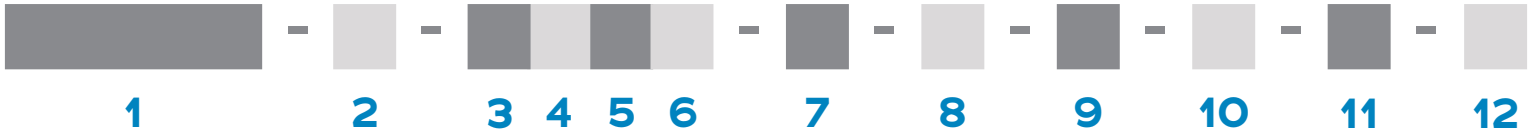


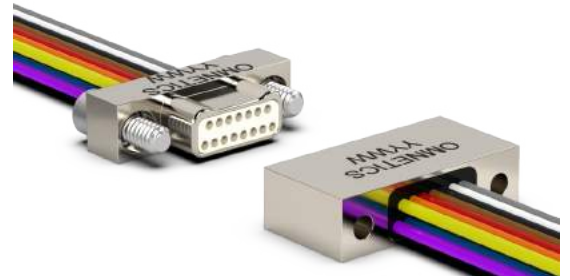
ORDERING GUIDE



1 Series	MNPO Metal Nano Pin Offset	MNSO Metal Nano Socket Offset
2 Number Of Contacts	09 15 21 25 31 37 51 65 69 85 91	
3 Termination Type	WD Discrete Wires	WC Cable
4 Wire Gage	0 30 AWG (STD)	2 32 AWG
5 Wire Type	Q NEMA HP3 (formerly M16878/4 and /6)	XX.X M22759/33 (30 AWG only)
6 Wire Length	18.0 18.00" (STD)	XX.X Custom Length
7 Color Scheme	C 10 Repeating Colors Per MIL STD 681	Y All Other Wire Color
8 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated B Aluminium Shell, Black Anodized T Titanium Shell, Unplated	CD Aluminium shell, Cadmium Plated S Stainless steel Shell, Passivated
9 Common Options	ETH End Threaded Hole, #0-80 YY Non Standard Hardware (threaded holes, thumb screws, #2-56 screw) HT High Temp. Epoxy BS1 Standard Straight Backshell BS3 90/RA Oval BSY Custom Backshell	EJS End Jack Screw RH RoHS Compliant BS2 45 Oval BS4 2 Piece BS CS Customer Supplied Material
10 Shield / Jacket	D Slip-on Braid E Machine Braid F Flexo Braid J Nomex Braid ST Shrink Tube	
11 Mod Codes	M10 Keyed M50 Space Grade Nano-D, SPT1	M30 Ground Spring M53 Space Grade Nano-D, SPT2
12 Special Instructions	YYY Describe anything that is not covered in standard options	

DUAL ROW PRE-WIRED (TYPE WD)

Pre-Wired Dual Row Bi-Lobe[®] nanos feature 30 AWG or smaller sizes of stranded wire. Omnetics assembles them using our proprietary semi-automated crimping system, as their very small size requires special care and precision to accomplish a perfect crimp. Each unit is carefully hand-inspected throughout the assembly process. Pre-crimped wires and contacts are potted in place to further protect the integrity of the crimp joint. Designers may specify wire type, size, and color coding to achieve a near-custom part. COTS versions with 18" of color-coded AWG Teflon are also available for quick turnaround. These connectors come in standard sizes ranging from 9 to 91 positions, as well as custom configurations. Omnetics also offers full QPL versions of MIL-DTL-32139.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125 °C (200 °C w/HTE)
Current rating	1 Amp per contact
Voltage Rating (DWV)	250 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 100 VDC
Shock	100 g's discontinuity < 10 nanoseconds
Vibration	20 g's discontinuity < 10 nanoseconds
Thermal Vacuum Outgassing	1.0% max TML, 0.1% VCM
Contact Resistance	71 milliohms (71 mV) max @ 1 Amp
Mating/Unmating Force	2.5 oz. (.71g) typical per contact

