

GIMOTA railway data connectors

Designed for high reliability and fail-safe operation

Suitable for
railways



D-Sub, an abbreviation for D-Subminiature, is a widespread type of connector system that has applications in the field of computer systems and data processing, among others. D-Sub connectors are also widely used in railway applications. If higher currents or high robustness are required, the DIN 41612 also known as DIN F connector comes into play. Gimota has adapted the well-known industrial connectors to the needs of the railway industry already 40 years ago. The GIMOTA TRAC™ connectors have been specially developed for use in monitoring controls and prove their high and reliable performance every day in rail vehicles used worldwide.

GIMOTA TRAC™ D-SUB and DIN-F data connector housings are made of a robust zinc die-cast alloy. This ensures sustainable EMC conductivity even at high EMC currents. The 360 ° EMC shielding is achieved with a hexagonal shield pressing on the cable clamp. The cable clamp also contains an integrated cable strain relief, also realised by crimping.

They are suitable for indoor use (IP44 according to DIN EN 60529) and very resistant to shocks and vibrations. They also offer a unique coding system to avoid faulty connections during the coupling process.



ADVANTAGES

- Suitable for railway applications
- Resistant housing (zinc die-cast)
- Conductive surface (EMC)
- 360° shielding
- Strain relief on the cable
- More than 24 codings depending on enclosure type



PROPERTIES

- 360° connection of the EMC shielding
- Conductivity according to MIL 1344A/3007 $\leq 0.5\text{m}\Omega$
- Tracking resistance according to IEC 60664 <300
- Operating temperature -55°C to $+105^{\circ}\text{C}$
- DIN EN 60529 Protection class IP44

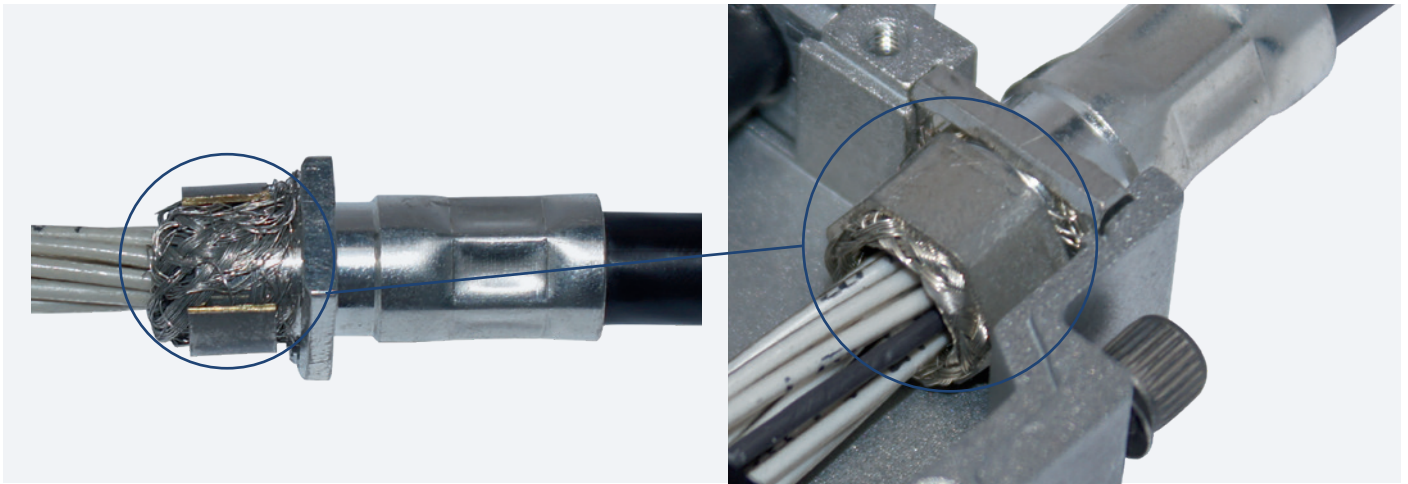


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www.gimota.com



GIMOTA EMC connection with shielding sleeve

The GIMOTA EMC connection with shielding sleeve guarantees an optimal 360° shield contacting at smallest space. The shielding concept using a shielding sleeve guarantees a high level of process reliability, as the components and crimping tools used are precisely defined in relation to each other and are consistent.



Low contact resistances

The direct contact between the braiding and the cableclamp results in extremely low contact resistances.

