

# Teflon™ PTFE Fibers

## Continuous Multi Filaments: Standard Grade

### Product Benefits

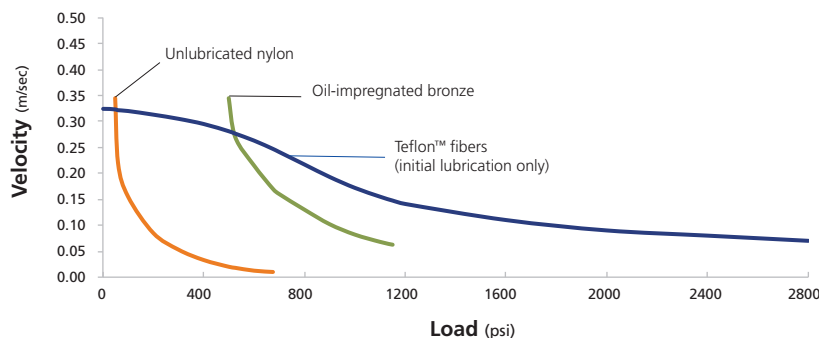
- Teflon™ branded PTFE matrix-spun fibers for optimum performance
- Multi-filament yarns with a highly even fiber diameter
- Easily used for woven, knitted and winding as diverse processes
- Teflon™ fibers perform excellently, especially under high-load and low-velocity conditions



### Physical Properties

Product	Total Denier (d)	# of Filament (-)	Specifications		
			Denier (dpf)	Tenacity (g/d)	Elongation (%)
Plain	200	30	6.7	2.0	18
	400	60	6.7	2.0	15
	1200	180	6.7	1.7	21
Twisted (up to 6 turns/inch)	400	60	6.7	2.0	15
	1200	180	6.7	1.7	21
	1600	360	4.4	1.4	27

### 1,000-hour Service Test Comparison of Spherical Bearings of Teflon Fabric vs. Other Materials



### Oscillating Test Comparison of Spherical Bearings of Teflon™ Fabric vs. Steel

	Teflon™ Fabric	Steel	Teflon™ Fabric	Steel	Teflon™ Fabric	Steel
Load, psi (Mpa)	3,000	3,000	16,000	16,000	25,000	25,000
	(21)	(21)	(110)	(110)	(172)	(172)
Arc of Oscillation	60°	60°	60°	60°	60°	60°
Cycles/Min	60	60	6	6	6	6
Total Cycles	1,000,000	1,000,000	65,000	65,000	6,000	-
Lubrication	Initial	Full	Initial	Full	Initial	Full
Remarks	Serviceable	Shaft Scored	Serviceable	Severe Shaft Scoring	Serviceable	Seized at Start Up



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# Teflon™ PTFE Fibers

## Continuous Multi Filaments: Extra Wear-Life Grade

### Product Benefits (Compared to Standard Grade)

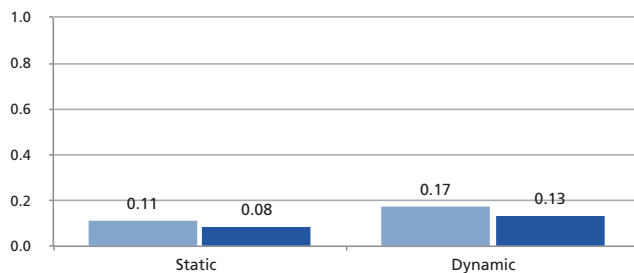
- Same levels of fiber properties
- Same levels of fabric coefficient friction to metal
- 4 times longer life under higher load
- Same levels of fiber coefficient friction to metal
- Same levels of wear rate under low to medium load



### Physical Properties

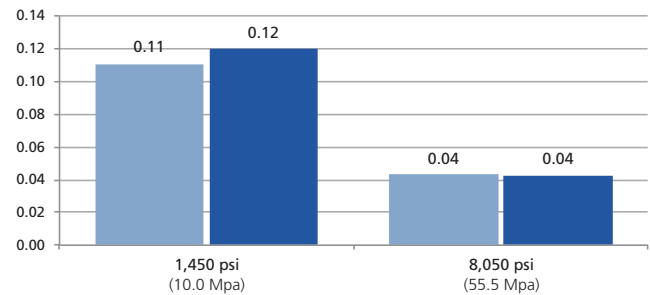
Product	Total Denier (d)	# of Filament (-)	Specifications		
			Denier (dpf)	Tenacity (g/d)	Elongation (%)
Extra Wear-Life Grade	400	60	6.7	1.7	10
Standard Grade	400	60	6.7	2.0	15

### Fiber Coefficient Friction (to Matte Finished Metal)



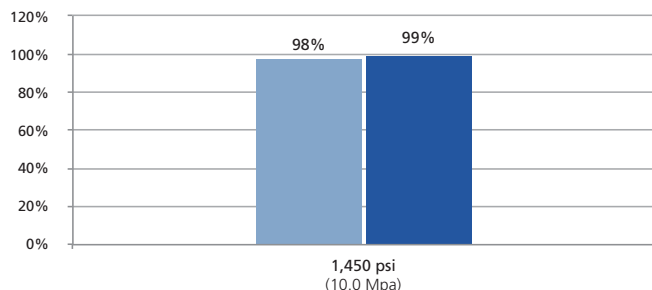
Velocity; Static / Dynamic; 0.00042 / 0.050 m/sec (0.082 / 9.8 ft/min)  
Based on ASTM D3108

### Fabric Coefficient Friction (to Metal)



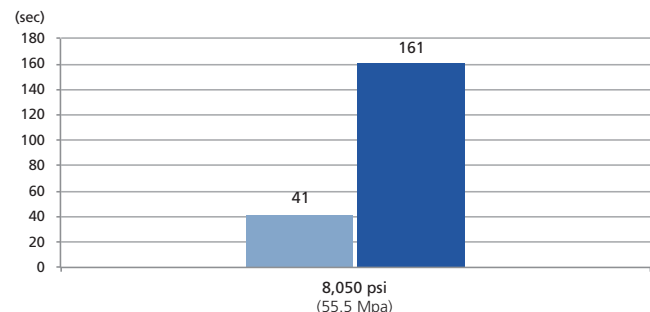
Velocity; 0.016 m/sec (3.2 ft/min), Metal Material; S45C  
Based on ASTM D3702

### Wear Rate



Velocity; 0.016 m/sec (3.2 ft/min), Metal Material; S45C, 30 minutes  
Based on ASTM D3702

### Wear Life



Velocity; 0.016 m/sec (3.2 ft/min), Metal Material; S45C  
Based on ASTM D3702

Standard Grade    Extra Wear-Life Grade

\* Extra Wear-Life Grade is under development as of July 2016. Please inquire for product availability.



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