

RELY ON EXCELLENCE

SensoCan

Magnetic Couplings | Couplings



Features

- Additively manufactured can for magnetic couplings
- For temperature sensitive applications up to 40 bar
- Integrated hole to accommodate a temperature sensor on the can flange for condition monitoring (patented)
- Special design of the embedded channels in the can optimizes heating and cooling
- Low operating costs

Functional description

In magnetic couplings, power is transmitted contact-free by magnets from the drive shaft to the product-contacting output shaft. Between the two rotating parts is the containment can, the sealing element, which is bolted to the container. It separates the product space from the atmosphere and hermetically seals it statically. The integrated sensor holder and the patented cooling/heating channels of the SensoCan enable precise temperature monitoring of the medium to be processed.

Advantages

The SensoCan from EagleBurgmann: This new, additively manufactured titanium can is designed to ensure low operating costs, a high level of customization, short delivery times and pays off quickly. Its biggest advantage is integrated into the wall: a specially designed and patented receiver for typical sensor systems.

The temperature can now be measured right at the source. With the availability of direct measurement values, the interpolation of values measured at other locations is a thing of the past. This is particularly useful for applications that demand precise monitoring.

The innovative heating/cooling channels in double-walled cans are another great feature. These ensure that heating/cooling is optimally distributed throughout the can.

- Simple integration into existing measurement systems
- Enables simple yet highly accurate temperature monitoring
- No temperature limits
- Easy to assemble, efficient to operate
- Very high degree of individualization possible
- Size can be scaled quickly and easily
- Short delivery times

Operating range

Shaft diameter: $d = \dots 100 \text{ mm (4")}$
 Pressure: $p = 40 \text{ bar (580 PSI)}$
 Cooling channel pressure: up to 30 bar (435 PSI)
 Temperature: no limits
 Speed: $n = 3,600 \text{ min}^{-1}$
 Chemical resistance: pH 0 ... 14
 Viscosity: 0.3 ... 12,000 mPas (SiC)
 Torque: >1000 Nm

Materials

Titanium

Standards and approvals

- ISO 15783
- API 685
- ATEX Zone 1, 2

Recommended applications

- Chemical industry
- Refining technology
- Pumps
- Mixers
- Aerators
- Blowers
- Autoclaves
- Special applications (e.g. Subsea)

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Solids: max. 0.1 mm; max. 5 % by weight; grain
hardness max. 700 HV