PRODUCT TYPES, STANDARDS, PRECAUTIONS & APPLICATIONS



							WINDING WIRE
Туре	Enamel used	Temperature index	Standard (Cu)	Standard (AI)	Advantages	Operational Precautions	Applications
PVF/PVA	Polyvinylformal Enamelled wire Poly Vinyl Acetal	105°C 120°C	IEC 60317-12, MW 15- C, JIS-3202-2 IEC 60317-1		Mechanically strong coating and good flexibility. Good thermal shock resistance. Strong in hydrolytic degradation.	Crazing prone (Preheating prevents crazing from developing.)	1.Transformer
PEW	Polyester Enamelled wire Polyester Enamelled wire	130°C 155°C	IEC 60317-34 IEC 60317-3, NEMA- MW5C, JIS-3202	IEC 60317-9	Good electrical characteristics. Good heat resistance. Good solvent resistance.	Mediocre resistance to thermal shock. Poor resistance to hydrolytic degradation; care must be taken when used in sealed equipment.	General purpose motors Magnet coils
UEW	Polyurethane Enamelled wire	130°C	IEC 60317-4, MW 75-C				Coils for electronic equipment
UEW	Polyurethane Enamelled wire	155°C	IEC 60317-20, MW 79- C, JIS 3202	-	Soldering is possible without stripping off coating Excellent electrical characteristics with high	Coating is mechanically weak. Vulnerable to aromatic solvents. Crazing prone. (Preheating prevents crazing	2.Coils for communication equipment 3.Coils for electric meters 4.Micromotors
UEW	Polyurethane Enamelled wire	180°C	IEC 60317-51, MW 82- C JIS-3202		frequency.	from developing.)	5.Magnet coils
EIW	Polyesterimide Enamelled wire	180°C	IEC 60317-8, NEMA- MW30C NEMA-MW72- C,JIS-3202	IEC 60317-15	Good heat resistance. Good thermal shock resistance. Mechanically strong coating. Excellent resistance to hydrolytic degradation. Excellent resistance to refrigerants.	Film detachment is difficult.	1.Class-F motors 2.Freon motors 3.Microwave oven transformers 4.Magnet coils for heat- resistance components 5.Motors for electrical equipment
AIW	Polyamideimide Enamelled wire	220°C 240°C	IEC 60317-26, IEC 60317-57 MW 81-C, JIS-3202		Mechanically strong coating. Good heat resistance. Good overload characteristics.	Coating flexibility is slightly inferior to PEW.	1.Transformers for heat- resistance equipment 2.Motors for electric tools 3.Hermetic motors 4.Motors for electrical equipment
PUPEI	Solderable PEI wire	180°C	IEC 60317-23, MW 77- C, JIS-3202		Soldering is possible without stripping off coating Excellent electrical characteristics with high frequency.	Soldering temp is higher than normal solderable enamels	Switchgear industry Defence equipment
SB-EIW	PolyesterImide+Self bond wire	180°C	IEC 60317-36		Coils can be fixed without varnishing. Coil winding is possible while applying methanol and ethanol. Solder reflow after coil winding causes only slight coil deformation due to heat from reflow furnace. Coil winding is possible while applying methanol and ethanol.	Store wires in a cool, dark place away from heat and moisture.	1.Coils for flat motors 2.Clutch coils
SB-UEW	Polyurethane+Self bond wire	130°C	IEC 60317-2, MW 130-		Coils can be fixed without		
SB-UEW	Polyurethane+Self bond wire	155°C	IEC 60317-35, MW 131		varnishing. Coil winding is possible while applying methanol and ethanol Solder reflow after coil winding causes only slight coil deformation due to heat from	Store wires in a cool, dark place away from heat and moisture.	1.Coils for flat motors 2.Clutch coils
SB-UEW	Polyurethane+Self bond wire	180°C	IEC 60317-55		reflow furnace. Coil winding is possible while applying methanol and ethanol		
EIW-AIW	Polyestermide+Polyam ideimide	200°C, 220°C	IEC 60317-13, MW 35- C , MW 73-C MW 36- C, MW 38-C JIS-3202	IEC 60317-25, MW 35-A, MW 36-A MW 73-A	Good heat resistance. Good thermal shock resistance. Mechanically strong coating. Excellent resistance to hydrolytic degradation.Excellent resistance to refrigerants.	Film detachment is difficult.	1.Class-F motors 2.Freon motors 3.Microwave oven transformers 4.Magnet coils for heat- resistance components 5.Motors for electrical equipment
NY-UEW	Polyurethane+Nylon wire	130°C	IEC 60317-19, MW 28- C	MW 28-A	Good surface slip		Coils for electronic equipment
NY-UEW	Polyurethane+Nylon wire	155°C	IEC 60317-21, MW 80- C	MW 80-A		Poor resistance to hydrolytic degradation; care must be taken when used in sealed equipment.	Coils for communication equipment Coils for electric meters Micromotors
NY-UEW	Polyurethane+Nylon wire	180°C	MW 83-C		wire		5.Magnet coils
NY-EIW	PolyesterImide+ Nylon wire	180°C	IEC 60317-22		characteristics; suited for high- speed machine winding. Good	Poor resistance to hydrolytic degradation; care must be taken when used in sealed equipment.	General purpose motors Small motors
NY-PEW	Polyester+Nylon wire	155°C	MW 24-C	MW 24-A	Good surface slip characteristics; suited for high- speed machine winding. Good thermal shock resistance.	Poor resistance to hydrolytic degradation; care must be taken when used in sealed equipment.	1.General purpose motors 2.Small motors
NY-PEW	Polyester+Nylon wire	180°C	MW 76-C	MW 76-A	Similar advantages to PEW.		
SB- PUPEI	Solderable PEI+Self bond wire	180°C	IEC 60317-36		Coils can be fixed without varnishing. Coil winding is possible while applying methanol and ethanol.	Store wires in a cool, dark place away from heat and moisture.	1.Coils for flat motors 2.Clutch coils
NY- PUPEI	Solderable PEI+Nylon wire	180°C	MW 78-C		Good surface slip characteristics; suited for high- speed machine winding. Good thermal shock resistance. Similar advantages to PUPEI.	Poor resistance to hydrolytic degradation; care must be taken when used in sealed equipment.	1.Coils for flat motors 2.Clutch coils
SL-EIW- AIW	EIW+AIW+Self lubricating PAI	200°C, 220°C	IEC 60317-13, MW 35- C, MW 73-C JIS-3202	IEC 60317-25, MW 35-A, MW36-A MW 73-A, JIS-3202	Excellent surface slip characteristics and mechanical strength; suited for high space- factor motors. Similar advantages to EIW-AIW	Film detachment is difficult.	High space factor motor Freon motors Motors for electrical equipment
SB-EIW AIW	- EIW+AIW+Self bond wire	200°C	IEC 60317-38, MW 10 C	²⁻ MW 102-A	Coils can be fixed without varnishing. Wires can be bonded tightly together by heat produced with current flow or by heating in a thermostatic chamber Coil winding is possible while applying methanol and ethanol	moisture.	1.Coils