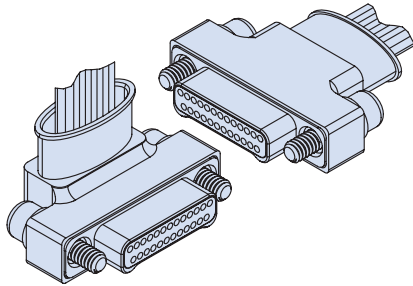




# SERIES 89 Dual Row Connectors



Back-to-Back Cable with Straight, 45° or 90° Angle Factory Installed Backshell and Insulated Wire - How to Order



**Cable Assemblies with Factory installed Backshell and Shield/Jacket Option** feature nano connectors with gold alloy TwistPin contacts. Contacts are precision-crimped to insulated, stranded wire. These nanominiature connectors offer premium performance and reliability for demanding applications. Contact spacing is .025 inches. 1 amp current rating, DWV rating 250 volts AC. Wire gages #30 and #32 AWG.

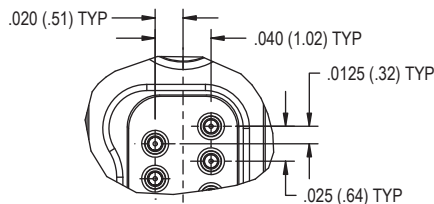
**Wire Type and shield/jacket options** include ultra lightweight XLETFE insulation, Extruded PTFE insulation and cross linked modified ETFE insulation. Shield options include Amberstrand®, Amorlite™ and nickel plated copper with or without E-CTFE halal jacket

**Typical Applications** include UAV's, satellites, missile systems and geophysical instruments

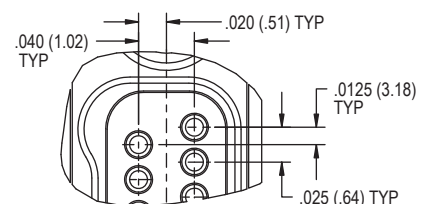
How to Order													
Sample Part Number	891-032 -25 CS N L A2 -0 B 7 -12 T J -N												
Series	891-032 = Plug or Receptacle												
Number of Contacts	9, 15, 21, 25, 31, 37, 41, 51, 65, 69, 85												
Connector Type	<table border="1"> <thead> <tr> <th>TYPE</th> <th>SIDE 1</th> <th>SIDE 2</th> </tr> </thead> <tbody> <tr> <td>GP</td> <td>Plug</td> <td>Plug</td> </tr> <tr> <td>GS</td> <td>Receptacle</td> <td>Receptacle</td> </tr> <tr> <td>CS</td> <td>Plug</td> <td>Receptacle</td> </tr> </tbody> </table>	TYPE	SIDE 1	SIDE 2	GP	Plug	Plug	GS	Receptacle	Receptacle	CS	Plug	Receptacle
TYPE	SIDE 1	SIDE 2											
GP	Plug	Plug											
GS	Receptacle	Receptacle											
CS	Plug	Receptacle											
Backshell Accessory	H = 45°, Lobe Side Exit      L = 90°, Lobe Side Exit K = 45°, Major Side Exit      M = 90°, Major Side Exit N = Straight, No Orientation												
Backshell/Shell Material and Finish	A1 - Aluminum Shell, Cadmium Plating A2 - Aluminum Shell, Electroless Nickel Plating T - Titanium Shell, Unplated S - Stainless Steel Shell, Passivated												
Wire Gage	0 = 30 AWG      2 = 32 AWG (Wire Type "B" Only)												
Wire Type	A = Ultra Lightweight XLETFE Insulation, Silver Coated Ultra High Strength Copper. (Not available in #32 AWG) B = Extruded PTFE Insulation, Silver Coated Copper NEMA HP3-ETX (MIL-W-16878/6) C = Cross Linked Modified ETFE Insulation, Silver Coated High Strength Copper. MIL-W-22759/33 (Not available in #32 AWG)												
Wire Color	1 = White    2 = Yellow    7 = 10 Color Repeating (Wire Type A is Striped, Types B and C are Solid Colors)												
Length	Wire Lenth in Inches, i.e. 12 = 12 inches; 3 inches minimum												
Hardware	J = Jackscrew      T = Female Thread												
Shield/Jacket Options	N, A, C, D, S, T, V, W, X, Z; See Shield / Jacket Options table												

