D2C
Designed to Customer

Reich

ARCUSAFLEX®
+ electromagnetic clutch

Coupling unit comprising a highly flexible rubber disc coupling and electromagnetic clutch

www.reich-kupplungen.com

SIMPLY **POWERFUL.**

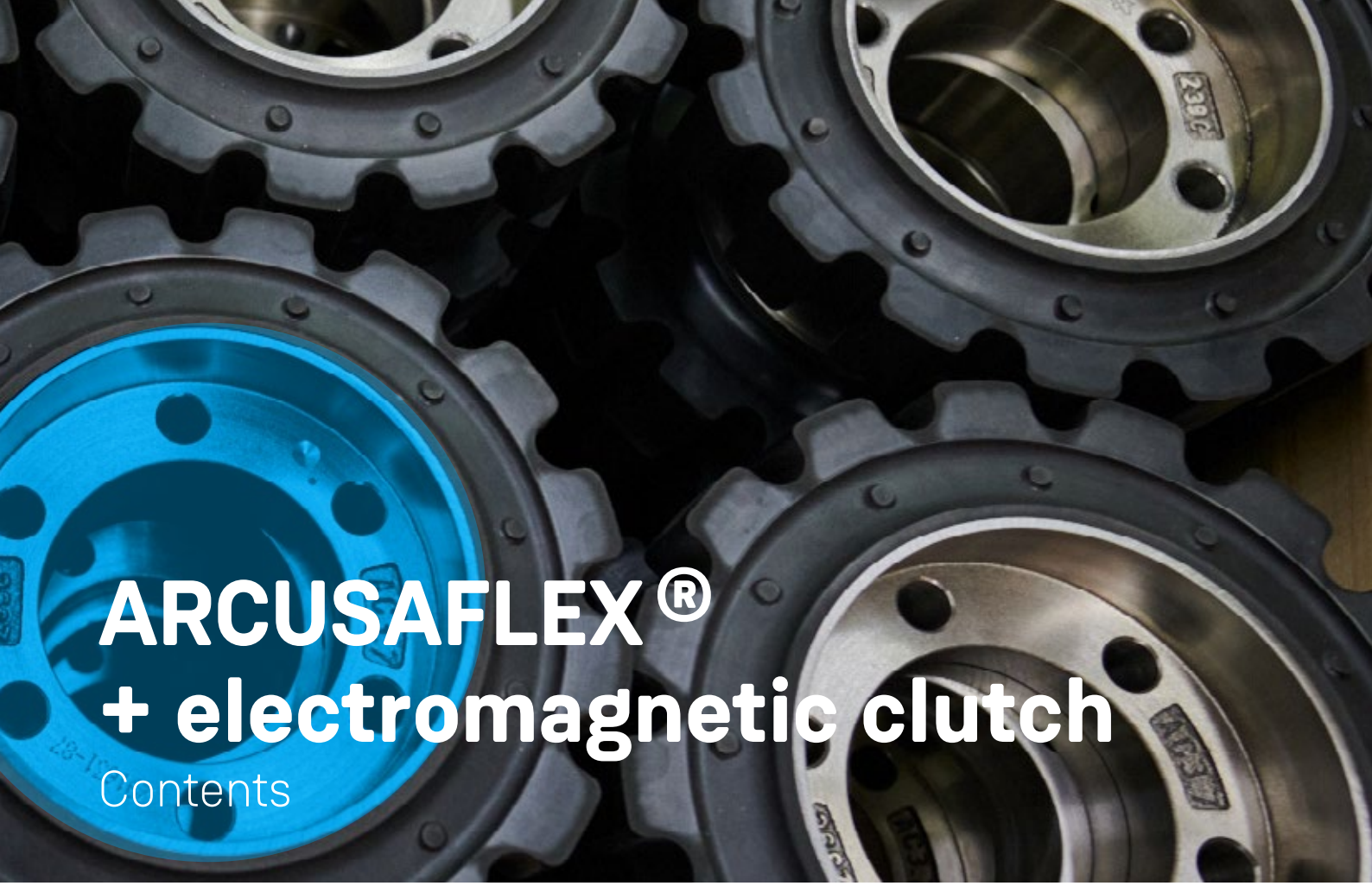
D2C – Designed to Customer

The guiding principle of Designed to Customer is the recipe for success behind REICH. In addition to the catalogue products, we supply our customers with couplings developed to their specific requirements. The designs are mainly based on modular components to provide effective and efficient customer solutions. The special nature of our close cooperation with our partners ranges from; consulting, development, design, manufacture and integration to existing environments, to customer-specific production, logistics concepts and after-sales service - worldwide.
This customer-oriented concept applies to both standard products and production in small batch sizes.

