TYPE H56 HYDROPHONE

Fig. H56-1 - Type H56 hydrophone.

FUNCTION: A wide-band hydrophone with high sensitivity and low self noise for frequencies below 65 kHz.

DESIGN: A capped PZT cylinder in an oil-filled rubber boot with a solid-state preamplifier. The hydrophone is completely rubber covered. See refs. 9, 10, and 11 for details on low-self-noise hydrophones.

FREQUENCY RANGE: 10 Hz to 65 kHz
FFVS: See Fig. H56-2
MAXIMUM DEPTH: 690 m
TEMPERATURE RANGE: 0 to 30°C
ACOUSTIC OVERLOAD: 169 dB re 1 µPa
PREAMPLIFIER OUTPUT IMPEDANCE: 50 Ω in series with 100 µF
EQUIVALENT NOISE PRESSURE LEVEL: See Fig. H56-3
DIRECTIVITY: Omnidirectional in the horizontal (XY) plane
See Fig. H56-4 for patterns in the vertical (XZ) plane
WEIGHT: 6 kg (13 lbs)
SHIPPING WEIGHT: 16 kg (35 lbs)
INTERNAL RESISTOR (for coupling measurements): 10 Ω Do no use more than 0.1 input voltage
NORMAL CABLE LENGTH: 30 m

CABLE CODE:	coaxial center	G	high signal output
	coaxial shield	A, F	low signal output, low coupling input, and 24 V return
	red or black	B	24 V dc supply at 8 mA
	white or green	D	high coupling input
	cable shield	E	case ground

INSTRUCTIONS FOR THE USER:

See Appendix D for preparing for use
See Appendix B for voltage coupling loss measurement
See Fig. H56-5 for the acoustic center
Clamp hanger around rubber-covered cylinder near conical cable gland

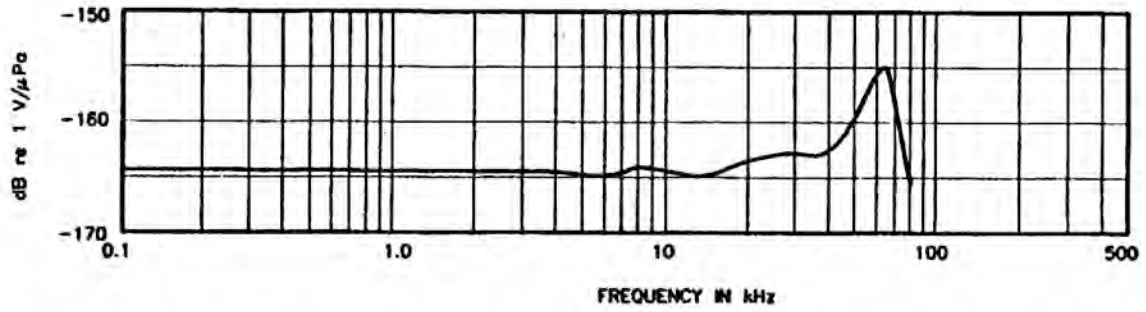

Fig. H56-2 - Typical FFVS for Type H56 hydrophone, open-circuit voltage at end of 30-m cable.

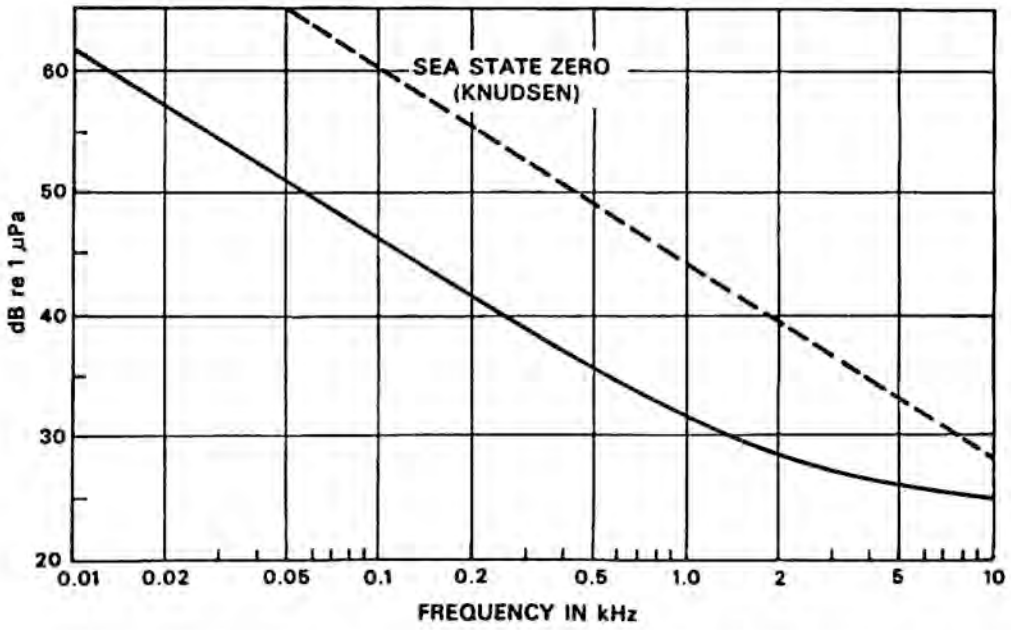

Fig. H56-3 - Equivalent noise pressure of Type H56 hydrophone (computed from noise voltage measured at the end of a 30-m cable).

