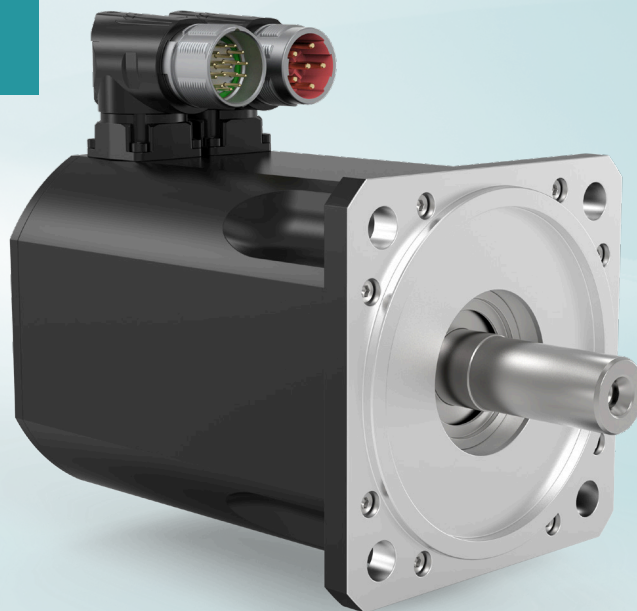


powerful  
compact  
easily modified

cyber<sup>®</sup> power motor AF  
brushless servo motors



# cyber® power motor AF

## Compact servo motors with high power density

WITTENSTEIN cyber® power motors AF (12 poles) with natural cooling are designed for dynamic servo applications where small dimensions (especially shorter length) and high torque, along with a wide speed range and variable load, are required. From an electromagnetic standpoint, cyber® power motors AF are designed for an overload capacity of 3–5 times the rated torque. Therefore, these servo motors can be used with torques substantially higher than those produced at nominal speed. They also offer a large power range, achieving continuous stall torque values from 2.8 to 65 Nm [25–575 lb-in].

The modular design of the cyber® power motor AF supports a variety of options. In addition, WITTENSTEIN cyber motor can provide fully customized solutions. We offer winding systems and special insulation options for different intermediate circuit voltages (12 V, 24 V, 48 V, 330 V, 560 V and 700 V<sub>DC</sub>) as well as for a wide range of different voltage constants (from about 1 to 500 V min. / 1,000). For high speed applications, WITTENSTEIN cyber motor offers special rotors with double or triple bandages. Additional rotor options include special lightweight rotors for reduced inertia. We can also customize active lengths and develop special mechanical designs for the flange, shaft end and bearings, for applications requiring higher radial and axial forces. Our motors can be engineered to meet even the toughest environmental requirements (higher temperature; hazardous or harsh environment), have increased IP ratings and be equipped with a variety of available encoder options to meet all our customer needs.

### Features

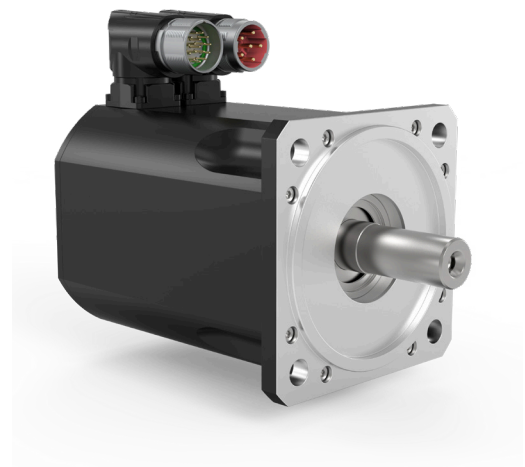
- Compact dimensions with shorter axial length (flat motors)
- High torque overload capacity
- High efficiency
- High quality production
- High precision assembly
- Long life and high operational reliability

### Benefits

- Space-saving installation
- High power density
- Highly customizable
- Rugged structure
- Minimal maintenance needs
- Different winding options available

### Specifications

Dimensions	Measuring Unit	cyber® power motor AF
Continuous Stall Torque $M^{\circ}$	Nm [lb-in]	2.8–65 [25–575]
Peak Torque $M_{max}$	Nm [lb-in]	12.3–254 [109–2,246.4]
Rated Speed $n_N$	min <sup>-1</sup> (rpm)	0–5,500
Rated Power $P_N$	kW [hp]	0.8–9.4 [1.07–12.61]
Rated Torque $M_N$	Nm [lb-ft]	2.5–59.6 [22.1–527]
Moment of Inertia $J$	kg m <sup>2</sup> [lb-in sec <sup>2</sup> x 10 <sup>-4</sup> ]	1.8–130 [15.9–1,150.3]
Position Transducer	Standard / Optional	Resolver / Encoder
Temperature Monitoring	N/A	PTC, PT1000, Thermoswitch
Brake	N/A	Optional
Rated Bus Voltage $V_{DC}$	V	300/560 (or customizable)
Certificate / Marks	N/A	CE
Cooling	N/A	Natural



cyber® power motor AF