



ENAMELLED COPPER WIRES

Description	Insulating Enamel		Temperature index acc. to IEC	Standards*	Production range [mm]	
	Base enamel	Overcoat			Grade 1,2**	
E 120	Modified Polyvinylacetal	-	120	IEC 317 - 1 IEC 317 - 12 NEMA MW 15 - C	0.70÷4.50	Very good mechanical properties. Motors and windings of thermal class E. Oil immersed transformers. Winding subject to mechanical stresses.
FL 155	Modified Polyurethane	-	155	IEC 317 - 20 NEMA MW 79 - C ZALOM 155 SC UL No: E 129934	0.02÷2.00	Very good solderability and high thermal properties. Used in small transformers, relays, solenoids, small motors, clock coils, instruments.
FLN 155	Modified Polyurethane	Polyamide	155	IEC 317 - 21 NEMA MW 80 - C ZALOM 155 NSC UL No: E 129934	0.03÷2.00	Very good solderability and very good windability. Suitable for use with the automatic high-speed winding machines.
HL 180	Modified Polyurethane	-	180	IEC 317 - 51 NEMA MW 79 - C	0.02÷1.60	Good solderability and improved thermal properties. Used for automotive coils as relays and ignition coils, in transformers and in solenoids.
HLN 180	Modified Polyurethane	Polyamide	180	IEC 317 - 51 NEMA MW 80 - C ZALOM 180 NAP UL No: E 129934	0.03÷1.60	Good solderability, elevated thermal properties, and very good windability. Suitable for use with the automatic high speed winding machines.
H 180	Polyesterimide THEIC modified	-	180	IEC 317 - 8 NEMAMW74-C;30-C; ZALOM 180 HB UL No: E 129934	0.05÷2,00	High thermal properties and good chemical resistance. Used for the motors for household appliances, hermetic motors, dry and oil filled transformers.
CX 200 C 200	Modified Polyester or Polyesterimide	Amideimide	200	IEC 317 - 13 NEMA MW 35 - C ZALOM 200 DP UL No: E 129934	0.15÷4.00*	Very high thermal properties and high mechanical and chemical resistance. Used in motors and transformers, ballasts and hermetic motors. *Larger diameters are available when agreed.
C 220	Polyamideimide	-	220	IEC 317 - 26 NEMA MW 81 - C	0.15÷3.00	Extraordinary thermal, mechanical and chemical resistance. Used in special motors, special relays, special transformers.
FLS 155	Polyurethane	Polyamide	155	IEC 317 - 35 NEMA MW 29 - C	0.03÷0.08 0.15÷1.40	Solderable, self bonded windings requiring no further impregnation. Used for self supporting coils.
HLS 155	Polyurethane	Polyamide	180	IEC 317-35	0.03÷0.08 0.15÷1.40	Solderable, self bonded windings requiring no further impregnation. Used in TV deflection coils.
HXS 180	Polyesterimide	Polyamide	180	IEC 317 - 37	0.15÷0.80	Self-bonded windings requiring no further impregnation, used for self-supporting coils.
CXS 200	Polyesterimide + Polyamideimide	Polyamide aliphatic	200	IEC 317 - 38 MW 102-C	0.15÷0.80	Heat resistant, heat bonding wire, consisting of a double coat base varnish and self bonded overcoat. Used in TV deflection coils.

*DIN EN 60 317...and BS EN 60 317...standards are equivalent to IEC 317.

** Grade 3 is available in the range 0,15-2,00 mm