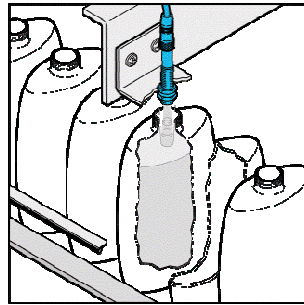


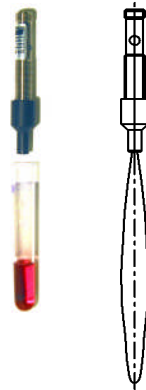
NEWS 2008: Tailored Ultrasonic Sensors

UPS Series Miniature sensors in M12 housing with narrow detection beam



STANDARD: UPS 200

- Measuring range 20...200mm
- Narrow detection beam
- Small size M12x1
- Teach-In
- Binary or analogue outputs
- Measurement independent of material, surface, colour and size of target
- Work under dust, dirt, fog, light
- Detect transparent and bright objects



FOCUS BEAM: UPS 150 FB

The ultrasonic sensors series UPS FB are equipped with a focusing device made of glass-fibre reinforced polypropylene, which makes the sound beam particularly narrow. Therefore they are suitable in the near range up to 150mm to watch into narrow cavities. A typical application is measuring of liquid level in small tubes or containers.

- Measuring range 0...150mm
- Teach-In
- Binary or analogue outputs



CHEMICAL PROTECTION: UPS 150 CP

The diaphragm of the series UPS 150 CP is coated with a thin PTFE foil. The head made of chemically resistant PVDF serves as mechanical fixation for the foil and protection of the sensor front part. Thus the front part of the ultrasonic sensor becomes resistant to most chemicals.

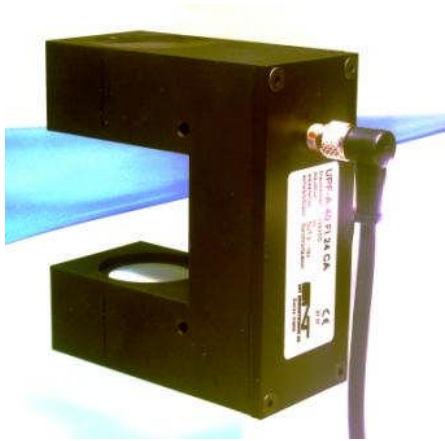
- Measuring range 20...150mm
- Teach-In
- Binary or analogue outputs

Description

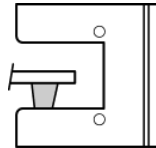
The ultrasonic sensors of the UPS series are particularly small, and they have a narrow detection beam. Thus they are well suited to detect objects in the near range up to 200mm and under confined conditions. The sensors are available as well as pure proximity switches as also as distance sensors with analogue mA or V output. The switch or measuring distances can be learned by a teach-in procedure. Typical applications are detection of objects and distance and level measurement.

The variants FB und CP allow a lot of new applications for particularly small orifices or aggressive liquids.

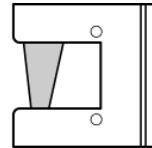
UPF-A Series Ultrasonic fork barrier for web guide and edge control



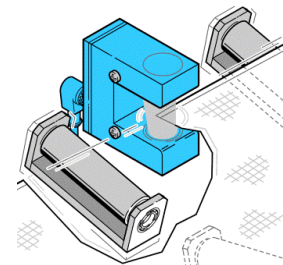
- Ultrasonic fork barrier with analogue output 0...10V
- The analogue signal is a function of lateral covering
- For edge control and web guidance systems
- For transparent foils and contaminated air
- High accuracy, temperature stability and Linearity
- High detection width 13mm
- Small plane change error within 26mm
- 285Hz sampling rate



0 V DC



10 V DC



Description

The edge sensor type UPF-A is based on the experience of SNT Sensortechnik AG with ultrasonic through beam sensors. New software algorithms and a unique **SONARANGE** ultrasonic transducer material allow an accuracy and temperature stability so far only realized with optical systems. But the ultrasonic fork barrier is much less sensitive to dirt and dust compared to optical sensors. Further more transparent materials such as foils can be perfectly handled. The so called plane change error has been minimized to almost zero within 26mm plane change. Together with the high sampling speed of the sensor this means that fast moving and thus fluttering webs are well aligned.

The UPF-A is an ultrasonic through beam sensor with separated transmitter and receiver. In contrast to conventional barriers it does not offer a simple on/off output signal, but it measures the degree of covering of the ultrasonic receiver as a linear analogue output signal. If the receiver is fully covered, the output is 0V and if not covered at all 10V. With its large measuring range of 13mm it is the perfect tool for web guiding applications in dusty environment and with transparent web material. This new sensor can be used in packaging industry for web guiding control. But many other applications are open to this product, such as edge detection for many materials.