

CHETAK ENAMELLED COPPER WIRES



Product Summary Guide

Product	Chetak MP34	Chetak MP3	Chetak PEI8	Chetak DC13P	Chetak DC13	Chetak AI26	
Characteristics	Polyester Wires	Polyester Wires for elevated temp.	Hermetic Wires for high temp. resistance	Dual Coat Wires for high temp. resistance & better adhesion	Dual Coat Wires for better Temp Index & thermal properties	C Class Wires for higher temp resistance	
Temp. Index °C	155	175	200	210	220	>220	
Thermal Class °C	130	155	180	200	200	220	
Insulation	Base Coat	Polyester	Theic Polyester	Theic Polyester	Theic Polyesterimide	Polyamide Imide	
	Top Coat	-	-	-	Polyamide Imide	Polyamide Imide	
Standards	IS	13730-34	13730-3	13730-8	13730-13	13730-13	13730-26
	IEC	60317-34	60317-3	60317-8	60317-13	60317-13	60317-26
Production Range mm / SWG	4.0 ~ 0.06 / SWG 8 ~ 46	4.0 ~ 0.06 / SWG 8 ~ 46	4.0 ~ 0.06 / SWG 8 ~ 46	4.0 ~ 0.06 / SWG 8 ~ 46	4.0 ~ 0.06 / SWG 8 ~ 46	2.0 ~ 0.06 / SWG 14 ~ 46	
Comparison of Technical Properties (Note: Ranking Scale: 1 - Excellent >>> 3 - Very Good >>> 5 - Fair)							
Thermal:							
Heat Shock	155 °C	180 °C	210 °C	220 °C	230 °C	260 °C	
Cut Through	> 260 °C	> 260 °C	> 310 °C	> 330 °C	> 330 °C	> 350 °C	
Burn Out Time	5	5	3	4	2	1	
Mechanical:							
Flexibility	3	2	3	2	3	2	
Adherence	3	2	3	1	3	2	
Peel	1	2	3	3	3	4	
Resistance to Abrasion	5	5	4	2	3	1	
Windability	5	4	4	3	2	1	
Chemical:							
Solvent Crazing	4	4	4	2	2	1	
Resistance to Styrene	4	4	4	2	2	1	
Resistance to Transformer Oil	5	5	3	3	2	1	
Resistance to Refrigerants	5	5	3	3	2	1	
Special Characteristics	Economical with balanced electrical & mechanical properties	Good thermal, mechanical & dielectric properties with high adhesion to copper	Good hermetic & burn-out resistance, good thermal & mechanical properties with high resistance to thermal overloads	Excellent mechanical properties with high adhesion to copper, very good thermal & chemical resistance	Excellent hermetic & burn-out resistance, improved thermal properties, high speed windability	Excellent hermetic resistance, excellent thermal & mechanical properties, high speed windability	
Application	Equipments upto Class B, all general purpose rotating & static electrical / electronic equipments	Equipments upto Class F, all general purpose rotating & static electrical / electronic equipments	Equipments upto Class H, Hermetic/FHP motors, chokes, ignition coils, hand tools, transformers, relays, generators, etc.	Equipments upto Class H+, Hermetic/FHP motors, chokes, transformers, generators, relays, hand tools, ignition coils, etc.	Equipments upto Class H+, Hermetic & FHP motors, chokes, transformers, generators, relays, hand tools, coils, etc.	Equipments upto Class C, special Hermetic/FHP motors, coils, transformers, generators, relays, hand tools, etc.	
Winding Applications	windings on manual or medium speed automatic winding machines	windings on manual or medium speed automatic winding machines	windings on manual or automatic winding machines, windings experiencing severe heat overloads	severe winding conditions, unusual shapes, high mechanical stresses, windings for the automotive industry	windings on high speed automatic winding machines, windings experiencing severe heat overloads & mechanical or chemical stress	windings on high speed automatic winding machines, windings experiencing very harsh mechanical, chemical and thermal conditions	



SOLDERABLE & BONDABLE WIRES

Product	Chetak SS20	Chetak SS23	Chetak SB35	Chetak SB37	Chetak SB38	Chetak SB220
Characteristics	Self Solderable Wires	High Temp. Solderable Wires	Solderable & Bondable Wires	High temp. Bondable Wires	Triple Coated, High temp. Bondable Wires	High temp. Bondable Wires
Temp. Index °C	170	200	170	200	220	>220
Thermal Class °C	155	180	155	180	200	220
Insulation						
Base Coat	Polyurethane	Polyesterimide	Polyurethane	Theic Polyesterimide	Theic Polyesterimide	Polyamide Imide
Top Coat	-	-	-	-	Polyamide Imide	-
Bondable Coat	-	-	Epoxy	Epoxy	Epoxy	Epoxy
Standards						
IS	13730-20	13730-23	13730-35	13730-37	13730-38	-
IEC	60317-20	60317-23	60317-35	60317-37	60317-38	-
Production Range mm / SWG	0.90 ~ 0.06 / SWG 20 ~ 46	1.20 ~ 0.06 / SWG 18 ~ 46	1.00 ~ 0.06 / SWG 19 ~ 46	1.20 ~ 0.06 / SWG 18 ~ 46	1.40 ~ 0.06 / SWG 17 ~ 46	0.80 ~ 0.06 / SWG 21 ~ 46
Technical Properties:						
Flexibility & Adherence	Good	Good	Good	Very Good	Very Good	Excellent
Resistance to Abrasion	Fair	Good	Fair	Very Good	Very Good	Excellent
Heat Shock	175 °C	200 °C	175 °C	200 °C	220 °C	240 °C
Cut Through	220 °C	240 °C	220 °C	300 °C	320 °C	340 °C
Solderable Temperature	390 °C	425 °C	390 °C	-	-	-
Application	Class F motors, electrical & electronic equipments such as small power motors, relays, transformers, magnet coils, telecommunications equipment, etc.	Class H motors, electrical & electronic equipments such as power motors, hand tools, relays, transformers, magnet coils, telecommunications equipment, etc.	Class F shaped/unsupported/coreless coils - TV yoke coils, voice & deflection coils, solenoids, relays, inductors, fhp motors, fan motors, etc.	Class H shaped/unsupported/coreless coils - yoke, voice & deflection coils, solenoids, relays, inductors, fhp & hermetic motors, stators, etc.	Class 200 shaped/unsupported/coreless coils - yoke, voice & deflection coils, solenoids, relays, inductors, fhp & hermetic motors, stators, etc.	Class 220 shaped/unsupported/coreless coils - yoke, voice & deflection coils, solenoids, relays, inductors, fhp & hermetic motors, stators, etc.



Nylon coated and any special wires can be manufactured as per requirements. Chetak Wires are compatible with "cenvar" range of Varnishes & Impregnating Resins www.cenvar.com