The company policy at REICH embraces, first and foremost, principles such as customer satisfaction, flexibility, quality, prompt delivery and adaptability to the requirements of our customers.

REICH supplies not only a coupling, but a solution:
Designed to Customer – and that is SIMPLY **POWERFUL.**

D2C
Designed to Customer



ARCUSAFLEX® + electromagnetic clutch

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ARCUSAFLEX®
+ electromagnetic clutch
General Technical Description

ARCUSAFLEX® + electromagnetic clutch
Highly flexible rubber disc coupling,
electromagnetic clutch

The ARCUSAFLEX® coupling (abbreviation: AC) is a highly torsionally flexible flange coupling with an axial plug-in facility, providing a torsionally soft connection between an internal combustion engine and a driven machine.

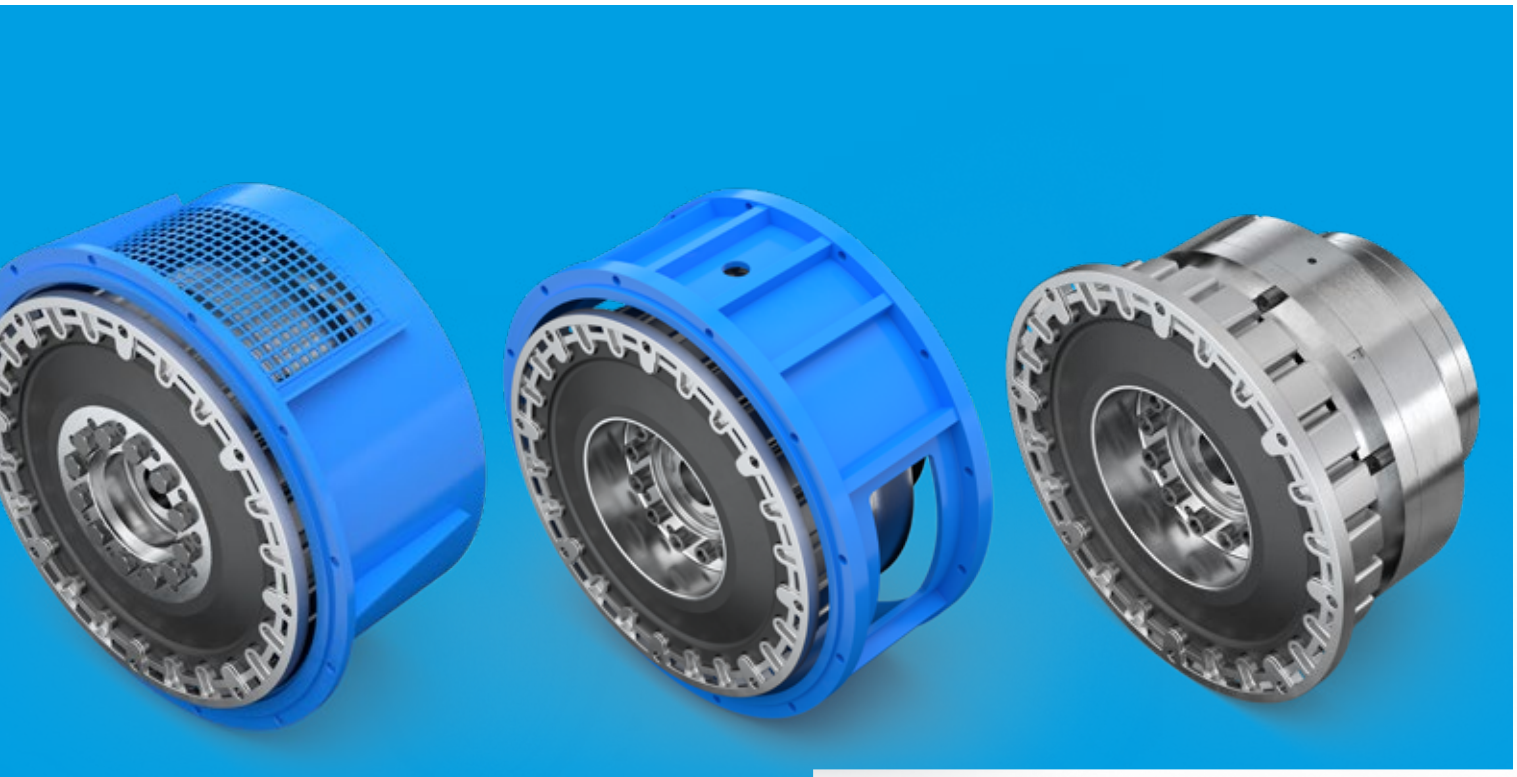
Various vulcanizates to suit the application and operating conditions effectively dampen torsional vibrations and ensure the reliability and durability of the system.

