

NDW 2

The new electronic NDW 2 inclinometer utilises a modern measurement method based on MEMS technology for gravitational inclination measurement (rotational angle measurement).

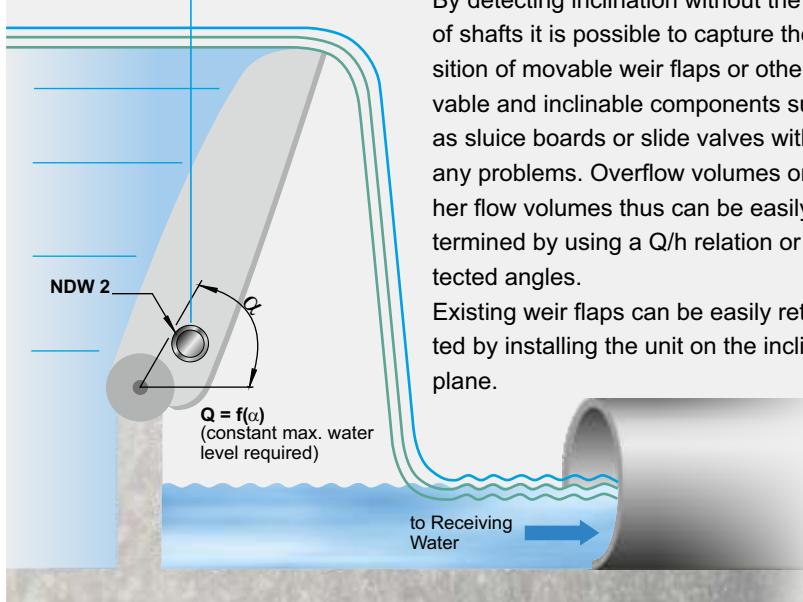
By detecting inclination without the use of shafts it is possible to capture the position of movable weir flaps or other movable and inclinable components such as sluice boards or slide valves without any problems. Overflow volumes or other flow volumes thus can be easily determined by using a Q/h relation or detected angles.

Existing weir flaps can be easily retrofitted by installing the unit on the inclined plane.

NDW 2 combines high accuracy and operational safety with robust design.

