



ULTRASONIC SENSORS

Powerful sensors to meet growing demands

Ultrasonic Sensors UFP / UPA / UPT



Features

- ▶ Measurement range of 25 to 6000 mm
- ▶ Linearity up to $\pm 0.3\%$
- ▶ Resolution up to 0.125 mm
- ▶ Operating temperature $-20\dots+70\text{ }^{\circ}\text{C}$
- ▶ Protection class IP67
- ▶ Output: 0...10 V, 4...20 mA, PNP, NPN
- ▶ Distance sensor or proximity switch versions
- ▶ Measurement independent of the targets material, surface or colour
- ▶ Works in dust, dirt, fog and light
- ▶ UPT: Synchronisation input

Description

The three ultrasonic sensors series UFP, UPA and UPT primarily vary in shape. Whilst the UFP series has a fully cylindrical housing (M12, M18, M30), the sensors of the UPA and UPT series are rectangular. All devices are generally available as classic distance meters with analogue output or as proximity switches with up to two switching points.

Technical Data

SERIES ► CHARACTERISTICS ▼	UFP	UPA	UPT
Measurement range max.	3500 mm	6000 mm	3500 mm
Linearity max. ¹⁾	$\pm 0.3\%$	$\pm 0.5\%$	
Resolution max.	0.125 mm	1.5 mm	0.125 mm
Measuring rate max.	40 ms	700 ms	60 ms
Output analog	0...10 V, 4...20 mA		
Output Switching	PNP, NPN		
Protection class max.	IP67		
Operating temperature	$-20\dots+70\text{ }^{\circ}\text{C}$		
Sound beam angle	8°		
Housing material	stainless steel or plastics	plastics	
Housing profile	cylindrical M12, M18 or M30	square	rectangular

¹⁾ based on the measurement range

Ultrasonic Sensors UFA2 / UPK



Features

- ▶ Measurement range of 0 to 6000 mm
- ▶ Linearity up to $\pm 0.4\%$
- ▶ Resolution up to 1 mm
- ▶ Operating temperature $-25...+70\text{ }^{\circ}\text{C}$
- ▶ Protection class IP67
- ▶ Output: 0...10 V, 4...20 mA, NO/NC
- ▶ Distance sensor or proximity switch versions
- ▶ Measurement independent of the targets material, surface or colour
- ▶ Works in dust, dirt, fog and light

Description

A variety of applications have special requirements for ultrasonic sensors, whether it's a very narrow sound beam, chemically aggressive environment or limited installation space which can only fit a radial measurement sensor. The UFA2 series are the optimal solution for a variety of complex applications.

Technical Data

SERIES ▶ CHARACTERISTICS ▼	UFA2-150, UFA2-200	UFA2-1500	UFA2-1500
Measurement range max.	150 mm / 200 mm	1500 mm	6000 mm
Linearity max. ¹⁾	$\pm 0.4\%$	$\pm 0.5\%$	
Repeatability	<0.5 mm	<1 mm	<4 mm
Resolution max.	1 mm		
Output analog	0...10 V, 4...20 mA		
Output Switching	Push-pull NO/NC		
Protection class max.	IP67		
Operating temperature	$-25...+70\text{ }^{\circ}\text{C}$		
Housing material	nickel-plated brass		
Housing profile	cylindrical M12	cylindrical M18	cylindrical M30

¹⁾ based on the measurement range

Ultrasonic Sensors UBA



Features

- ▶ Fork width 30/60 mm and 40/70 mm
- ▶ Repeatability ± 0.1 mm
- ▶ Resolution up to 0.1 mm
- ▶ Operating temperature 0...+60 °C
- ▶ Protection class IP67
- ▶ Output: 0...10 V, 4...20 mA
- ▶ Measurement independent of the targets material, surface or colour
- ▶ Works in dust, dirt, fog and light
- ▶ UBA: Forked shaped sensor for edge control
- ▶ Inverted signal

Description

Monitoring fluid levels or counting goods on conveyor belts are some of the classic applications of ultrasonic sensors. The UBA series on the other hand is designed for the measurement of edges of conveyor belts.

Technical Data

SERIES ► CHARACTERISTICS ▼	UBA
Measurement range max.	70 mm
Repeatability	± 0.1 mm
Resolution max.	0.1 mm
Output analog	0...10 V, 4...20 mA
Protection class max.	IP67
Operating temperature	0...+60 °C
Housing material	anodized Aluminium
Housing profile	fork

WayCon
Positionsmesstechnik GmbH

Headquarters
Mehlbeerstr. 4
82024 Taufkirchen
Phone +49 (0)89 67 97 13-0
Fax +49 (0)89 67 97 13-250

Office
Auf der Pehle 1
50321 Brühl
Phone +49 (0)2232 56 79-44
Fax +49 (0)2232 56 79-45
Email: info@waycon.de
Internet: www.waycon.biz