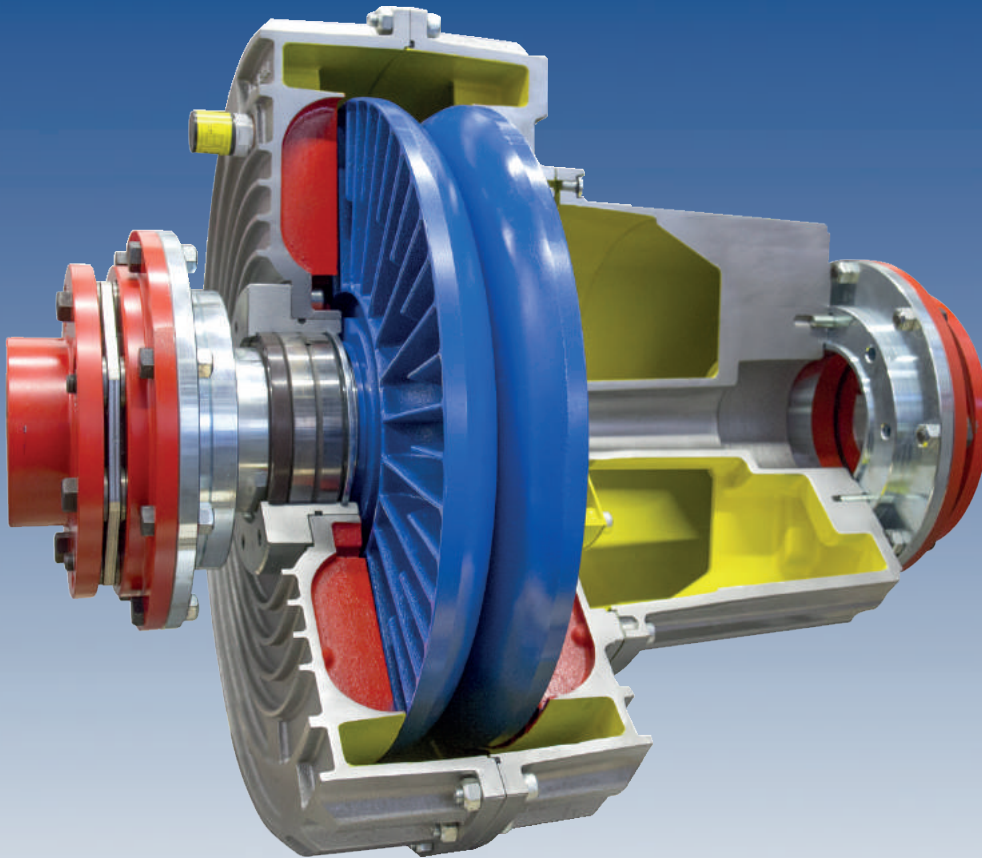




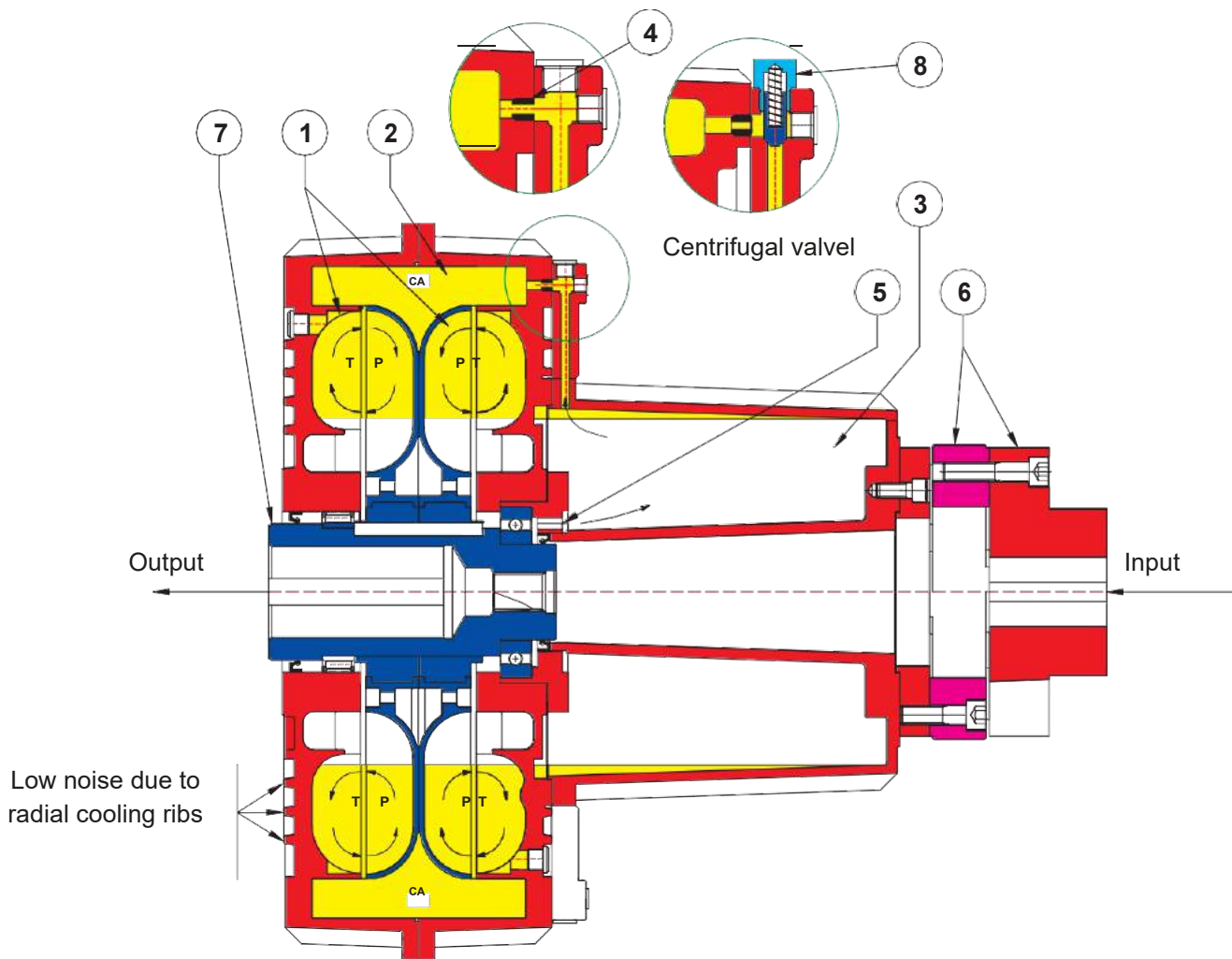
Rotofluid CA

Fluid Couplings

For Power up to 1000 kW

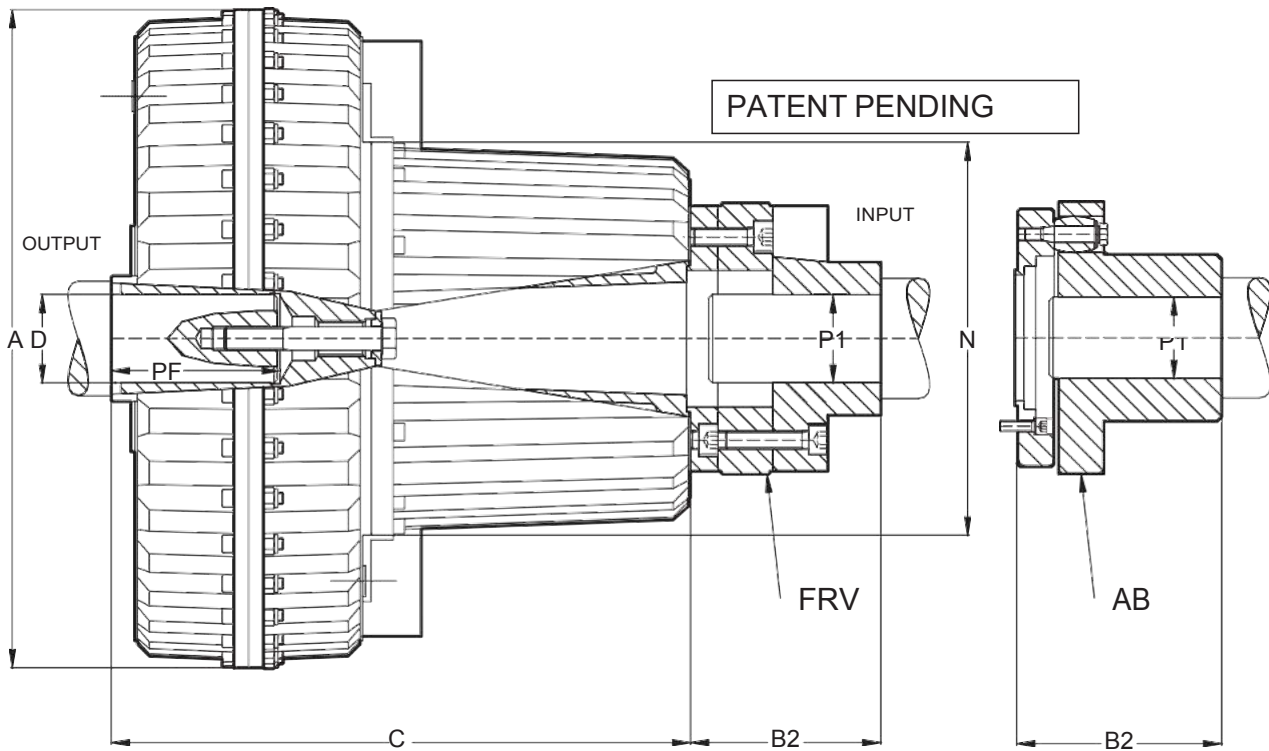


WESTCAR sets up the new "ROTOFLUID-CA" coupling to improve its range of fluid couplings, already known and appreciated all over the world since more than twenty years. The peculiarity of this coupling is to allow a smooth and adjustable start through a reduced initial torque. Thanks to its properties, the "ROTOFLUID-CA" coupling is the most innovative and suitable to start all those machines, which require a setting of the transmission before beginning the real starting (for example: belt conveyors). The peculiarity of the "ROTOFLUID-CA" coupling is more evident compared to the starting curves of the various types of constant filling fluid couplings.



1. Impeller turbine chamber (TP-PT)
2. Annular chamber "CA"
