Overview product catalogues

❯Overview products

❯ Controller

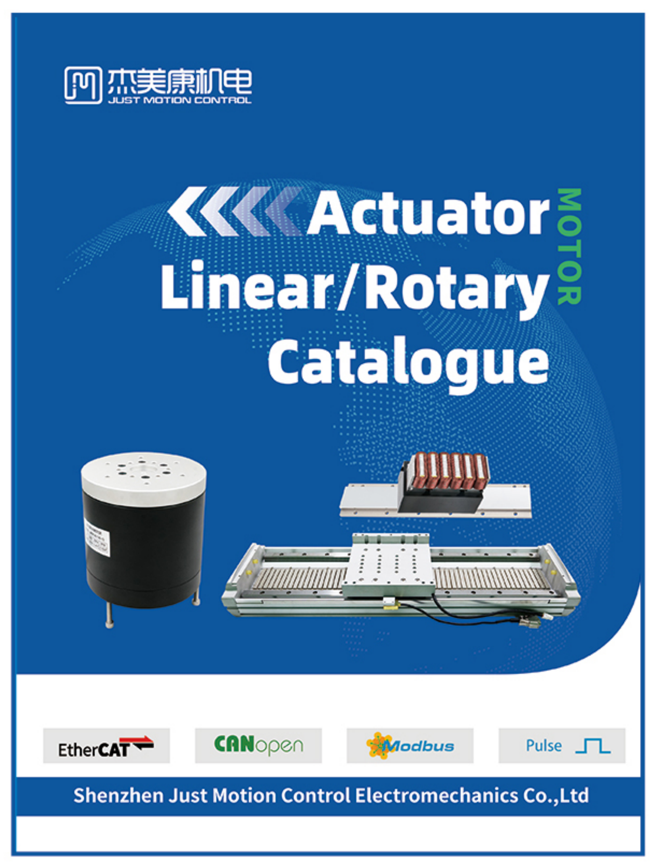
❯Fieldbus series

❯Stepper series

❯AC/DC Servo Series

❯Integrated series

❯Screwlead motor



❯Actuators

❯Gear reducer series

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杰美康机电
JUST MOTION CONTROL

Direct-Drive(DD) Catalogue

MOTOR

EtherCAT CANopen Pulse

Shenzhen Just Motion Control Electromechanics Co.,Ltd

Company Profile

Shenzhen Just Motion Control Electromechanics Co.,Ltd. was established in **2007**. It is a national high-tech enterprise specializing in the research and development, production and sales of motion control products. The factory is headquartered in **Shenzhen, Guangdong Province,China.**

The company covers an area of **16,000 square** meters and has more than **5,000 square meters** of production workshops. Has more than 50 sets of professional production equipment, With an advanced ERP warehouse management system, products in stock can be shipped on the same day.

The R&D personnel are all undergraduates or above, accounting for more than 20% of the total number of the company. Can provide OEM, ODM and other customized services. By the end of 2023, the JMC R&D team has applied for more than **150 patents.**

Honor and Qualification

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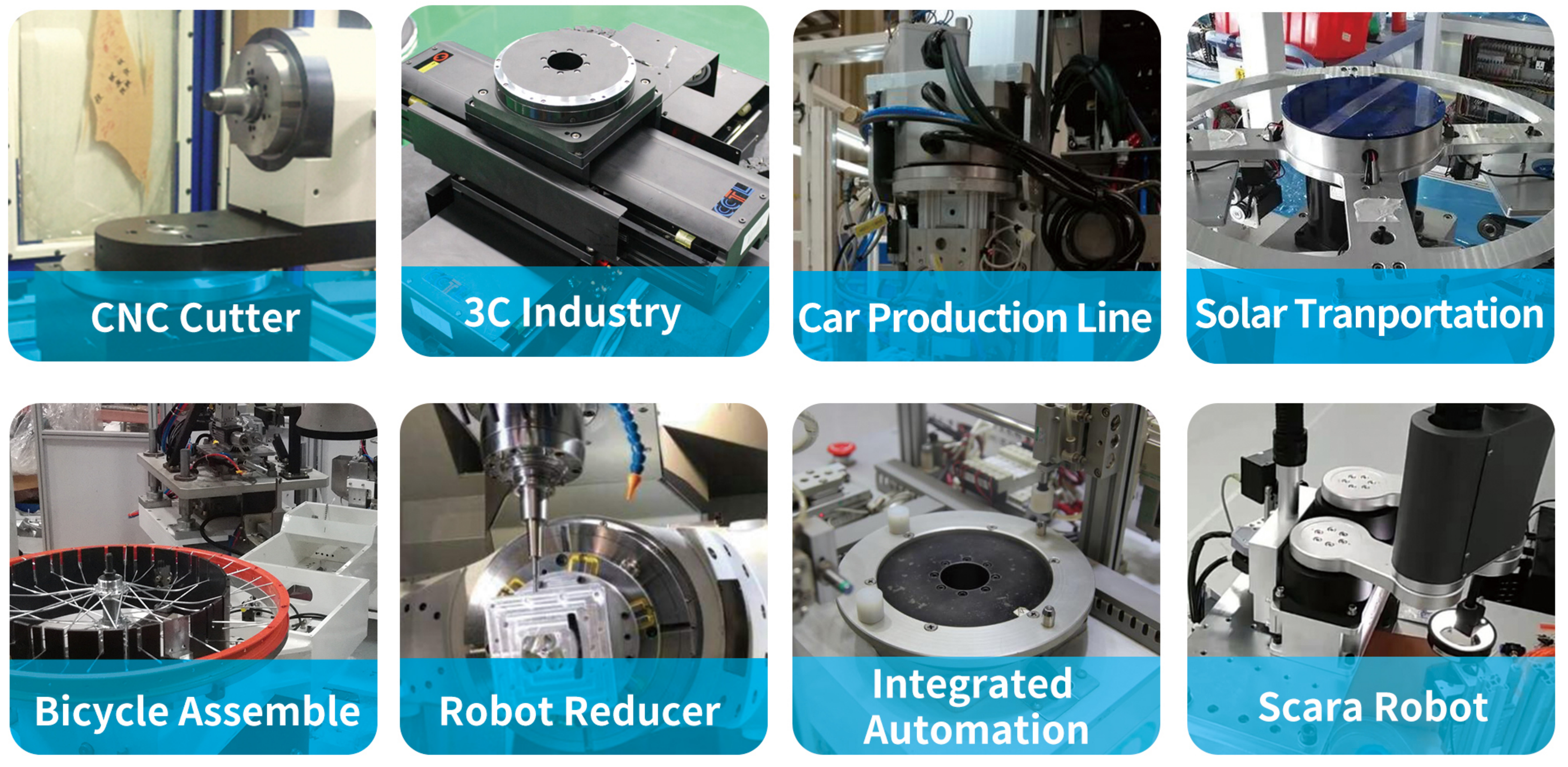
1 DD Motor Products

Application



DD Motor Naming Rules

JRM - 170 - 50 - 2 - T1 - H1 - 3 - A

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①DD Motor Series
JRM : Direct-Drive motor

②Diameter
170: 170mm

③Height
50 : 50mm

④ Rotor type
2: Inner rotor
Default is Outer rotor

⑤Temperature
T1: With sensor (temperature)
Default is no sensor.

⑥Hall
H1: With hall sensor (Proximity switches)
Default is no sensor.

