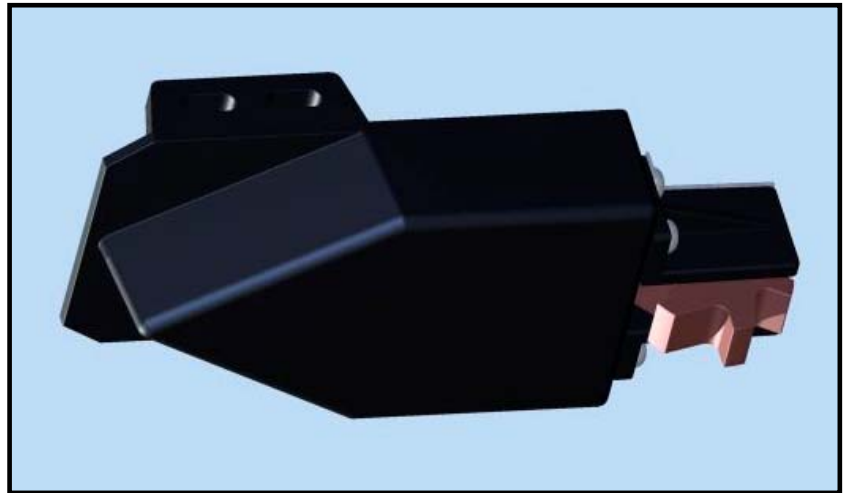


Model 238

50kHz to 200kHz

A wedge shaped transducer similar to Model 236 except longer to allow use of two elements of different frequencies, i.e. 50 & 200 kHz. The Model 238 is available in several different combination of frequencies and beam widths.

Utilizing the different orderable options for the 238, it may be configured in any combination of depth, depth/temperature or depth/temperature/speed.



Model 238 – Bottom view showing Temp and Speed sensors.

Options:

- Temperature sensor
- Speed sensor

Applications:

- Good high speed performance.
- Inboard, Outboard, or jet boats.
- Safe with all types of hull material.

Specifications:

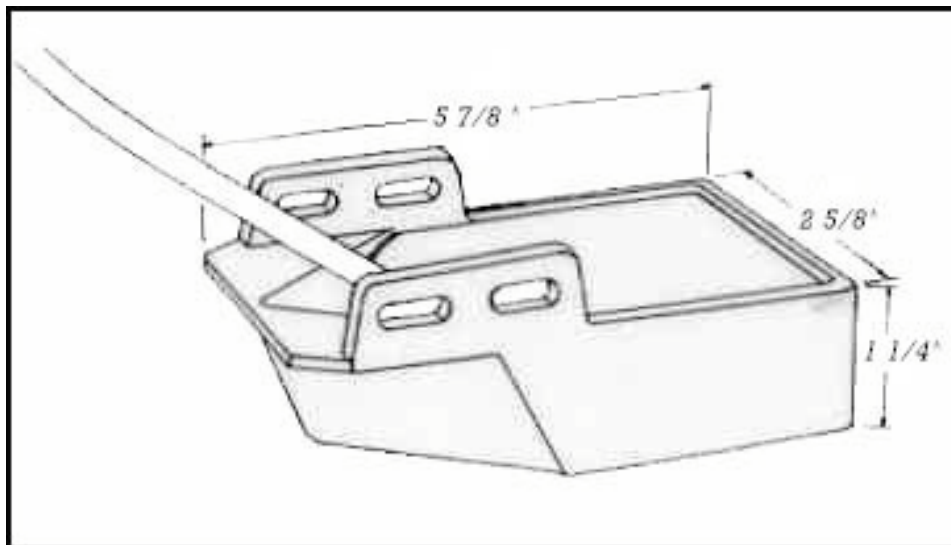
- Speed Sensor
 - Linearity is plus/minus 3% over speed range.
 - 3 pulses per revolution or 22,500 pulses per nautical mile.
- Temperature
 - Type: Thermistor.
 - Value: 10k ohms at 25C.
- Weight: 1.5 lbs.
- Material: Polycarbonate alloy.

Performance Data

FREQUENCY (kHz)	BEAM WIDTH (degrees @ -3db)	ELEMENT SIZE (inches)	CAPACITANCE (pf) NOTE (1)	IMPEDANCE (ohms) NOTE (2)	TRANSMIT RESPONSE (db) NOTE (3)	RECEIVE RESPONSE (-db) NOTE (4)	POWER RATING, RMS (watts)	COMMENT
200	18	1.1	965	550	157	-189	300	
200	12	1.45	1265	480	161	-182	300	
200	11	1.7	1900	300	163	-185	600	Dual frequency, 200 & 50 kHz

Performance Data Continued								
FREQUENCY (kHz)	BEAM WIDTH (degrees @ -3db)	ELEMENT SIZE (inches)	CAPACITANCE (pf)	IMPEDANCE (ohms)	TRANSMIT RESPONSE (db)	RECEIVE RESPONSE (-db)	POWER RATING, RMS (watts)	COMMENT
			NOTE (1)	NOTE (2)	NOTE (3)	NOTE (4)		
200	9	2.0	2185	385	165	-186	600	
160	20	1.1	885	750	158	-189	300	
160	11	2.0	1750	550	164	-183	600	
120	38	1.0	1050	500	167	-181	300	
120	14	2.0	1725	320	164	-171	600	
75	29	1.7	4200	200	160	-184	600	
50	45	1.7	1600	440	156	-173	600	Dual frequency, 200 & 50 kHz
50	43	2.0	4550	265	173	-184	600	

(1) with standard length cable. (2) equivalent series R in water. (3) the source level generated by one watt input. (4) the open circuit RMS voltage generated by a pressure of one microbar.



Model 238 – Show without mounting brackets.