

# BergStik® Headers Straight Unshrouded

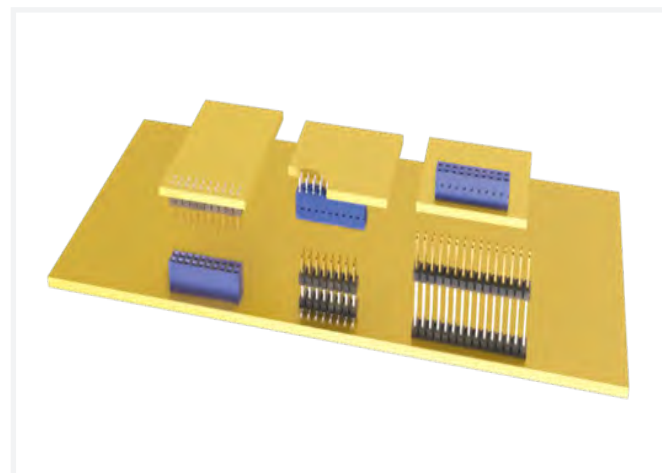
## 2.54MM PITCH

### VERSATILE HEADERS WITH BREAKAWAY DESIGN

BergStik® Amphenol FCI 2.54mm unshrouded headers are offered in surface-mount (SMT), through-hole (THT), press-fit (PF) and pin-in-paste (PIP) versions. Available in single and double row from 2 to 72 positions.

These “breakaway headers” can be cut or broken into specific lengths to suit the application profile with a maximum current rating of 3A per contact. The drawn-wire pins offer an economical solution for various applications with durability up to 100 mating.

- Same PCB layout for Through-Hole and PF versions
- Multiple termination options: SMT, THT, PF, PIP
- Fully compatible with Dubox® receptacles



#### TARGET MARKETS



#### FEATURES

- High temperature thermoplastic material
- Customizable height
- Blank 0.64mm square contacts present 4 surfaces of equal quality
- Standoff design
- Duplex plating
- Tin-lead plating in press-fit area
- Press-fit designed to fit 1.02mm diameter hole, solder-to-board products
- Meets DIN 41651 specification, HE 13, and BT D2632

#### BENEFITS

- Re-flow compatible
- Cater to a wide range of applications
- Suitable for mezzanine application and gives more flexibility in meeting different stack height requirements
- Can be used for wire wrapping
- Allows cleaning to remove soldering contamination
- Cost efficient
- Easy pin insertion onto PCB
- High retention force onto PCB
- Same layout on THT and press-fit
- Qualified product

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High temperature thermoplastic
- Flammability Rating: UL94V-0
- Pin: Phosphor bronze
- Plating: Gold / GXT® or Tin over 1.27µm (50µin) nickel

### MECHANICAL PERFORMANCE

- Pin Retention Force to Housing: 9N min.

### ELECTRICAL PERFORMANCE

- Current Rating:
  - 3A continuous
  - 2A DC max. per contact for fully energized connector
- Insulation Resistance: 5000MΩ min.
- Dielectric Withstanding Voltage: 1500Vrms min.

### ENVIRONMENTAL

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

### SPECIFICATIONS

- Product Specification: BUS-12-050 / BUS-12-144 (duplex plated) / BUS-12-117 (press-fit)

### APPROVALS & CERTIFICATION

- UL Approval: E66906

### PACKAGING

- Polybags
- Endless reels
- Optional: Tubes or tape-and-reel with pick-up cap (if available)

