

Series 7000 Transducer

SensComp's Series 7000 Electrostatic Ultrasonic sensor is specifically intended for operation in air at ultrasonic frequencies. The assembly comes complete with a perforated protective cover.

Features

50 KHz Electrostatic Ultrasonic sensor
Beam Angle of 17° at -3 dB
Ranges from 6" to 35'
Excellent Receive Sensitivity
Perforated Plastic Protective Cover.
Specifically Intended for Operation in Air at Ultrasonic Frequencies

Part No.

*PID# 612366 – Series 7000 Ultrasonic sensor
(with electrical connecting clips)
*PID# 614565 – Series 7000 Ultrasonic sensor
(without electrical connecting clips)
*RoHS Compliant

Benefits

Able to Range from 6" to 35'
Excellent Receive Sensitivity

Applications

Level Measurement, Proximity Detection, Presence Detection, Robotics, Educational Products

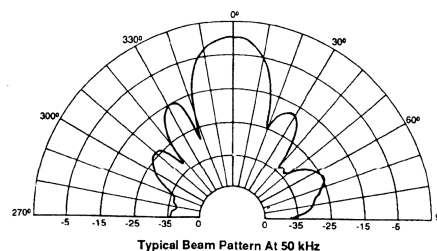
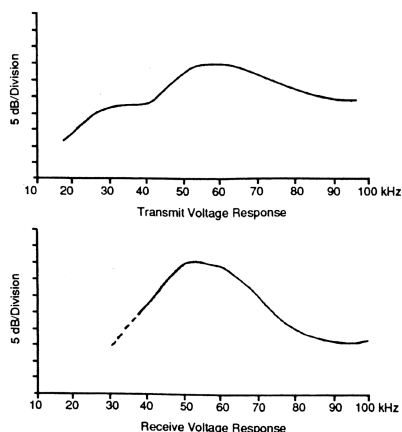
Specifications



Description

The Series 7000 ultra-sensitive ultrasonic sensors feature ranging capability from 2.5 cm to 15.2 m when used with SensComp drive electronics. They are ideally suited for demanding applications where the most sensitivity possible is the highest priority. These ultrasonic sensors are among the best available when detecting soft or small targets.

Transmit/Receive Response & Beam Pattern



Note: dB normalized to on-axis response.
Note: Curves are representative only. Individual responses may differ.

Series 7000 Specifications**Usable Frequency Range**

Transmitting..... See Graph

Receiving See Graph

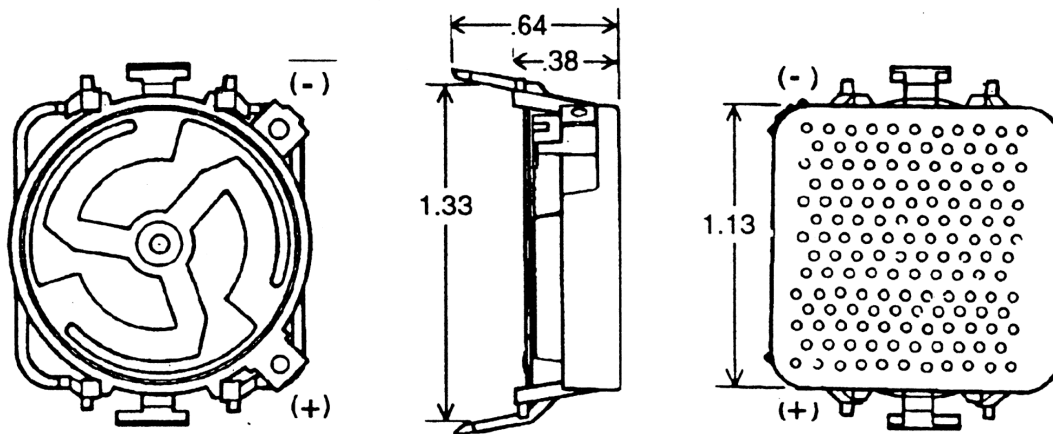
Beam Pattern See Graph

Typical: 17° at -3dB

Transmitting Sensitivity 106.9 dB min
at 50.0 kHz; 0dB re 20 μ Pa at 1 meter
(300 VAC_{PP}; 150 VDC bias)**Receiving Sensitivity** -43.4 dB min
at 50.0 kHz; 0dB = 1 volt/Pa
(150 VDC bias)**Distance Range** 0.15 to 10.7 M
(0.5 to 35 feet)**Resolution** (\pm 1% over entire range) \pm 3mm to 3m
(\pm 0.12 to 10 ft)**Weight**..... 4.7 gm (0.15 oz)**Suggested DC Bias Voltage** 200V**Suggested AC Driving Voltage**..... 200V peak**Combined Voltage** 400V max**Capacitance** at 1 kHz (typical) 600-700 pf
(at 150 VDC bias)**Operating Temperature** -40 to +85° C
(-40 to 185° F)**Relative Humidity** (non condensing) 5% - 95%**Dimension****Thickness** 0.41 inch**Square Size** 1.13 inch**Standard Finish****Foil** Gold**Housing** Flat Black
Plastic**Notes:**

[1] Lines which may occasionally appear in foil have no effect on product functionality or performance.

[2] Variations in die depth may result in minor variations of tolerances.



SENSCOMP PRODUCT SPECIFICATION SHEET DISCLAIMER NOTICE

SensComp, Inc. ("SensComp") reserves the right to make corrections, enhancements, improvements and other changes to its products, specification sheets and data, and to discontinue any product, without further notice. Buyer should obtain the latest relevant information before placing an order and should verify that such information is current and complete. All products are sold subject to SensComp's terms and conditions of sale in effect at the time of order acknowledgment.

SensComp disclaims any and all liability for any errors, inaccuracies or incompleteness contained in any specification sheet or in any other disclosure relating to any product. Information contained herein is strictly for reference and subject to change without notice. SensComp is not liable for any damages that the reader or any third person might suffer as a result of the reader ignoring this warning.

SensComp makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose. SensComp disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for a particular purpose, non-infringement and merchantability.

SensComp assumes no liability for applications assistance or the design of Buyer's products. Buyer is responsible to validate its products, designs and applications using SensComp's products or components. To minimize the risks associated with Buyer's products and applications, Buyer should provide adequate design and operation safeguards.

SensComp products are not authorized for use in aircraft, aviation, nuclear, medical or safety-critical applications including, but not limited to, life support, where a failure of the SensComp product would reasonably be expected to cause severe personal injury or death.