

Description

The Doppler simulators VDS-1 and VDS-2 are used for the reliable and fast calibration of radar-based driver assistance systems such as lane change or turn assistants in modern vehicles. With the help of the Doppler effect, the Doppler simulator is recognized as a moving object by the sensor to be calibrated which enables the functional test of the angle measurement capability and the calibration of the sensor.



VDS-1

Thanks to its special design, the VisiCon Doppler simulators cover an exceptionally large vertical measurement range compared to other Doppler simulators available on the market, which means that no height adjustment and the associated safety devices are required even with a wide mix of vehicles and different installation positions of the radar sensors in the vehicle. The VDS-1 offers the widest possible measurement range. The VDS-2, on the other hand, is more compact and better suited for confined spaces, but still offers a wide measurement range.

Inside the Doppler simulator, a special roller rotates at a constant and defined speed, thus generating a backscatter of the radar waves. Several operating lights indicate whether the speed is within or outside the specified tolerances. Depending on the required installation position, the Doppler simulators can be installed stationary or adjustable in azimuth.



VDS-2

Benefits for our customers

- Calibration or testing of the angle measurement capability of radar-based assistance systems.
- Maximum flexibility in terms of vehicle mix and installation height of the sensors to be calibrated.
- Simple, independent retrofitting in existing systems possible

Order number

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Doppler simulator VDS-1	B253183
Doppler simulator VDS-2	B253343

Technical Data

	VDS-1	VDS-2
Dimensions (without base, H x W x D)	935 mm x 134 mm x 129 mm	632 mm x 125 mm x 125 mm
Weight	approx. 7,7 kg	approx. 5,5 kg
Power supply	24 V DC (permissible input voltage 19 V to 31 V)	
Starting current	2 A	
Operating lights	<ul style="list-style-type: none"> • Green: rotational speed is within the specified tolerances • Red: rotational speed too high • Blue: rotational speed too low • Yellow: Error 	
Active radar reflecting area	600 mm	440 mm
Rotational speed	2775 1/min	
Simulated speed	-6,4 m/s	
Stability of rotational speed	0,1 %	
Protection type according to DIN EN 60529	IP 54	
Interface	Harting Han 8U Pin assignment <ul style="list-style-type: none"> • Pin 1 – 24 V DC Motor • Pin 2 – 24 V GND Motor • Pin 3 – 24 V DC Control • Pin 4 – „OK“ • Pin 5 – „Error“ Note: Pins 3-5 are potential-free	
Temperature range	0°C up to +40°C	
Humidity	Up to 85 %, not condensing	