

Ultrasound, sensing the level

One step ahead of the world



Dual-frequency non-contact level detection

Y050T 50/200 kHz air transducer

Long sensing range

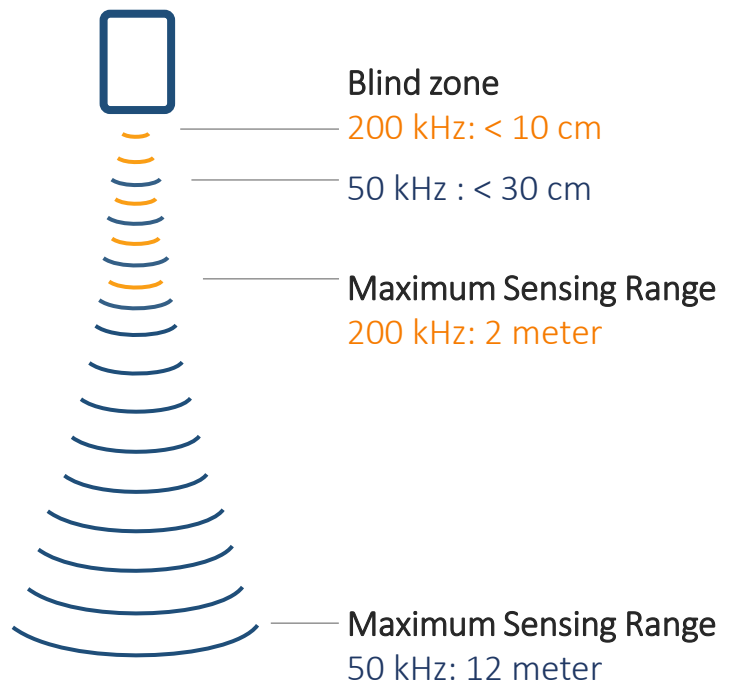
Short blind zone

High resolution

High reliability

PVDF housing

Patented technologies



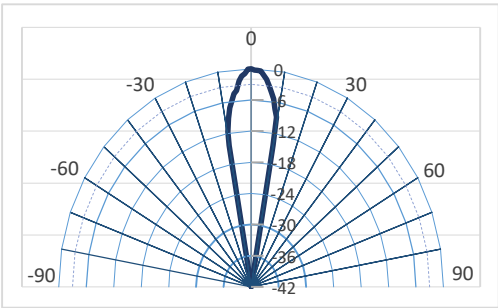
Y050T is a novel dual-frequency ultrasonic air transducer working as a signal transmitting and receiving unit. The dual-frequency transducer can detect as long as up to 12 meter range at 50 kHz operating mode along with only 10 cm blind zone at 200 kHz mode. This ultrasonic transducer is particularly suitable for non-contact level detection and proximity measurement with high resolution, long sensing range, short blind zone as well as exceptional reliability.

Specifications

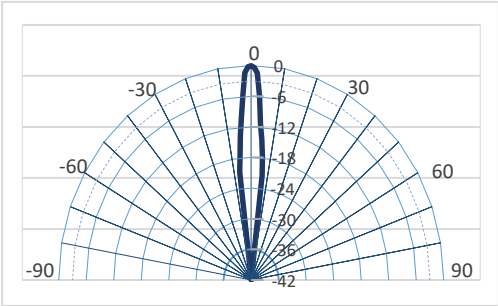
| Y050T (P/N: H2KY050KT1CD00) | 50 kHz | 200 kHz | |
|--|----------------|---------|--------|
| Operation Frequency | 50 | 200 | kHz |
| Capacitance (@ 1 kHz, 1Vrms) | 1500 | 1500 | pF |
| Directivity (Full Angle @-3 dB) | 10 | 6 | Degree |
| Maximum Driving Voltage (2% Duty Cycle Tone Burst) | 1000 | 1000 | Vpp |
| Maximum Sensing Range | 12 | 2 | meter |
| Blind Zone | < 30 | < 10 | cm |
| Operating Temperature | -40°C to +85°C | | |

Directivity Diagram

50 kHz



200 kHz

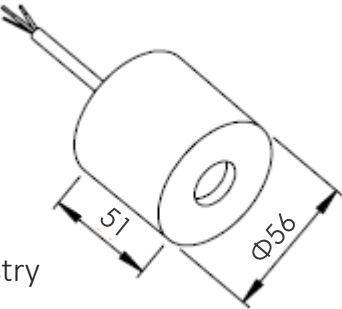


Major Applications

- Proximity measurement
- Non-contact level detection
- River level monitoring
- Petrochemical industry
- Food and beverage industry
- Water supply and drainage industry
- Grain, powder, granular material level detection

Dimensions

Housing material: PVDF
Unit: mm



As Unictron continues to improve its products, all specifications are subject to change without notice. All specifications are typically measured at 25 ± 3 ° C, 45 to 60% RH.