



SPICE FOR FINE ALUMINUM MAGNET WIRE

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.

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

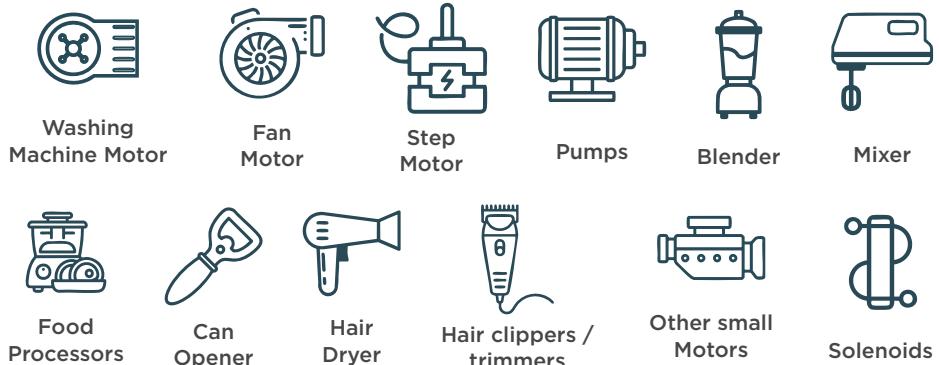
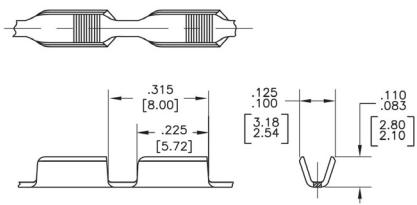
ADDITIONAL RESOURCES

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

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.

APPLICATIONS



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ORDERING INFORMATION

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

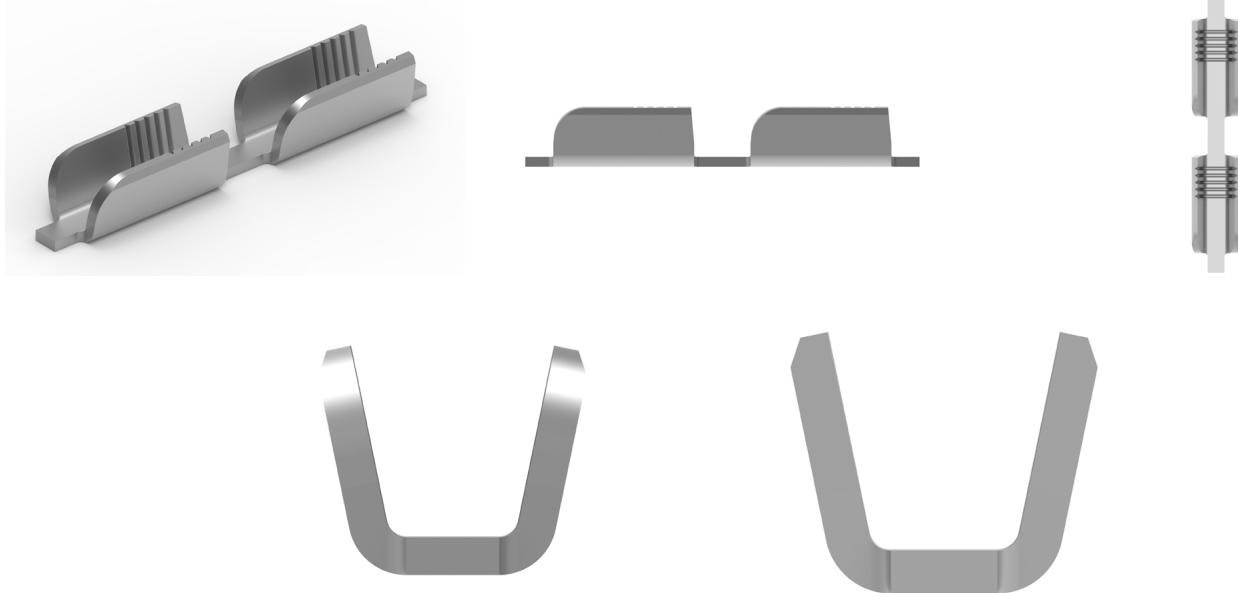
APPLICATION TOOLING

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

CURRENT, RESISTANCE AND CRIMP TENSILE SPECIFICATIONS FOR 2825180-2

Wire Size			Current & Resistance			Tensile Strength [lbs]
AWG	mm	CMS	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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We make it easy to connect with our experts and are ready to provide all the support you need.

Visit te.com/support to chat with a Product Information Specialist.

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