



NivuBar H III

Immersion probe with integrated 2-wire 4/20 mA transmitter @ 24 Vdc

ELECTRONICS

ACOUSTIC

WEIGHT

OVERLOADING
SAFETY SYSTEMS

VALVES

TEMPERATURE

DETECT
A FIRE®

FLOW

DENSITY

INTERFACE

PRESSURE

LEVEL



- Ceramic diaphragm
- Capacitive measuring cell
- 2-wire technology (output 4-20 mA @ 24 Vdc)
- Integrated overload protection
- Extensive, almost front flush diaphragm
- Independent measurement range setting via HART interface
- Ex approval for zone 0 (optional)

Submersible probe with integrated 4-20 mA transmitter for hydrostatic level measurement in water and waste water. With capacitive ceramic measuring cell without oil filling and independent measurement range setting via HART interface. This probe is developed to meet the high demands of industrial and environmental protection. The stainless steel probe body is locked by a capacitive ceramic measuring cell at the bottom and is held by the self-supporting cable on the top. The probe can be suspended e.g. on manhole walls by using a straining clamp. The non-corrosive enclosure with ingress protection IP68 (NEMA 6X) permits universal use for reliable determination of levels in containers, basins, pump stations and tanks.

The extensive diaphragm has proven as very reliable, particularly in the sewage environment.

The probe is also available with Ex-approval and therefore can be installed in all explosive surroundings.

Via the HART protocol the measurement range of the probe can be set universally.

This is done via a laptop with the NIVUS Configuration Software and the HART interface converter. The Measurement range is adjustable until 20 m water column.

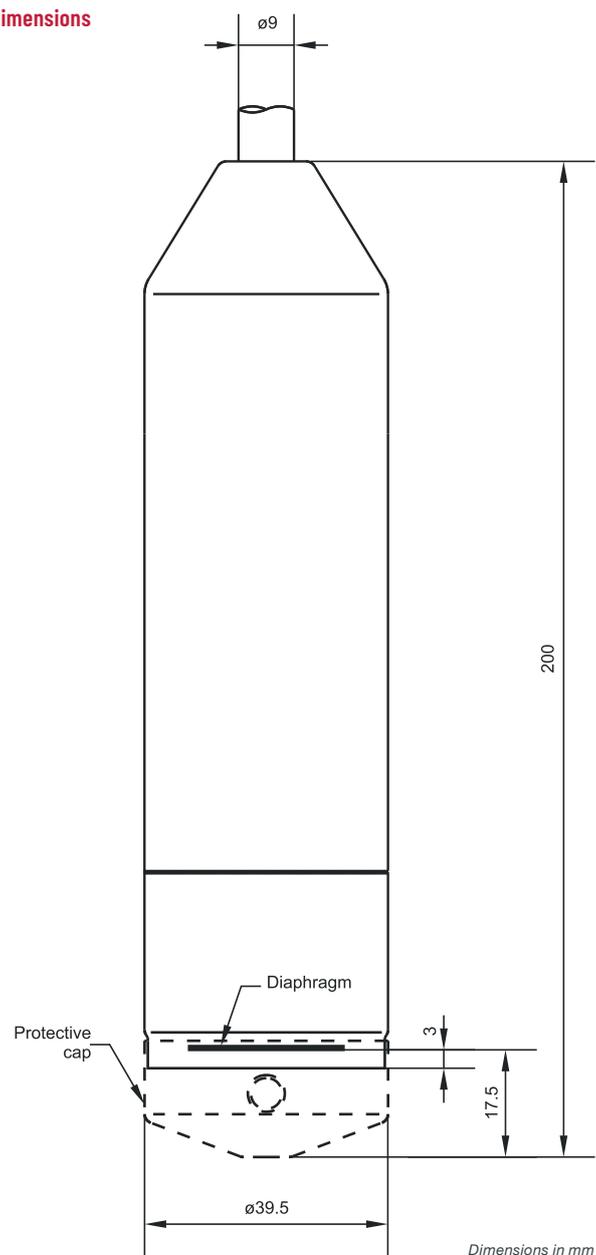
This enables a low set limit of 20% in relation to the stated measurement range (FSO) of the probe e.g. 0 to 2 m or 4 to 6 m. Utilising the widely used 2-wire technology, the installation costs are very low.

Technical Specifications

SUBMERSIBLE PROBE

Measurement range	0 to 20 m H ₂ O lowest range: 20% of measurement value adjustable via HART special measurement ranges on request
Power supply	12 to 36 V DC, Ex: 12 to 28 Vdc
Output signal	4 - 20 mA, 2-wire technology @ 24 Vcc
Accuracy according to IEC 60770	0.25% / 0.35% FSO
Long-term stability	± 0,1 % FSO/year
Electric connection	free cable end
Load	600 Ohm/24 V 1000 Ohm/32 V
Integrated overvoltage protection	-120 to 150 V DC (1 sec at 25 °C)
Operating temperature	-10 °C to +70 °C
Storing temperature	-25 °C to +70 °C
Material	<ul style="list-style-type: none"> • diaphragm: ceramic (Al₂O₃) • enclosure: stainless steel 1.4571 • sealing: Viton® • cable: ø9 mm Polyurethane
Cable length	10, 20, 30, 50, 100 m special length on request
Protection	IP68
Measuring principle	capacitive
Ex-approval (optional)	FTZÚ 06 ATEX 0027X II 1GD Ex ia IIB/IIC T4 T85°C
Accessories	
Terminal clamp	AKL 1, stainless steel 1.4571
Locking sleeve (carrier)	G1,5", stainless steel, as holder for NivuBar Plus II probe
Connector box	KLB2 with overvoltage protection and pressure compensation; material: Plastic
Junction box	BPG Ex with pressure compensation
Surge arrester	Type 9001/51-280-091-141 ATEX for connection to PLC in zone 1
HART interface module (interface converter)	For connection to PC via RS232 interface
HART configuration software	on CDROM
HART-Modul	HAM-300, adapter module for integration into mA loop

Dimensions



Connection

2-wire: 4...20mA

