

UMT 30-6000

Ultrasonic sensor with switching output



PRODUCT HIGHLIGHTS

- Long scanning range of 6 m
- With one or two switching outputs as option
- Sensor adjustment via teach-in or numerically via 7-segment display
- Additional features with numerous supplementary functions

Sensor data		Functions	
Limiting scanning distance	8000 mm	Display	Parameterisation
Operating scanning distance	600 ... 6000 mm	LED indicator 1	Switching output indicator
Ultrasonic frequency	~ 80 kHz	LED indicator 2	Switching output indicator
Resolution	0.18 mm	Scanning distance adjustment	Via Teach-in buttons and numerically via 7-segment display
Repeatability	± 0.15 % ¹	Teach-in modes	Mode 1: set switching point Mode 2: set Window Mode Mode 3: set two-way reflex switch
Hysteresis ²	100 mm	Adjustment possibilities	N.O. / N.C. via Teach-in button Button lock via Teach-in button Default settings via Teach-in button
Accuracy ²	± 1 % (Temperature drift internal compensated, may be deactivated, 0.17 % / K without compensation)	Supplementary functions	– Energy-saving Mode – Multiplex Mode, device address – Hysteresis – Multiplex Mode, highest address – Measurement value filter – Measurement range – Filter strength – Calibration display – Response delay – Detection range, sensitivity – Foreground suppression
		Default settings ³	Measurement range: limit scanning distance Switching distances: scanning distance Switching output: N.O.
		Default settings ⁴	Measurement range: limit scanning distance Switching distances: scanning distance and half scanning distance Switching output: N.O.
Electrical data		Mechanical data	
Operating voltage, +U _B	9 ... 30V DC ⁵	Dimensions	M30 x 105 mm
No-load current, I ₀	≤ 80 mA	Enclosure rating	IP 67 ⁶
Output current, I _e	200 mA	Material, housing	Brass, nickel-plated, plastic content: PBT,TPU
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Material, ultrasonic converter	Polyurethane foam, epoxy resin with glass content
Power On Delay	< 300 ms	Type of connection	(See Selection Table)
Switching output, Q	1 x PNP / 2 x PNP (see Selection Table)	Ambient temperature, operation	-25 ... +70 °C
Output function	N.O. / N.C.	Ambient temperature, storage	-40 ... +85 °C
Switching frequency, f (ti/tp 1:1) ²	2 Hz ³ / 3 Hz ⁴	Weight	270 g
Response time ²	240 ms	Vibration and impact resistance	EN 60947-5-2
Connection, GY	Sync. / Com.		

¹ Related to current measurement value

² Parameterisable via control panel

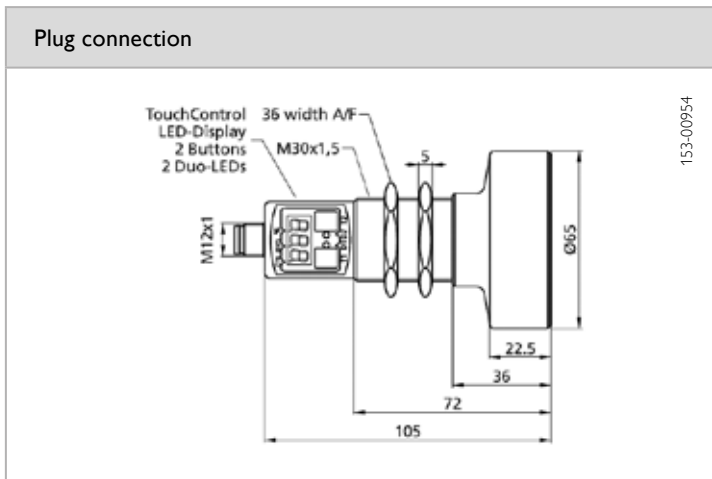
³ 1 x PNP

⁴ 2 x PNP

⁵ Max. 10 % ripple, within U_B

⁶ With connected IP 67 plug

Operating scanning distance	Switching output	Type of connection	Part number	Article number
600 ... 6000 mm	1 x PNP	Plug, M12x1, 5-pin	UMT 30-6000-PSD-L5	690-51570
600 ... 6000 mm	2 x PNP	Plug, M12x1, 5-pin	UMT 30-6000-2PSD-L5	690-51571



Connection, 5-pin (1 x PNP)		Connection, 5-pin (2 x PNP)	
<p>1 PNP switched output</p> <p>154-00322</p>	<p>154-00306</p>	<p>2 PNP switched outputs</p> <p>154-00323</p>	<p>154-00307</p>

Sound cone	Synchronisation / multiplex
	<p>Mounting distances below which synchronisation / multiplex should be used.</p>

Accessories

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