



Technical Document

RS PRO - FLEX PRO 98

Stock numbers:

174-0064 / 174-0065 / 174-0066 / 174-0067 / 174-0069 / 174-0070 /
174-0071 / 174-0072 / 174-0073 / 174-0075 // 174-0077

EN

FLEX PRO 98 is a specifically formulated flexible filament for easy & high speed printing on both direct and Bowden style 3D printers. FLEX PRO 98 features an exceptionally high heat resistance (138°C) and can be stretched as far as 450% before reaching its breaking point. FLEX PRO 98 does not require the use of a heated bed and can even be printed straight onto (clean) glass. FLEX PRO 98 is the flexible filament for (semi)professional users who do not want to compromise and require a high mechanical flexible filament that prints easily. FLEX PRO 98 is an extremely usable flex-filament with a wide variety of different applications such as Orthopedic insoles, Prosthetics, Vibration dampers and much more.

Features:

- Strong & Flexible
- Works on Direct & Bowden style 3D printers
- Printable at speeds of >75mm/s
- Exceptionally high softening point of 138°C
- 450% elongation at break
- Resistance to oils, greases & microorganisms
- Easily print watertight objects

Colours: RS PRO - FLEX PRO 98 is available from stock in six colours

Packaging: RS PRO - FLEX PRO 98 is available in 500 grams packaging and is supplied in a vacuum bag, due to the moisture sensitivity of the material.



Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,16 g/cc
Tensile Strength at Yield	ISO 527 1/2	50 Mpa
Elongation-Strain at Break	ISO 527 1/2	450%
Tensile (E) modulus	ISO 527	150 MPa
Impact Strength Charpy method 23 °C	ISO 179	NB
Shore Hardness	ISO 7619-1	98A
Printing temperature	Print Lab	235±10 °C
Melting temp.	ISO 294	225 °C
Glass transition (Tg)	DSC	-16 °C

Additional information:

FLEX PRO 98 does not require a heated bed to stick well though you can set it to 0-60°C for extra reassurance.

FLEX PRO 98 works superb with a direct drive feeder, or newer types of Bowden FDM or FFF technology 3D printers.

By changing the infill / amount of walls you can create the perception of a higher / lower shore than 98A.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.

This product will be supplied with a moisture content <0,2%. After being out of the bag for several hours, redrying in an oven is recommended to eliminate moisture. Below you will find some recommended drying time and temperatures:

- After a 24 hour print put it into a standard HEATED AIR oven or filament dryer at 65 °C for 24 hours
- After a 8 hour print, put the filament into the oven for 8 hours.
- After a 2 hour print, put the filament into the oven for 2 hours.