

# Frameless Motor Selection Manual



## Cooperation Partner



(Midea)



(Vizum)



(XCC)



(NARWAL)



( JIECANG )



(KOFON)



(CSB)



( MGI )



(FEIYUE)



( YOUINOT )

## Product Advantages

### Simple and compact structure

Directly drives the workstation plate without adding a transmission mechanism;

### High efficiency

Improve device performance, efficiency and user experience;

### High reliability, high dynamic response

Using brushless technology, no friction loss, high reliability; Directly drives the motor, no need to wait, faster response;

### High rigidity

Large radial and axial static load capacity, can withstand load fluctuations;

### High precise positioning

The load is directly installed on the motor and directly drives the workstation plate to ensure accurate positioning;

### Easy to install, friction-free, maintenance-free

Completely enclosed crossed roller bearings to avoid dust contact; no need for maintenance of belts, chains and other components, reducing usage costs.

## Application Areas



Collaborative Robot



Servo Press



Photoelectric Turntable



Semiconductor Scribing Machine



Robot



Medical Devices



Semiconductor Chip Installation



High Precision Machine Tools

# Some Products Display







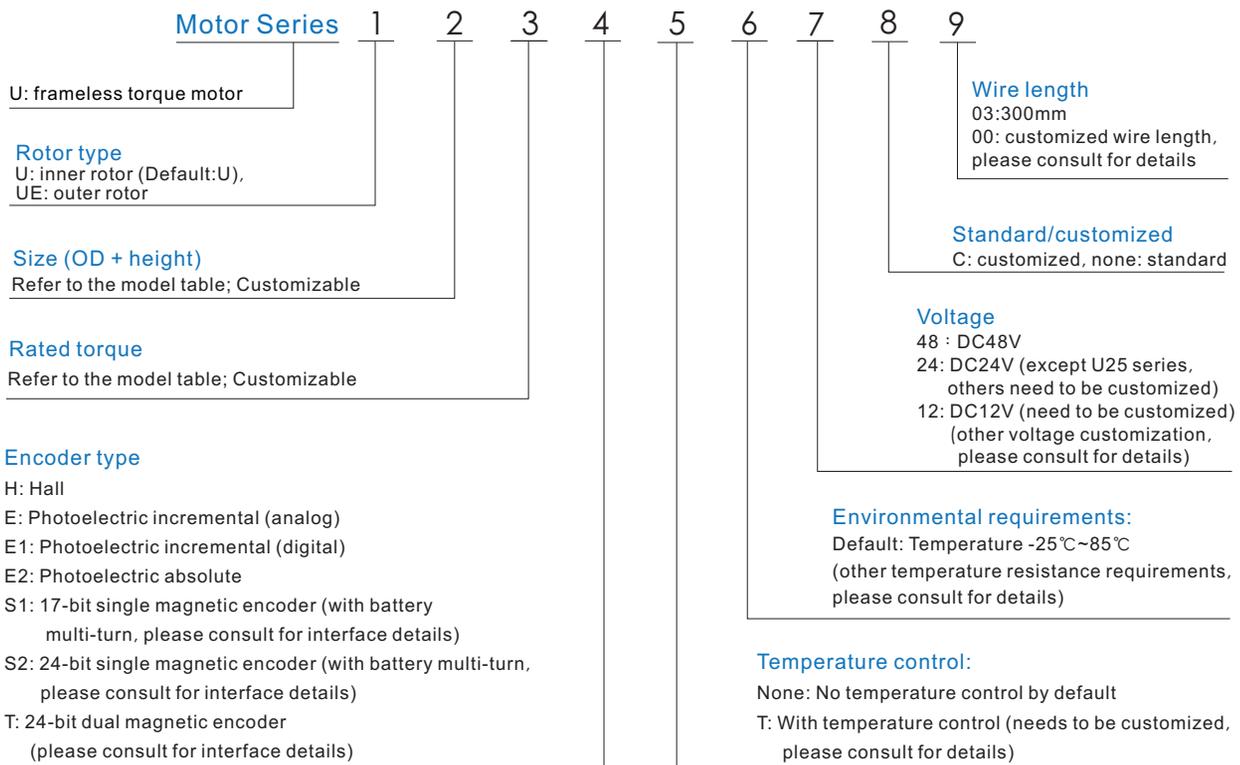
(Inner Rotor) Frameless Torque Motor Models List (Support customization)

Model	OD (mm)	ID (mm)	Motor height L (mm)	Rated Torque (Nm)	Rated Power (W)	Rated Speed (rpm)	Voltage (V)	Weight (kg)
U1615	16	4	15.4	0.01	1.57	1500	12	0.02
U1625			25.4	0.02	3.14			0.037
U1919	19	7	19.9	0.02	12.58	6000	24	0.0199
U1934			34.9	0.04	16.77			4000
U2510	25	11.6	10.9	0.025	10.48	4000	24	0.024
U2515			15.3	0.05	20.96			0.036
U2523			23.7	0.075	31.44			0.052
U3212	32	19.3	12.7	0.07	36.8	5000	24/48	0.05
U3815	38	18	15.3	0.1	31.4	3000	48	0.06
U3822			22.3	0.2	62.8			0.1
U3834			34.3	0.35	128	3500		0.16
U4315	43	25.3	15.2	0.16	83.84	5000	48	0.088
U5019	50	30	19.9	0.27	85	3000	48	0.12
U5024			24.6	0.45	141			0.157
U5037			37.9	0.7	220			0.266
U6017	60	33	18	0.45	141.5	3000	48	0.15
U6022			22.5	0.6	188.5			0.2
U6035			35.5	1	314			0.35
U6818	68	40	18.6	0.65	204	3000	48	0.197
U6822			22.9	0.86	270			0.266
U6836			36.6	1.55	487			0.474
U7618	76	45	18.6	0.9	282.7	3000	48	0.265
U7623			23.1	1.25	392.7			0.35
U7636			36.7	2.1	660			0.38
U8519	85	52	19.6	1.21	380	3000	48	0.306
U8523			23.9	1.65	518			0.414
U8537			37.7	2.7	848			0.736
U9419	94	57	19.9	1.6	502.6	3000	48	0.382
U9424			24.5	2.1	660			0.522
U9437			37.9	3.7	1162			0.93
U10428	104	73	28	2.3	722.5	3000	48	0.52
U10443			43	4.4	1382.3			0.9
U11526	115	74	26.6	3	785.4	2500	48	0.655
U11530			30.9	3.9	1021			0.85
U11544			44.1	6.1	1597			1.45
U13025	130	84	25.9	5	419.2/1048	800/2000	48/220	0.9
U13035			35.9	9	471.6/1414.8	500/1500		1.3
U13060			60.9	18	754.56/1509.12	400/800		2.7
U16025	160	106	25.9	9	471.6/1886.40	500/2000	48/220	1.1
U16035			35.9	15	471.6/1257.6	300/800		1.6
U16060			60.9	32	670.72/2012.16	200/600		3.3
U20025	200	140	25.9	13	408.72/1089.92	300/800	48/220	1.7
U20035			35.9	24	503.04/1257.6	200/500		2.9
U20060			60.9	50	524/1572	100/300		5.5

