DINGS

Precision Motion Specialist

BRUSHED CORELESS DC MOTOR

PRODUCT CATALOG

Jiangsu DINGS' Intelligent Control Technology Co., Ltd.

dingsmotion.com

Founded in 2008, Jiangsu DINGS' Intelligent Control Technology Co., Ltd. is guided by the philosophy, **"Quality stems from responsibility, and details determine success."**

As a global leader in precision linear motion, DINGS' delivers a comprehensive portfolio of precision stepper, DC and BLDC motors, voice coil motors, lead and ball screw linear actuators, PMSM motors for eco-mobility, and advanced motion controllers — setting new benchmarks in the global motion control market.

SCALE

300+	Advanced Machining Equipment	
40+	Automated Assembly Lines	
100+	Precision Testing & Analysis Systems	
140+	Patents & Intellectual Properties	

GROWTH

2008	Company Founded & DINGS' Brand Established
2010	DINGS' Motion USA Established
2016	DINGS' Korea Established
2019	Joined LEILI Group
2021	Changzhou Intelligent Manufacturing Plant Established Listed on China NEEQ Market
2022	Korea R&D Center Established
2023	Listed on Beijing Stock Exchange [Stock Code: 920593] DINGS' Korea Converted to Corporate Entity DINGS' Japan Established
2024	New Headquarters & Plant Established DINGS' Motion Europe Established
2025	Thailand Manufacturing Facility Established
2026	DINGS' Motion Europe Austria Branch Established

CERTIFICATIONS

ISO 9001 — Quality

ISO 14001 — Environmental

ISO 45001 — Health & Safety

ISO 13485 — Medical Device Quality

ISO/IEC 17025 — Laboratory Accreditation

IATF16949 — Automotive Quality

IPMS — Intellectual Property

CE — Safety Standards

RoHS COMPLIANT — Environmental Standards - RoHS

REACH NPS — Environmental Standards - REACH

PRODUCT WARRANTY

Warranty period: 1 year from shipment.

Free repair is provided for defects in materials or workmanship under normal use.

Warranty does not apply to:

- Warranty expiration or damaged/lost nameplates
- Improper installation or operating conditions
- Unauthorized disassembly or modification
- Repairs conducted outside of official service channels
- Force majeure, including natural disasters

DINGS' is committed to quality, reliability, and responsibility

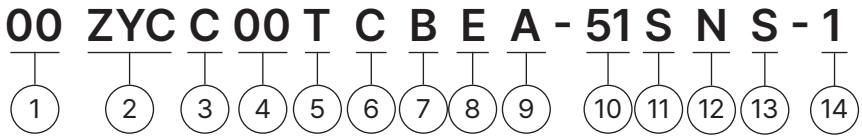
— delivering high-performance motion solutions built on precision engineering.

Content

BRUSHED CORELESS DC MOTOR

Part number construction	4
8 mm	5
10 mm	7
16 mm	9
25 mm	11
30 mm	13
35 mm	15
40 mm	17

Part number construction



① Motor Size

Motor Size(mm)	8	10	16	25	30	35	40

② Product Name

ZYC = Brushed Coreless DC Motor

③ Motor Shape

C = Circular Type

S = Square Type

④ Motor Length

Unit : mm

When the length involves decimal points, use "_" instead

⑤ Motor Casing

L = Aluminum

T = Stainless steel / Iron

X = No housing

⑥ Brush Type

C = Graphite brush

P = Metal graphite brush

⑦ Option

EKX = Encoder (X = Encoder Resolution)

B = Brake

GX = Gearbox (X = Gear Ratio)

Note: When selecting multiple options, please arrange them in alphabetical order (e.g., "BEG").

⑧ Structure

E = External type

N = Non-Captive type

C = Electric Cylinder (Captive) type

K = Kaptive type

⑨ Lead Screw Code

Please refer to the lead screw code selection table

⑩ Screw Length / Stroke

Kaptive = stroke distance

Non-captive = total length of screw

External = screw extension length from the mounting flange

⑪ Screw Surface Treatment

T = Teflon coating

S = Standard (No teflon coating)

⑫ End Machining

M = Metric

U = UNC

S = Smooth

C = Customization

N = None

⑬ Nut Style

S = Standard flange nut

A = Anti-backlash nut

C = Customized nut

⑭ Customer Sequence Number

Example

Part Number	16ZYCC40-1
Description	16mm size Brushed Coreless DC Motor Circular type Body length 40mm Customization 001

