

Low voltage. High performance.

Kollmorgen introduces AKM DC Servo Motor low voltage as a motor solution for machine modules and retrofits.

- ▶ All the benefits of permanent-excited servo solutions in a low voltage environment
- ▶ Able to replace existing technology
- ▶ Power range up to 300 W (48 V)
- ▶ Full flexibility of the AKM range in terms of feedback systems, connectors and flange/shaft combinations
- ▶ Controls possible using AKD Servo Drives *

Practice-oriented performance data and functions

- Torque range up to 1.25 Nm (continuous) and 4.1 Nm (peak)
- 2 voltage ranges: 24 V DC and 48 V DC
- 3 sizes with 40, 58 and 84 mm flanges
- Rated speed range up to 2500 rpm



Low-voltage servo axes can be used for upgrading existing systems as a result of their compact design, and they also allow space-saving machine modules to be installed with independent intelligence. The axes are designed for rated power of 300 W with 6 A current, but can supply a current of 15 A for a short time and can thereby cope with the breakaway torques that occur upon start-up. The drive system has a more efficient design through the high peak current without oversizing.

* Please contact our Support Team before use.

Compact low voltage servo axes

Ideal for high-precision drives in packaging machines or for use in autonomous transportation systems with dynamic driving behavior.



Drive solution in a packaging machine's labeler with AKM31K



Low voltage motor in an autonomous transportation system. Autonomous transportation systems fitted with low voltage servo axes are characterized by high precision and dynamic driving behavior.

| Parameters | Unit | AKM11F | AKM21J | AKM12E | AKM22H | AKM31K |
|-------------------------|------|--------|--------|--------|--------|--------|
| Voltage U | V DC | 24 | | 48 | | |
| Stall torque M_0 | Nm | 0.18 | 0.43 | 0.30 | 0.88 | 1.25 |
| Peak torque M_{max} | Nm | 0.30 | 0.90 | 0.59 | 2.00 | 4.10 |
| Current I_0 | F | 3.75 | 7.13 | 2.73 | 5.41 | 9.10 |
| Rated speed N_{nenn} | rpm | 2,000 | 2,000 | 2500 | 2,000 | 2500 |
| Maximum speed N_{max} | rpm | 4500 | 3500 | 4,000 | 3000 | 3000 |
| Resistance R (cold) | ohm | 1.91 | 0.79 | 3.90 | 1.46 | 0.63 |
| Inductance L | mH | 1.18 | 0.76 | 2.68 | 2.57 | 1.00 |

High-end control technology from Kollmorgen

You can still have the precise controls of 24 V/48 V motors in a low voltage environment. The compact AKD Servo Drives can be used in many applications and turn a simple drive into a powerful low voltage axis. Yet every application has specific requirements - which is why you should contact the Kollmorgen Team before use in order to learn more about the options available for your planned application. We will be happy to advise you further!

