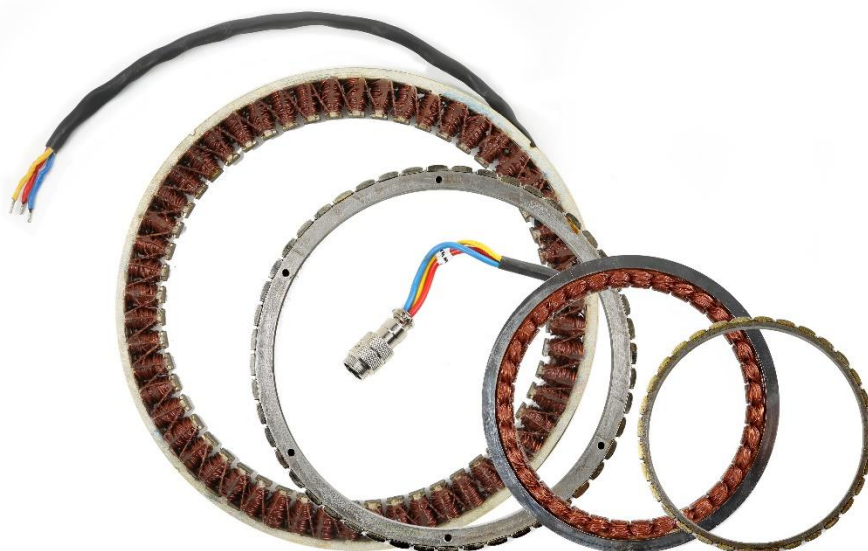


FRAMELESS TORQUE MOTORS

- *Diameters from 65 up to 410 mm*
- *Rated torques Up to 70 Nm*
- *The direct drive technology of Frameless torque motors is a perfect way to enhance productivity, accuracy, and dynamic performance of applications.*



Frameless Torque Motors consist of a separate rotor and stator which are assembled directly inside the machine. The result is a compact, fully-integrated motor with improved dynamic performance. The motor winding can be customized to get any desired speed as per requirement of application.



In Runner Frameless Torque Motors

Specification Summary by Model

Electrical Specifications			065-OD		100-OD	150-OD		165-OD	230-OD	410-OD
Sr. No	Specification	Unit	T-I-065-14-07-N-AB	T-I-065-48-35-N-AB	T-I-100-40-40-N-AA	T-I-150-38-93-N-AA	T-I-150-40-147-N-AA	T-I-165-55-123-N-AA	T-I-230-31-130-N-AB	T-I-410-35-235-N-AA
1	Continuous Torque	Nm	0.25	1.25	4	8	12	13.6	16	70
2	Continuous Current	A	4.2	4.3	12.6	11	9.5	14	15.5	32
3	Phases		3	3	3	3	3	3	3	3
4	Kt (Torque Constant)	Nm /Amp	0.06	0.3	0.32	0.7273	1.263	0.97	1.03	2.188
5	Ke (Voltage Constant)	V/Krpm	7	35	40	93	147	123	130	235
6	Km (Motor Constant)	Nm/ \sqrt{W}	0.069	0.189	0.439	0.974	1.085	1.254	1.593	5.578
7	Resistance	Ohm	1.38	3.52	0.5234	0.558	1.355	0.6	0.42	0.154
8	Poles		8	8	12	24	24	32	48	64
Mechanical Specifications										
9	Stator OD	mm	65	65	100	152	152	165	230	410
10	Stator ID	mm	35	35	65	108	108	137.2	184	332
11	Rotor OD	mm	33.2	33.2	63	106.5	106.5	135.7	182	330
12	Rotor ID	mm	17	17	43	89	89	118.11	160	290
13	Air Gap	mm	0.9	0.9	1	0.75	0.75	0.75	1	1
14	Stator Length	mm	14	48	40	38	40	55	31	35
15	Stator Height	mm	8	38	32	25	27	42	18	25
16	Weight	kg	0.278	0.837	1.4	1.9	2.1	3	2.65	10.8

Features and Benefits

- High torque output at low speed for direct-drive application – eliminates gearing issues.
- Direct drive (No gear, No backlash), Low height, big hollow shaft.
- Easy integration into system design.
- Higher accuracy.

