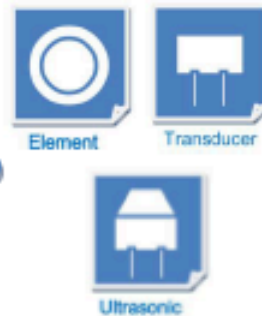


# Applications guides | Proximity Sensor for the acoustic components



A signal sound is emitted when user press the button.

Ultra sonic sensors are used to measure the distance of objects.

A proximity sensor is a sensor able to detect the presence of nearby objects without any physical contact.

A proximity sensor often emits an electromagnetic field or a beam of electromagnetic radiation (infrared, for instance), and looks for changes in the field or return signal. The object being sensed is often referred to as the proximity sensor's target. Different proximity sensor targets demand different sensors. For example, a capacitive photoelectric sensor might be suitable for a plastic target; an inductive proximity sensor always requires a metal target.

The maximum distance that this sensor can detect is defined "nominal range". Some sensors have adjustments of the nominal range or means to report a graduated detection distance.

Proximity sensors can have a high reliability and long functional life because of the absence of mechanical parts and lack of physical contact between sensor and the sensed object.

Proximity sensors are also used in machine vibration monitoring to measure the variation in distance between a shaft and its support bearing. This is common in large steam turbines, compressors, and motors that use sleeve-type bearings.

# Applications guides | Proximity sensor for the acoustic components



Suggested Item	64PE15041	64PE20040
Size (mm)	∅ 15 x 0.22	∅ 20 x 0.22
Frequency(Hz)	4100	4000
Capacitance(pF)	9000	26000



Suggested Item	DB-E1108	DB-E1898	DB-E2338
Size (mm)	∅ 12.6 x 6.3	12 x 12 x 3	∅ 13.8 x 6.4
Sound Pressure Level (dBA)	80	70	85
Product Type	Piezo	Piezo	Piezo
Type	Pin	SMD	Pin



Suggested Item	USWA12A08	USWA14A09	USWA15A09	USWS14A09
Size (mm)	∅ 12 x 8	∅ 14 x 9	∅ 15 x 9	∅ 14 x 9
Product Type	Waterproof	Waterproof	Waterproof	Waterproof