Dr. Tillwich GmbH
Werner Stehr

Product Specifications

Bearing Grease 117643 Spacer PMF

Article No.: TF1901

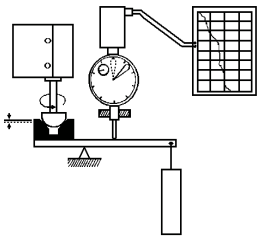
Soft Precision Grease with Optimized Stick-Slip Behaviour for Metals and Plastics

Laboratory Data:

Unworked Penetration	300 - 360 mm/10
Worked Penetration	315 - 385 mm/10
NLGI Class	0-1
Consistency	soft
Color	white
Dropping Point	180°C [356°F]
Oil Separation (FTMS) 48 hrs/85°C [185°F]	-14 %
Permanent Low Temperature Base Oil (72 hrs fluid)	-40°C [-40°F]
Application Temperature	-30°C to +150°C [-22°F to 302°F]
Base Oil	polyalphaolefines with additives (contains no silicons)
Viscosity Base Oil 20°C [68°F]	300 mm^2/s
Thickener	metallic soaps and PTFE Spacer PMF
Drop Stability	good
Durability	good
Corrosion Resistance	brass: very good steel: very good
Compatibility with Plastics	
compatible	ASA, PA66, PBT, PC, POM, POM (CL), PPO, ABS

Tribological Data:

Test system: sphere on prism (ISO 7148/2)



Friction Behavior
dependent on sliding speed

v (mm/s)	f	friction coeffient f (0.1 0.2 0.3 0.4)
0	0.02	
20	0.03	
50	0.02	
200	0.03	

materials: steel/POM, load 3N, 25°C [77°F]
lubricant: Bearing Grease 117643 Spacer PMF

Wear Behavior
comparison: dry and lubricated with Grease 117643 Spacer PMF

materials		wear (in mm) (0.01 0.03 0.1 0.3 1.0)
St/PC:	**117643**	
	dry	
St/POM:	**117643**	
	dry	

test parameters: load 30N, distance 10 km, 25°C [77°F], v = 28.1 mm/s

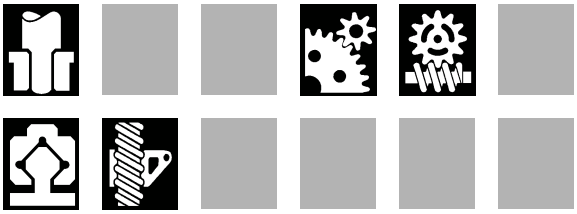
Comments:

Bearing Grease 117643 Spacer PMF is based on different polyalphaolefines, which are adjusted with a special metal soap thickener to a soft consistency with a defined yield point, which reduces effects of creeping lubricants out of the bearings. Additional PTFE Spacer particles that are coated with PMF (polymeric friction modifier) ensure a smooth sliding with no stick-slip effects even at high loads and low sliding speeds.

Contains no silicones!

Application:

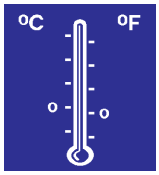
For plastic/plastic and plastic/metal precision bearings in measing devices and instruments. For the lubrication of radial bearings, helical gear trains, precision gears, linear guides, etc.



Product

Bearing material

Application temperature

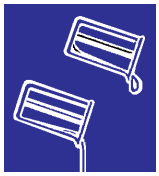


Bearing load

Sliding speed

Durability

Viscosity



Wetting

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