



NPP NIVUS

Pipe Profiler

ELECTRONICS

ACOUSTIC

WEIGHT

OVERLOADING
SAFETY SYSTEMS

VALVES

TEMPERATURE

DETECT
A FIRE®

FLOW

DENSITY

INTERFACE

PRESSURE

LEVEL



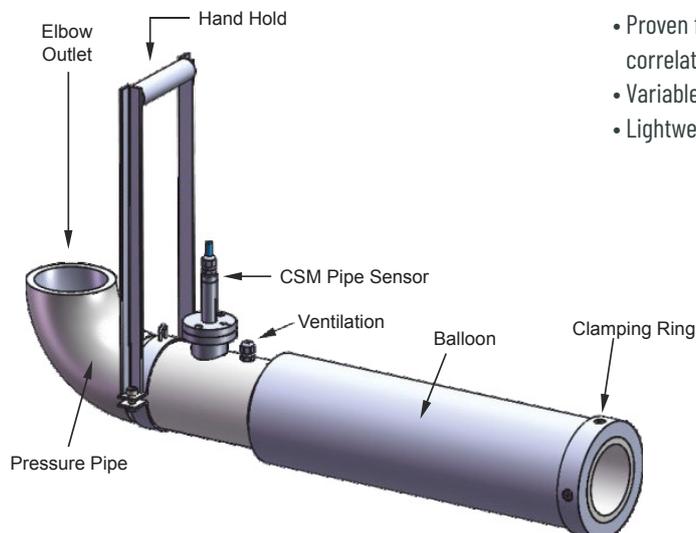
- Verification of channel utilisation
- Calibration basis for hydraulic calculation models
- Determination of required renovation extents
- Determination of required reservoir volumes (retention basin)
- Introduction of a channel management system
- Localisation of extraneous water volumes
- Influent control
- Throttle discharge control
- Determination of basic data for new billing networks

Pipe measuring section as extension to the mobile flow measurement system Nivu Flow Mobile 750.

The measurement system ensures highly accurate determination of flow rates even under difficult conditions such as low flow volumes or poor hydraulic flow conditions.

Benefits

- Calibrated overall system
- Sensor always in the right position thanks to guided sensor seat
- Exactly defined cross-sectional area in pipes
- Measurement in full pipes with ideal flow profiles
- Proven flow velocity measurement using ultrasonic cross correlation
- Variable use in pipes with various diameters
- Lightweight, can be installed by one person



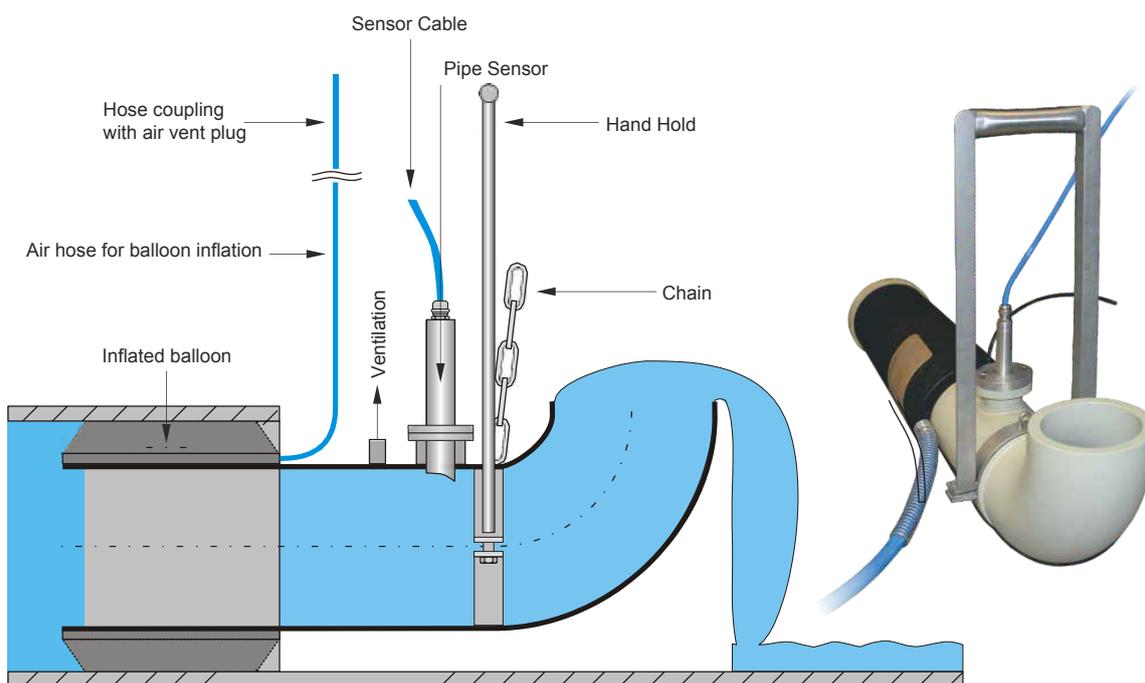
Technical Specifications

NIVUS Pipe Profiler - Complete Unit

Max. inflation pressure	1,5 bar
Operation temperature	-10 °C to +70 °C
Storage temperature	-20 °C to +60 °C
Meas. uncertainty within application	2% depending on measurement and boundary conditions
Material	PP H, stainless steel, natural rubber

CSM PIPE SENSOR

Measurement principle	Ultrasonic cross correlation with real flow profile measurement
Meas. frequency	1MHz
Protection	IP68
Ex approval	II 2G Ex ib IIB T4 Gb (ATEX) / Ex ib IIB T4 Gb (IECEX)
Operation pressure	Max. 4 bar
Cable length	15 m
Construction	1" pipe sensor with connection flange
Measurement range	-100 cm/s to +600 cm/s
Scan layers	max. 16
Zero point drift	Absolutely stable zero point
Error limits (per scan layer)	< 1% of measurement value (v > 1 m/s) / < 0.5% of meas. value +5 mm/s (v < 1 m/s)
Material	Stainless steel 1.4571 (AISI 316Ti), PEEK



NPP Type	Outside Ø mm	Inside Ø mm	Weight kg*	Total Length mm	For Installation in Pipes Inside Ø mm	Q max in l/s	Q in l/s with 1 m dam-up
DN 150	148	90	11	835	150 - 300	approx. 38	approx. 17
DN 200	190	141.8	15	970	195 - 500	approx. 95	approx. 42
DN 300	290	199.4	27	1195	295 - 600	approx. 187	approx. 76

**incl. sensor with cable and air hose