McMASTER-CARR®

Moisture- and Wear-Resistant Nylon Rod

1" Diameter



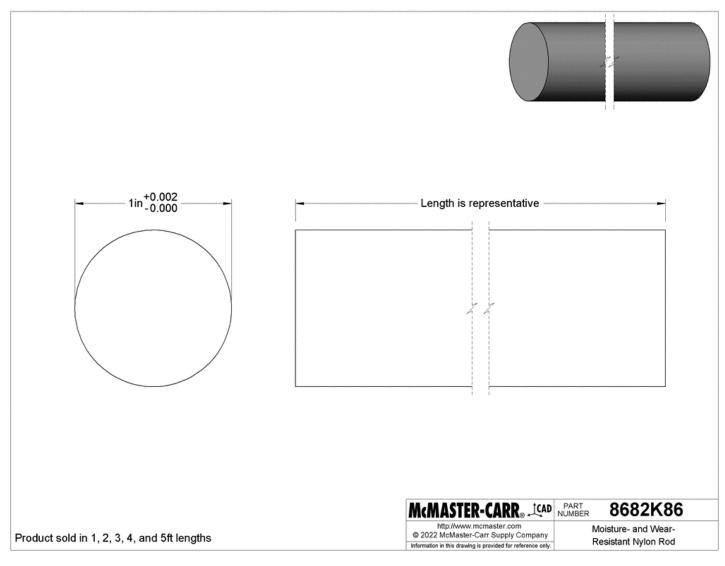
Length, ft.
1
2
3
4
5

\$20.25 per ft. 8682K86

 Material	Nylon Plastic
Material Grade	Nylon 6/12
Shape	Rod and Disc
Texture	Smooth
Diameter	1"
Diameter Tolerance	0" to 0.002"
Tolerance Rating	Oversized
Hardness	Rockwell R114
Hardness Rating	Hard
For Use Outdoors	No
Temperature Range	-40° to 200° F
Impact Strength	0.9 ftlbs./in.
Impact Strength Rating	Poor
Tensile Strength	10,000 psi
Tensile Strength Rating	Good
Color	Off-White
Clarity	Opaque
Specifications Met	ASTM D5989, ASTM D6779
Performance Properties	High Strength, Low Thermal Expansion, Low Water Absorption, Multipurpose, Slippery, Wear Resistant
For Use With	Acetone, Coolant, Diesel Fuel, Heating Oil, Isopropyl Alcohol, Kerosene, Methanol, Methyl Ethyl Ketone (MEK), Vegetable Oil, Water
Chemical Resistance	
Excellent	Coolant, Diesel Fuel, Heating Oil, Kerosene, Methyl Ethyl Ketone (MEK), Vegetable Oil
Moderate	Acetone, Isopropyl Alcohol, Methanol, Water
Not Recommended	Acetic Acid, Hydrochloric Acid, Hydrogen Peroxide, Nitric Acid, Phosphoric Acid, Sulfuric Acid, Synthetic Oil
Not Rated	Bleach, Chlorine, Fuel Oil, Gasoline, Hydraulic Fluid, Lacquer Solvents, Mineral Oil, Sodium Hydroxide
Fabrication	Extruded
Density	0.038 lbs./cu. in.
Flexural Modulus	350,000 psi
Flexibility	Semi-Rigid
Coefficient of Friction	0.31
Friction Rating	Slippery
Dielectric Strength	Not Rated

Electrical Insulation Rating	Not Rated
Water Absorption	0.15%
Water Absorption Rating	Good
Coefficient of Thermal Expansion	5 × 10 ⁻⁵ in./in./°F
Thermal Stability	Good
Comparable To	Ertalon, Tecamid, Ultramid, Zytel
Warning Message	Physical and mechanical properties are not guaranteed. They are intended only as a basis for comparison and not for design purposes.
Additional Specifications	SDS
RoHS	RoHS 3 (2015/863/EU) Compliant
REACH	Not Compliant
DFARS	Specialty Metals COTS-Exempt
Country of Origin	United States
USMCA Qualifying	No
Schedule B	391690.6000
ECCN	EAR99

Often machined into tube fittings and valve components, these nylon 6/12 rods absorb less water and hold their shape better than standard nylon 6/6. They're also better electrical insulators. They have a slippery surface that provides excellent resistance to wear caused by friction.



The information in this 3-D model is provided for reference only.