



## microQUAD™

### MJHS – Jumper Cable

MJHS rugged metal cable assemblies are used in jumper applications where both signal and quadrx modules are desired. These connectors come with a variety of wiring and hardware options and all cable connectors are available in custom lengths.

### DIMENSIONS

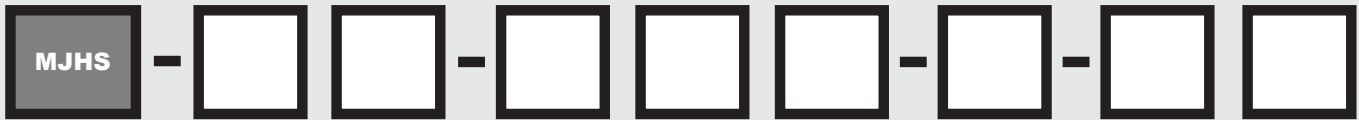
TABLE A	
Module	Dimension
Module	0.200
SIG 10	0.321
SIG 20	0.571
SIG 30	0.821
SIG 40	1.071
SIG 50	1.321

DIMENSIONS		
Body Length (see calculation below)		
A	"A" minus 0.744	
B	"A" minus 0.560	
C	"A" minus 0.320	
D	"A" minus 0.264	
Y	"A" minus 0.624	

TABLE B		
Module	Gap Dims if Previous Zone is SIGxx	Gap Dims if Previous Zone is Module
Module	0.028	0.025
SIG xx	0.028	0.028

SHOWN WITH CAPTIVE #4-40 JACKNUT/SCREW (2 PCS EA)

### Sample Part Number Format: MJHS-04R1-33D-022-5N41



**SERIES**  
 Jumper Cable

**HIGH-SPEED MODULES**  
 01 – 1 Module  
 02 – 2 Modules  
 03 – 3 Modules  
 04 – 4 Modules  
 05 – 5 Modules (max. sig. 40)  
 06 – 6 Modules (max. sig. 30)  
 07 – 7 Modules (max. sig. 20)  
 08 – 8 Modules (max. sig. 10)  
 09 – 9 Modules (max. sig. 10)  
 0A – 10 Modules (no signals)

**BODY STYLE**  
 1 – Male-to-Male  
 2 – Male-to-Female  
 3 – Male-to-Female, ground fingers  
 4 – Female-to-Female  
 5 – Female-to-Female (both with ground fingers)

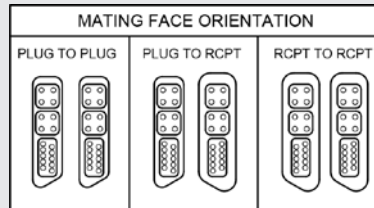
**WIRE TYPE & GAUGE, QUADRX**  
 X – See Quadrx Wire Codes on page 13

**WIRE LENGTH**  
 XXX – Wire length in inches (minimum 3")  
 Example: 018 = 18"

**WIRE TYPE & GAUGE, SIGNALS**  
 0 – No signal contacts  
 X – See Wire Codes on page 14

**BODY PLATING (LCP INSULATORS)**  
 1 – Electroless nickel-plated aluminum shell  
 2 – Electroless nickel-plated aluminum shell ☒  
 3 – Electrodeposited cadmium-plated aluminum shell ☒  
 5 – Gold-plated aluminum shell  
 6 – Gold-plated aluminum shell ☒

**SIGNAL CONTACTS**  
 L0 – Left-side key – No signal contacts  
 L1 – Left-side key – 10 signal contacts  
 L2 – Left-side key – 20 signal contacts  
 L3 – Left-side key – 30 signal contacts  
 L4 – Left-side key – 40 signal contacts  
 L5 – Left-side key – 50 signal contacts  
 R0 – Right-side key – No signal contacts  
 R1 – Right-side key – 10 signal contacts  
 R2 – Right-side key – 20 signal contacts  
 R3 – Right-side key – 30 signal contacts  
 R4 – Right-side key – 40 signal contacts  
 R5 – Right-side key – 50 signal contacts



**HARDWARE**  
 000 – No hardware  
 610 – Fixed jacknuts, captivated\*\* (both)  
 810 – Turning jackscrews, captivated\*\* (both)  
 860 – Fixed jacknuts, captivated (female) & turning jackscrews (male)  
 870 – Fixed jacknuts, captivated (male) & turning jackscrews (female)  
 NXX – Keying jacknuts (both)\*\*\*  
 JXX – Keying jackscrews (both)\*\*\*  
 AXX – Keying jacknuts (female) & keying jackscrews (male)\*\*\*  
 BXX – Keying jacknuts (male) & keying jackscrews (female)\*\*\*

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

### NOTES

- All high-speed receptacles have fluoropolymer interfacial seals.
- Option not RoHS-compliant.
- \* Left or right polarization is determined by looking at the male interface with the LONG SIDE downward. The key is the angled side of the interface.
- \*\* Captivated hardware is factory-installed and non-removable.
- \*\*\* Refer to "Hardware Keying Options" on page 15.

### MATERIALS and FINISHES

Socket Contact: ..... Brass  
 Pin Contacts: ..... BeCu alloy strip  
 Contact Finish: ..... Gold plate, 50 μ" minimum  
 Shells: ..... Aluminum alloy 6061-T6  
 Shell Finishes: ..... Electroless nickel, electrodeposited cadmium, or gold-plated  
 Molded Insulators: ..... Glass-filled liquid crystal polymer (LCP)  
 Embedment: ..... Frey Eng. Co. compound CF3003-80 & L-II-49  
 Hardware: ..... Corrosion-resistant steel  
 Interfacial Seal Gaskets: ..... Fluorosilicone

NOTE: AirBorn can manufacture special configurations to your exact specifications.

### SIGNAL INTEGRITY PERFORMANCE

1	1 Meter Long	1.0 GHz @ -2 dB
2	2 Meters Long	1.0 GHz @ -4 dB
3	3 Meters Long	1.0 GHz @ -6 dB

### PERFORMANCE

Contact Rating: ..... 3 amperes maximum  
 Operating Temperature: ..... -55° C to 125° C  
 Maximum Working Voltage: ..... 600V, RMS, 60Hz  
 Insulation Resistance: ..... 5,000 megohms minimum @ 500 VDC  
 Durability: ..... 500 connector mating cycles  
 Contact Engaging Force: ..... 6.0 ounces maximum/contact  
 Contact Separating Force: ..... 0.5 ounces minimum/contact  
 Mating and Unmating Force: ..... 10 ounces maximum/contact