

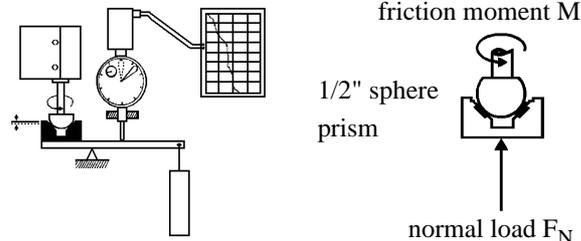
# Product Specifications

## Laboratory Data:

<b>Unworked Penetration</b>	225 - 275 mm/10
<b>Worked Penetration</b>	215 - 265 mm/10
<b>NLGI Class</b>	3
<b>Consistency</b>	medium
<b>Color</b>	yellow/white
<b>Dropping Point</b>	180°C [356°F]
<b>Oil Separation (FTMS)</b>	-5 %
48 hrs/85°C [185°F]	
<b>Permanent Low Temperature</b>	-20°C
<b>Base Oil (72 hrs fluid)</b>	[-4°F]
<b>Application Temperature</b>	-10°C to 80°C [14°F to 176°F]
<b>Base Oil</b>	synthetic oil on ester base (free of silicones)
<b>Viscosity Base Oil</b>	150 mm <sup>2</sup> /s
20°C [68°F]	
<b>Thickener</b>	metallic soaps, anti-separation-gel, micro PTFE particles
<b>Durability</b>	very good
<b>Drop Stability</b>	very good
<b>Corrosion Resistance</b>	brass: very good steel: very good
<b>Compatibility with Plastics</b>	on request

## Tribological Data:

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

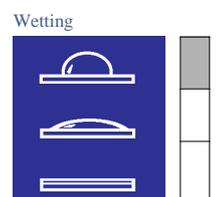
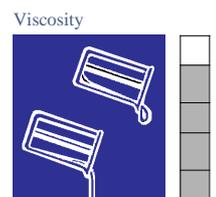
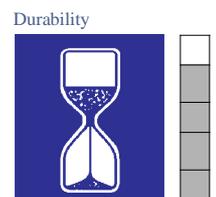
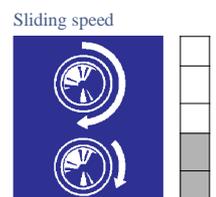
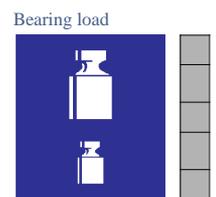
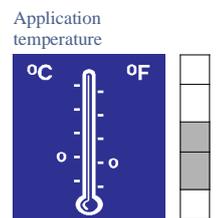
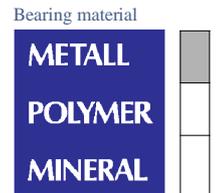
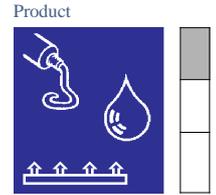


Friction Behavior					
dependent on sliding speed					
v (mm/s)	f	friction coefficient f			
		0.1	0.2	0.3	0.4
0	0.08	█			
20	0.06	█			
50	0.04	█			
200	0.04	█			

materials: steel/brass, load 3N, 25°C [77°F]  
lubricant: Clock-Grease 859-8 + PTFE

Wear Behavior						
comparison: dry and lubricated with Clock-Grease 859-8 + PTFE						
materials		wear (in mm)				
		0.01	0.03	0.1	0.3	1.0
St/brass:	CL-Gr.	█				
	dry	█	█	█	█	█
St/st:	CL-Gr.	█				
	dry	█	█	█	█	█

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



## Comments:

Clock-Grease 859-8 + PTFE has been developed especially for precision bearings out of metals. It contains a fully synthetic base oil with high load carrying capacity and excellent aging stability. A special thickener combination out of metallic soaps, anti-separation-gel and micro PTFE particles guarantees high adhesion, an optimized oil separation behavior and a strong reduction of stick-slip effects. Very low friction coefficients.

Clock-Grease 859-8 + PTFE is free of silicones. If applied with plastics please test their compatibility or request results.

F1364

## Application:

For metal bearings in clock movements, counters, alarm clocks, helical gear trains, measuring devices, precision gears, mainsprings, plotters, printers. For all brass/steel bearings from 0.1 to 10 mm diameter (0.004 to 3/8 inches). For barrels, clicks, guidances, etc.

