

## Specification sheet

# ROHEVEL-MGS51

Microwave level switch for bulk solid and liquid level detection



## Working principle

The ROHEVEL-MGS51 type microwave level switch is a level switch consisting of an emitting unit (ROHEVEL-MGS51T) and a receiving unit (ROHEVEL-MGS51R) installed face to face.

The emitting unit emits a continuous, low power microwave beam towards the receiving unit. If there is medium between emitting unit and receiving unit, the signal is damped. This change is detected by the build-in electronics module and converted into a switching command.

## Features

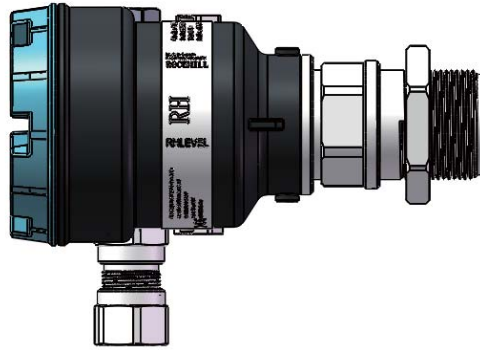
- Apply the design of high performance PLL based on VOC
- With the microwave energy and frequency monitoring and predicting system
- With functions of adherence warming, electronic components temperature monitoring, hardware breakdown self-checking
- Multi-band output. Each couple of switches can be set microwave frequency separately to avoid interfere of multi couple of switches used at close range

- With IV level EMC capability
- Connectable to LCD display unit and support remote display of history temperature curve and energy curve
- Gas ex-proof and dust ignition-proof
  - Digital energy display and human-computer interaction design (key plus menu)

## Application

The level switch has wide application across all areas of industry where highly reliable, non-contact level detection is required. The level switch is generally used for process control by monitoring presence/absence of product, flow /no flow conditions and point level detection in bins and silos. The level switch may also be used as a proximity switch for detection of vehicles such as dump trucks and rail cars. It can also measure from the lightest to the heaviest bulk solids with absolute reliability, even in the presence of dust and noise, without being affected by buildup or condensation.

