

NivuFlow Mobile 750

High-precision flow measurements
in portable execution in partially filled
channels, pipes and tunnels



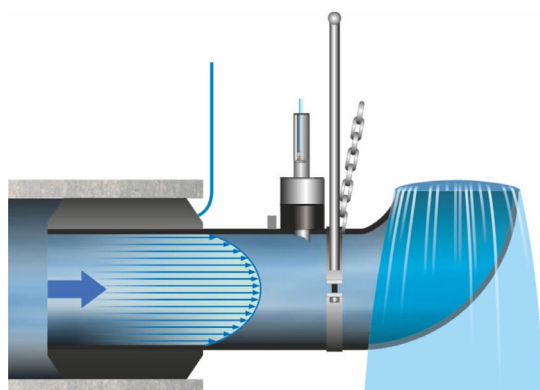
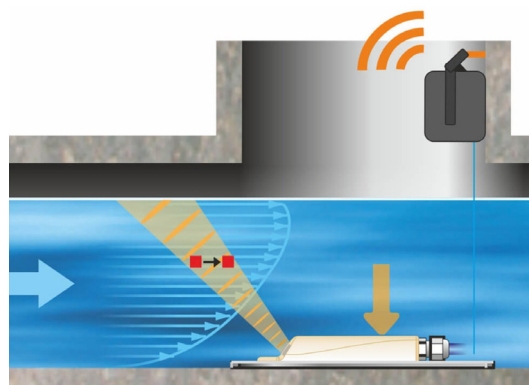
NivuFlow Mobile 750 is the successor to the PCM product family. Based on the ultrasonic cross correlation technology with flow profile detection the portable system provides highest accuracy.

Accessories such as a calibrated pipe measuring section to force full filled pipes or appropriate sensor mounting materials provide the best possible conditions for impeccable measurements.

The modern operating concept via web browser in connection with tablet, smartphone etc. is intuitive and enables quick commissioning. Here, a quick start assistant guides through the most relevant parameter settings. The optional built-in modem provides automatic data transmission via e-mail, FTP or web portal. In combination with the long battery life the number of maintenance jobs can be reduced to a minimum.

Benefits

- Extremely long battery life – 5 min. 250 days
- Flood protected IP68 locked, IP67 open
- Operation via smartphone, tablet etc.
- Quick start assistant
- Automatic sensor detection
- Up to 3 flow velocity sensors
- Wide range of sensors for best application solutions
- Integrated Modem optional



ELECTRONICS

ACOUSTIC

WEIGHT

OVERLOADING
SAFETY SYSTEMS

VALVES

TEMPERATURE

DETECT
A FIRE®

FLOW

DENSITY

INTERFACE

PRESSURE

LEVEL

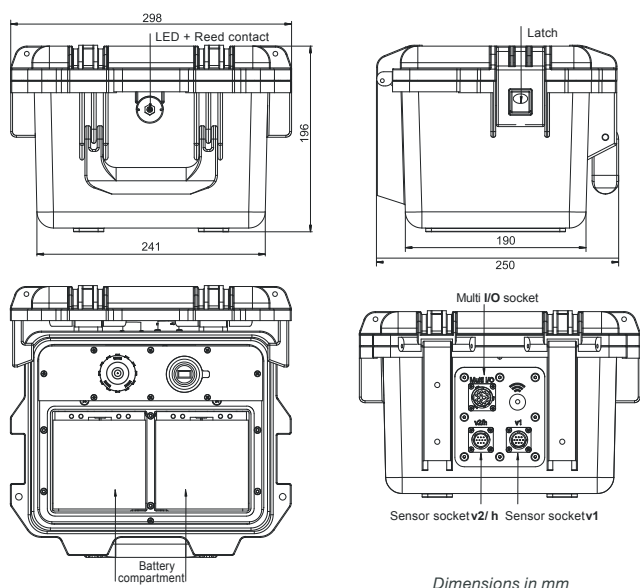
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Technical Specifications

