



AC Brushless servomotors

Complete product overview

AC BRUSHLESS SERVOMOTORS - DSM5 Series

AC Synchronous Servomotors DSM5 Size 0-2-3-4-5-6-7

The DSM5 series of AC PM synchronous servomotors have been designed using the latest generation of magnets and construction techniques to provide very high performance with a wide range of available options.

The high torque to volume ratio, low cogging torque and low torque ripple provides the best solution for demanding applications where such characteristics are essential.

PRINCIPLE CHARACTERISTICS:

- Rare earth magnets for high performance
- 8 pole construction for high torque density
- Medium Inertia for high stability
- Compact design and low weight
- 90° right angle rotatable connectors
- High IP rating, smooth finish

Torques from 0,19 to 500 Nm – frame size from 40mm to 260mm



BRUSHLESS HIGH TORQUE SERVOMOTOR - DSM7

The new DSM7 High torque servomotors are AC PM Synchronous motors. They incorporate High temperature resistant magnets and low loss laminations. With very low cogging torque these motors are suitable for the most demanding applications.

PRINCIPLE CHARACTERISTICS:

- Rare earth magnets for high performance
- 8 pole construction for high torque density
- 90° right angle rotatable connectors
- Compact design, smooth finish
- Low cogging torque and low torque ripple
- Dimensions compatible with Asian market

Torque from 1,4 to 3,9Nm - Frame size 80 x 80mm



INTEGRATED ACTUATORS - ARM & ABM Series

The Precision Integrated Rotary Actuators ARM & ABM series are composed of a very compact brushless servomotor, a hollow shaft zero speed gear reducer and an absolute position feedback device.

PRINCIPLE CHARACTERISTICS:

- Hollow shaft (ARM) or hollow blind shaft (ABM)
- Absolute single or multiturn encoders
- Precision gear reducers with zero backlash and high rigidity

Complete series from ARM/ABM20 to ARM/ABM62



TORQUE MOTOR - TG9

The hollow shaft Torque Motor TG9 is designed for direct drive applications incorporating recirculating ball screws. Ideal for applications in the field of electric presses and in applications where hydraulic cylinders can be replaced with electric actuators.

- High precision compact design with accurate positioning capability
- Environmentally friendly energy saving performance
- High torque at low speed
- High peak torque and high maximum speed
- Field weakening at constant power

Peak Torque from 900 to 2.200 Nm - Ø 380 mm



COMPACT SERVOMOTORS - DSM5 COMPACT series

DSM5.x0 – ZERO LENGTH Brushless Servomotors are AC PM Synchronous servomotors. They have been designed using the latest generation of magnets and construction. Techniques to provide very high performance, low cogging and torque ripple. Special design features enable extremely low length/Nm making them very compact.

PRINCIPLE CHARACTERISTICS:

- Rare earth magnets for high performance
- 8 pole construction for high torque density
- Medium Inertia for high stability
- Extremely compact design and low weight
- Integrated PTC thermal protection
- 90° right angle rotatable connectors
- High IP rating
- Smooth finish

Torque from 1 to 8 Nm - Frame size from 85mm to 190mm



TORQUE MOTOR – DSM5 size 8

The DSM5 size 8 Torque Motor is a high pole, AC PM Synchronous servomotor. Designed with high temperature resistant magnets and low loss laminations, these high torque motors have very low cogging torque which makes them suitable for the most demanding precision applications.

PRINCIPLE CHARACTERISTICS:

- Rare earth magnets for high performance
- 16 pole construction for very high torque density
- Integrated PTC thermal protection
- 90° right angle rotatable connectors
- Compact design, smooth finish
- Low cogging torque and low torque ripple
- High efficiency
- Forced ventilation or liquid cooling options
- Hollow shaft option

Torque from 125Nm to 800Nm - Ø 320 mm



HIGH EFFICENCY MOTOR – ECOPM IE4 & IE5

The ECOPM series are low cost PMSM motors with standard induction motor housings designed to replace inefficient induction motors. The highly efficient output complies with current and future energy saving regulations having a classification that exceeds IE4 & IE5 premium defined by directive 64030-31.

ECOPM motors must be used in conjunction with an inverter.

PRINCIPLE CHARACTERISTICS:

- High efficiency with low losses and silent running
- Standard IEC housing with B3, B5 and B14 mounting options
- Sensorless operation
- Coupled fan or forced ventilation options

Outputs from 0,25kW to 20kW - Frame sizes MEC56 to MEC132



DIRECT DRIVE FRAMELESS SPINDLE & TORQUE Motor

- High energy magnets with epoxy protection
- SPM (surface mount) or IPM (buried) magnet design
- Field weakening operating
- High speed applications
- High torque applications
- Liquid cooling for compact size
- Encapsulated stator windings







SANGALLI SERVOMOTORI S.r.I.

VIA FEDERICO ROSSI, 5

20900 - MONZA (MB) - ITALY

Subject to the direction and coordination of ESAUTOMOTION SPA

TEL. 1:00-39-039-2020322 TEL. 2:00-39-039-2020747 FAX : 00-39-039-2020656

INFO@SANGALLISERVOMOTORI.IT WWW.SANGALLISERVOMOTORI.IT

MOTORS & MOTION CONTROL

- **DSM5 BRUSHLESS SERVOMOTOR**
- **DSG SYNCHRONOUS PM GENERATOR**
- DC SC RARE EARTH SERVOMOTOR
- **DSW LIQUID COOLING**
- **PLANETARY GEAR REDUCERS**
- **LOW-COST SOLUTIONS**
- **CUSTOMIZED SOLUTIONS**
- **TORQUE MOTOR**
- FRAMELESS SPINDLE MOTOR





