

Eltex UPG-Stitch

thread break detector for sewing machines



The UPG-Stitch is a thread break detector designed to be used on sewing machines.

It checks that the thread is moving in stitches. Both no thread movement and continuous thread movement will result in an active output.

It operates on the piezoelectric principle, detecting the thread movement. This working principle makes it suitable for all types of thread and makes it insensitive to dust, dirt and humidity variations.

It has an optocoupler output suitable for PLC or other electronic control devices. It's size is small, therefore taking up only a small footprint on the machine.

A LED (light emitting diode) indicates the thread 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.



■ Function description

Sensing part Aluminium oxide ceramic, with a $\varnothing 3$ mm closed eyelet and a 7 mm wide bar.

Output Optocoupler, active when the thread is **not moving correctly**.

Sensitivity setting The sensitivity can be adjusted with a potentiometer under the lid.

The output reflects the movement of the thread. When the thread is moving correctly, the optocoupler is inactive. When the thread is not moving or moving continuously the optocoupler is active.

The LED is on when the thread is moving correctly.

It is flashing steady when the thread is not moving.

It is flashing irregularly when the thread is moving continuously.

The detector has a cable with a 6/4 modular plug connector.

Several detectors can be connected in parallel.

The detector is protected against wrong polarity on power supply.



■ Technical specifications

Housing in zinc metal

Power supply 12–30 V DC

Current consumption 20 mA

Output:

Max. switching current 10 mA

Max. voltage drop 2 V

Speed range

600 – 10 000 rpm

Part no 16750

cable length 0.5 m

Part no 16760

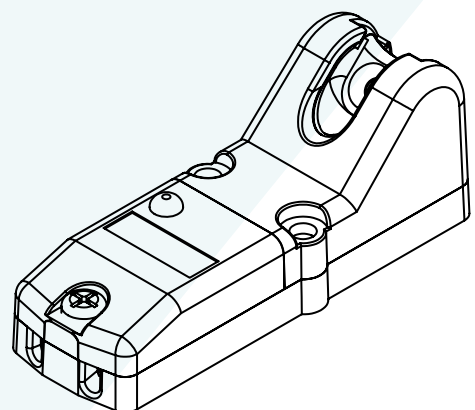
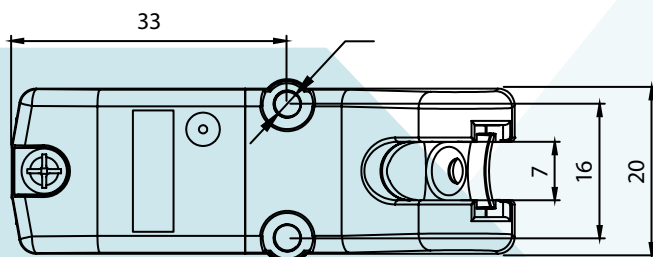
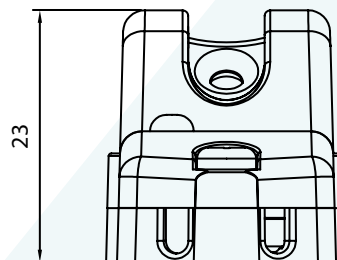
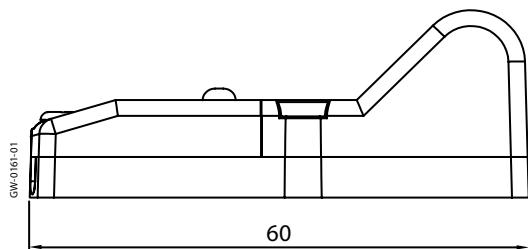
cable length 3.5 m

Cable connector

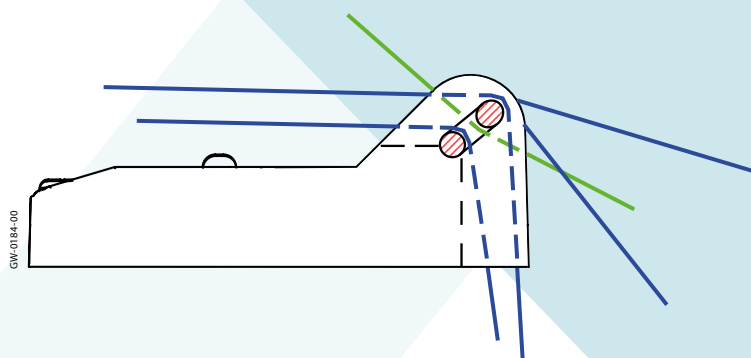
6/4 modular plug connector



■ Dimensions (mm)



■ Thread direction possibilities



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