



## CAUTION

### Important information

#### For the treatment and utilisation of permanent magnets and magnet systems

Please observe absolutely following notices for the treatment and utilisation of magnets and magnets systems.

#### Treatment

- Magnets show important attraction and repulsion forces. Avoid the danger of wounds due to jamming or splintering
- Sintered materials are brittle, please use during the treatment protective glasses and gloves. Magnets and magnet systems must not be used or worked in an area where there is a danger of explosion. (Flying sparks during dashing).
- Powder of Rare earth magnets is inflammable, and therefore can be set on fire easily. This also applies to sanding dust and wheel swarf resulting from grinding, so please use water during working.

#### Handling

- Certain magnetic materials are either toxic or easily soluble which can obviously cause some inconvenience.
- Permanent magnets cannot be exposed to radioactive beams.
- Weakened performance, destruction or dissolution of material can be caused e.g. by corrosion (dry storage), chemical influences, inverted magnetic fields, temperatures, additional air gaps etc...
- In principle magnet values are in relation with a magnet geometry which corresponds to the optimal operating point on the working straight line. Irreversible losses of the magnetic properties appear partly already with low temperatures. Please take into account that the magnetic values refer to room temperatures.
- Please anticipate safety margins for the possible performance parameter and all applications. Please make a practice test.
- Concerning moving permanent magnets electric power and heat build-up could arise in electrically conductive materials.

#### Influences

- Be aware that magnetic fields delete recording storage medium and could influence or destroy electronic and mechanical components, e.g. pacemakers. Please respect absolutely the safety distances advised by the manufacturers of these products.
- We do not have any knowledge of negative influences that magnetic fields arising from permanent magnets could have on human beings. Allergic reactions can appear when direct contact is made with magnetic systems and materials. (e.g. ceramic and metallic materials such as zinc, nickel and plastics).

#### Transportation of dangerous goods

- An official statement is necessary for transport of such products by air.

**In case of transmission of the supplied goods to a third party, this one should be informed accordingly.**

Please contact us for any additional information you may need concerning the above subjects.

**Notice 07.02**