3. "DCA" chamber
4. Adjustable nozzle (adjustable from outside to allow the oil from the DCA chamber into the annular chamber)
5. Returning holes of oil into DCA chamber
6. Flexible coupling connected to the motor
7. Driven side
8. Centrifugal check valve set according to r.p.m. (on request)

The fluid couplings ROTOFLUID-CA are supplied with hollow shaft, bore and keyway according to DIN 6885. The assembly of the coupling (hollow shaft side "D") can be done on both the motor shaft and the output shaft. For very long start-up times, it is recommended to mount the coupling on the output shaft, because this allows better heat dissipation.



Also available as a pulley version

| Coupling ROTOFLUID CA | Flexible Coupling | Dimensions (mm) | | | | | | | Weight (kg) |
|--------------------------|----------------------|-----------------|-----|-----|-----------------|------------|-----|------------|----------------|
| | | A | B2 | C | D | P1 max. | N | PF max. | |
| 55-S K2 | FRV-6 | 480 | 139 | 467 | 42-48-55-60-65 | 80 | 285 | 142 | 68 |
| 55-D K2 | FRV-6 | 480 | 139 | 467 | 48-55-60-65 | 80 | 285 | 142 | 70 |
| 55-D K3 | FRV-6 | 480 | 139 | 466 | 75 | 80 | 285 | 142 | 70 |
| 65-S K2 | FRV-7 | 580 | 163 | 480 | 60-65-75 | 100 | 375 | 142 | 112 |
| 65-D K2 | FRV-7 | 580 | 163 | 480 | 60-65-75-80 | 100 | 375 | 172 | 115 |
| 75P-S K2 | FRV-8 | 690 | 194 | 572 | 75-80-90 | 110 | 400 | 172 | 205 |
| 75P-D K2 | FRV-8 | 690 | 194 | 572 | 75-80-90 | 110 | 400 | 172 | 210 |
| 75P-D K3 | FRV-8 | 690 | 194 | 587 | 100 | 110 | 400 | 212 | 210 |
| 85P-S K2 | AB-8 | 890 | 196 | 765 | 80-90-100 | 110 | 525 | 212 | 390 |
| 85P-D K2 | AB-8M | 890 | 226 | 765 | 90-100-110-125 | 160 | 525 | 252 | 420 |
| 90-S K2 | AB-9 | 1015 | 318 | 770 | 100-110-125-130 | 180 | 755 | 252 | 550 |

