



ABS



Fused Deposition Modelling
(FDM)
Material Datasheet



A tough, impact-resistant material commonly used for functional testing and practical applications. It performs well in higher-temperature environments. Available in multiple colours & glass-filled.

Measurement	Normal ABS	Glass-Filled
Tensile Strength (Z)	28 ± 2 MPa	29 ± 3 MPa
Tensile Strength (X-Y)	33 ± 3 MPa	36 ± 3 MPa
Breaking Elongation Rate (X-Y)	10.5 ± 1.0 %	6.3% ± 1.2%
Breaking Elongation Rate (Z)	4.7 ± 0.8 %	2.3% ± 0.8%
Young's Modulus (X-Y)	2200 ± 190 MPa	3160 ± 170 MPa
Young's Modulus (Z)	1960 ± 110 MPa	2250 ± 130 MPa
Bending Modulus (X-Y)	1880 ± 110 MPa	2860 ± 130 MPa
Bending Modulus (Z)	1590 ± 100 MPa	1970 ± 110 MPa
Impact Strength (X-Y)	39.3 ± 3.6 kJ/m ² ; 21.5 ± 2.2 kJ/m ² (notched)	14.5 ± 1.5 kJ/m ² ; 4.2 ± 1.1 kJ/m ² (notched)
Impact Strength (Z)	7.4 ± 1.2 kJ/m ²	5.3 ± 1.4 kJ/m ²
Heat Resistance (HDT, 0.45 MPa)	87° C	99° C

Actual values may vary depending on build conditions. Our technical team can advise.