Motor Characteristics

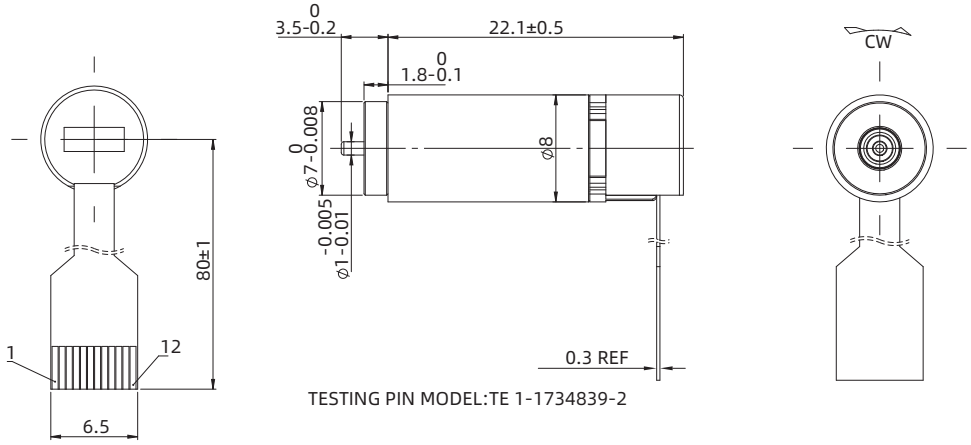
Motor part number		8ZYCC24P-1	8ZYCC24P-G16-E256-1
Gear ratio		-	16
Encoder type		-	Magnetic encoder
Pulses per revolution		-	256
Phase		-	3
Rated voltage	V	12	12
No-load speed	RPM	12800	780
No-load current	mA	6	30
Max. continuous torque	mN·m	0.6	6.7
Max. continuous speed	RPM	6300	430
Max. continuous current	mA	80	80
Motor efficiency	%	72	-
Peak torque	mN·m	1.17	-
Peak current	A	0.13	-
Terminal resistance	Ω	78.4	-
Terminal inductance	mH	0.28	-
Torque constant	mN·m/A	8.83	-
Back-EMF constant	rpm/V	1120	-
Speed constant	rpm/mN·m	11400	-
Rotor inertia	g·cm²	0.043	-
Mechanical time constant	ms	4.32	
Insulation class	-	F/155 °C	-
Case thermal resistance (no load)	K/W	115	-
Ambient temperature	°C	-20 ~ +65	-
Max winding temperature (no load)	°C	155	-
Brush type	-	Precious-metal brushes	-
Number of commutator segments	-	5	-
Motor weight	g	5.2	8

For customized options, please contact DINGS' or your local distributor

8mm series

Dimensional Drawings

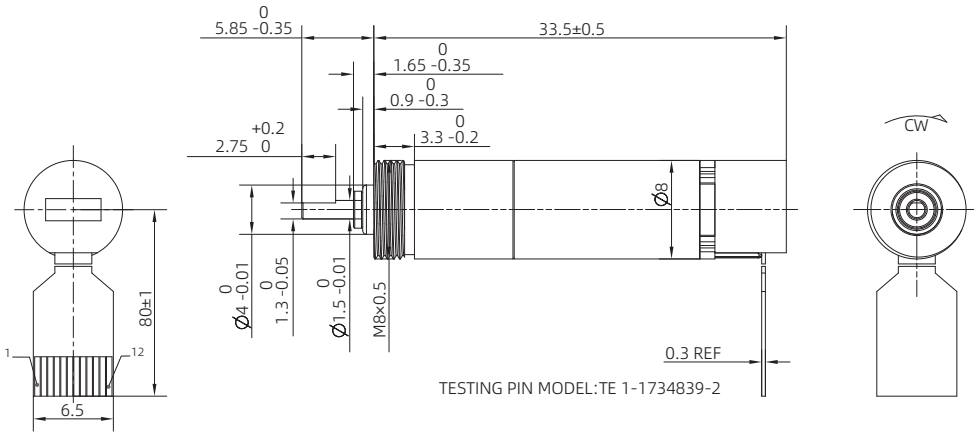
8ZYCC24P-E256-1



TESTING PIN MODEL:TE 1-1734839-2

Pin Assignment	
PIN1	MOTOR +
PIN2	MOTOR -
PIN3	NC
PIN4	GND
PIN5	Vcc
PIN6	A
PIN7	B
PIN8	I
PIN9	-
PIN10	-
PIN11	-
PIN12	-

8ZYCC24P-G16-E256-1

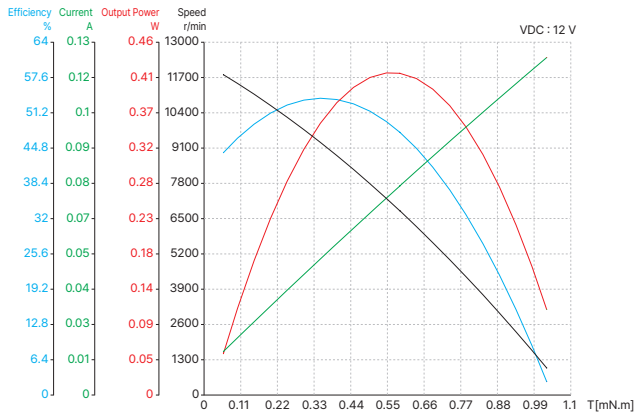


TESTING PIN MODEL:TE 1-1734839-2

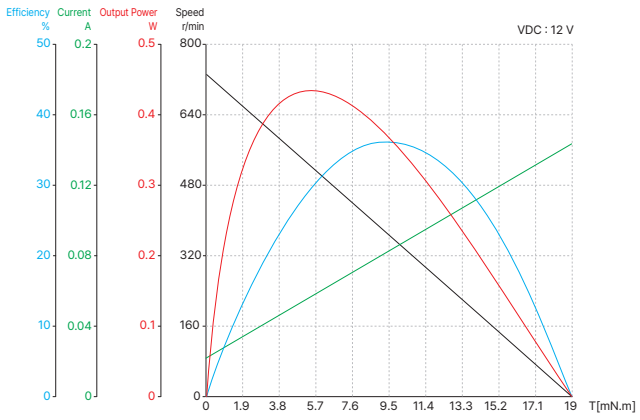
Pin Assignment	
PIN1	MOTOR +
PIN2	MOTOR -
PIN3	NC
PIN4	GND
PIN5	Vcc
PIN6	A
PIN7	B
PIN8	I
PIN9	-
PIN10	-
PIN11	-
PIN12	-

Torque Performance Curves

8ZYCC24P-1



8ZYCC24P-G16-E256-1



Motor Characteristics

Motor part number		10ZYCC25P-EK256-1	10ZYCC25P-G18-EK256-1
Gear ratio		-	18
Encoder type		-	Magnetic encoder
Pulses per revolution		-	256
Phase		-	3
Rated voltage	V	12	12
No-load speed	RPM	11300	620
No-load current	mA	12	30
Max. continuous torque	mN·m	1.6	23
Max. continuous speed	RPM	6500	360
Max. continuous current	mA	200	250
Motor efficiency	%	75	-
Peak torque	mN·m	3.2	-
Peak current	A	0.39	-
Terminal resistance	Ω	30.2	-
Terminal inductance	mH	0.56	-
Torque constant	mN·m/A	9.67	-
Back-EMF constant	rpm/V	984	-
Speed constant	rpm/mN·m	3079	-
Rotor inertia	$g \cdot cm^2$	0.18	-
Mechanical time constant	ms	5.81	-
Insulation class	-	F/155 °C	-
Case thermal resistance (no load)	K/W	40	-
Ambient temperature	°C	-20 ~ +65	-
Max winding temperature (no load)	°C	100	-
Brush type	-	Precious-metal brushes	-
Number of commutator segments	-	7	-
Motor weight	g	15	21.2

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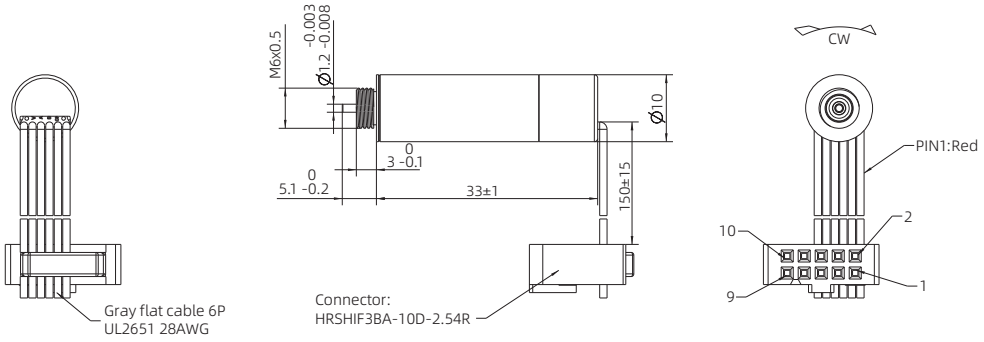
10mm series

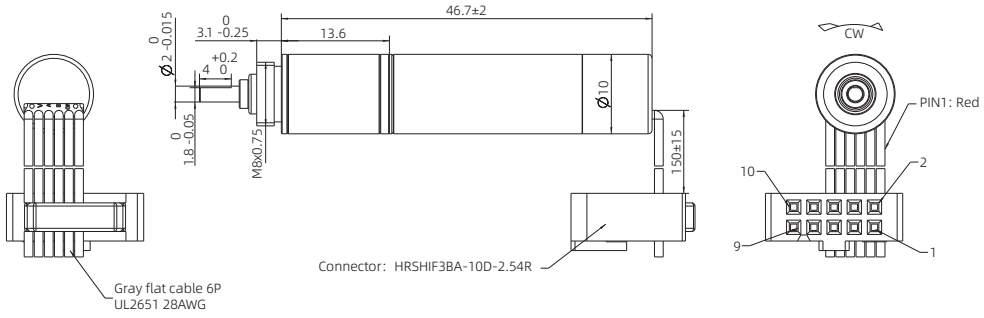
Dimensional Drawings

10ZYCC25P-EK256-1



Pin Assignment	
PIN1	MOTOR +
PIN2	Vcc
PIN3	Channel A
PIN4	Channel B
PIN5	GND
PIN6	MOTOR -
PIN7	-
PIN8	-
PIN9	-
PIN10	-

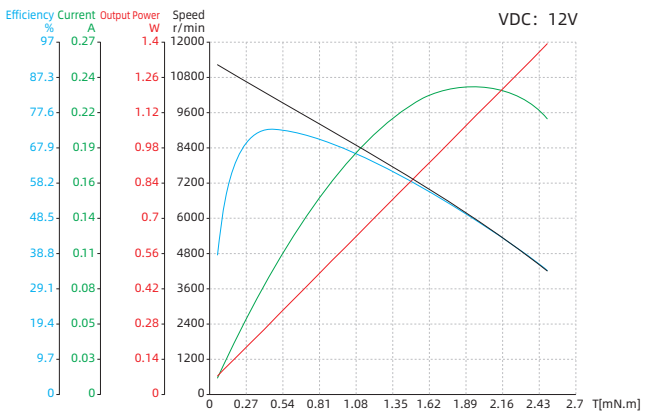
10ZYCC25P-G18-EK256-1



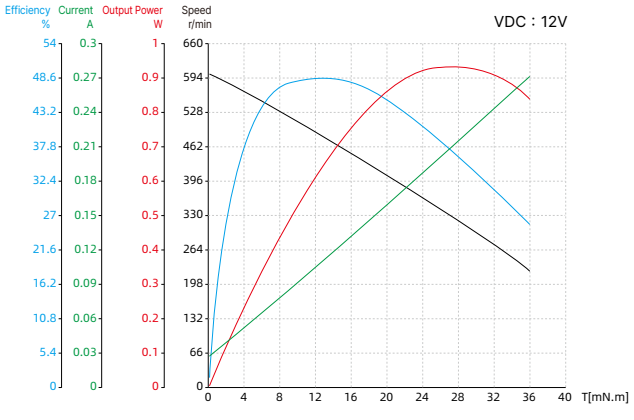
Pin Assignment	
PIN1	MOTOR +
PIN2	Vcc
PIN3	Channel A
PIN4	Channel B
PIN5	GND
PIN6	MOTOR -
PIN7	-
PIN8	-
PIN9	-
PIN10	-

Torque Performance Curves

10ZYCC25P-EK256-1



10ZYCC25P-G18-EK256-1



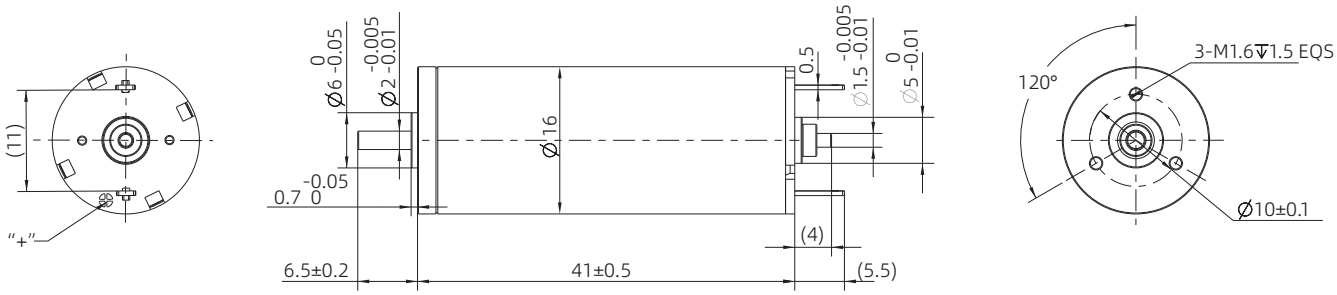
Motor Characteristics

Motor part number		16ZYCC40-1
Rated voltage	V	24
No-load speed	RPM	6600
No-load current	mA	12
Max. continuous torque	mN·m	10.7
Max. continuous speed	RPM	4600
Max. continuous current	A	0.37
Max. efficiency	%	78
Peak torque	mN·m	40
Peak current	A	1.1
Terminal resistance	Ω	22.6
Terminal inductance	mH	1.46
Torque constant	mN·m/A	35.5
Back-EMF constant	rpm/V	274
Speed constant	rpm/mN·m	163
Rotor inertia	$g·cm^2$	2.8
Mechanical time constant	ms	5.02
Insulation class	-	F/155 °C
Case thermal resistance (no load)	K/W	21
Ambient temperature	°C	-20 ~ 65
Max. winding temperature (no load)	°C	155
Brush type	-	Graphite brushes
Number of commutator segments	-	7
Motor weight	g	45

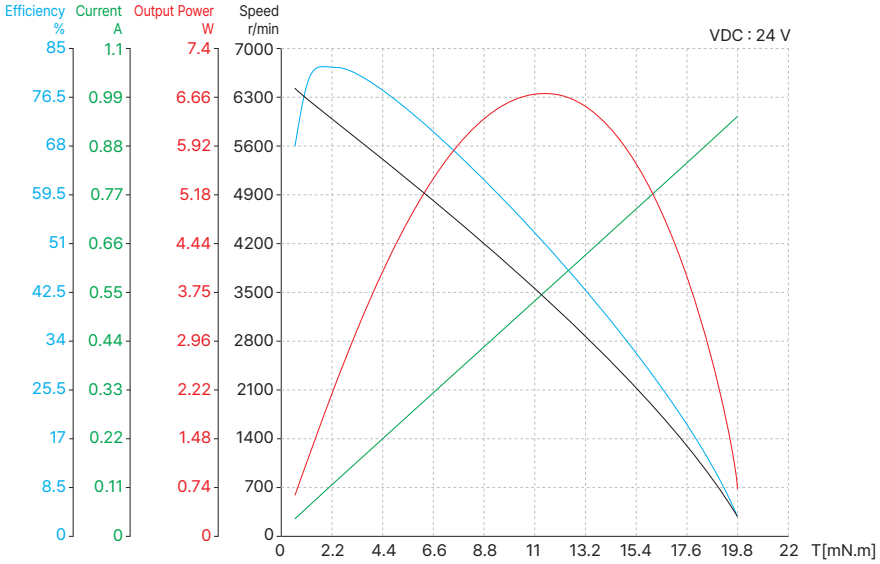
For customized options, please contact DINGS' or your local distributor

16mm series

Dimensional Drawings



Torque Performance Curves



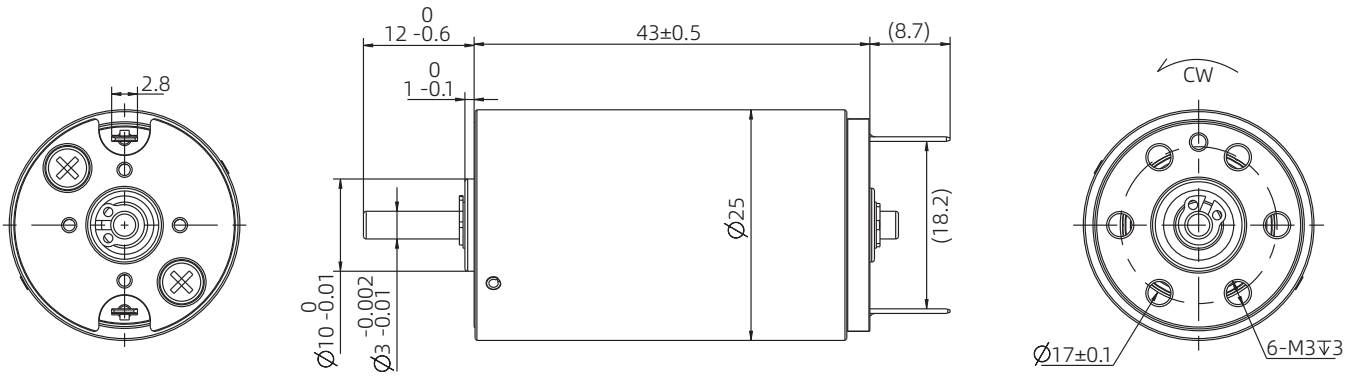
Motor Characteristics

Motor part number		25ZYCC43-2
Rated voltage	V	24
No-load speed	RPM	11000
No-load current	A	0.18
Max. continuous torque	mN·m	30
Max. continuous speed	RPM	10000
Max. continuous current	A	1.8
Max. efficiency	%	88
Peak torque	mN·m	270
Peak current	A	13
Terminal resistance	Ω	1.8
Terminal inductance	mH	0.22
Torque constant	mN·m/A	20.3
Back-EMF constant	rpm/V	473
Speed constant	rpm/mN·m	41.75
Rotor inertia	g·cm²	14.9
Mechanical time constant	ms	6.5
Insulation class	-	F/155 °C
Case thermal resistance (no load)	K/W	15
Ambient temperature	°C	-20 ~ 65
Max. winding temperature (no load)	°C	155
Brush type	-	Graphite brushes
Number of commutator segments	-	11
Motor weight	g	105

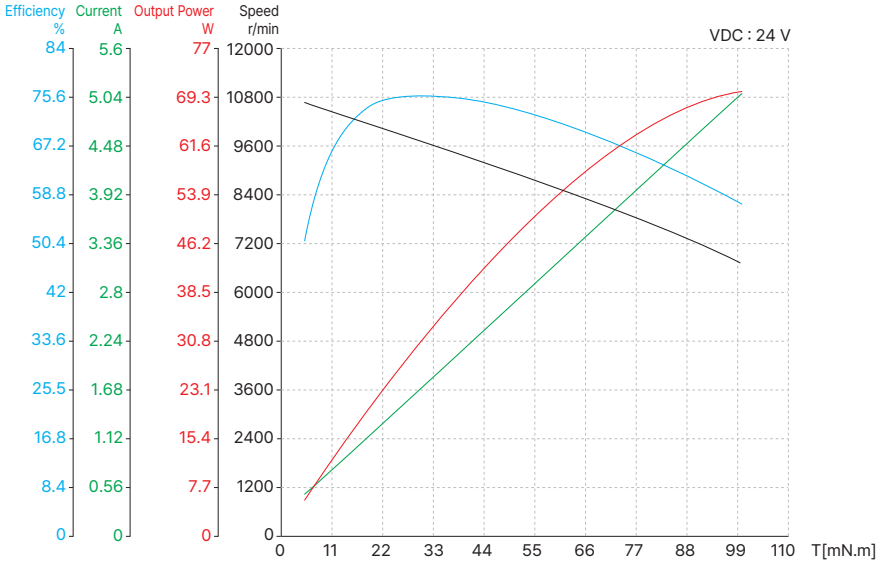
For customized options, please contact DINGS' or your local distributor

25mm series

Dimensional Drawings



Torque Performance Curves



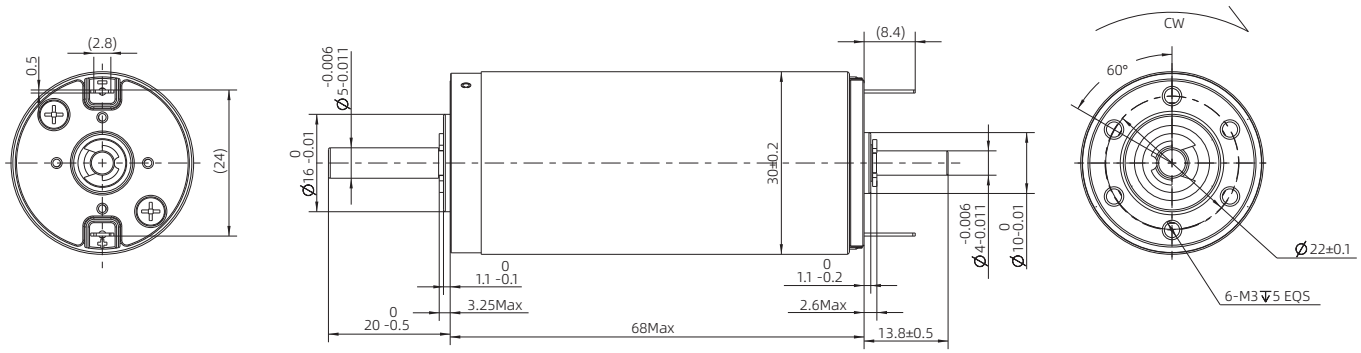
Motor Characteristics

Motor part number		30ZYCC68-1
Rated voltage	V	18
No-load speed	RPM	8700
No-load current	A	0.3
Max. continuous torque	mN·m	75
Max. continuous speed	RPM	7700
Max. continuous current	A	5.5
Max. efficiency	%	84
Peak torque	mN·m	660
Peak current	A	34.1
Terminal resistance	Ω	0.53
Terminal inductance	mH	0.07
Torque constant	mN·m/A	19.63
Back-EMF constant	rpm/V	486.5
Speed constant	rpm/mN·m	13.07
Rotor inertia	$g·cm^2$	52
Mechanical time constant	ms	7.15
Insulation class	-	F/155 °C
Case thermal resistance (no load)	K/W	15
Ambient temperature	°C	-20 ~ 65
Max. winding temperature (no load)	°C	155
Brush type	-	Graphite brushes
Number of commutator segments	-	13
Motor weight	g	235

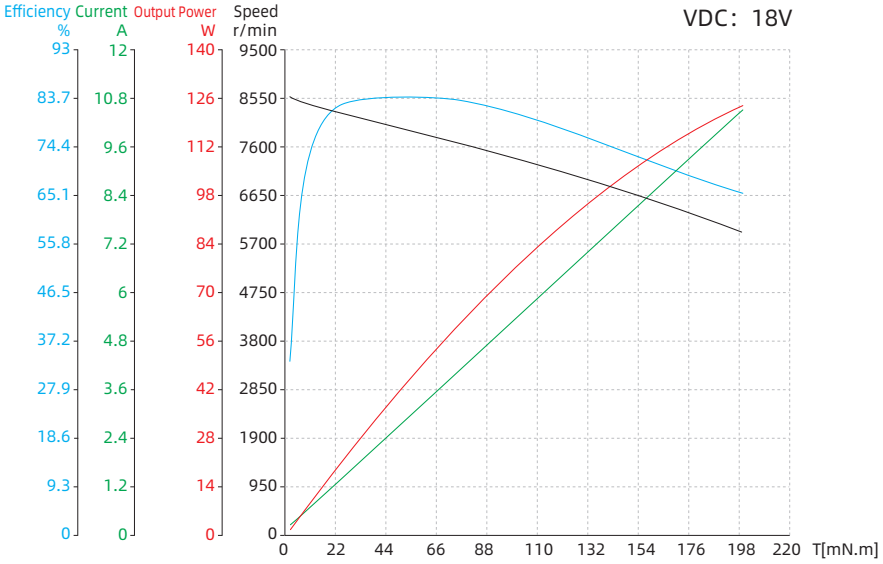
For customized options, please contact DINGS' or your local distributor