- Weight with oil
- For further information please contact esco antriebstechnik gmbh

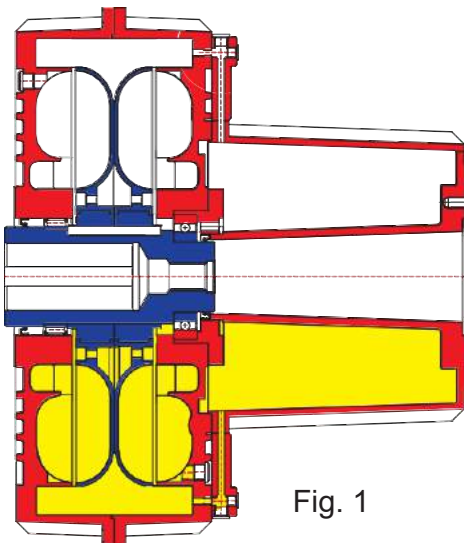


Fig. 1

Fig. 1 - At rest:
The oil stands in the lower part of the coupling.

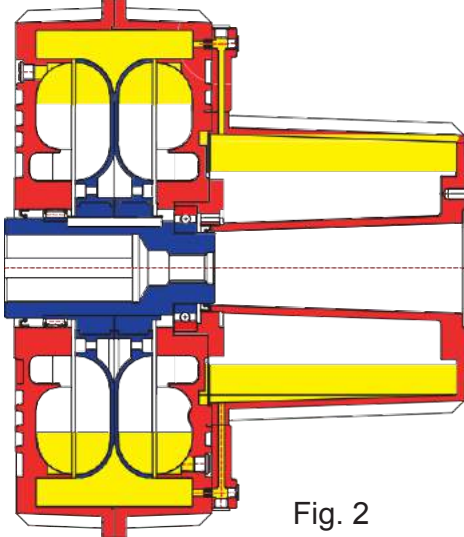


Fig. 2

Fig. 2 - Starting:
During the first motor's revolutions the oil is centrifuged from the impeller turbine chamber to the annular chamber and that allows the initial starting at reduced torque lower than the nominal. During the starting the oil in the DCA chamber passes into the annular chamber and through the adjustable nozzles. In this way you get a gradual starting. The starting time can be adjusted changing the nozzles (4), which are easily accessible from outside.

