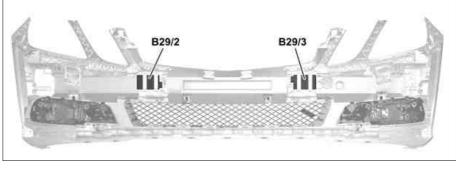
GF30.30-P-3302FLComponent description for bumper radar sensorsMODEL212.0 /2 up to 31.5.10 with CODE (234) Blind Spot AssistMODEL212.0 /2 up to 28.2.13with CODE (233) Distronic Pluswith CODE (237) Active Blind Spot Assist

Shown on a disassembled bumper at the front (internal view)

B29/2 DISTRONIC sensor (DTR) / left front bumper B29/3 DISTRONIC sensor (DTR) / right front bumper



P30.30-2354-04

B29/6

Shown on a disassembled bumper at the rear (internal view)

- B29/6 Bumper radar sensor at the left rear (for code (237) Active Blind Spot Assist or up to 31.5.10 with code (234) Blind Spot Assist)
- B29/7 Bumper radar sensor at the right rear (for code (237) Active Blind Spot Assist or up to 31.5.10 with code (234) Blind Spot Assist)

Location

Front:

The DTR sensors are inserted from the rear at the left and right respectively into the front bumper.

rear:

The radar sensors are respectively inserted on the inside on the left and right outer side for the rear bumper.

<u>Task</u>

The radar sensor or the DTR sensors (short range sensor) recognize objects (e.g. vehicles) in the short range area up to s = 30 m for a maximum detection angle of $\measuredangle = 130^{\circ}$.

Design

B29/7

The radar sensors or the DTR sensors are ultra-wideband radar sensors with the following properties:

- Radar sensor detection range s = 0.18 to 30 m, at a resolution of s = 0.04 m
- Acquisition angle $\measuredangle = 60^{\circ}$ with angle determination and $\measuredangle = 130^{\circ}$ only detection (track)
- Carrier frequency f = 24.125 GHz
- Method of operation: short pulse method with $\mathsf{f}=\mathsf{5}~\mathsf{GHz}$ band width

The high band width of the radar sensors or the DTR sensors allows a very precise position statement to be made and optimizes separation of objects lying close to each other.

i Coding (differentiation) for the individual radar sensors takes place by means of different assignment with ground on pin 5 and 6.

The radar sensor or the DTR sensors are actuated and evaluated by the following control units via the sensor CAN (CAN S):

- Radar sensors control unit (N62/1) (up to 31.5.10)
- Video and radar sensor system control unit (N62/2) (as of 1.6.10)

₩ PE	Wiring diagram for the video and radar	PE30.30-P-2103-97DAA
	sensor system control unit	

