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Jameco Part Number 1963802



PRODUCT SPECIFICATION

INSULKRIMP QUICK DISCONNECTS

1.0 SCOPE

- A. THIS PRODUCT SPECIFICATION COVERS THE INSULKRIMP QUICK DISCONNECTS WITH NYLON/PVC INSULATION FOR 26 AWG TO 10 AWG WIRE.

2.0 PRODUCT DESCRIPTION

2.1 INSULATED QUICK DISCONNECTS

- A. 19003 FULLY INSULATED FEMALE QUICK DISCONNECTS 26 – 10 AWG
- B. 19004 FULLY INSULATED MALE COUPLERS 22 – 10 AWG
- C. 19005 FULLY INSULATED FEMALE COUPLERS 22 – 10 AWG
- D. 19007 FULLY INSULATED FEMALE FLAG QUICK DISCONNECTS 22 – 10 AWG
- E. 19011 PARTIALLY INSULATED PIGGYBACK QUICK DISCONNECTS 22 – 10 AWG
- F. 19013 FULLY INSULATED PIGGYBACK QUICK DISCONNECTS 22 – 10 AWG
- G. 19017 PARTIALLY INSULATED QUICK DISCONNECTS 26 – 10 AWG
- H. 19023 FULLY/PARTIALLY INSULATED MALE 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 19004 AND 19023, WHICH ARE MADE FROM C26000 BRASS OR C11000 COPPER.
 - II. PLATING IS MATTE TIN WITH THE FOLLOWING EXCEPTIONS
 - 1. 19004 IS PLATED WITH ZINC CHROMATE.
 - 2. 19023 IS PLATED WITH MATTE TIN OR ZINC CHROMATE.
 - III. INSULATION MATERIAL IS NYLON 94V2 OR 94V0 IN VARIOUS COLORS WITH THE FOLLOWING EXCEPTIONS:
 - 1. 19011 AND 19017 INSULATION MATERIAL IS PVC 94V2 IN VARIOUS COLORS
 - 2. 19023 PARTIALLY INSULATED MATERIAL IS PVC 94V2 IN VARIOUS COLORS OR NYLON 94V2 OR 94V0 IN VARIOUS COLORS

2.3 SAFETY AGENCY APPROVALS

- A. ALL PARTS ARE UL LISTED E79133 CATEGORY RFWV
- B. ALL PARTS ARE CSA CERTIFIED 018689 CLASS 6227-01
- C. ALL PARTS ARE ROHS COMPLIANT

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

- A. UL LISTED TO STANDARD 310
- B. CSA CERTIFIED TO STANDARD C22.2 NO 65

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A1	EC No: WNA2008-0003 DATE: 2007 / 12 / 17	INSULKRIMP QUICK DISCONNECTS	1 of 4
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-19902-008	R. DERROSS	E. THRODAHL	J. MACNEIL



PRODUCT SPECIFICATION

4.0 RATINGS

4.1 VOLTAGE

A. ALL OF THESE PARTS ARE RATED AT 600VAC.

4.2 CURRENT

A. THE AMPERAGE RATING IS BASED ON THE WIRE AWG APPLIED TO THE TERMINALS PER UL 310 SHOWN BELOW. 26 AND 24 AWG ARE NOT IN UL STD 310.

WIRE AWG	MAX AMPERE RATING
26	-
24	-
22	3
20	5
18	7
16	10
14	15
12	20
10	30

4.3 OPERATING TEMPERATURE – 105C (221F)

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

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Dielectric Strength Test	As Received Samples to be tested at 3400 volts (600 Volt Rating) for 1 minute.	No Breakdown (Puncture) thru the Insulation is allowed
2	Assembled Conditioning	Samples Assembled (crimped) to wire to be Conditioned at 136C for 7 days	The Insulation will not harden, soften, crack, deform or loosen to effect insulation qualities
3	Non-Assembled Conditioning	Samples not Assembled to wire to be Conditioned at 100C for 7 days	The Insulation will not harden, soften, crack, deform or loosen after Crimping to effect insulation qualities

REVISION: A1	ECR/ECN INFORMATION: <u>EC No:</u> WNA2008-0003 <u>DATE:</u> 2007 / 12 / 17	TITLE: INSULKRIMP QUICK DISCONNECTS	SHEET No. 2 of 4
DOCUMENT NUMBER: PS-19902-008	CREATED / REVISED BY: R. DERROSS	CHECKED BY: E. THRODAHL	APPROVED BY: J. MACNEIL



PRODUCT SPECIFICATION

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4	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
5	Engage / Disengage Test	Samples to be Mated/Unmated to Test Tabs for 6 Mating Cycles	Samples must meet the Requirements of Table 11.1
6	Secureness of Insulation Test as Received	The Insulation on Terminal Samples will be pulled Axially with 1 lb (4.5N) for 1 minute	The Insulation will not be Damaged or Removed
7	Secureness of Insulation Test as Assembled (Crimped)	The Insulation on Terminal Samples will be pulled Axially with 5 lbs (22.3N) for 1 minute	The Insulation will not be Damaged or Removed

