

内转子无框力矩电机模组
Inner rotor frameless torque motor module

FL系列-无框电机 Frameless Motor

大直径、大中空、强劲动力

Large Diameter, Big Hollow Shaft, Strong Torque



无框设计

为客户的集成设计提供更多灵活选择

扁平化 大直径 大中空
散热好 绝缘佳 易于安装

FLATTENED DESIGN/LARGE DIAMETER/ LARGE HOLLOW
WELL HEAT DISSIPATION/ GOOD INSULATION/ EASY INSTALLATION

高度集成化:无框力矩电机+超大中空驱动器+编码器
HIGH INTEGRATION:FL MOTOR+HOLLOW SHAFT DRIVER+ENCODER



RMD-FL系列产品命名规则

RMD-FL SERIES NAMING CONVENTIONS

DIVERSIFIED APPLICATION SCENARIOS

多元化适用场景



机械臂
Robotic Arm



家电制造
Household Manufacturing



吹风机
Hairdryer



手术机器人
Surgical Robot



汽车工业
Automobile Industry



航空工业
Aviation Industry

RMD-FL-50-15-200

① ② ③ ④ ⑤

- ① 品牌名称: RMD (Reducer Motor Drive)
Brand Name R-Reducer M-Motor D-Drive
- ② FL代表系列名: 内转子无框力矩电机模组
FL Stands For The Series Name: Inner rotor frameless torque motor Actuator
- ③ 定子直径 50
Stator diameter 50
- ④ 转子高度 15
Rotor height
- ⑤ 额定功率 200W
Rated power 200W

例如 For example

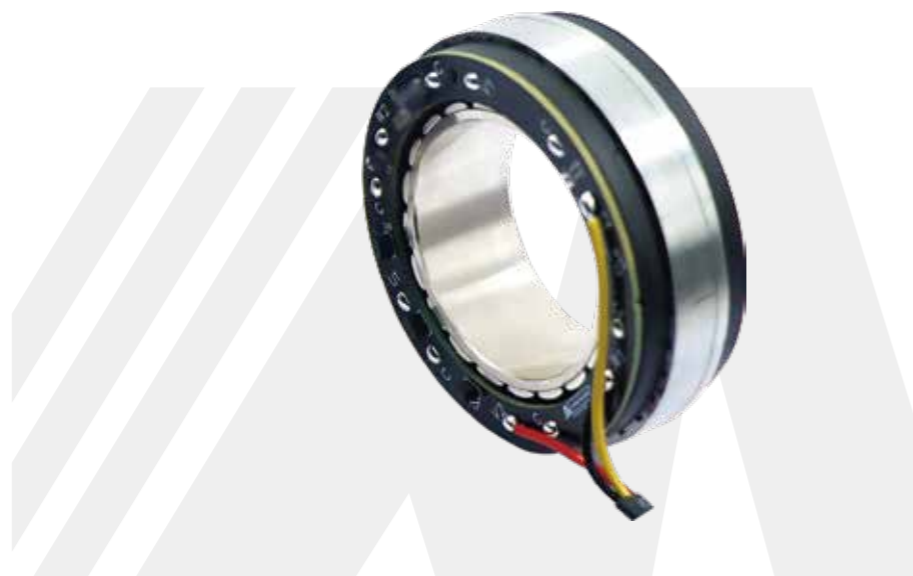
型号 RMD-FL-85-13-500

说明
RMD: 品牌名
FL: 内转无框力矩系列
85: 定子直径
13: 转子高度
500: 额定功率

Model RMD-FL-85-13-500

Illustrate
RMD: Brand Name
FL: Internal rotation frameless torque series
85: Stator diameter
13: Rotor height
500: Rated power

