

RELY ON EXCELLENCE

The proven magnetic coupling MAK with high-efficiency containment shells



MAK series (...-A96) with carbon fiber reinforced PEEK can, extremely low EC loss

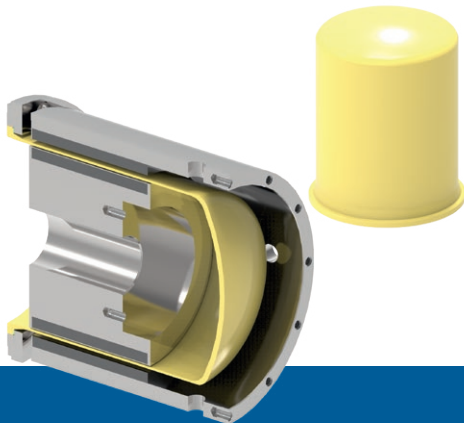
Magnetic couplings (MAK) are currently the most economical and reliable sealing solution for applications in the chemical and refinery industry – and many more.

For applications in pumps, agitators and blowers that are sensitive to temperature increase associated with eddy current (EC) losses, EagleBurgmann can offer a variety of high-efficiency containment shells (cans)

- MAK series (...-A95) with ceramic can (zirconium oxide ZrO), zero EC losses.
- MAK series (...-A96) with carbon fiber reinforced PEEK can, extremely low EC loss
- NovaMagnetics high-efficiency couplings with laminated metallic can, very low EC losses.

The advantages of non-metallic cans are:

- Zero eddy current, hence no temperature increase in the product resulting in energy savings and improved safety
- High resistance against numerous aggressive liquids based on the corrosion resistance of PEEK/ZrO
- Excellent durability due to ductile material properties (PEEK)
- High pressure and temperature limits for the PEEK can due to carbon fibers
- Highest possible temperature limits for the ceramic can in MAK applications with best possible efficiency



MAK series (...-A95) with ceramic can (zirconium oxide ZrO), zero EC losses

The advantage of zero eddy current loss is enormous:

With a pump running at 3,000 rpm, 8,000 hours per year, the operating company can save 4,470 €* on energy costs (motor power: 45 kW; 0.12 €/kWh; 4.66 kW EC losses).

*compared to Hastelloy can

MAK is a mature modular system based on the latest magnetic coupling technology, which can fulfill all customer requirements.

Operating limits PEEK can:

Pressure (p): -1 to 40 bar g at 120 °C (acc. to API685)

Pressure (p): -1 to 20 bar g at 150 °C max. differential pressure (outside) +10 bar above internal pressure

Operating limits ceramic cans:

Pressure (p): 1 to 40 bar g at 350 °C (acc. to API685)

Pressure (p): -1 to 16 bar g at 350 °C (Standard)

max. differential pressure (outside) +10 bar above internal pressure

Break-away torque at 20°C: up to 2,300 Nm