INFO

Dinel®

PRINCIPLES OF LEVEL MEASUREMENT ADVANTAGES AND DISADVANTAGES

	Antenna radar	
advantages ⊕	• non-contact measurement method • high measurement accuracy • independence of measurement on temperature and atmospheric pressure above the surface	• the measurement is independent on the medium properties • easy installation • possibility of measurement even in aggressive vapors or vacuum
disadvantages ⊖	• foam can affect the quality of the measurement • dead zone at the beginning of the range	• not suitable for very light bulk media • not intended for higher temperatures above + 70°C
	Guided wave radar	
advantages ⊕	• high measurement accuracy • possibility of measurement even in aggressive vapors or vacuum • suitable for turbulent surfaces and foaming media	• resistant to atmospheric changes (pressure, temperature, dust, vapors) • resistant to changes in the parameters of the medium (dielectric constant, conductivity) • measurement of the interface of two different media or thickness of the upper medium layer
disadvantages ⊖	• dead zone at the beginning and end of the range • contact measurement method	• the length of the electrode, rope must be known in advance
	Ultrasonic level meter	
advantages ⊕	• non-contact measurement method • easy installation	• the measurement is independent on the medium properties
disadvantages ⊖	• not intended for higher temperatures above + 70°C • not suitable for very dusty, loose media • not suitable for organic solvents, volatile and aggressive substances	• foam can affect measurement quality • dead zone at the beginning of the range • impossibility of measuring in vacuum
	Capacitance level meter	
advantages ⊕	• measurement without dead zones • simple electronics - low price • easy installation	• measurement possible even in aggressive vapors or vacuum • suitable for turbulent surfaces and foaming media
disadvantages ⊖	• contact measurement method • the length of the electrode must be known in advance • setting and commissioning	• measurement depends on the properties of the medium • not suitable for adhering conductive media
	Hydrostatic level gauge	
advantages ⊕	• range selection for liquid column height up to 100 m (H2O) • very simple installation without the need for adjustment	• measurement is not affected by foam on the surface
disadvantages ⊖	• contact measurement method • not suitable for pressure and vacuum applications • measurement is dependent on medium density	• not intended for higher temperatures above + 60°C • not intended for aggressive media

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