

# Radar Sensor Type SEBAPULS

for contact free measuring of surface water level



measurement of surface water

measurement in arid zone

standard fixing

## Radar Sensors SEBAPuls

The radar sensor SEBAPuls is a high accuracy measuring device for measuring the surface water level without direct contact to the medium.

Measuring principle: Pulse principle (26GHz-technology)

The so-called pulse procedure sends a short microwave impulse to the water surface. The transmitter has a short time lag. Within this time the water transmits the pulses to the integrated evaluation system. The run time of the impulses corresponds directly to the distance to the actual surface water level.

#### Advantages:

- unaffected by mudding, drifting materials, weedage, sewage and brackish or saline water
- low constructional efforts (e.g mounting at bridge jibs)
- no measurement cross-section reduction (hydraulic is not remolded)
- no influence in measuring accuracy caused by air humidity (fog) and air temperature fluctuations
- low energy consumption
- short measuring cycle
- non-existence of a blind angle
- short mounting distance (approx. 20...30 cm)



The basic configuration of the measuring system is a sensor with analogue output (4...20mA). According to the modular conception, the SEBAPuls can be equipped with an additional storage (e.g. SEBA Data Loggers) and a remote transmission system (via GSM-network, fix network, etc.).

## Technical Data

#### Housing

Dimension SEBAPULS 15: Ø 72mm, length 300mm Dimension SEBAPULS 20: Ø 116mm, length 245mm Dimension SEBAPULS 30: Ø 116mm, length 392mm Dimension SEBAPULS 70: Ø 116mm, length 606mm

#### Material:

Aluminium housing, Valox PBT Horn antenna made of stainless steel Weight:

approx. 2kg

#### Registration of measuring values

Accuracy: Measuring range: IP Protection Class: Operation temperature: Output:

## SEBAPULS 15: SEBAPULS 20:

± 2mm ± 2mm 0...35m 0...15m IP 68 IP 66

SEBAPULS 30: SEBAPULS 70: ± 3mm 0...35m

IP 66

± 15mm 0...70m IP 66

-40°C up to 80°C (all types) 4 up to 20mA or 0.4 up to 2V (all types)

#### Transmission of measuring values to PC

Offline: with SEBA data logger

Online: analogue with 4...20mA, digitally with GSM or telephone-modem

Power supply

12V or 24V Battery:

Solarpanel: incl. charger and buffer accumulator

Mains adapter:  $220V_{AC}/12V_{DC}/24V_{DC}$ 

Ø116 SEBAPULS 20 SEBAPULS 30 SEBAPULS 15 SEBAPULS 70

The right is reserved to change or amend the foregoing technical specification without prior notice.



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