

UMT 30-350-A

Ultrasonic sensor with analogue output



PRODUCT HIGHLIGHTS

- Automatic selection to current or voltage output
- Easy pre-setting of sensor via digital display – sensor immediately ready for operation
- Synchronisation of up to 10 devices in restricted spaces
- Additional features with numerous supplementary functions

| Sensor data | | Functions | |
|------------------------------------|---|---------------------------------|---|
| Limiting scanning distance | 600 mm | Display | Parameterisation |
| Operating scanning distance | 65 ... 350 mm | LED indicator 1 | Switching output indicator |
| Ultrasonic frequency | ~ 400 kHz | LED indicator 2 | Switching output indicator |
| Resolution ¹ | 0,025 ... 0,17 mm | Set analogue characteristic | Via Teach-in button and numerically via 7-segment display |
| Repeatability | ± 0,15 % ² | Teach-in modes | Mode 1: set window limits Mode 2: rising / falling output characteristics |
| Accuracy ³ | ± 1 % (Temperature drift internal compensated, may be deactivated, 0,17 % / K without compensation) | Adjustment possibilities | Button lock via Teach-in button Default settings via Teach-in button |
| | | Supplementary functions | – Energy-saving Mode – Indicator Mode – Current or voltage output selection – Measurement value filter – Filter strength – Response delay – Foreground suppression – Multiplex Mode, device address – Multiplex Mode, highest address – Measurement range – Calibration display – Detection range, sensitivity |
| | | Default settings | Measurement range: limit scanning distance Window limits, analogue signal: blind zone and scanning distance Switching output: rising analogue characteristic |
| | | | |
| Electrical data | | Mechanical data | |
| Operating voltage, +U _b | 9 ... 30V DC ⁴ | Dimensions | M30 x 84 mm |
| No-load current, I ₀ | ≤ 80 mA | Enclosure rating | IP 67 ⁵ |
| Current output | R _L ≤ 100 Ω with 9V ≤ U _b ≤ 20V R _L ≤ 500 Ω with U _b ≥ 20V | Material, housing | Brass, nickel-plated, plastic content: PBT,TPU |
| Voltage output | R _L ≥ 100 kΩ with U _b ≥ 15V | Material, ultrasonic converter | Polyurethane foam, epoxy resin with glass content |
| Protective circuits | Reverse-polarity protection, U _b / short-circuit protection (Q) | Type of connection | (See Selection Table) |
| Power On Delay | < 300 ms | Ambient temperature, operation | -25 ... +70 °C |
| Analogue output | 0 ... 10V / 4 ... 20 mA | Ambient temperature, storage | -40 ... +85 °C |
| Response time ³ | 64 ms | Weight | 150 g |
| Connection, GY | Sync. / Com. | Vibration and impact resistance | EN 60947-5-2 |

