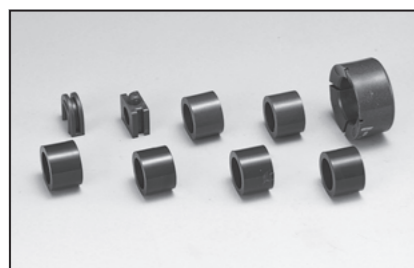


Oiles 88 Oil-impregnated polyester bearings



Feature

- Serviceable without the need for lubrication.
- Features low coefficient of friction and superior impact resistance.
- Features superior vibration-proof and soundproof characteristics.
- Injection-molded and can be made in complicated shapes. Has good mass productivity.

Service range	88-02	88-71
Lubrication condition	Dry	
Service temperature range °C	-40~+140	-40~+140
Allowable max. pressure P N/mm ² {kgf/cm ² }	14.5 {148}	17.5 {179}
Allowable max. velocity V m/s {m/min}	0.85 {51}	0.85 {51}
Allowable max. PV value N/mm ² · m/s {kgf/cm ² · m/min}	2.45 {1,500}	2.45 {1,500}

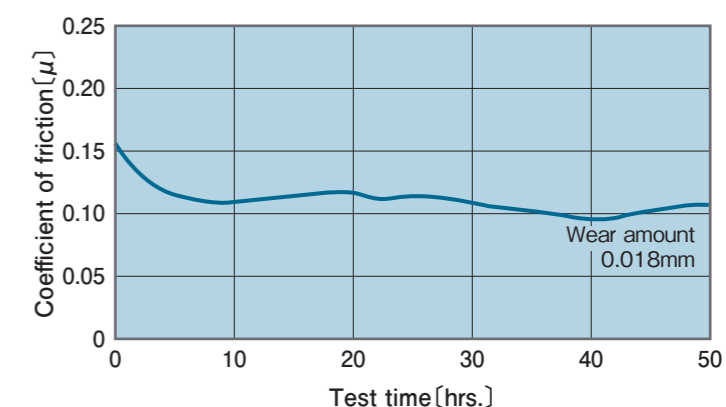
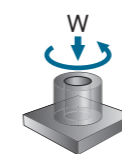
Mechanical properties			88-02	88-71	
Specific gravity	ASTM D 792	—	1.35	1.20	
Tensile strength	ASTM D 638	N/mm ² {kgf/cm ² }	37.3 {380}	55.4 {565}	
Tensile elongation at break	ASTM D 638	%	30	30	
Flexural property	ASTM D 790	N/mm ² {kgf/cm ² }	57.8 {590}	79.9 {815}	
Flexural modulus	ASTM D 790	N/mm ² {kgf/cm ² }	1,760 {18,000}	2,160 {22,000}	
Compressive stress	ASTM D 695	N/mm ² {kgf/cm ² }	1% deformation	13.7 {140}	22.1 {225}
			10% deformation	49.0 {500}	86.8 {885}
Hardness	ASTM D 785	HRM	52	80	
Izod impact strength (with notch)	ASTM D 256	J/m {kgfcm/cm}	49.0 {5.0}	118 {12.0}	
Co-efficient of linear expansion	ASTM D 696	×10 ⁻⁵ °C ⁻¹	6~12	6	
Deflection temperature under load 1.82 MPa	ASTM D 648	°C	56	—	
Melting point	DSC	°C	224	220	
UL incombustibility	UL94	File No.E78113	HB	—	

※The values shown above are typical values, not the standard values.

88-02 Test data

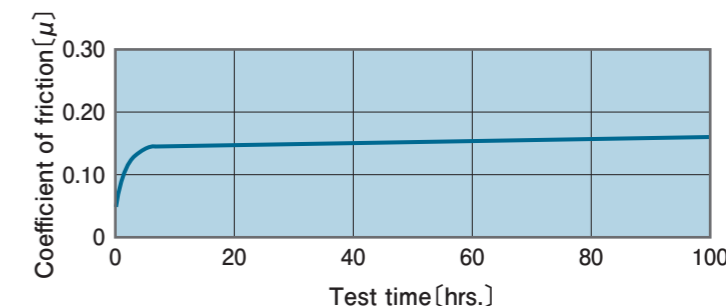
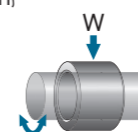
Thrust test

<Testing conditions>
 Mating material : S45C (surface roughness Rz3μm)
 Pressure : 5.88N/mm² {60.0kgf/cm²}
 Velocity : 0.083m/s {5.0m/min}
 Test time : 50hrs.
 Lubrication : dry

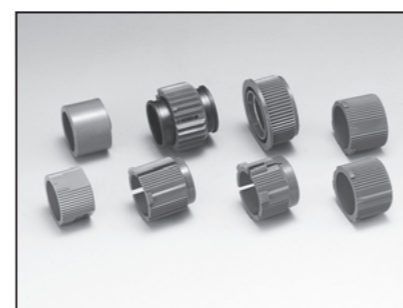


Journal oscillation test

<Testing conditions>
 Mating material : FCD500 (surface roughness Rz1.5μm)
 Pressure : 14.7N/mm² {150.0kgf/cm²}
 Velocity : 0.028m/s {1.67m/min}
 Oscillating cycle : 60cpm
 Oscillating angle : ±20°
 Test time : 100hrs.
 Lubrication : grease is applied at assembly



Oiles 88 Elastomer Polyester elastomer



Feature

- Among thermo-plastic elastomer, the Oiles 88 elastomer features superior high temperature characteristics and is applicable to wide temperature range from low to high temperatures.
- Has superior wear resistance. Demonstrates outstanding resistance against abrasive wear caused by dust and coarse mating surface, in particular.
- Has rubber elasticity and flexibility, superior impact resistance, and large noise suppressing and vibration-proof effects.
- Features superior oil resistance, chemical resistance and aging resistance among elastomer type flexible plastic.

Mechanical properties 88-91

Specific gravity	ASTM D 792	—	1.22
Tensile strength	ASTM D 638	N/mm ² {kgf/cm ² }	33.3 {340}
Tensile elongation at break	ASTM D 638	%	400
Tear strength	ASTM D 6301	N/mm ² {kgf/cm ² }	15.7 {160}
Hardness	ASTM D 2240	Shore D	57
VICAT softening point	ASTM D 1525	°C	190
Melting point	DSC	°C	212