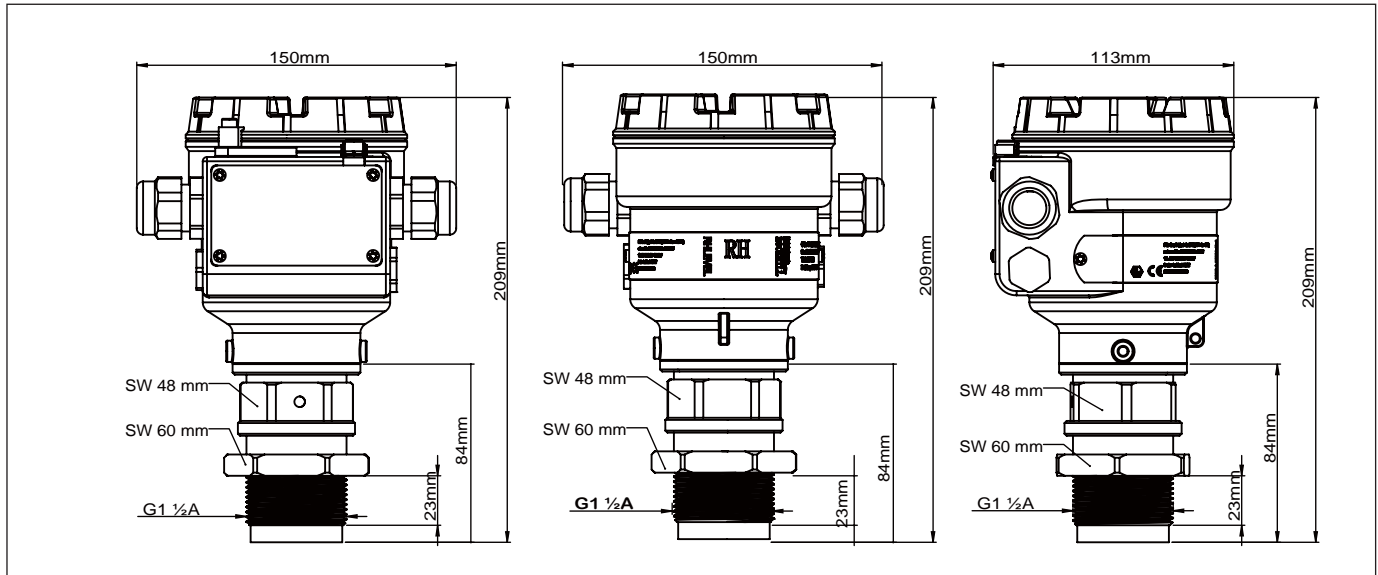
## ROHEVEL-MGS51



## Specification

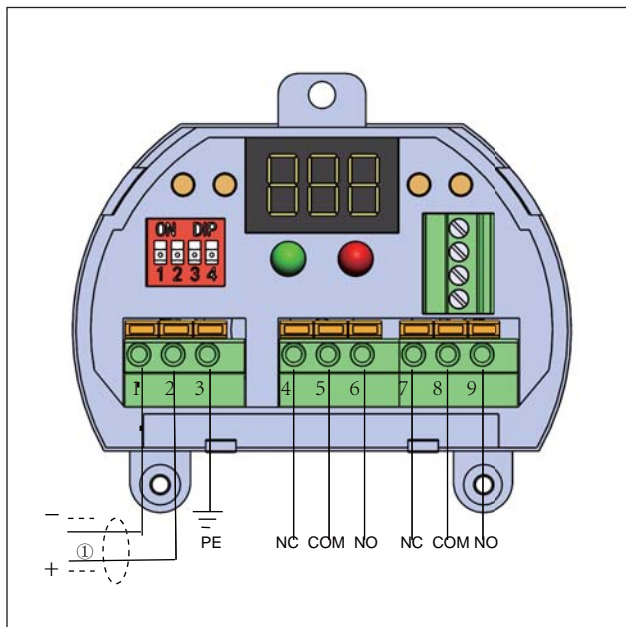
<b>Application</b>	Bulk solid and liquid level detection
<b>Measuring range</b>	0~500m
<b>Power supply</b>	AC100~240V±10% /DC11V~32V±10%
<b>Frequency</b>	22~24GHz
<b>Beam angle</b>	± 20°
<b>Delay time</b>	0~99S (adjustable)
<b>Power</b>	3W
<b>Channel no.</b>	8
<b>Frequency accuracy</b>	1MHz
<b>Process fitting</b>	Thread or flange
<b>Seal material</b>	FKM(Viton)
<b>Antenna material</b>	PTFE
<b>Ambient temperature</b>	-40~70 °C
<b>Process temperature</b>	-40~120 °C up to 500 °C with adapter
<b>Process pressure</b>	-1~4bar up to 40bar with adapter
<b>Protect level</b>	IP67
<b>Ex certificate</b>	Ex d II CT6 Gb and Ex TDA21 T80 °C

