

## HNS Hydrophones

The HNS needle hydrophone, also known as the Müller-Platte probe, has a miniature hemispherical tip. It was specifically designed for use in shock wave measurements and focusing ultrasonic fields. Today this probe is the gold standard for measurements of pressure in acoustic pulses of high amplitude and short duration, renowned for its reliability and durability in this harsh environment.

### Features

- Small sensitive area (< 0.5 mm)
- Durable
- Shock wave calibrated (2 MPa)

### Technical Specifications

	<b>HNS-0500</b>
<b>Usable frequency range</b>	1 - 10 MHz
<b>Rise time (10% to 90%)</b>	50 ns
<b>EOC Nominal Sensitivity [nV/Pa]</b>	10
<b>Acceptance angle (-6dB at 5 MHz)</b>	50°
<b>Capacitance</b>	240 pF
<b>Max. pressure extremes*</b>	-10 Mpa to 200 MPa
<b>Max. Operating Temperature</b>	60°C

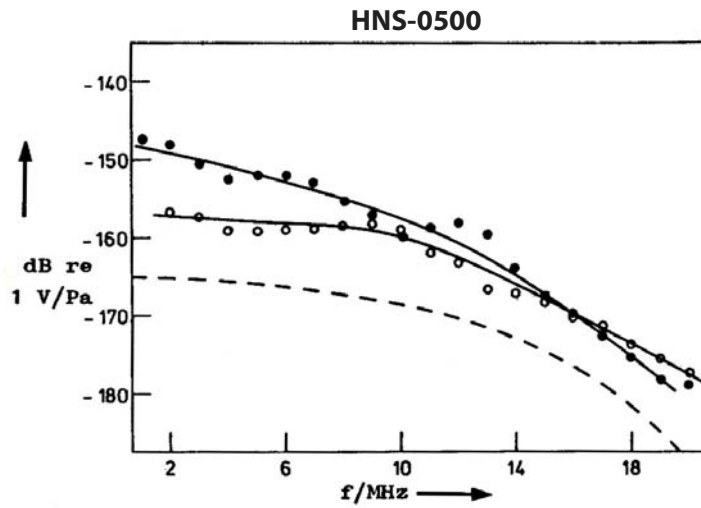
\* Note: The lifetime of the hydrophone is limited due to erosion by cavitation. The lifetime can be estimated by multiplying the maximum pressure P (in bar) by the number of pulses N. We have found that this product is approximately equal to 200,000. For instance, for exposures to 100 bar, the average life is 2,000 measurements.

This specification is subject to change without notice.

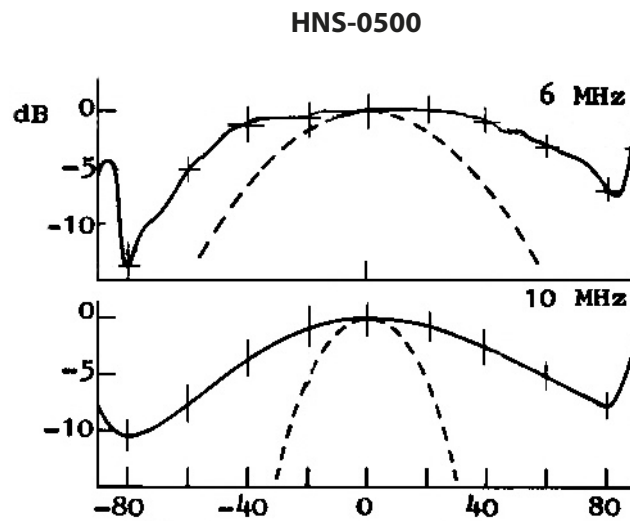


**HNS Hydrophone**

## Typical Sensitivity Plot



## Typical Directivity Plot



## Mechanical Specifications

Outside materials:

- Silver paint
- Stainless steel
- Heat shrink

