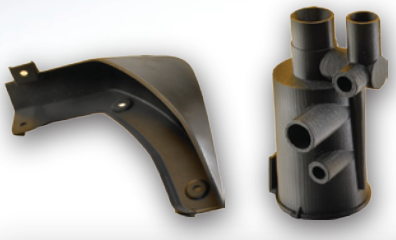

FDM® ABS-M30

Features & Benefits

- Durable
- 25%-70% Stronger Than ABS
- Better Feature Detail
- Ideal For:
  - *Conceptual Models*
  - *Design Verification*
  - *Functional Testing*
  - *Low Volume Production*

Additional Information

- Available for Instant Online Quoting
- Maximum Build: 24x20x24in
- Tolerances: +/- .005" for the first 2 inches, +/- .002" for each additional inch
- Minimum Wall Thickness: .020"
- Finish Options Include:
  - *Standard*
  - *Available in natural, black, dark gray, blue and red*

MECHANICAL PROPERTIES[1]	TEST METHOD	IMPERIAL	METRIC
Tensile Strength (Type 1, 2"/min)	ASTM D638	5,200 psi	36 MPa
Tensile Modulus	ASTM D638	350,000 psi	2,413 MPa
Tensile Elongation	ASTM D638	4%	4%
Flexural Stress (Method 1, 0.05"/min)	ASTM D790	8,800 psi	61 MPa
Flexural Modulus	ASTM D790	336,000 psi	2,317 MPa
Flexural Elongation	ASTM D790	52%	52%
IZOD Impact, Notched (Method A 23°C)	ASTM D256	2.6 ft-lb/in	139 J/m
IZOD Impact, Un-notched (Method A 23°C)	ASTM D256	5.3 ft-lb/in	283 J/m

THERMAL PROPERTIES[3]	TEST METHOD	IMPERIAL	METRIC
Heat Deflection (HDT) @ 66 psi, 0.125", unannealed	ASTM D648	204°F	96°C
Heat Deflection (HDT) @ 264 psi, 0.125", unannealed	ASTM D648	180°F	82°C
Vicat Softening Temp. (Rate B/50)	ASTM D1525	210°F	99°C
Coefficient of Thermal Expansion (flow, -40F to 100F)	ASTM E831	4.9E-05 in/in/°F	8.82E-05 mm/mm°C
Coefficient of Thermal Expansion (flow, -40F to 100F)	ASTM E831	4.7E-05 in/in/°F	8.46E-05 mm/mm°C
Glass Transition (Tg)	DSC (SSYS)	226°F	108°C

OTHER[3]	TEST METHOD	VALUE
Specific Gravity	ASTM D792	1.04
Vertical Burning Test (Flame)	UL94	HB (0.06", 0.85m)
Rockwell Hardness	ASTM D785	109.5
Dielectric S (kV/mm)	IEC 60112	28.0

The information presented are typical values intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions. Tested parts were built on FDM 400mc @ 0.10" (0.254 mm) slice. Product specifications are subject to change without notice.

1 Build orientation is on side long edge 2 Due to amophous nature, material deos not display a melting point 3 Literature value unless otherwise noted