

## **AVAS** actuators

Acoustic Vehicle Alerting System (AVAS) is designed to emit speed-related driving sounds that alert pedestrians and other road users to the presence of electric vehicles within speeds of up to 30km/h. While the sound must meet legal requirements in different nations (e.g., EU: R138.01, US: FMVSS 141), it also creates new opportunities for OEMs to make their vehicles sound brand-specific and unique. Our advanced automotive actuators are a perfect fit for generating a unique and natural sound experience, while having many advantages compared to conventional loudspeakers in terms of sound performance, required installation space and durability.

## **Highlights:**

- One AS wide range actuator can already fulfill the legal requirements for AVAS
- Sound is being generated by excite regular vehicle structures and trim parts
- Scalable system to cover entry to premium customer requirements (optional actuator for Bass enhancement available)
- Unique and natural sound reproduction with a wide frequency range (clear sound)
- Extra wide radiation of sound due to excitation of the surface
- Requires much less installation space compared to conventional speakers
- Support in creating a brand specific sound design that fulfills legal requirements

## Fields of application:

- Acoustic Vehicle Alerting System (AVAS)
- Engine sound augmentation (for exterior and interior)
- HMI sounds (vehicle earcons and chimes, voice communication, etc.)
- Music playback (best performance with optional AS Bass actuator)





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