

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 $\mu\text{S}/\text{cm}$ (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 (289 °F) / 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
- Add-On Instructions are available at www.anderson-negele.com/aoi

Communication

 **IO-Link**  **4...20 mA**

Government-funded

Supported by:



on the basis of a decision
by the German Bundestag

NSL-F-02



Head unit remote version (HUR)



Large User Interface (LUI)

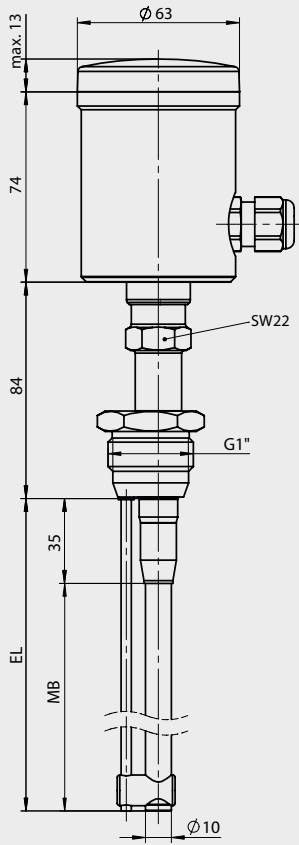


Note

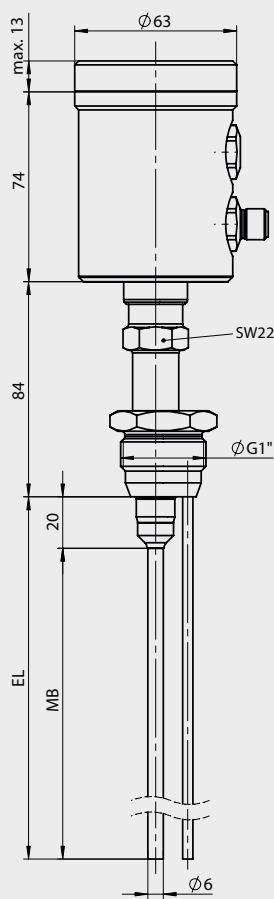
This product information is a supplement to Product Information NSL-F-00. Except for the rod length of 200 mm up to max. 1 500 mm, the NSL-F-02 is identical to the NSL-F-00. The data, instructions and other information provided in Product Information NSL-F-00 also apply to this sensor variant.



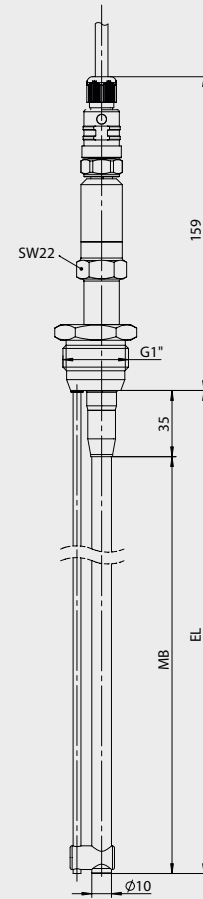
Drawing NSL-F-02 (EL ≥ 200 mm)



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



Drawing NSL-FS-02 (EL ≥ 200 mm)



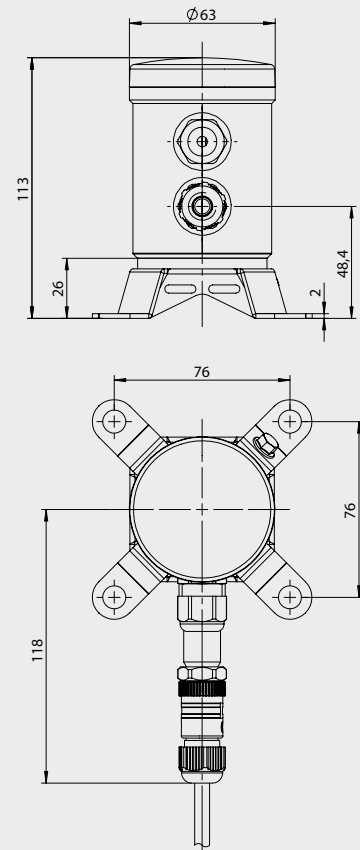
NSL-F-02 with insulation at top (EL ≥ 200 mm)



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... 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

2 Installation from top
4 Installation from bottom
6 Installation from top, 40 mm insulated, only for rod diameter 10 mm

Signal module

I42 IO-Link and 1x 4...20 mA level

Electrical connection

P Cable gland M16x1.5
M 1x M12 plug, 4 pin output/power supply
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 / I42 / P / X / X / XX / X

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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

I42 IO-Link and 1x 4...20 mA level

Electrical connection

P Cable gland M16x1.5
M 1x M12 plug, 4 pin output/power supply
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 / I42 / P / X / X / XX / X