30mm series

Dimensional Drawings



Torque Performance Curves



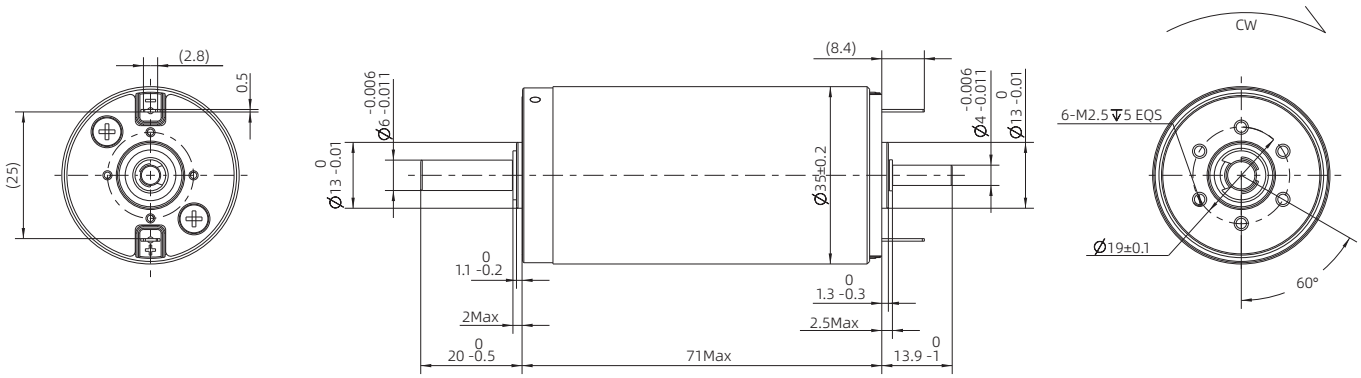
Motor Characteristics

Motor part number		35ZYCC71-1
Rated voltage	V	24
No-load speed	RPM	7750
No-load current	A	0.25
Max. continuous torque	mN·m	108
Max. continuous speed	RPM	6900
Max. continuous current	A	5
Max. efficiency	%	81
Peak torque	mN·m	1000
Peak current	A	34.2
Terminal resistance	Ω	0.7
Terminal inductance	mH	0.1
Torque constant	mN·m/A	30.25
Back-EMF constant	rpm/V	315.6
Speed constant	rpm/mN·m	7.31
Rotor inertia	$g·cm^2$	88
Mechanical time constant	ms	6.7
Insulation class	-	F/155 °C
Case thermal resistance (no load)	K/W	12
Ambient temperature	°C	-20 ~ 65
Max. winding temperature (no load)	°C	155
Brush type	-	Graphite brushes
Number of commutator segments	-	13
Motor weight	g	327

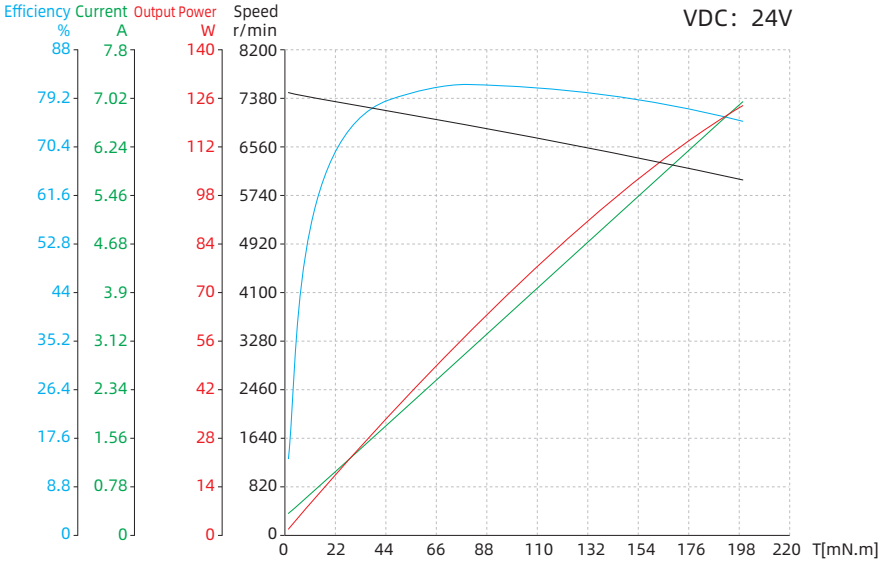
For customized options, please contact DINGS' or your local distributor