⑦Cable
3 : 3m
5 : 5m
10 : 10m

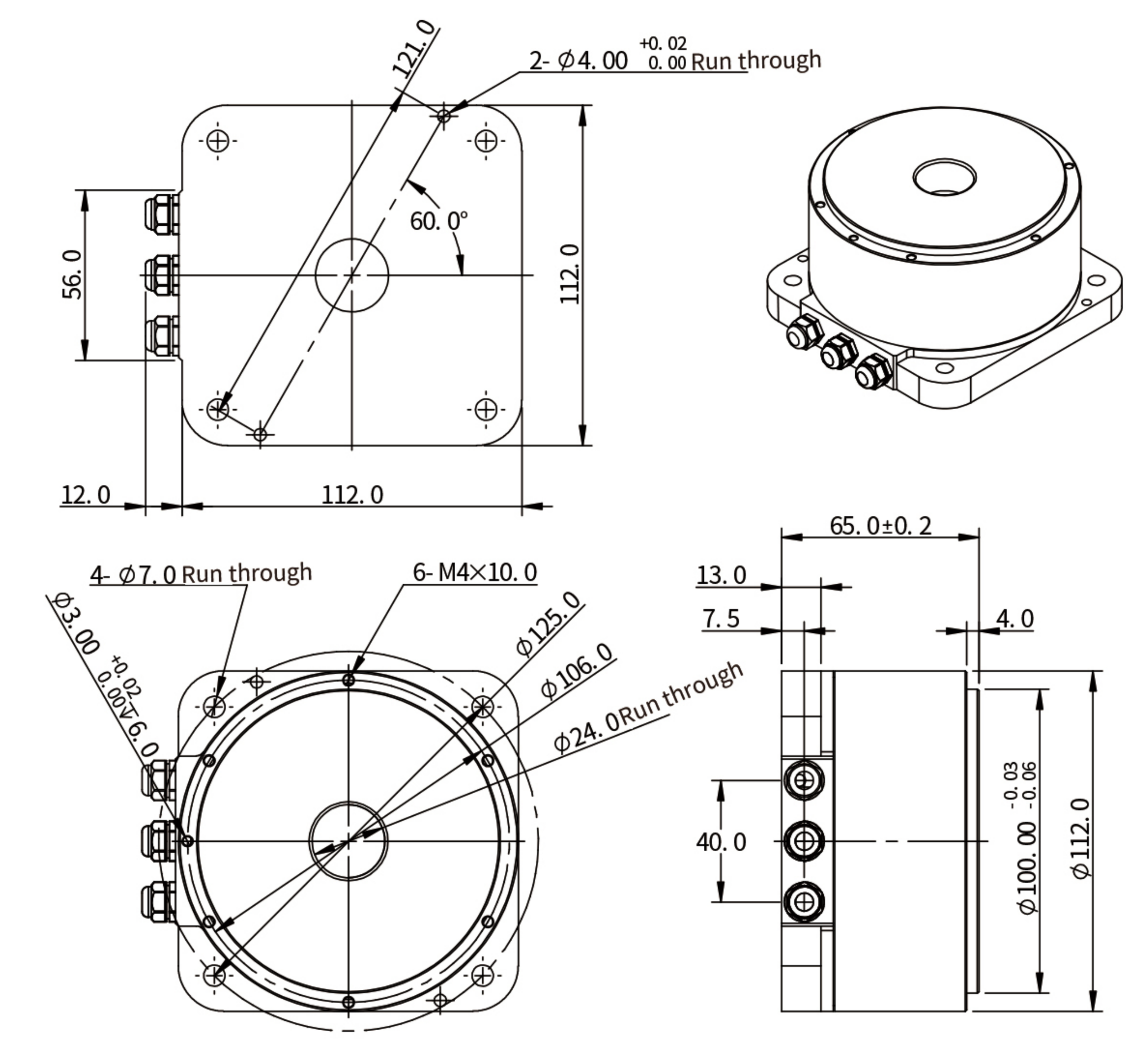
⑧Cooling
A: Air cooling
W: Water cooling
Default is Natural cooling

Model	Dia (mm)	Height (mm)	Middle hole (mm)	Rated torque (Nm)	Torque (Nm)	Current (Arms)	Peak current (Arms)	Speed (rpm)	Highest speed (rpm)	Rotor inertia ($kg \cdot m^2$)	Match drive model
JRM112-065	112	65	20	3	9	2.5	7.5	175	350	0.002	JADD4002-20B-DB44
JRM140-140-10	138	140	0	10	30	2.5	7.5	200	400	0.012	JADD4002-20B-DB44
JRM140-140-20	138	140	0	20	60	3.5	11	100	200	0.02	JADD7502-20B-DB44
JRM160-84.5	160	84.5	0	12	24	2.8	8.4	100	200	0.0065	JADD7502-20B-DB44
JRM170-050	170	50	42	4.5	14	1.4	4.2	225	450	0.007	JADD4002-20B-DB44
JRM170-095	170	95	42	20	65	2.5	7.5	95	190	0.02	JADD4002-20B-DB44
JRM170-125	170	125	42	41.8	125	2.5	7.5	75	150	0.025	JADD4002-20B-DB44
JRM170-155	170	155	42	59.5	179	2.5	7.5	60	120	0.032	JADD4002-20B-DB44
JRM224-042	224	42	50	14.1	42.2	2.2	6.6	225	450	0.012	JADD4002-20B-DB44
JRM224-062	224	62	50	35	105	2.2	6.6	160	320	0.02	JADD4002-20B-DB44
JRM263-113	263	113	80	95	190	7.1	14.2	75	150	0.13	JADD15002-20B-DB44
JRM263-138	263	138	80	150	300	7.1	14.2	60	120	0.16	JADD15002-20B-DB44
JRM263-188	263	188	80	250	500	7.1	14.2	50	100	0.21	JADD15002-20B-DB44

DD Motor Selection Model

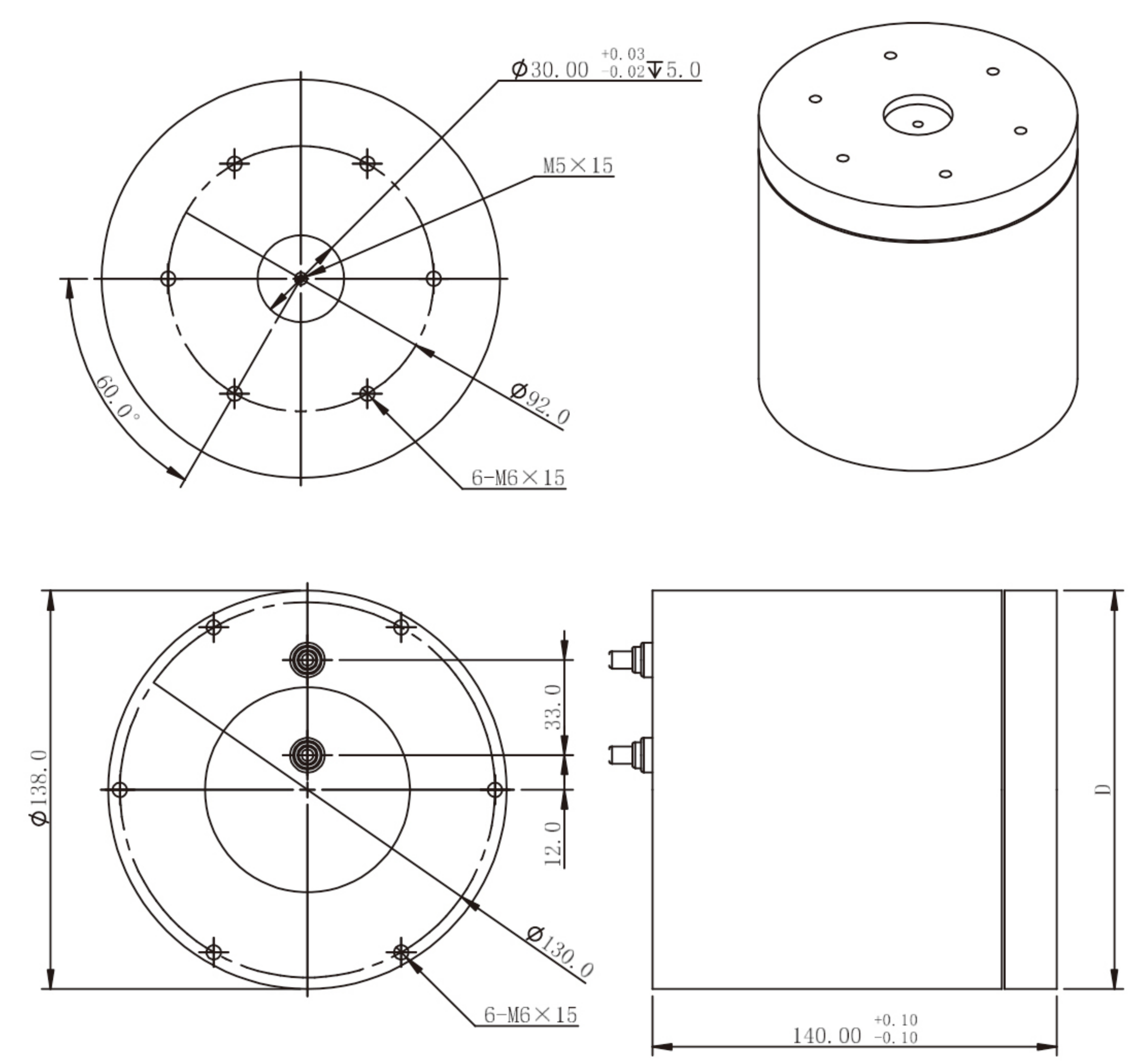
Motor model: JRM112-065

Performance parameters	unit	JRM112-065
Continuous torque	N.m	3.0
Continuous current	Arms	2.5
Maximum torque	N.m	9
Maximun current	Arms	7.5
Torque constant	N.m/Arms	1.2
Resistance	Ω(25℃)	2.2
Inductance	mH(25℃)	1.8
Magnetic poles	--	28
Moment of inertia	kg.m2	0.0026
Motor weight	kg	3.2
Highest speed	rpm	350
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	8192
Maximum axial load	N	2500
Maximum radial load	N.m	20
Axial runout	mm	0.005
Radial runout	mm	0.005