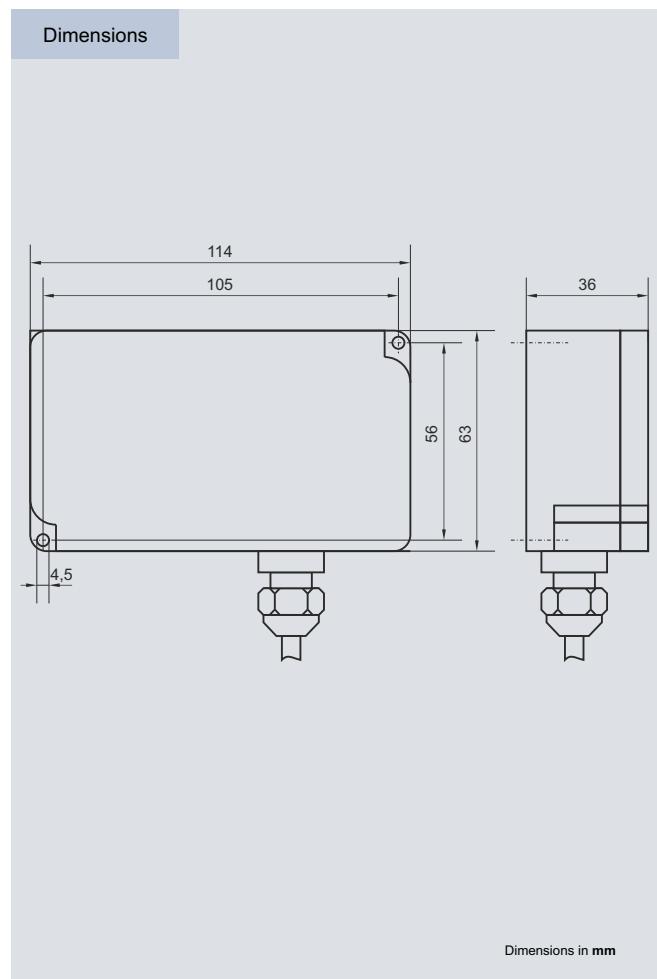
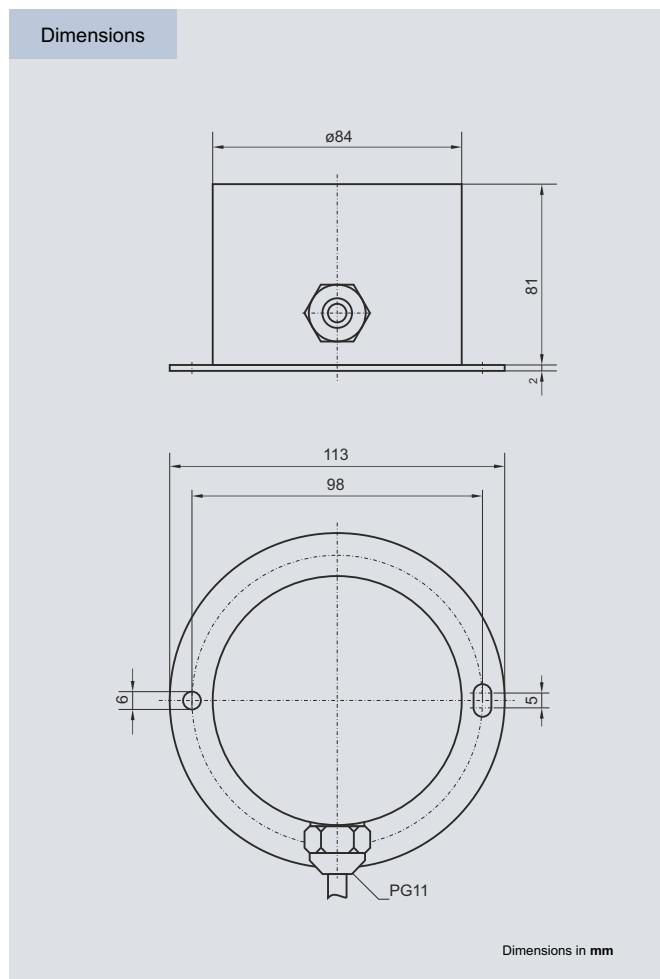
The compact unit is free of wear since the measurement principle does not use any movable parts and hence provides reliable measurement results even under flood conditions (IP68).

NDW 2 provides a 4 - 20 mA signal proportional to the angle of inclination (0 - 90° or 0 - 60°) to obtain overflow data. Following devices such as HydraulicCalculator Plus, NivuCont Plus, NivuFlow, NivuLog or PCS/SCADA systems use flap-specific data to compute accurate overflow volumes.





Specifications



NDW 2	
Power supply	18 to 28 V DC
Power consumption	60 mA at 24 V DC, max. 80 mA
Output	• 4 - 20 mA, galvanically isolated • load: max. 500 Ohm
Measurement range	• 0 ... 60° • 0 ... 90°
Resolution	0.1°
Measurement uncertainty	± 0,5°
Temperature influence	<± 0.5° [0-60 °C]
Settling time	1s / 90%
Enclosure	• protection IP68 • material: stainless steel 1.4571, Polyurethane
Cable	6-wire shielded cable, fixed
Cable length	10 / 20 / 30 / 50 m
Ex approval	no
Operating temperature	-20 °C to +60 °C
Storage temperature	-30 °C to +70 °C

NDW Ex	
Power supply	• 18 to 28 V DC, intrinsically safe circuit • max. 28 V / 110 mA
Power consumption	+4 ...+12 ...+20 mA (2-wire system)
Output	2-wire, load: max. 500 Ohm
Measurement range	• 0 ... 90°
Enclosure	• protection IP68 • material: die-cast aluminium
Cable	2-wire cable, fixed
Cable length	10 / 20 / 30 / 50 m
Ex approval	II 2 G Ex ib IIB T4
Operating temperature	-25 °C to +60 °C
Storage temperature	-30 °C to +70 °C
Max. humidity	80 %, non-condensing
Accessories (optional)	stainless steel adapter plate (120 x 167 mm) for installation using available boreholes in NDW Ex mounting plate

You can find more information in the instruction manual or on www.nivus.com