

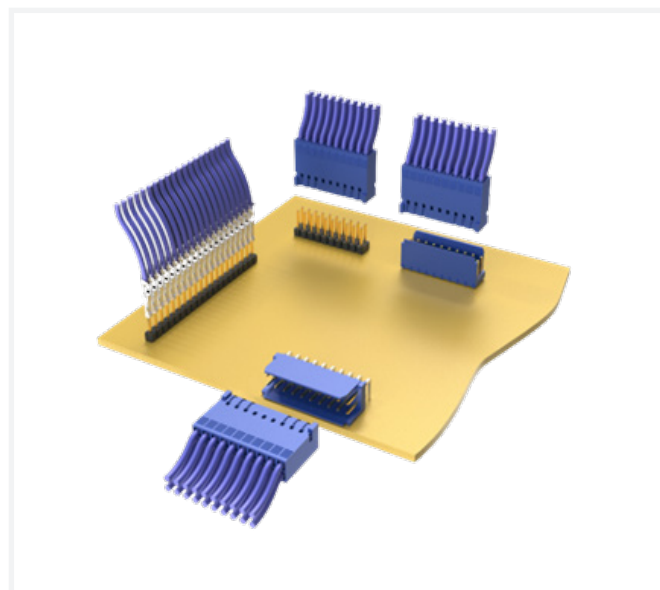
# Dubox® Wire-to-Board

## MODULAR, RELIABLE, AND COMPACT SOLUTION

The Dubox® 2.54mm wire-to-board connectors offer an extensive range of through-hole part options, including single or double-row in either vertical or right-angle orientation from 2 to 62 positions, with a maximum current rating of 3A () per individual contact.

The Dubox® contact has a pre-stressed, dual beam design to enable low insertion force, 4-wall contact design for signal protection, and supports up to 200 mating cycles (plating dependent).

- Uniform dual-beam design across the range
- Reliable connection for demanding applications
- Fully compatible with standard BergStik® headers



### TARGET MARKETS



### FEATURES

- Dual beam contact design
- Pre-stressed contact
- Mates with very short pins (5mm) and are stackable end-to-end and side-by-side
- Floating solder tails with self-centering on the circuit pads
- 4 wall contact design
- Duplex plating
- Locating feature available
- High Temperature thermoplastic material
- Compliant to DIN41651 specifications, HE13 and BT D2632

### BENEFITS

- Highly reliable electrical performances
- Low insertion force
- Suitable for mezzanine applications and meets different application requirements.
- Assures coplanarity
- Improved signal protection
- Cost efficient
- Maintains the alignment for soldering and facilitates robotic placement
- Compatible with Infrared and Vapor-Phase Reflow
- Qualifies industry specific standards

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High temperature thermoplastic
- Color:
  - TMT: Blue
  - SMT: Grey
- Contact: Phosphor Bronze (CTW contacts) / Copper Alloy (shrouded headers)
- Plating: 0.76µm (30µin) Gold / GXT® over 1.27µm (50µin) Nickel or 2.0µm matte Tin full plated

### MECHANICAL PERFORMANCE

- Contact Normal Force: 0.6N
- Contact Retention Force to Housing: 15N per contact
- Insertion Force per Gold Contact: 1.30N (CTW contacts)
- Withdrawal Force per Gold Contact: 0.30N (30gf) min.
- Contact Wiping Length: 1.5mm
- Insertion Depth: 3.6mm–5.6mm (discrete wire) / 5.1mm–6.2mm (crimp-to-wire housing)
- Pin Retention to Housing: 20N min. (shrouded headers)
- 200 mating cycles (Gold plating)
- Wire Sizes: 22AWG–20AWG & 30AWG–22AWG & 32AWG–28AWG

### ELECTRICAL PERFORMANCE

- Current Rating: 3A continuous
- 2ADC max. per contact for fully energized connector
- Insulation Resistance: 1 x 105MΩ min.
- Dielectric Withstanding Voltage: 1000Vrms min.
- Contact Resistance: 15mΩ max dielectric
- 20MΩ max. after environmental tests

## PART NUMBERS

Description	Part Numbers	Preferred Parts
Shrouded Header, Vertical, Through Hole, Single Row	76384	✓
Shrouded Header, Right-Angle, Through Hole, Single Row	76382	✓
Shrouded Header, Vertical, Through Hole, Double Row	76385	✓
Shrouded Header, Right-Angle, Through Hole, Double Row	76383	✓
CTW Housing, Single Row	65240	✓
CTW Housing, Double Row	65239	✓
Dubox® CTW contact	76347	✓

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

### ENVIRONMENTAL

- Operating Temperature Range: -65°C to +125°C

### SPECIFICATIONS

- Product Specification: BUS-12-055 (Gold) / BUS-12-066 (Tin)
- Hand Tool:
  - 10164488-001 (20AWG)
  - 10164489-001 (24AWG)

### APPROVALS & CERTIFICATION

- UL Approval: E66906

### PACKAGING

- PCB Header: Polybags or Tubes
- CTW housing: Polybags
- Crimping Terminal: Reel