Combined with the electromagnetic clutch (abbreviation: EMC), the switchable coupling unit enables load-free engine start-up and flexible connection and disconnection of the drive train. The separation of the drive train can ensure a high level of safety, especially in critical situations.

This combination of performance, safety and flexibility makes the coupling unit the ideal solution for demanding applications. Various designs allow for axial and radial force absorption, for example, without causing additional loads on the flywheel/crankshaft bearing.

The coupling unit can be designed to connect a drive shaft or to be fitted with a shaft.

Hybrid applications are becoming increasingly important and common
- REICH has the optimum solution for you with the AC+EMC!



ARCUSAFLEX®
+ electromagnetic clutch

Torques up to 8 200 Nm

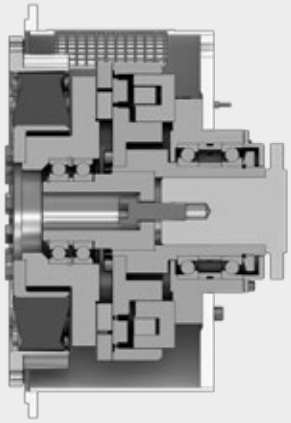
AC + EMC
Advantages

The key features of the electromagnetic clutch:

- Suitable for torque transmission with an initial differential speed between the drive elements
- High torques in the smallest of installation spaces
- Designs up to 8 200 Nm, others on request
- Quick decoupling without residual torque
- Maintenance-free
- Suitable for a variety of applications
- Emergency operation possible
- 24V DC operation, other variants possible
- De-energised when open

ARCUSAFLEX®
+ electromagnetic clutch
Standard Types

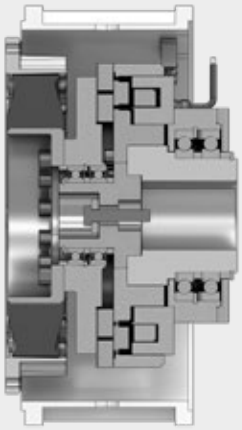
Type AC...F2 FG-GL with electromagnetic clutch



Flange coupling with external flange housing and electromagnetic clutch

Absorption of radial and axial forces
when using a drive shaft

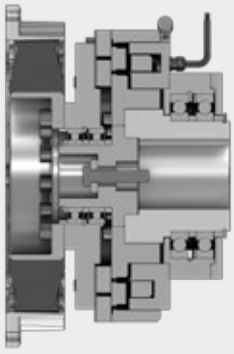
Type AC...F2 ZG with electromagnetic clutch



Flange coupling with intermediate housing and electromagnetic clutch

Connection of drive and output unit by means of
intermediate housing with integrated torque support

Type AC...F2 with electromagnetic clutch



Flange coupling with electromagnetic clutch

Use with free-standing installation
for external torque support

ARCUSAFLEX® + electromagnetic clutch

Data required for coupling size selection

General

1. Project: _____
2. Application (CHP, emergency power generator, fire pump, ...): _____
3. Operating mode (continuous operation, emergency power operation, ...): _____
4. Place of operation/location: _____ Ambient temperature: T_u _____ [°C]
5. Certification/class/requisite rules for selecting the coupling size: _____
6. Switching frequency: _____
7. Operating/switching description: _____
8. Switching speed: _____
9. Switching load-free or loaded: _____