## Frameless Torque Motor Models List (Support customization)

Model	OD (mm)	ID (mm)	Motor height L (mm)	Rated Torque (Nm)	Rated Power (W)	Rated Speed (rpm)	Voltage (V)	Weight (kg)	
UE1406	14.9	5	6.25	0.01	0.59	850	12	0.006	
UE2208	22	9	8.5	0.03	0.66	800		0.012	
UE2506	25.3	10	6.2	0.04		792			
UE3306	33.4	14		0.06	0.81	950		0.022	
UE4009	40	22	9.5	0.09	1.1	467		0.024/0.032	
UE4013			13.7	0.11	0.53	363		0.036/0.047	
UE4913	49	25	13.5	0.2	0.9	504	24	0.078	
UE4918				0.28	0.59	238		0.11	
UE5819	58.6	24	19	0.76	1.12	221		0.167	
UE5829			29	0.57	1.54			0.281	
UE6815	68	36	15.5	0.8	1.3	294		36	0.156
UE6830		35.5	30.5	1.77	7.4	504			0.345
UE9014	90	58.5	14	1.6	1.75	130	24	0.206	
UE9019			19	2.16	17	1800	24~48	0.313	
UE10933	109	78	33	4	3.8	168	36	0.576	

### How To Order



### For Example

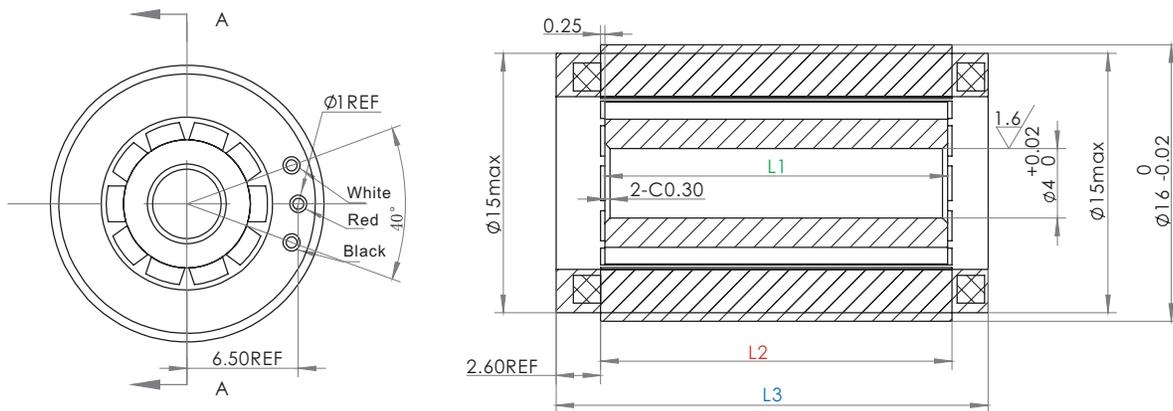
**U3815** indicates U series frameless torque motor with OD 38mm, height 15.5mm, rated torque 0.1Nm, and inner rotor drive mode;  
**UE2506** indicates U series frameless torque motor with OD 25.3mm, height 6.2mm, rated torque 0.04Nm, and outer rotor drive mode;

# U16 series

## Frameless Torque Motor

MAIN PARAMETERS		U1615	U1625
Voltage (VDC)		12	12
Rated Output (W)		1.57	3.14
Rated torque (Nm)		0.01	0.02
Instant Max Torque (Nm)		0.02	0.04
Rated Current (Arms)		0.80	0.80
Instant Max Current (Arms)		1.6	1.6
Rated Speed (rpm)		1500	1500
Max Speed (rpm)		3000	3000
Torque constant (Nm/Arms)		0.01	0.03
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		0.003	0.005
Back EMF coefficient (V/K rpm)		3.30	3.30
Resistance ( $\Omega$ )		6.8	6.8
Inductance (mH)		0.8	0.8
Pole-pairs number (2P)		5	5
Weight (kg)		0.02	0.037
Motor height L (mm)	L1	10	20
	L2	10.5	20.5
	L3	15.4	25.4

### Specification & drawing

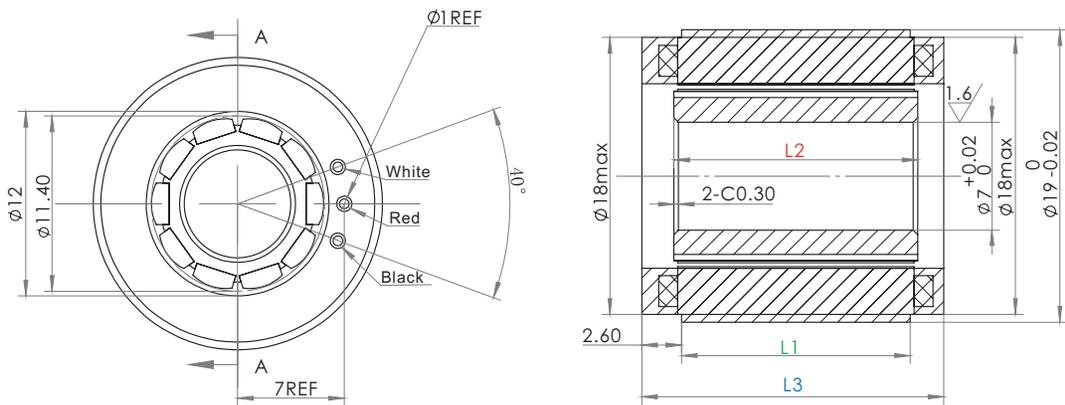


# U19 series

## Frameless Torque Motor

MAIN PARAMETERS		U1919	U1934
Voltage(VDC)		24	24
Rated Output (W)		12.58	16.77
Rated torque (Nm)		0.02	0.04
Instant Max Torque (Nm)		0.05	0.11
Rated Current (Arms)		2	2.5
Instant Max Current (Arms)		5.5	7.5
Rated Speed (rpm)		6000	4000
Max Speed (rpm)		8000	6000
Torque constant (Nm/Arms)		0.01	0.02
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		0.005	0.01
Back EMF coefficient(V/K rpm)		1.5	2.4
Resistance ( $\Omega$ )		1.9	1.8
Inductance (mH)		0.4	0.38
Pole-pairs number (2P)		5	5
Weight (kg)		0.0199	0.0349
Motor height L(mm)	L1	15	30
	L2	16	31
	L3	19.9	34.9

### Specification & drawing

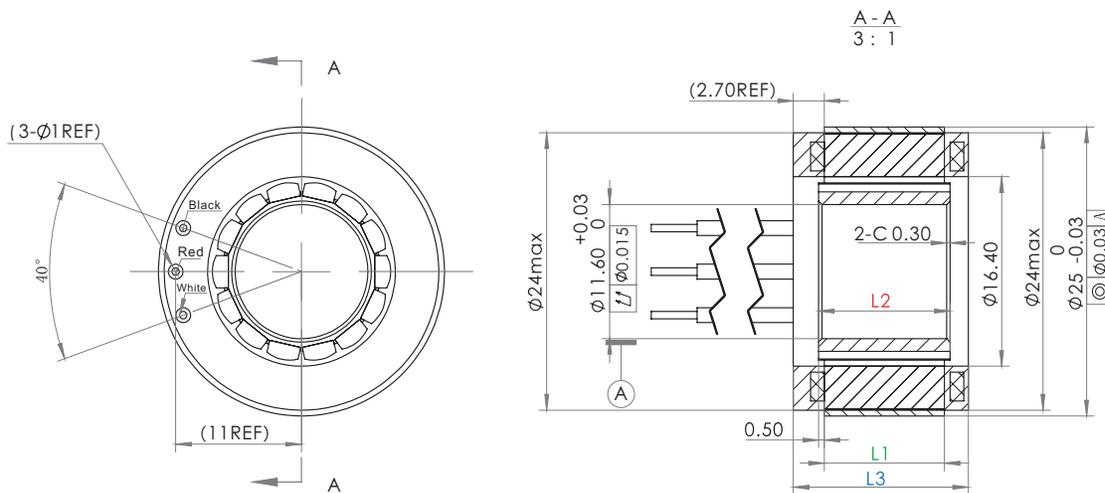


# U25 series

## Frameless Torque Motor

MAIN PARAMETERS		U2510	U2515	U2523
Voltage (VDC)		24	24	24
Rated Output (W)		10.48	20.96	31.44
Rated torque (Nm)		0.025	0.05	0.075
Instant Max Torque (Nm)		0.08	0.16	0.24
Rated Current (Arms)		2.5	2.50	2.50
Instant Max Current (Arms)		8	8	8
Rated Speed (rpm)		4000	4000	4000
Max Speed (rpm)		6000	6000	6000
Torque constant (Nm/Arms)		0.01	0.02	0.03
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		0.003	0.005	0.008
Back EMF coefficient (V/K rpm)		1.5	3.20	3.50
Resistance ( $\Omega$ )		3	2.30	1.80
Inductance (mH)		0.72	0.45	0.67
Pole-pairs number (2P)		7	7	7
Weight (kg)		0.024	0.036	0.052
Motor height L (mm)	L1	6.3	10.5	18.5
	L2	7.3	11.5	19.5
	L3	10.9	15.3	23.7

