



Frameless Motors

FMI by Rozum Robotics is a high torque density brushless AC motor. Inrunner. Direct drive 3-phase encoder-ready kits. Intended for projects where high power and compact size are foremost.

FMI501201

Power	130	W
Supply voltage	48	V
RMS Current	2.7	A
Rated Torque	200	mNm
Peak Torque	500	mNm
Rated speed	6000	rpm
Speed const Kv	130	rpm/V
Torque const Kt	74	mNm/A
Motor const	67	mNm/√W
Terminal resistance	0.8	Ω
Terminal inductance	500	μH
Number of pole pairs	7	
Max. efficiency	89.1%	
Rotor inertia	0.22	kgcm ²
Weight	105	g
Winding type	Y	

FMI702001

Power	190	W
Supply voltage	48	V
RMS Current	5	A
Rated Torque	600	mNm
Peak Torque	1500	mNm
Rated speed	3000	rpm
Speed const Kv	120	rpm/V
Torque const Kt	155	mNm/A
Terminal resistance	0.6	Ω
Terminal inductance	250	μH
Number of pole pairs	7	
Max. efficiency	90%	
Weight	270	g
Winding type	Y	

SUPPLY KIT:

- Frameless motor with a thermal sensor
- Rotor ring with rare-earth magnets
- STEP model
- User Manual
- Low voltage equipment and electromagnetic compatibility certificate*

* - check, if it is available for your country

FMI1102001

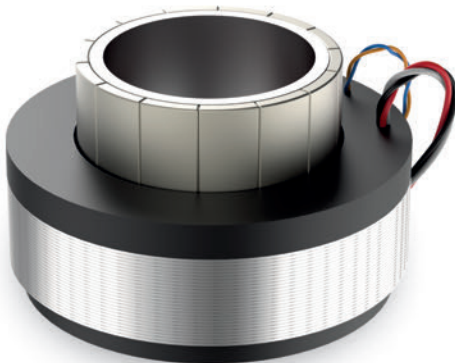
Power	440	W
Supply voltage	48	V
RMS Current	9	A
Rated Torque	1400	mNm
Peak Torque	3500	mNm
Rated speed	3000	rpm
Torque const Kt	155	mNm/A
Motor const	400	mNm/√W
Terminal resistance	0.1	Ω
Number of pole pairs	7	
Max. efficiency	90%	
Weight	590	g
Winding type	Y	

FMI601201

Power	190	W
Supply voltage	48	V
RMS Current	3.5	A
Rated Torque	300	mNm
Peak Torque	840	mNm
Rated speed	6000	rpm
Speed const Kv	125	rpm/V
Torque const Kt	86	mNm/A
Motor const	94	mNm/ \sqrt{W}
Terminal resistance	0.55	Ω
Terminal inductance	520	μH
Number of pole pairs	7	
Max. efficiency	90%	
Rotor inertia	0.244	kgcm ²
Weight	130	g
Winding type	Y	

FMI852001

Power	405	W
Supply voltage	48	V
RMS Current	8	A
Rated Torque	900	mNm
Peak Torque	2600	mNm
Rated speed	4300	rpm
Speed const Kv	100	rpm/V
Torque const Kt	112	mNm/A
Motor const	289	mNm/ \sqrt{W}
Terminal resistance	0.1	Ω
Terminal inductance	170	μH
Number of pole pairs	10	
Max. efficiency	90%	
Weight	455	g
Winding type	Y	



KEY FEATURES:

- Compact size and low weight
- High power density and high power-to-weight ratio
- Simple mounting and assembling
- Hollow shaft design
- 35 000+ hours service life
- 1-year warranty

Average lead time - 2-8 weeks.
 Custom modifications are available on request. Worldwide supplies.
 Direct sales by the manufacturer or local dealer supply.

CONTACT EMAIL:

sales@rozum.com

EUROPE OFFICE:

Rozum Robotics LLC

Olshevskogo Str., 20/11, office 21, Minsk, Belarus

Tel. +375 33 376 04 60

US OFFICE:

INC 491 N Orinda Ct, Mountain House, CA, 95391, United States

Tel. +1 650 618 0671