35mm series

Dimensional Drawings



Torque Performance Curves



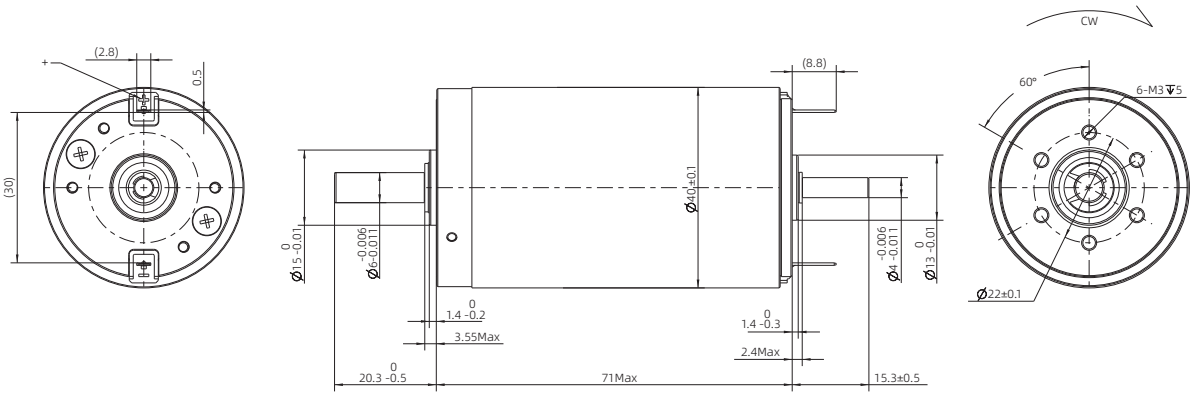
Motor Characteristics

Motor part number		40ZYCC71-1
Rated voltage	V	48
No-load speed	RPM	6500
No-load current	A	0.25
Max. continuous torque	mN·m	186
Max. continuous speed	RPM	5700
Max. continuous current	A	4
Max. efficiency	%	89
Peak torque	mN·m	2061
Peak current	A	28.3
Terminal resistance	Ω	1.7
Terminal inductance	mH	0.372
Torque constant	mN·m/A	72.95
Back-EMF constant	rpm/V	131
Speed constant	rpm/mN·m	3.05
Rotor inertia	$g·cm^2$	215
Mechanical time constant	ms	6.87
Insulation class	-	F/155 °C
Case thermal resistance (no load)	K/W	8.2
Ambient temperature	°C	-20 ~ 65
Max. winding temperature (no load)	°C	155
Brush type	-	Graphite brushes
Number of commutator segments	-	13
Motor weight	g	440

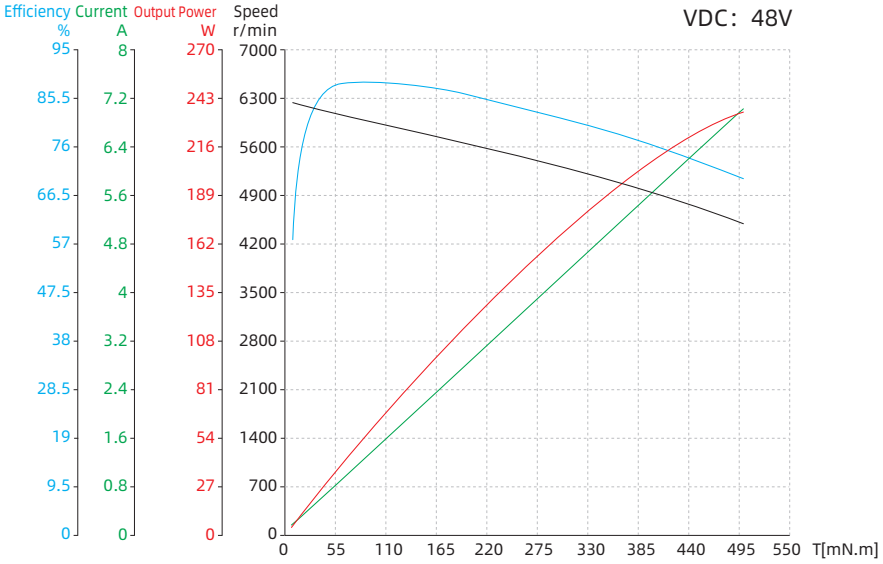
For customized options, please contact DINGS' or your local distributor

40mm series

Dimensional Drawings



Torque Performance Curves



DINGS'
Precision Motion Specialist

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