Motor model: JRM140-140-10/JRM140-140-20

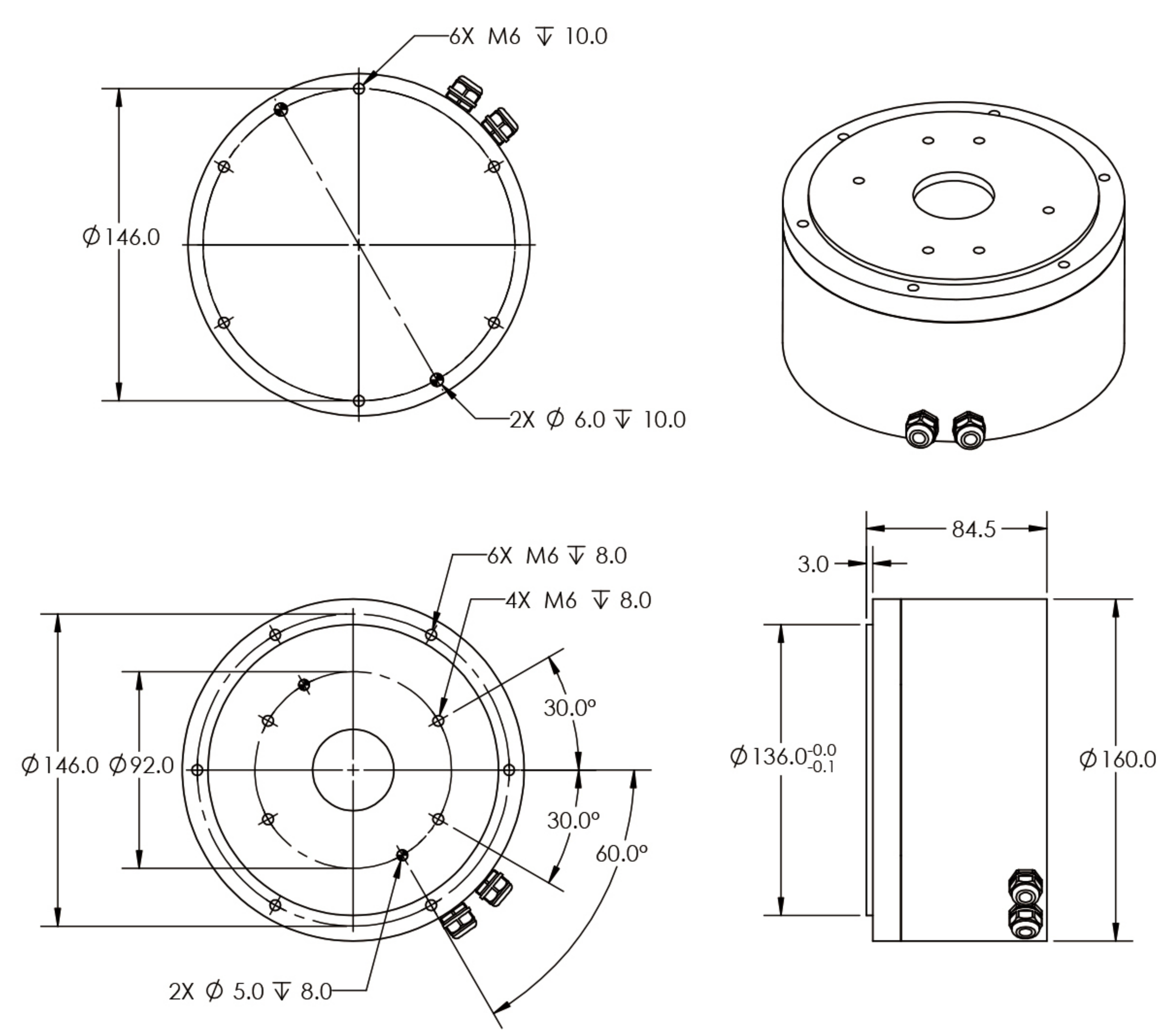
Performance parameters	unit	JRM140-140-10	JRM140-140-20
Continuous torque	N.m	10.0	20.0
Continuous current	Arms	2.5	3.5
Maximum torque	N.m	30	60
Maximun current	Arms	7.5	11.0
Torque constant	N.m/Arms	4.0	5.7
Resistance	Ω(25℃)	17.0	26.0
Inductance	mH(25℃)	21.0	31.5
Magnetic poles	--	28	28.0
Moment of inertia	kg.m2	0.0120	0.02
Motor weight	kg	7.1	13.2
Highest speed	rpm	400	200
Positioning accuracy	Arc sec	±20	±20
Repeat accuracy	Arc sec	±3	±3
Resolution ratio	Bit	23	23
Maximum axial load	N	4000	4000
Maximum radial load	N.m	20	20
Outer diameter D	mm	138	140



DD Motor Products

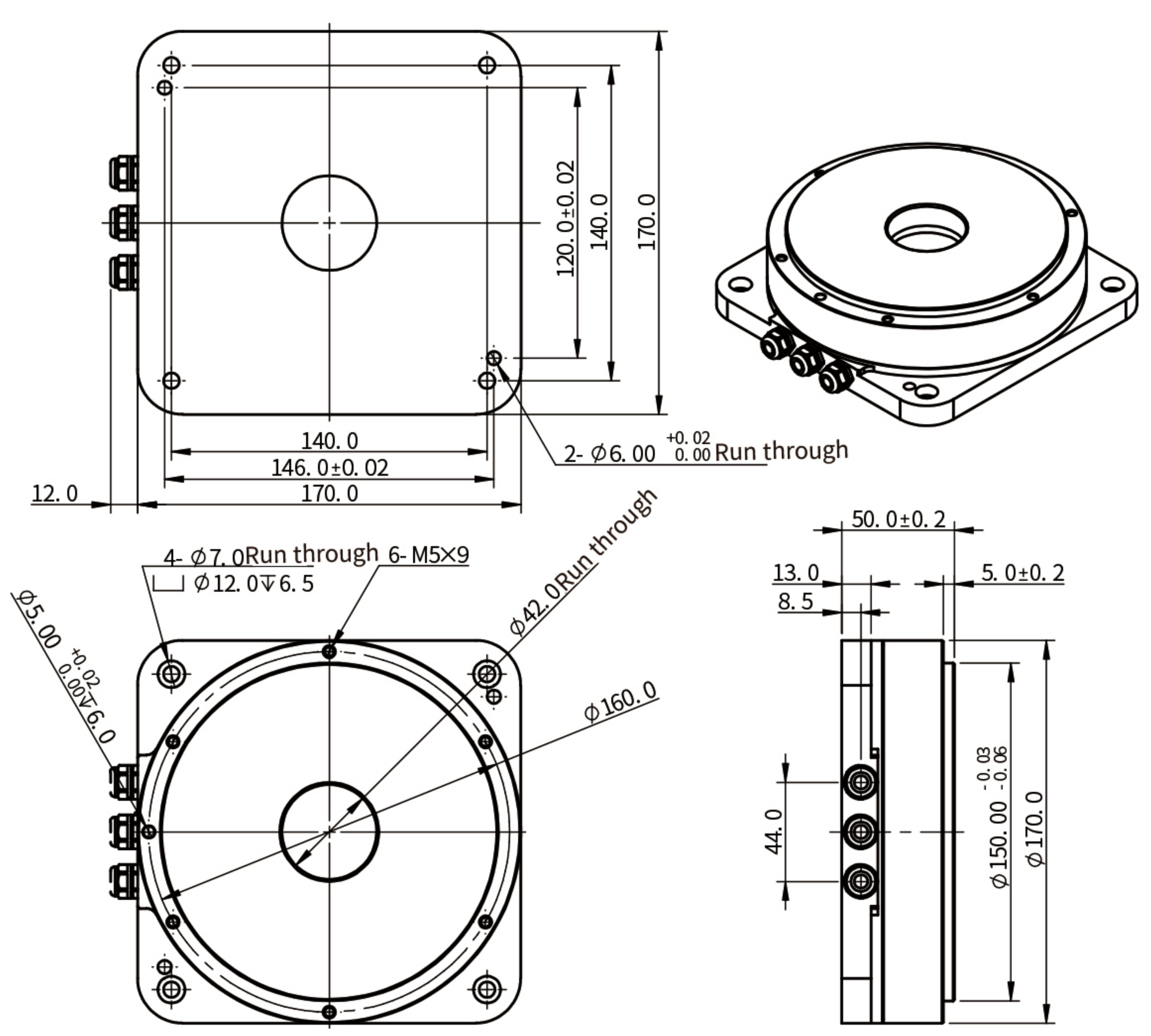
Motor model: JRM160-84.5

Performance parameters	Unit	JRM160-84.5
Continuous torque	N.m	12.0
Continuous current	Arms	2.8
Maximum torque	N.m	24
Maximun current	Arms	8.4
Torque constant	N.m/Arms	4.3
Resistance	Ω(25℃)	9.0
Inductance	mH(25℃)	52.5
Magnetic poles	--	40
Moment of inertia	kg.m2	0.0065
Motor weight	kg	7.3
Highest speed	rpm	200
Positioning accuracy	Arc sec	±30
Repeat accuracy	Arc sec	±4
Resolution ratio	Bit	23
Maximum axial load	N	1200
Maximum radial load	N.m	40