### Specification & drawing

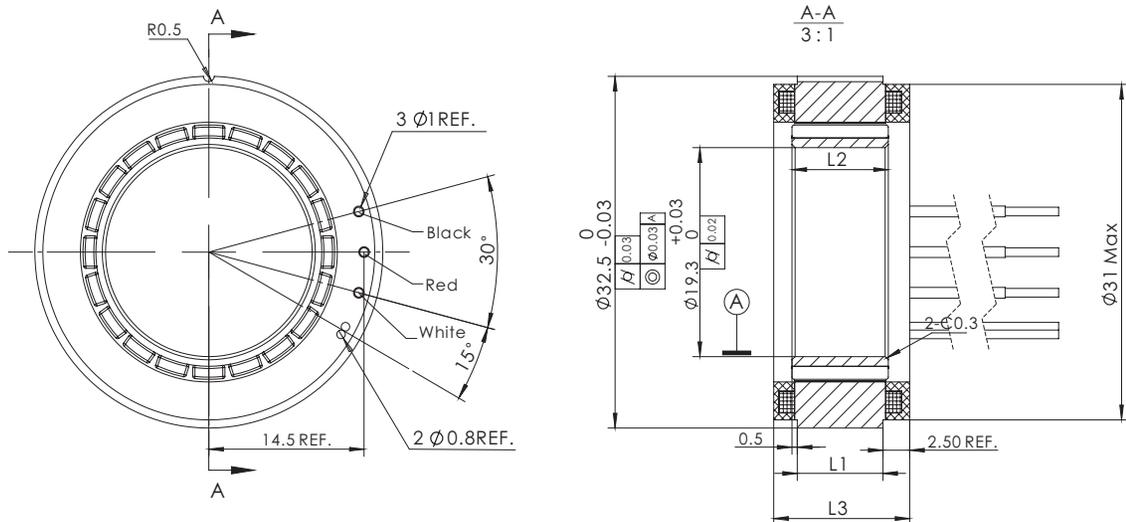


# U32 series

## Frameless Torque Motor

Model		U3212	U3212
Voltage(VDC)		24	48
Rated Output (W)		36.68	36.68
Rated torque(Nm)		0.07	0.07
Instant Max Torque (Nm)		0.2	0.2
Rated Current (Arms)		1.75	0.88
Instant Max Current (Arms)		5.2	2.7
Rated Speed (rpm)		5000	5000
Max Speed (rpm)		7000	7000
Torque constant (Nm/Arms)		0.04	0.08
Rotor inertia 10 <sup>-4</sup> kg.m <sup>2</sup>		1	1
Back EMF coefficient(V/K rpm)		3.43	6.86
Resistance (Ω)		1.3	5.2
Inductance (mH)		0.181	0.724
Pole-pairs number(2P)		10	10
Weight (kg)		0.05	0.05
Size(mm)	L1(Stator stack height)	8	8
	L2(Rotor height)	9	9
	L3(Overall height)	12.7	12.7

### Specification & drawing

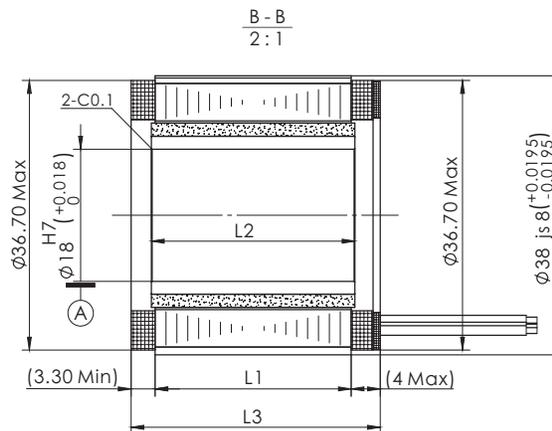
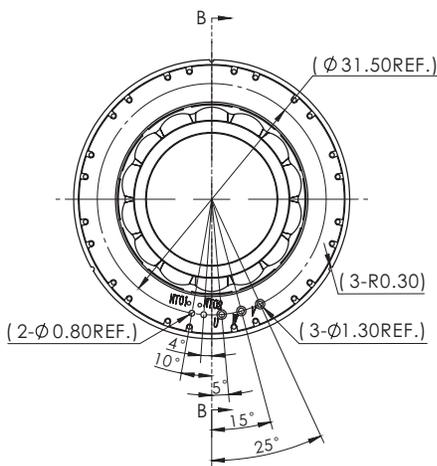


# U38 series

## Frameless Torque Motor

Model		U3815	U3822	U3834
DC voltage(VDC)		48	48	48
Rated Output (W)		31.4	62.8	128
Rated torque(N.m)		0.1	0.2	0.35
Rated Current (A)		2.2	3.9	4.5
Rated Speed (rpm)		3000	3000	3500
Maximum Speed (rpm)		4500	4500	4500
Instant Max Torque (N.m)		0.3	0.6	1.05
Instant Max Current(A)		6.6	11.7	13.5
Coil resistance(ohms@20°C)		1.35	0.7	0.75
Coil Inductance (mH)		0.75	0.4	0.51
Torque constant (Nm/A)		0.045	0.051	0.078
Back EMF coefficient (Vrms/Krpm)		3.2	3.4	5
Number of pole-pairs(2P)		7	7	7
Rotor inertia(kg.cm <sup>2</sup> )		0.018	0.32	0.053
Weight(kg)		0.06	0.1	0.16
Size(mm)	L1(Stator stack height)	9	16	27
	L2(Rotor height)	10	17	28
	L3(Overall height)	15.3	22.3	34.3