Highest leakage currents

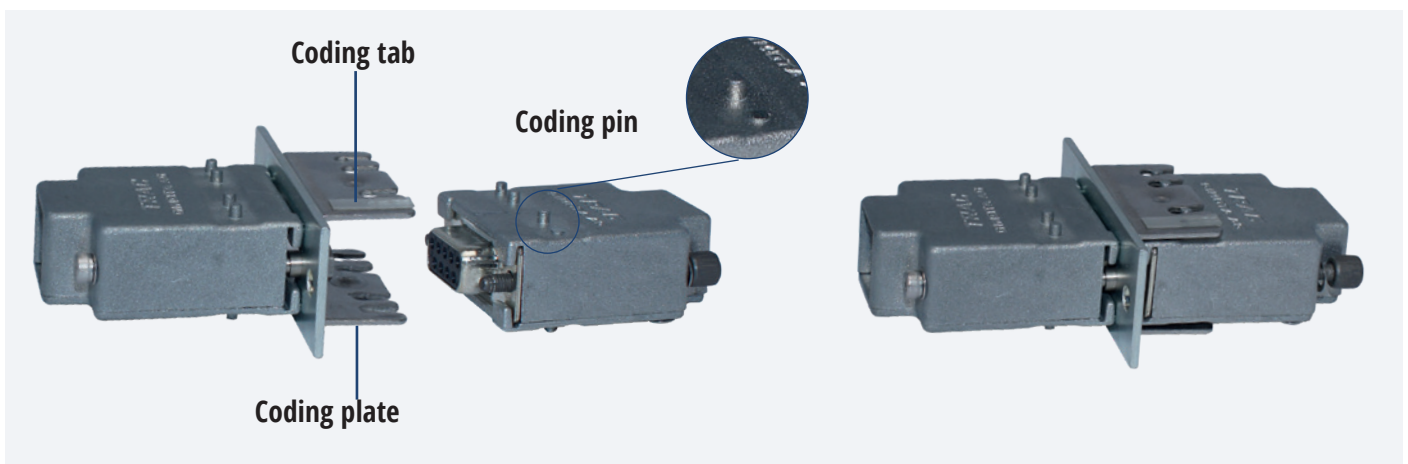
Permanently high contact pressure due to the pressed shielding sleeve enables highest leakage currents, which are only limited by the shielding cross-section.

Vibration safety

The defined crimping of the shielding sleeve, using the appropriate crimping tool from Gimota, ensures the highest vibration safety.

GIMOTA D-SUB Coding

Coding is required to make several connectors next to each other unmistakable, which is why GIMOTA TRAC connectors can be coded. Coding pins are removed from the housing and corresponding coding tabs are attached in the coding plate.



No faulty connection possible

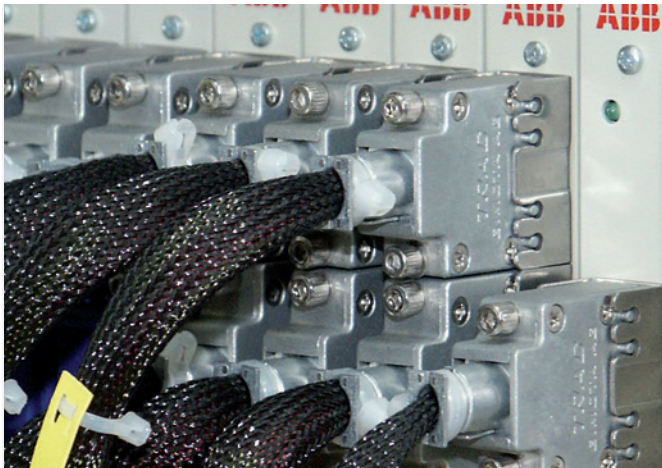
The coding prevents several connectors arranged next to each other from being connected incorrectly.

High flexibility

Coding of TRAC connectors can be done on site. More than 24 variants are possible.

GIMOTA TRAC D-Sub

GIMOTA TRAC™ D-SUB connector housings are made of a robust zinc die-cast alloy. They impress with their compact design and are extremely space-saving. They are available with crimp flange system or flexible cable clamp for single conductors. The covers are available in sizes 1 (9 pin) / 2 (15 pin) / 3 (25 pin) for up to 3 cable outlets.



Optimum shield contacting

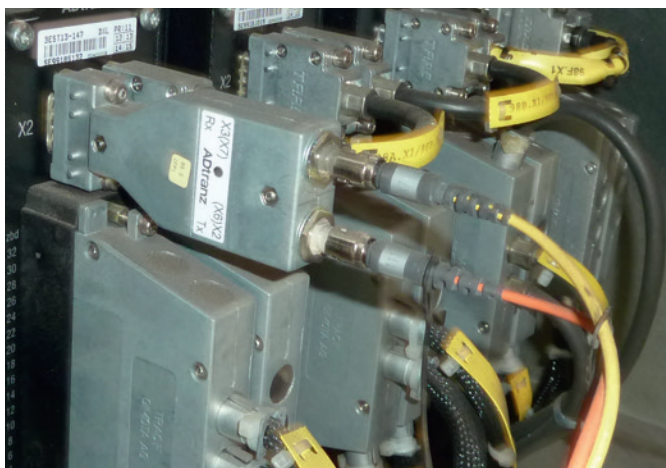
The crimping of the cable shield guarantees excellent shield contact and ensures low transfer impedances.