D

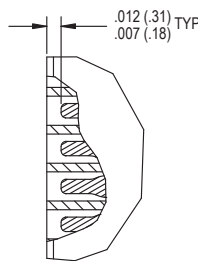
**DETAIL A (PLUG)**



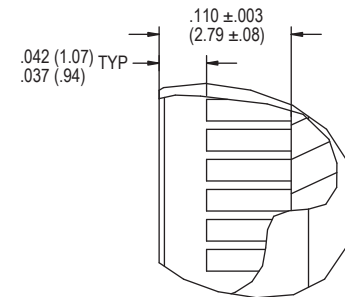
**DETAIL B (RECEPTACLE)**



**DETAIL C (PLUG)**



**DETAIL D (RECEPTACLE)**



**Shield/Jacket Options Table**

Code	Description
<b>N</b>	No Shield, No Jacket
<b>A</b>	Braided Shield Installed (Nickel Plated Copper)
<b>C</b>	Braided Shield Installed (Nickel Plated Copper), with E-CTFE Halar "Expando" Jacket (+150° C)
<b>D</b>	No Shield, with E-CTFE Halar "Expando" Jacket (+150° C)
<b>S</b>	100% Braided Amberstrand Shield Installed
<b>T</b>	100% Braided Amberstrand Shield Installed, with E-CTFE Halar "Expando" Jacket (+150° C)
<b>V</b>	75% Braided Amberstrand Shield Installed
<b>W</b>	Armorlite Braided Microfilament Stainless Steel Shield Installed
<b>X</b>	Armorlite Braided Microfilament Stainless Steel Shield Installed with E-CTFE Halar "Expando" Jacket (+150° C)
<b>Z</b>	75% Braided Amberstrand Shield Installed, with E-CTFE Halar "Expando" Jacket (+150 C)

**NOTES**

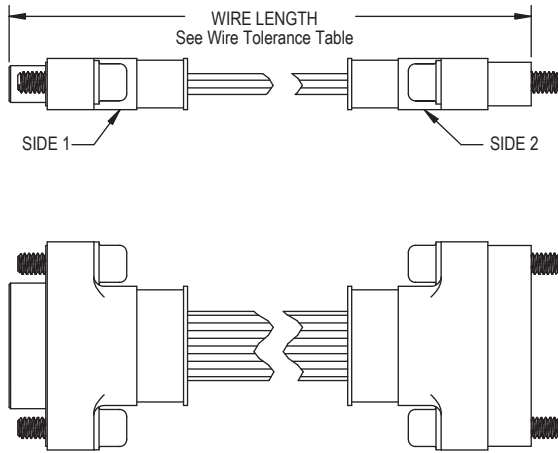
- Material/Finishes:
  - Shell: see part number break down
  - Insulator: LCP/N/A
  - Contacts: gold alloy / unplated
  - Wire: see part number break down
  - Hardware: stainless steel, passivated
  - Band clamp: (Shield termination when applicable) stainless steel
- Inspected and tested IAW MIL-DTL-32139
- Interface dimensions per MIL-DTL-32139/3 and MIL-DTL-32139/4

**Wire Length Tolerance**

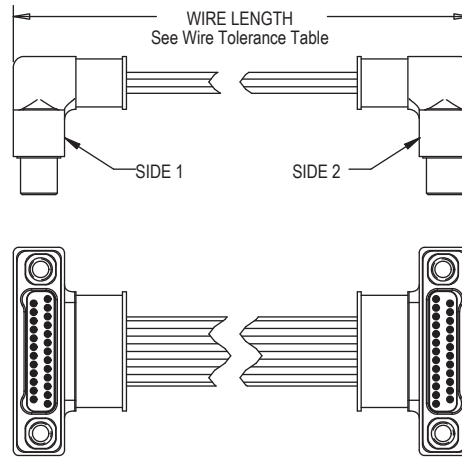
Length Range	Tolerance
3" - 48"	+0.50/-0.00
>48" - 72"	+1.00/-0.00
>72" - 120"	+2.00/0.00
>120"	+4.00/-0.00



