

▶ double sheet monitoring

PRODUKT: ultrasonic barrier / amplifier

DESIGN: 98x84x37
M18X1, 25mm



- Reliable detection of multi-layer paper and plastic sheets as well as metal foils
- Measurement range from 20g paper to 1200g cardboard
- Automatic and manual calibration
- Ultrasonic sensor in the M18 round-sleeve housing
- Plug connection
- Short-circuit proof PNP or NPN transistor output
- Operating-state indication by means of LED
- Very short construction (can thus be used in applications with limited space)

| Technical data | UY18C140 | UV98A975 |
|---|--------------|---|
| Operating range | 20...60mm | |
| Converter frequency | 200kHz +/-2% | |
| Sound beam divergence | approx. 12° | |
| Switching frequency | | 200 Hz |
| Input pulse | | min. 5ms |
| Delay before start up | | ≤ 100 ms |
| Operating voltage UB | | 18-30 V DC (incl. residual ripple) |
| Residual ripple | | ≤ 15% of UB |
| Bias current | | ≤ 75 mA |
| Switching output | | 2 PNP-transistor outputs |
| Function characteristics | | single sheet detect. / double sheet detect. |
| Signal voltage high/low | | ≥ UB – 2V / ≤ 2 V |
| Output current | | max.200mA per output |
| TEACH- / TRIGGER-Input | | Rin = 10kΩ |
| TEACH- / TRIGGER IN active / not active | | ≥ 6 V / ≤ 2 V or not connected |
| TEACH- / TRIGGER IN length | | max. 100 ms |
| TEACH IN delay 1) | | approx. 300 ms with S1= "0" |
| LED green a | | double sheet control ready |
| LED green / flashing a | | TEACH IN procedure |
| LED yellow b | | Single sheet detected |
| LED red c | | Double sheet detected |

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|-----------------------------------|---------------------------|--|
| Housing | Nickel-plated brass | Aluminium, powder coated black |
| Weight | 30 g | 400g |
| Connection type | 2m cable, M8 conn. 3 pole | M12 conn., 5-pole |
| Ambient temp. (operating/storage) | | 0°C...+60°C / -40°C...+70°C |
| Protective circuit 2) | | 1,2,3 |
| VDE safety class | | III |
| System of protection | | IP 65 |
| Electromagnetic compatibility | | Severity level 3 according to (IEC 801-4 and IEC 17B (CO) 180-I and II) |

- 1) valid only for automatic calibration during sheet run
 2) 1= transient protection, 2=polarity reversal protection, 3= short circuit protection

Dimensional drawings

Fig. 1 UV98A975

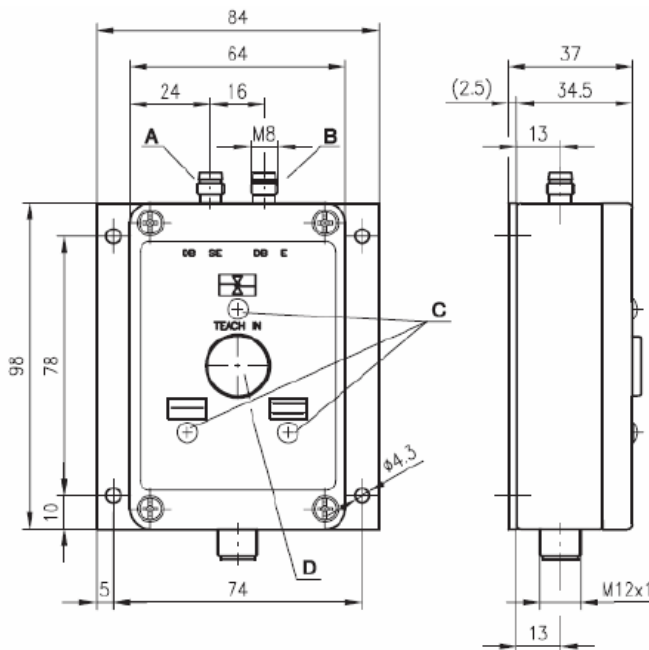
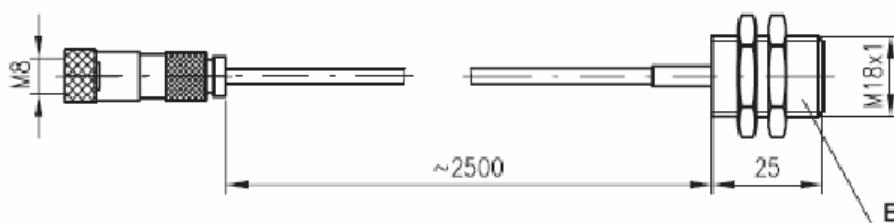


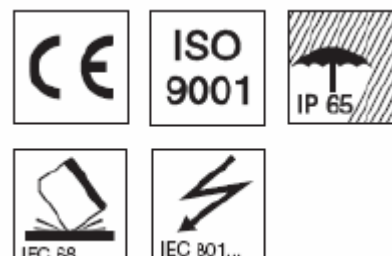
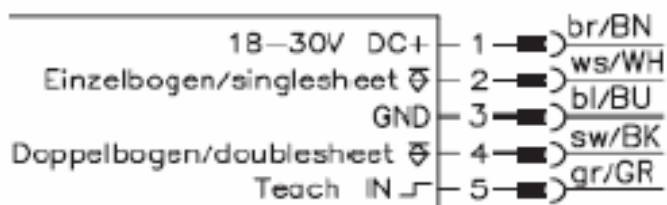
Fig. 2 UY18C140



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Electrical connection

Fig.3 UV98A975



Warning: Never use these devices in applications where the safety of a person depends on their functionality!