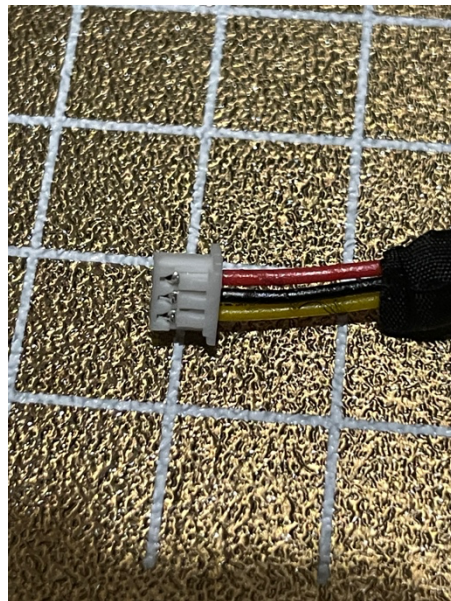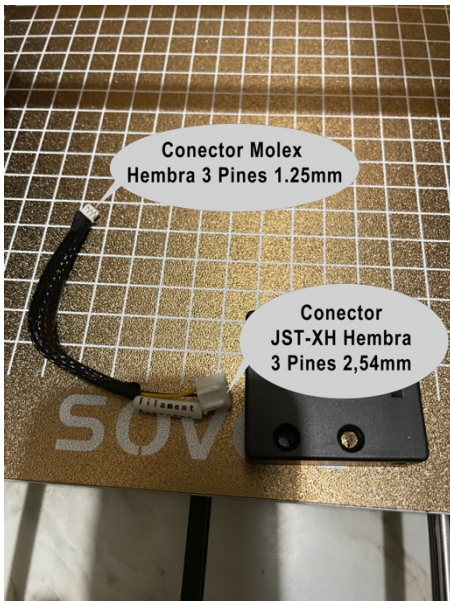# Add filament sensor with LED to Sovol SV06

In order to add a filament sensor to our Sovol SV06 3d printer we will need a three-wire cable with a 1.25 mm three-pin MOLEX female connector (Micro JST 1.25 Mm) and a three-pin JST-XH female connector of 2.54mm in addition to the filament sensor.
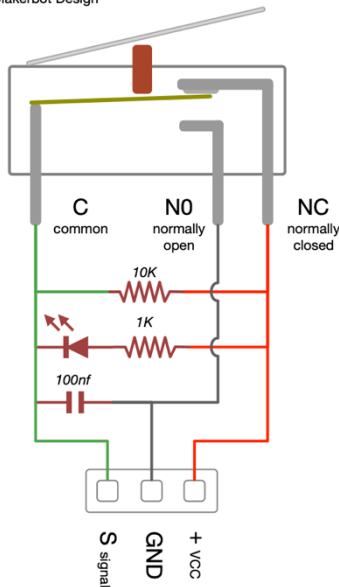

Micro JST 3P 1,25 mm

JST-XH 3P 2,54 mm

The sensor must be of the Makerbot type with the ground pin of the connector to the NO (Normally Open) pin of the switch.

The easiest thing to do is buy the 1.2mm 3-pin molex connector with cable and attach a 2.54 JST-XH connector to the other end.

"The creality sensors for ender 3 come with the NC pin grounded, so they will fail us.
The one in the photo is from ender 3 but I had to modify the tracks and now the LED turns on upside down. Use another one that has NO (Normally Open) to ground".

Check the pins of your sensor (VCC, GND and SIGNAL) to connect to the extruder board connector (DET).