### Specification & drawing

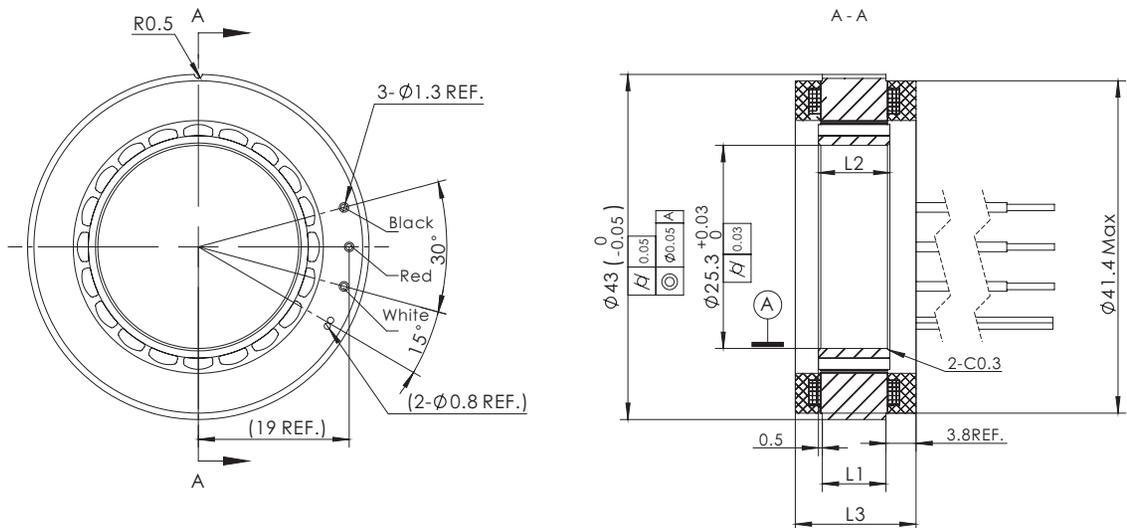


# U43 series

## Frameless Torque Motor

Model		U4315
Voltage (VDC)		48
Rated Output (W)		83.84
Rated torque(Nm)		0.16
Instant Max Torque (Nm)		0.48
Rated Current (Arms)		3
Instant Max Current (Arms)		9
Rated Speed (rpm)		5000
Max Speed (rpm)		6500
Torque constant (Nm/Arms)		0.05
Rotor inertia 10 <sup>-4</sup> kg.m <sup>2</sup>		0.04
Back EMF coefficient(V/K rpm)		8
Resistance (Ω)		2.5
Inductance (mH)		0.7
Pole-pairs number(2P)		10
Weight (kg)		0.088
Size(mm)	L1(Stator stack height)	8
	L2(Rotor height)	9
	L3(Overall height)	15.2

### Specification & drawing

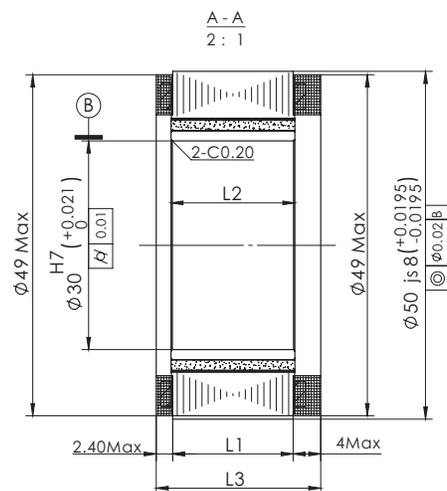
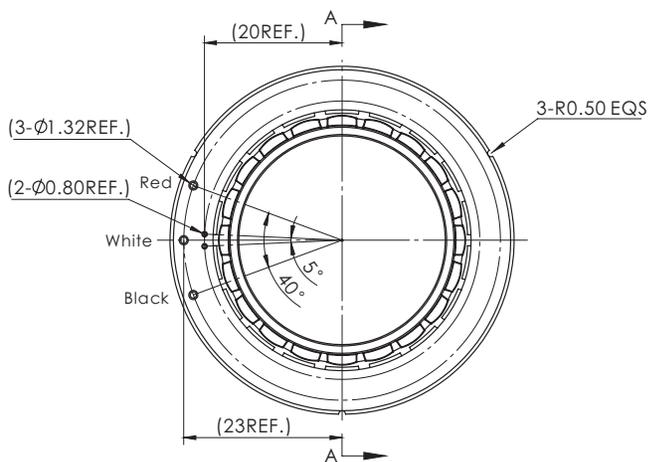


# U50 series

## Frameless Torque Motor

Model		U5019	U5024	U5037
DC voltage (VDC)		48	48	48
Rated Output (W)		85	141	220
Rated torque(N.m)		0.27	0.45	0.7
Rated Current (A)		2.5	4	5.8
Rated Speed (rpm)		3000	3000	3000
Maximum Speed (rpm)		4500	4500	4500
Instant Max Torque (N.m)		0.8	1.35	2.1
Instant Max Current(A)		7.5	12	17.5
Coil resistance(ohms@20°C)		1.4	0.9	0.45
Coil Inductance (mH)		0.74	0.55	0.35
Torque constant (Nm/A)		0.108	0.113	0.120
Back EMF coefficient (Vrms/Krpm)		7.5	7.5	7.5
Number of pole-pairs(2P)		10	10	10
Rotor inertia(kg.cm <sup>2</sup> )		0.076	0.098	0.163
Weight(kg)		0.12	0.157	0.266
Size(mm)	L1(Stator stack height)	13.5	17.5	29.5
	L2(Rotor height)	14	18	30
	L3(Overall height)	19.9	24.6	37.9

### Specification & drawing

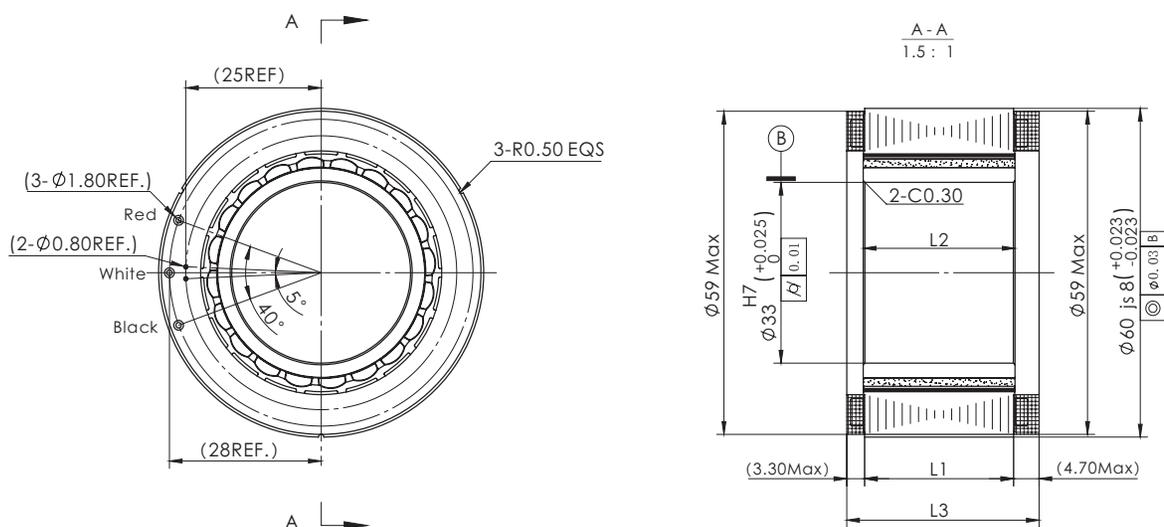


# U60 series

## Frameless Torque Motor

Model		U6017	U6022	U6035
DC voltage(VDC)		48	48	48
Rated Output (W)		141.5	188.5	314
Rated torque(N.m)		0.45	0.6	1
Rated Current (A)		5	6.5	8
Rated Speed (rpm)		3000	3000	3000
Maximum Speed (rpm)		4500	4500	4500
Instant Max Torque (N.m)		1.35	1.8	3
Instant Max Current(A)		15	19.5	24
Coil resistance(ohms@20°C)		0.54	0.41	0.26
Coil Inductance (mH)		0.4	0.4	0.26
Torque constant (Nm/A)		0.09	0.0923	0.125
Back EMF coefficient (Vrms/Krpm)		6.2	6.7	8.1
Number of pole-pairs(2P)		10	10	10
Rotor inertia(kg.cm2)		0.139	0.198	0.372
Weight(kg)		0.15	0.2	0.35
Size(mm)	L1(Stator stack height)	10	14.5	27.5
	L2(Rotor height)	10.5	15	28
	L3(Overall height)	18	22.5	35.5

