

# Oiles 50 Polyurethane bearings



## 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.

Types of Oiles 50						
Series	Type	Kind	Hardness (Note)		Heat resistant temp.	Characteristics
			HDA	HDD		
<b>P1000</b>	Adipate Type Polyurethane Elastomer	<b>P1085</b>	85	—	80°C	<ul style="list-style-type: none"> <li>• Light load</li> <li>• Impact resistance</li> </ul>
		<b>P1090</b>	90	—		
		<b>P1095</b>	95	46		
		<b>P1098</b>	98	53		
<b>P5000</b>	Caprolactone Type	<b>P5085</b>	85	—	80°C	<ul style="list-style-type: none"> <li>• Light to mid load</li> <li>• Water resistance</li> <li>• Heat resistance</li> </ul>
		<b>P5090</b>	90	—		
		<b>P5095</b>	95	46		
		<b>P5098</b>	98	53		
<b>P5000D</b>	Polyurethane Elastomer	<b>P5059D</b>	—	59	100°C	<ul style="list-style-type: none"> <li>• Heavy load</li> <li>• Water resistance</li> <li>• Heat resistance</li> </ul>
		<b>P5064D</b>	—	64		
		<b>P5068D</b>	—	68		
		<b>P5074D</b>	—	74		

(Note) hardness : JIS K 7215 durometer hardness  
 HDA-type A durometer hardness  
 HDD-type D durometer hardness

## OILES 50 P1000 series

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/mm <sup>2</sup> {kgf/cm <sup>2</sup> }	43.1 {440}	43.1 {440}	45.1 {460}	45.1 {460}
Tensile elongation 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	°C	110	118	122	125

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

## OILES 50 P5000 series

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/mm <sup>2</sup> {kgf/cm <sup>2</sup> }	44.1 {450}	46.1 {470}	47.1 {480}	49.0 {500}
Tensile elongation 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	°C	116	130	131	141

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

## OILES 50 P5000D series

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/mm <sup>2</sup> {kgf/cm <sup>2</sup> }	49.0 {500}	51.0 {520}	52.0 {530}	52.0 {530}
Tensile elongation 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	°C	143	145	147	151

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