

**Premo-Flex™ FFC jumpers, available in a variety of pitches, cable lengths and thicknesses, plus high-temperature ratings up to +105°C, deliver durable, ultra flexible, low-cost solutions for PCB connections in virtually any industry**



The complete line of 0.50, 1.00 and 1.25mm pitch flat flex cable (FFC) jumpers offers standard lengths, pitches and circuit sizes to accommodate a wide range of flexible interconnect requirements between two PC boards. Standard, off-the-shelf FFC cable jumpers reduce lead-times and tooling costs to the customer. In addition, Molex can also accommodate custom requirements for FFC cable jumpers in lengths of over 305mm, with prototype lead-times of around 1 week.

The flat flex jumpers are terminated to Zero Insertion Force (ZIF), non-ZIF or Low Insertion Force (LIF) FFC connectors, available from Molex. Premo-Flex standard flat flex jumpers are now available in ultra-thin, ultra-flexible 0.12mm cable, ideal for complex board-to-board interconnections in confined spaces.

Molex offers an extensive range of FFC connectors and is able to design customized FFC connectors to customer requirements. Type A (same-side) and Type D (opposite-side) contact layouts allow for mirrored contacts in top- and bottom-mount ZIF applications. For additional information visit: [www.molex.com/product/premoflex\\_ffc-fpc.html](http://www.molex.com/product/premoflex_ffc-fpc.html)

**Premo-Flex™ Flat Flex Cable Jumpers**

**Cable Thickness 0.12mm**

- 15166 Tin, 0.50mm Pitch, 105°C
- 15167 Tin, 1.00mm Pitch, 105°C
- 15168 Tin, 1.25mm Pitch, 105°C

**Cable Thickness 0.22mm**

- 98266 Tin, 0.50mm Pitch, 105°C
- 98267 Tin, 1.00mm Pitch, 105°C
- 98268 Tin, 1.25mm Pitch, 105°C

**Cable Thickness 0.27mm**

- 21020 Tin, 0.50mm Pitch, 80°C
- 21039 Tin, 1.00mm Pitch, 80°C
- 21049 Tin, 1.25mm Pitch, 80°C
- 15266 Tin, 0.50mm Pitch, 105°C
- 15267 Tin, 1.00mm Pitch, 105°C
- 15268 Tin, 1.25mm Pitch, 105°C
- 15020 Gold, 0.50mm Pitch, 105°C
- 15039 Gold, 1.00mm Pitch, 105°C
- 15049 Gold, 1.25mm Pitch, 105°C

**FEATURES AND BENEFITS**

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|---|--|
| <ul style="list-style-type: none"> <li>• Available in numerous circuit sizes (4 to 60) and custom lengths</li> </ul>                          | <ul style="list-style-type: none"> <li>• Provides limitless design-in options</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Contact area can be configured on the same or opposite sides of the flexible cable jumper</li> </ul> | <ul style="list-style-type: none"> <li>• Cable mirrors signal layout between PCBs</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Rated up to +105°C</li> </ul>  | <ul style="list-style-type: none"> <li>• Meets industry-standard requirements</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Simple assembly process</li> </ul>   | <ul style="list-style-type: none"> <li>• Ideal for electrical connections between PCBs, display boards, etc.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Various cable termination thicknesses</li> </ul>   | <ul style="list-style-type: none"> <li>• Meets industry-standard ZIF connector requirements</li> <li>• Ease-of-assembly in hard-to-reach applications</li> </ul> |
| <ul style="list-style-type: none"> <li>• Polyester insulation</li> </ul>  | <ul style="list-style-type: none"> <li>• Meets Registration Evaluation, Authorization and Restriction of Chemicals (REACH) requirements</li> </ul>               |
| <ul style="list-style-type: none"> <li>• Ultra-thin, ultra-flexible 0.12mm cable option</li> </ul>  | <ul style="list-style-type: none"> <li>• Extends life of cable: 900,000 cycles vs. standard jumper flex life of 6,000 cycles</li> </ul>                          |



