



TCMF CARBON FIBER FILLED PTFE

Design Description

This material is available in a mixture of PTFE virgin, carbon fillers and additives. Its colour is black with a hardness of 60 shore D. TCMF has good dry running properties and is used for seals in compressors or lip seals. Exceptional wear life over conventional carbon grades.

Examples of applications: Seal rings, piston rings and compressor rings

Features

- Used in dynamic applications at high speed
- Good loading properties
- Suitable for higher load gasket applications
- Exceptional wear life over conventional carbon grades
- Examples of applications: Seal rings, piston rings and compressor rings

Properties	Specified	Unit	Test method
Specific gravity	2.00-2.20		ASTM D792
Yield strength	10-19	MPa	ASTM D1708
Tensile strength	15-20	MPa	ASTM D1708
Elongation	150-250	%	ASTM D1708
Hardness	60-65	Shore D	ASTM D2240
Tensile modulus	590	MPa	ASTM D638
Flexural modulus	900	MPa	ASTM D790
Deformation @ 14.2 MPa. 1 HR	2-3	%	ASTM D621
Deformation @ 14.2 MPa. 24 HRS	3-4	%	ASTM D621
Permanent deformation	2-3	%	ASTM D621
Deformation @ 6.9 MPa. 1 HR	0.5-1	%	ASTM D621
Deformation @ 6.9 MPa. 24 HRS	0.5-1.5	%	ASTM D621
Permanent deformation	0.3-0.8	%	ASTM D621
Izod impact strength	80	J/m	ASTM D621
Static coefficient of friction	0.22		ASTM D1894
Dynamic coefficient of friction	0.11		ASTM D1894
Wear factor	1.45×10^{-7}	Mm ³ /Nm	PIN ON DISC
Melting point	327	°C	ASTM D3418
Continuous service in air (max)	260	°C	Without load
Continuous service in air (min)	-260	°C	Without load