



Frameless Motors

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

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

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	0.92	Ω
Terminal inductance	680	μH
Number of pole pairs	7	
Max. efficiency	89.1%	
Diameter	41	mm
Length	21.5	mm
Weight	91	g

FMI702001

Power	190	W
Supply voltage	48	V
RMS Current	5	A
Rated Torque	600	mNm
Peak Torque	1500	mNm
Rated speed	3000	rpm
Torque const Kt	120	rpm/V
Motor const	120	mNm/√W
Terminal resistance	0.54	Ω
Terminal inductance	190	μH
Number of pole pairs	7	
Max. efficiency	91.6%	
Diameter	60	mm
Length	27	mm
Weight	270	g

FMI1102001

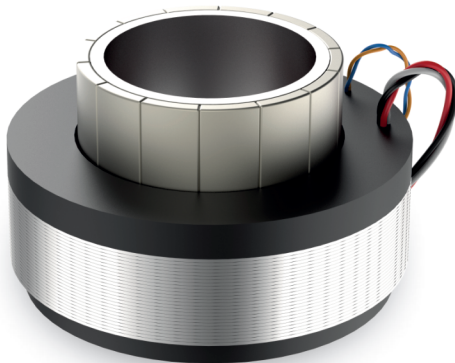
Power	460	W
Supply voltage	48	V
RMS Current	10	A
Rated Torque	2200	mNm
Peak Torque	3500	mNm
Rated speed	2000	rpm
Torque const Kt	220	mNm/A
Motor const	400	mNm/√W
Terminal resistance	0.1	Ω
Number of pole pairs	7	
Max. efficiency	90%	
Diameter	95	mm
Length	40	mm
Weight	590	g

FMI601201

Power	166	W
Supply voltage	48	V
RMS Current	4.2	A
Rated Torque	300	mNm
Peak Torque	700	mNm
Rated speed	5300	rpm
Speed const Kv	123	rpm/V
Torque const Kt	71	mNm/A
Motor const	74	mNm/vW
Terminal resistance	0.62	Ω
Terminal inductance	550	μH
Number of pole pairs	7	
Max. efficiency	90%	
Diameter	51	mm
Length	22	mm
Weight	148	g

FMI852001

Power	405	W
Supply voltage	48	V
RMS Current	9	A
Rated Torque	900	mNm
Peak Torque	2600	mNm
Rated speed	4300	rpm
Speed const Kv	100	rpm/V
Torque const Kt	100	mNm/A
Motor const	226	mNm/vW
Terminal resistance	0.13	Ω
Terminal inductance	155	μH
Number of pole pairs	10	
Max. efficiency	90%	
Diameter	75	mm
Length	32	mm
Weight	455	g



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 leadtime - 2-8 weeks.
Custom modifications are available on request. Worldwide supplies.
Direct sales by the manufacturer or local distributor supply.

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