

UT 20-S150-A

Ultrasonic sensor with soundpipe and analogue output



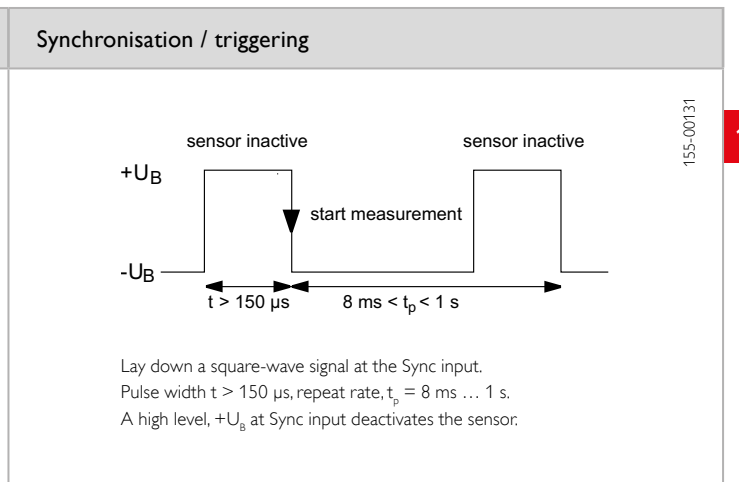
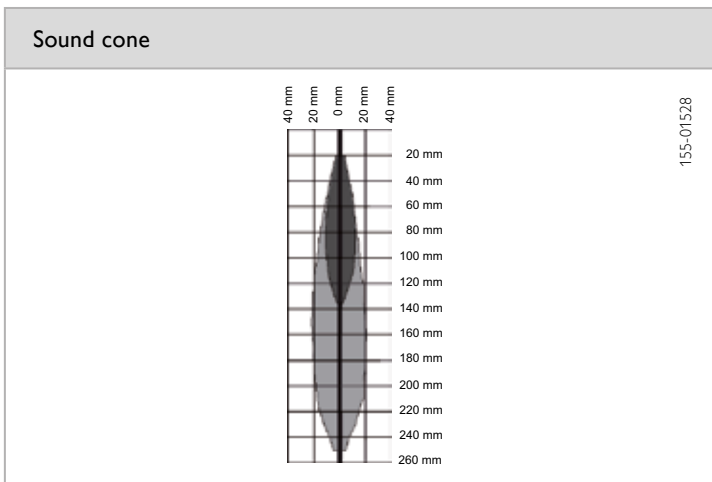
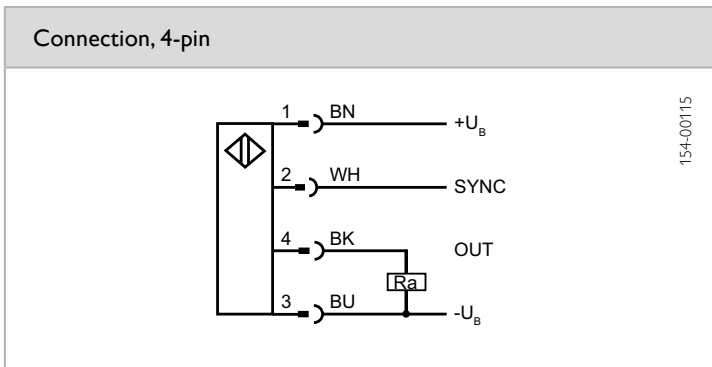
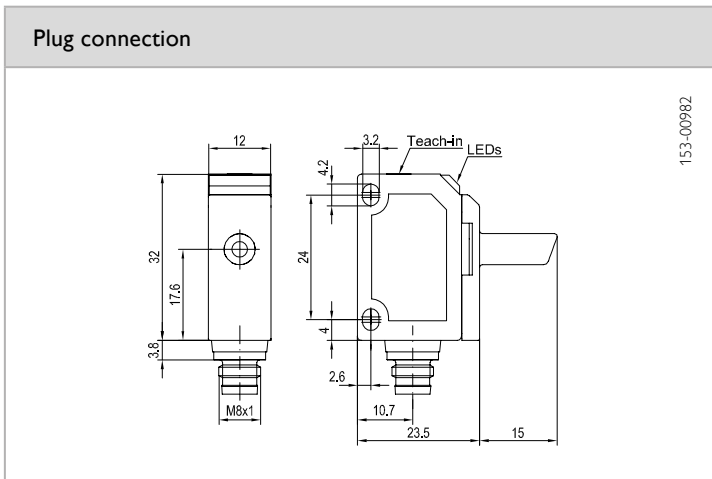
PRODUCT HIGHLIGHTS

- Ideal for level control, particularly in narrow containers
- Narrow sound beam for precise detection even through small openings and drilled holes
- Reliable detection of highly transparent objects
- Compact miniature housings for use when space in machine is limited
- Analogue output 0 ... 10V or 4 ... 20 mA

Sensor data ¹		Functions	
Limiting scanning distance	250 mm	LED indicator, green	Operating voltage indicator
Operating scanning distance	20 ... 140 mm	LED indicator, yellow	Switching output indicator
Ultrasonic frequency	~ 380 kHz	Set analogue characteristic	Via Teach-in button
Resolution	0,20 mm	Adjustment possibilities	Rising / falling edge via Teach-in button
Repeatability	± 0.15 % ²		Button lock via Teach-in button
Temperature drift	≤ 2 %		Synchronisation via control input
			Default settings via Teach-in button
Electrical data		Mechanical data	
Operating voltage, +U _B	20 ... 30V DC ³	Dimensions	32 x 38,5 x 12 mm
No-load current, I ₀	≤ 25 mA	Enclosure rating	IP 67 ⁴
Current output	R _a < 500 Ω	Material, housing	ABS
Voltage output	R _a > 500 Ω	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)
Protection Class	2	Ambient temperature, operation	-25 ... +70 °C
Power On Delay	< 300 ms	Ambient temperature, storage	-40 ... +85 °C
Analogue output	0 ... 10V / 4 ... 20 mA (see Selection Table)	Weight	10 g
Response time	30 ms	Vibration and impact resistance	EN 60947-5-2
Connection, WH	Sync.		

¹ After 30 min. settling time ² From final value of limit scanning distance ³ Max. 10 % ripple, within U_B ⁴ With connected IP 67 plug

Operating scanning distance	Analogue output	Type of connection	Part number	Article number
20 ... 140 mm	0 ... 10V	Metal plug, M8x1, 4-pin	UT 20-S150-AUM4	693-11014
20 ... 140 mm	4 ... 20 mA	Metal plug, M8x1, 4-pin	UT 20-S150-AIM4	693-11015



Accessories

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