¹ depending on the set analogue window

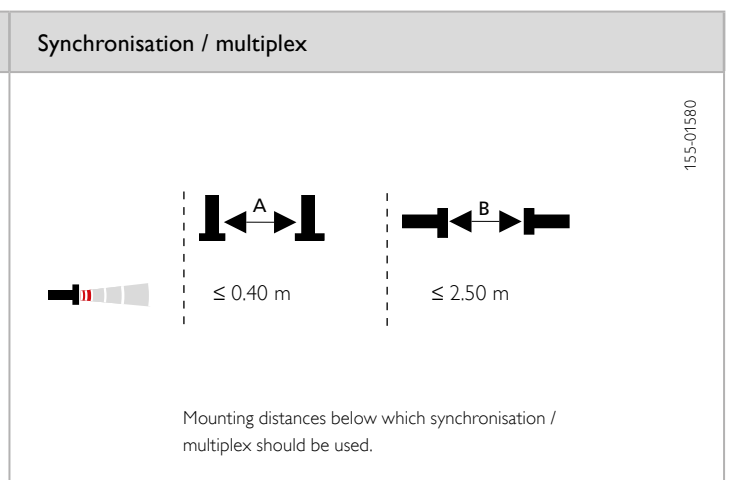
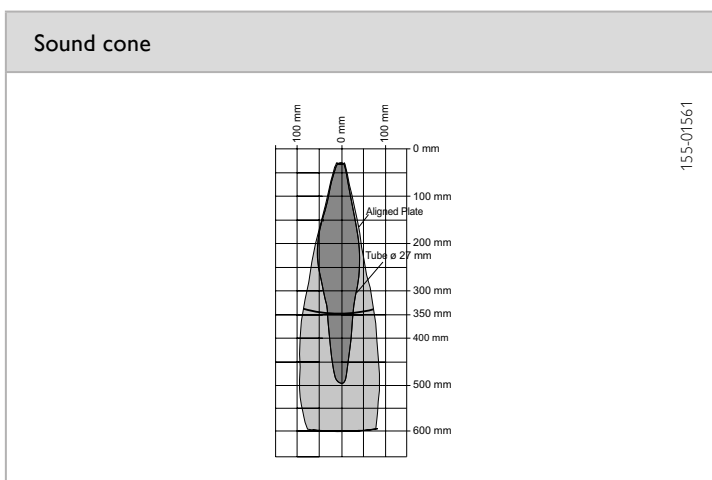
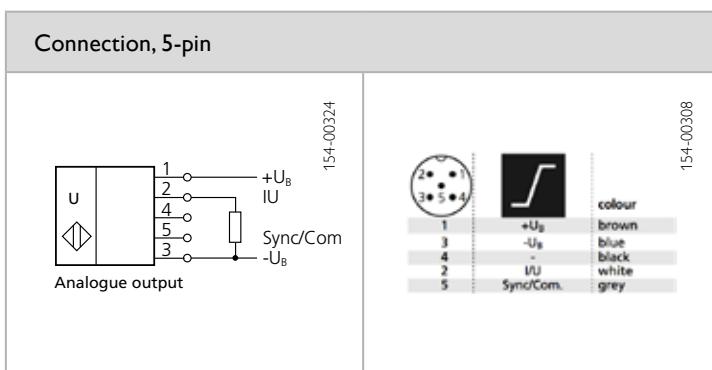
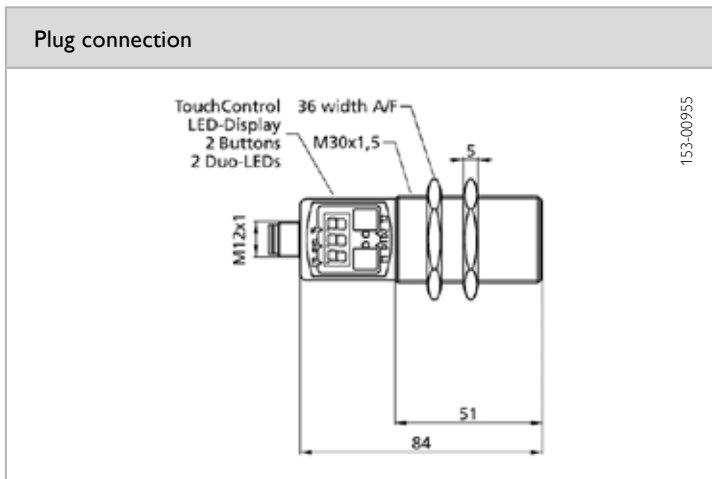
² Related to current measurement value

³ Parameterisable via control panel

⁴ Max. 10 % ripple, within U_b

⁵ With connected IP 67 plug

| Operating scanning distance | Analogue output | Type of connection | Part number | Article number |
|-----------------------------|-------------------------|--------------------|---------------------|----------------|
| 65 ... 350 mm | 0 ... 10V / 4 ... 20 mA | Plug, M12x1, 5-pin | UMT 30-350-A-IUD-L5 | 690-51572 |



Accessories

| | |
|-------------------|----------------|
| Connection cables | From Page A-38 |
| Brackets | From Page A-4 |