

1) Ultrasonic transducer axis, 2) Exit direction 90° connector, 3) Operating voltage, 4) Output function



Basic features

| | |
|----------------------------|-----------------------------------|
| Application | Distance measurement |
| Approval/Conformity | cULus LISTED CE EAC WEEE |
| Operating mode | Analog measurement (output curve) |
| Series | M18M1 |

Display/Operation

| | |
|-----------------|----|
| Adjuster | no |
|-----------------|----|

Electrical connection

| | |
|------------------------------------|-------------------|
| Connection | M12x1-Male, 5-pin |
| Polarity reversal protected | yes |

Electrical data

| | |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Current draw max. | 40 mA |
| Input function | Output curve rising/falling Teach in the working range Factory setting (Reset) Synchronization on/off Synchronization signal |
| Load resistance RL max. (Analog I) | 500 Ohm at UB > 20 V 100 Ohm at UB < 20 V |
| Operating voltage Ub | 10...30 VDC |
| Rated operating voltage Ue DC | 24 V |
| Synchronization | internal, max. 10 sensors |
| Ultrasonic Frequency | 320 kHz |

Environmental conditions

| | |
|----------------------------|-------------|
| Ambient temperature | -25...70 °C |
| Protection degree | IP67 |
| Storage temperature | -40...85 °C |

Functional safety

| | |
|---------------------|--------|
| MTTF (40 °C) | 1134 a |
|---------------------|--------|

Material

| | |
|---------------------------------|---------------------------|
| Housing material | Brass PBT |
| Material sensing surface | PU foam/Epoxy resin/Glass |
| Surface protection | nickel plated |

Mechanical data

| | |
|------------------|----------------|
| Dimension | Ø 18 x 52.5 mm |
| Mounting | Nut M18x1 |

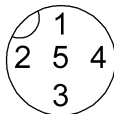
Output/Interface

| | |
|------------------------------|---------------------------|
| Analog output | Analog, current 4...20 mA |
| Output characteristic | linear rising/falling |

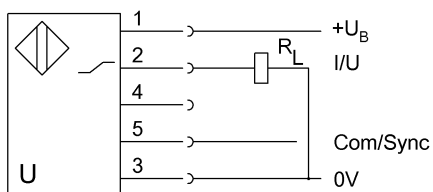
Range/Distance

| | |
|------------------------------------|-------------|
| Range | 30...350 mm |
| Rated operating distance Sn | 250 mm |
| Repeat accuracy | ± 0.15 %FS |
| Resolution | ≤ 0.070 mm |

Connector Drawings



Wiring Diagrams



Technical Drawings

