Dr. Tillwich GmbH
Werner Stehr

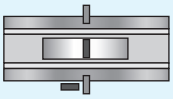
R 34 K

Article No. TK2500

Precision Oil for Meters and Instruments

Product Specifications

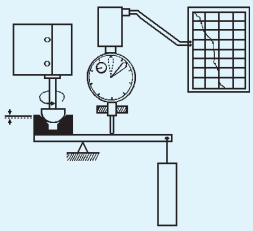
Laboratory Data:

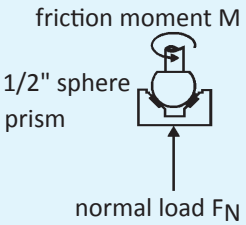
Viscosity		
Stabinger (ASTM D7042)	**Temperature**	**ν (mm²/s)**
	0 °C [32 °F]	730
	20 °C [68 °F]	150
	40 °C [104 °F]	50
Viscosity-Index (ISO)		90
Viscosity-Temperature-Behaviour		satisfactory

Color	colorless
Permanent Low Temperature 72 hrs fluid	-20 °C [-4 °F]
Application Temperature	-15 °C to +90 °C [+5 °F to +194 °F]
Density 20 °C [68 °F] (DIN)	0.90 g/cm³
Surface Tension	32 mN/m
Evaporation Rate 24 hrs/105 °C [221 °F]	0.4 % very low
Drop Stability /Wetting	good
Durability	good
Composition	partially synthetic oil on base of esters and hydrocarbons with additives

Tribological Data:

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





Friction Behaviour
dependent on sliding speed

v (mm/s)	**f**	friction coefficient f (0.1 0.2 0.3 0.4)
0	0.18	
20	0.07	
50	0.05	
200	0.07	
materials:	steel/brass, load 3 N, 25 °C [77 °F]	
lubricant:	R 34 K	

Wear Behaviour
comparison: dry and lubricated with R 34 K

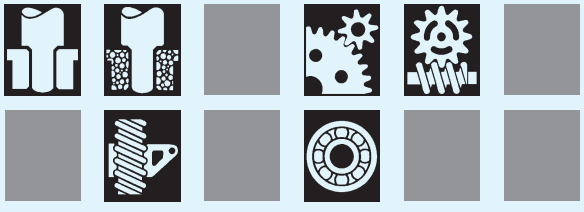
materials	wear (in mm) (0.01 0.03 0.1 0.3 1.0)
St/brass: TK2500	
dry	
St/steel: TK2500	
dry	
test parameters:	load 30 N, distance 10 km, 25 °C [77 °F], v=28.1 mm/s

Comments:

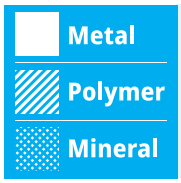
Partially synthetic precision oil for meters and instruments on base of synthetic ester oils, natural hydrocarbons and polyalphaolefines. R 34 K is equipped with an additive package for high ageing and oxidation stability as well as corrosion resistance, which ensures for-life lubrication. Due to its high pressure absorption capacity R 34 K may be used to lubricate miniature ball bearings.

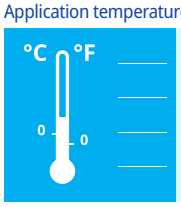
Application:

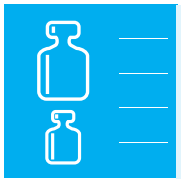
R 34 K may be used for all metal/metal precision bearings (steel, aluminum, non-ferrous heavy metals, etc.), such as sliding and porous bearings in meters, recording devices, synchronous motors, clock movements and instruments.

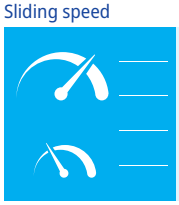


Product

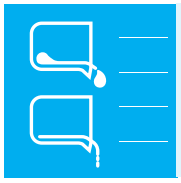

Bearing material


Application temperature


Bearing load


Sliding speed


Durability


Viscosity


Wetting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