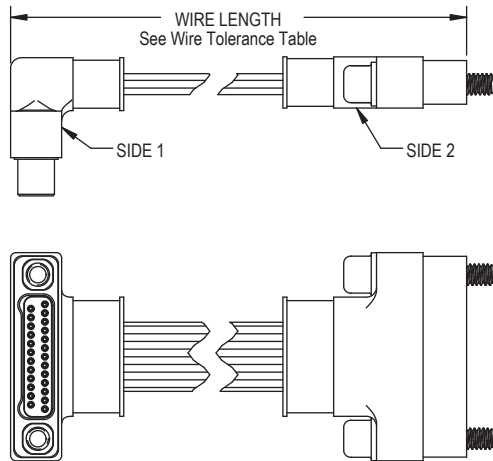
**CS STRAIGHT CABLE ASSEMBLY**



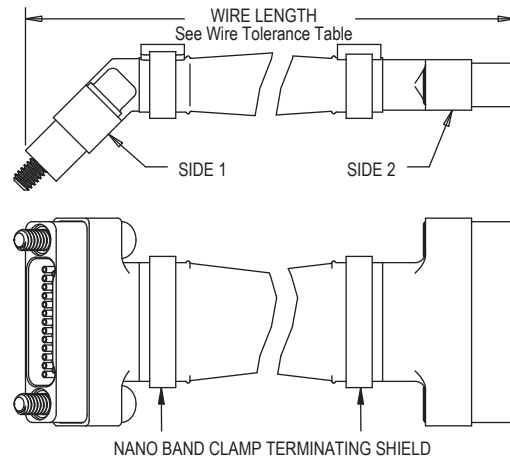
**GP RIGHT ANGLE CABLE ASSEMBLY**



**CS 90° TO STRAIGHT CABLE ASSEMBLY**

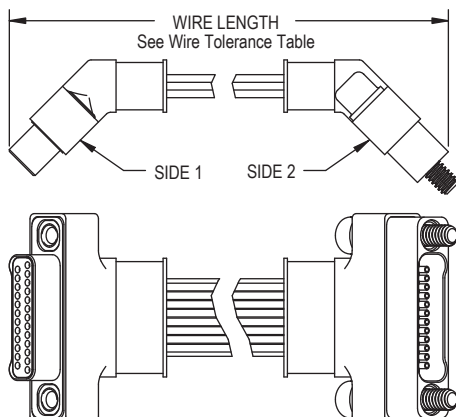


**GS 45° TO STRAIGHT CABLE ASSEMBLY**

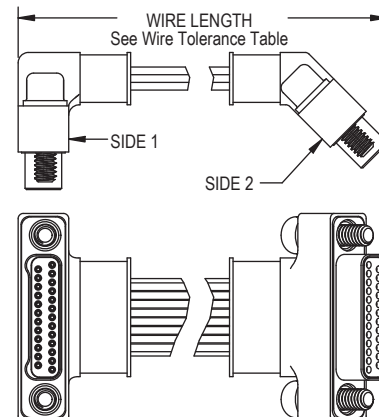


D

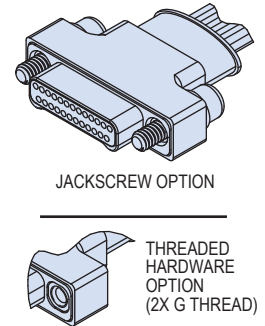
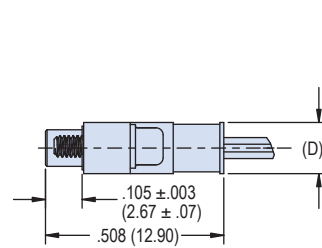
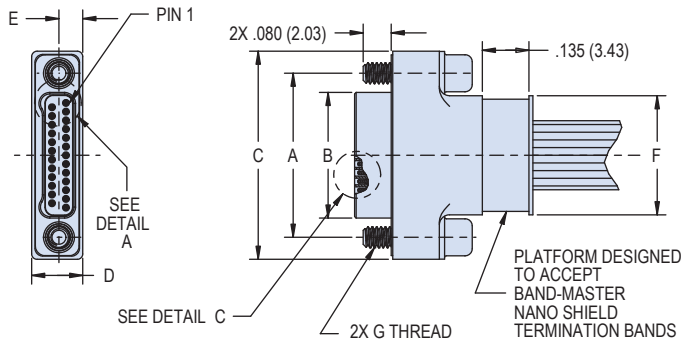
**CS 45° TO 45° CABLE ASSEMBLY**