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
8	Temperature Test	The Test Specimens shall be subjected to continuous current per Table 12.1 or 12.2 until Stabilization.	Temperature Rise must not exceed 30C
9	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 or 12.2.	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)
26	-
24	-
22	8
20	13
18	20
16	30
14	50
12	70
10	80

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DOCUMENT NUMBER: PS-19902-008	CREATED / REVISED BY: R. DERROSS	CHECKED BY: E. THRODAHL	APPROVED BY: J. MACNEIL



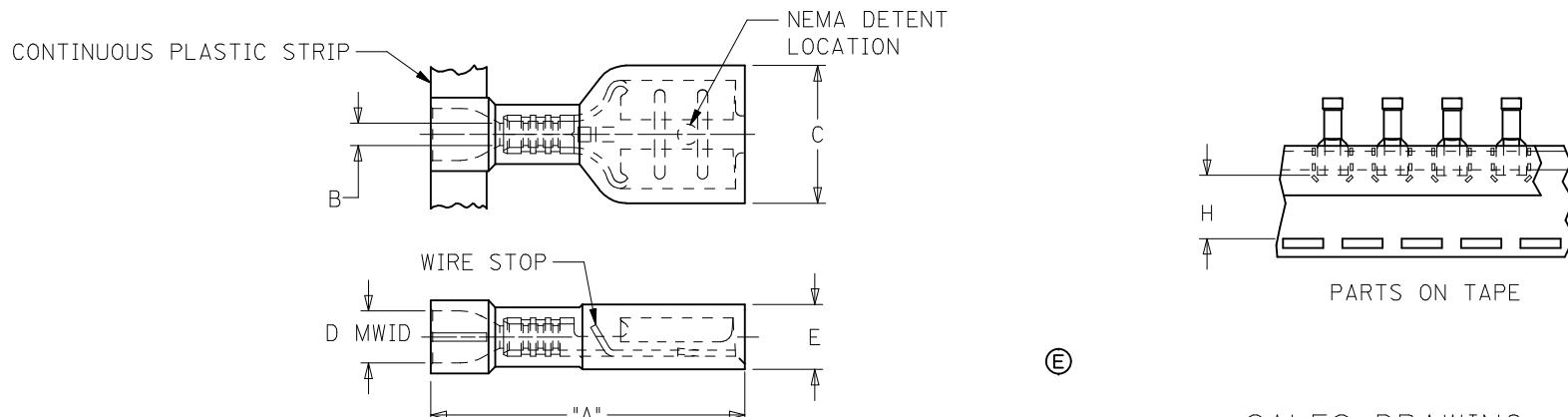
PRODUCT SPECIFICATION

6.0 PACKAGING

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

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<u>DOCUMENT NUMBER:</u> PS-19902-008	<u>CREATED / REVISED BY:</u> R. DERROSS	<u>CHECKED BY:</u> E. THRODAHL	<u>APPROVED BY:</u> J. MACNEIL
<small>TEMPLATE FILENAME: PRODUCT_SPEC(SIZE_A)(V.1).DOC</small>			