### Specification & drawing

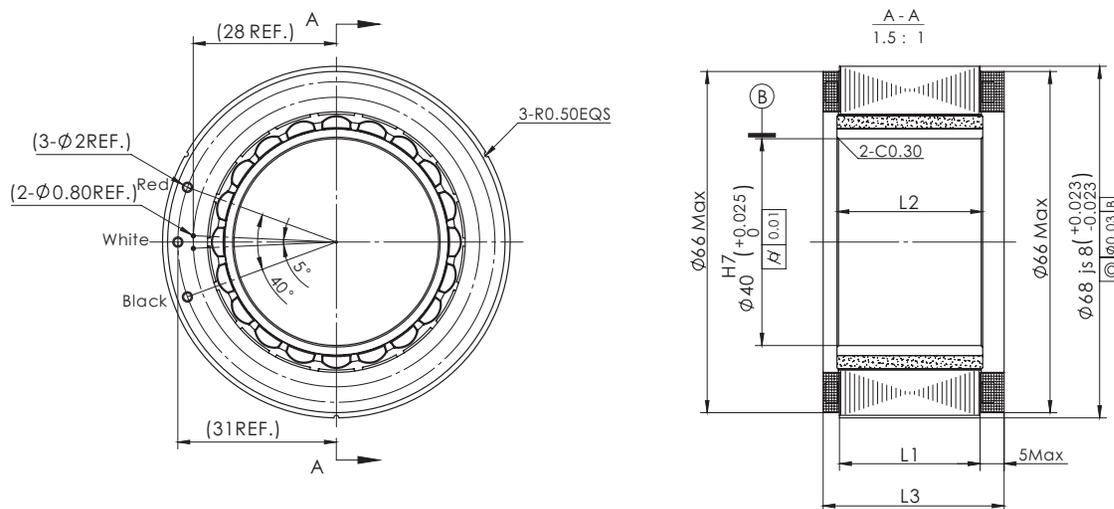


# U68 series

## Frameless Torque Motor

Model		U6818	U6822	U6836
DC voltage (VDC)		48	48	48
Rated Output (W)		204	270	487
Rated torque (N.m)		0.65	0.86	1.55
Rated Current (A)		6.3	8	12
Rated Speed (rpm)		3000	3000	3000
Maximum Speed (rpm)		4500	4500	4500
Instant Max Torque (N.m)		1.95	2.5	4.65
Instant Max Current (A)		18.9	24	36
Coil resistance (ohms @20°C)		0.55	0.35	0.18
Coil Inductance (mH)		0.4	0.30	0.2
Torque constant (Nm/A)		0.103	0.1075	0.129
Back EMF coefficient (Vrms/Krpm)		6.5	7	8
Number of pole-pairs (2P)		10	10	10
Rotor inertia (kg.cm <sup>2</sup> )		0.262	0.37	0.68
Weight (kg)		0.197	0.266	0.474
Size (mm)	L1 (Stator stack height)	10	14.5	27.5
	L2 (Rotor height)	11	15.5	28.5
	L3 (Overall height)	18.6	22.9	36.6

### Specification & drawing

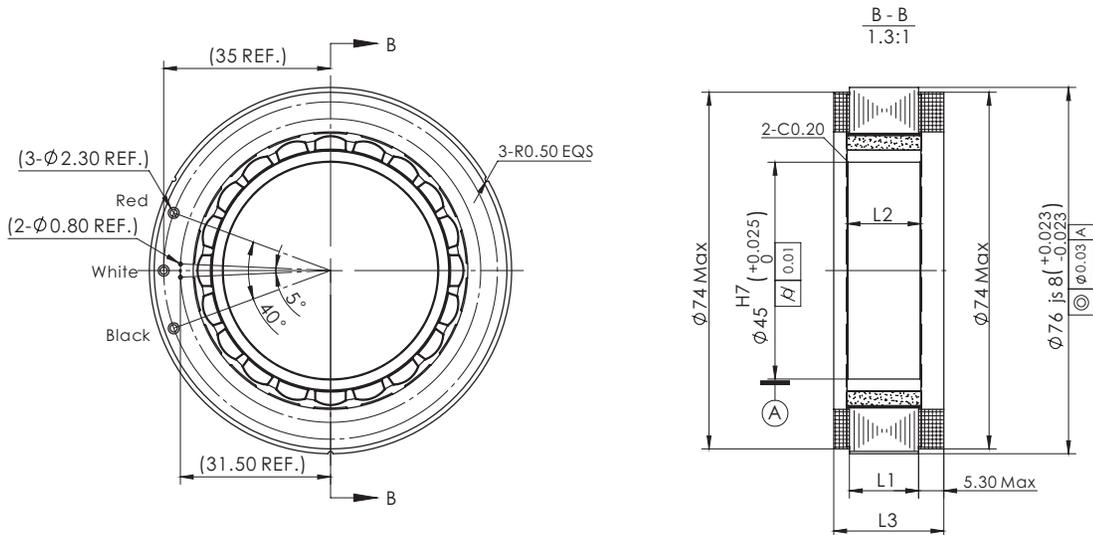


# U76 series

## Frameless Torque Motor

Model		U7618	U7623	U7636
DC voltage(VDC)		48	48	48
Rated Output (W)		282.7	392.7	660
Rated torque(N.m)		0.9	1.25	2.1
Rated Current (A)		8.2	10.5	16
Rated Speed (rpm)		3000	3000	3000
Maximum Speed (rpm)		4500	4500	4500
Instant Max Torque (N.m)		2.7	3.75	6.3
Instant Max Current(A)		24.5	31.5	48
Coil resistance(ohms@20°C)		0.42	0.22	0.135
Coil Inductance (mH)		0.3	0.24	0.15
Torque constant (Nm/A)		0.110	0.119	0.131
Back EMF coefficient (Vrms/Krpm)		7	7.5	8.5
Number of pole-pairs(2P)		10	10	10
Rotor inertia(kg.cm <sup>2</sup> )		0.484	0.675	1.254
Weight(kg)		0.265	0.35	0.38
Size(mm)	L1(Stator stack height)	10	14.5	27.5
	L2(Rotor height)	11	15.5	28.5
	L3(Overall height)	18.6	23.10	36.7

### Specification & drawing

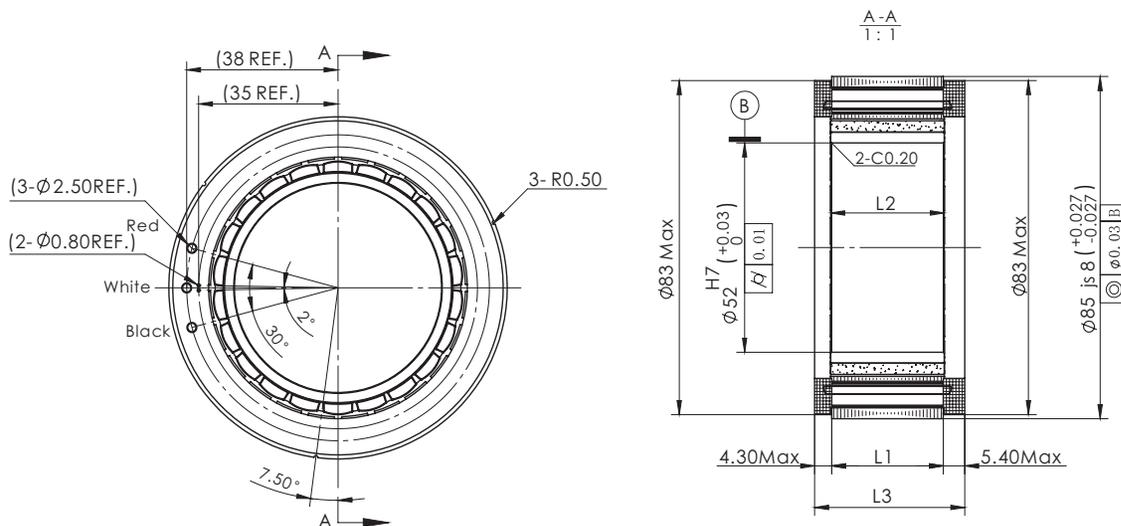


# U85 series

## Frameless Torque Motor

Model		U8519	U8523	U8537
DC voltage(VDC)		48	48	48
Rated Output (W)		380	518	848
Rated torque(N.m)		1.21	1.65	2.7
Rated Current (A)		10.5	13	23.5
Rated Speed (rpm)		3000	3000	3000
Maximum Speed (rpm)		4500	4500	4500
Instant Max Torque (N.m)		3.6	4.95	8.1
Instant Max Current(A)		30	39	40.5
Coil resistance(ohms@20°C)		0.26	0.17	0.188
Coil Inductance (mH)		0.2	0.16	0.22
Torque constant (Nm/A)		0.121	0.127	0.115
Back EMF coefficient (Vrms/Krpm)		7.5	7.5	7.3
Number of pole-pairs(2P)		11	11	11
Rotor inertia(kg.cm2)		0.610	0.859	1.581
Weight(kg)		0.306	0.414	0.736
Size(mm)	L1(Stator stack height)	10.5	15	28
	L2(Rotor height)	11	15.5	28.5
	L3(Overall height)	19.6	23.9	37.7

