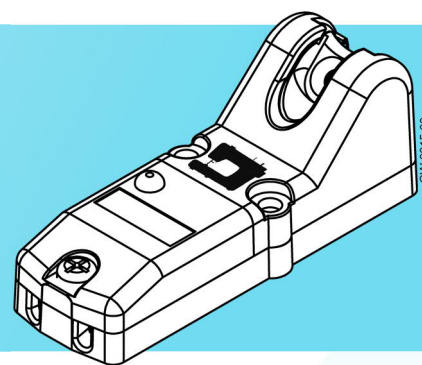


Instruction for ELTEX UPG-Stitch thread break detector for sewing machines

16760



General

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.

The ceramic sensor part can be used both as a closed eyelet and an open bar.

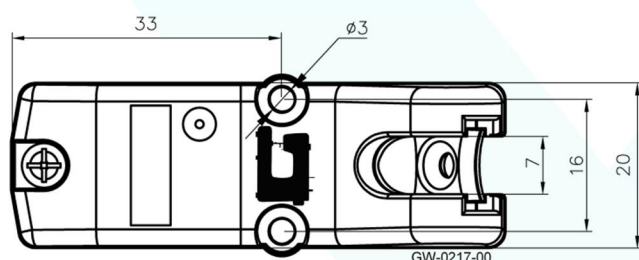
The thread must always contact the ceramic bar or eyelet, and the thread motion is detected most effectively when it deviates about 10-15° as it passes through the sensor.

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.

Fitting



The UPG-Stitch thread break detector is fitted on the machine with two screws, maximum diameter 3 mm.

Adjustment

If the factory setting of the sensitivity is not suitable, it can be adjusted with the potentiometer, located under the lid.

When making adjustments, use a small screw-driver, maximum size of 2.5 mm.

Minimum setting (↻ counter clockwise) is for course, fast moving and/or high-tension thread.

Maximum setting (↻ clockwise) is for fine, slow moving, and low-tension thread.

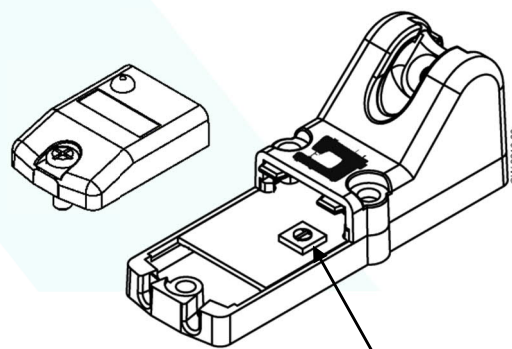
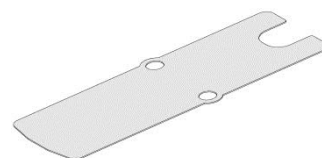
NOTE! Electrical interference caused by insufficient machine ground can cause the UPG-Stitch to indicate thread movement when no thread is moving.

This can be corrected by electrically insulating the UPG-Stitch from the machine frame. Two nylon screws and an insulation pad can be used to achieve this. These parts are included with the UPG-Stitch sensor. These parts can also be ordered from Eltex.

The part numbers are:

#4144 Nylon Screw,

#6868 Insulation pad

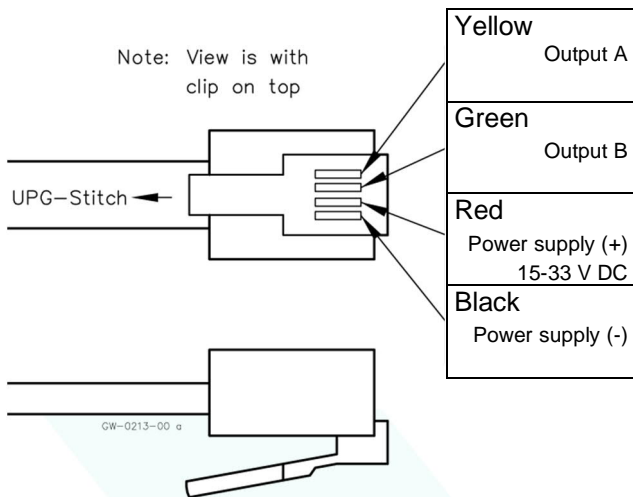


Connection

The detector has a cable with a 6P4C modular plug connector

The output is suitable for PLC or other electronic control devices. The detectors can be connected in parallel.

The detector is protected against reversed polarity on the power supply

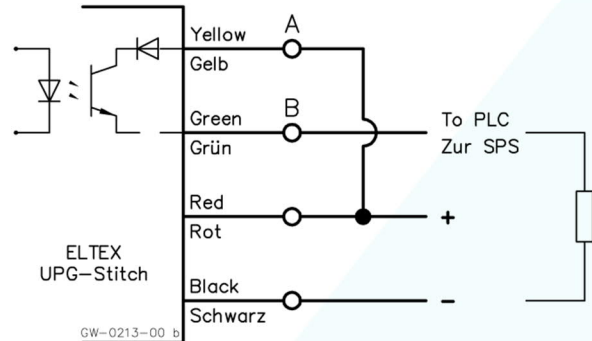


Output: Optocoupler, NC = normally closed

Output load: max 10mA, 35 V DC

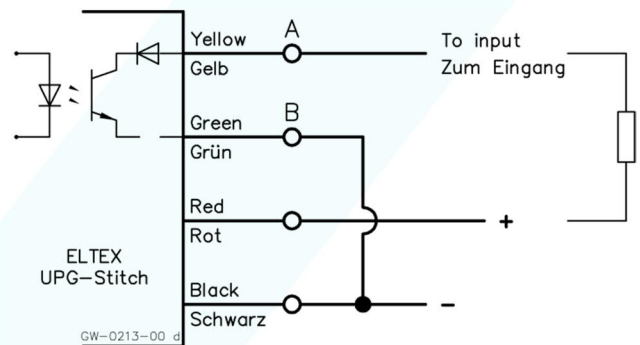
Max ON-STATE voltage drop: 2V DC at 10 mA

PNP



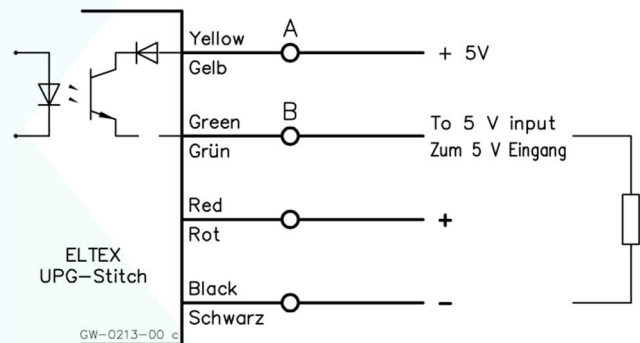
Configured as PNP output for PLC; high when thread is not moving.

NPN



Configured as NPN open collector output (for input with pull-up resistor); low when thread is not moving.

Special



Configured as optocoupler output; high when thread is not moving.