10	9	8	7	6	5	4	3	2	19003							
F	LOOSE PIECE MATERIAL NUMBER	LOOSE PIECE ENGRNG NUMBER	CONTINUOUS STRIP MATERIAL NUMBER	CONTINUOUS STRIP ENGRNG NUMBER	MYLAR TAPE MATERIAL NUMBER	MYLAR TAPE ENGRNG NUMBER	WIRE RANGE AWG	FITS MALE TAB SIZE	INSULATION COLOR	STOCK THICK.	"A" MAX.	"B" MIN.	"C" MAX.	"D" MWID	"E" MAX.	"H" NOMINAL
I90030071	M-2212	I90030106	M-2212C	I90030073	M-2212T	26-24	.250x.032 (6.35x0.81)	YELLOW	.016/0.41	.86/21.8	.030/0.76	.38/9.7	.075/1.90	.18/4.6	.560/14.22	
I90030064	M-2210	I90030103	M-2210C	I90030067	M-2210T	26-24	.187x.020 (4.75x0.51)	YELLOW	.016/0.41	.78/19.8	.030/0.76	.32/8.1	.075/1.90	.16/4.1	.600/15.24	
I90030068	M-2211	I90030104	M-2211C	I90030070	M-2211T	26-24	.187x.032 (4.75x0.81)	DK YELLOW (E)	.016/0.41	.78/19.8	.030/0.76	.32/8.1	.075/1.90	.16/4.1	.600/15.24	
I90030001	AA-2201	I90030105	AA-2201C	I90030003	AA-2201T	22-18	.250x.032 (6.35x0.81)	RED	.016/0.41	.86/21.8	.058/1.47	.38/9.7	.135/3.43	.18/4.6	.560/14.22	
I90030036	AA-2213	I90030109	AA-2213C	I90030074	AA-2213T	22-18	.205x.020 (5.21x0.51)	RED	.016/0.41	.78/19.8	.058/1.47	.32/8.1	.135/3.43	.16/4.1	.600/15.24	
I90030038	AA-2214	I90030110	AA-2214C	I90030075	AA-2214T	22-18	.205x.032 (5.21x0.81)	PINK (E)	.016/0.41	.78/19.8	.058/1.47	.32/8.1	.135/3.43	.16/4.1	.600/15.24	
I90030011	AA-2202	I90030107	AA-2202C	I90030013	AA-2202T	22-18	.187x.020 (4.75x0.51)	RED	.016/0.41	.78/19.8	.058/1.47	.32/8.1	.135/3.43	.16/4.1	.600/15.24	
I90030017	AA-2203	I90030108	AA-2203C	I90030020	AA-2203T	22-18	.187x.032 (4.75x0.81)	PINK (E)	.016/0.41	.78/19.8	.058/1.47	.32/8.1	.135/3.43	.16/4.1	.600/15.24	
I90030024	AA-2204	I90030097	AA-2204C	I90030026	AA-2204T	22-18	.110x.020 (2.79x0.51)	RED	.012/0.30	.78/19.8	.058/1.47	.23/5.9	.135/3.43	.15/3.8	.615/15.62	
I90030030	AA-2205	I90030098	AA-2205C	I90030032	AA-2205T	22-18	.110x.032 (2.79x0.81)	PINK (E)	.012/0.30	.78/19.8	.058/1.47	.23/5.9	.135/3.43	.15/3.8	.615/15.62	
I90030040	BB-2206	I90030041	BB-2206C	I90030042	BB-2206T	16-14	.250x.032 (6.35x0.81)	BLUE	.016/0.41	.86/21.8	.083/2.10	.38/9.7	.160/4.06	.18/4.6	.560/14.22	
I90030062	BB-2215	I90030085	BB-2215C	I90030077	BB-2215T	16-14	.205x.020 (5.21x0.51)	BLUE	.016/0.41	.78/19.8	.083/2.10	.32/8.1	.160/4.06	.17/4.3	.600/15.24	
I90030063	BB-2216	I90030086	BB-2216C	I90030078	BB-2216T	16-14	.205x.032 (5.21x0.81)	AQUA (E)	.016/0.41	.78/19.8	.083/2.10	.32/8.1	.160/4.06	.17/4.3	.600/15.24	
I90030050	BB-2207	I90030051	BB-2207C	I90030052	BB-2207T	16-14	.187x.020 (4.75x0.51)	BLUE	.016/0.41	.78/19.8	.083/2.10	.32/8.1	.160/4.06	.17/4.3	.600/15.24	
I90030056	BB-2208	I90030057	BB-2208C	I90030058	BB-2208T	16-14	.187x.032 (4.75x0.81)	AQUA (E)	.016/0.41	.78/19.8	.083/2.10	.32/8.1	.160/4.06	.17/4.3	.600/15.24	
I96060002	19606-0002	I96060001	19606-0001	I96060003	19606-0003	12-10	.250x.032 (6.35x0.81)	YELLOW	.018/0.46	.120/3.04	.38/9.7	.235/5.97	.22/5.6	.508/12.90		



NOTES:

- MATERIAL: TERMINAL: BRASS
PLATING: ELECTRO-TIN
FERRULE: BRASS
PLATING: ELECTRO-TIN
INSULATION: NYLON 6/6 94V-2.
COLOR: SEE CHART
- MWID = MAXIMUM WIRE INSULATION DIAMETER
- PARTS ARE ROHS COMPLIANT.

CHANGE HSG COLORS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
EC NO: WNA2008-0135	DRWNE/THRODAHL 2008/09/23	CHKD:JMACEIL 2008/09/23	APPR:JMACEIL 2008/09/25	QUALITY SYMBOLS	mm INCH	DRAWN BY BRE 02/03/20	DATE	TITLE	
F	REV			$\nabla=0$	$\pm ---$			INSULKRIMP FEMALE FIQD STANDARD FLARE	
				$\nabla=0$	$\pm ---$	CHECKED BY HEB 02/03/20	DATE		
				$\nabla=0$	$\pm ---$	APPROVED BY RWD 02/03/20	DATE	MOLEX INCORPORATED	
					ANGULAR $\pm ---^\circ$				
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO. SEE CHART	
								DOCUMENT NO. SD-19003-005	SHEET NO. 1 OF 1
								SIZE B	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION