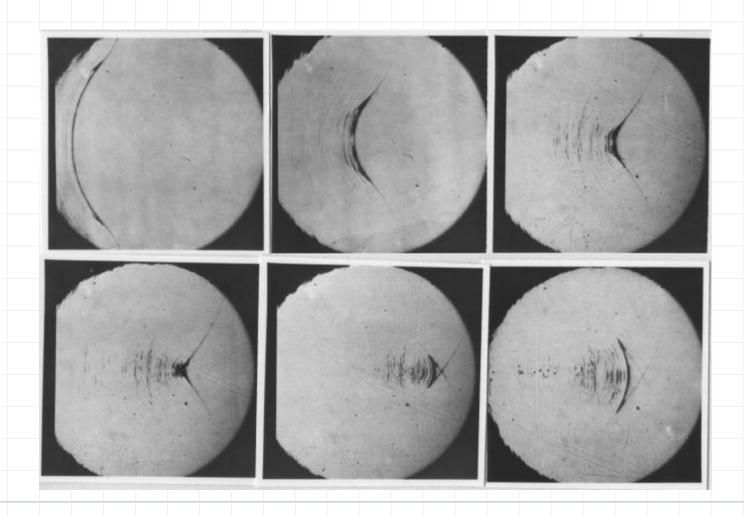
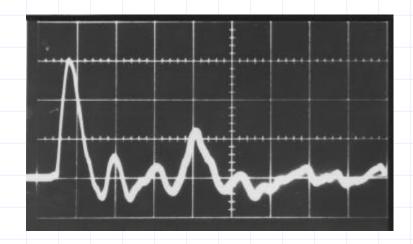


Shock Wave Focussing in Water

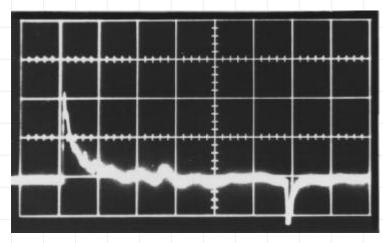




Measurement of Shock Waves in Water



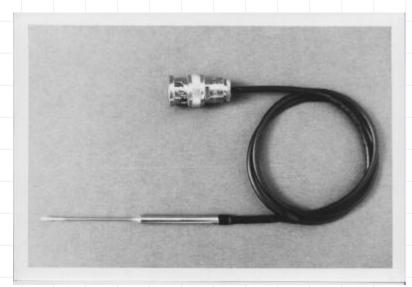
PCB 105 A43



Müller-Platte Needleprobe



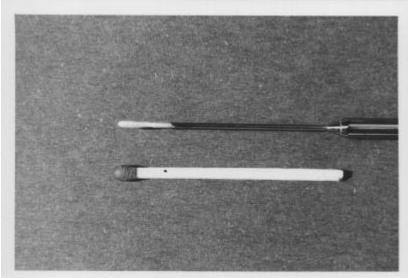
Müller-Platte Needleprobe



Ideal for pressure measurement of blast waves and high energy ultrasound

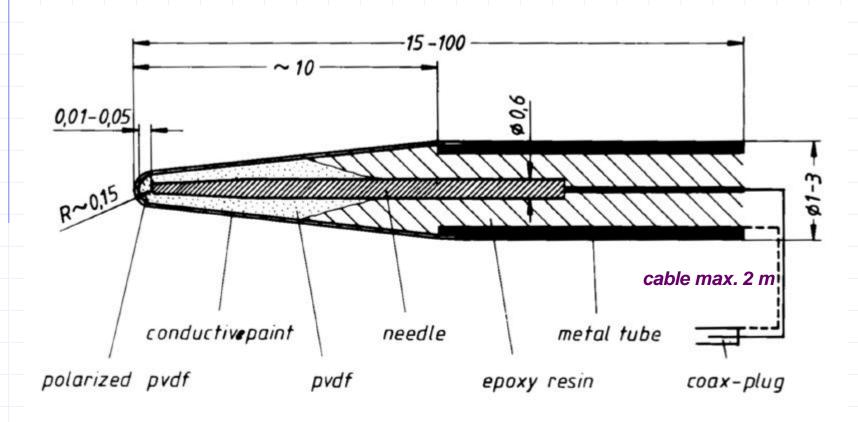
Since 1985 the "Gold Standard" for blast wave measurements in liquids

