

Precise level measurement even with difficult media and operating conditions

# Continuous Level Sensor NSL-F

### Benefits in production processes

For efficient production processes, continuous, precise monitoring of the filling level of feed tanks, storage tanks or fillers is essential. The flexible, modular level sensor NSL-F with its potentiometric measuring principle offers a reliable and precise application even with difficult to measure media and with demanding applications such as:

- · strongly or differently foaming media
- · pasty media or media adhering to the measuring rod
- · pressurized tanks
- · fast level changes, e.g. during filling processes
- non-metallic tanks
- · different media in one tank
- · tank shapes with restricted installation access
- production environments with high mechanical or chemical stress (e.g. cleaning agents)

## Advantages of the NSL-F sensor

- Maximum resource efficiency due to precise measurement even with demanding media: Even with foam or with the measuring rod coated by pasty or strongly adhesive media, the measuring accuracy is < 1% of the rod length.
- Ready for industry 4.0: digital IO-Link interface and analog 4...20 mA data transmission in parallel
- Ideal for metallic, non-metallic and pressurized tanks due to rod length from 50 mm to 3 m, installation from below, above or from the side and optional versions
- Extremely fast response time < 100 ms for precise dosing monitoring, e.g. for filling systems
- Automatic adjustment to media, no adaptation required with alternating media in one tank
- Hygienic alternative to float sensors due to easily sterilizable installation solution
- Robust construction made entirely of stainless steel

### Typical customer applications

- Dairies / milk production: milk heaters, separators, fillers, ice cream production plants, tanks for yoghurt and pasty milk products
- Breweries: Brewing, lautering and storage tanks, filters, bottling plants
- Beverage and food industry: Filling systems for alternating beverages and juices, storage and production tanks



#### Optional versions



#### Technical specification at a glance

- · Extremely precise, fast & flexible level sensor
- Flex Hybrid Technology with digital ÷ analog interface (IO-Link ÷ 4...20 mA)
- Modular design: configurable from the lowpriced to the fully equipped high-end model
- For vessels from 50 mm to 3 m height
- CIP / SIP cleaning up to 143 °C / 120 min.
- Response time < 100 ms for constantly precise values even with rapid level changes in highspeed fillers
- · Protection class IP 69K for safe application
- Smart Replace Design: Easy replacement of all components by plug & play