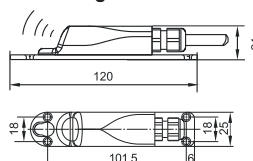
Transmitter



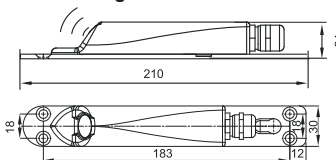
Dimensions in mm

Sensors

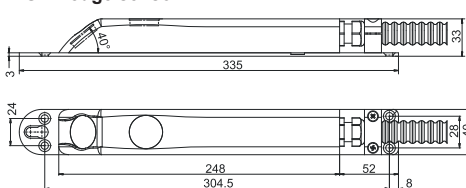
CSM wedge sensor



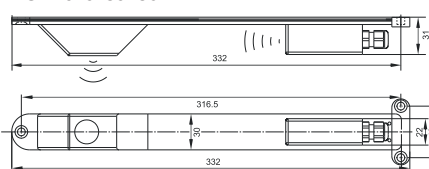
CSM-D wedge sensor



CSP wedge sensor



DSM level sensor



Dimensions in mm

TRANSMITTER

Measurement principle	Correlazione incrociata a ultrasuoni con rilevamento del profilo di flusso
Alimentazione	2 x rechargeable batteries 12V/15 Ah, lead gel - charger 100 - 240 V AC / 50 to 60 Hz / 50 VA
Enclosure	- Material: HPX high-performamce synthetic resin - Weight: approx. 2.2 kg (without battery and hoop guards) - Protection: IP68 locked / IP67 open
Operating temperature	-20° C to + 50° C / - 15° C to + 50° C for Ex-Zone 1
Storage temperature	-20° C + 70° C
Max. humidity	90%, non-condensing
Display	Status LED (RGB)
Ex-Approval	Optional: II 2G Ex eb ib [ib] mb IIB T4 Gb
Operation	Magnet switch, via WLAN using Smartphone, Tablet, Notebook...
Inputs	2x 0/4 - 20 mA (active/passive) 1x 0/4 - 20 mA (passive) 1x active digital input 1x connection socket for battery charger or alternative power supply 2x connection sockets for flow velocity, combi and level sensors
Outputs	1 x analog output 0 - 10 V 1 x potential-free digital output as SPDT / bistable 1 x USB for readout of values via USB stick
Storage cycle	5 sec. - 60 min, cyclic or event-based
Data memory	Internal memory, covering a period of 1.5 years at a measurement interval of 5 minutes
Data transmission	- Via plug-in USB stick - Via WLAN - Via GPRS, UMTS, LTE

SENSORS

CSM, CSM-D, CSP wedge sensors, CSM pipe sensor

Measurement principle	cross correlation w. real flow profile measurement
Protection	IP68
Ex-Approval (optional)	II 2G Ex ib IIB T4 Gb
Measurement range	-100 cm/s to +600 cm/s
Operating temperature	-40 °C to +80 °C
Operation pressure	CSM: max. 4 bar, CSM-D: max. 1 bar
Scan layers	max. 16
Measurement uncertainty (per scan layer)	< 1 % of measurement value (v > 1 m/s) ± 0.5 % of meas. value + 5 mm/s (v < 1 m/s)
Zero point drift	absolutely zero point stable

CSM-D, CSP: Level Measurement - Pressure

Measurement range	0 to 500 cm
Zero point drift	max. 0.75% of final value
Measurement uncertainty	< 0.5% of final value

DSM Level Sensors

Measurement principle	Transit time / time of flight with air ultrasound
Protection	IP68
Ex-Approval (optional)	II 2G Ex ib IIB T4 Gb
Measurement range	0 to 200 cm
Measurement uncertainty	< ± 5 mm
Dead zone	(from mounting plate) 4 cm