Motor model: JRM170-050

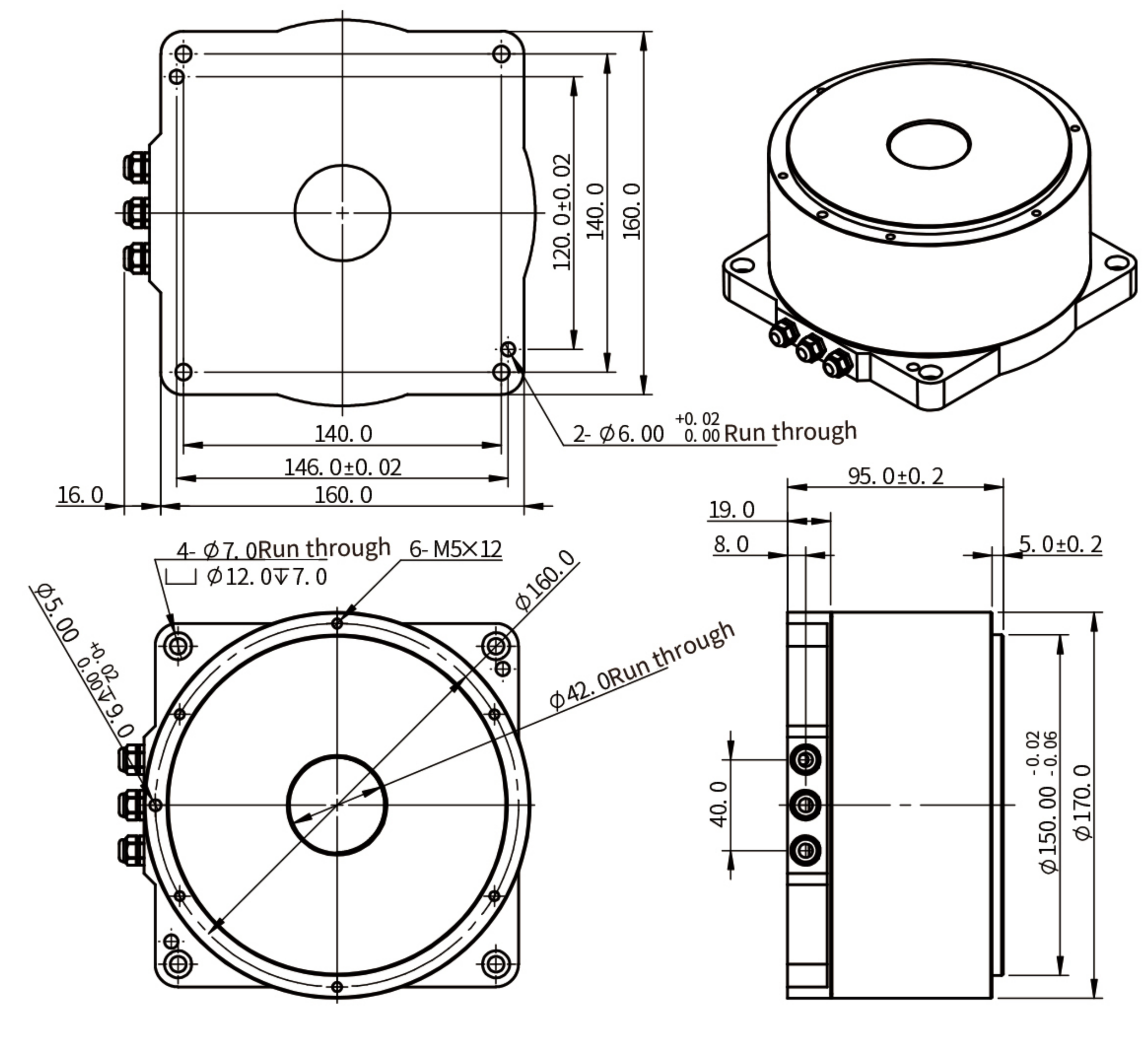
Performance parameters	unit	JRM170-050
Continuous torque	N.m	4.5
Continuous current	Arms	1.4
Maximum torque	N.m	14
Maximun current	Arms	4.2
Torque constant	N.m/Arms	3.4
Resistance	Ω(25℃)	6.0
Inductance	mH(25℃)	7.6
Magnetic poles	--	30
Moment of inertia	kg.m2	0.0068
Motor weight	kg	3.9
Highest speed	rpm	450
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	11740
Maximum axial load	N	4000
Maximum radial load	N.m	40
Axial runout	mm	0.005
Radial runout	mm	0.005



