

AM88xx | Stainless steel servomotors

Based on the AM8000 technology, the AM8800 series has a stainless steel housing in Hygienic Design. The AM8800 is ideally suited for use in the food, pharmaceutical and chemical industries.

The windings of the AM8800 motors are implemented using salient pole-wound technology. This gives rise to a high copper space factor. Due to the high slot space factor, high continuous torques can be attained. The fully potted stator provides for a thermally ideal transition of the winding to the housing. A further positive consequence of this is the mechanical protection of the winding wires against vibrations.

Since the housing and motor shaft are manufactured from scratch-proof stainless steel AISI 316L, no corrosion creep or damage to the paint finish is possible. The motors are manufactured as standard with IP 69K protection, allowing the use of steam pressure cleaners. An optional sealing air connection to prevent the formation of condensation is also available. The cable gland also has a hygienic design. The lubricants used are certified food-safe (FDA).

One Cable Technology (OCT)

With the servomotors of the AM8000 series the feedback signals are sent directly along the conductor to the power supply so that the power and feedback systems are combined in a single motor supply cable. With the use of OCT, the information is sent reliably and without interference through a digital interface. Since a cable and plug are omitted at both the motor and controller end, the component and commissioning costs are significantly reduced.

Technical data	
Motor type	permanent magnet-excited three-phase synchronous motor
Magnet material	neodymium-iron-boron
Insulation class	thermal class F (155 °C)
Design form	flange-mounted according to IM B5, IM V1, IM V3, optionally IM B14, IM V18, IM V19
Protection class	IP 69K, PTFE double-lip shaft seal with FDA approval
Cooling	convection, permissible ambient temperature 40 °C
Materials	AISI 316L
Temperature sensor	integrated in stator winding
Connection method	direct cable outlet via cable gland with connected M23 speedtec® coupling plug or direct connection for AX5000 or AX8000
Life span	L _{10h} = 30,000 hrs for ball bearings
Approvals/markings	CE, UL
Feedback system	absolute encoder single-turn and multi-turn (OCT), resolver

Options	AM88xx
Feather key groove	according to DIN 6885 P1
Holding brake backlash-free	permanent magnet single-surface brake, suitable only as holding brake
Feedback system option	absolute encoder multi-turn, resolver

Accessories	
AG2800	Planetary gear units for AM8800 stainless steel servomotors
ZK45xx-8xxx	Supply cables AM8000, AM8500, AM8800

Stainless steel products

For further information on the stainless steel control solution please see here.