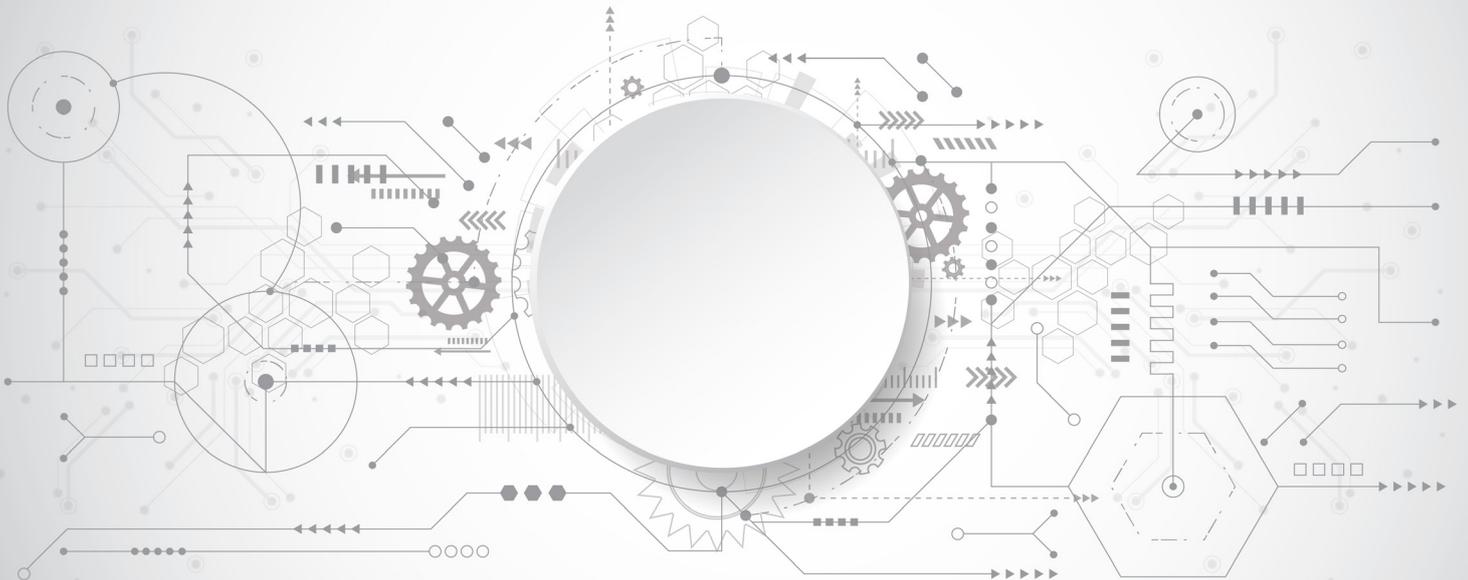




ELEKTRONIK  
BEYOND CONNECTIONS



# MD GROUP DATA SHEET

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## **1. Application Area**

Data transmission and if applicable power transmission in vehicles (limitation to the maximum power and/or reference to the data sheet)

## **2. Use**

The item is solely intended to be used in data transmission, infotainment and communication systems that are not safety-relevant in the vehicle interior. In case of waterproof connector systems, the use at exposed positions is permitted within the limits of the selected protection class.

## **3. Product Properties**

The product properties result from the properties of the selected combination and primary materials – especially cable material and connectors – that are released by the customer, e.g. system suppliers or OEM (“user”). These properties can be adversely affected by the technical processing (e.g. printing, hot stamping, overmolding, etc.), by the individual construction of the item (e.g. cable length, attaching labels, cable ties, fixing aids, etc.; assembly of ground clamps, ferrite cores, etc.), by common and unavoidable variations of processes and raw materials (e.g. varying sheath thickness of the goods on reels, varying thermal properties of the granules) or the specific installation situation within the on-board power system or vehicle (for instance due to interactions with other cables, batteries, engines, etc.). Therefore, the suitability of the item for the vehicle-specific use over the entire transmission path has to be tested by the user.

## **4. Application-dependent Use**

The serial use of the item is permitted only after the application-dependent testing by the user. Vehicle-specific testing of all product properties of the item that are not explicitly specified in this data sheet as well as the suitability and functionality within the entire system is recommended.

## **5. Use in Safety-relevant Systems**

The use of the item in safety-relevant systems, including the pure connection or linking of safety-critical components with this item, is only permitted after the requirements defined by the user have been explicitly confirmed by MD ELEKTRONIK GmbH. Included are also driver assistance systems, emergency communication systems and systems for detecting the vehicle condition, the vehicle occupancy as well as the driving and environmental situation. Please contact Application Engineering of MD ELEKTRONIK GmbH regarding the confirmation as early as possible.

