

**Annex C**  
**Cross Reference of NEMA and IEC Magnet Wire Specifications**  
**(Informative)**

Description Basecoat/Overcoat/Bond Overcoat	NEMA Standard Number	Thermal Class	Round Build (Bond Build)				Rectangular/Square Build			IEC Specifications	
			Single	Heavy (Type 1)	Triple (Type 2)	Quad (Type 3)	Single	Heavy (Double)	Quad	IEC No.	Thermal Class, if Different
Polyester	MW 5-C	155	X	X						60317-3	-
Polyvinyl acetal	MW 15-A	105	X	X	-	-	-	-	-	60317-14	-
Polyvinyl acetal	MW 15-C	105	X	X	X	X	-	-	-	60317-1	-
Polyimide	MW 16-C	240	X	X	X	X	-	-	-	60317-46	-
Polyvinyl acetal	MW 18-A	105	-	-	-	-	-	X	X	60317-67	-
Polyvinyl acetal	MW 18-C	105	-	-	-	-	-	X	X	60317-17	-
Polyvinyl acetal/self-bonding	MW 19-C	105	-	X	X	X	-	-	-	-	-
Polyimide	MW 20-C	240						X	X	60317-47	-
Polyester or polyesterimide/polyamide	MW 24-A	155	X	X	-	-	-	-	-	-	-
Polyester or polyesterimide/polyamide	MW 24-C	155	X	X	X	-	-	-	-	-	-
Polyurethane/polyamide	MW 28-A	130	X	X	-	-	-	-	-	-	-
Polyurethane/polyamide	MW 28-C	130	X	X	-	-	-	-	-	-	-
Polyester or polyesterimide	MW 30-C	180	X	X	X	-	-	-	-	60317-8	-
Paper covered (also 90°C)	MW 31-A	105	X	X	-	-	-	-	-	-	-
Paper covered (also 90°C)	MW 31-C	105	X	X	-	-	-	-	-	-	-
Paper covered (also 90°C)	MW 33-A	105	-	-	-	-	X	X	-	-	-
Paper covered (also 90°C)	MW 33-C	105	-	-	-	-	X	X	-	60317-27	-
Polyester or polyesterimide/polyamideimide	MW 35-A	220	X	X	-	-	-	-	-	60317-25	200
Polyester or polyesterimide/polyamideimide	MW 35-C	200	X	X	X	X	-	-	-	60317-13	-
Polyester or polyesterimide/polyamideimide	MW 36-A	220	-	-	-	-	-	X	X	60317-69	-
Polyester or polyesterimide/polyamideimide	MW 36-C	200	-	-	-	-	-	X	X	60317-29	-
Polyester or polyesterimide overcoated with polyamideimide	MW 37-C	220	X	X	X	-	-	-	-	-	-
Polyester or polyesterimide overcoated with polyamideimide	MW 38-C	220	-	-	-	-	-	X	X	-	-

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Glass fiber/varnish	MW 41-C	155	X	X	-	-	-	-	-	60317-48	-
Glass fiber/varnish	MW 42-C	155	-	-	-	-	X	X	-	60317-32	-
Glass fiber/silicone varnish	MW 43-C	200	-	-	-	-	X	X	-	60317-33	-
Glass fiber/silicone varnish	MW 44-C	200	X	X	-	-	-	-	-	60317-50	**
Polyester glass fiber covered	MW 45-C	155	X	X	-	-	-	-	-	60317-70-1	-
Polyester glass fiber covered	MW 46-C	155	-	-	-	-	X	X	-	60317-60-1	-
** Silicone varnish not specified											
Polyester glass fiber/silicone varnish	MW 47-C	200	X	X	-	-	-	-	-	60317-72	**
Polyester glass fiber/silicone varnish	MW 48-C	200	-	-	-	-	X	X	-	60317-62	**
Glass fiber/high temperature varnish	MW 50-C	180	X	X	-	-	-	-	-	60317-49	-
Polyester glass fiber/high temperature varnish	MW 51-C	180	X	X	-	-	-	-	-	60317-71	-
Glass fiber/high temperature varnish	MW 52-C	180	-	-	-	-	-	X	X	60317-31	-
Polyester glass fiber/high temperature varnish	MW 53-C	180	-	-	-	-	-	X	X	60317-61	-
Polyester Glass Fiber Covered and Varnish Treated Bare or Heavy Film-Insulated	MW 54-C	180	X	X	-	-	-	-	-	60317-70-2	-
Polyester Glass Fiber Covered and Varnish Treated Bare or Heavy Film-Insulated	MW 55-C	180	-	-	-	-	X	X	-	60317-60-2	-
Aromatic polyamide paper covered	MW 60-A	220	-	-	-	-	-	X	-	-	-
Aromatic polyamide paper covered	MW 60-C	220	-	-	-	-	-	X	-	60317-53	-
Aromatic polyamide paper covered	MW 61-A	220	-	X	-	-	-	-	-	-	-
Aromatic polyamide paper covered	MW 61-C	220	-	X	-	-	-	-	-	60317-52	-
Aromatic polyimide tape covered	MW 64-A	240					X	X		-	
Aromatic polyimide tape covered	MW 64-C	240	-	-	-	-	X	X	-	60317-44	-
Aromatic polyimide tape covered	MW 65-A	240	X	X	-	-	-	-	-	-	
Aromatic polyimide tape covered	MW 65-C	240	X	X	-	-	-	-	-	60317-43	-
Polyester or polyesterimide Hermetic applications	MW 72-C	180	-	X	-	-	-	-	-	60317-8	
Polyester or polyesterimide /polyamideimide Hermetic applications	MW 73-A	220	-	X	-	-	-	-	-	60317-25	200