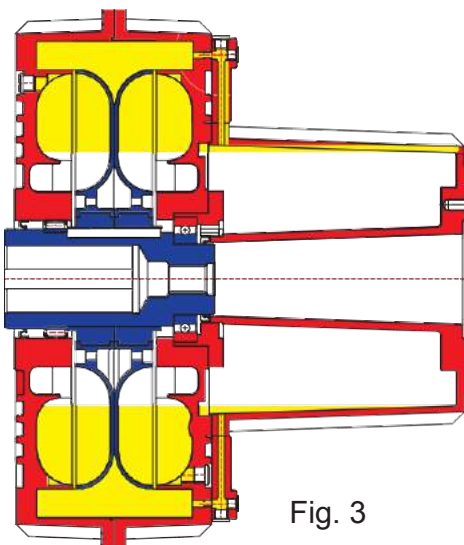
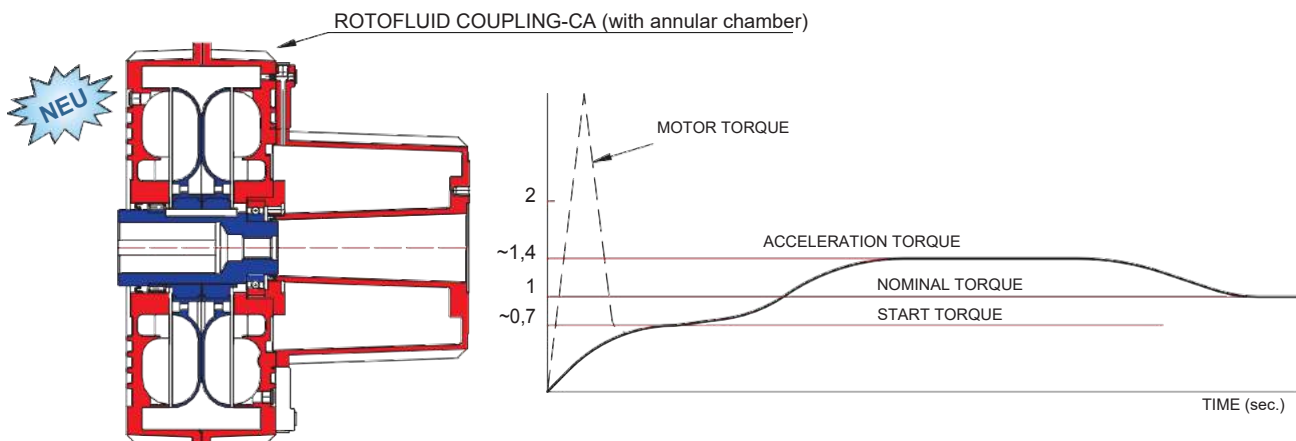
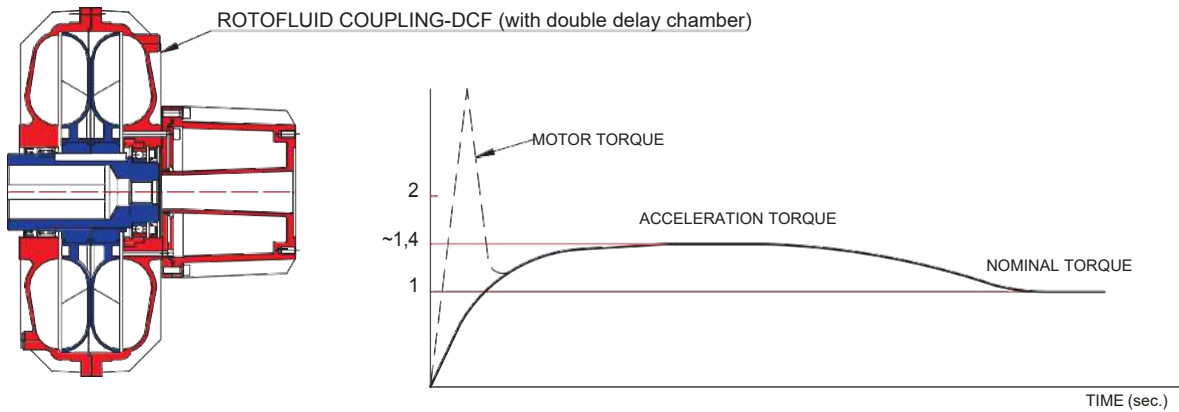