## Dimension

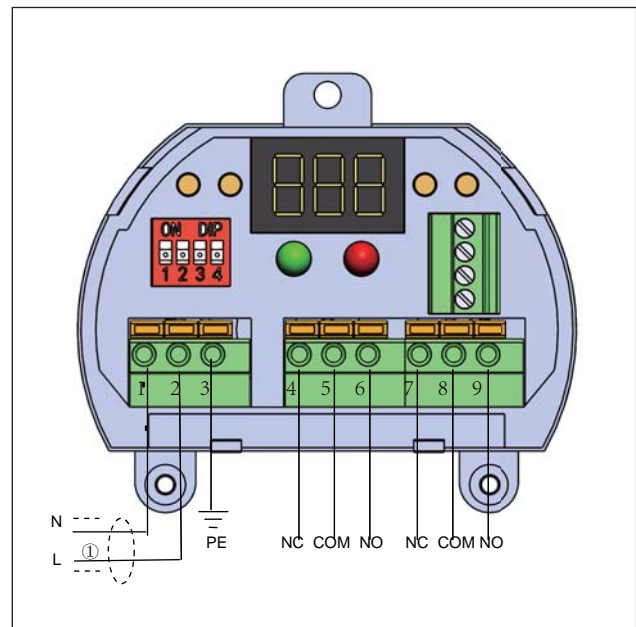


## Electronics

### Electronics of receiving unit

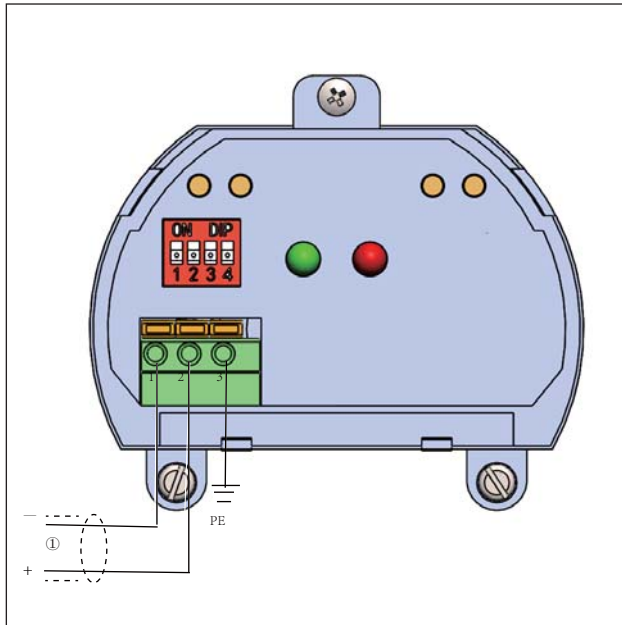


① 24V voltage supply

