

Data Sheet TFM 1600 PTFE				
Parameter	Unit	Testing method	Test specimen	Required values
Mechanical Properties, measured at 23°C on sintered specimens				
Density	g/cm ³	DIN 53479		2,165 ± 0,02
Tensile strength	N/mm ²	DIN 53455	specimen thickness 1,0 mm	> 28
Elongation at break	%	DIN 53455	specimen thickness 1mm	> 300
Ball indentation hardness	N/mm ²	DIN 53456	Platelets, 4 mm thick	28 ± 2
Shore-hardness D		DIN 53505	Platelets, 6 mm thick	59 ± 2
Deformation under load (15 N/mm ² , 100 h, 23°C)	%	Similar ASTM D 621	Cylinder, 10 mm Ø x 10 mm	9 ± 1
Tensile modulus	N/mm ²	DIN 53457		> 600
Thermal properties				
Thermal conductivity	W/m·K	DIN 52612		0,35
Coefficient of linear expansion ¹⁾ (Parallel to pressing direction)	K ⁻¹	DIN 53752	30-100 °C 30-200 °C 30-260 °C	12 · 10 ⁻⁵ 14 · 10 ⁻⁵ 17 · 10 ⁻⁵
Electrical properties, measured at 23°C				
Electrical strength	kV/mm	DIN 53481 VDE 0303 part 2	Film, 100 µm thick Film, 200 µm thick	--- 65
Volume resistivity	Ohm·cm	DIN VDE 0303 part 30 IEC93		10 ¹⁸
Surface resistance	Ohm	DIN VDE 0303 part 30 IEC93		10 ¹⁷

¹⁾ measured with dilatometer 2°C/min