

0.50 mm Pitch FFC/FPC – F31L Series

RIGHT ANGLE ZIF FLEX CONNECTOR

The F31L series is a right-angle ZIF flex connector with a front flip lock, surface mount termination, and double contact points. It features 2.55 mm in height and comes in 4 to 80 contacts. This series features a cable thickness of 0.30mm and provides enhanced durability of 30 mating cycles. The connectors feature a robust design that prevents solder and flux wicking. These are ideal for automotive, data, industrial, and medical applications.

- Easy to operate
- Strong FFC/FPC retention force makes it vibration-proof
- Enhanced contact stability
- Ensures high solderability and high durability
- USCAR-2 T3V2 qualified



FEATURES

- ZIF (Zero Insertion Force) mechanism
- Front flip locking function
- Double contact point
- Design against solder and flux wicking
- 4 to 80 positions available

BENEFITS

- Absence of frictional mating wear results in high mating cycle life
- Easy to operate and strong FFC/FPC retention makes it vibration-proof
- Ensures enhanced contact stability
- Ensures high solderability
- Comprehensive range to satisfy different customer requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP, Natural color (UL 94 V-0)
- Actuator: PA9T, Black color (UL 94 V-0)
- Contact: Phosphor bronze, T=0.20 mm, 1~3 μm Ni under plating
- Anchor-plate: Brass, T=0.20 mm, 1~3 μm Ni under plating, 2~4 μm tin plating
- Mylar: T= 0.10mm, Thermostable, Yellow color

MECHANICAL PERFORMANCE

- FFC/FPC Retention Force: 40 gf ~70 gf / pin
- Terminal Retention Force: 100 gf/terminal min.
- Fixed Plate Retention Force: 100 gf/plate min.
- Durability: 30 mating cycles

ELECTRICAL PERFORMANCE

- Voltage Rating: 50 V AC/DC
- Current Rating: 0.5 A
- Contact Resistance: 30 mΩ max.
- Insulation Resistance: 500 MΩ min.
- Dielectric Withstanding Voltage: No short or breakdown after 500 V AC, 2 mA, 1 min.

