

Servo motor

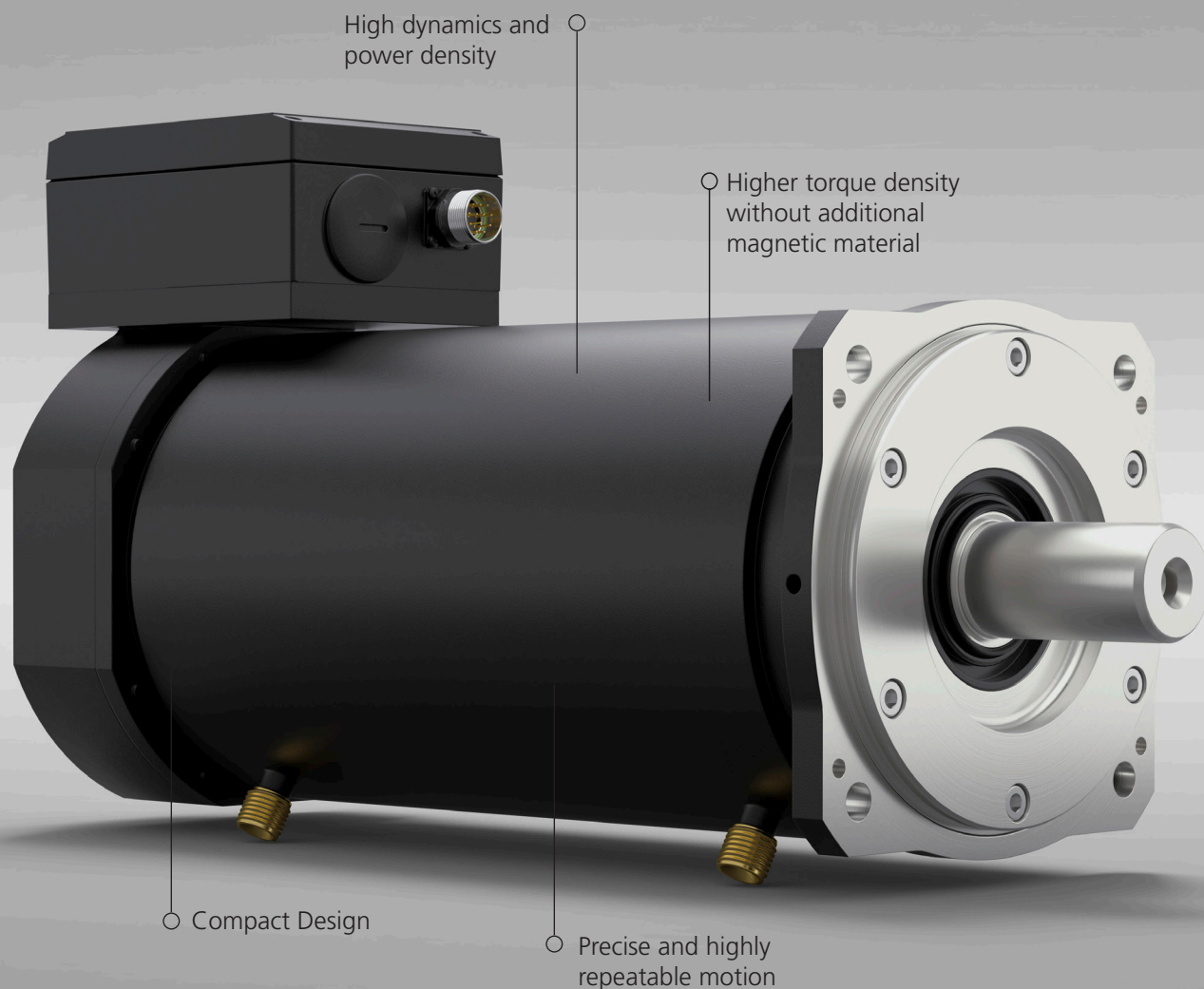
DIP

Synchronous servo motors –
highly dynamic with high
power density



DIP

Synchronous servo motors



High dynamics and power density

The DIP synchronous servo motor achieves three times the acceleration capability compared to equivalent synchronous servo motors from AMKmotion. With its exceptional torque and high rotational speed, the DIP delivers both power and speed in a very compact design. This allows machines to be built more compactly and operated more efficiently.