### Specification & drawing



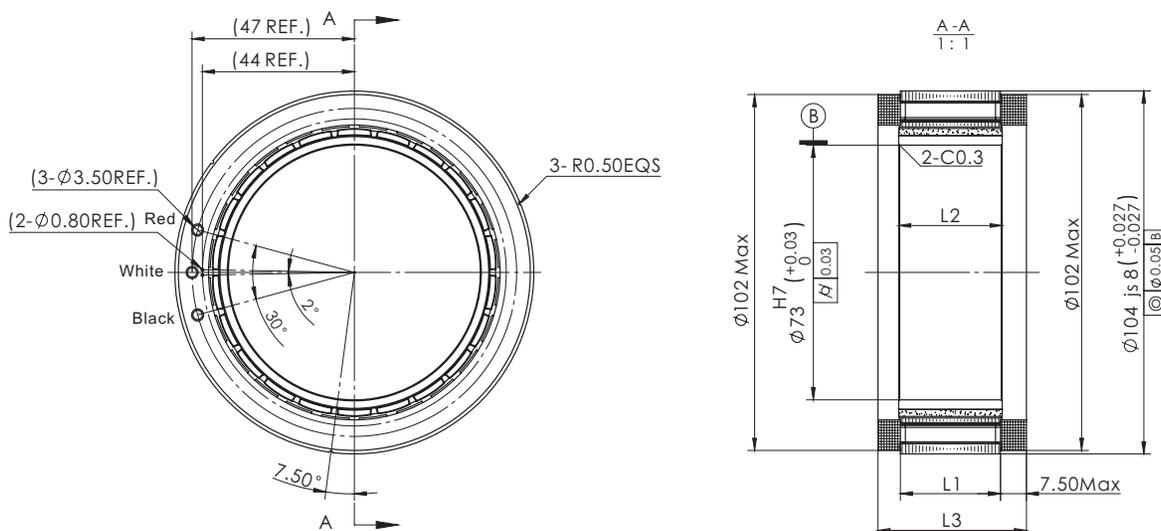


# U104 series

## Frameless Torque Motor

Model		U10428	U10443
DC voltage(VDC)		48	48
Rated Output (W)		722.5	1382.3
Rated torque(N.m)		2.3	4.4
Rated Current (A)		18.5	33.5
Rated Speed (rpm)		3000	3000
Maximum Speed (rpm)		4000	4000
Instant Max Torque (N.m)		6.9	13.2
Instant Max Current(A)		55.5	100
Coil resistance(ohms@20°C)		0.1	0.04
Coil Inductance (mH)		0.08	0.05
Torque constant (Nm/A)		0.124	0.131
Back EMF coefficient (Vrms/Krpm)		7.5	8.5
Number of pole-pairs(2P)		11	11
Rotor inertia(kg.cm2)		1.844	3.694
Weight(kg)		0.52	0.9
Size(mm)	L1(Stator stack height)	14	29
	L2(Rotor height)	15	30
	L3(Overall height)	28	43

### Specification & drawing

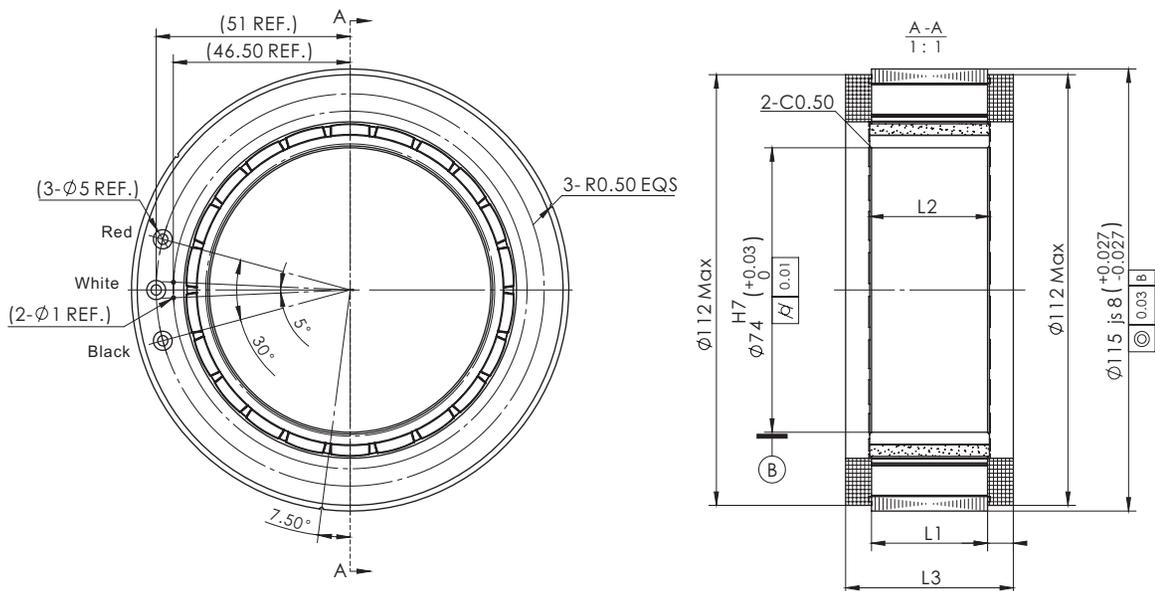


# U115 series

## Frameless Torque Motor

Model		U11526	U11530	U11544
DC voltage(VDC)		48	48	48
Rated Output (W)		785.4	1021	1597
Rated torque(N.m)		3	3.9	6.1
Rated Current (A)		20.5	25	41
Rated Speed (rpm)		2500	2500	2500
Maximum Speed (rpm)		3200	3200	3200
Instant Max Torque (N.m)		9	11.7	18
Instant Max Current(A)		60	75	120
Coil resistance(ohms@20°C)		0.075	0.06	0.03
Coil Inductance (mH)		0.8	0.08	0.04
Torque constant (Nm/A)		0.146	0.156	0.148
Back EMF coefficient (Vrms/Krpm)		8.5	9	9
Number of pole-pairs(2P)		11	11	11
Rotor inertia(kg.cm <sup>2</sup> )		2.71	3.376	5.764
Weight(kg)		0.655	0.85	1.45
Size(mm)	L1(Stator stack height)	14	17.5	30.5
	L2(Rotor height)	15	18.5	31.5
	L3(Overall height)	26.6	30.9	44.1

