



SPLICE FOR FINE ALUMINUM MAGNET WIRE

Product Flyer

PRODUCT DESCRIPTION

TE Connectivity's (TE) new fine aluminum (Al) magnet wire splice accommodates wires of 0.14 to 0.32mm. This addresses the needs of a growing number of motor and solenoid manufacturers who are switching to fine (<0.32mm) Al magnet wires to reduce product cost and weight. Prior to introduction of this splice, traditional soldering/welding processes were still being used for terminations of these wires, as existing AMPLIVAR splices could only accommodate Al wires larger than 0.32mm. This new open barrel, pigtail splice fills the gap at the lower end of the AMPLIVAR splice size range. It can accommodate up to three fine Al magnet wires plus a copper stranded lead wire (400 to 1500 CMA total). By converting to this new splice applied with an APT-5A terminating machine, customers using fine Al magnet wire can eliminate traditional soldering/welding, reducing labor and improving efficiency with our IDC crimp technology.

FEATURES & BENEFITS

- Accommodate up to three fine Al magnet wires plus a copper stranded lead wire (400 to 1500 CMA total) in a single splice for efficient connectivity.
- Improve production efficiency with IDC compression crimp feature that does not require pre-stripping of magnet wires. It penetrates the magnet wire insulation while simultaneously terminating wire.
- Help reduce applied cost and increase connection reliability by eliminating possible errors such as cold solder joints, weld burns and wire embrittlement that might occur during soldering/welding.
- Enable higher production rates with precision formed and strip-fed splices applied with APT-5A terminating machine.
- Provides a mechanically strong, superior electrical connection free of contaminants such as stripper residue and solder flux.

Splice for Fine Aluminum Magnet Wire

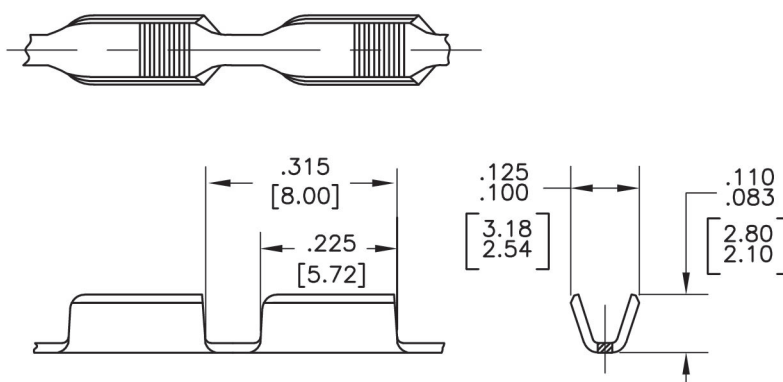
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APPLICATIONS

- Washing machine motors
- Fan motors
- Step motors
- Pumps
- Blenders
- Mixers
- Food processors
- Can openers
- Hair dryers
- Hair clippers / trimmers
- Other small motors
- Solenoids

TECHNICAL DETAILS

- Part Number: 2825180-2
- Voltage: According to applied wire.
- Current: According to applied wire.
- Temperature Range: -65°C to +150°C
- Material: Brass, tin-plated



ADDITIONAL RESOURCES

- [Product Spec 108-64051](#)
- [Application Spec 114-64001](#)
- [Customer Drawing](#)

ORDERING INFORMATION

Part Number	Part Description
2825180-2	Splice for Fine Aluminum Magnet Wire

APPLICATION TOOLING

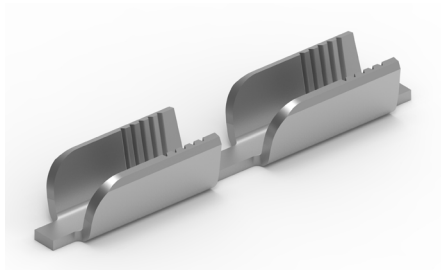
Part Number	Part Description
1-2161800-3	APT-5A terminating machine

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CURRENT, RESISTANCE AND CRIMP TENSILE SPECIFICATIONS FOR 2825180-2

Wire Size			Current & Resistance			Tensile Strength [lbs]
AWG	mm	CMA	Current [A] / T-Rise	Current [A] / Cycled	Low Level Resistance	
28	0.32	159	2.0	3.5	28.9	0.90
28.5	0.30	144	1.8	3.2	32.5	0.84
29	0.29	128	1.7	3.0	36	0.77
29.5	0.27	115	1.5	2.6	41	0.69
30	0.25	100	1.3	2.3	46	0.60
30.5	0.24	90	1.0	1.8	52	0.54
31	0.23	79	0.7	1.3	58	0.48
32	0.20	64	0.6	1.0	72	0.39
33	0.18	50	0.4	0.7	91.5	0.30
33.5	0.17	45	0.3	0.5	104	0.27
34	0.16	40	0.2	0.3	116	0.24
35	0.14	31	0.1	0.2	146	0.19



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