### TOOLING INFORMATION

- Insertion Tool: 30AWG to 20AWG

### TARGET MARKETS/APPLICATIONS



Personal Care Devices (Air Dryer)  
Home Care Devices (Cleaning Robot)  
Home Automation (Alarm System)



Sever Storage



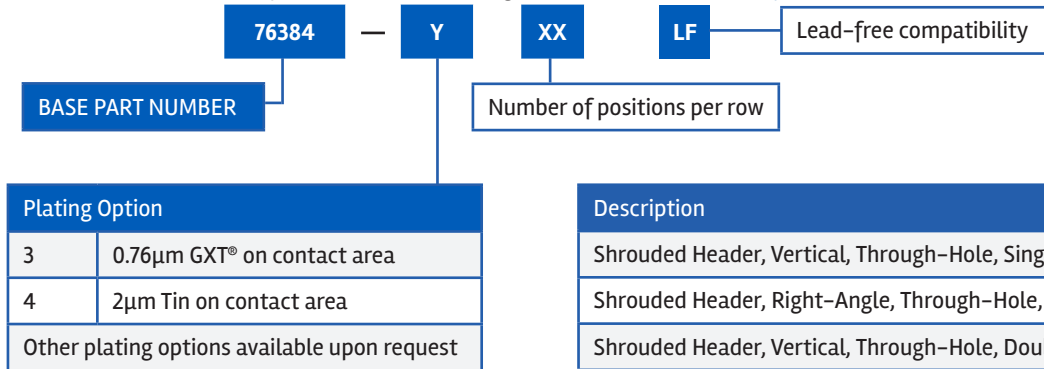
Industrials (Robotics, PLC, Power Tool)



- ✓ Short lead-times
- ✓ Low MOQ's
- ✓ Quick sampling
- ✓ Available at disty

## PART NUMBER SELECTOR SHROUDED HEADER

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

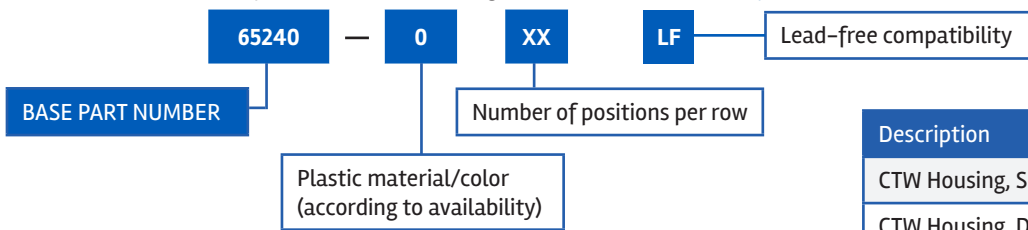


Description	Part Numbers
Shrouded Header, Vertical, Through-Hole, Single Row	76384
Shrouded Header, Right-Angle, Through-Hole, Single Row	76382
Shrouded Header, Vertical, Through-Hole, Double Row	76385
Shrouded Header, Right-Angle, Through-Hole, Double Row	76383

Example: 76384-305LF

## PART NUMBER SELECTOR CTW HOUSING

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

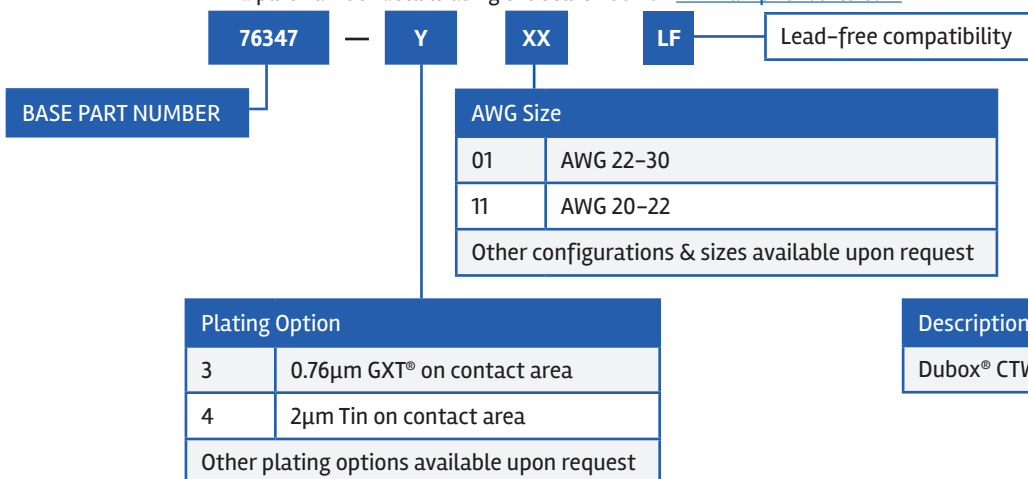


Description	Part Numbers
CTW Housing, Single Row	65240
CTW Housing, Double Row	65239

Example: 65240-005LF

## PART NUMBER SELECTOR CTW CONTACT

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)



Description	Part Numbers
Dubox® CTW contact	76347

Example: 76347-301LF