

EU Certificate of Conformity in reference to guidelines 2014/34/EU (ATEX)

Manufacturer **DST Dauermagnet-SystemTechnik GmbH**
Hönnestraße 45
D-58809 Neuenrade

Product description **Permanent magnetic couplings**
Type DST 27 to 200

This certificate is issued under the sole responsibility of the manufacturer.

The permanent magnet couplings of the types DST 27 to DST 200 are intended for installation in machines such as pumps, agitators, etc.

The component permanent magnet couplings essentially consist of the components:

1. outer rotor
2. canister
3. inner rotor

The safety-relevant instructions and the conditions for the installation of this component in equipments and protective systems are specified in the operating instructions and are to be adhered to, to ensure that the essential health and safety requirements applicable to assembled equipments and protective systems are met in accordance with Annex II to Directive 2014/34/EU.

DST Dauermagnet-SystemTechnik GmbH confirms that the above-mentioned products meet the basic safety and health requirements with regard to the construction of products used in potentially explosive atmospheres, as specified in Annex II of Directive 2014/34/EU of the European Parliament and Parliament and of the Council of 26.02.2014.

The marking of the component permanent magnetic couplings has according to the type examination certificate IEx-U04ATEXB020 U, issue 3 the following information :

II 2G Ex h IIC T6 .. T1 Gb X
-40 °C ≤ T_E ≤ +350 °C

The following standards have been applied for the conformity of the above mentioned products with the provisions of this EU Directive.

DIN EN ISO 80079-36:2016-12
DIN EN ISO 80079-37:2016-12

The marking of the products end with an "X" and indicate special conditions for safe use in the explosion protection area, which are marked in the operating and assembly instructions. An "U" after the type examination certificate indicates that this certificate must not be confused with a certificate for equipment or protective systems. This partial certificate may only be used as a basis for the certification of a device or protective system.

Express reference is made to the following essential information:

As the permanent magnetic coupling is intended as a component for installation in equipment (machines), the manufacturer of the machine must either pass on the operating and assembly instructions for the permanent magnetic couplings to the operator or he must include the information in accordance with the safety requirements to be observed by the operator in the operating instructions to be drawn up for the equipment (machinery) as a whole.

The permanent magnetic couplings may only be used if their materials are resistant to mechanical and/or chemical influences or corrosion under the respective operating conditions in such a way that the explosion protection is not nullified.

The permanent magnetic couplings with metallic canisters, canisters made of CFRP with PTFE-L and PEEK canisters may only be operated in potentially explosive atmospheres with temperature monitoring, which automatically shuts down the drive when a certain switch-off temperature is reached. **However, for the permanent magnetic couplings with canisters made of ceramics, the requirement for operation with temperature monitoring does not apply.**

The design of the temperature monitoring must comply with the requirements of RL 2014/34/EU. Information for the automatic shutdown of the drive by temperature monitoring system and temperature limits can be found in the operating and installation instructions.

The permanent magnetic coupling must be cooled by a partial flow of the fluid conveyed or by an outer ring cooling.

When assembling screw connections, only screws specified by the manufacturer may be used. When tightening the screws, the torque specified by the manufacturer must be observed. The screws must be secured against self-loosening unless self-locking screws are used.

In the case of permanent magnetic couplings, the radial distance (air gap) between the inner rotor and the canister, as well as between the outer rotor and the canister, as shown in the drawing of the permanent magnetic coupling, must not be more than 30% less than the smallest of the air gap.

The permanent magnetic couplings must be provided by the user with fixed covers which protect the permanent magnetic couplings from the point of view of explosion protection, in particular against the impact of falling objects. The cover must be electrically conductive and included in the equipotential bonding and must have a minimum distance of 5 mm from moving parts. The cover may only be removed when the unit is at a standstill.

It is confirmed that the documentation according to Annex VIII of Directive 2014/34/EU for the above mentioned non-electrical component in accordance with the provisions of Directive 2014/34/EU, Article 13 (1) b ii), are deposited at the notified body IBExU (EU Identification No. 0637) under No.: IB-22-2-0020, IB-21-2-0097, IB-20-2-0162, IB-18-2-0146, IB-16-4-006, IB-04-4-033 and IB-04-4-013.

Neuenrade, 30.06.22

signed by

Neel Sheth, Head of Technology