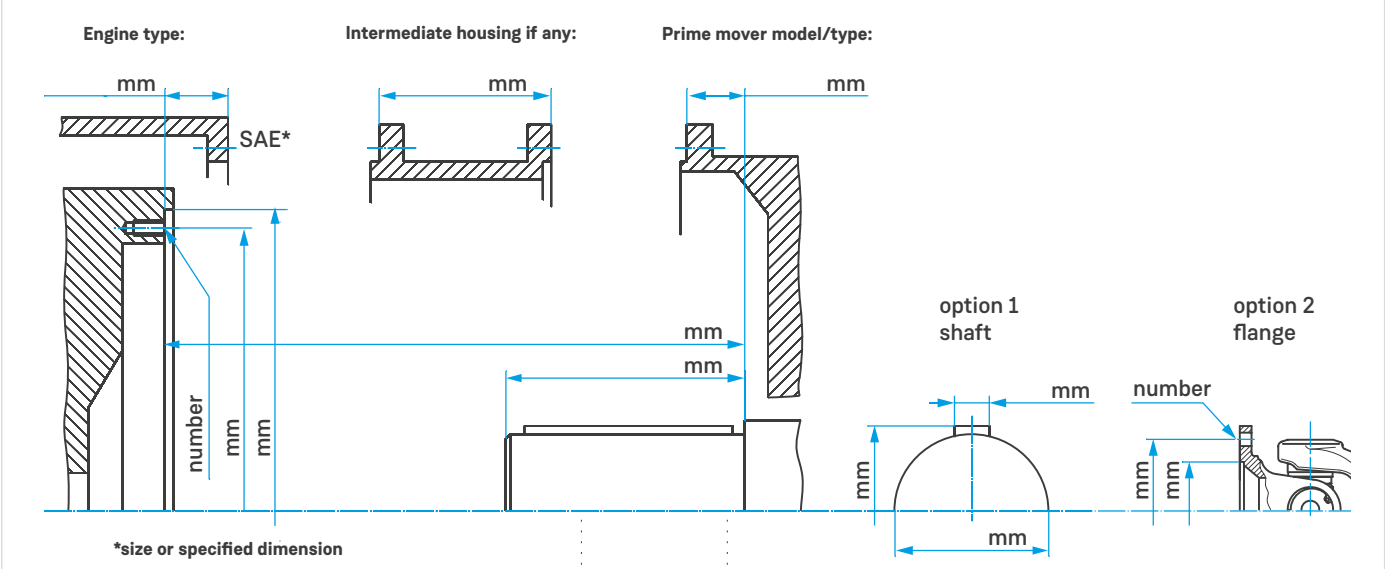
Engine side

1. Engine (manufacturer, designation/type): _____ ☐ Diesel ☐ Gas
2. Engine power (nominal operation): P _____ [kW]
3. Engine speed (nominal speed): n _____ [min^{-1}]
4. Idling speed available? ☐ yes ☐ no
   If adjustable from: n _____ [min^{-1}] to _____ [min^{-1}]
5. If variable speed operation, speed range from: n _____ [min^{-1}] to _____ [min^{-1}]
   ! Please attach corresponding speed/torque/power diagram.
6. Total stroke volum: V_H _____ [ccm] R/V (angle): _____ Number of cylinders: _____
7. Moments of inertia engine incl. damper without flywheel: J _____ [kgm^2]
   Moments of inertia flywheel: J _____ [kgm^2]
   Total moments of inertia of the engine (incl. damper, flywheel, etc.): J _____ [kgm^2]

Output side

1. Type (generator, pump, compressor, ...): _____
2. Type (manufacturer, designation): _____
3. Moments of inertia: J _____ [kgm^2]
4. Connection dimensions (D x L, flange, ...): _____
   ! For branched systems: System sketch with details of the individual inertias (with details of the reference speed) and transmission ratios.

If the prime mover is to be flange-mounted to the engine with an intermediate housing, we require the following to determine an optimum mounting position; specified details and dimensions as in the following sketch:



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SIMPLY **POWERFUL.**

Industrial solutions:

- Power generation
- Mobile applications
- Test benches
- PUMPS & COMPRESSORS
- Industry
- Ship & port engineering

September 2024 edition
The present AC + EMC catalogue edition renders parts of the previous AC + EMC catalogues obsolete. All dimensions are given in millimetres. We reserve the right to change dimensions and/or design without prior notice. Texts and illustrations, dimensional and performance data have been compiled with the utmost care. There is no guarantee, however, that the information is accurate; in particular, there is no guarantee that products will match the illustrations in terms of technology, colour, shape and configuration or that the products will correspond to the proportions of the illustrations. We also reserve the right to make changes due to printing errors or mistakes.