

Minitek® 2.00mm Blind Mate Interface (BMI) Connectors

ROBUST AND VERSATILE SELF-ALIGNING CONNECTOR

Minitek® 2.00mm Blind Mate Interface (BMI) is a flexible and comprehensive solution designed for application with a current rating up to 2A per circuit. It allows misalignment and provides floating for easy blind mate connections. BMI option is available in dual row with 8 or 12 circuits. These connectors provide an ideal solution for panel-to-board applications.

- Fixed or floating mounting possible
- Fully isolated receptacle to prevent terminals from damage
- Polarized mating geometry to prevent mismatching
- Passive locking to secure mating operation



TARGET MARKETS



FEATURES

- Blind mate interface
- Floating receptacle option available
- Passive locking on housing with low thumb latch operation
- Fully polarized housings
- Scoop-proof housings
- Available in through hole, PIP and SMT as option
- Existing crimp section and automated crimp tooling from 30AWG to 22AWG
- Glow wire compliant
- UL flammability
- RoHS compliant, halogen free and lead-free

BENEFITS

- Allows $\pm 2.00\text{mm}$ catching for blind mating
- Allows $\pm 1.00\text{mm}$ misalignment in x and y axes
- Ensure secured mating retention
- Prevents accidental mismating
- Ensure terminals and header pins are not damaged from misuse
- Compatible with multiple manufacturing processes
- No specific industrial tools required
- Complies with International Standard IEC 60335-1 for household appliances
- Better safety
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Header Housing: High temperature thermoplastic , natural
- Receptacle Housing: High temperature thermoplastic, black
- Crimping Terminal: Copper alloy
- Plating : Gold/GXT on the contact area, tin on tail, nickel under layer

MECHANICAL PERFORMANCE

- Catching: ± 2 mm in x and y axes
- Misalignment with Floating Option: ± 1 mm or 15° in x and y axes, ± 0.3 mm in z axis
- Terminal Insertion Force: 2N max. per contact
- Durability: 100 mating cycles for gold plating

ENVIRONMENTAL

- Operating Temperature: -40°C to $+125^\circ\text{C}$

PACKAGING

- Header : Tube packaging / Tape & Reel
- Receptacle: Bag
- Terminal: Reel

TOOLING INFORMATION

- 30AWG to 26AWG: Hand tool RCY21151W, Mini Application RCY20010
- 24AWG to 22AWG: Hand tool RCY21153W, Mini Application RCY20036

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: $20\text{m}\Omega$ max.
- Insulation Resistance: $1000\text{m}\Omega$ min.
- Voltage Rating: 200Vrms
- Current Rating: 2A per contact
- Dielectric Withstanding Voltage: 650V AC
- Temperature Rise: 30°C max.

APPROVALS AND CERTIFICATION

- Glow Wire Ignition Temperature (GWIT) per IEC 60695-2-13
- Glow Wire Flammability Index (GWFI) per IEC 60695-2-12
- UL & CSA

SPECIFICATION

- Amphenol Product Specification: GS-12-1470

TARGET MARKETS/APPLICATIONS



Data



Industrial



Medical

PART NUMBERS

Description	Part Numbers
Minitek® 2.00mm BMI Floating Receptacle, Dual Row (2x4), 8 positions	10148136-008LF
Minitek® 2.00mm BMI Floating Receptacle, Dual Row (2x6), 12 positions	10148136-012LF
Minitek® 2.00mm BMI Vertical Header, 8 positions, Dual Row (2x4), Gold/GXT 0.76µm, tail length 2.50mm	10148138-G0108ULF
Minitek® 2.00mm BMI Vertical Header, 12 positions, Dual Row (2x6), Gold/GXT 0.76µm, tail length 2.50mm	10148138-G0112ULF
Minitek® 2.00mm BMI Vertical Header, 8 positions, Dual Row (2x4), Gold/GXT 0.76µm, tail length 4.10mm	10148138-G0208ULF
Minitek® 2.00mm BMI Vertical Header, 12 positions, Dual Row (2x6), Gold/GXT 0.76µm, tail length 4.10mm	10148138-G0212ULF
Minitek® 2.00mm BMI Vertical Header, 8 positions, Dual Row (2x4), Gold/GXT 0.38µm, tail length 2.50mm	10148138-S0108ULF
Minitek® 2.00mm BMI Vertical Header, 12 positions, Dual Row (2x6), Gold/GXT 0.38µm, tail length 2.50mm	10148138-S0112ULF
Minitek® 2.00mm BMI Vertical Header, 8 positions, Dual Row (2x4), Gold/GXT 0.38µm, tail length 4.10mm	10148138-S0208ULF
Minitek® 2.00mm BMI Vertical Header, 12 positions, Dual Row (2x6), Gold/GXT 0.38µm, tail length 4.10mm	10148138-S0212ULF
Minitek® 2.00mm BMI Fixed Receptacle, 8 positions, Dual Row (2x4)	10148139-008LF
Minitek® 2.00mm BMI Fixed Receptacle, 12 positions, Dual Row (2x6)	10148139-012LF
Minitek® Crimp-to-Wire terminal, 24AWG to 22AWG	10044403-Y01LF
Minitek® Crimp-to-Wire terminal, 30AWG to 26AWG	77138-Y01LF