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**Martens**  
Member of GHM GROUP  
**Hygienic Design**

## Product information

# Potentiometric level sensor MLP437-MR



GHMware

- Continuous level measurement
- Suitable for non-metallic tanks and containers
- Process connection GHMadapt G 1" hygienic
- Flexible installation, compact version
- No moving parts in the measured fluid
- 2 switching outputs, analogue output
- Parameterisation via local display & internal USB interface

## Technical data

### Power supply

Supply voltage : 18..30 V DC, max. 130 mA  
Electrical connection : M12 plug or cable gland M16x1,5  
Polyamide (PA) or stainless steel (1.4305)

CE conformity : EN 61326-1:2013

### Ambient conditions

Ambient temperature : -20..+60 °C  
Climate class : EN 60068-2-38:2009  
Vibrations : EN 60068-2-6:2008, GL Test 2

### Sensor

Probe tube length : 100..999 mm (Ø 6 mm),  
(Measuring range) 1000..2500 mm (Ø 10 mm)  
Reference rod : Ø 4 mm, independent from range  
Process temperature : -20..+100 °C, 140 °C < 30 min.  
CIP- / SIP capable

Process pressure : -1..10 bar  
Process material : 1.4404, PEEK, FDA compliant,  
conform regulation  
1935/2004 & 10/2011

Process connection : G 1" hygienic

Torque : 5..10 Nm

Min. media conductivity : 1µS < 20 µS, ≥ 20µS

Measuring accuracy : < 3% < 0.5 % of measuring range

Linearity : < 2% < 0.3 % of measuring range

### Output

Analogue output : Active, 0/4..20 mA, Resistance < 600 Ω

Damping : Programmable from 0.05..10 s

Switching outputs : Transistor PNP / NPN programmable,  
max. 30 V / 100 mA

Response time : Programmable from 0.01..10 s

Galvanic isolation : Sensor, Power supply/outputs

Display : Graphic LC display, white/red backlighting

Keys : 4 capacitive keypads

Housing : Round stainless steel housing Ø 59 mm

Material : 1.4305

LED viewing window : acrylic glass (PMMA)

Protection class : IP67 / IP69K

### Accessories / spare parts

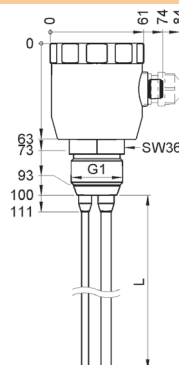
AMD200 Spacer for probe tube diameter 6 mm

AMD201 Spacer for probe tube diameter 10 mm

ACI211 USB connection cable

ACH connection lines, APH process adaptation,  
see separate product information **GHMadapt/Accessories**

## Dimensions



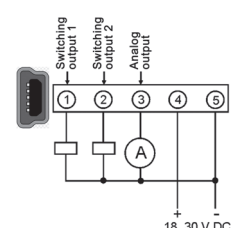
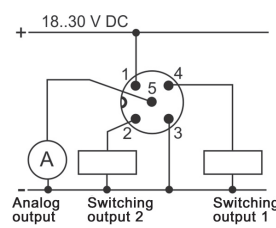
Sealing edge for  
process at 100 mm

L= Max. Probe tube diameter  
= Immersion length in the  
tank

## Wiring

M12 plug

internal terminal and USB mini B jack



Cable colours M12 plug:

1 = brown, 2 = white, 3 = blue, 4 = black, 5 = grey

## Order code

MLP437 - 1. 2. 3. 4. 5. 6. 7. 8. 9.  
MR - - - - - - - - -

| 1. Type                                                                    | MR         | with reference electrode                      |
|----------------------------------------------------------------------------|------------|-----------------------------------------------|
| 2. Process connection                                                      | 3          | G1" hygienic                                  |
| 3. Probe tube material                                                     | 0          | stainless steel (316L) 1.4404                 |
|                                                                            | 1          | stainless steel (316L) 1.4435                 |
| 4. Probe tube diameter                                                     | 06         | 6 mm                                          |
|                                                                            | 10         | 10 mm                                         |
| 5. Immersion length (length specification to 1 mm)                         | 0100..0500 | 100 to 500 mm                                 |
|                                                                            | 0501..0999 | 501 to 999 mm                                 |
|                                                                            | 500..1500  | 500 to 1500 mm                                |
|                                                                            | 1501..2500 | 1501 to 2500 mm                               |
| 6. Probe tube insulation                                                   | 0          | without insulation                            |
| 7. Electrical connection                                                   | 0          | M12- plug (standard)                          |
|                                                                            | 1          | cable gland M16x1.5; polyamide (PA)           |
|                                                                            | 2          | cable gland M16x1.5; stainless steel (1.4305) |
| 8. Option                                                                  | 00         | without option                                |
| 9. Certificate according to DIN EN 10204. Please specify only if required. | WZ2.2      | certificate of conformity 2.2                 |

Subject to technical changes