Safe strain relief

The strain relief pressure directly on the cable sheath guarantees optimum and permanent cable strain relief.

GIMOTA TRAC bus housing

GIMOTA TRAC™ bus connector housings are made of a robust zinc die-cast alloy. They convince with their compact design and have two cable outlets. They are also available with EMC shield compression and cable strain relief compression in size 1 and are optimally suited for bus and special applications.

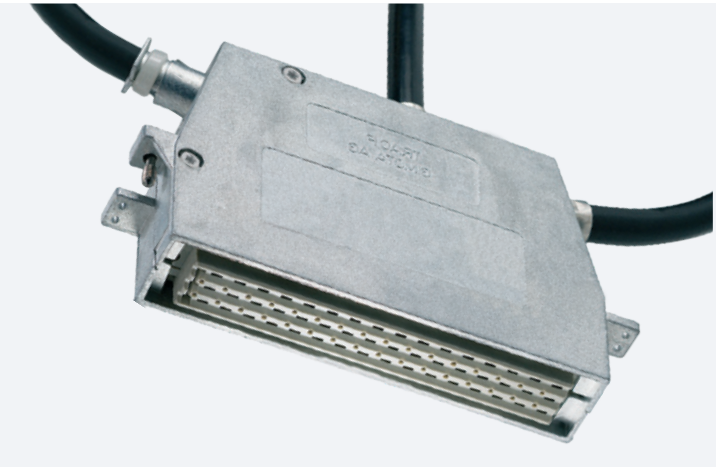


Ideal for bus applications

Via the input/output modules (DI, DX, AX) combined with the MITRAC bus couplers, the analogue signals (e.g. driver's cab inputs) are input digitised in the MITRAC module, but digital signals are also output vice versa.

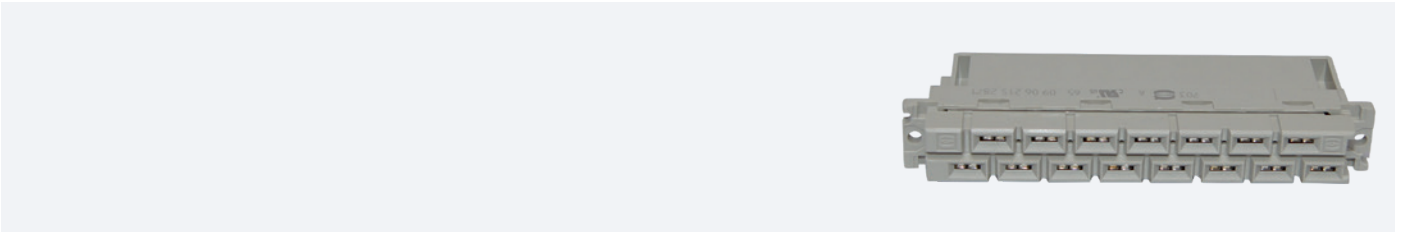
GIMOTA TRAC DIN 41612 F

GIMOTA TRAC™ DIN 41612 F connector housings are made of a robust zinc die-cast alloy. They convince through their robust construction. The covers have 6 cable outlets and are available with crimp flange system or flexible cable clamp for single conductors. Depending on the connector housing, a distinction is made between DIN Power and DIN Signal.



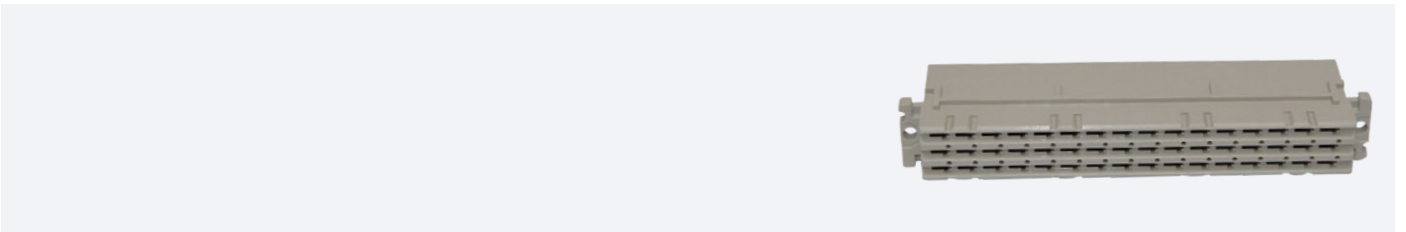
DIN Power FKEH15

The DIN Power connector is preferably used in applications where special robustness of the connector or higher currents up to 15A are required. The DIN Power has 15 power contacts.



DIN Signal FKEF48

The DIN signal connector is characterised by the constant pitch of 2.54 mm. This ensures both a relatively high contact density and the necessary robustness. The DIN signal connector has 48 signal contacts.



DIN Mix FKEF31

The DIN Mix connector FKEF31 combines the advantages of DIN Power and DIN Signal connectors in one connector housing. The DIN Mix connector has 7 power contacts and 24 signal contacts.

