

## Datasheet

# RS Pro High-Performance Nylon Filament



### Filament Specifications

Article Numbers	Colour	Size	Ø Tolerance	Roundness
8320501	White	1.75 mm	± 0.05 mm	≥ 95 %
8320507	Black			
8320510	Black	2.85 mm	± 0.10 mm	≥ 95 %
8320513	White			

### Material Properties

Description	Test Method	Typical Value
Specific gravity	ISO 1183	1.02 g/cc
MFR 280°C/2.16 kg	ISO 1133	15 cm <sup>3</sup> /10 min
Tensile strength at yield	ISO 527	60 MPa
Strain at yield	ISO 527	8%
Strain at break	ISO 527	>150%
Tensile modulus	ISO 527	1400 MPa
Flexural modulus	ISO 178	1700 MPa
Flexural strength	ISO 178	90 MPa
Impact strength – Charpy notched 23°C	ISO 179	14 kJ/m <sup>2</sup>
Moisture absorption	ISO 62	3.5%
Printing temperature	DF	240°C to 260°C
Melting points	ISO 11357	250°C
Shore D hardness	ISO 868	81

### Additional Information

Needs to be dried for good 3D print results, a standard air-circulated oven is sufficient. A guideline for drying is 2-3 hours at 110-130°C for 100 gram (please take care to remove the spool holding the filament as it will melt at much lower temperatures).

Recommended temperature for heated bed is 80-100°C or even higher.

The filament will not bond to glass, but adheres well to a variety of “print stickers” and other bed adhesives. Can be used on most common desktop FDM or FFF technology 3D printers.

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