



Servotankmeetinstrument Proservo NMS81

Uiterst nauwkeurige servometing voor
vloeistofniveau, -interface en -dichtheid



Voordelen:

- Hardware en software ontwikkeld volgens IEC 61508 tot SIL3 (in homogene redundantie) voor een optimale veiligheid
- Maximale betrouwbaarheid door een nauwkeurigheid tot $\pm 0,4$ mm ($\pm 0,02$ ")
- Ontwikkeld volgens internationale metrologische aanbevelingen zoals OIML R85 en API MPMS
- Lokale en landspecifieke certificeringen, zoals NMI of PTB, voor custody transfer toepassingen
- Superieure corrosiebestendigheid met 316L-materialen in het proces compatibel met zwavelhoudende toepassingen zoals ruwe olie
- Meting van interfaces tussen maximaal drie vloeistoflagen, tankbodem, spottemperatuur en profieldichtheid
- Zeer geschikt voor LNG/LPG-toepassingen zonder invloed van dc-waarde of verdampingsgas

Overzicht specificaties

- **Accuracy** up to 0.4 mm
- **Process temperature** -200°C...200°C (-328°F...392°F)
- **Process pressure / max. overpressure limit** up to 25 bar (363 psi) abs
- **Max. meetafstand** 55 m (180 ft)
- **Main wetted parts** 316L, AlloyC276, PTFE

Toepassingsgebied: De intelligente tankmeter Proservo NMS81 is ontworpen voor zeer nauwkeurige vloeistofniveaumeting in custody transfer- en voorraadcontrole-toepassingen met NMI- en PTB-goedkeuringen. Het instrument voldoet aan de relevante eisen volgens OIML R85 en API 3.1B. Het voldoet exact aan de eisen van

tankvoorraadbeheer en verliesbeheersing en is geoptimaliseerd met betrekking tot totale kostenbesparing en veilige werking.

Kenmerken en specificaties

Continuous / Liquids

Meetprincipe

Servo / Float Tank Gauging

Characteristic / Application

Servo Tank Gauging: High precision measurement for liquid level, interface, spot density, profile density

Specialities

Custody transfer level measurement

Interface measurement

Spot density, density profile measurement

Supply / Communication

85-264VAC

52-74VAC

19-64VDC

Accuracy

up to 0.4 mm

Ambient temperature

Standard:

-40°C...60°C

(-40°F...140°F)

For calibration to regulatory Standards:

-25°C...55°C

(-13°F...131°F)

Process temperature

-200°C...200°C

(-328°F...392°F)

Process pressure / max. overpressure limit

up to 25 bar (363 psi) abs

Continuous / Liquids

Main wetted parts

316L, AlloyC276, PTFE

Process connection

Flange:

DN80/3" / DN100/4" / DN150/6"

Max. meetafstand

55 m (180 ft)

Communication

Outputs:

Fieldbus: Modbus RS485, V1, WM550

HART, BPM and TRL/2 (via GE option)

Analog 4-20mA output (Exi/ Exd)

Relay output (Exd)

Inputs:

Analog 4-20mA input (Exi/ Exd)

2-, 3-, 4-wire RTD input

Discrete input (Exd, passive/ active)

Certificates / Approvals

ATEX, FM, IEC Ex, EAC, JPN Ex, KC Ex,
INMETRO, NEPSI

Safety approvals

Overfill protection WHG

SIL

Design approvals

EN 10204-3.1

NACE MR0175, MR0103

Metrological approvals and certificates

OIML, NMI, PTB, LNE

Calibration performed on accredited calibration facilities (acc.to ISO/IEC 17025)

Continuous / Liquids

Options

Redundant fieldbus
Alu-coated or 316L housing
Weather protection cover
Guide wire assembly
Relief valve
Gas purging nozzle connection
Pressure gauge
Cleaning nozzle connection

Application limits

Stilling well or guide wires for turbulent application
Recommend PTFE displacer for high viscosity application
Recommend AlloyC276 displacer for corrosive application
Interface measurement requires min. difference of 0.100 g/ml between layers

Density

Meetprincipe

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Supply / Communication

85-264 VAC

Density

Ambient temperature

Standard:

-40°C...60°C

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For calibration to regulatory

Standards:

-25°C...55°C

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Process temperature

-200°C...200°C

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Process pressure

up to 25 bar (363 psi) abs

Wetted parts

316L, AlloyC276, PTFE

Output

Fieldbus: Modbus RS485, V1, HART

Analog 4-20mA output (Exi/ Exd)

Relay output (Exd)

Inputs:

Analog 4-20mA input (Exi/ Exd)

2-, 3-, 4-wire RTD input

Discrete input (Exd, passive/ active)

Certificates / Approvals

ATEX, FM, IEC Ex, NEPSI, EAC

Density

Options

Redundant fieldbus
 Alu-coated or 316L housing
 Weather protection cover
 Guide wire assembly
 Relief valve
 Gas purging nozzle connection
 Pressure gauge
 Cleaning nozzle connection

Specialities

Custody transfer level measurement
 Interface measurement
 Spot density, density profile measurement

Measuring range

47 m (154 ft)

Other approvals and certificates

OIML, NMI, PTB



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