Welcome To Quality Crimping and Stripping For Terminations

Components of a Quality Termination

•Wire

- •Terminals
- •Tooling
- Documentation
- Quality Trained Personnel



COPPER CONDUCTORS







INSULATION VARIATION





COAXIAL CABLE











CMA CHART

Circular Mil Area of Various Wire Shapes

Girupiar Mil Area (CRA) /		Normal West Size		filmanda.		Approximate		
Nominal Wire Sizes	CMA	AWC mod		No.	Dismoster		Conductor Diameter	
			No.	MG.	linch	200	inch	ene
	4.0	44	6.002	1	00195	0.050	.002	0.051
	16.0	34	0.008	1	.0040	0.102	.004	0.102
	64.0	32	0.032	1	0080	0.203	008	0.203
	175.0	28	0.089	;	0056	6,127	.915	0.381
	388	24	0.197		0197	0.500	020	0.508
	367	.24	0.291	10	0063	0.160	.073	0.564
	400	24	0.200	16	0050	0.127	023	0.544
	400	24	3.203	4	@100	0.254	023	0.564
	403	24	0.204	1	0071	0,180	.023	0.584
	654	22	0.321	8	.0000	0.226	029	0.737
	6.35	22	0.327	16	0063	0.190	.029	0.737
	640	22	6.324	16	.0060	0.203	.02%	0.737
	640	\overline{n}	0.324	1	0253	0.643	625	6.635
	992	20	8.503	1	6315	0.600	0.00	0.613
	1000	20	0.507	10	0100	0.254	638	0.965
	16(08)	20	0.511	20	0071	0.190	.039	0.691
	1004	20	0.519	16	0060	0.203	/796	0.001
	1600	18	0.811	16	0100	0.254	048	1.345
	1608	18	0.815	19	.0092	0.214	048	1.045
	1617	18	0.819	1	0152	0.384	042	1.6%3
	1624	18	0.823	1	0403	1.034	(40	1.007

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STRIPPING WIRE; GOOD STRIPS

Square, even cut



No nicks or cut strands



Results of Bad Strips = Loss of Electrical Characteristics



COMPONENTS OF A QUALITY TERMINATION

- Wire
- Terminals
- Tooling
- Documentation
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PARTS OF A TERMINAL -OPEN BARREL

 Wire Barrel

 Wire Barrel and
Contact End

 Wire Barrel and Contact End

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PARTS OF A TERMINAL -CLOSED BARREL



ADVANTAGES OF INSULATION SUPPORT



ENVIORMENTAL SPLICES



TYPICAL CONTACT



CONTACT COLOR CODE – BIN CODE

		MATING		
	END		0 – Black	5 - Green
	•	2	1 – Brown	6 – Blue
			2 - Red	7 – Violet
	312 1		3 - Orange	8 - Gray
3rd COL		OR BAND (3rd DIGIT)	4 - Yellow	9 - White

TYPICAL CONNECTOR







COMPONENTS OF A QUALITY TERMINATION

- Wire
- <u>Terminals</u>
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THESE ARE NOT CRIMPERS









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TOOLS FOR CUTTING WIRE



STRIPPERS



WIRE STRIPPING

WIRE STRIPPING TECHNIQUE



- Determine the proper length of insulation to be removed. Wire must be visible in inspection hole. Insulation must be 1/64" – 1/32" from end of contact or inside of insulation cup.
- Insert wire into exact center of correct cutting slot for wire size to be stripped. Each slot is marked with wire size.
- Close handles together as close as possible.
- 4. Release handles, allowing wire holder to return to open position.
- 5. Remove stripped wire.
- After stripping, strands of wire should be twisted firmly together in the same direction as the normal lay of the wire.
- 7. Stripped wire with nicked or cut strands is not acceptable.

STRIPPERS





BASIC STRIPPER - GRIPPER PADS AND BLADES

STRIPPER FRAME IS IDEAL (STRIPMASTER)

STRIPPER O BLADES	GRIPER SET	WIRE TYPE	NOTES
45-1773-1	LB-722++	KAPTON CF 16-24 GAUGE	
45-1939-1	LB-721	KAPTON CF 10-14 GAUGE	
45-1611-1	LB-721	TEFLON 10-14 GAUGE	
45-1987-1	LB-722++	TEFLON 16-24 GAUGE	
45-1608-1	LB-721	KAPTON 10-14 GAUGE	

CORRECT STIRIP LENGTH



CORRECT STIRIPPING



CORRECT STIRIP LENGTH



CORRECT STIRIP LENGTH





PROPER STRIP LENGTH AND PLACEMENT OF WIRE









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DANIELS CRIMPER WITH TURRET HEAD



DANIELS CRIMPER TURRET HEAD



SMALL DANIELS CRIMPER



ENVIRONMENTAL SPLICE CRIMPER



ENVIRONMENTAL SPLICE CRIMPING







MOLEX CRIMPER





RED & BLUE LUGGER



MECHANICAL AND ELECTRICAL CHARACTERISTICS

FUNCTIONS OF WIRE BARREL AND INSULATION SUPPORT BARREL (OPEN BARREL)



Insulation Support Barrel



Insulation Support Crimp





Wire Barrel Crimp

FUNCTIONS OF WIRE BARREL AND INSULATION SUPPORT BARREL (CLOSED BARREL)





MECHANICAL STRENGTH





ELECTRICAL PERFORMANCE



ELECTRICAL PERFORMANCE



CRIMP DESIGN PARAMETERS



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QUALITY MEASUREMENTS AND PROPERLY CRIMPED TERMINALS

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