### Specification & drawing

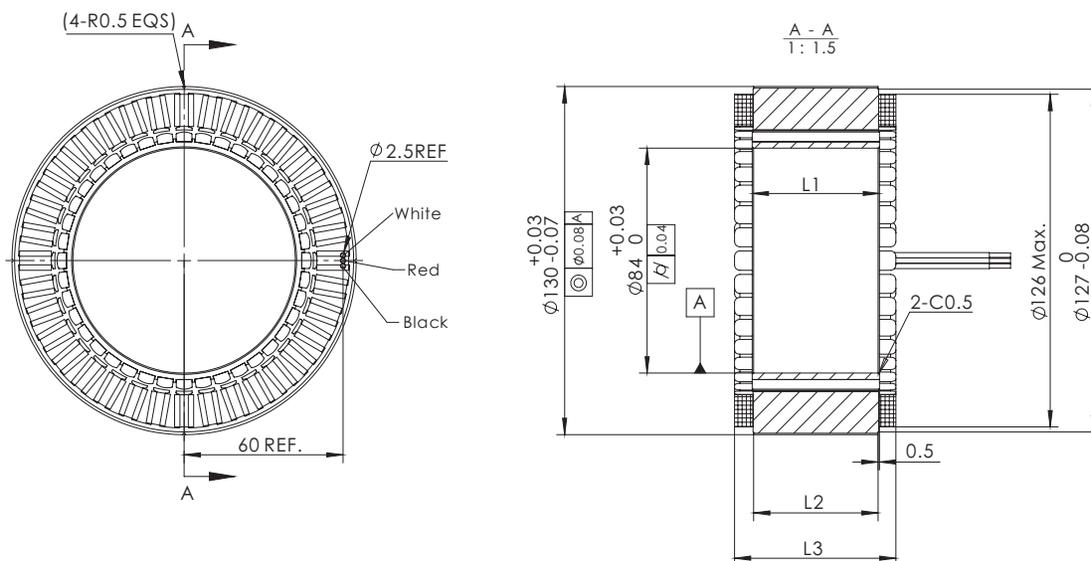


# U130 series

## Frameless Torque Motor

Model		U13025	U13035	U13060
Voltage(VDC)		48	48	48
Rated Output (W)		419.2	471.6	754.56
Rated torque (Nm)		5	9	18
Instant Max Torque (Nm)		11	20	40
Rated Current (Arms)		17	21	30
Instant Max Current (Arms)		40	50	70
Rated Speed (rpm)		800	500	400
Max Speed (rpm)		1400	1000	800
Torque constant (Nm/Arms)		0.29	0.43	0.60
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		3.6	5.2	11
Back EMF coefficient(V/K rpm)		30	42	52
Resistance ( $\Omega$ )		0.13	0.08	0.06
Inductance (mH)		0.35	0.22	0.17
Pole-pairs number (2P)		20	20	20
Weight (kg)		0.9	1.3	2.7
Size(mm)	L1(Stator stack height)	14	23	47
	L2(Rotor height)	15	24	48
	L3(Overall height)	25.9	35.9	60.9

### Specification & drawing

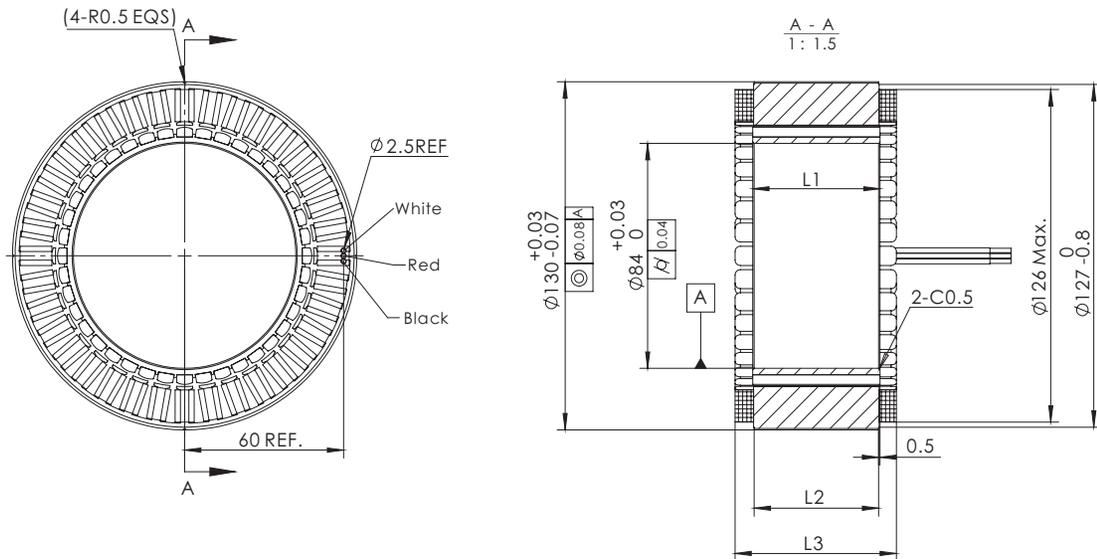


# U130 series(220V)

## Frameless Torque Motor

Model		U13025	U13035	U13060
Voltage(VAC)		220	220	220
Rated Output (W)		1048	1414.8	1509.12
Rated torque (Nm)		5	9	18
Instant Max Torque (Nm)		11	20	40
Rated Current (Arms)		10	10	10
Instant Max Current (Arms)		25	25	25
Rated Speed (rpm)		2000	1500	800
Max Speed (rpm)		3000	2300	1200
Torque constant (Nm/Arms)		0.5	0.9	1.80
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		3.6	5.2	11
Back EMF coefficient(V/K rpm)		66	73	140
Resistance ( $\Omega$ )		1.6	0.87	1
Inductance (mH)		4.1	2.6	3.2
Pole-pairs number (2P)		20	20	20
Weight (kg)		0.9	1.3	2.7
Size(mm)	L1(Stator stack height)	14	23	47
	L2(Rotor height)	15	24	48
	L3(Overall height)	25.9	35.9	60.9

### Specification & drawing

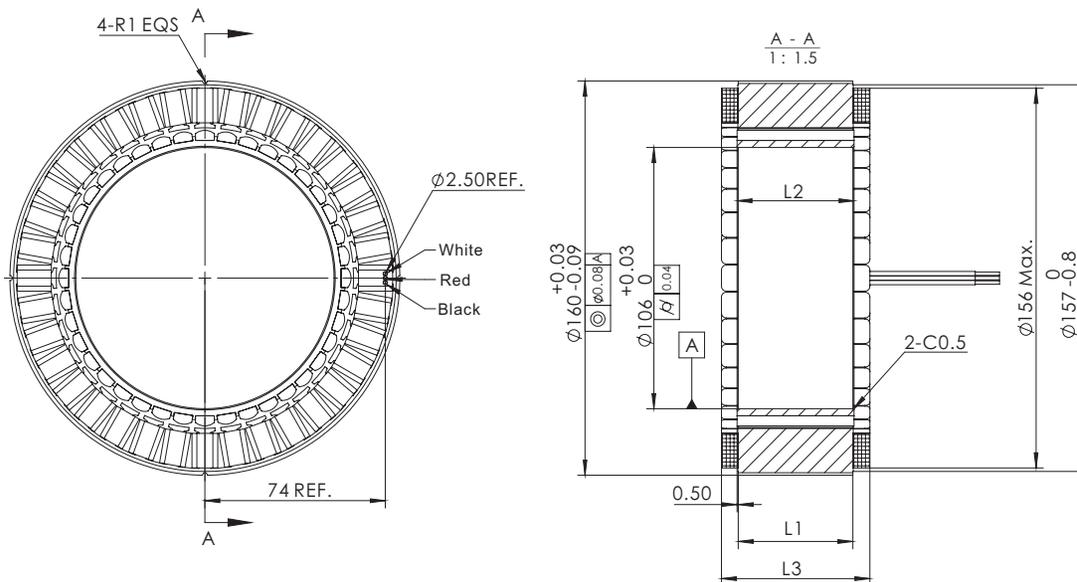


# U160 series

## Frameless Torque Motor

Model		U16025	U16035	U16060
Voltage (VDC)		48	48	48
Rated Output (W)		471.6	471.6	670.72
Rated torque (Nm)		9	15	32
Instant Max Torque (Nm)		20	32	66
Rated Current (Arms)		15	17	20
Instant Max Current (Arms)		35	38	45
Rated Speed (rpm)		500	300	200
Max Speed (rpm)		800	600	400
Torque constant (Nm/Arms)		0.60	0.88	1.60
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		9.2	14	26
Back EMF coefficient (V/K rpm)		42	61	84
Resistance ( $\Omega$ )		0.18	0.2	0.16
Inductance (mH)		0.35	0.44	0.35
Pole-pairs number (2P)		20	20	20
Weight (kg)		1.1	1.6	3.3
Size (mm)	L1 (Stator stack height)	15	23	47
	L2 (Rotor height)	16	24	48
	L3 (Overall height)	25.9	35.9	60.9

