

How to – Test filament jam detector

FELIX Pro 1

28 June 2016

Revision 0



1 Introduction

Sometimes you experience a lot of filament jam errors (the “Click to reheat” message appears). Usually this is because of one or another external cause, but it might also be that something is wrong with the filament jam detector itself.

This document describes how the sensor can be tested

1.1 Necessary

- G-code file “Filament detector tester.gcode”
- PC with Repetier-Host installed and printer connected

1.2 Procedure

You can test the filament sensor like this:

- Connect to the printer with Repetier-Host program
- Remove the hot end from the printer and leave the hot end connector attached to the print head PCB
- Insert a piece of fresh filament into the feeding mechanism
- Print “Filament detector tester.gcode”

The g-code file will put the printer in debug mode.

Then it will spool some filament through the head. The head does not have to heat up for this. The filament can move freely through the head, since the hot end is not in the way.

Then the printer will echo the output of the filament jam sensor to the printer log.

Check the g-code file itself for a little more information.

In short, the reported values need to be between 75-400%.

Sometimes a value of 10% is detected, that is usually a one-time event caused by electric noise.

If the printer detects a value of 1000 steps (450%) it will slow down the printing speed. This allows it to continue printing if there is a difficult piece of filament that causes issues.

If it detects 1500 steps (680%) it will trigger the “click to reheat” jam detection dialogue. This requires action from the user, thus allowing any problems to be resolved.

Please reset the printer afterwards, else it will remain in debug mode.

If you are unable to continue or have any questions, you can check at the support section of our website or you can contact us directly:

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Kind regards,

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