

Thread sensor

15960–15962, for sewing machines



This thread sensor is designed to monitor up to 6 intermittent running threads on automatic sewing machines. The eyelets are scanned electronically.

It detects both broken and continuously moving threads. The yarn movement can be monitored even when the yarn tension is rather low.

Available in different models

15960 has a latching output suitable for Eltex central control units with latching function.

15961/15962 has opto coupler input and output and is suitable for machines with PLC control system.

■ Technical features

- The thread sensor works on the piezo electrical principle and the thread stitch movement is detected by a ceramic bar inside the eyelet.
- For each eyelet there is an ON/OFF switch.
- Each eyelet has a red LED to indicate a stop.
 - A broken thread is indicated by continuous light on the LED.
 - A continuous moving thread is indicated by the LED flashing.
- A green LED on the thread sensor indicates when the signal giver is active and sensing the yarns.
- Power supply 24 V (16–33V) DC. Current consumption 35 mA.
- The thread sensor has a DB9M connector.

■ 15960 model

- If more than one thread sensor is used on one machine, the thread sensors must be connected in parallel.
- The models 15960 has ceramic bars.

■ 15961/15962 model

- The thread sensor can be used on a PLC control system with either plus or minus connected to earth.
- The PLC should be programmed to give a signal on the opto coupler input when the sewing machine is running and the threads must be moving.
- The thread sensor sends a stop on the opto coupler output if any yarn is not moving correctly during the time the thread sensor is active.
- The model 15961 has ceramic bars.
The model 15962 has ceramic eyelets.



■ Adjustments

- Sensitivity can be adjusted by the GAIN potentiometer accessible from the outside of the thread sensor.
- It is possible to adjust one of the eyelets to be more sensitive than the others with a potentiometer available under the lid inside the thread sensor.

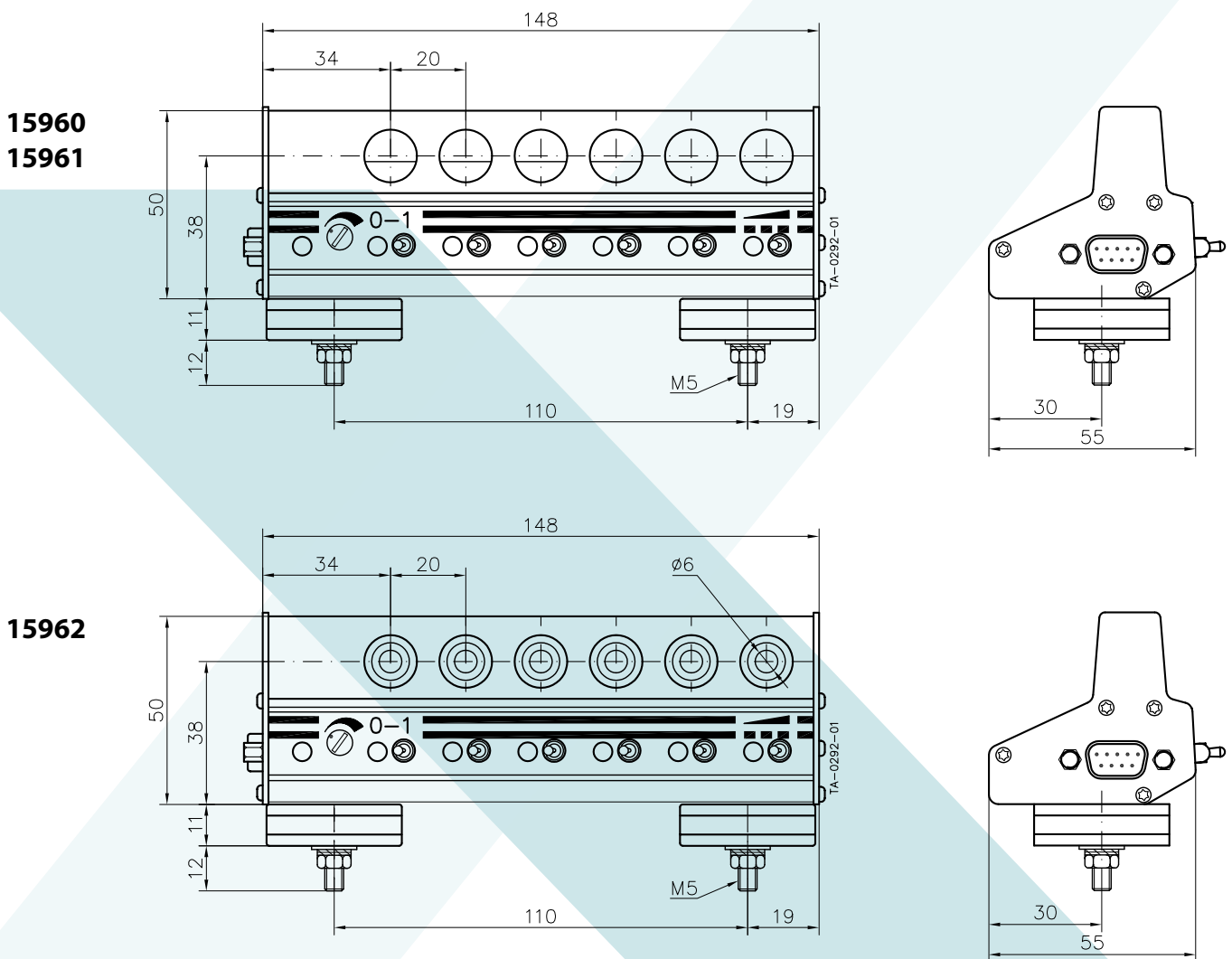
- It is possible to adjust the reaction time. This can be done easily on a movable jumper also available under the lid inside the thread sensor.

On a slow operating machine it may be necessary to make the reaction time longer.

On a high speed machine, the time can be set shorter than standard to stop the machine quickly if so desired.

Detailed information regarding fitting, connecting and adjustments is available on the sheet: "Instruction for thread sensor 15960" or "Instruction for thread sensor 15961/15962"

■ Dimensions (mm)



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