Boom height control for Field Sprayers



For automatic boom height control for field sprayers, several ultrasonic sensors measure the distance between the sprayer boom and the crop canopy without physical contact. The field sprayer's control system uses the measured distance values to compensate for uneven ground, slopes, or varying plant heights. This keeps the spray boom at the desired working height, allowing crop protection products or fertilizers to be applied evenly across the field.

application areas

Agricultural machinery

Which ultrasonic sensors are suitable for automatic boom height control?
For easy integration, mic ultrasonic distance sensors with analogue outputs (4–20 mA and 0–10 V) are available. If signal processing is to take place in the customer's own control system, the wms ultrasonic distance sensors with echo output are suitable. Both sensor families feature a robust all-metal housing and are specifically designed for outdoor use on agricultural machinery or mobile machinery.

SENSORS FOR THIS APPLICATION AREA



mic-130/IU/M
operating range: 200 - 2.000 mm
Housing: cylindrical M30
Outputs: 1 x analogue 4-20 mA + 0-10 V...



mic-340/IU/M
operating range: 350 - 5.000 mm
Housing: cylindrical M30
Outputs: 1 x analogue 4-20 mA + 0-10 V...



wms-130/RT
operating range: 200 - 2.000 mm
Housing: cylindrical M30
Outputs: echo output
special feature: cable outlet and...



wms-340/RT
operating range: 350 - 5.000 mm
Housing: cylindrical M30
Outputs: echo output
special feature: cable outlet and...