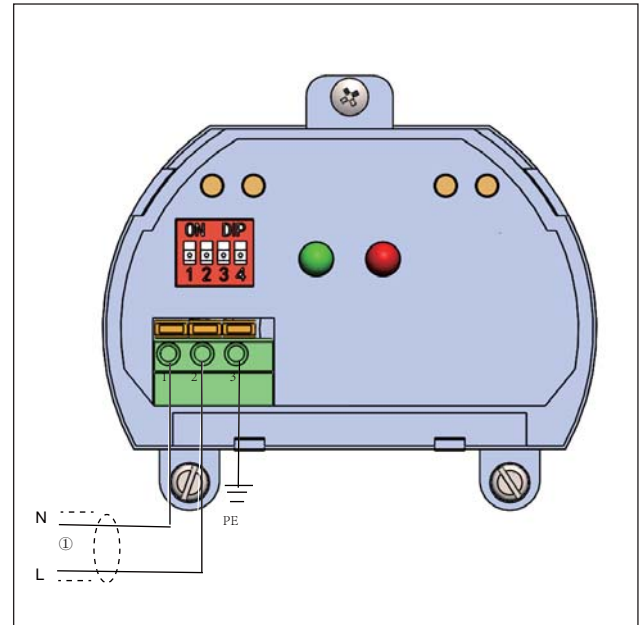


① 220V voltage supply

## Electronics of emitting unit



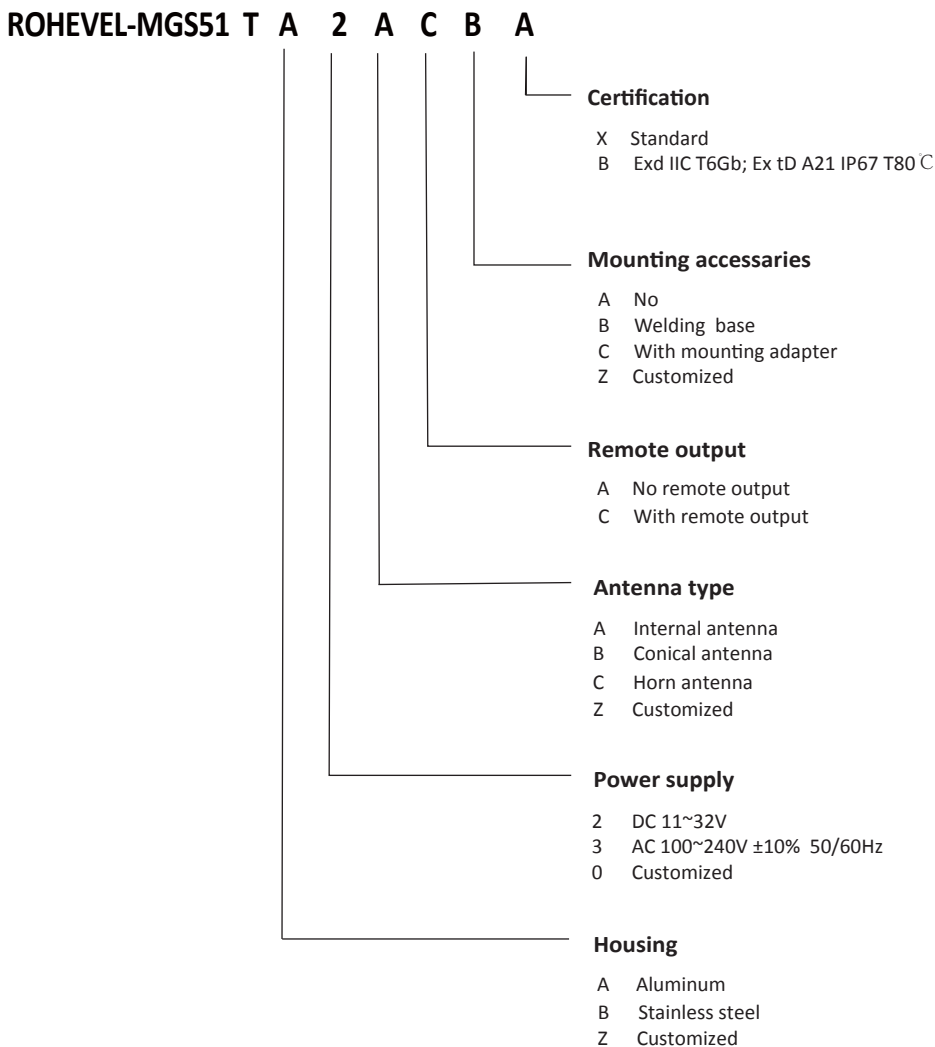
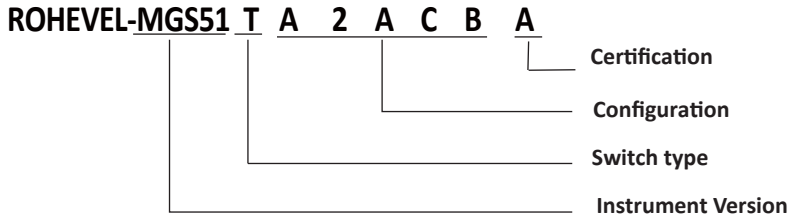
① 24V voltage supply



