

2.08. MULTISTAGE MAGNETOELECTRIC SYSTEMS (MMS)

MMS are intended for orientation of the moving elements of surveillance systems, search for targets, guidance in military and space technology.

Technical specifications:

Three-stage systems		Two-stage systems	
Outer diameter, mm	Up to 70	Outer diameter, mm	Up to 150
Angular range of rotor tilt to cross axes, degrees	Up to ± 30	Angular range of rotor rotation, degrees	Up to ± 60
Stabilized rotor speed, rpm	Up to 10000	Coefficient of moment stepness, Nm/A	Up to 1

Advantages

The multistage system replaces a combination of two or three conventional electric motors. At the same dimensions and energy consumption, the electromagnetic moment in the MMS is 3 ... 5 times greater than in the traditional combination of two or three electric motors, and the speed - in 7 ... 20 times. The advantages can be achieved at the expense of a full use of the device volume for electromagnetic core installation, significant reduction of inertia moments of intermediate moving elements and electromagnetic moment increase.



Two-stage motor for tracking systems