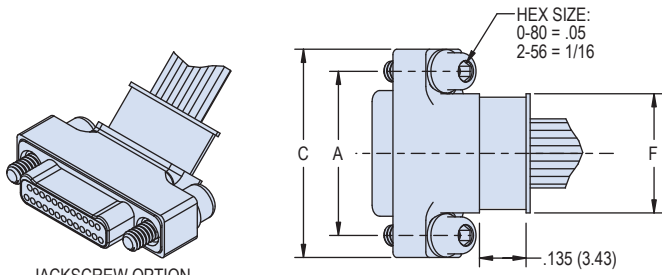
**GP 90° TO 45° CABLE ASSEMBLY**



**891-032 PLUG WITH STRAIGHT BACKSHELL**



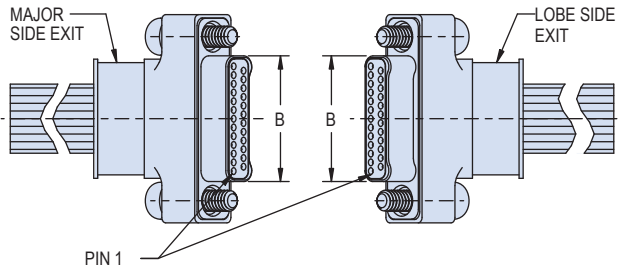
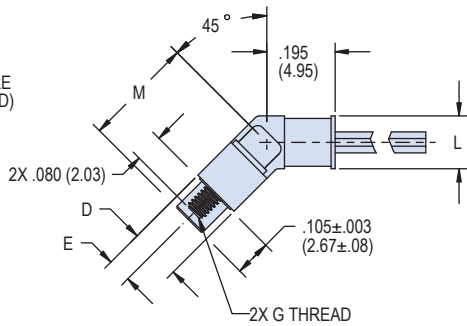
**891-032 PLUG WITH 45° BACKSHELL**



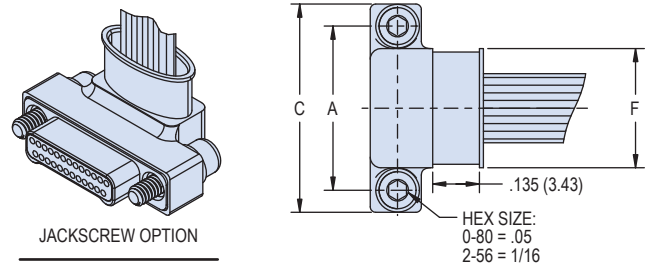
JACKSCREW OPTION



THREADED HARDWARE OPTION (2X G THREAD)



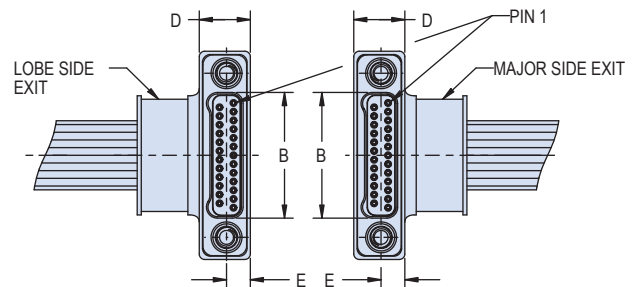
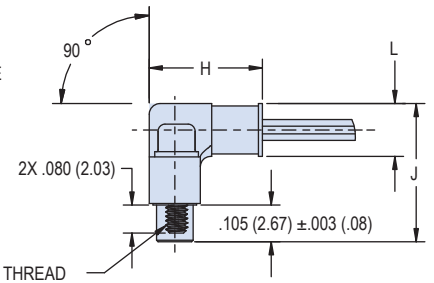
**891-032 PLUG WITH 90° BACKSHELL**