Shorter cycle times and precise movements

The DIP ensures highly repeatable motion and reduces cycle times. Users benefit from shorter process cycles and increased productivity.

Energy-efficient and resource-conserving

The energy-efficient DIP requires significantly less power for the same acceleration compared to similar models. Its reluctance component provides high torque without the need for additional magnetic materials, greatly reducing the use of rare earth elements.

Areas of Application

Industry: Printing & Packaging

Typical applications

- Punching
- Cutting
- Conveyor and packaging systems

Your benefits

- Shorter cycle times
- Repeatable motion
- Increased productivity

Industry: Test benches & test systems

Typical applications

- Dynamic load simulation
- Torque control

Your benefits

- Fast load changes
- Precise control
- Flexible test sequences

Industry: Plastics industry

Typical applications

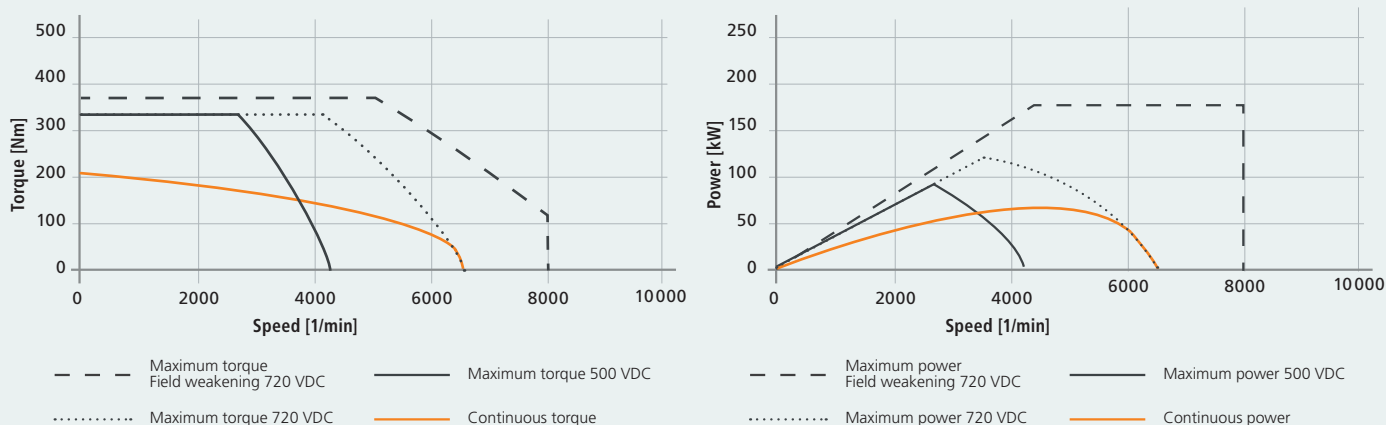
- Injection molding, thermoforming, and film stretching machines

Your benefits

- Shorter cycle times
- Increased injection speeds
- More delicate components possible

Motor performance curves

(Exemplary performance curves of a DIP10-240-10-xxW-4200)



Technical Data DIP10

Flange size	190 x 190 mm
Power range	5 - 100 kW
Rated speed	Up to 8.000 min ⁻¹
Maximum power	Up to 200 kW
Maximum torque	Up to 550 Nm
Inertia	From 26 - 160 kgcm ²
Acceleration capacity	Up to 37.000 rad/s ² In real-world applications with a lambda ratio of 1:10, accelerations of up to 80g can be achieved.
Cooling type	Convection-cooled and liquid-cooled
Protection class	IP54, IP65
Brake	Available with or without brake
Encoder	EnDat 2.1, Hiperface, Hiperface DSL
Single-cable solution	Optionally available
Certification	C-CSA-US

AMKmotion GmbH + Co KG

Gaußstraße 37-39
73230 Kirchheim unter Teck
Germany
Phone +49 7021 5005-0
info@amk-motion.com
www.amk-motion.com

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