More than 1000 sensors sold



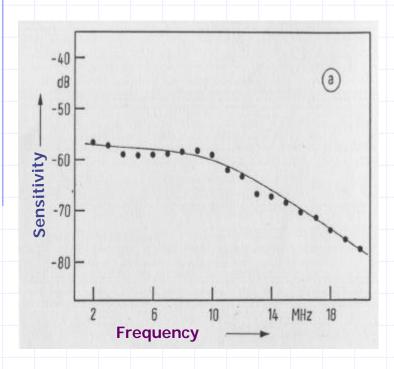


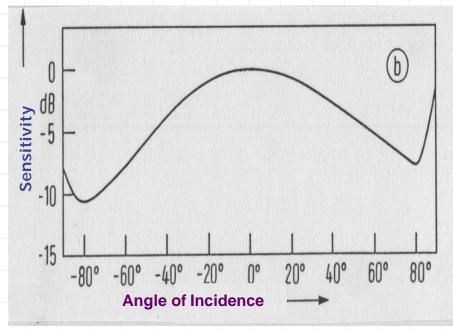
Müller-Platte Needleprobe





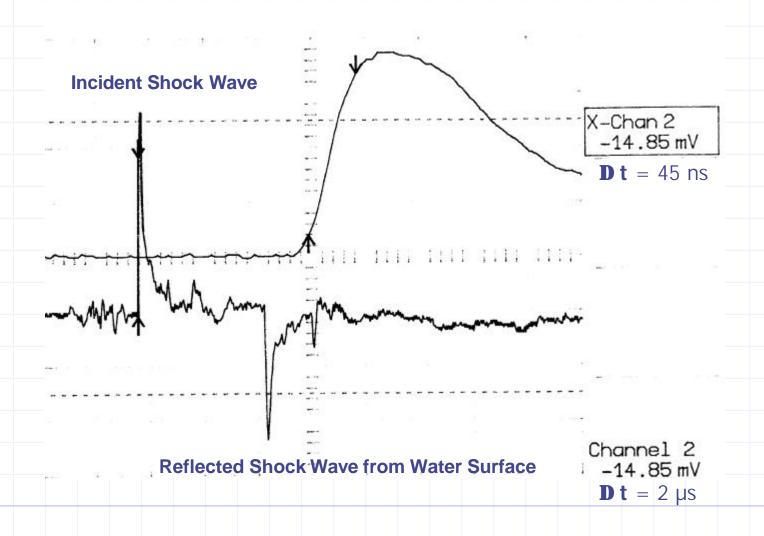
Sensitivity of the Needleprobe





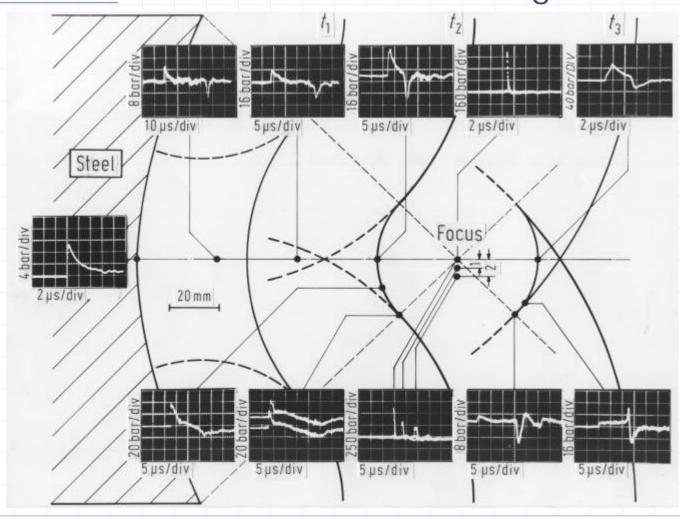


Typical Record of a Water Blast Wave





Pressure Distribution in a Focussing Field

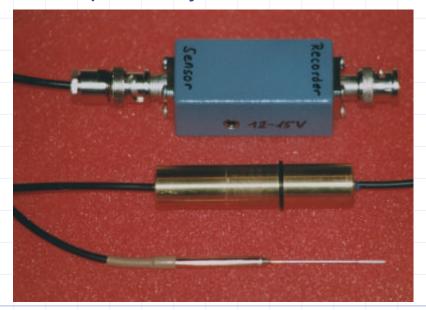




Special Designs of Müller-Platte Needleprobe

- 1. Any diameter or length of the sensor can be realised.
- 2. For longer cable connections than 3 meter a preamplifier is necessary to avoid signal disturbance and ringing.

 We have made a version with 300 m under water cable. The preamplifier is positioned about 50 cm behind the sensor. The power supply of 12-15 V is transported by the measurement coaxial cable.





Müller-Platte Needleprobe

Technical Data:

Medium: High Speed measurements in liquids

Range: -100 to 1500 bar

Rise time: 50 ns

Sensitive diameter: < 0.5 mm

Sensitivity: about 0.3 pC/bar → 1 mV/bar

Frequency range: up to 10 MHz

Calibration: up to 20 bar calibration in water

(const. sensitivity was verified up to 320 bar)

Temperature range: -20 to 70 °C, shortly higher

Tube diameter: 1.2 mm at the tip, 4.0 mm for mounting

Material: stainless steel

Connection: 2 m cable, BNC pos.

Recording: e.g. to a 1 MOhm input

Live time: const.= 200000 = Pressure amplitude (bar) x Measurements

Article No.: 100-100-1

Specials: with preamplifier for cable lengths of x meter up to 300 m

Article No.: 100-100-4/x