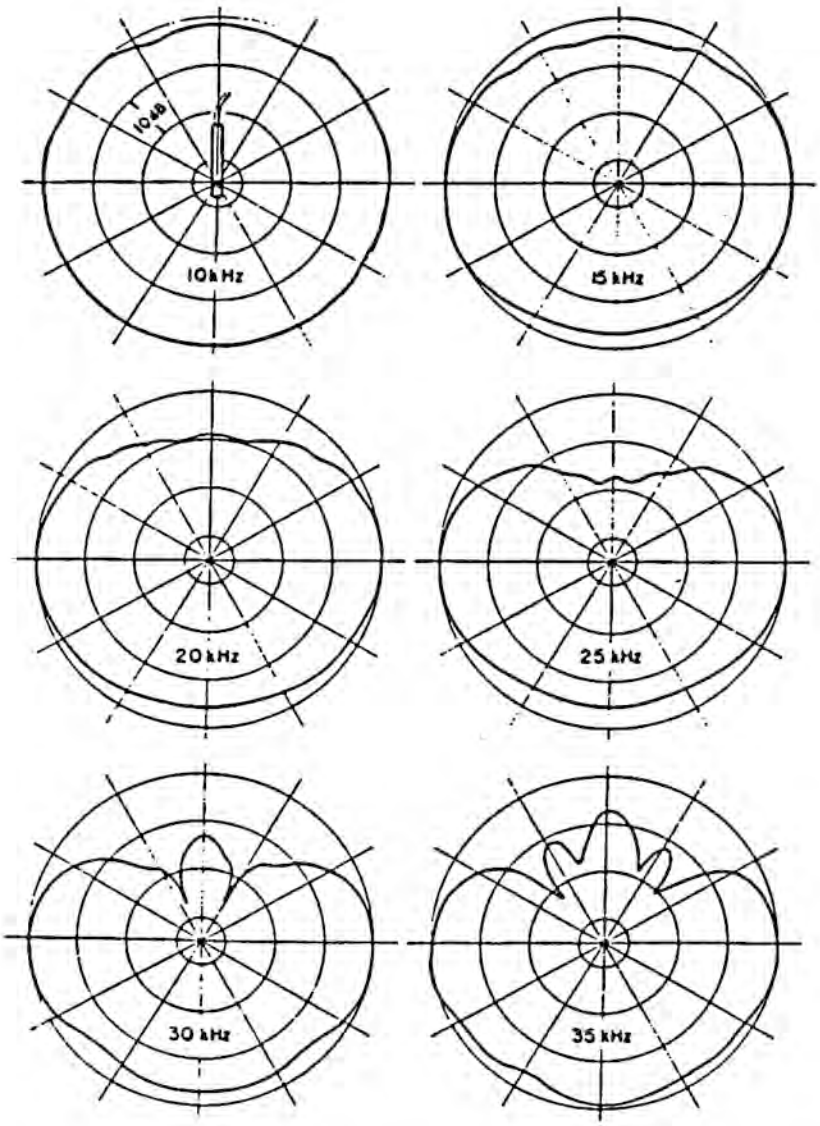

Fig. H56-4 - Directivity patterns in the vertical (XZ) plane of Type H56 hydrophone.

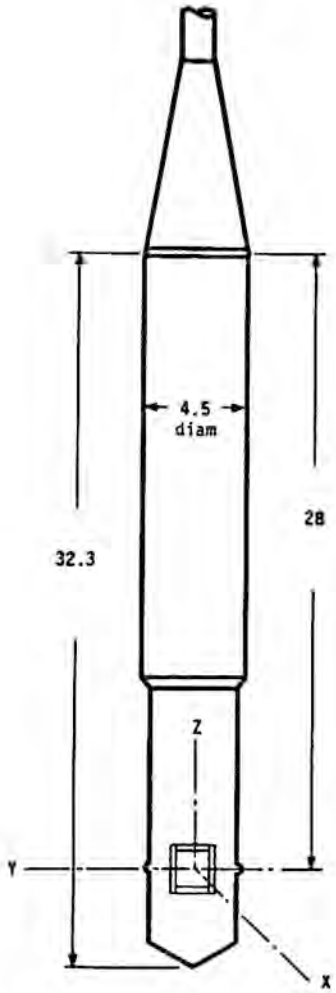

Fig. H56-5 - Dimensions (in cm) and orientation of Type H56 hydrophone.