Premo-Flex™ Flat Flex Jumpers

**MARKETS AND APPLICATIONS**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Automotive             <ul style="list-style-type: none"> <li>- Radio, CD, DVD, GPS device</li> <li>- LCD display</li> <li>- Keyboard</li> <li>- Moveable units</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Industrial</li> <li>• Medical Equipment</li> <li>• Military</li> <li>• Home Appliance             <ul style="list-style-type: none"> <li>- Control Panels</li> </ul> </li> </ul> |
| <ul style="list-style-type: none"> <li>• Consumer             <ul style="list-style-type: none"> <li>- Set top box</li> <li>- Camcorder</li> <li>- Plasma display</li> </ul> </li> </ul>  |   |
| <ul style="list-style-type: none"> <li>• Computer             <ul style="list-style-type: none"> <li>- Notebook</li> <li>- Printer</li> <li>- Scanner</li> <li>- Keyboard</li> <li>- LCD flat panel</li> </ul> </li> </ul>      |   |



Automotive Electronics



Surgery Lamp

## SPECIFICATIONS

### Reference Information

Packaging: Box  
 UL Style No: 20706 (copper wire)  
 Flame Resistance: UL 758 VW-1  
 RoHS: Yes  
 Halogen Free: Yes

### Physical

Temperature Rating: -40 to +105°C  
 Heat Resistance: 168 hours at +136°C  
 Moisture Resistance: 96 hours at +60°C,  
 95% Relative Humidity (RH)  
 Folding: Specimen to be folded manually  
 at +180° over a 4.00mm (.157") radius,  
 min. 20 cycles

### Electrical

Voltage (max.): 60V  
 Current (max.):  
 0.50mm Pitch — 0.5A  
 1.00mm Pitch — 1.2A  
 1.25mm Pitch — 1.4A  
 Conductor Resistance: 730 ohms per km. max.  
 Insulation Resistance: 10 Megohms per km. min.  
 Dielectric Test: 200V AC for 1 minute, no  
 disrupted discharge

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### Cable Thickness 0.22mm

98266 Tin, 0.50mm Pitch, 105°C  
 98267 Tin, 1.00mm Pitch, 105°C  
 98268 Tin, 1.25mm Pitch, 105°C

### Cable Thickness 0.27mm

21020 Tin, 0.50mm Pitch, 80°C  
 21039 Tin, 1.00mm Pitch, 80°C  
 21049 Tin, 1.25mm Pitch, 80°C  
 15266 Tin, 0.50mm Pitch, 105°C  
 15267 Tin, 1.00mm Pitch, 105°C  
 15268 Tin, 1.25mm Pitch, 105°C  
 15020 Gold, 0.50mm Pitch, 105°C  
 15039 Gold, 1.00mm Pitch, 105°C  
 15049 Gold, 1.25mm Pitch, 105°C



Control Panels

## ORDERING INFORMATION

Series No.	Plating Material	Cable Thickness mm	Pitch mm	Temp Rating Max. °C	Circuits	Contact Layout Type	Cable Lengths	Minimum Order Quantity			
15166-XXXX	Tin	0.12	0.50	105	6 to 60	A or D	Standard lengths 30 up to 305mm  Custom lengths available over 305mm	1000			
15167-XXXX			1.00								
15168-XXXX			1.25								
98266-XXXX		0.22	0.50		6 to 50						
98267-XXXX			1.00		4 to 50						
98268-XXXX			1.25								
21020-XXXX		0.27	0.50	0.50	80				6 to 50		
21039-XXXX				1.00							
21049-XXXX				1.25							
15266-XXXX			105	0.50	0.50				4 to 50		
15267-XXXX					1.00						
15268-XXXX					1.25						
15020-XXXX			Gold	0.50	0.50				105	6 to 50	
15039-XXXX					1.00						4 to 50
15049-XXXX					1.25						