DD Motor Products

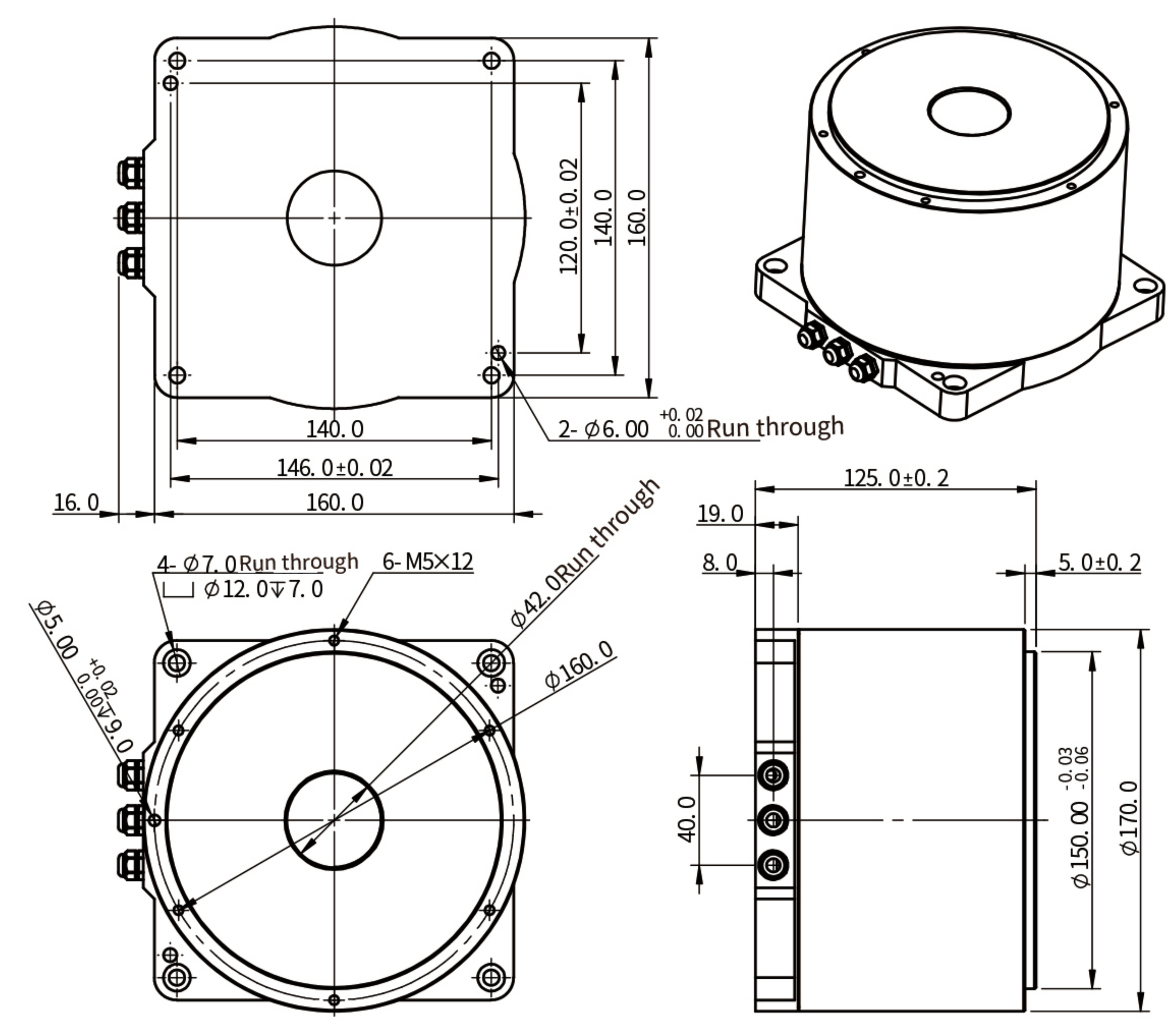
Motor model: JRM170-095

Performance parameters	unit	JRM170-095
Continuous torque	N.m	23.8
Continuous current	Arms	2.5
Maximum torque	N.m	71
Maximun current	Arms	7.5
Torque constant	N.m/Arms	9.5
Resistance	Ω(25℃)	9.4
Inductance	mH(25℃)	17.9
Magnetic poles	--	30
Moment of inertia	kg.m2	0.023
Motor weight	kg	10.1
Highest speed	rpm	190
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	11740
Maximum axial load	N	15000
Maximum radial load	N.m	150
Axial runout	mm	0.005
Radial runout	mm	0.005



Motor model: JRM170-125

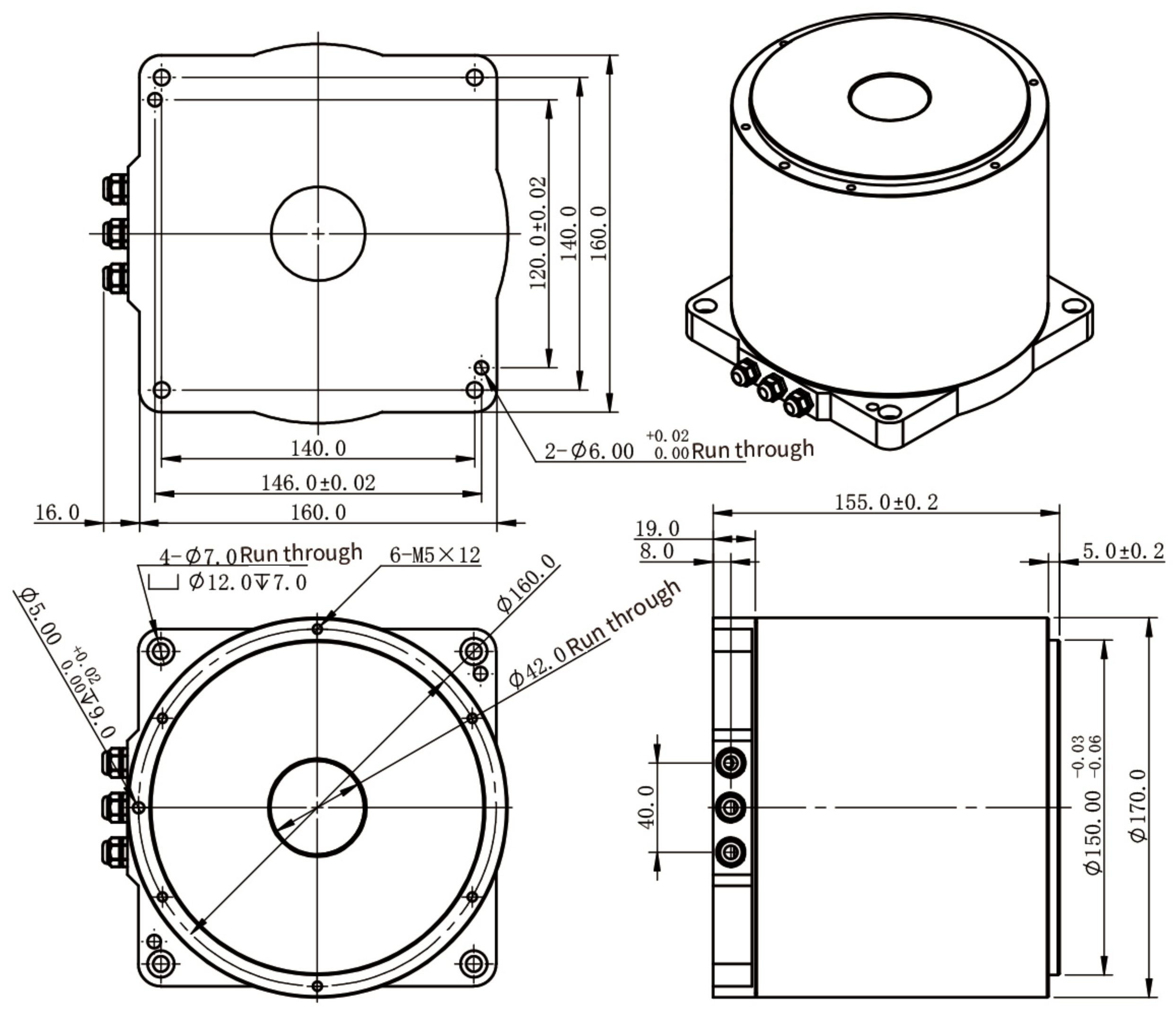
Performance parameters	unit	JRM170-125
Continuous torque	N.m	41.8
Continuous current	Arms	2.5
Maximum torque	N.m	125
Maximun current	Arms	7.5
Torque constant	N.m/Arms	16.7
Resistance	Ω(25℃)	14.4
Inductance	mH(25℃)	34.7
Magnetic poles	--	30
Moment of inertia	kg.m2	0.032
Motor weight	kg	13.9
Highest speed	rpm	150
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	11740
Maximum axial load	N	15000
Maximum radial load	N.m	150
Axial runout	mm	0.005
Radial runout	mm	0.005