### TOOLING INFORMATION

- Insertion tool: 30AWG to 20AWG

### TARGET MARKETS/APPLICATIONS



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



Server  
Storage

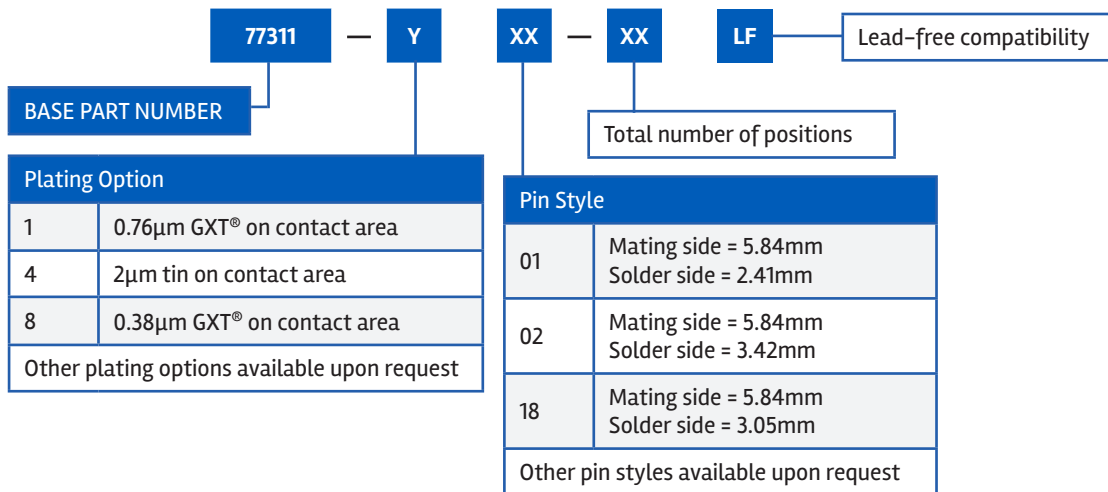


Industrials (Robotics, PLC, Power tool)

## PART NUMBERS

Description	Part Numbers
Unshrouded Header, Straight, Single Row, TMT	77311
Unshrouded Header, Straight, Single Row, SMT	95293
Unshrouded Header, Straight, Single Row, Press-Fit	93689
Unshrouded Header, Straight, Double Row, TMT	77313
Unshrouded Header, Straight, Double Row, SMT	95278
Unshrouded Header, Straight, Double Row, Press-Fit	93690

## PART NUMBER SELECTOR – STRAIGHT UNSHROUDED HEADERS



Description	Part Numbers
Unshrouded Header, Straight, Single Row, TMT	77311
Unshrouded Header, Straight, Single Row, SMT	95293
Unshrouded Header, Straight, Single Row, Press-Fit	93689
Unshrouded Header, Straight, Double Row, TMT	77313
Unshrouded Header, Straight, Double Row, SMT	95278
Unshrouded Header, Straight, Double Row, Press-Fit	93690

# BergStik® Headers Stacking Unshrouded

## 2.54MM PITCH

### CUSTOMIZABLE STACKING HEADERS WITH BREAKAWAY DESIGN

BergStik® Amphenol FCI 2.54mm stacking unshrouded headers are offered in surface-mount (SMT), through-hole (THT), press-fit (PF) and pin-in-paste (PIP) versions. Available in single and double row from 2 to 72 positions.

These “breakaway headers” can be cut or broken into specific lengths to suit the application profile with a maximum current rating of 3A per contact. The drawn-wire pins offer an economical solution for various applications with durability up to 100 mating.

- Duplex, triplex or full plating
- Height up to 55.00mm (duplex plating) and 65.00mm (triplex)
- Multiple termination options: SMT, THT, PF, PIP
- Fully compatible with Dubox® receptacles



#### TARGET MARKETS



#### FEATURES

- High temperature thermoplastic material
- Customizable height
- Blank 0.64mm square contacts present four surfaces of equal quality
- Standoff design
- Duplex plating
- Tin-lead plating in press-fit area
- Press-fit designed to fit 1.02mm diameter hole, solder-to-board products
- Meets DIN 41651 specification, HE 13, and BT D2632

#### BENEFITS

- Re-flow compatible
- Cater to a wide range of applications
- Suitable for mezzanine application and gives more flexibility in meeting different stack height requirements
- Can be used for wire wrapping
- Allows cleaning to remove soldering contamination
- Cost efficient
- Easy pin insertion onto PCB
- High retention force onto PCB
- Same layout on THT and Press-fit
- Qualified product

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High temperature thermoplastic
- Flammability Rating: UL94V-0
- Pin: Phosphor bronze
- Plating: Gold / GXT® or Tin over 1.27µm (50µin) nickel

### MECHANICAL PERFORMANCE

- Pin Retention Force to Housing: 9N min.

