

PTFE – TLFG 3124

(PTFE with fillers)

PTFE – TLFG 3124 is a suspension Polytetrafluorethylen (PTFE), which is filled with a special sliding type carbon and additional fillers.

Since this material is able to reach extremely low friction coefficients with at the same time improved allowable pressure it is favourably suitable for use in sliding applications, especially bridge bearings.

PTFE – TLFG 3124 is manufactured according to the same guidelines as the white virgin types PTFE, which are certified according to EN 1337 for the use in bridge bearings.

The mechanic and friction data measured at the MPA Stuttgart according to the friction and deformation values for rods and sheets thicker than 5,0 mm in bridge bearing quality can be taken from the following diagram:

Property	Measuring method	Dimension	PTFE standard white virgin	PTFE-TLBQ 3070 white virgin	PTFE-TLFG 3124 filled
Density	DIN EN ISO 1183-1	kg/m ³	2140 – 2200	2140 – 2200	> 2120
Tensile strength	DIN EN ISO 527-1 and -3	N/mm ²	23	29 - 40	> 15
Tensile elongation	DIN EN ISO 527-1 and -3	%	> 260	> 300	> 250
Ball thrust hardness	DIN EN ISO 2039-1	N/mm ²	22	23 - 33	37
dyn. coefficient of friction dry ¹⁾	EN 1337-2	μ	n.a.	< 0,06	< 0,07
dyn. coefficient of friction lubricated ¹⁾²⁾	EN 1337-2	μ	n.a.	< 0,012	< 0,02
max. allowable pressure ³⁾	EN 1337-2	N/mm ²	20	30	45

¹⁾ At approx. 21 °C, counter plate stainless steel R_z < 1μm

²⁾ Lubricated with silicon grease acc. to EN 1337

³⁾ Load and recess of PTFE-sheets according to EN 1337-2