

ID Material:
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TF1600-MC2

TF1600-MC2 is a high performance, high longevity, non-metallic composite material containing a significant percentage of aramid fiber. It can be considered as an alternative for sintered metal materials and offers many advantages: It will resist high energy inputs and is suitable for both dry and oil-immersed applications. It is not abrasive to the drum or rotor, is silent in operation and resists high pressures. The wear rate is low even at high temperatures. Additionally, due to our proprietary manufacturing process, we have eliminated the break-in requirement common to other high Kevlar facings in the market. No backing plate required for most clutch applications. TF1600-MC2 is available in thicknesses from 0.6mm to 7.5mm.

Material Data

Friction Properties (according to graphics)

Static Friction Coefficient (15bar, from box):	0.30±0.05	μ
Static Friction Coefficient (15bar, 100oC):	0.45±0.05	μ
Dynamic Friction Coefficient [μ]	0.40±0.05	
Wear Rate [mm ³ /kwh]	30 (at 300 °F)	
T Fading [°F]	752	

Physical Properties

Hardness (DIN53505):	85±5	Shore-D
Specific Gravity (ASTM D792):	1.30±0.05	gr/cm ³
Thermal Conductivity (ASTM E1952):	0.25±0.01	W/m°K

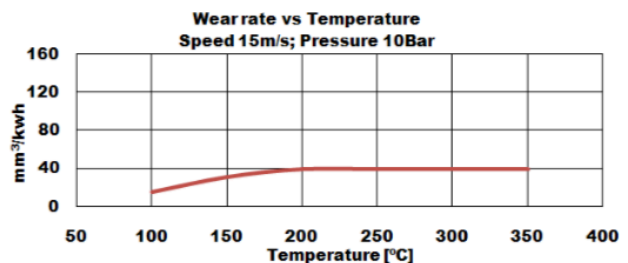
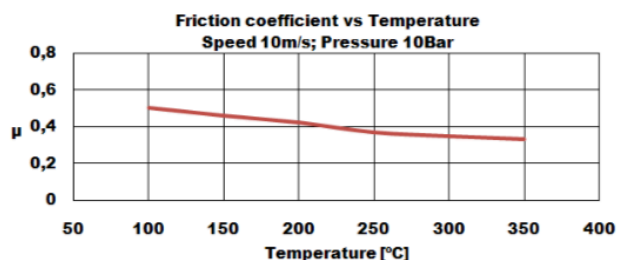
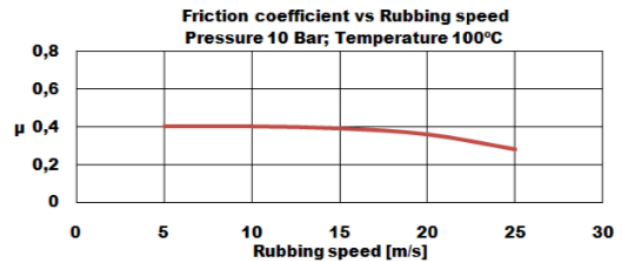
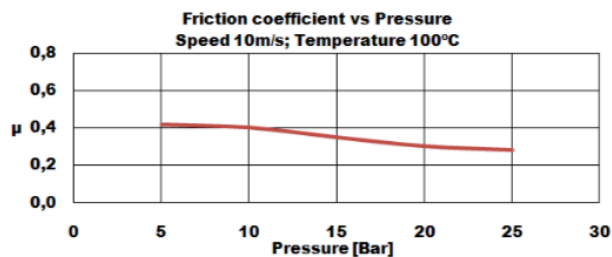
Mechanical Properties

Tensile Strength (ASTM D638):	70±5	N/mm ²
Compressive Strength (ISO 844:2014):	306±5	N/mm ²
Burst Resistant (200 x 137 x 3,5) 200°C:	18200±100	RPM
Poisson Coefficient (ASTM D638):	0.27±0.03	
Young Modulus (ASTM D638):	7260±100	N/mm ²

Recommended Working Values

T° Max. Continuous Operation:	680	°F
T° Max. Intermittent Operation:	750	°F

The above data is taken from specific test parameters therefore results can vary in different application conditions



Rubbing speed, temperature and pressure are related. Changing any values will change other. The values shown represent typical conditions, but are not ultimate limits of the material.

Material Type :

Appearance / Formats



Applications

Car / motorcycle competition clutches - Clutch buttons - Heavy vehicle clutches - Miscellaneous industrial brakes / clutches -

Price Level : \$\$\$\$

Reach (EC) 1907/2006 - RoHS 2011/65/EU : Compliance

Others

Recommended Mating Surface:	Perlitic cast iron, hardness HB150-200
Recommended Adhesives:	Thermosetting adhesive
Oil Resistant:	Yes