PACKAGING

- Tape & Reel

APPROVALS AND CERTIFICATIONS

- UL File Number: E106764
- RoHS compliant

SPECIFICATION

- Aorora Product Specification: IS.EQC.039

ENVIRONMENTAL

- Operating Temperature Range: -40 °C to +125 °C

TARGET MARKETS/APPLICATIONS



Car Multimedia
Car Navigation
Dashboard
PND



Router
Server
ODD
HDD



Base Station
Power
Switches



Sensing Element
Monitoring Camera
Human Machine Interface
Industrial PC
Robotics



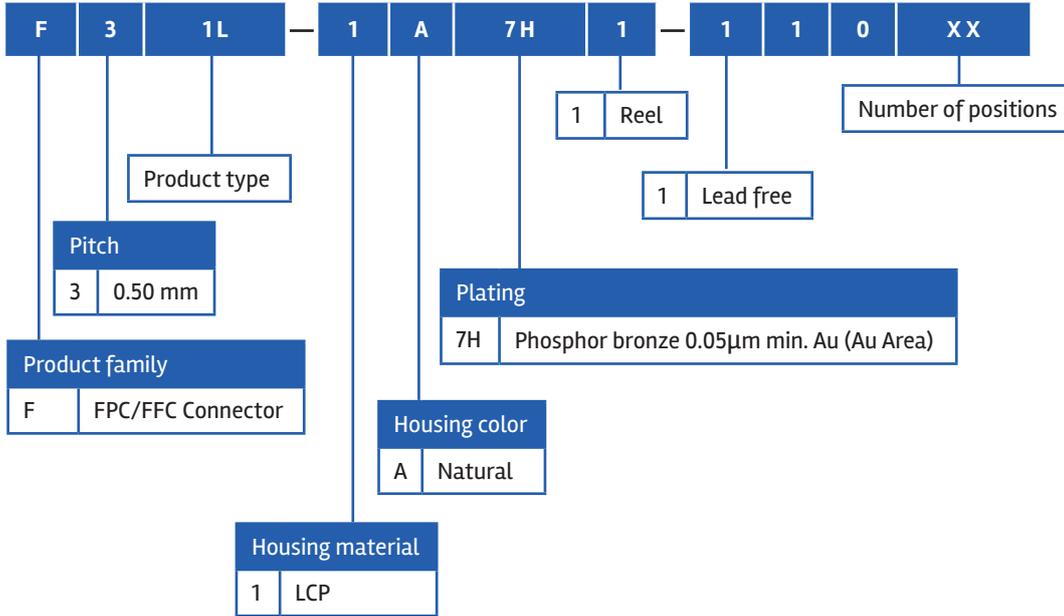
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Tablets
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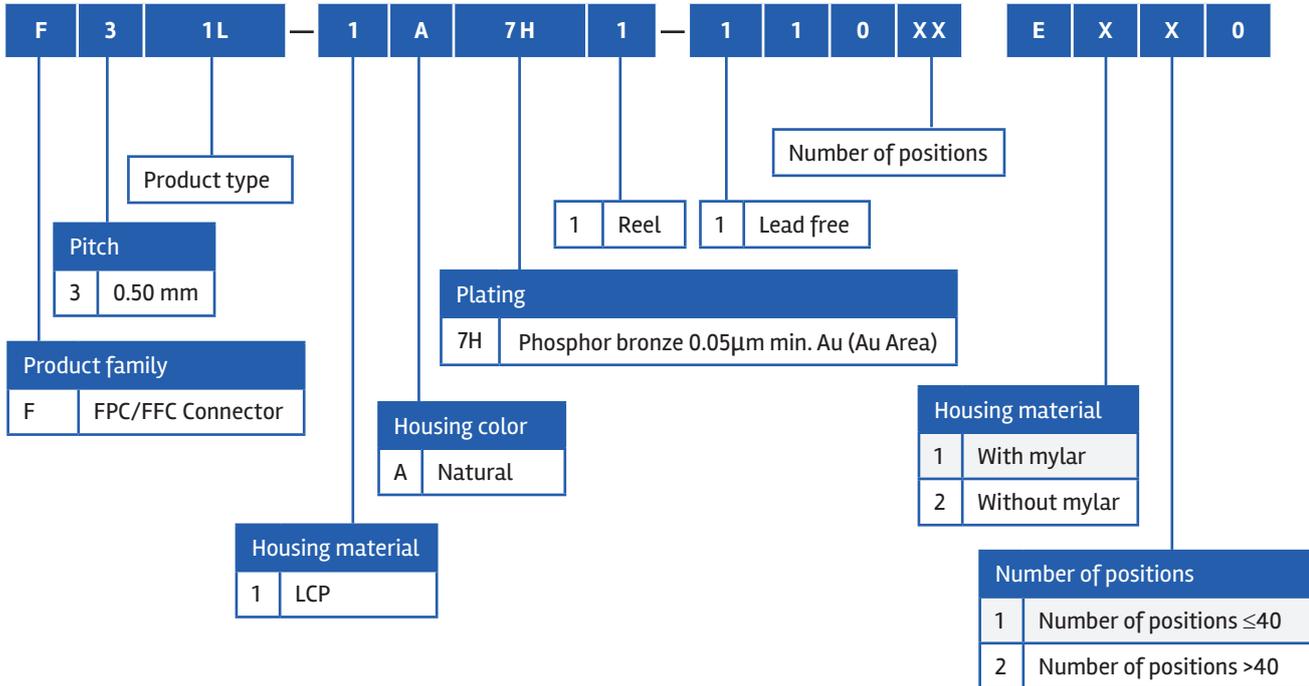
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MRI
CT
Infusion Pump

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