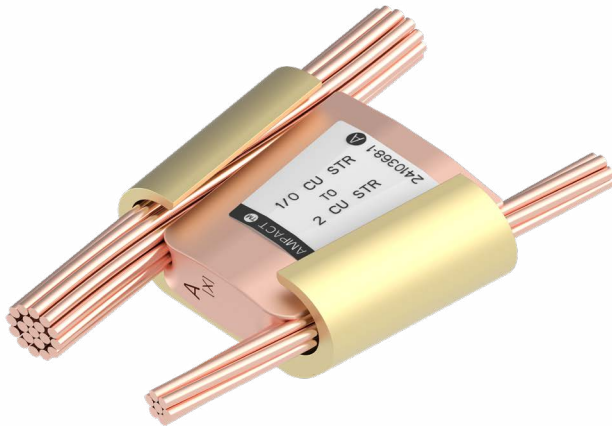


AMPACT COPPER TAPS

FOR CONNECTING SOLID OR STRANDED CONDUCTORS



COPPER TAPS FOR PERMANENT ELECTRICAL CONNECTIONS

APPLICATIONS

- Overhead Power Systems
- Electrical Substations

RELEVANT STANDARDS AND TEST REPORTS

- Meets test requirements of ANSI C119.4
- Meets test requirements of IEEE 837

KEY FEATURES

- Wedge Pressure Technology
- Corrosion Resistant - made of quality alloys for low resistivity and superior corrosion resistance
- Low resistance grounding connections
- Optimum electrical contact
- Visual Inspection - Easy and Fast Inspection

TE Connectivity (TE)'s AMPACT copper taps are used for permanent connection. They resist corrosion and will not loosen. The unique design, incorporating a tapered "C" member and wedge, permits easy installation, which is only a fraction of the time required for conventional crimp-type or molded joints.

The "C" members are composed of an aluminium bronze alloy, and the wedge of a copper alloy very close to pure copper. Built-in spring tension causes the tap to maintain constant mechanical pressure for optimum electrical conductivity.

The taps will provide secure connections on both stranded wire and solid rod.

Our AMPACT taps exceed the current-carrying capacity of the conductors to which they are connected when properly matched and applied. A locking tab prevents the tapered locked wedge from loosening once it has been driven into position.

TE's Copper taps stay permanently locked during power surges, yet they may be removed if necessary without damaging cables or rods. To make operations even easier, AMPACT taps may be visually inspected by verifying the wedge position and locking tab. Installers can check the connection immediately, speeding up the application.

PRODUCT SELECTION INFORMATION

Groove Size kcmil or AWG	Groove Code	Conductor Diameter inch (mm)	
		Min	Max
500	A	.785 (19.9)	.813 (20.7)
450	B	.745 (18.9)	.784 (19.9)
400	E	.700 (17.8)	.744 (18.9)
350	G	.650 (16.5)	.699 (17.8)
300	H	.620 (15.7)	.649 (16.5)
250	K (R)**	.561 (14.2)	.625 (15.9)
4/0	L	.506 (12.9)	.560 (14.2)
3/0	M	.451 (11.5)	.505 (12.8)
2/0	N	.401 (10.2)	.450 (11.4)
1/0	O	.355 (9.0)	.400 (10.2)
No. 2	T	.280 (7.1)	.354 (9.0)
No. 4	W	.216 (5.5)	.279 (7.1)
No. 6	X	.182 (4.6)	.215 (5.5)

** 250 kcmil groove is identified with the letter "K" when paired with 300 through 500 kcmil grooves, and with letter "R" when paired with No. 6 AWG through 250 kcmil grooves.

