is identical to the NSL-F-00. The data, instructions and other information provided in Product Information NSL-F-00 also apply to this sensor variant.

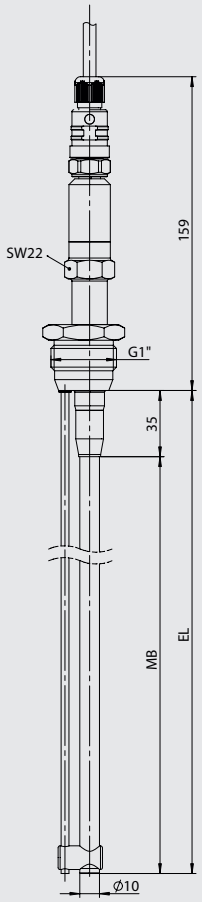
Drawing NSL-F-02 (EL ≥ 200 mm)



Drawing NSL-F-02 (EL < 200 mm)



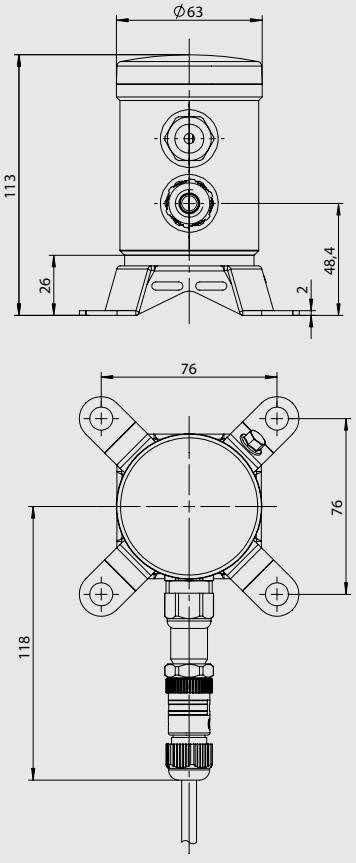
Drawing NSL-FS-02 (EL ≥ 200 mm)



NSL-F-02 with insulation at top (EL ≥ 200 mm)

NSL-F-02 (EL < 200 mm)

HUR | Head unit remote version



Order code

NSL-FR-02 (Potentiometric level sensor, double rod design - remote version, remote cable must be ordered separately)

Rod length EL
0050...1500 (In steps of 10 mm, intermediate sizes at extra charge)

Rod diameter
- **06** (Ø 6 mm, up to rod length 199 mm)
- **10** (Ø 10 mm, from rod length 200 mm)

Process connection
- **S21** (CLEANadapt G1" hygienic, sensor eccentric)
- **TC1** (Tri-Clamp 1½")
- **TC2** (Tri-Clamp 2")
- **T25** (Tri-Clamp 2½")
- **TC3** (Tri-Clamp 3")
- **V25** (Varivent type F, DN 25)
- **V40** (Varivent type N, DN 40/50)

Material certificate
- **O** (No certificate)
- **Z** (With 3.1 material certificate)

Installation position
- **2** (Installation from top)
- **4** (Installation from bottom)
- **6** (Installation from top, 40 mm insulated) only for rod diameter 10 mm

Signal module
- **A42** (1x 4...20 mA level)
- **I42** (IO-Link and 1x 4...20 mA level)

Electrical connection
- **P** (Cable gland M16x1.5)
- **M** (1x M12 plug)
- **L** (1x M12 plug, 5 pin, wiring according to LN sensor)
- **C** (1x M12 plug, 5 pin analog output and IO-Link)

Display
- **X** (Without display)
- **L** (Large User Interface with display)

Cap
- **X** (Opaque plastic)
- **P** (Clear plastic)
- **M** (Stainless steel without control window)
- **W** (Stainless steel with control window)

Insulation at rod end
- **XX** (Without insulation)

Configuration
- **X** (Factory setting)
- **S** (Special customer setting)

NSL-FR-02 /	**1500 /**	**10 /**	**S21 /**	**O /**	**2 /**	**A42 /**	**P /**	**X /**	**X /**	**XX /**	**X**

Order code

NSL-F-02 (Potentiometric level sensor, double rod design)

Rod length EL
0050... (In steps of 10 mm, intermediate sizes at extra charge)
1500

Rod diameter
06 (Ø 6 mm, up to rod length 199 mm)
10 (Ø 10 mm, from rod length 200 mm)

Process connection
S21 (CLEANadapt G1" hygienic, sensor eccentric)
TC1 (Tri-Clamp 1½")
TC2 (Tri-Clamp 2")
T25 (Tri-Clamp 2½")
TC3 (Tri-Clamp 3")
V25 (Varivent type F, DN 25)
V40 (Varivent type N, DN 40/50)

Material certificate
O (No certificate)
Z (With 3.1 material certificate)

Installation position
1 (Installation from top, head orientation horizontal)
2 (Installation from top, head orientation vertical)
3 (Installation from bottom, head orientation horizontal)
4 (Installation from bottom, head orientation vertical)
5 (Installation from top, head orientation horizontal, 40 mm insulated) only for rod diameter 10 mm
6 (Installation from top, head orientation vertical, 40 mm insulated) only for rod diameter 10 mm

Signal module
A42 (1x 4...20 mA level)
I42 (IO-Link and 1x 4...20 mA level)

Electrical connection
P (Cable gland M16x1.5)
M (1x M12 plug)
L (1x M12 plug, 5 pin, wiring according to LN sensor)
C (1x M12 plug, 5 pin analog output and IO-Link)

Display
X (Without display)
S (Simple User Interface with small display)
L (Large User Interface with display)

Cap
X (Opaque plastic)
P (Clear plastic)
M (Stainless steel without control window)
W (Stainless steel with control window)

Insulation at rod end
XX (Without insulation)

Configuration
X (Factory setting)
S (Special customer setting)

NSL-F-02 /	1500 /	10 /	S21 /	O /	2 /	A42 /	P /	X /	X /	XX /	X

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