Tridelta Magnetic Couplings

Couplings taken to the next level.

Our manifold standard couplings stand out for their compact design with high performance.

Tridelta Magnetsysteme
Magnetic flexibility since 1920

Hysteresis coupling: Suitable as a holding coupling to transmit movements without slippage.

Tridelta Magnetic Couplings

The ultimate solution for maintenance-free, high-performance power transmission

They work without contact, wear and tear and maintenance. They have an almost unlimited lifespan under standard operating conditions. Permanent magnetic couplings are used if an absolute separation of drive and downforce must be made or parts must be screwed on with a firmly defined torque. Magnetic couplings transmit forces through walls cost-effectively and reliable and compensate for vibrations.

THREE BASIC TYPES OF MAGNETIC COUPLINGS

- Hysteresis coupling
- Synchronous coupling
- Eddy current coupling

IN TWO DIFFERENT CONSTRUCTION TYPES

- Forehead design
- Central rotary design

Hysteresis couplings as the ultimate holding solution with seamless force transition

The special feature of the hysteresis coupling is that it produces a braking force even at standstill. This makes it particularly suitable as a holding coupling. When the maximum force to be transmitted is reached, the force transmission continues with cog-free slipping without exceeding it.

ADVANTAGES

- Wear and tear-free, as it is contactless
- Currentless
- Fail-safe
- Low maintenance
- Sustainable
- No subsequent costs
- High torque even at low speeds
- Silent

Field of application: The hysteresis coupling is ideal if a constant torque is to be transferred to rotating parts even at low speeds. Hysteresis couplings are contactless and therefore free of wear and tear.

APPLICATION AREA

Variable adjustable torque

- Area of application: screw-on machines (bottle cap, screws), labeling machines, winding tension and speed control
- Industrial area: food, pharmacy, chemistry
- Desired torque mechanically adjustable
- Maximum braking torque can be changed by choosing the material for magnetic and hysteresis disc
- Torque: by default up to 35 Nm

Fixed torque

- Precise, stable, gentle, even adjustment
- Industrial area: food, pharmacy, chemistry
- Change of braking torque possible by means of spacers between hysteresis and magnetic disc (requires opening of housing)
- Maximum braking torque can be changed by choosing the material for magnetic and hysteresis disc
- Braking torque: by default up to 35 Nm

Reinventing power transmission: Eddy Current Coupling for maintenance-free, speed-dependent torque

The eddy current coupling can be used when the torque is to depend on the rotational speed or speed and contactless, wear and tear-free operation and operational safety without energy input is desired.
The eddy current coupling transmits forces, with the torque increasing as the relative speed increases.

ADVANTAGES

- Wear and tear-free
  Because it is contactless
- Currentless, which means:
  Fail-safe, low-maintenance, sustainable
- No follow-up costs
- Torque increases with increasing speed
- High torque at high (rotational) speeds
- Silent

APPLICATION AREA

Classic area of application

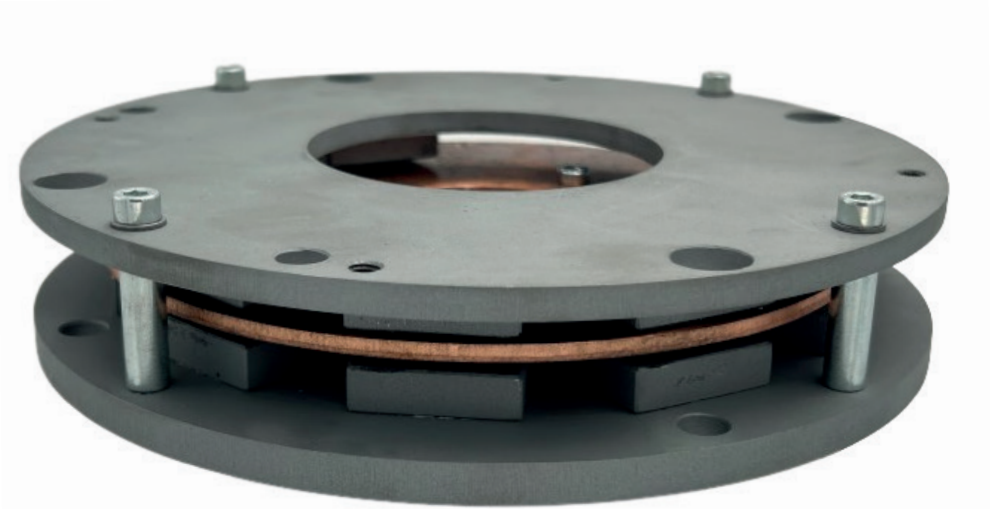
- Rail vehicles, fitness equipment, fairground rides, ...
- Cable winches, belt unwinders
- Continuous material to be unwound
- Water drives/water wheels

Mechanically controlled torque

- Tension control to rewind endless material, such as wires, threads, tapes, sheet metal, plastics and textiles
- Desired torque mechanically adjustable
- Maximum torque can be changed by selecting the material for the magnet and eddy current disc
- Torque: Standard up to 35 Nm (depends on speed)

Fixed torque

- Damping profiles, motion brakes, measuring devices
- The torque can be changed using spacers between magnets and the eddy current disc
- Maximum torque can be changed by selecting the material for the magnet and eddy current disc
- Torques: Standard up to 35 Nm (depends on speed)



Eddy current coupling: The eddy current coupling transmits increasing torque as the relative speed increases.

Synchronous couplings redefine efficiency

The peculiarity of the forehead coupling lies in the friction-free transmission of the torque even with axial middle offset or tilting. The spur rotary coupling transmits a high torque with little installation space.

ADVANTAGES

- Wear and tear-free, as it is contactless
- Currentless, which means: Fail-safe, low-maintenance, sustainable
- No follow-up costs
- Transmits forces vibration-free
- Silent

APPLICATION AREA

- Screw-on systems for caps and bottle closures
- Pumps for liquids and gases
- Food
- Chemistry and pharmacy
- Medicine
- Wind energy
- Special machine construction
- Plastic industry

Tridelta Magnetsysteme
Magnetic couplings

Let's talk about your requirements

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