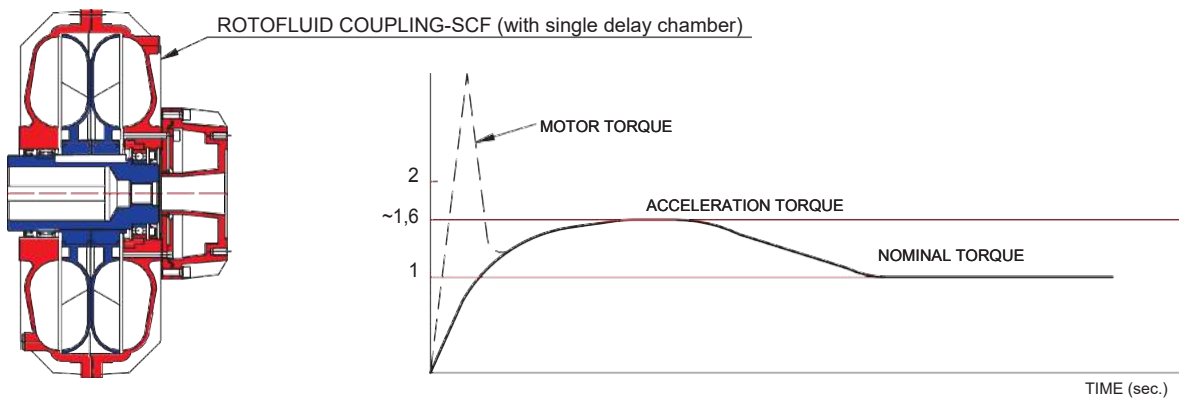
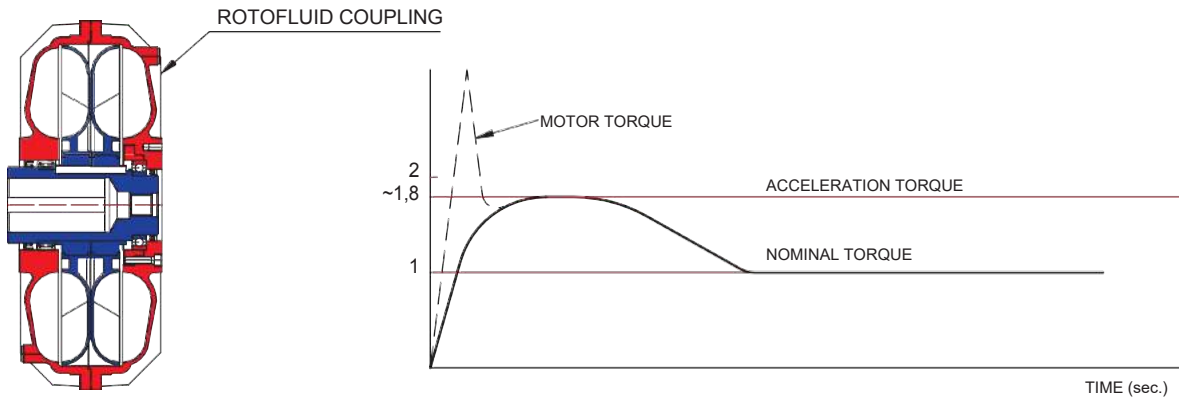
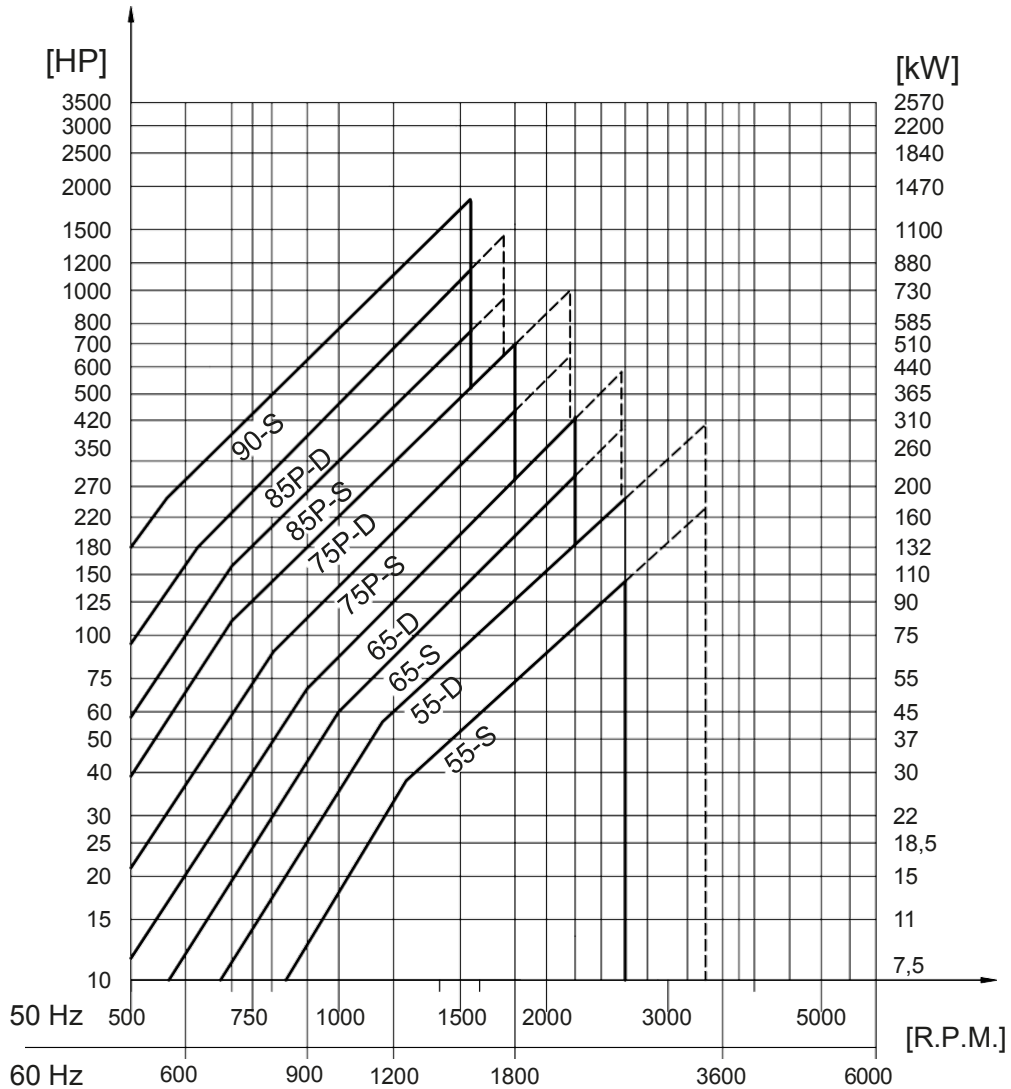


