

<b>POM &amp; PA Material</b>	Descriptions	POM(Polyoxymethylene) can be used in temperatures ranging from -60℃ to +100℃. The high surface strength is only surpassed by a few materials. POM shows good sliding properties and high resistance to wear and tear because of the high strength and smooth surface. There is a very low risk of stress cracks. POM exhibits a high thermal stability and a high resistance to chemicals (high resistance to hydrolysis).	
	Structure	Rings	POM、 PA
		Retainer	PA66、 POM
		Rolling elements	Glass ball; Steel Ball;ZrO2、 440C、 304
Temperature	from -60℃ to +100℃		
<b>PTFE Material</b>	Descriptions	Very corrosion resistant plastic bearing materials including PTFE and PVDF, including PTFE is all known engineering plastic in corrosion resistance the best, can be used for all the strong acid and strong alkali occasions, including HF, fuming sulfuric acid (more than 98%) and concentrated nitric acid, etc. Relative PTFE, PVDF have better mechanical properties and high temperature properties, can be in 150 ℃ under normal use.	
	Structure	Rings	PTFE
		Retainer	PTFE
		Rolling elements	Glass ball; Steel Ball;ZrO2; Si3N4; SiC
Temperature	the highest can get 150 ℃		
<b>PEEK &amp; PI Material</b>	Descriptions	PEEK and PI as the new engineering plastics materials, was proved to be all known engineering plastic in mechanical strength size stability and high temperature resistant performance of the best, of which PEEK the long-term use of temperature up to 260 ℃, PI long-term use of temperature is up to 300 ℃, and it has excellent corrosion resistance, medium strength in acid and alkali corrosion environment can still run freely. Compared with other plastics PEEK and PI have high strength and stiffness, excellent toughness (also is suitable for low temperature conditions), high temperature resistant performance, high temperature dimensional stability, etc.	
	Structure	Rings	PTTEK;PI
		Retainer	PTFE;PEEK;PI
		Rolling elements	Glass ball; Steel Ball; ZrO2; Si3N4; SiC
Temperature	The highest can get 260 ℃		
<b>PP;HDPE;UPE Material</b>	Descriptions	Acid and alkali resistant plastic bearing HDPE, PP, UPE materials in addition to have general plastic bearing the oil less self-lubrication, no magnetic and insulation, such as performance, also have good resistance to acid and alkali performance. But this plastic mechanical strength is low, easy to deformation, therefore, this kind of resistance to acid and alkali plastic bearing does not apply to large load and high speed. In comparison, UPE material has better strength, low friction properties and low temperature application characteristics (lowest to - 150 ℃), USES the most widely.	
	Structure	Rings	HDPE;PP;UPE
		Retainer	HDPE;PP;UPE
		Rolling elements	Glass ball; Steel Ball; ZrO2; Si3N4; SiC
Temperature	The lowest can get -150 ℃		

Performance	<ul style="list-style-type: none"><li>•high tensile strength and rigidity &amp; with great mechanical performance</li><li>•Self-Lubrication(no need grease and oil)</li><li>•low density (light weight)</li><li>•good heat resistance and thermal stability</li><li>•high corrosion resistance (acid/alkali/salt/solvent/oil/gas/and sea water corrosion environment)</li><li>.insulating properties (Non-Electrical Conductive; electricity leakage) Can be used as high insulating medium</li></ul>
Applications	Gear wheels, parts for pumps, screws, parts for the textile industry; The microelectronics industry, chemical, electroplating, pickling, semiconductor, piston rings, valve seats, gears, seals, aviation, plug connectors, wafer carriers. Pumps, Food Machinery; household appliances