Applications

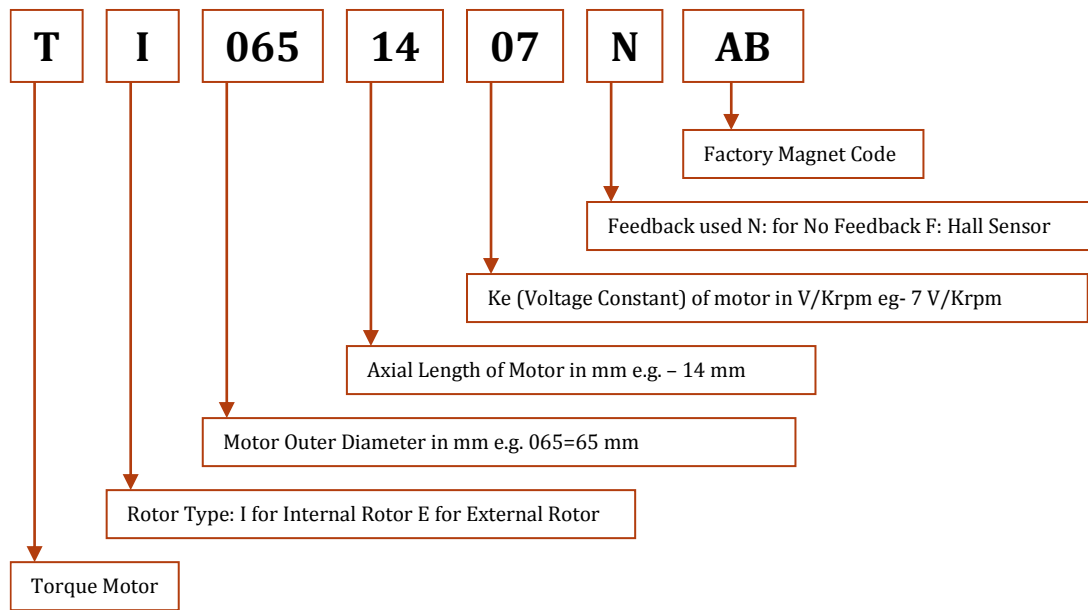
- Pharmaceutical shaker
- Surgical robot and other medical systems
- Indexing Table
- Robot joint axes
- Material handling – Cable Reeling drums
- Ring rail machine

Out Runner Frameless Torque Motors

Specification Summary by Model

Electrical Specifications			20-OD		52-OD	70-OD	200-OD
Sr. No	Specification	Unit	T-E-020-08-01-N-AB	T-E-020-15-02-N-AB	T-E-052-18-05-N-AB	T-E-070-25-56-N-AB	T-E-200-24-29-N-AB
1	Continuous Torque	Nm	0.014	0.077	0.353	1.087	9.102
2	Continuous Current	A	2.1	0.33	6.9	20.3	32.5
3	Phases		3	3	3	3	3
4	Kt (Torque Constant)	Nm/Amp	0.006	0.024	0.052	0.053	0.28
5	Ke (Voltage Constant)	V/Krpm	0.6	1.78	5.4	56	29.3
6	Resistance	Ohm	2.65	25.8	0.63	0.15	0.09
7	Km (Motor Constant)	Nm/√W	0.004	0.0460	0.0650	0.14	0.959
8	Poles		12	12	16	16	40
Mechanical Specifications							
9	Rotor OD	mm	19.81	19.81	52.07	70.1	199.13
10	Rotor ID	mm	16.51	16.51	42.49	59.94	173
11	Stator OD	mm	15.79	15.79	40.89	58.17	171.2
12	Stator ID	mm	8.99	8.99	17.84	28.7	100
13	Air Gap	mm	0.35	0.35	0.6	0.85	0.9
14	Stator Length	mm	7.8	15	17.53	24.58	24.13
15	Stator Height	mm	5.72	12	11.43	15.59	13.97
16	Weight	Kg	0.033	0.160	0.281	0.475	2.4

Model Numbering



On demand design & Manufacturing capability with quick response to the customer, which in turn can help the customer to reduce his time to market that will more than offset the modest price premium.

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