

UMT 30-1300-A

Ultrasonic sensor with analogue output



PRODUCT HIGHLIGHTS

- Ideal for monitoring the filling levels of liquids such as fats and oils
- 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	2000 mm	Display	Parameterisation
Operating scanning distance	200 ... 1300 mm	LED indicator 1	Switching output indicator
Ultrasonic frequency	~ 200 kHz	LED indicator 2	Switching output indicator
Resolution ¹	0.18 ... 0.57 mm	Set analogue characteristic	Via Teach-in buttons 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	92 ms	Weight	150 g
Connection, GY	Sync. / Com.	Vibration and impact resistance	EN 60947-5-2

¹ depending on the set analogue window

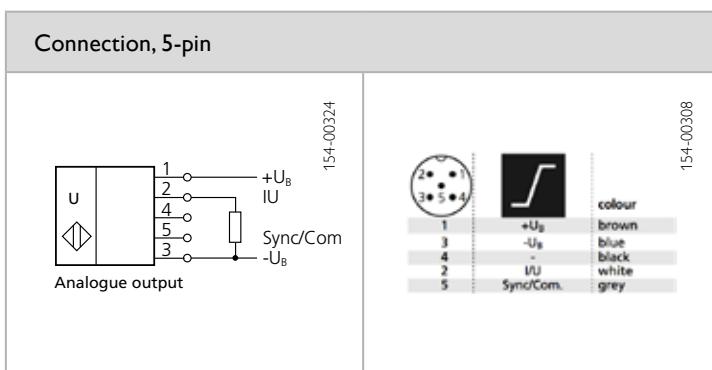
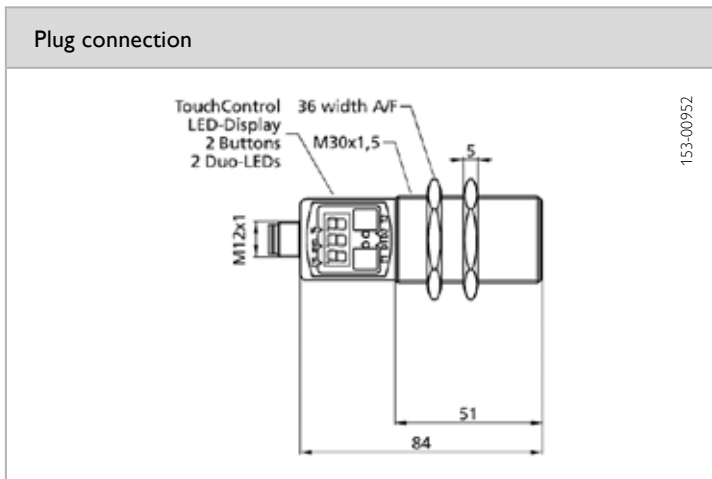
² Related to current measurement value

³ Parameterisable via control panel

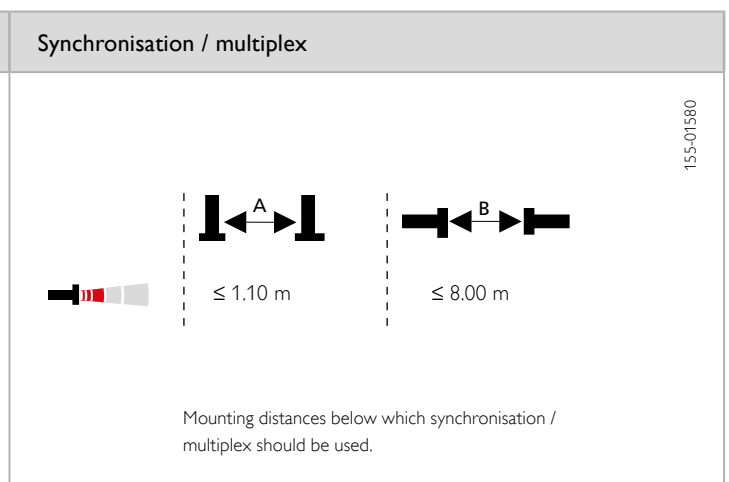
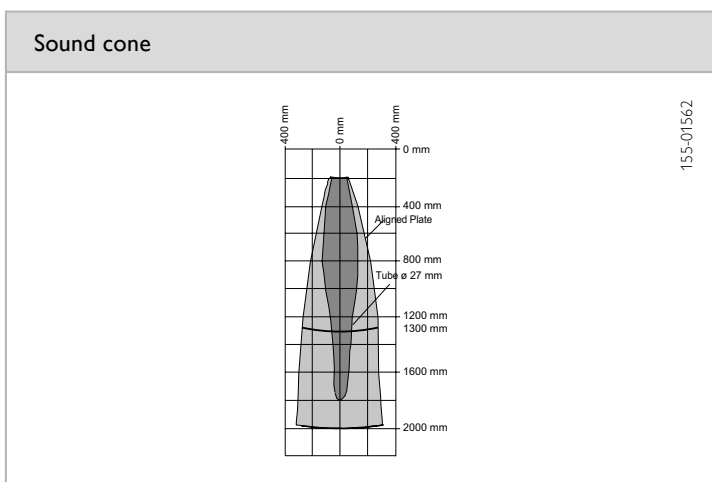
⁴ Max. 10 % ripple, within U_b

⁵ With connected IP 67 plug

Operating scanning distance	Analogue output	Type of connection	Part number	Article number
200 ... 1300 mm	0 ... 10V / 4 ... 20 mA	Plug, M12x1, 5-pin	UMT 30-1300-A-IUD-L5	690-51562



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Accessories

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