Fig. 3

Fig. 3 - Running:
The whole oil in the DCA chamber has passed into the impeller turbine chamber and the coupling can supply all the torque. At the end of the cycle, when the coupling stops, the oil gets back into the DCA chamber through the returning holes and the coupling is ready for a new start.

The ROTOFUID-CA peculiarities are more evident comparing the starting curves of different fluid coupling.





The ROTOFLUID-CA couplings have been designed in different sizes for power from 37 to 1300 KW at 1500 RPM.

The curves diagram shows maximum power and speed of couplings. Select coupling size from the power required and input speed.

In case of selection to the limit of performance, it is suggested to contact esco antriebstechnik gmbh to check the maximum permissible temperature rise of the coupling during the starting and the maximum number of starts/hour.

For the coupling selection in the dashed area please contact esco antriebstechnik gmbh.

Service and Support

esco - Excellent service for excellent brands

By service, we – the esco team – mean far more than maintenance and repair. That's why our service already starts with the first phone call. Our experienced experts advise you on choosing the appropriate components and offer technically and economically convincing solutions meeting your requirements. In constructive collaboration with you and our suppliers we realize the solution concepts efficiently and give you our support throughout the whole project phase until the start-up on site. Engineering and consulting service, products of leading manufacturers and first class support – esco offers optimum performance at an economical price.



Personal consultation

At the Troisdorf offices, our field experienced engineering team answers in detail all questions regarding conception of complete drives or customization to the requirements of the application. Close cooperation and personal consultation provide confidence – and this is now more important than ever.



Service activities

We know how cost-intensive production losses resulting from machine downtime are. So, we do our utmost to make your equipment ready for operation again as fast as possible. Short reaction times due to best organized service processes and an extensive stock at the Troisdorf location with 24/48 hours delivery of all important spare parts guarantee safe operation of your machines and minimum downtimes.



For more information on clever drive solutions from esco please refer to www.esco-antriebstechnik.de

Or simply call us! Our sales team will be pleased to help you.