DD Motor Products

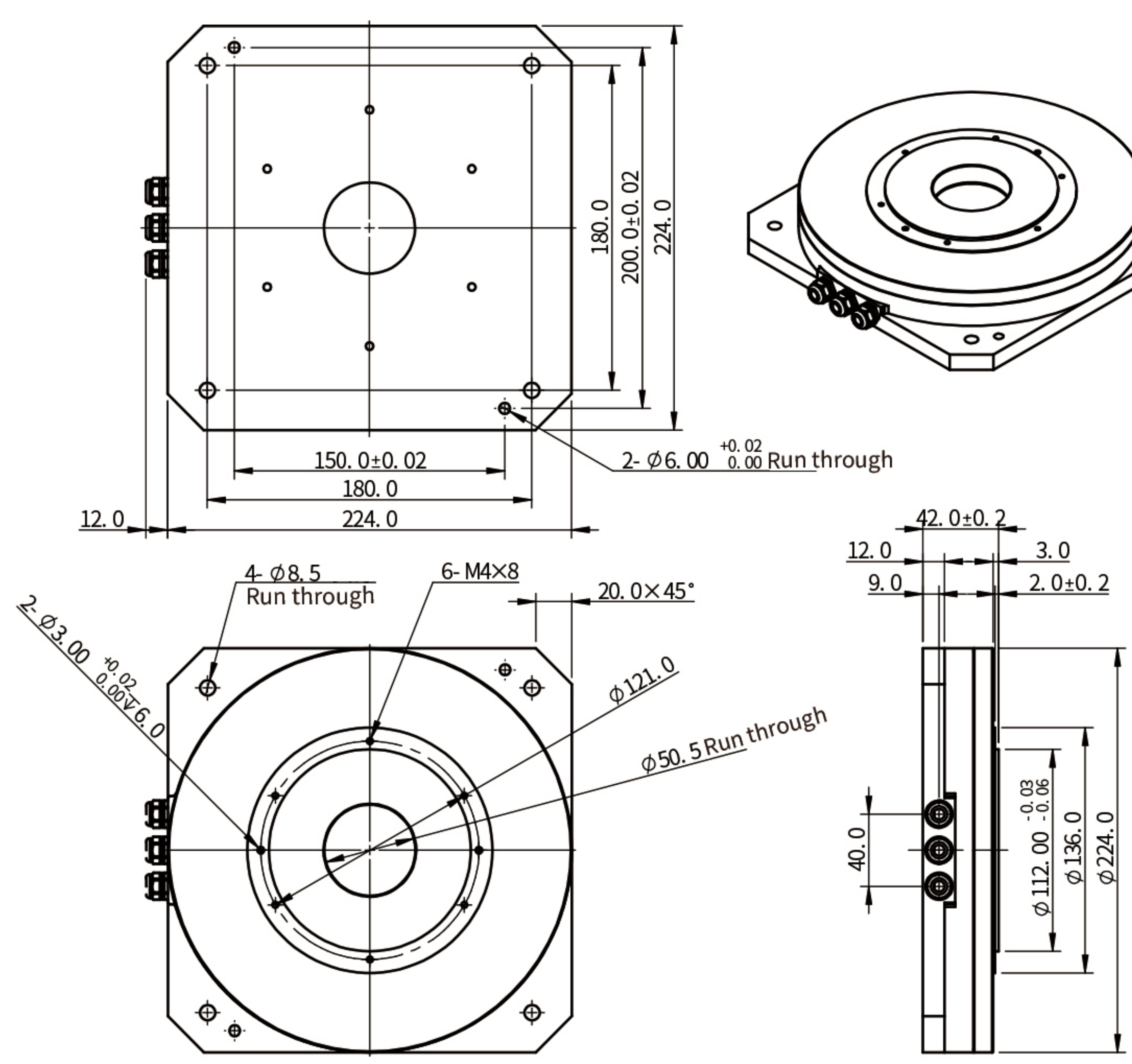
Motor model: JRM170-155

Performance parameters	unit	JRM170-155
Continuous torque	N.m	59.5
Continuous current	Arms	2.5
Maximum torque	N.m	179
Maximun current	Arms	7.5
Torque constant	N.m/Arms	23.8
Resistance	Ω(25℃)	20.0
Inductance	mH(25℃)	45.0
Magnetic poles	--	30
Moment of inertia	kg.m2	0.041
Motor weight	kg	18.1
Highest speed	rpm	120
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	11740
Maximum axial load	N	15000
Maximum radial load	N.m	150
Axial runout	mm	0.005
Radial runout	mm	0.005



Motor model: JRM224-042

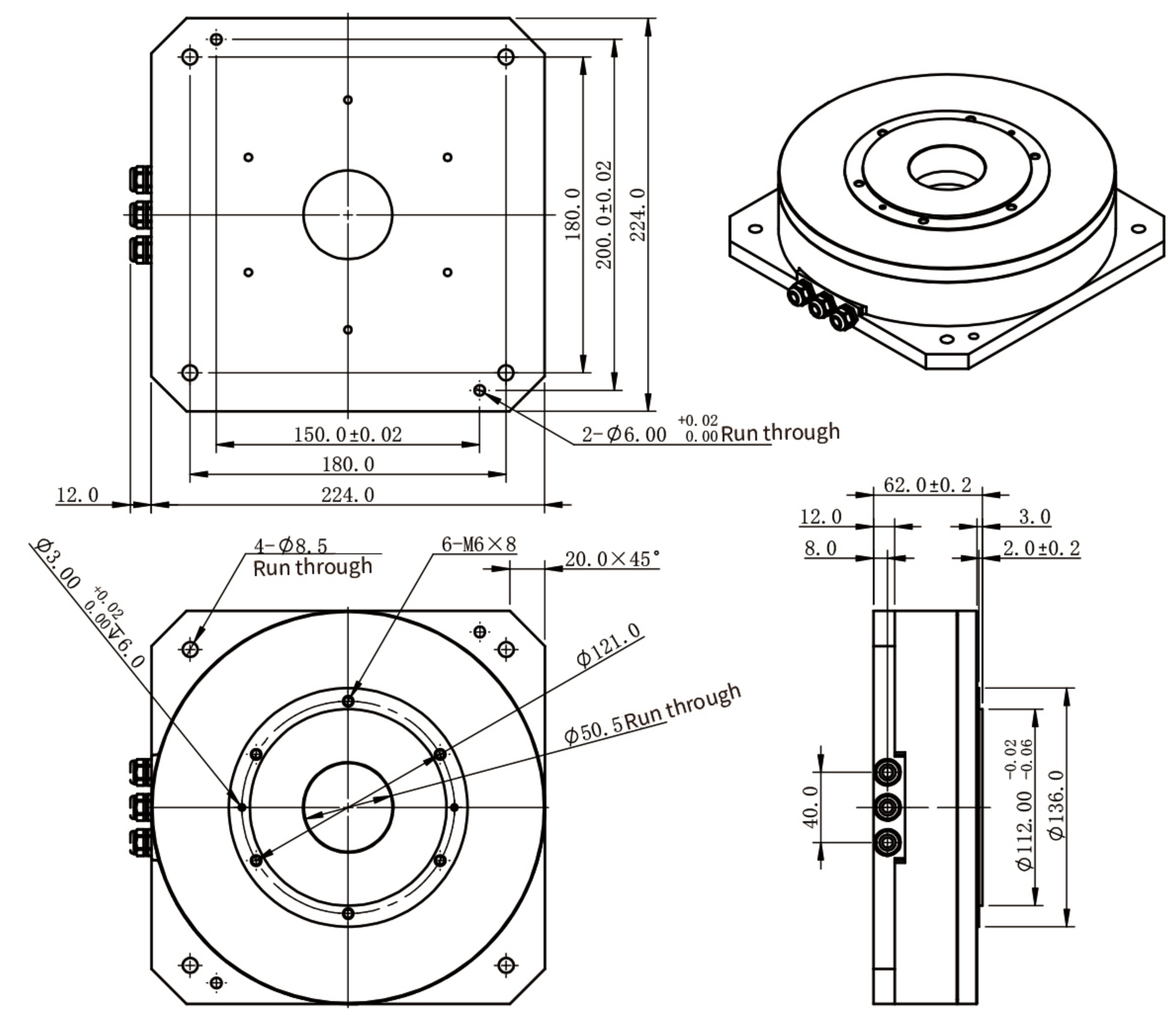
Performance parameters	unit	JRM224-042
Continuous torque	N.m	14.1
Continuous current	Arms	2.2
Maximum torque	N.m	42.2
Maximun current	Arms	6.6
Torque constant	N.m/Arms	6.4
Resistance	Ω(25℃)	9.1
Inductance	mH(25℃)	17.1
Magnetic poles	--	40
Moment of inertia	kg.m2	0.012
Motor weight	kg	5.5
Highest speed	rpm	380
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	11740
Maximum axial load	N	8000
Maximum radial load	N.m	80
Axial runout	mm	0.005
Radial runout	mm	0.005



