

Nylatron GSM with additive for improved friction and wear behavior

ISO	PA polyamide
Shape	Rod
Color	Anthracite
Temperature Range	-30 and 90 °C
tbl_temp_melting	215 °C
Density	1160 kg/m3
Elongation at break	25 %
Tensile strength	82 N/mm2

Material information

Nylon with addition molybdenum disulfide (MOS2) providing an improvement in friction and wear behavior. This cast material is especially available in larger sizes, below is the extrusion grade GS.

Usage examples

It is a widely used grade for sprockets, bearings, sprockets and pulleys.
Measurement tolerance 2768-mK

Wear resistance

Excellent

Item Overview

Item Code	Item Name	Width (mm)	Length (mm)
67800500	PA Nylatron GSM staf 50 mm		1.000
67800560	PA Nylatron GSM staf 56 mm		1.000
67800600	PA Nylatron GSM staf 60 mm		1.000
67800650	PA Nylatron GSM staf 65 mm		1.000
67800700	PA Nylatron GSM staf 70 mm		1.000
67800800	PA Nylatron GSM staf 80 mm		1.000
67801000	PA Nylatron GSM staf 100 mm		1.000
67801100	PA Nylatron GSM staf 110 mm		1.000
67801200	PA Nylatron GSM staf 120 mm		1.000
67801250	PA Nylatron GSM staf 125 mm		1.000
67801300	PA Nylatron GSM staf 130 mm		1.000
67801400	PA Nylatron GSM staf 140 mm		1.000
67801500	PA Nylatron GSM staf 150 mm		1.000
67801600	PA Nylatron GSM staf 160 mm		1.000
67801700	PA Nylatron GSM staf 170 mm		1.000
67801800	PA Nylatron GSM staf 180 mm		1.000
67802000	PA Nylatron GSM staf 200 mm		1.000



67802300	PA Nylatron GSM staf 230 mm	1.000
67802500	PA Nylatron GSM staf 250 mm	1.000
67802600	PA Nylatron GSM staf 260 mm	1.000
67802800	PA Nylatron GSM staf 280 mm	1.000
67803000	PA Nylatron GSM staf 300 mm	1.000
67803250	PA Nylatron GSM staf 325 mm	1.000
67803500	PA Nylatron GSM staf 350 mm	1.000
67804000	PA Nylatron GSM staf 400 mm	1.000

Water absorption

The extent to which the product absorbs water when tested for 24 hours in water at 23 degrees in accordance with ISO 63.

Immersion Saturation

0,760 % 6,700 %

Thermal properties

[tbl_thermal_explainer](#)

[tbl_thermische_geleiding](#) [tbl_lin_uitzet_2360](#) [tbl_lin_uitzet_23100](#) [tbl_temp_deflection_load](#)

0,300 W/(K.m) 80 x 10⁻⁶ m/(m.K) 90 x 10⁻⁶ m/(m.K) 80 °C

Mechanical properties

[tbl_mechanical_explainer](#)

[tbl_tension_norm](#) [tbl_tension_stress_yield](#) [tbl_tension_strain_yield](#) [tbl_tension_strain_break](#) [tbl_modulus_elasticity](#)

ISO 527-1/-2 82 MPa 5 % 25 % 3.400 MPa

Impact tests

[tbl_charpy_izod_explainer](#)

[tbl_charpy_impact](#) [tbl_charpy_unnotched](#) [tbl_charpy_notched](#) [tbl_izod_impact](#) [tbl_izod_impact_notched](#)

ISO 179-1 KJ/m² 3 KJ/m² ISO 179-1 0

Dynamische Coefficient of Friction

[tbl_dcf_explainer](#)

[tbl_dcf](#) [tbl_dcf_min](#) [tbl_dcf_max](#) [tbl_dcf_wear](#)

ISO 179-1 0,350 0,550 11 µm/km



Electrical properties

Tests related to the electrical resistivity and conductivity of the material.

Electric strength	Volume resistance	Surface resistance
IEC 60243-1 24 kV/mm	IEC 60093 >10E 14 Ohm.cm	IEC 60093 >10E 13 Ohm/sq.

Related materials

Code	Group Name	Shape	Color
602	PA Nylatron GS	Sheet	Anthracite
677	PA Nylatron GS staf	Rod	Anthracite
603	PA Nylatron GSM	Sheet	Anthracite
717	PA Nylatron GSM buis	shape_65	Anthracite
678	PA Nylatron GSM staf	Rod	Anthracite

We provide product information as known by us with great care. We cannot accept any liability for errors and/or inaccuracies and/or incompleteness. Please note that our products are intended for professional use only. For high impact applications and/or combinations of limit values we always recommend to have the properties specific to that situation verified by us. If there are multiple specifications for a product we will use the standard of 2mm or the closest specification.