### ELECTRICAL PERFORMANCE

- Current Rating:
  - 3A continuous
  - 2A DC max. per contact for fully energized connector
- Insulation Resistance: 5000MΩ min.
- Dielectric Withstanding Voltage: 1500Vrms min.

### ENVIRONMENTAL

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

### SPECIFICATIONS

- Product Specification: BUS-12-050 / BUS-12-144 (duplex plated) / BUS-12-117 (press-fit)

### APPROVALS & CERTIFICATION

- UL Approval: E66906

### PACKAGING

- Polybags
- Optional: Tubes or tape-and-reel with pick-up cap (if available)

### TARGET MARKETS/APPLICATIONS



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



Server  
Storage

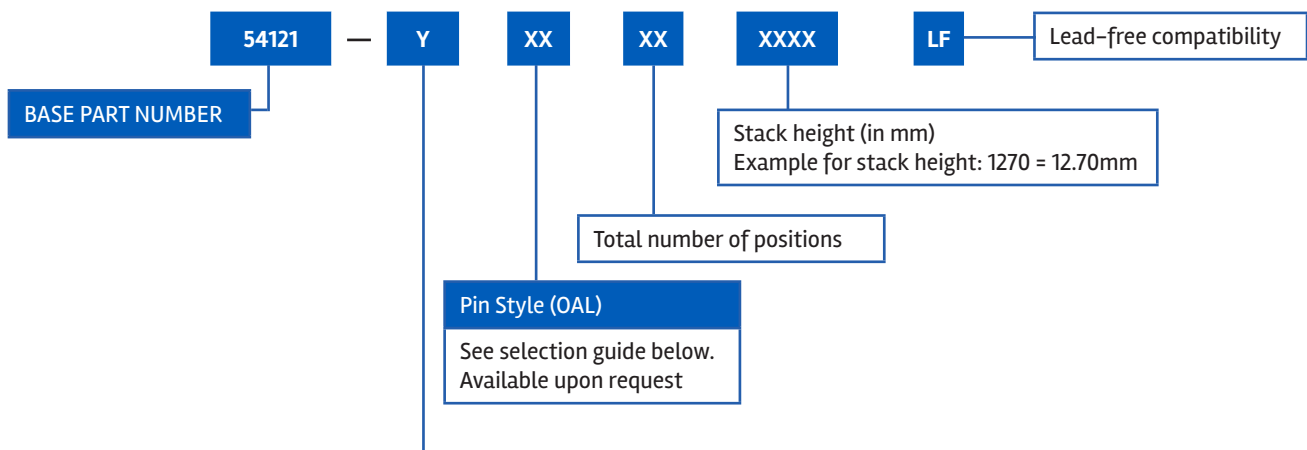


Industrials (Robotics, PLC, Power tool)

## PART NUMBERS

Description	Part Numbers
Unshrouded Stacking Header, Vertical, Single Row, TMT	54121
Unshrouded Stacking Header, Vertical, Single Row, Press-Fit	10124323
Unshrouded Stacking Header, Vertical, Double Row, TMT	54122
Unshrouded Stacking Header, Vertical, Double Row, SMT	54242
Unshrouded Stacking Header, Vertical, Double Row, Press-Fit	10112620

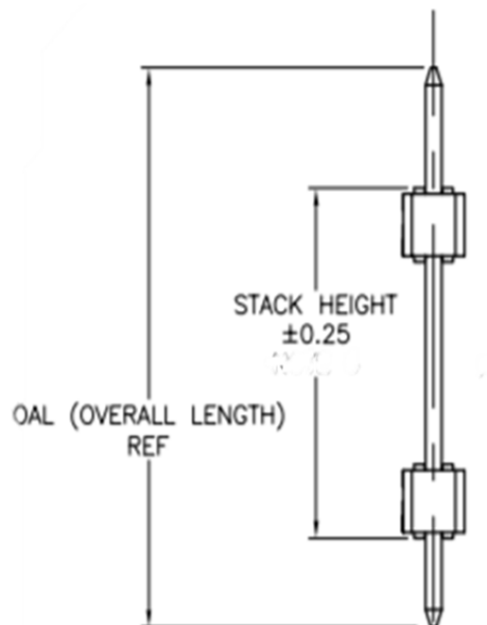
## PART NUMBER SELECTOR – STACKING UNSHROUDED HEADERS



