ntch Filaments®

PA-CX12 @df

PA-CX12@df is our high-performance nylon filament with a broad range of mechanical and chemical properties. These properties include, but are not limited to, high impact (even at low temperatures), crack & scratch resistance, food / water contact acceptable, superior chemical & weathering resistance backed by a very low water absorption and excellent dimensional stability. PA-CX12 is the perfect nylon filament for the (semi)professional print user who is looking for the perfect combination of printability and mechanical properties. PA-CX12@df is one of the best solutions for industrial grade applications that need to last.

Features:

- High-performance industrial grade nylon
- Strong & Flexible
- High impact, abrasion, crack & scratch resistance
- Superior chemical & UV resistance
- Excellent dimensional stability
- Low water absorption

Colours:

PA-CX12@df is available from stock in clear, white and black. Other colours on request



Packaging:

PA-CX12@df is available in nearly any type of packaging and labelling, but will always be supplied in a vacuum bag, due to the moisture sensitivity of Polyamides. Ask our team to help you customizing your product.

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	1,02 g/cc
MFR 280°C/2,16 kg	ISO 1133	15 cm3/10 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 ²
Moisture absorption	ISO 62	3,5%
Printing temp.	DF	240-260°C
Melting points	ISO 11357	250°C
Shore D Hardness	ISO 868	81

Additional info:

PA-CX12@df 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. PA-CX12@df will not bond perfect to glass, but adheres well to a variety of "print stickers" and other bed adhesives.

PA-CX12@df 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. This enhances the shelf life significantly.