## **6. Installation and Auxiliary Means**

The item can be damaged by not allowed mechanical loads, especially tensile, torsional and bending loads. During the installation of the item in the on-board power system or the vehicle, the corresponding MD handling instructions have to be observed. It is only allowed to move and install the item manually. The use of auxiliary means and tools (e.g. pliers, grippers, clamps, loops, etc.) is prohibited. In general, it is also prohibited to insert materials (especially greases, oils and other lubricants) into the product and/or into the mating connectors intended for the connection with the product. Only auxiliary means and tools that are explicitly indicated in the MD handling instruction are excluded from this rule, but only under the consideration of the requirements included in the MD handling instruction. The MD handling instructions are accessible online and will be made available also upon request.

## **7. Flexibility of the Cable Material**

The cable material of the item is suitable for both the static and the flexible use, provided that the corresponding goods on reels are released for flexible applications by the cable material manufacturer. In case of the flexible use, the flexibility data of the cable material manufacturer has to be observed. The requirements of the MD handling instruction regarding bending radii and bending loads have to be strictly observed in case of the flexible use. In case of flexible installation situations with high stress or frequently recurring movement, the suitability of the item for the vehicle-specific use has to be tested by the user.

## **8. Watertightness**

In general, connectors are not waterproof unless the drawing does not explicitly contain an information about watertightness. The watertightness can be adversely affected by an installation situation that does not comply with the specification (e.g. high level of thermal variations, mechanical loads (e.g. kinking, vibration), splash water, etc.). If waterproof connectors are used, the user is responsible for testing the vehicle-specific suitability and the sufficient protection within the entire system.

## **9. Thermal and Chemical Resistance**

The thermal resistance of the item depends on the weakest thermal resistance of the primary materials. The item does not have any special chemical resistance unless the drawing does not explicitly contain an information about chemical resistance. If the item is used in thermally or chemically sophisticated installation situations, the user is responsible for testing the vehicle-specific suitability and the sufficient resistance within the entire system.

## **10. Coloring and Surface**

It is only allowed to use the item in the vehicle interior visible for the end user (“visible part”) if this is explicitly indicated on the drawing. Solely in case of visible parts the condition of the surface as well as a certain and even color shade are quality characteristics. For all other items, complaints due to surface defects, color deviations or color defects will not be accepted.

## **11. Use of Recyclates**

The item can contain plastic parts which partly consist of recyclates. In general, MD ELEKTRONIK GmbH decides about the use of recyclates at its own discretion, but only if the product properties are not significantly changed due to this use. No claim arises for a certain percentage of recyclate or the non-use of recyclate.

## **12. Directed Parts**

Components of the product that are stipulated or recommended by the customer, for which only one supplier is released by the customer or which were not freely selected by MD ELEKTRONIK GmbH due to other reasons (“directed parts”), are solely assembled according to the regulations of the component manufacturer. Further applicable technical regulations, norms and standards are not separately verified and only observed if this was explicitly agreed and/or explicitly indicated on the drawing.

## **13. Warranty**

Solely the properties and characteristics explicitly specified in this data sheet and in the corresponding sampling documents are warranted properties and characteristics whereby the influencing factors indicated above under “Product Properties” have to be also considered with regard to the warranty. Warranty exclusively refers to the condition when being delivered. Properties and characteristics that are not explicitly specified in this data sheet and/or in the corresponding sampling documents are deemed to be not agreed and not warranted. Properties and characteristics can be adversely affected or changed by handling, further processing and installation. In general, product properties qualified by the users have to be re-qualified by the users themselves.

## **14. Development, Prototypes and Pre-series**

During the development, prototype and pre-series phase, characteristics and properties can change until the start of the series phase. Thus, all data has to be considered as preliminary until serial production starts.

## **15. Military Use**

The military use of the item and/or the installation in defense products is/are not allowed. This also applies to so-called “dual-use” items as laid down in the Annex I of the Council Regulation (EC) No 428/2009.

## **16. Marketability, Export and Re-export**

The item is marketable when being delivered within the country of manufacture and if applicable in the country of transfer by MD ELEKTRONIK GmbH to the direct purchaser. In case of a later transfer to a third country, solely the respective exporter is responsible for considering and observing the export and/or re-export regulations. The same applies to the marketability of the item in third countries.

## **17. Protection Note**

If protectable information is transmitted in this data sheet or the related drawing, MD ELEKTRONIK GmbH reserves all rights for the grant of a patent and/or protective right. Each power of disposition, including the right of reproduction and disclosure, is the sole property of MD ELEKTRONIK GmbH.

## **18. Additional Notes**

Subject to errors and changes. The original version of this data sheet was created in German. Additionally, other language versions can be made available. If the contents of two language versions differ from each other, solely the original version applies.