

TORQUE TABLES RSMR-T-36 WITH HOLLOW SHAFT

FEATURES:

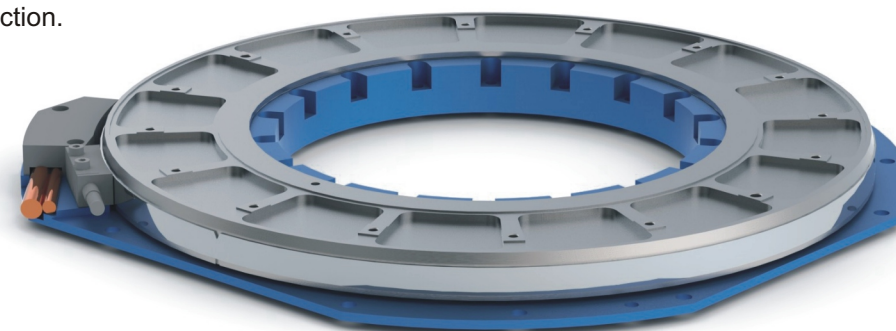
Ironless three-phase rotary synchronous motor with rare-earth magnets for high torque density.
Direct pancake drive (no gear, no backlash), low height , big hollow shaft .
Built-in precision four-point ball bearing, sine encoder, PTC thermistors for overheating protection.
High precision, repeatability and resolution, zero cogging and low ripple.
High motor stiffness and large bandwidth by position regulator with encoder feedback.
Low rotor inertia, high peak torque, high acceleration, very fast indexing times.
Smooth movement by sinusoidal commutation of motor phase currents
Supply voltage 3x220 V AC, degree of protection IP40.

APPLICATIONS:

Indexing tables, pick and place machines, tilt and swivel systems, wafer inspection.

CONSTRUCTION:

Motor consist of a steel rotor ring with glued permanent magnets and fixed stator with encapsulated in thermally conductive epoxy windings.



RSMR-T-36-231-25-C-HS-KF-AM

Parameter		115-25-C-HS-KF-AM	231-25-C-**-KF-AM		333-25-C-**-KF-AM		409-25-C-**-KF-AM	
	Unit **	HS	HS	HT	HS	HT	HS	HT
SPECIFICATIONS RSMR-T-36-								
Number of poles pairs P		8	16		24		32	
Peak / rated torque Mp / Ma	Nm	5,7 / 1,7	22,9 / 6,9		49,5 / 14,5		100 / 23	
Bearing friction / Cogging torque Mb / Mc	Nm	0.3 / 0.0	0.5 / 0.0		1.0 / 0.0		3.0 / 0.0	
Viscous damping	Nm/rpm	0,005	0,01		0,02		0,06	
Peak / rated current at Mp / Ma	Arms	8,7 / 2,6	8,7 / 2,6	15,1 / 4,5	8,7 / 2,6	15,1 / 4,4	8,7 / 2,4	15,1 / 4,2
Inductance L	mH	4	8,1	2,7	12	4,1	16	5,4
Resistance R	Ohm	5,5	11,1	3,7	17,6	5,6	22	7,4
Rated power dissipation	W	76	150		214		260	
Maximum short-time velocity Np at Mp	Rpm	1100	320 / 630	800 / 1100	48 / 260	290 / 500	1 / 144	110 / 290
Maximum continuous no-load velocity	Rpm	1100	600	600	360	600	210	360
Rotor moment of inertia	Kg m ²	0,005	0,03		0,08		0,15	
Motor weight	Kg	3,0	5,9		8,5		10,4	
Maximal axial / radial payload	Kg	12	24		38		45	
Maximal payload tilting torque	Nm	5	12		32		48	
Axial / radial runout	micron	30 / 30	30 / 20		40 / 30		40 / 30	
Number of encoder lines		540	900		1216		1455	
Position accuracy / Repeatability / Resolution	arc.sec.	50 / 5 / 2	40 / 4 / 1		30 / 3 / 1		20 / 3 / 1	
Hollow shaft diameter	mm	55	158		390		466	

ORDER EXAMPLE: RSMR-T-36-115-25-C-HS-KF-AM-3000-N0-A, where: RSMR-T-36 - type, 115 - middle diameter of rotor, 25 - magnet length, C - no cooling (only), H - winding wire code, S - internal star connection, KF - bearing code, AM-encoder code, 3000 - cable length mm, N0 - without motor connector (flying leads), A - standard version.