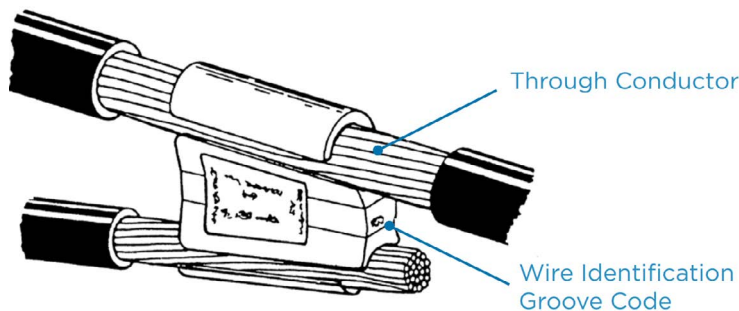
AMPACT COPPER TAP SELECTION FOR WIRE TO GROUND ROD† OR SOLID PIN

Copper Conductor (kcmil/AWG)	3/8"	1/2"	5/8"		3/4"	
	Ground Rod/Pin Dia. Range inch (mm) .355-.375 (9.02-9.53)	Ground Rod/Pin Dia. Range inch (mm) .475-.500 (12.07-12.7)	Ground Rod/Pin Dia. Range inch (mm) .563 (14.3)	Ground Rod/Pin Dia. Range inch (mm) .625 (15.88)	Ground Rod/Pin Dia. Range inch (mm) .682 (17.32)	Ground Rod/Pin Dia. Range inch (mm) .750 (19.05)
500	1-276337-4	1-276337-3	276337-9	1-276337-2	1-276337-1	276337-1
450	2-276337-5	2-276337-4	2-276337-3	2-276337-2	2-276337-1	1-276337-9
400	3-276337-7	3-276337-5	3-276337-3	3-276337-2	3-276337-1	2-276337-0
350	4-276337-9	4-276337-7	4-276337-5	4-276337-4	4-276337-3	2-276337-1
300	6-276337-0	5-276337-8	5-276337-6	5-276337-5	4-276337-4	2-276337-2
250	275187-4	275187-2	2-275187-8	5-276337-6	4-276337-5	2-276337-3
4/0	275187-9	275187-7	275187-1	5-276337-7	4-276337-6	276337-2
3/0	1-275187-3	1-275187-1	275187-2	5-276337-8	4-276337-7	2-276337-4
2/0	1-275187-6	1-275187-2	275187-3	5-276337-9	4-276337-8	276337-3
1/0	1-275187-8	1-275187-3	275187-4	6-276337-0	4-276337-9	2-276337-5
No. 2	2410368-1	1-275187-4	275187-5	6-276337-2	5-276337-1	276337-4
No. 4	2410368-1	3-275187-6	3-275187-0	6-276337-4	5-276337-3	2-276337-8
No. 6	2410368-2	3-275187-7	3-275187-1	6-276337-5	5-276337-4	2-276337-9

Note: Some Ground Rods have a designated or descriptive diameter that is different from the Actual Diameter. The Actual Diameter must be determined and used with the top chart for correct tap selection.

AMPACT COPPER TAP SELECTION FOR WIRE-TO-WIRE APPLICATIONS

Typical Example: 500 to 350 kcmil = Groove Code AG = Part No. 1-276337-1



AMPACT COPPER TAP SELECTION FOR WIRE-TO-WIRE APPLICATIONS

White Shells (69338-5)									Blue Shells (69338-1)					Yellow Shells (69338-4)
Wire Size	X 5,6	W 4	T 2	O 1/0	N 2/0	M 3/0	L 4/0	K (R) 250	H 300	G 350	E 400	B 450	A 500	750 (61)
X 5,6	2410368-4	2410368-4	2410368-2	2410368-2	4-275187-0	3-275187-7	3-275187-4	3-275187-1	6-276337-5	5-276337-4	4-276337-2	2-276337-9	1-276337-8	1-81723-3*
W 4		2410368-3	2410368-2	2410368-1	3-275187-9	3-275187-6	3-275187-3	3-275187-0	6-276337-4	5-276337-3	4-276337-1	2-276337-8	1-276337-7	1-81723-3*
T 2			2410368-1	2410368-1	1-275187-7	1-275187-4	1-275187-0	275187-5	6-276337-2	5-276337-1	3-276337-9	276337-4	276337-8	1-81723-2*
O 1/0				1-275187-8	1-275187-6	1-275187-3	275187-9	275187-4	6-276337-0	4-276337-9	3-276337-7	2-276337-5	1-276337-4	1-81723-2*
N 2/0					1-275187-5	1-275187-2	275187-8	275187-3	5-276337-9	4-276337-8	3-276337-6	276337-3	276337-7	1-81723-1*
M 3/0						1-275187-1	275187-7	275187-2	5-276337-8	4-276337-7	3-276337-5	2-276337-4	1-276337-3	1-81723-0*
L 4/0							275187-6	275187-1	5-276337-7	4-276337-6	3-276337-4	276337-2	276337-6	81723-9*
K(R) 250								2-275187-8	5-276337-6	4-276337-5	3-276337-3	2-276337-3	276337-9	81723-8*
H 300									5-276337-5	4-276337-4	3-276337-2	2-276337-2	1-276337-2	81723-7
G 350										4-276337-3	3-276337-1	2-276337-1	1-276337-1	81723-6
E 400											3-276337-0	2-276337-0	1-276337-0	81723-5
B 450												1-276337-9	276337-1	81723-4
A 500													276337-5	81723-2
750 (61)														81723-1

