

Bosch Ultrasonic Sensors Generation 6

Reliable distance measurement for safe and comfortable parking and maneuvering

Bosch ultrasonic sensors (USS) detect distances to obstacles and monitor space when parking and maneuvering. The USS generation 6 is a nonimpact distance sensor that works on the basis of ultrasound for automotive applications. It uses an echo technology with a variable ultrasonic frequency in the range of 43kHz – 60kHz.



Key features	Ultrasonic sensors generation		
	6.0	6.1	6.5
Object presence detection	6 cm	6 cm	3 cm
Min. measuring range ²	15 cm	15 cm	15 cm
Max. measuring range ²	2,5 m	4,5 m	5,5 m
ASIL sensor/ECU	QM/QM	A/B	B ³ /B
Blindness detection	Yes	Yes	Yes
Adaptive threshold	Yes	Yes	Yes
Signal coding	Yes	Yes	Yes
Digital sig. processing	Yes	Yes	Yes
Fusional capability (video/radar etc.)	Yes	Yes	Yes

²⁾ Reference object: 75mm standard pole

³⁾ Measures & process in accordance with ASIL B, FIT>10-7/h

Advantages at a glance:

- One sensor covers multiple brands
- Easy installation: plug and play
- Sensor for aftermarket is based on Bosch OE sensor
- Basis for parking and maneuvering systems as well as for braking and automated parking functions
- Enables handling in very small parking lots (vehicle + 60 cm)
- Sensitive ultrasonic system (e.g. detection of low reflecting objects)
- Very robust against dirt, ice and challenging environmental conditions



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Application list

Order number	Generation	Applications
0218001089	6.0R PC	BMW
0218SS0001	6.0R	BMW, GM, Daimler, Stellantis, Renault, Volkswagen, Honda, Iveco, JLR
0218SS0002	6.5R	BMW, GM, Volvo, Renault, Honda, Daimler, Volkswagen, JLR, Mazda, Subaru
0218SS0003	6.5A	BMW, GM, Honda, JLR, Mazda, Daimler, Renault, Subaru, Volvo, Volkswagen
0218SS0004	6.1A	BMW
0218SS0005	6.1R	BMW, GM, Renault, Volvo, Stellantis, Volkswagen
0218SS0006	6.0A	BMW, GM, Renault, Honda, Iveco, Volkswagen, JLR, Daimler

All order numbers listed above contain an ultrasonic sensor and a transparent ring.

Except for the powder coated ultrasonic sensors (PN 0218001089), all sensors are KTL sensors which need to be primed and painted before being mounted to a vehicle.

The ring should only be fitted on the sensor after the painting work has been completed.