JACKSCREW OPTION



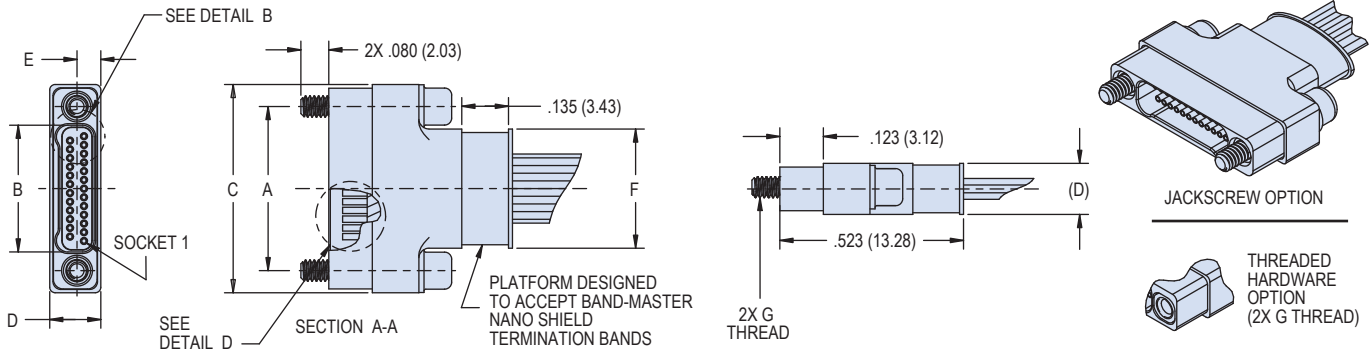
THREADED HARDWARE OPTION (2X G THREAD)



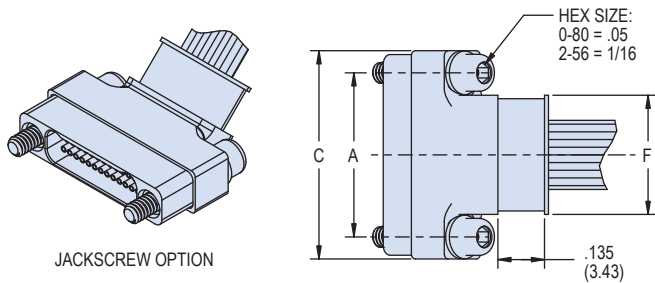
SPECIFY EXIT SIDE IN P/N



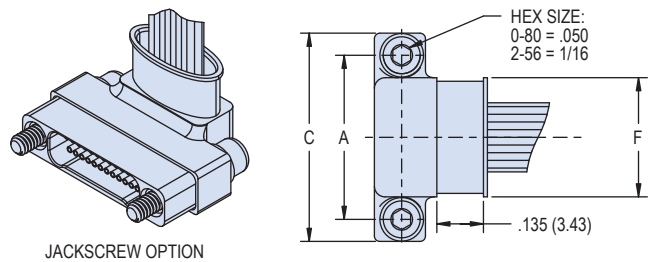
**891-032 RECEPTACLE WITH STRAIGHT BACKSHELL**



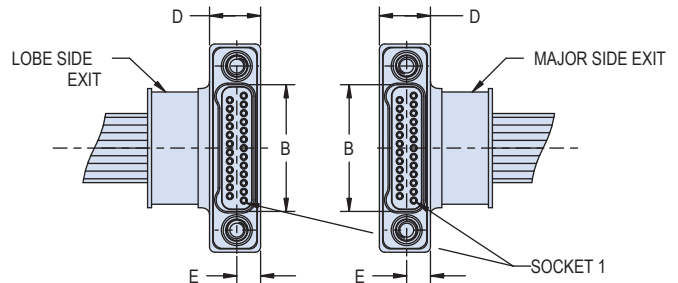
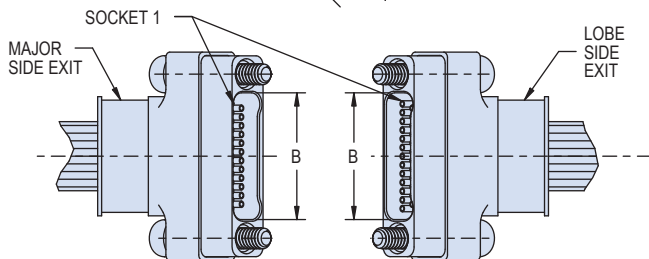
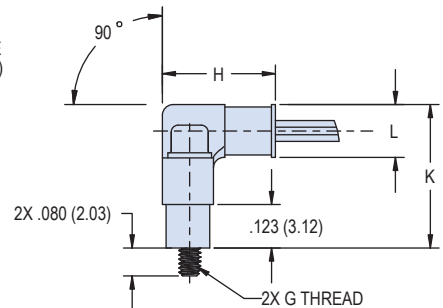
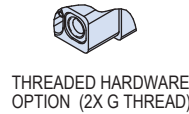
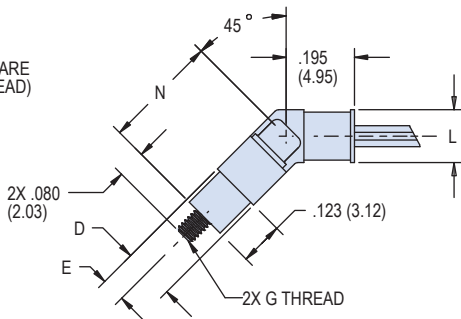
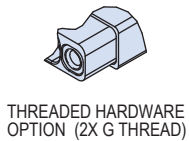
**891-032 RECEPTACLE WITH 45° BACKSHELL**