DD Motor Products

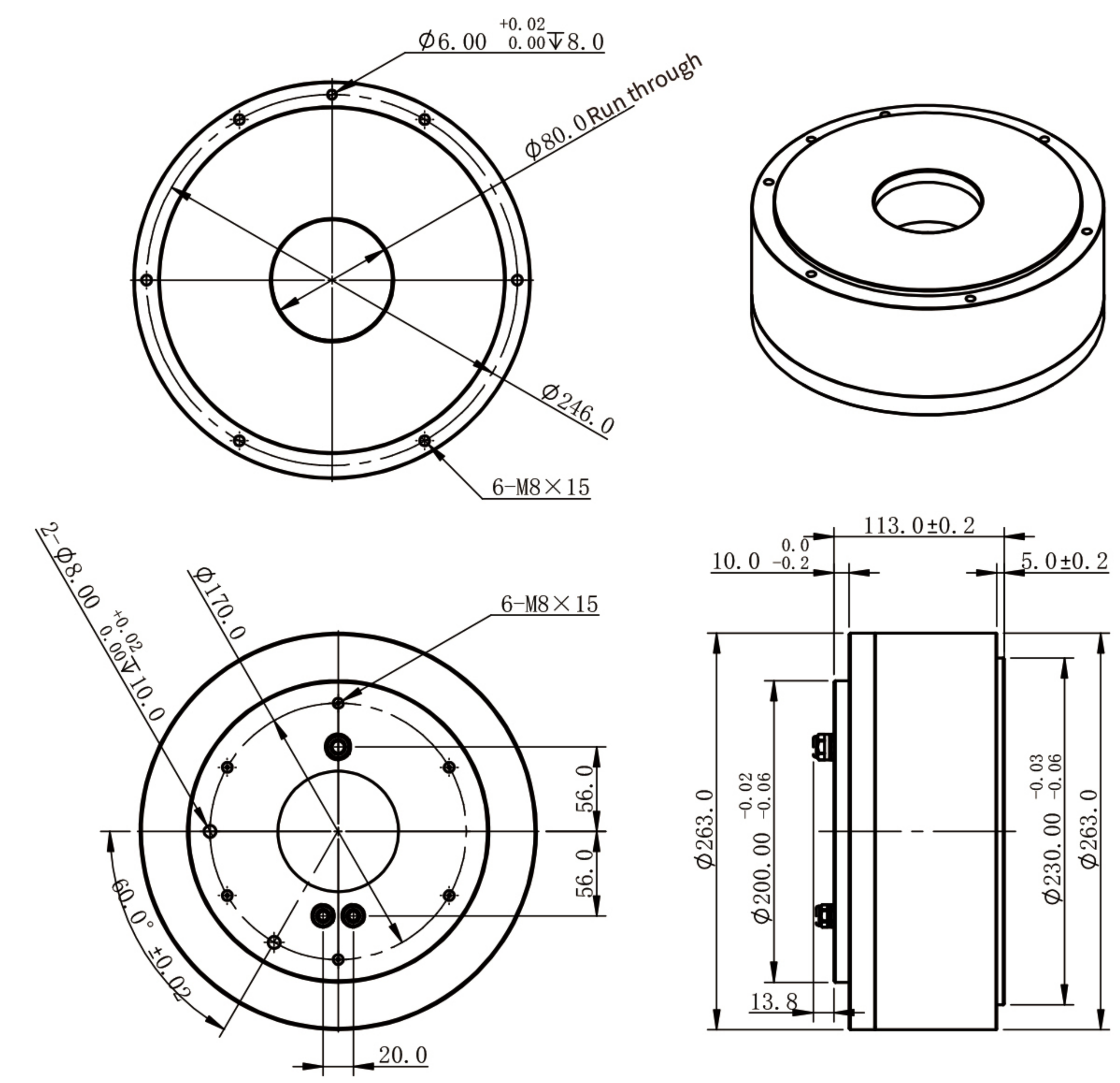
Motor model: JRM224-062

Performance parameters	unit	JRM224-062
Continuous torque	N.m	35.0
Continuous current	Arms	2.2
Maximum torque	N.m	105
Maximun current	Arms	6.6
Torque constant	N.m/Arms	15.7
Resistance	Ω(25℃)	13.8
Inductance	mH(25℃)	40.0
Magnetic poles	--	40
Moment of inertia	kg.m2	0.03
Motor weight	kg	9.2
Highest speed	rpm	200
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	16384
Maximum axial load	N	10000
Maximum radial load	N.m	100
Axial runout	mm	0.005
Radial runout	mm	0.005



Motor model: JRM263-113

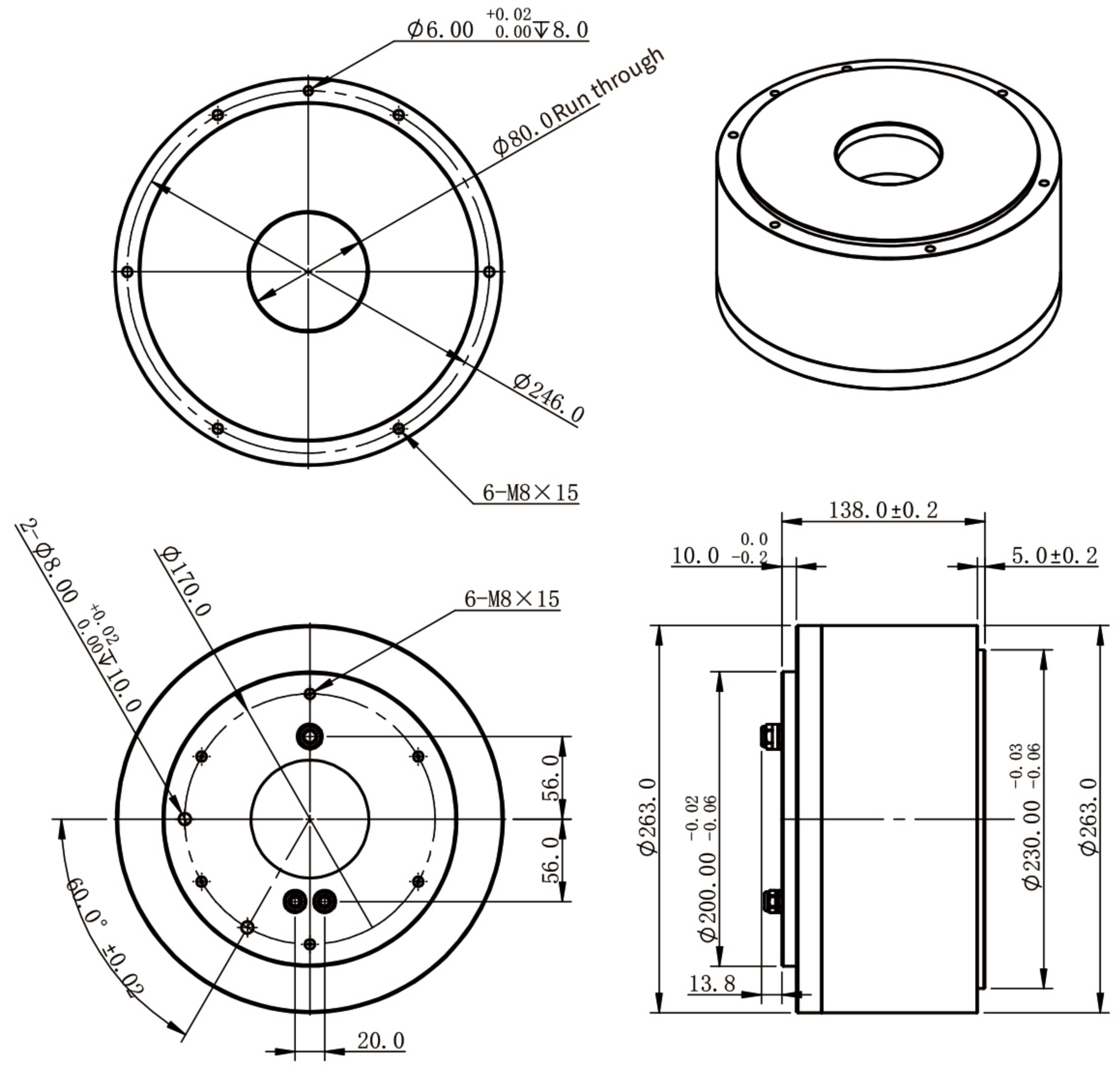
Performance parameters	unit	JRM263-113
Continuous torque	N.m	95.0
Continuous current	Arms	7.1
Maximum torque	N.m	190
Maximun current	Arms	14.2
Torque constant	N.m/Arms	13.4
Resistance	Ω(25℃)	2.7
Inductance	mH(25℃)	8.3
Magnetic poles	--	40
Moment of inertia	kg.m2	0.1
Motor weight	kg	24.4
Highest speed	rpm	150
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	16384
Maximum axial load	N	40000
Maximum radial load	N.m	400
Axial runout	mm	0.005
Radial runout	mm	0.005