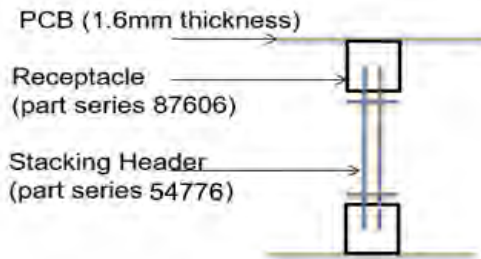
Plating Option	
1	0.76µm GXT® on contact area
4	2µm tin on contact area
8	0.38µm GXT® on contact area
Other plating options available upon request	

Description	Part Numbers
Unshrouded Stacking Header, Vertical, Single Row, TMT	54121
Unshrouded Stacking Header, Vertical, Single Row, Press-Fit	10124323
Unshrouded Stacking Header, Vertical, Double Row, TMT	54122
Unshrouded Stacking Header, Vertical, Double Row, SMT	54242
Unshrouded Stacking Header, Vertical, Double Row, Press-Fit	10112620

## PART OVERVIEW



## STANDARD CONFIGURATION A

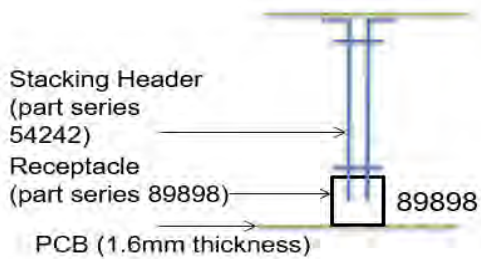


OAL = Distance between the two PCB – 7,4mm

Example with PCB distance of 25mm :

$$OAL = 25mm - 7,4mm = 17,6mm$$

## STANDARD CONFIGURATION B

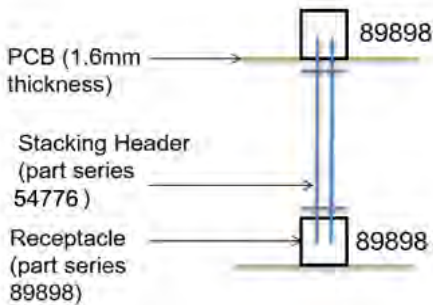


OAL = Distance between the two PCB – 2,4mm

Example with PCB distance of 25mm :

$$OAL = 25mm - 2,4mm = 22,6mm$$

## STANDARD CONFIGURATION C

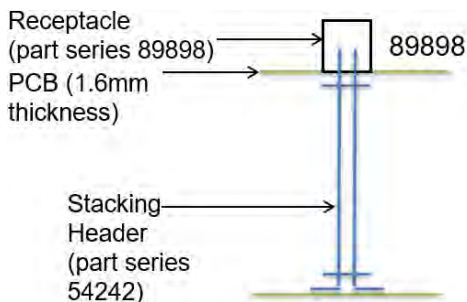


OAL = Distance between the two PCB – 2,4mm + PCB thickness + 7,1mm

Example with PCB distance of 25mm :

$$OAL = 25mm - 2,4mm + 1,6mm + 7,1mm = 31,3mm$$

## STANDARD CONFIGURATION D



OAL = Distance between the two PCB + PCB thickness + 6,8mm

Example with PCB distance of 25mm :

$$OAL = 25mm + 1,6mm + 6,8mm = 33,4mm$$

# BergStik® Headers Right-Angle Unshrouded

## 2.54MM PITCH

### VERSATILE HEADERS WITH BREAKAWAY DESIGN

BergStik® Amphenol FCI 2.54mm unshrouded headers are offered in surface-mount (SMT), through-hole (THT) and pin-in-paste (PIP) versions. Available in single and double row from 2 to 72 positions.

These “breakaway headers” can be cut or broken into specific lengths to suit the application profile with a maximum current rating of 3A per contact. The drawn-wire pins offer an economical solution for various applications with durability up to 100 mating.

- Same PCB layout for Through-Hole and PF versions
- Multiple termination options: SMT, THT, PIP
- Fully compatible with Dubox® PCB receptacles



### FEATURES

- High temperature thermoplastic material
- Customizable height
- Blank 0.64mm square contacts present four surfaces of equal quality
- Standoff design
- Duplex plating
- Tin-lead plating in press-fit area
- Press-fit designed to fit 1.02mm diameter hole, solder-to-board products
- Meets DIN 41651 specification, HE 13, and BT D2632

### BENEFITS

- Re-flow compatible
- Cater to a wide range of applications
- Suitable for mezzanine application and gives more flexibility in meeting different stack height requirements
- Can be used for wire wrapping
- Allows cleaning to remove soldering contamination
- Cost efficient
- Easy pin insertion onto PCB
- High retention force onto PCB
- Same layout on THT and Press-fit
- Qualified product

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High temperature thermoplastic
- Flammability Rating: UL94V-0
- Pin: Phosphor bronze
- Plating: Gold / GXT® or tin over 1.27µm (50µin) nickel

### MECHANICAL PERFORMANCE

- Pin Retention Force to Housing: 9N min.

### ELECTRICAL PERFORMANCE

- Current Rating: 3A continuous 2A DC max. per contact for fully energized connector
- Insulation Resistance: 5000MΩ min.
- Dielectric Withstanding Voltage: 1500Vrms min.

### ENVIRONMENTAL

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

### SPECIFICATIONS

- Product Specification: BUS-12-050 / BUS-12-144 (duplex plated) / BUS-12-117 (press-fit)

### APPROVALS & CERTIFICATION

- UL Approval: LR46923

### PACKAGING

- Polybags
- Optional: Tubes or tape-and-reel with pick-up cap

### TOOLING INFORMATION

- Insertion tool: 30AWG to 20AWG

### TARGET MARKETS/APPLICATIONS



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



Server  
Storage

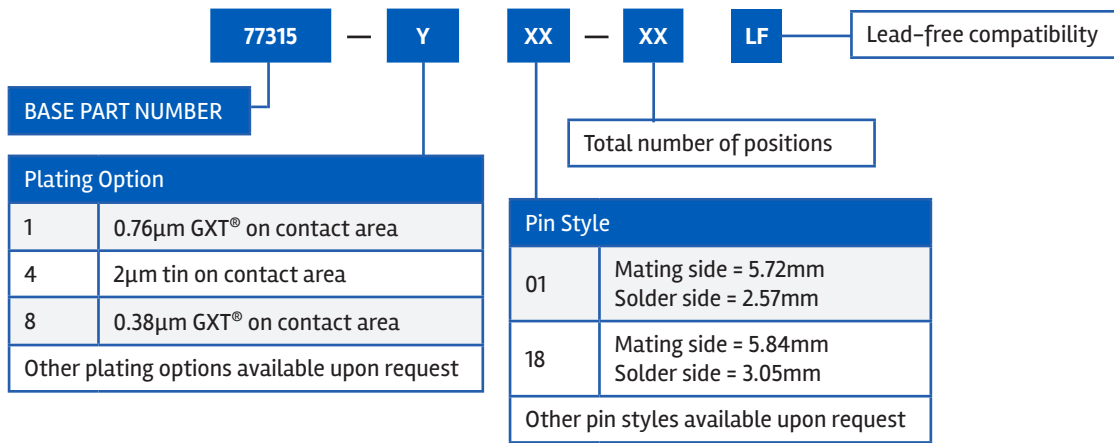


Industrials (Robotics, PLC, Power tool)

## PART NUMBERS

Description	Part Numbers
Unshrouded Header, Horizontal, Single Row, TMT/PIP	77315
Unshrouded Header, Horizontal, Single Row, SMT	10119333
Unshrouded Header, Horizontal, Double Row, TMT/PIP	77317
Unshrouded Header, Horizontal, Double Row, SMT	10118084

## PART NUMBER SELECTOR – RIGHT-ANGLE UNSHROUDED HEADERS



Description	Part Numbers
Unshrouded Header, Horizontal, Single Row, TMT/PIP	77315
Unshrouded Header, Horizontal, Single Row, SMT	10119333
Unshrouded Header, Horizontal, Double Row, TMT/PIP	77317
Unshrouded Header, Horizontal, Double Row, SMT	10118084