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Polyester or polyesterimide/polyamideimide Hermetic applications	MW 73-C	200	-	X	-	X	-	-	-	60317-13	-
Polyester or polyesterimide	MW 74-A	220	X	X	-	-	-	-	-	60317-15	180 (PEI only)
Polyester or polyesterimide	MW 74-C	200	X	X	-	-	-	-	-	60317-42	-
Polyurethane	MW 75-C	130	X	X	-	-	-	-	-	60317-4	-
Polyester or polyesterimide/polyamide	MW 76-A	180	X	X	-	-	-	-	-	60317-24	-
Polyester or polyesterimide /polyamide	MW 76-C	180	X	X	X	-	-	-	-	60317-22	-
Polyester or polyesterimide solderable	MW 77-C	180	X	X	-	-	-	-	-	60317-23	-
Polyester or polyesterimide /polyamide solderable	MW 78-C	180	X	X	-	-	-	-	-	-	-
Polyurethane	MW 79-C	155	X	X	X	-	-	-	-	60317-20	-
Polyurethane/polyamide	MW 80-A	155	X	X	-	-	-	-	-	-	-
Polyurethane/polyamide	MW 80-C	155	X	X	X	-	-	-	-	60317-21	-
Polyamideimide	MW 81-C	220	X	X	-	-	-	-	-	60317-57	-
Polyurethane	MW 82-C	180	X	X	X	-	-	-	-	60317-51	-
Polyurethane/polyamide	MW 83-C	180	X	X	X	-	-	-	-	60317-55	-
Polyamideimide	MW 84-C	220	-	-	-	-	-	X	X	60317-58	-
Polyurethane FIW zero-defect solderable	MW 85-C	180	-	-	-	-	-	-	-	60317-56	-
Polyvinyl acetal	MW 86-A	120	X	X	X	X	-	-	-	-	-
Polyvinyl acetal	MW 86-C	120	X	X	X	X	-	-	-	60317-12	-
Polyvinyl acetal	MW 87-A	120	-	-	-	-	-	X	-	60317-68	-
Polyvinyl acetal	MW 87-C	120	-	-	-	-	-	X	-	60317-18	-
Polyvinyl acetal and self-bonding overcoat	MW 88-C	120	-	-	-	-	-	X	-	-	-
Polyester or polyesterimide/polyamideimide w/self- bonding overcoat	MW 102-A	180	-	X	X	-	-	-	-	-	-
Polyester or polyesterimide/polyamideimide w/self- bonding overcoat	MW 102-C	180	-	X	X	-	-	-	-	60317-38	-
Polyamideimide with self-bonding overcoat	MW 122-C	180	-	X	X	-	-	-	-	-	-
Polyurethane/self-bonding	MW 130-C	130	-	X	X	-	-	-	-	60317-2	-
Polyurethane/polyamide/self-bonding	MW 131-C	130	-	X	X	-	-	-	-	-	-
Polyurethane/self-bonding	MW 132-C	180	-	X	X	-	-	-	-	-	-

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Polyurethane/self-bonding	MW 135-C	155	-	X	X	-	-	-	-	60317-35	-
Polyurethane/polyamide/self-bonding	MW 136-C	155	-	X	X	-	-	-	-	-	-
Polyurethane/polyamide/self-bonding	MW 137-C	180	-	X	X	-	-	-	-	-	-

\*\* Silicone varnish not specified

IEC—Specifications with No NEMA Equivalent	NEMA Standard Number	Thermal Class	IEC Build Grades						IEC Specification No.
			Round Wire			Rectangular Wire			
			G1	G2, G1B	G3, G2B	G1	G2		
Polyesterimide	-	180	-	-	-	X	X	60317-28	
Polyesterimide w/ self-bonding overcoat solderable	-	180	-	X	X	-	-	60317-36	
Polyesterimide w/ self-bonding overcoat	-	180	-	X	X	-	-	60317-37	
Glass fiber braided polyesterimide varnish treated	-	180	-	-	-	X	X	60317-39	
Glass fiber braided silicone varnish treated bare or enameled	-	200	-	-	-	X	X	60317-40	
Polyamide-imide enameled round copper wire, class 240	-	240	X	X	-	-	-	60317-59	
Polyester or polyesterimide overcoated with polyamide-imide enameled rectangular aluminium wire	-	200	-	-	-	X	X	60317-73	
Polyesterimide enameled rectangular aluminium wire	-	180	-	-	-	X	X	60317-74	
Polyesterimide enameled round aluminium wire	-	200	X	X				60317-89	
Polyester or polyesterimide overcoated with polyamide-imide enameled rectangular copper wire	-	220				X	X	60317-93	