### Specification & drawing

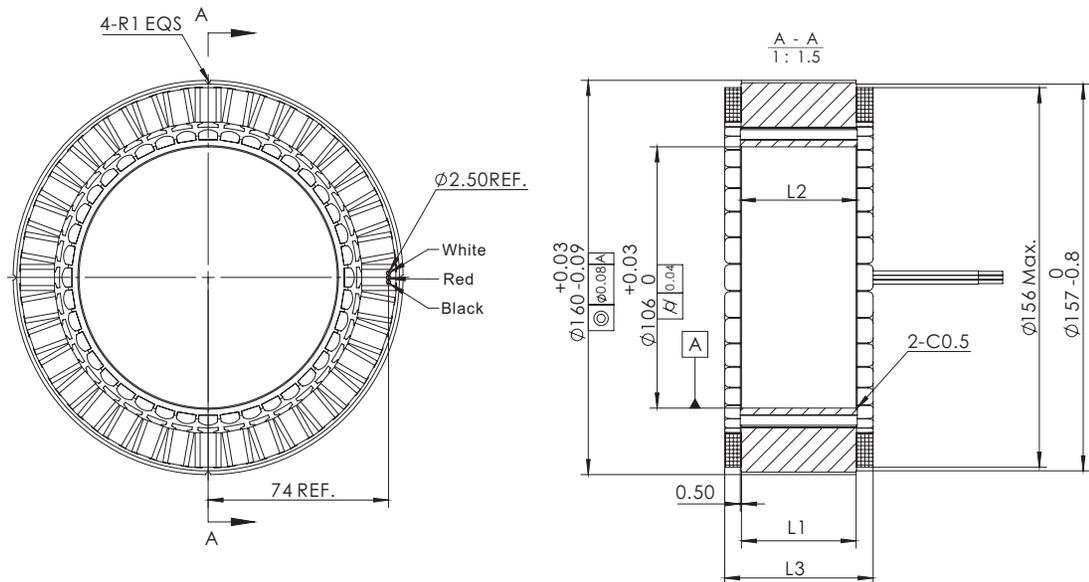


# U160 series(220V)

## Frameless Torque Motor

Model		U16025	U16035	U16060
Voltage(VAC)		220	220	220
Rated Output (W)		1886.4	1257.6	2012.16
Rated torque (Nm)		9	15	32
Instant Max Torque (Nm)		20	32	66
Rated Current (Arms)		10	10	10
Instant Max Current (Arms)		25	25	25
Rated Speed (rpm)		2000	800	600
Max Speed (rpm)		3000	1500	1000
Torque constant (Nm/Arms)		0.9	1.5	3.2
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		9.2	14	26
Back EMF coefficient(V/K rpm)		70	100	176
Resistance ( $\Omega$ )		0.5	0.55	0.87
Inductance (mH)		1	1.2	1.79
Pole-pairs number (2P)		20	20	20
Weight (kg)		1.1	1.6	3.3
Size(mm)	L1(Stator stack height)	15	23	47
	L2(Rotor height)	16	24	48
	L3(Overall height)	25.9	35.9	60.9

### Specification & drawing

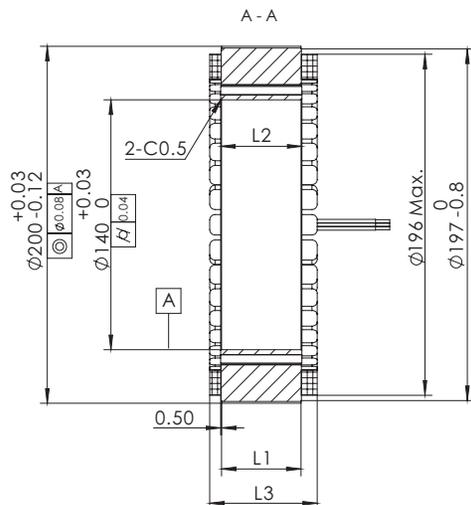
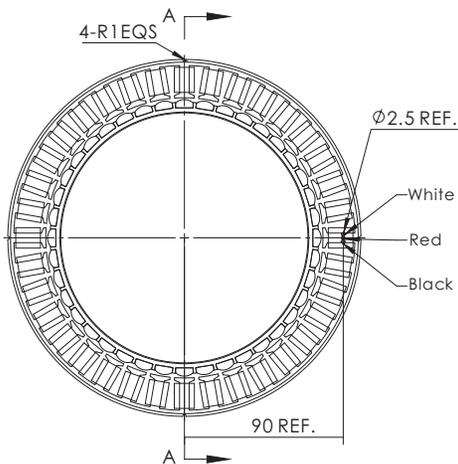


# U200 series

## Frameless Torque Motor

Model		U20025	U20035	U20060
Voltage (VDC)		48	48	48
Rated Output (W)		408.72	503.04	524
Rated torque (Nm)		13	24	50
Instant Max Torque (Nm)		28	50	100
Rated Current (Arms)		14	18	18
Instant Max Current (Arms)		35	40	40
Rated Speed (rpm)		300	200	100
Max Speed (rpm)		500	400	200
Torque constant (Nm/Arms)		0.93	1.33	2.78
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>		28	41	85
Back EMF coefficient (V/K rpm)		88	100	200
Resistance ( $\Omega$ )		0.18	0.2	0.26
Inductance (mH)		0.35	0.44	0.55
Pole-pairs number (2P)		20	20	20
Weight (kg)		1.7	2.9	5.5
Size (mm)	L1 (Stator stack height)	11	21	45
	L2 (Rotor height)	12	22	46
	L3 (Overall height)	25.9	35.9	60.9

### Specification & drawing



# U200 series(220V)

## Frameless Torque Motor

Model	U20025	U20035	U20060	
Voltage (VAC)	220	220	220	
Rated Output (W)	1089.92	1257.6	1572	
Rated torque (Nm)	13	24	50	
Instant Max Torque (Nm)	28	50	100	
Rated Current (Arms)	10	10	10	
Instant Max Current (Arms)	25	25	25	
Rated Speed (rpm)	800	500	300	
Max Speed (rpm)	1200	800	500	
Torque constant (Nm/Arms)	1.30	2.4	5	
Rotor inertia $10^{-4}$ kg.m <sup>2</sup>	28	41	85	
Back EMF coefficient(V/K rpm)	166	200	400	
Resistance ( $\Omega$ )	0.72	0.8	10.5	
Inductance (mH)	1.44	1.68	2.3	
Pole-pairs number (2P)	20	20	20	
Weight (kg)	1.7	2.9	5.5	
Size (mm)	L1(Stator stack height)	11	21	45
	L2(Rotor height)	12	22	46
	L3(Overall height)	25.9	35.9	60.9

