



25% GLASS FILLED PTFE (TFG)

Design Description

PTFE 25% Glass contains 25% clean milled fibres and 75% PTFE virgin and is available in white with a hardness of 60 shore D.

This material offers a higher stiffness and better wear properties than PTFE virgin. It is not useable for soft metal counterparts and has a limited usage in hot water.

Features

- Improved creep resistance over all temperature ranges
- Improved wear behavior
- Exceptional resistance to water
- 25% glass must be avoided with the use of strong alkalis and hydraulic acid
- Ideal for high load bearing applications

Properties	Specified	Unit	Test method
Specific gravity	2.19-2.25		ASTM D792
Yield strength	8-15	MPa	ASTM D1708
Tensile strength	16-23	MPa	ASTM D1708
Elongation	200-310	%	ASTM D1708
Hardness	59-65	Shore D	ASTM D2240
Tensile modulus	470	MPa	ASTM D638
Flexural modulus	785	MPa	ASTM D790
Deformation @ 14.2 MPa, 1 HR	8-9	%	ASTM D621
Deformation @ 14.2 MPa, 24 HRS	10-11	%	ASTM D621
Permanent deformation	8-9	%	ASTM D621
Deformation @ 6.9 MPa, 1 HR	1-2	%	ASTM D621
Deformation @ 6.9 MPa, 24 HRS	2-3	%	ASTM D621
Permanent deformation	1-2	%	ASTM D621
Izod impact strength	110	J/m	ASTM D256
Static coefficient of friction	0.16		ASTM D1894
Dynamic coefficient of friction	0.08		ASTM D1894
Wear factor	0.4 x 1.2 x 10 ⁻⁴	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