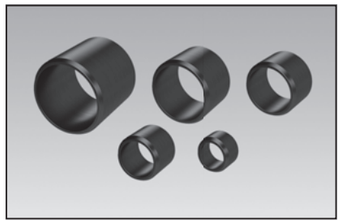
Oiles Glitron SF Polyphenylene sulfite bearings with fillers



RoHS2 ELV

Bearings with superior heat resistance, chemical resistance, and serviceable in high-speed conditions

Feature

- It has superior chemical resistance and can be used in environments where disinfection is performed. (It is also resistant to disinfection with sodium hypochlorite.)
- It can be used in the temperature range up to 200˚C.
- Injection-molded and can be made in complicated shapes. Has good mass productivity.
- It conforms to the positive list system of the food sanitation act in Japan.
- It conforms to the positive list system of the food and drug administration (FDA) in United states.

Service range

Lubrication condition	Dry
Service temperature range ℃	−60～+200
Allowable max. pressure P N/mm² {kgf/cm²}	20 {204}
Allowable max. velocity V m/s {m/min}	2.5 {150}
Allowable max. PV value N/mm² · m/s {kgf/cm² · m/min}	0.36 {220}

Mechanical properties

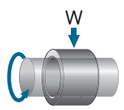
Specific gravity	ASTM D 792	g/cm³	1.5	Izod impact strength	ASTM D 256	J/m	15.9
Tensile strength	ASTM D 638	N/mm²	49.6	Hardness	ASTM D 785	HRR	114
Tensile elongation at break	ASTM D 638	%	2.6	Co-efficient of linear expansion	ASTM D 696	×10⁻⁵ ℃⁻¹	7
Flexural property	ASTM D 790	N/mm²	77.4	Melting point	——	℃	279
Flexural modulus	ASTM D 790	N/mm²	3,379				

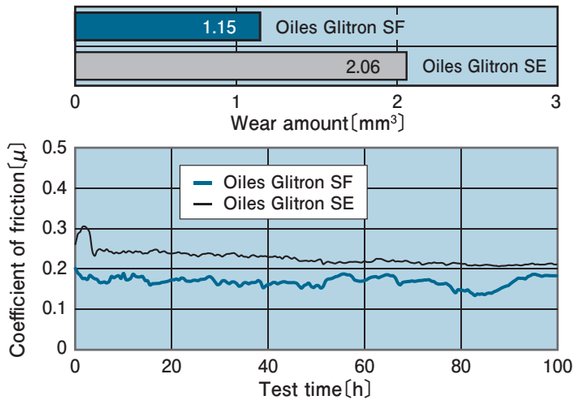
※The values shown above are typical values, not the standard values.

Test data

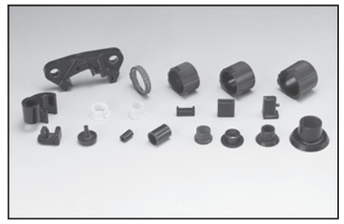
Journal rotation test

<Testing conditions>
Meting material : SUJ2
Environment : In atmospheric air
Pressure : 0.98N/mm²
Velocity : 0.33m/s
Test time : 100h
Lubrication : dry





Oiles 50 Polyurethane bearings



RoHS2 ELV

Feature

- 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 vibration-proof and noise suppressing effects.
- Has superior cold resistance, weather resistance and ozone resistance.
- Injection-molded and can be made in complicated shapes.

OILES 50 P1000 series (Adipate Type Polyurethane Elastomer)

Mechanical properties			P1085	P1090	P1095	P1098
Specific gravity	JIS K 7311	——	1.21	1.22	1.22	1.23
Tensile strength	JIS K 7311	N/mm² {kgf/cm²}	43.1 {440}	43.1 {440}	45.1 {460}	45.1 {460}
Tensile elongtion at break	JIS K 7311	%	610	600	550	550
Tear strength	JIS K 7311	N/mm {kgf/cm}	113 {115}	127 {130}	147 {150}	157 {160}
VICAT softening point	JIS K 7206	℃	110	118	122	125
Hardness (Note)			85 (HDA)	90 (HDA)	95 (HDA)/46 (HDD)	98 (HDA)/53 (HDD)
Heat resistant temp.			80℃			
Characteristics			Light load, Impact resistance			

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

OILES 50 P5000 series (Caprolactone Type Polyurethane Elastomer)

Mechanical properties			P5085	P5090	P5095	P5098
Specific gravity	JIS K 7311	——	1.17	1.18	1.18	1.19
Tensile strength	JIS K 7311	N/mm² {kgf/cm²}	44.1 {450}	46.1 {470}	47.1 {480}	49.0 {500}
Tensile elongtion at break	JIS K 7311	%	550	500	500	500
Tear strength	JIS K 7311	N/mm {kgf/cm}	118 {120}	137 {140}	147 {150}	157 {160}
VICAT softening point	JIS K 7206	℃	116	130	131	141
Hardness (Note)			85 (HDA)	90 (HDA)	95 (HDA)/46 (HDD)	98 (HDA)/53 (HDD)
Heat resistant temp.			80℃			
Characteristics			Light to mid load, Water resistance, Heat resistance			

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

OILES 50 P5000D series (Caprolactone Type Polyurethane Elastomer)

Mechanical properties			P5059D	P5064D	P5068D	P5074D
Specific gravity	JIS K 7311	——	1.20	1.21	1.23	1.23
Tensile strength	JIS K 7311	N/mm² {kgf/cm²}	49.0 {500}	51.0 {520}	52.0 {530}	52.0 {530}
Tensile elongtion at break	JIS K 7311	%	450	400	350	350
Tear strength	JIS K 7311	N/mm {kgf/cm}	177 {181}	206 {210}	235 {240}	275 {281}
VICAT softening point	JIS K 7206	℃	143	145	147	151
Hardness (Note)			59 (HDD)	64 (HDD)	68 (HDD)	74 (HDD)
Heat resistant temp.			100℃			
Characteristics			Heavy load, Water resistance, Heat resistance			

※The values shown above are typical values, not the standard values.
(Note) hardness : JIS K 7215durometer hardness
HDA-type A durometer hardness
HDD-type D durometer hardness