

Eltex UPG yarn break detector

16720/16730

INFO LEAFLET

The UPG is a small, general purpose, thread break detector. It operates on the piezoelectric principle, detecting the yarn movement. This working principle makes it suitable for all types of yarn and makes it insensitive to dust, dirt and humidity variations.

The detector has an optocoupler output suitable for PLC or other electronic control devices.

A LED (light emitting diode) indicates the yarn movement.

The ceramic sensor part can be used either as a closed eyelet or as an open bar.

Several detectors can be connected in parallel.

The 16791 connection board can be used to help make this connection. When it is not possible to connect the sensors directly to the machine control (PLC), the Eltex Flexi-Hub can be used instead.

See Flexi-Hub info leaflet TH-0366.



■ Function description

Sensing part	Aluminium oxide ceramic, with a Ø3 mm closed eyelet and a 7 mm wide bar.
Output	Optocoupler, active when yarn is not moving .
Sensitivity setting	The sensitivity can be adjusted with a potentiometer under the lid.

The output reflects the movement of the yarn. When the yarn is moving, the optocoupler is inactive. When the yarn is not moving, the optocoupler is active.

The LED is on when the yarn is moving.

The detector is supplied with cable and a 6/4 modular plug 6P4C connector. Many thread detectors can be connected in parallel. The detector is protected against wrong polarity on power supply.

■ Application examples

- Winders
 - Spinning machines
 - Twisters
 - Texturing machines
 - Sewing machines *
 - Covering machines
 - Yarn preparation machines
 - Double/multiple picks on airjet weaving machines
- * For sewing machines, we also recommend UPG-Stitch See TH-0335

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■ Technical specifications

Housing in zinc metal

Power supply 15–30 V DC

Current consumption 20 mA

Output:

Max. switching current 10 mA

Max. voltage drop 2 V

Reaction time

150 ms

Cable length

16720

0.5 m

16730

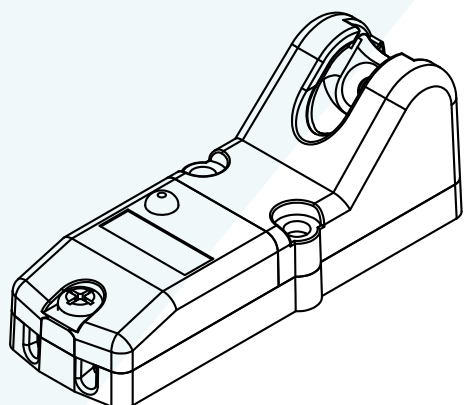
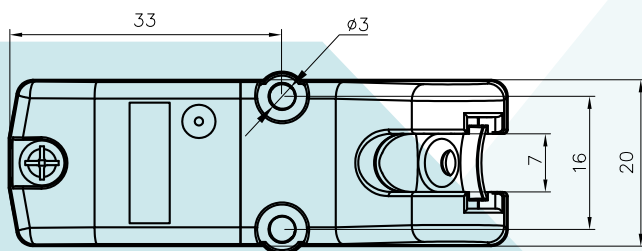
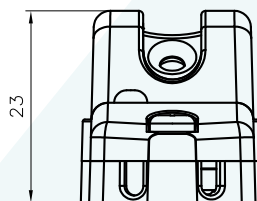
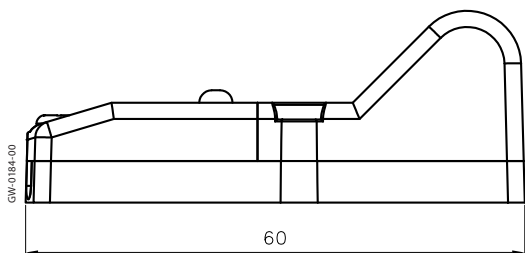
3.5 m

Cable connector

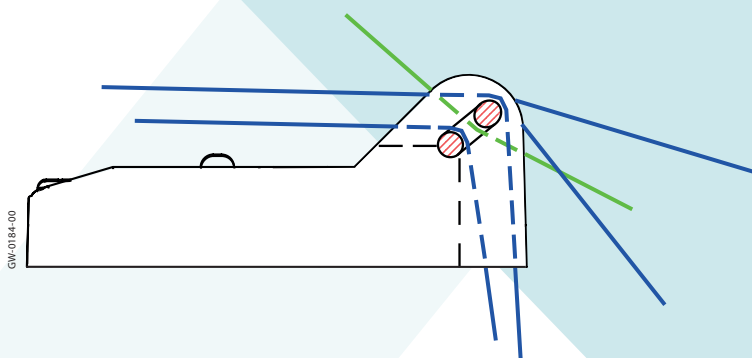
modular 6P4C plug connector



■ Dimensions (mm)



■ Yarn direction possibilities



NB: Yarn must contact the ceramic eyelet.

The yarn movement will be best detected when the yarn deviates about 10–15° when it passes through the yarn sensor eyelet.

