KOLLMORGEN®

Because Motion Matters™

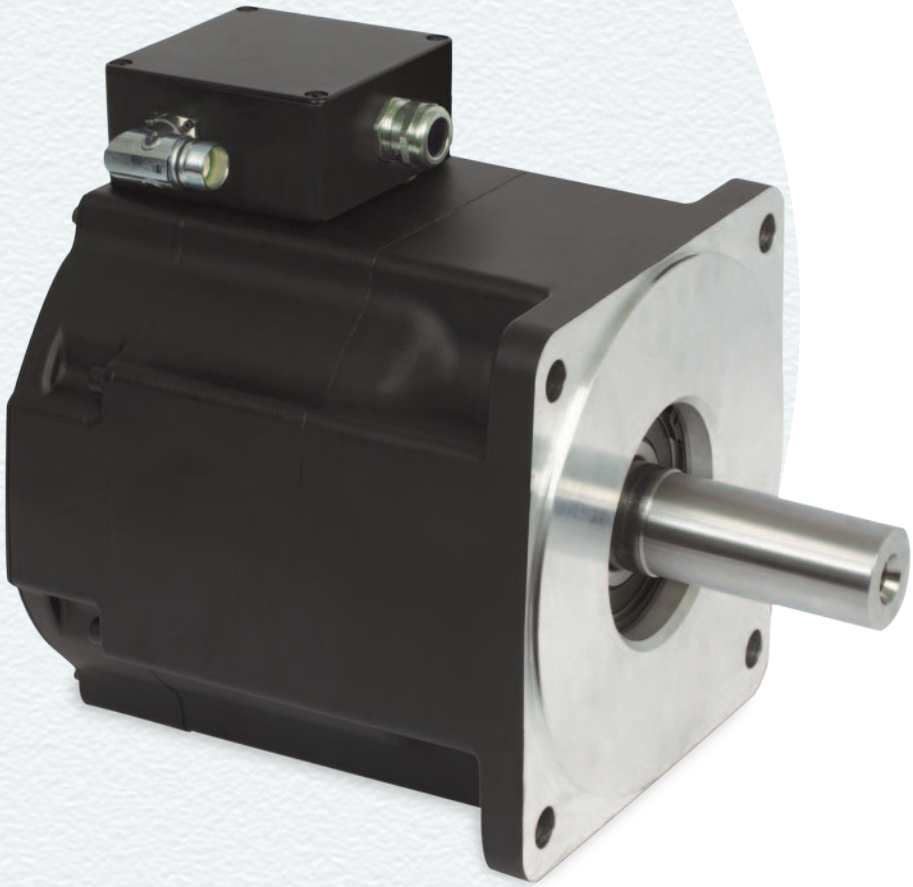
A Space and Cost Saving Solution that Gives Maximum Performance.

The new AKM synchronous servo motor AKM8 is unbeatable in its class

The AKM8 is an enhancement to the proven AKM Series – giving the best value possible in terms of cogging, electrical power and power loss, and has exceptional features – all in all providing incredible performance. It offers a stall torque up to 180 Nm and a peak torque up to 668 Nm. It is 30 – 50% more compact and weighs 10 – 30% less than motors using conventional technology, but is still designed to achieve the exact same performance. New solutions open up for customers allowing them to make their own machines more compact. Like other small motors, AKM8 motors can also be installed anywhere on a machine and do not need any Foot mount. The new AKM motors – probably the most compact motors in their torque class.

Amazing Advantages

- Less space requirement due to compact design
- Saves energy because of its high efficiency
- Noticeable performance benefits through its high torque density
- Minimal loss of power through its smaller end windings
- Flexible design options such as electrical connections
- Reinforced high-quality bearings
- Fully encapsulated stator
- Integrated A-flange
- "One piece flow" design and production process leads to a quicker and more flexible production
- Many years of experience in designing and manufacturing high performance drive solutions



Totally Competitive

- As compact as possible at the same or increased torque
- Maximum torque achieved from minimum volume
- Good result when torque and speed are compared
- Acceptable rotor inertia compared with stall torque with extremely short and larger rotor
- Highly flexible, particularly for customer specific windings
- Available worldwide due to a global presence

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Total Flexibility and Best Performance for Maximum Power.

Feedback Systems

The motors are fitted with double-pole hollow shaft resolvers as standard. They can also be provided with additional feedback systems:

- Smart Feedback Device (SFD)
- Single Turn Absolute Encoders
- Multi Turn Absolute Encoders

The encoders are available as an optical variant. Interfaces are Endat, Biss and Hiperface.

Special Features

- The A-flange and motor case are in one piece so that high density and strength are produced along with low tolerances
- The fully encapsulated stator delivers high stability, increased lifetime and guarantees improved heat dissipation from the motor

Additional Options

- Integrated high-performance immobilization spring holding brake with 180 Nm holding torque
- A shaft seal made of Teflon allows Protection type IP 65 to be achieved, with low friction and less lubrication during operation
- The numerous options also include the most diverse range of flange and shaft lengths, bolt circles and pilots as well as shaft diameters
- Reinforced bearing option for doubling the radial forces on the load side (AKM83, AKM84)
- 2-connector option instead of terminal box
- High-speed version of AKM83 with 3000 rpm available

Approvals and Compliance

- CE (Europe)
- UL (North America)
- GOST-R Certification (Russia)
- Complies with the RoHS & REACH Standards

	AKM82 [1]	AKM83 [1]	AKM83 [1] [2] 3000 rpm	AKM84 [1]
Stall Torque (Nm)	75	130	130	180
Peak Torque (Nm)	210	456	456	668
Rated Torque (Nm) 400 V	47,5	70	65	105
Rated Torque (Nm) 480 V	38	60	65	93
Rated Speed (rpm) 400 V	2500	2200	3000	1800
Rated speed (rpm) 480 V	3000	2500	3000	2000
Stall Current (A)	48	62	91	67
Rotor Inertia (kg·cm²)	175	341	341	506
Length without Brake (mm)	267	348	348	428
Length with Brake (mm)	333	414	414	494
Frame Size (mm)	260	260	260	260
Hole Circle (mm)	265/300	265/300	265/300	265/300
Centering (mm)	230/250	230/250	230/250	230/250
Shaft Diameter (mm)	42/48	42/48	42/48	42/48
Shaft Length (mm)	80/110	80/110	80/110	80/110

1) Measurement according to DIN 42948, IEC 72-1; Performance data applies to conventional cooling
2) Protection class IP52