

PRESS RELEASE

New Family of Miniature Ultrasonic Sensors from Baumer Electric

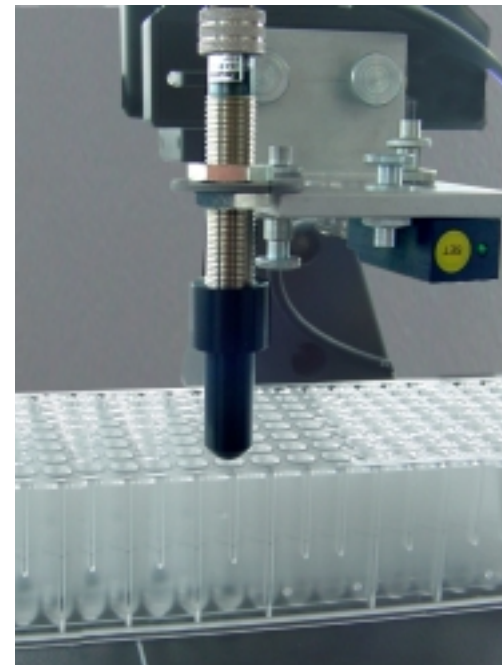
Southington, Conn. — June XX, 2002.... Baumer Electric has introduced a new family of miniature ultrasonic sensors that offer a sensing range of 100 mm with a blind range of as small as 10 mm.

These very compact sensors are available in either a tubular enclosure measuring M12x1x70 mm or in rectangular housings with exterior dimensions of 15x20x49 mm. Both versions offer Teach-in programming and for space restricted applications, the switching point on the miniature ultrasonic sensors can be remotely adjusted using the external Teach-in capability, eliminating the need for direct access to the sensor housing.

With a repeatability of less than or equal to 0.8 mm, these sensors will detect very small differences in height such as levels of liquids or stack height of paper. And utilizing ultrasonic technology, they are unaffected by reflectivity and color differentiations which limit

photoelectric sensors.

Baumer miniature ultrasonic sensors feature a narrow sonic beam angle of just 6°, which makes them ideal for sensing objects through tight openings such as bottlenecks, test tubes, or ampoules. As the sensors offer a short 10 msec reaction time, they can accurately detect the fastest movement of objects on a manufacturing line. All Baumer Electric miniature ultrasonic sensors are sealed to IP67.



Application photo:

Level detection in medical ampoules

Ampoule filling station for nebulizers. The miniature ultrasonic sensor is a safety check to ensure that fluid level is correct.

Baumer electric

Leading in Precision Sensing

122 Spring Street, C-6
Southington, CT
800.937.9336
www.baumerelectric.com/usa

Ultrasonic proximity sensors with Teach-in



Scanning range Sd	10...100 mm	10...100 mm
Special characteristics	<ul style="list-style-type: none"> • Internal and external Teach-in • Compact housing 	<ul style="list-style-type: none"> • External Teach-in input • Miniature housing
<p>Ultrasonic proximity sensors enable the detection of different objects - irrespective of color and transparency. The sensor's potentiometer or teach-in input (button) enables the user to adjust the sensor for a specific sensing distance, eliminating background interference.</p>		
PNP make function (NO)	UNDK 20P6914/S35A	UNAM 12P1914/S14
PNP break function (NC)	UNDK 20P7914/S35A	UNAM 12P3914/S14
NPN make function (NO)	on request	on request
NPN break function (NC)	on request	on request
technical data		
scanning range far limit Sde	25...100 mm	25...100 mm
blind range St	10 mm	10 mm
sonic beam angle	6°	6°
sonic frequency	380 kHz	380 kHz
hysteresis	≤ 3 mm	≤ 3 mm
voltage supply range +Vs	12 - 30 VDC	12 - 30 VDC
residual ripple	< 10% Vs	< 10% Vs
supply current	< 30 mA	< 30 mA
max. switching current	200 mA	200 mA
voltage drop	≤ 2 VDC	≤ 2 VDC
short circuit protection	yes	yes
reverse polarity protection	yes	yes
response time ton/toff	≤ 10 ms	≤ 10 ms
repeatability	≤ 0,8 mm	≤ 0,8 mm
temperature drift	0,18% Sde/K	0,18% Sde/K
temperature range	0...+60 °C	0...+60 °C
housing material	polyester	brass nickel plated
protection class	IP 67	IP 67
switching state indication	green LED	green LED
adjustment aid	yes	yes
synchronization	-	-
teach-in	internal or external	external
options		
multiplex version	-	-
connector options	ESW 31A, ESG 32A	ES 14, ESW 33A, ESG 34A
accessories		Teach-in Adapter Part nr. 141584
		