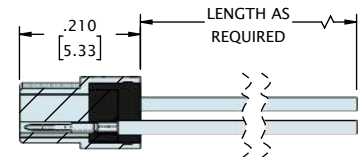
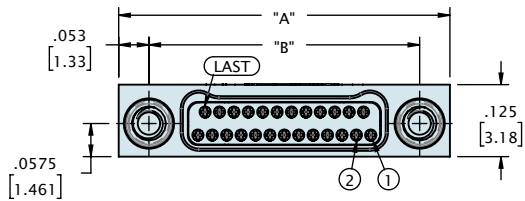
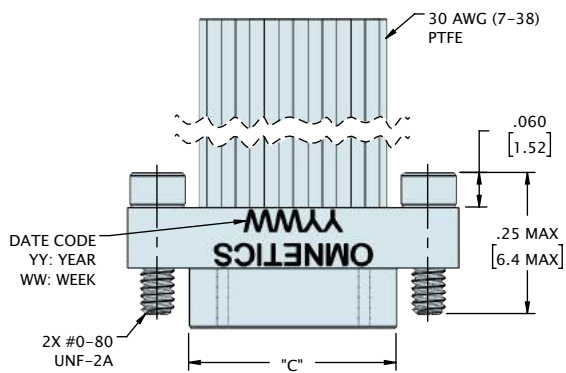
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-32139
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-M-24519
Encapsulant	Epoxy

Shell Options

TYPE	PERFORMANCE
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

DUAL ROW PRE-WIRED (TYPE WD)

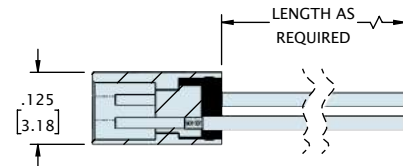
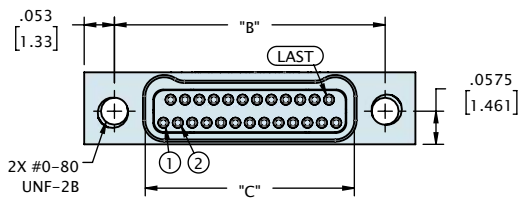
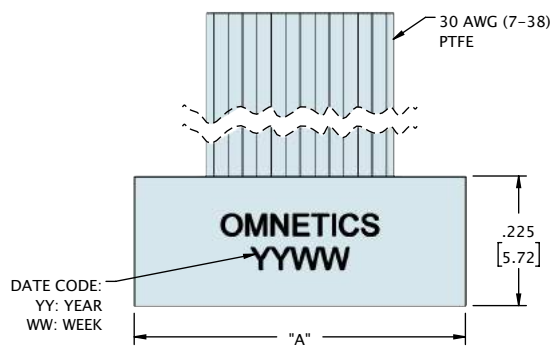


JACKSCREW HIDDEN FOR CLARITY

CONTACTS	"A"	"B"	"C"
09	.375 [9.53]	.270 [6.86]	.160 [4.06]
15	.450 [11.43]	.345 [8.76]	.235 [5.97]
21	.525 [13.34]	.420 [10.67]	.310 [7.87]
25	.575 [14.61]	.470 [11.94]	.360 [9.14]
31	.650 [16.51]	.545 [13.84]	.435 [11.05]
37	.725 [18.42]	.620 [15.75]	.510 [12.95]
51	.900 [22.86]	.795 [20.19]	.685 [17.40]
65	1.075 [27.31]	.970 [24.64]	.860 [21.84]
69	1.125 [28.58]	1.020 [25.91]	.910 [23.11]
85	1.325 [33.66]	1.220 [30.99]	1.110 [28.19]
91	1.452 [36.88]	1.321 [33.55]	1.185 [30.10]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

DUAL ROW PRE-WIRED (TYPE WD)



CONTACTS	"A"	"B"	"C"
09	.375 [9.53]	.270 [6.86]	.163 [4.14]
15	.450 [11.43]	.345 [8.75]	.238 [6.05]
21	.525 [13.34]	.420 [10.67]	.313 [7.95]
25	.575 [14.61]	.470 [11.94]	.363 [9.22]
31	.650 [16.51]	.545 [13.84]	.438 [11.13]
37	.725 [18.42]	.620 [15.75]	.513 [13.03]
51	.900 [22.86]	.795 [20.19]	.688 [17.48]
65	1.075 [27.31]	.970 [24.64]	.863 [21.92]
69	1.125 [28.58]	1.020 [25.91]	.913 [23.19]
85	1.325 [33.66]	1.220 [30.99]	1.113 [28.27]
91	1.452 [36.88]	1.321 [33.55]	1.188 [30.18]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY