

# DIN 41612 High-Temperature Headers and Receptacles

## HARSH ENVIRONMENT CONNECTOR ENHANCED FOR INDUSTRIAL APPLICATIONS

DIN 41612 High Temperature (HT) connectors meet the fire safety standards required in Industrial (Transportation, Power) market. DIN is most suitable for hazardous and high-risk product platforms of fire safety applications required in the industrial market. The 2.54mm pitch HT connectors comply with the relevant standards like IEC 603-2, NFF 16-101/102 and EN45545-2. It comes with rear plug up option which offers extended mating applications via shroud on the rear side of PCB.

- High-temperature resin, suitable for Through Hole Reflow (THR) process
- Ideal for Railways, Power Generation, and Medical applications
- Meets DIN 41612, IEC 603-2, NFF 16-101/102, EN 45545-2 specifications
- Available in Style C, C/2 – right angle header and vertical receptacle and Style R – right angle receptacle



### TARGET MARKETS



### FEATURES

- 2.54mm and 5.08mm pitch
- High-temperature compatibility
- Selective loading pattern for contacts
- FMLB and LMEB contacts
- Available in various termination types
- NFF 16-101/102 and EN45545-2 certified
- Rear Plug-Up (RPU) capability
- A wide range of accessories available

### BENEFITS

- Compatible to industry standards and hence inter-mateable & interchangeable
- Suitable for reflow soldering
- Improves creepage distance, facilitates custom loading
- Flexibility in grounding options
- Flexible PCB mounting options
- Suitable for railway applications
- Promotes extended mating applications via shrouds on the rear side of the PCB
- Enhances connector suitability and flexibility

### TECHNICAL INFORMATION

#### MATERIAL

- Insulator: High temperature thermoplastic
- Contact: Copper alloy (male/female contact)
- Plating: AU/GXT® over nickel (contact area),  
matte tin over nickel (terminal area)

#### MECHANICAL PERFORMANCE

- Insertion Force:  $\leq 0.94\text{N}$  per contact
- Extraction force:  $\geq 0.15\text{N}$  per contact

#### ELECTRICAL PERFORMANCE

- Current Rating at 20°C: 1.50A
- Current Rating: 2A max.
- Contact Resistance:  $\leq 20\text{m}\Omega$
- Insulation Resistance:  $\geq 10^6\text{M}\Omega$
- Test Voltage: 1000Vrms

#### ENVIRONMENTAL

- Operating Temperature:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Performance levels as per IEC 603-2
- RoHS compliant according to the EU Directive 2011/65/EU

#### SPECIFICATIONS

- DIN 41612
- IEC 603-2

#### PACKAGING

- Tray

#### APPROVALS AND CERTIFICATIONS

- UL
- NFF 16-101/102
- EN45545-2

#### TARGET MARKETS/APPLICATIONS



Off road vehicles  
Heavy duty loaders, conveyers  
Locomotives  
Onboard electronics  
Signaling



Test and lab equipment  
Process control  
Robotics  
Lighting & displays  
Energy distribution



Imaging  
Monitoring  
Analyzers

## PART NUMBERS

### DIN IDC 3x32 CABLE CONNECTOR

Description	Configuration	Rows Loaded	Part Numbers
Style C Right Angle Header (STB)	3 row / 96 pos	a, b, c	86093967113x*5F1LF
	2 row / 64 pos	a & c	86094647113x*5F1LF
Style C Straight Receptacle (STB)	3 row / 96 pos	a, b, c	86093968114x*5F1LF
	2 row / 64 pos	a & c	86094648114x*5F1LF
Style C/2 Right Angle Header (STB)	3 row / 48 pos	a, b, c	86093487313x*5F1LF
	2 row / 32 pos	a & c	86094327313x*5F1LF
Style C/2 Straight Receptacle (STB)	3 row / 48 pos	a, b, c	86093488314x*5F1LF
	2 row / 32 pos	a & c	86094328314x*5F1LF

Notes
x in part number denotes
B – High Temperature Housing (Natural)
T – High Temperature Housing (Natural) with Harpoon
Asterisk (*) in part number denotes Performance class:
6 – Class 1
5 – Class 2
4 – Class 3
Custom loading and other options available on request

\*Note: In case of obsolescence, please contact Amphenol ICC for the replacement part numbers