DD Motor Products

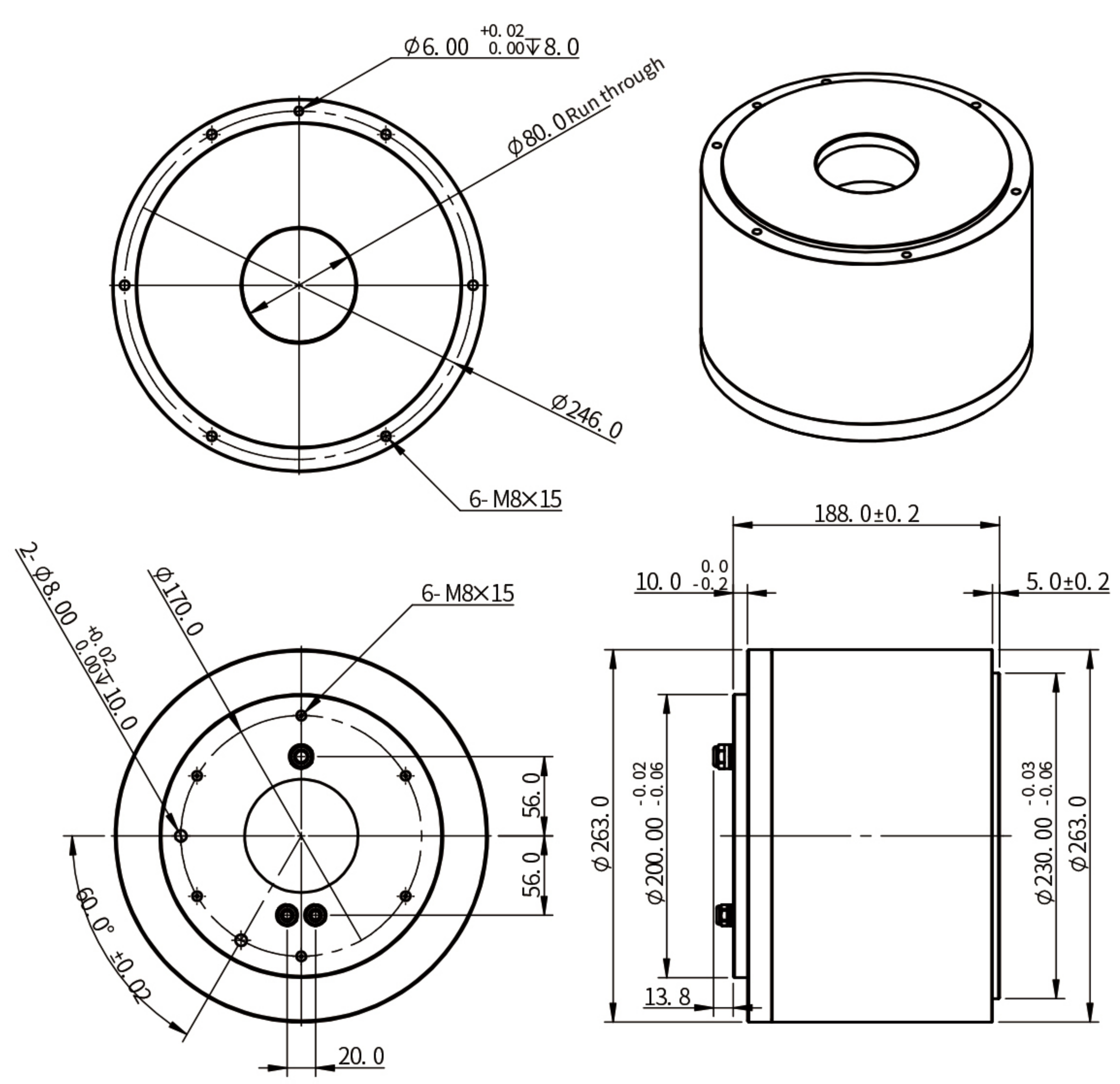
Motor model: JRM263-138

Performance parameters	unit	JRM263-138
Continuous torque	N.m	150.0
Continuous current	Arms	7.1
Maximum torque	N.m	300
Maximun current	Arms	14.2
Torque constant	N.m/Arms	21.9
Resistance	Ω(25℃)	3.9
Inductance	mH(25℃)	13.4
Magnetic poles	--	40
Moment of inertia	kg.m2	0.15
Motor weight	kg	35
Highest speed	rpm	120
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	16384
Maximum axial load	N	40000
Maximum radial load	N.m	400
Axial runout	mm	0.005
Radial runout	mm	0.005

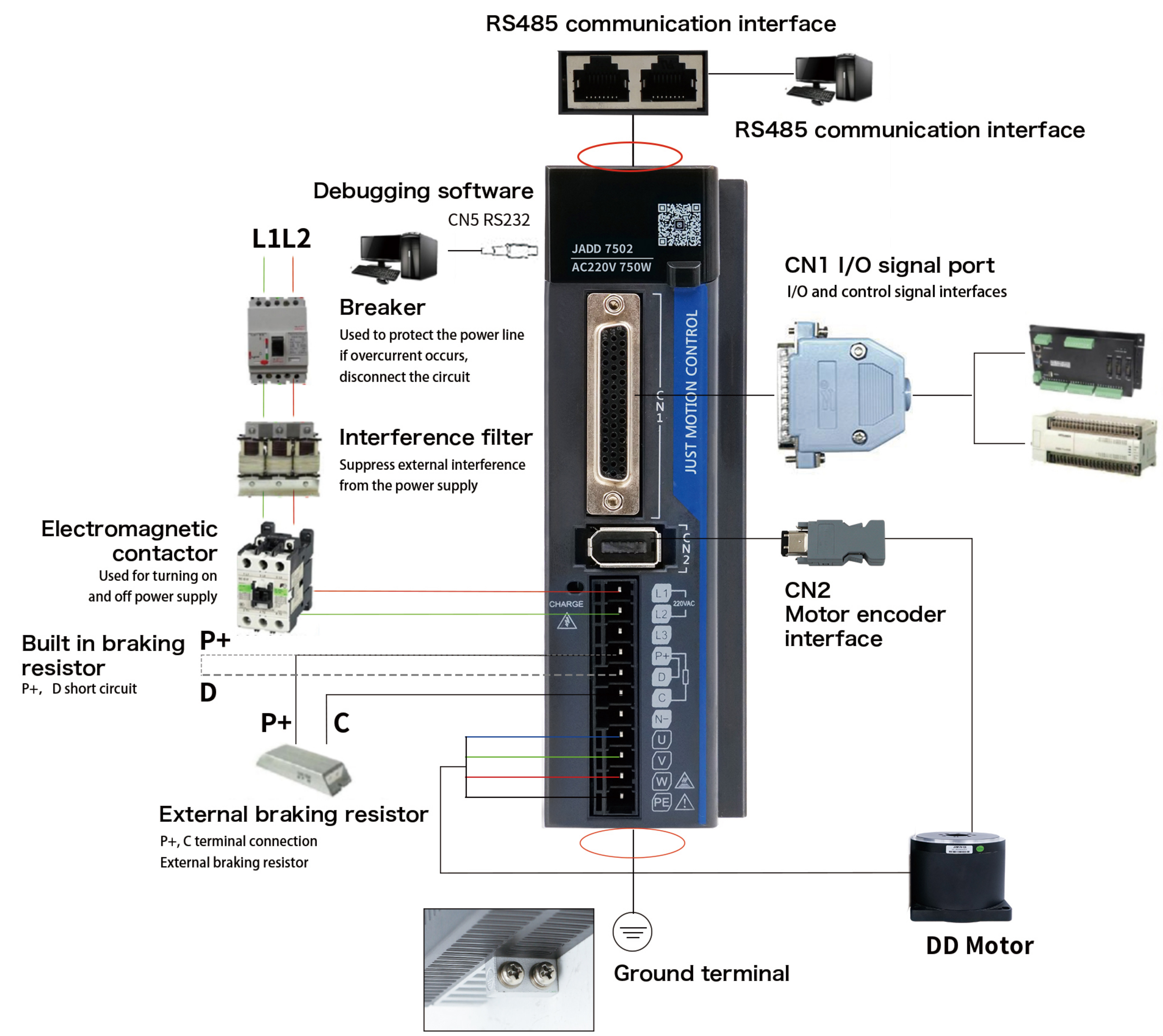


Motor model: JRM263-188

Performance parameters	unit	JRM263-188
Continuous torque	N.m	250.0
Continuous current	Arms	7.1
Maximum torque	N.m	500
Maximun current	Arms	14.2
Torque constant	N.m/Arms	35.2
Resistance	Ω(25℃)	6.7
Inductance	mH(25℃)	22.8
Magnetic poles	--	40
Moment of inertia	kg.m2	0.21
Motor weight	kg	47.5
Highest speed	rpm	100
Positioning accuracy	Arc sec	±20
Repeat accuracy	Arc sec	±1.5
Resolution ratio	sin/cos	16384
Maximum axial load	N	40000
Maximum radial load	N.m	400
Axial runout	mm	0.005
Radial runout	mm	0.005



Driver wiring diagram



Driver model	JADD4002-20B-DB44	JADD7502-20B-DB44	JADD15002-20B-DB44
Current (Arms)	2.8	5.5	10
Maximum current	9.6	16.9	20
Power supply	Single phase AC180V-240V，50/60Hz		
Braking function	External braking resistor	Built in braking resistor	
Control mode	single-phase rectification，IGBT，PWM control，Sine wave current driving method		
Encoder	17 bit/23 bit absolute value for single/multiple turns		
Encoder output	Frequency dividing output	Speed control range	1：600
Speed bandwidth	2KHz	Torque control accuracy	±2%
Overload capacity	3 times	Simulate command input	2-channel -10V~10V
IO input	8 inputs	IO output	5 outputs
Z signal output	Can match outputs of different widths		
Value to zero	Absolute position can be set as the mechanical origin		
communication	RS485	Support MODBUS protocol	
	RS232	Connect PC for debugging and testing	
Easy debugging	Can be debugged with buttons or PC upper computer		
Simple structure	Directly drive the load, easy installation, high precision		