

CAST NYLONS LIMITED

Discover the NYCAST® Advantage

NYCAST® RX/GX/BX

NYCAST RX (red) NYCAST GX (gray) and NYCAST BX (black) are our solid lubricant-filled cast nylons. This material is designed to provide low coefficient of friction with superior wear resistance, making them an excellent choice for low-load, high-speed applications.

- Low coefficient of friction
- Good sliding properties
- Good wear resistance
- High Young's modulus
- Easy to machine



NYCAST® RX/GX/BX Product Specifications

Property	Units	ASTM Test Method	NYCAST® RX/GX/BX
Specific Gravity	g/cm ³	D 792	1.14 - 1.15
Tensile Strength	psi	D 638	11,000 - 11,200
Tensile Elongation	%	D 638	35 - 100
Tensile Modulus	psi	D 638	495,000 - 525,000
Compressive Strength	psi	D 695	13,000 - 14,500
Compressive Modulus	psi	D 695	390,000 - 410,000
Flexural Strength	psi	D 790	14,000 - 14,500
Flexural Modulus	psi	D 790	400,000 - 450,000
Shear Strength	psi	D 732	8,000 - 9,000
Notched Izod Impact	ft.lbs/in.	D 256	1.4 - 1.8
Hardness Rockwell	R	D 785	110 - 115
Hardness, Shore	D	D 2240	74 - 80
Limiting Pressure Velocity	psi-ft/min	-	16,000
Melting Point	°F	D 3418	430 +/- 10
Coefficient of Linear Thermal Expansion	in./in./°F	D 696	5.0 * 10 ⁻⁵
Deformation Under Load	%	D 621	0.7 - 3.0
Deflection Temperature			
264 psi	°F	D 648	200 - 300
66 psi	°F	D 648	300 - 400
Continuous Service Temperature	°F	-	230
Intermittent Service Temperature	°F	-	330
Coefficient of Friction, Dynamic		D 1894	0.12
Water Absorption			
24 hours	%	D 570	0.4 - 0.5
Saturation	%	D 570	4.0 - 5.0
Dielectric Strength	v/mil.	D 149	500 - 600
Dielectric Constant			
60 Hz		D 150	3.7
1000 Hz		D 150	3.7
1 MHz		D 150	3.7



4300 Hamann Parkway | Willoughby, OH 44094
 Telephone: 800-543-3619 Fax: 440-269-2323
 International: +1-440-269-2300 Email: cnlmail@castnylon.com

The facts stated and recommendations contained herein are based on experiments and information to be reliable. No guarantee is made of the accuracy, however, and the products are sold without warranty, expressed or implied, and upon the conditions that purchasers shall conduct tests to determine suitability for their intended use.