① 220V voltage supply

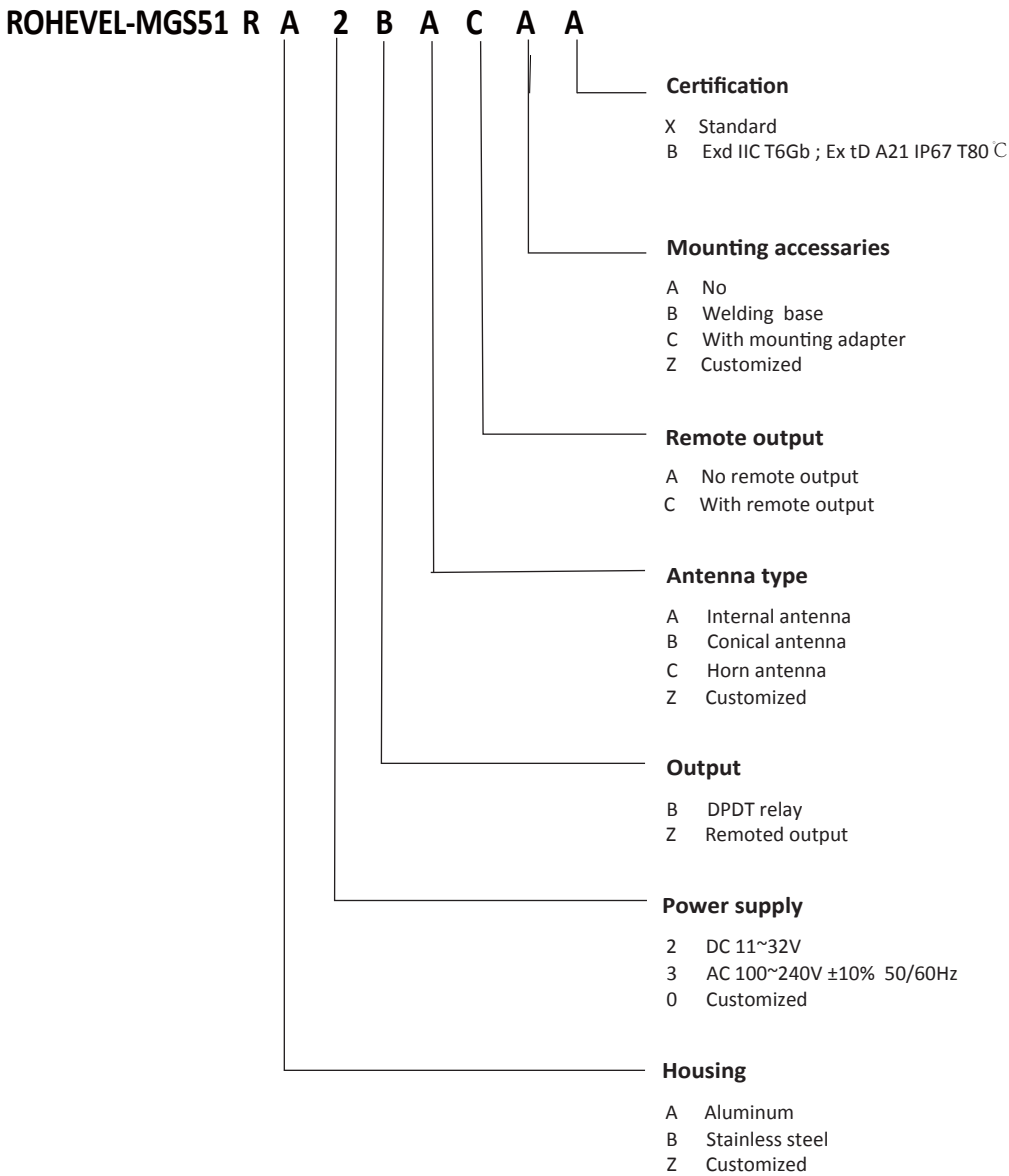
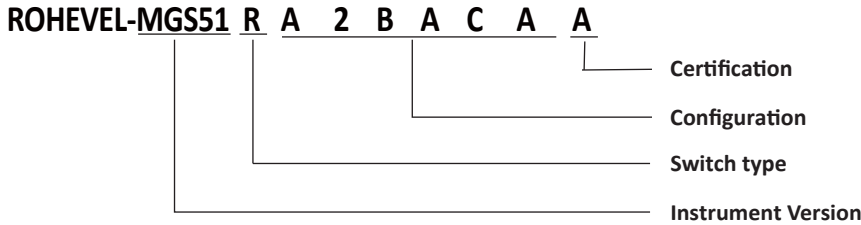
## Ordering code

### Microwave level switch emitting unit



## Ordering code

### Microwave level switch receiving unit



0802-0910-01MSS19041610