



PRODUCT SPECIFICATION

KRIMPTITE AND VIBRAKRIMP QUICK DISCONNECTS

1.0 SCOPE

- A. THIS PRODUCT SPECIFICATION COVERS THE KRIMPTITE AND VIBRAKRIMP QUICK DISCONNECTS (UNINSULATED) FOR 22 AWG TO 10 AWG WIRE.

2.0 PRODUCT DESCRIPTION

2.1 UNINSULATED QUICK DISCONNECTS

- A. 19008 KRIMPTITE UNINSULATED FEMALE FLAG QUICK DISCONNECTS (22 – 10 AWG)
B. 19009 VIBRAKRIMP UNINSULATED FEMALE FLAG QUICK DISCONNECTS (22 – 14 AWG)
C. 19016 KRIMPTITE UNINSULATED FEMALE STRAIGHT QUICK DISCONNECTS (22 – 10 AWG)
D. 19018 VIBRAKRIMP UNINSULATED FEMALE STRAIGHT QUICK DISCONNECTS (22 – 14 AWG)
E. 19022 KRIMPTITE UNINSULATED MALE STRAIGHT QUICK DISCONNECTS (22 – 10 AWG)
F. 19024 VIBRAKRIMP UNINSULATED MALE STRAIGHT QUICK DISCONNECTS (22 – 10 AWG)

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

- A. THE DIMENSIONAL CHARACTERISTICS ARE IDENTIFIED ON THE SALES DRAWINGS.
B. MATERIALS:
I. BASE MATERIAL IS C26000 BRASS IN VARIOUS THICKNESSES WITH THE EXCEPTION OF 19022 AND 19024, WHICH ARE MADE FROM C26000 BRASS OR C11000 COPPER.
II. PLATING IS MATTE TIN WITH THE FOLLOWING EXCEPTIONS
1. 19022 AND 19024 ARE PLATED WITH ZINC CHROMATE.
2. SOME SPECIAL PARTS ARE NICKEL OR NICKEL-OVER-TIN PLATED, TYPICALLY INDICATED WITH A “-N” AS A SUFFIX TO THE ENGINEERING NUMBER.
III. PARTS HAVE NO INSULATION. SERIES 19009 AND 19018 HAVE A BUILT-IN WIRE INSULATION GRIP, AND SERIES 19024 WIRE GRIP CONSISTS OF A TIN-PLATED BRASS FERRULE.

2.3 SAFETY AGENCY APPROVALS

- A. MOST PARTS ARE UL LISTED E79133 CATEGORY RFWV, CONSULT WEBSITE OR FACTORY FOR DETAILS
B. MOST PARTS ARE CSA CERTIFIED LR18689 CLASS 6227-01, CONSULT WEBSITE OR FACTORY FOR DETAILS
C. ALL PARTS ARE ROHS COMPLIANT

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PS-19902-005	E. THRODAHL	J. MACNEIL	J. MACNEIL



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3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

- A. UL STANDARD FOR ELECTRICAL QUICK-CONNECT TERMINALS ANSI/UL 310
- B. CSA STANDARD CSA-C22.2 NO 153-09 FOR ELECTRICAL QUICK-CONNECT TERMINALS

4.0 RATINGS

4.1 VOLTAGE

- A. VOLTAGE RATINGS APPLY TO INSULATED PARTS AND THEREFORE DO NOT APPLY TO PARTS COVERED IN THIS SPECIFICATION.

4.2 CURRENT

- A. THE AMPERAGE RATING IS BASED ON THE WIRE AWG APPLIED TO THE TERMINALS PER UL 310 SHOWN BELOW.

TABLE 4.2.B

WIRE AWG	MAX AMPERE RATING
22	3
20	4
18	7
16	10
14	15
12	20
10	24

4.3 MAXIMUM OPERATING TEMPERATURE – 149°C (300°F)

5.0 PERFORMANCE – SAMPLE PREPARATION, WIRE REQUIREMENTS, TESTS DESCRIPTIONS AND TABLE INFORMATION ARE PER UL STANDARD 310.

5.1 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Crimp Pullout Force (Axial)	Test Samples Crimped to Min/Max wire awg are subjected to an axial pullout force on the wire at a rate of 25 ± 6 mm ($1 \pm \frac{1}{4}$ inch) per minute.	The Test Samples must withstand Table 10.1 Force applied for 1 minute
2	Engage / Disengage Test	Samples to be Mated/Unmated to Unplated Brass Test Tabs for 6 Mating Cycles	Samples must meet the Requirements of Table 11.1

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5.2 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
3	Temperature Test	The Test Specimens shall be subjected to continuous current per Table 4.2.B until Stabilization.	Temperature Rise must not exceed 30C
4	Heat Cycling Test	The Temperature Test Samples shall complete 500 cycles of equal current on and off (45 min on/ 15 min off) at the current levels noted in Table 12.1.	Temperature Rise shall not rise more than 15C from 24 th Cycle and not more than 85C at the 500 th Cycle

Table 10.1

WIRE AWG	MIN PULL FORCE (LBS)
22	8
20	13
18	20
16	30
14	50
12	70
10	80

TABLE 11.1

Tab size	First Insertion Force (lbs)	First Withdrawal Force (lbs)	Sixth Withdrawal Force (lbs)
.250 x .032 (6.35 x 0.81)	16 MAX	3 MIN, 16 MAX	3 MIN
.205 x .020 (5.21 x 0.51)	15 MAX	3 MIN, 20 MAX	2 MIN
.205 x .032 (5.21 x 0.81)	15 MAX	3 MIN, 20 MAX	2 MIN
.187 x .020 (4.75 x 0.51)	15 MAX	3 MIN, 20 MAX	2 MIN
.187 x .032 (4.75 x 0.81)	15 MAX	3 MIN, 20 MAX	2 MIN
.110 x .020 (2.79 x 0.51)	12 MAX	2 MIN, 14 MAX	1 MIN
.110 x .032 (2.79 x 0.81)	12 MAX	2 MIN, 14 MAX	1 MIN

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TABLE 12.1

Wire AWG	Current Cycling Amperes
22	6
20	8
18	14
16	20
14	30
12	40
10	48

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

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