

**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 extra 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)

## FEATURES AND BENEFITS

- |                                                                                             |                                                                                                  |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| • Available in numerous circuit sizes (4 to 60) and custom lengths                          | • Provides limitless design-in options                                                           |
| • Contact area can be configured on the same or opposite sides of the flexible cable jumper | • Cable mirrors signal layout between PCBs                                                       |
| • Rated up to +105°C                                                                        | • Meets industry-standard requirements                                                           |
| • Simple assembly process                                                                   | • Ideal for electrical connections between PCBs, display boards, etc.                            |
| • Various cable termination thicknesses                                                     | • Meets industry-standard ZIF connector requirements                                             |
|                                                                                             | • Ease-of-assembly in hard-to-reach applications                                                 |
| • Polyester insulation                                                                      | • Meets Registration Evaluation, Authorization and Restriction of Chemicals (REACH) requirements |
| • Extra flexible 0.12mm cable option                                                        | • Extends life of cable: 900,000 cycles vs. standard jumper flex life of 6,000 cycles            |

## MARKETS AND APPLICATIONS

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                             |
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| <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> <li>• Consumer               <ul style="list-style-type: none"> <li>- Set top box</li> <li>- Camcorder</li> <li>- Plasma display</li> </ul> </li> <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> | <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> |
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Automotive Electronics



Surgery Lamp

## Premo-Flex™ Flat Flex Cable Jumpers

### Cable Thickness 0.12mm

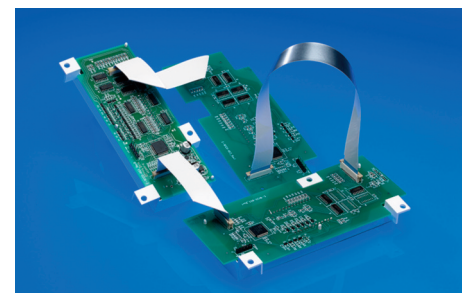
- |       |                          |
|-------|--------------------------|
| 15166 | Tin, 0.50mm Pitch, 105°C |
| 15167 | Tin, 1.00mm Pitch, 105°C |
| 15168 | Tin, 1.25mm Pitch, 105°C |

### 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

- |       |                           |
|-------|---------------------------|
| 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 |



Premo-Flex™ Flat Flex Jumpers

## 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

## Premo-Flex™ Flat Flex Cable Jumpers

### Cable Thickness 0.12mm

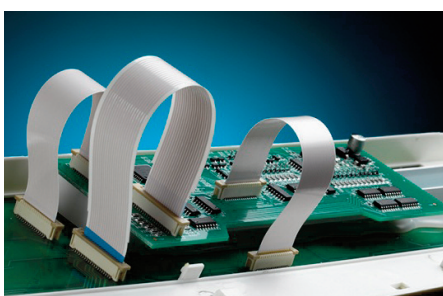
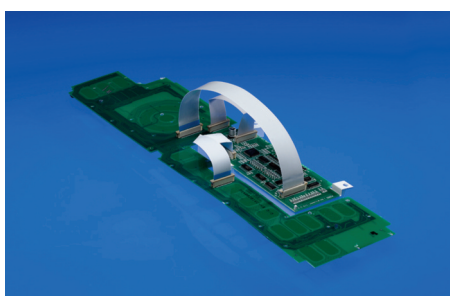
15166 Tin, 0.50mm Pitch, 105°C  
15167 Tin, 1.00mm Pitch, 105°C  
15168 Tin, 1.25mm Pitch, 105°C

### 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

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 | Flex Life Cycles | Pitch mm | Temp Rating Max. °C | Circuits | Contact Layout Type | Cable Lengths                                                              | Minimum Order Quantity |
|------------|------------------|--------------------|------------------|----------|---------------------|----------|---------------------|----------------------------------------------------------------------------|------------------------|
| 15166-XXXX | Tin              | 0.12               | 2.5M             | 0.50     | 105                 | 6 to 60  | A or D              | Standard lengths 30 up to 305mm<br><br>Custom lengths available over 305mm | 1000                   |
| 15167-XXXX |                  |                    |                  | 1.00     |                     |          |                     |                                                                            |                        |
| 15168-XXXX |                  |                    |                  | 1.25     |                     |          |                     |                                                                            |                        |
| 98266-XXXX |                  | 0.22               | 100K             | 0.50     |                     | 6 to 50  |                     |                                                                            |                        |
| 98267-XXXX |                  |                    |                  | 1.00     |                     | 4 to 50  |                     |                                                                            |                        |
| 98268-XXXX |                  |                    |                  | 1.25     |                     |          |                     |                                                                            |                        |
| 15266-XXXX | Gold             | .27                | 10K              | 0.50     | 105                 |          |                     |                                                                            |                        |
| 15267-XXXX |                  |                    |                  | 1.00     |                     | 4 to 50  |                     |                                                                            |                        |
| 15268-XXXX |                  |                    |                  | 1.25     |                     |          |                     |                                                                            |                        |
| 15020-XXXX |                  |                    |                  | 0.50     |                     | 6 to 50  |                     |                                                                            |                        |
| 15039-XXXX |                  |                    |                  | 1.00     |                     | 4 to 50  |                     |                                                                            |                        |
| 15049-XXXX |                  |                    |                  | 1.25     |                     |          |                     |                                                                            |                        |