



Flexi-Mate™ 24 AWG cable assemblies maximise design flexibility, simplify wiring production and provide end-to-end space savings for LED panel-lighting applications

The Flexi-Mate™ family meets the Solid State Lighting (SSL) Industry's needs for flexibility and space savings in applications requiring placement of LEDs on interconnecting panels across the width of the display or lighting fixture. The low-profile, 3.00mm mated height, of the connectors does not interfere with the luminescence angle of PCB mounted LEDs, ensuring light uniformity of the finished panel.

Flexi-Mate 24 AWG cable assemblies are supplied pre-crimped in standard cable lengths, meeting the needs of lighting panel manufacturers who typically lack crimping capabilities. The system comprises board-to-board harnesses used to connect LED light panels and driver-to-board harnesses to connect LED panels to the main power board. A wire loop configuration can complete an open-loop signal. The cable assemblies mate with existing Flexi-Mate receptacles.

Key features of the compact, low-profile Flexi-Mate connectors include a dual-contact terminal design for secure electrical contact, space-saving positive side locks and mating guide features. Connectors meet IEC60838-2-2 requirements for LED modules. For additional information visit: www.molex.com/link/fleximate.html

Features and Benefits

| | |
|--|---|
| 24 AWG cable assemblies in white | Cable gauge and colour support lighting market preferences |
| Flexible board-to-board, wire-to-board and cable-loop options | Meets needs of lighting designs that use interconnecting LED panels |
| Low-halogen materials | Meets lighting industry environmental regulations |
| 3.00mm mated height and 3.70mm pitch | Compact, low profile system achieves space savings |
| Positive side latches on crimp housing | Space savings and easy mating/unmating |
| Dual-contact terminal design | Ensures reliable electrical connection |
| Headers designed with extended wall to ensure >3mm creepage distance | Meets UL approval requirements |
| Shrouded contacts | Protects contact area |

Applications

Lighting:

- LED panel-lighting applications
 - Downlight modules
 - Linear lights / lighting strips
 - Track lighting
 - Office lighting
 - Industrial lighting



LED office lighting



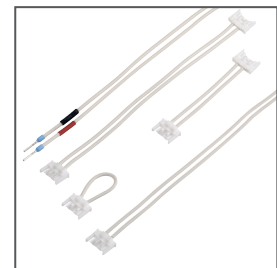
LED panel-lighting applications

Flexi-Mate™ 24 AWG Cable Assemblies

Board-to-Board
68801-4593
68801-4594
68801-4595

Wire Loop
68801-4596

Driver-to-Board
68801-4645
68801-4648



Flexi-Mate™ 24 AWG Cable Assemblies

Specifications

REFERENCE INFORMATION: CABLE ASSEMBLIES

Packaging (cables): Bags
 UL Approved: Yes
 Mates With: Receptacle: 503471
 (For low-halogen mating
 receptacle – contact GPM)
 Designed In: mm
 RoHS: Yes
 Low Halogen: Yes

MECHANICAL

Durability (min.): 15 cycles

PHYSICAL

Housing: PBT, White
 Terminal: Copper Alloy
 Plating:
 Contact Area — Tin (Sn)
 Operating Temperature:
 -40 to +85°C

Flexi-Mate™ 24 AWG Cable Assemblies

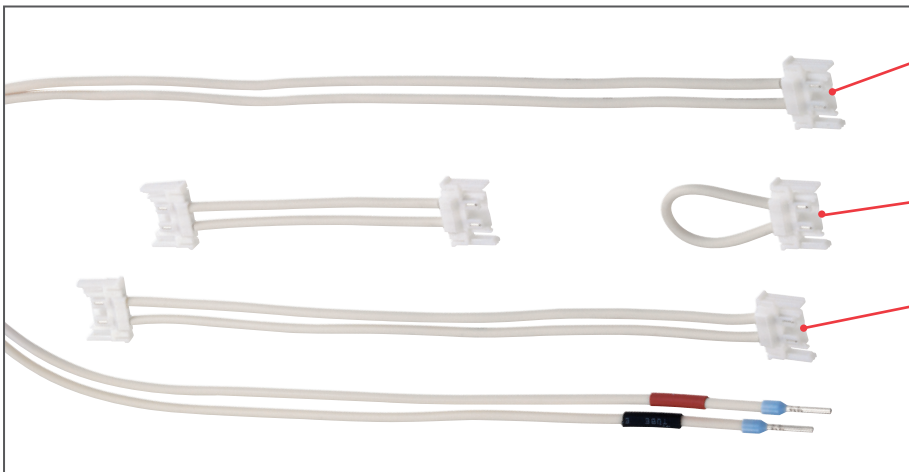
ELECTRICAL

Voltage (max.): 500V
 Current (max.): 2.0A
 Contact Resistance: 40 milliohms max.
 Dielectric Withstanding Voltage:
 1500V AC min.
 Insulation Resistance:
 1000 Megaohms min.

CABLE SPECIFICATIONS

AWG: 24
 Jacket Material: MPPE
 Conductor material:
 Tinned Copper wire stranded
 Colour: White

Flexi-Mate 24 AWG cable assemblies



Driver-to-board
 Flexi-Mate cable assemblies
 68801-4645 / 68801-4648
 (350 and 600mm lengths)

Flexi-Mate wire loop
 68801-4596

Board-to-board Flexi-Mate
 cable assemblies
 68801-4593 / 68801-4594 /
 68801-4595
 (46, 115 and 190mm lengths)

Ordering Information

| Order No. | Configuration | | Cable Length |
|------------|--------------------------|-----------------|--------------|
| 68801-4593 | Flexi-Mate to Flexi-Mate | Board-to-board | 46mm |
| 68801-4594 | | | 115mm |
| 68801-4595 | | | 190mm |
| 68801-4596 | Flexi-Mate wire loop | - | - |
| 68801-4645 | Flexi-Mate to ferrule | Driver-to-board | 350mm |
| 68801-4648 | | | 600mm |