

SPECIFICATIONS

PROPERTY	ASTM TEST METHOD	UNITS OF MEASURE	VALUE	
			Metric	English
Tensile Strength to break at 73° F	D 1457	MPa (PSI)	13.7	(2,000)
Elongation to break at 73° F	D 1457	%	168	(168)
Specific Gravity at 73° F	D 792	-	3.1	(3.1)
Deformation under load (73° F, 2000 PSI, 24 hrs.)	Refer to Deformation Graph			
Flexural Strength	D 790	Mpa (PSI)	96.5 (14,000)	
Water Absorption	D 570	%	0	(0)
Coefficient of Linear Thermal Expansion	D 696	m / m °C (in / in / °F)	10.8 x 10 ⁻⁵	(6 x 10 ⁻⁵)
Working Temperature Range		°C (°F)	-218 +260	(-360 +500)
Limiting PV		MPa-m/min (PSI-FPM)	53	(25,000)
Colour			Blue / Grey	

CHARACTERISTICS

CHARACTERISTICS	DESCRIPTION UNITS	VALUES
1. Coefficient of Friction		
(a) Trace Lubrication	Static	0.073
	Dynamic	0.068
(b) Flooded Lubrication	Static	0.062
	Dynamic	0.059
2. Allowable Bearing Pressure	kgf / cm ²	up to 115
3. Self Lubricity	Yes	
4. Min. Sliding Speed without Stick-slip	mm / min	0.01
5. Vibration Damping Property	Yes	
6. Machinability of Material	Can be milled or ground or scraped	
7. Mating Surface Requirements	Hardness (BHN), Surface Roughness (mm)	180 - 220, Ra < 0.6
8. Availability of the Material	Thickness (mm)	0.8,1.0,1.6,2.5,3.2 and 4.0
9. Shelf Life	No Limit	
10. Engineering Costs	Extremely Low	

Operating conditions for LUBRING Slideway gibs and other sliding applications	
PV factor	up to 1.7 N/mm ² x m/s
Specified Load	up to 20 N/mm ²
Sliding Speed	up to 2 m/s
Operating Temperature	from -260° to +260° C



LUBRING SLIDEWAY - Design Parameters and Technical Data

Fig. 1 : Friction as Function of Unit Load
 Lubrication Friction : Velocity 2 m/min (6.6 ft/min)
 Materials : LUBRING (Scraped)
 Cast Iron (Scraped)

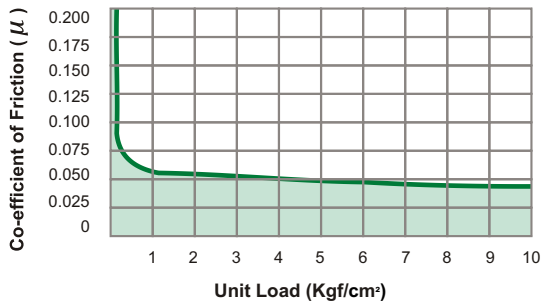


Fig. 2 : Friction as Function of Velocity
 Dry Friction : Loading 3.5 kgf/cm² (50 PSI)
 Materials : LUBRING (Fresh)
 Cast Iron G.S. 55, 264 HB (Ra = 0.47) (19 CLA)

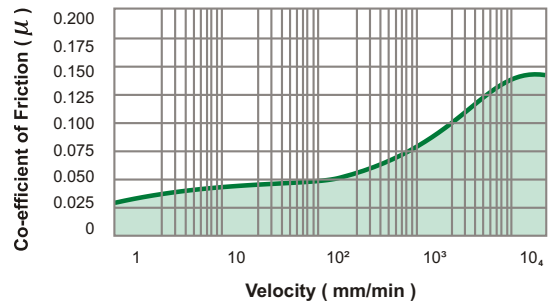


Fig. 3 : Friction as Function of Velocity after 0 Km
 Travel : Lubricated with Oil 50 E
 Materials : LUBRING (Scraped)
 Cast Iron G26, (Ra = 0.8) (32 CLA)

