

## Material Composition for P140KH-F20

Sub-component	Material	% of Total Mass	Substance Name	CAS #	Substance Mass (grams)	Special Classification			
Shaft	Polycarbonate PAO lubricant	16.38% 0.078%	Polycarbonate resin	25971-63-5	0.4180				
			Polyisobutylene	9003-27-4	1.40E-04				
			PAO	68037-01-4	0.0018				
			Fumed silica	68611-44-9	1.00E-04				
Element	Phenolic laminate Conductive plastic	6.57% 0.062%	Cellulose	65996-61-4	0.0754				
			Phenolic resin	9003-35-4	0.0922				
			Carbon black	1333-86-4	1.76E-04				
			Graphite	14807-96-6	1.76E-04				
	Silver conductor	0.096%	Phenolic resin	9003-35-4	0.0012				
			Phenolic resin	9003-35-4	3.81E-04				
			Phenolic resin	9039-25-2	1.23E-04				
			Silver	7440-22-4	0.0018				
	White oil	0.066%	Glass powder	65997-17-3	1.76E-05				
			Graphite	7782-42-5	1.13E-04				
			Molybdeum disulfide	1317-33-5	6.00E-05				
			Epoxy resin	25085-99-8	8.82E-04	Bisphenol-A resin			
			Barium sulfate talc	7727-43-7	2.65E-04	Barium compound			
			Titanium sulfate	13463-67-7	5.29E-04				
			Terminal	Steel	1.19%	C	7440-44-0	6.06E-05	
						Mn	7439-96-5	6.06E-05	
P	7723-14-0	1.21E-05							
S	7704-34-9	1.21E-05							
Si	7440-21-3	9.08E-05							
Al	7429-90-5	1.33E-05							
Fe	7439-89-6	0.0300							
Tin	0.024%	Sn	7440-31-5	6.18E-04					
Slider	Nickel-Silver alloy	2.66%	Cu	7440-50-8	0.0373				
			Zn	7440-66-6	0.0178				
			Ni	7440-02-0	0.0122				
			Mn	7439-96-5	3.39E-04				
			Fe	7439-89-6	1.36E-04				
Frame	Steel	56.06%	C	231-153-3	0.0029				
			Mn	231-105-1	0.0029				
			P	231-768-7	5.72E-04				
			S	231-722-6	5.72E-04				
			Si	231-130-8	0.0043				
			Al	231-072-3	6.30E-04				
			Fe	231-096-4	1.4190				
			Sn	7440-31-5	0.0292				
	Tin plating	1.14%							
Base	PBT plastic	8.12%	Polybutylene Terephthalate	30965-26-5	0.0725				
			Brominated epoxy resin	68928-70-1	0.0518	Bisphenol-A resin			
			Antimony oxide	1309-64-4	0.0207	Antimony oxide fire retardant			
			Glass wool	65997-17-3	0.0621				
Spring plate	Phosphor bronze	7.52%	Cu	7440-50-8	0.0576				
			P	7723-14-0	0.1248				
			Ag	7440-22-4	0.0096				
Conducting oil	PAO lubricant	0.039%	Polyisobutylene	9003-27-4	1.80E-04				
			PAO	68037-01-4	8.00E-04				
			Fumed silica	68611-44-9	2.00E-05				
<b>Total mass</b>					<b>2.5522</b>	<b>grams</b>			