**891-032 RECEPTACLE WITH 90° BACKSHELL**



**D**



SPECIFY EXIT SIDE IN P/N



# SERIES 89 Dual Row Connectors



Back-to-Back Cable with Straight, 45° or 90° Angle Factory Installed Backshell and Insulated Wire - Dimensions

Plug Dimensions																					
Layout	A BSC.		B BSC.		C		D		E		F		G	H		J		L		M	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		In	mm	In	mm	In	mm	In	mm
9	.270	6.86	.160	4.06	.395	10.03	.145	3.68	.068	1.73	.140	3.56	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
15	.345	8.76	.235	5.97	.470	11.94	.145	3.68	.068	1.73	.215	5.46	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
21	.420	10.67	.310	7.87	.545	13.84	.145	3.68	.068	1.73	.290	7.37	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
25	.470	11.94	.360	9.14	.595	15.11	.145	3.68	.068	1.73	.340	8.64	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
31	.545	13.84	.435	11.05	.670	17.02	.145	3.68	.068	1.73	.415	10.54	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
37	.620	15.75	.510	12.95	.745	18.92	.145	3.68	.068	1.73	.490	12.45	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
41	.670	17.02	.560	14.22	.795	20.19	.145	3.68	.068	1.73	.540	13.72	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
51	.795	20.19	.685	17.40	.920	23.37	.145	3.68	.068	1.73	.665	16.89	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
65	.970	24.64	.860	21.84	1.095	27.81	.145	3.68	.068	1.73	.840	21.34	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
69	1.020	25.91	.910	23.11	1.145	29.08	.145	3.68	.068	1.73	.890	22.61	#0-80 UNF	.323	8.20	.395	10.03	.150	3.81	.313	7.95
85	1.246	31.65	1.110	28.19	1.397	35.48	.170	4.32	.081	2.06	1.091	27.71	#2-56 UNC	.348	8.84	.421	10.69	.176	4.47	.318	8.08

Receptacle Dimensions																					
Layout	A BSC.		B BSC.		C		D		E		F		G	H		K		L		N	
	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm		In	mm	In	mm	In	mm	In	mm
9	.270	6.86	.163	4.14	.395	10.03	.145	3.68	.068	1.73	.140	3.56	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
15	.345	8.76	.238	6.05	.470	11.94	.145	3.68	.068	1.73	.215	5.46	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
21	.420	10.67	.313	7.95	.545	13.84	.145	3.68	.068	1.73	.290	7.37	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
25	.470	11.94	.363	9.22	.595	15.11	.145	3.68	.068	1.73	.340	8.64	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
31	.545	13.84	.438	11.13	.670	17.02	.145	3.68	.068	1.73	.415	10.54	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
37	.620	15.75	.513	13.03	.745	18.92	.145	3.68	.068	1.73	.490	12.45	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
41	.670	17.02	.563	14.30	.795	20.19	.145	3.68	.068	1.73	.540	13.72	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
51	.795	20.19	.688	17.48	.920	23.37	.145	3.68	.068	1.73	.665	16.89	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
65	.970	24.64	.863	21.92	1.095	27.81	.145	3.68	.068	1.73	.840	21.34	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
69	1.020	25.91	.913	23.19	1.145	29.08	.145	3.68	.068	1.73	.890	22.61	#0-80 UNF	.323	8.20	.408	10.36	.150	3.81	.328	8.33
85	1.246	31.65	1.113	28.27	1.397	35.48	.170	4.32	.081	2.06	1.091	27.71	#2-56 UNC	.348	8.84	.433	11.00	.176	4.47	.333	8.46