GROUND ROD APPLICATIONS, COPPER-CLAD

Designated Size inch (mm)	Wire Size	Actual Diameter inch (mm)
3/8 (9.53)	1/0 AWG	.355 (9.02)
1/2 (12.70)	3/0 AWG	.475 (12.06)
5/8 (15.88)	250 kcmil	.563 (14.30)
3/4 (19.05)	350 kcmil	.682 (17.32)
300 Galvanized Steel.620 (15.7)		
3/8 (9.53)	1/0 AWG	.561 (14.2)
1/2 (12.70)	3/0 AWG	.506 (12.9)
5/8 (15.88)	300 kcmil	.451 (11.5)
3/4 (19.05)	450 kcmil	.401 (10.2)



Sizes > 1/0 listed by Underwriters Laboratories Inc., File No. E69905



Sizes > 1/0 are certified by Canadian Standards Association, File No. LR 56476
RUS Letter of Technical Acceptance (Grounding Taps)

AMPACT copper taps have been tested for the most severe service environment that they would normally be exposed to under both distribution and grounding applications. They have been tested to meet or exceed the requirements of ANSI C119.4.

AMPACT copper taps have been tested at 32,000 amps symmetrical RMS (72kA peak) for 0.5 seconds on 4/0 copper conductor per IEEE 837. The AMPACT copper tap meets all mechanical requirements of ANSI C119.4 and is rated as a Class 3 minimum-tension connector.

One of the most severe requirements placed on a connector for below grade grounding applications is corrosion resistance. In order to make our corrosion testing more severe and more realistic, we first subject the electrical connections to thermal shock. Our procedure for subjecting a connector to thermal shock is as follows:

Thermal Shock Test Sequence

TE Specification 109-13009

Each cycle = 24 hours in following sequence;

- i) 150 minutes in oven at 150°C
- ii) 15 minutes in ice water at 0°C
- iii) 30 minutes in oven at 150°C
- iv) 20-3/4 hours at room ambient

(Test repeated for 5 complete cycles)

Features	Advantages	Benefits
Wedge Technology	For use in substations, transmission grounding and distribution grounding as well as overhead applications	Unique design and simple installation system provides firm, sure contact for consistent, all weather, wire-to-wire, low resistance grounding connections
Corrosion Resistant	Electrical joints are stable and effective for optimum electrical contact, even under conditions of creep and cold flow	TE's AMPACT copper taps are made of quality allows for low resistivity and superior corrosion resistance
Low resistance grounding connections	Telco distribution, CATV grounds	Compact, lightweight application tool permits easy installation almost anywhere, without bulky equipment, heat or external power
Optimum electrical contact	When properly matched and applied, AMPACT copper taps exceed the current-carrying capacity of the conductors they are connecting.	Taps will not penetrate copper plating, allowing secure connections from copper conductors to ground rods, reinforcing bars or conductors of any type. A locking tab prevents the tapered wedge from loosening once it has been driven into position.
Visual Inspection	-	Connectors may be checked visually

Learn more: [TE.com/energy](https://www.te-connectivity.com/energy)

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