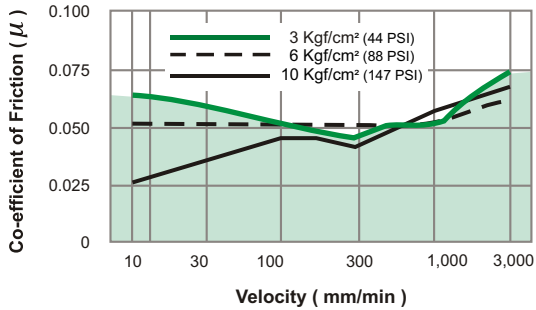


Fig. 4 : Friction as Function of Velocity after 40 Km
 Travel : Lubricated with Oil 50 E
 Materials : LUBRING (Scraped)
 Cast Iron G26, (Ra = 0.8) (32 CLA)

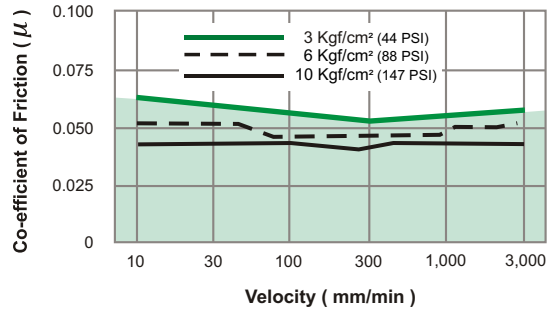


Fig. 5 : Wear as Function of Travel
 Lubricated Friction : Loading 6 Kgf/cm² (88 PSI)
 Materials : LUBRING (Scraped)
 Cast Iron G26, (Ra = 0.8) (32 CLA)

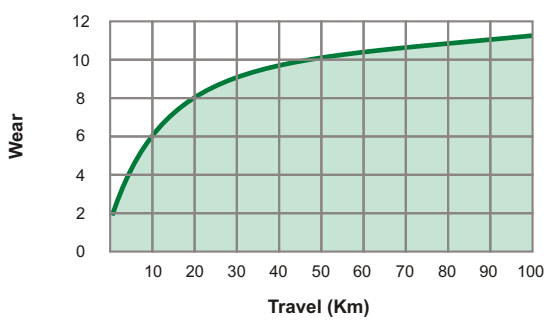


Fig. 6 : Wear as Function of Travel
 Dry Friction : Loading 20 Kgf/cm² (293 PSI)
 Materials : LUBRING Steel C 60 (Ra = 0.8)
 Cast Iron G26, (Ra = 0.8) (32 CLA)

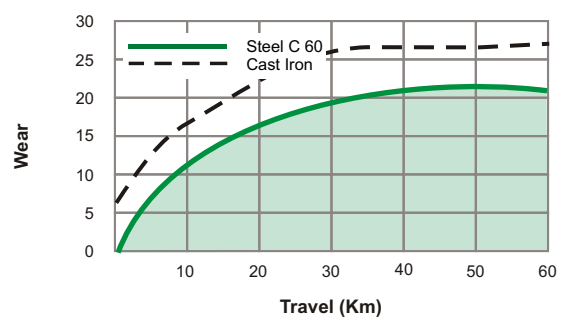


Fig. 7 : Deformation under load (Mpa)

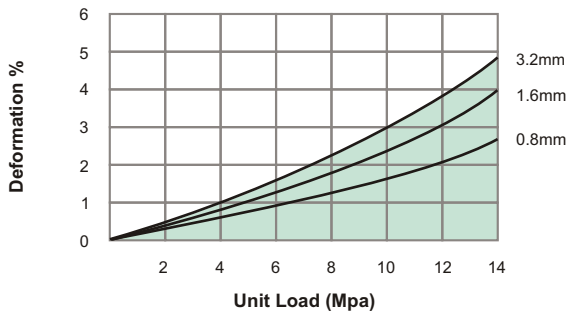
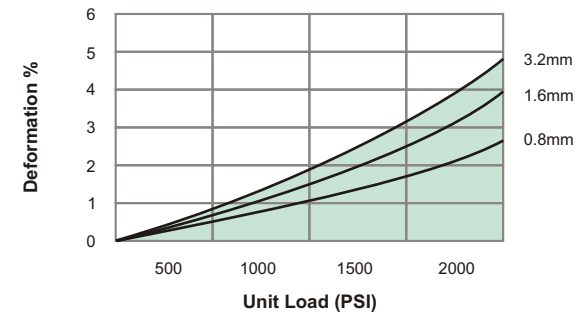


Fig. 8 : Deformation under load (PSI)



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