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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JJG 1017-2007

**Verification Regulation of Standard Hydrophones in the
Frequency Range 1 kHz~1 MHz
(English Translation)**

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1 Scope

The order applies to frequencies within the range of 1kHz ~ 1MHz initial verification standard hydrophone, and make follow-up test with the test. Within the frequency range of the transmitter to transmit the current response standard level calibration can also be implemented by reference.

2 Citations

The regulations cited in the following documents.

GB/T 3102.7-1993 "acoustic volume and unit" GB/T 3223-1994 "acoustic underwater acoustic transducer free-field calibration method" GB/T 3947-1996 "Acoustics terminology" GB/T 4128-1995 "Acoustics Standard hydrophone" GJB1727-1993 "IF a standard hydrophone test procedures" JJF1001-1998 "common measurement terms and definitions" JJF1034-2005 "Acoustic measurement terminology and definitions" JJF1059-1999 "Measurement Uncertainty and indicates" IEC 60565Ed.2.2006, Underwateracoustics-hydrophones-calibrationinthefrequency range0.01Hzto1MHz when using this procedure, it should pay attention to using the currently valid version of the documents cited.

3 terminology and units of measurement the procedure adopted GB/T 3947-1996, JJF1001-1998, JJF1034-2005 regarding terms and definitions.

This procedure uses quantities and units GB/T 3102.7-1993 prescribed.

In the present statutes, if not explained, all the voltage, current, sound pressure refers to a valid value.

3.1 reciprocal transducers electric terminal (electricalterminalsofareciprocals transducer) Measuring the electrical terminals of the emission current measured open circuit voltage of the electric terminal as a transmitter and is used as a hydrophone.

Note: If the transducer is immersed in water, the lowest electrical impedance between the end of the water is known as "low", and the other end is called the "high end." 3.2 transducer for electrical transfer impedance (electricaltransferimpedanceofatransducerpair) when the transmitter and hydrophone placed in the free sound field, its axis in a straight line and on time for each other, both ends of the hydrophone Open instantaneous voltage and instantaneous current through the emitter complex than that.

Unit. ohm, ohm.

Note:

1. Electrical transfer impedance is complex.
2. Due to the transfer of electrical impedance of the sound field conditions, the transmitter and the hydrophone electrical load, and therefore, together with the relevant conditions and electrical voltage Measuring end of the stream should be noted.