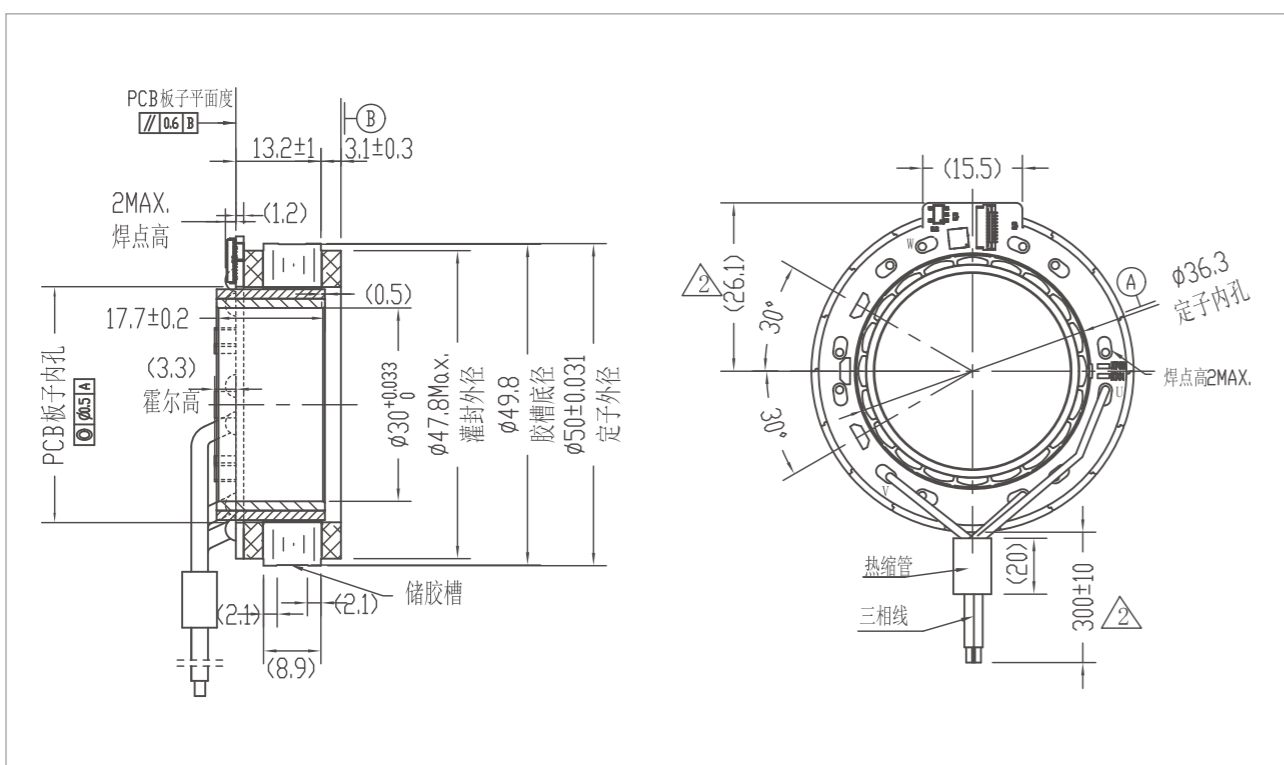
系列名 Series Name
RMD-FL
 电机简称 Motor Simplified Name
FL-50-08



单编码器 Single Encoder

型号 Actuator Full Name	货品编码 Product Code
RMD-FL-50-08-180	1106030000000000

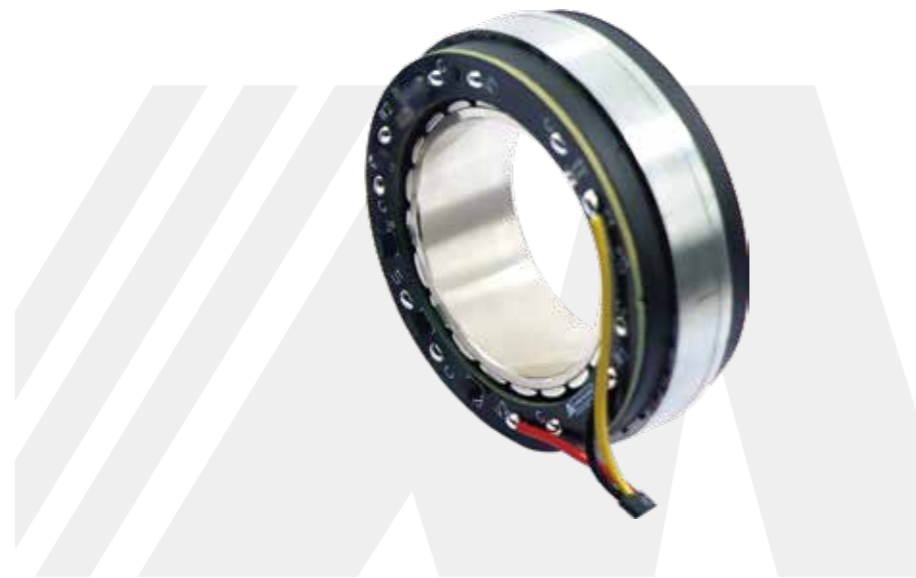
尺寸安装图 Installation Drawing



产品参数 Product Parameters

参数 Parameters	单位 Unit	FL-50-08
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	5200
空载电流 No Load Current	A	0.35
额定转速 Rated Speed	RPM	4100
额定转矩 Rated Torque	N.m	0.3
额定功率 Rated Power	W	163
额定电流 Rated Current	A	3.9
峰值扭矩 Peak Torque	N.m	0.96
峰值电流 Peak Current	A	12.48
效率 Efficiency	%	>83%
反电势常数 Back-EMF Constant)	Vdc/Krpm	5.37
扭矩常数 Torque Constant	N.m/A	0.08
线电阻 Phase to Phase Resistance	Ω	0.71
线电感 Phase to Phase Inductance	mH	0.44
极对数 Pole Pair	-	10
齿槽转矩 Cogging Torque	mN.m	-
接线方式 3 Phase Connection	-	Y
反驱力矩 Anti-Force Torque	N.m	-
背隙 Backlash	Arcsec/ Arcmin	-
轴向负载 Axial Payload	N	-
径向负载 Radial Payload	N	-
转动惯量 Inertia	Kg.cm ²	-
编码器类型及接口 Encoder Type&Interface	-	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	-
通信方式 Communication	-	-
重量 Weight	kg	0.11
绝缘等级 insulation grade	-	F
防护等级 level of protection	-	-

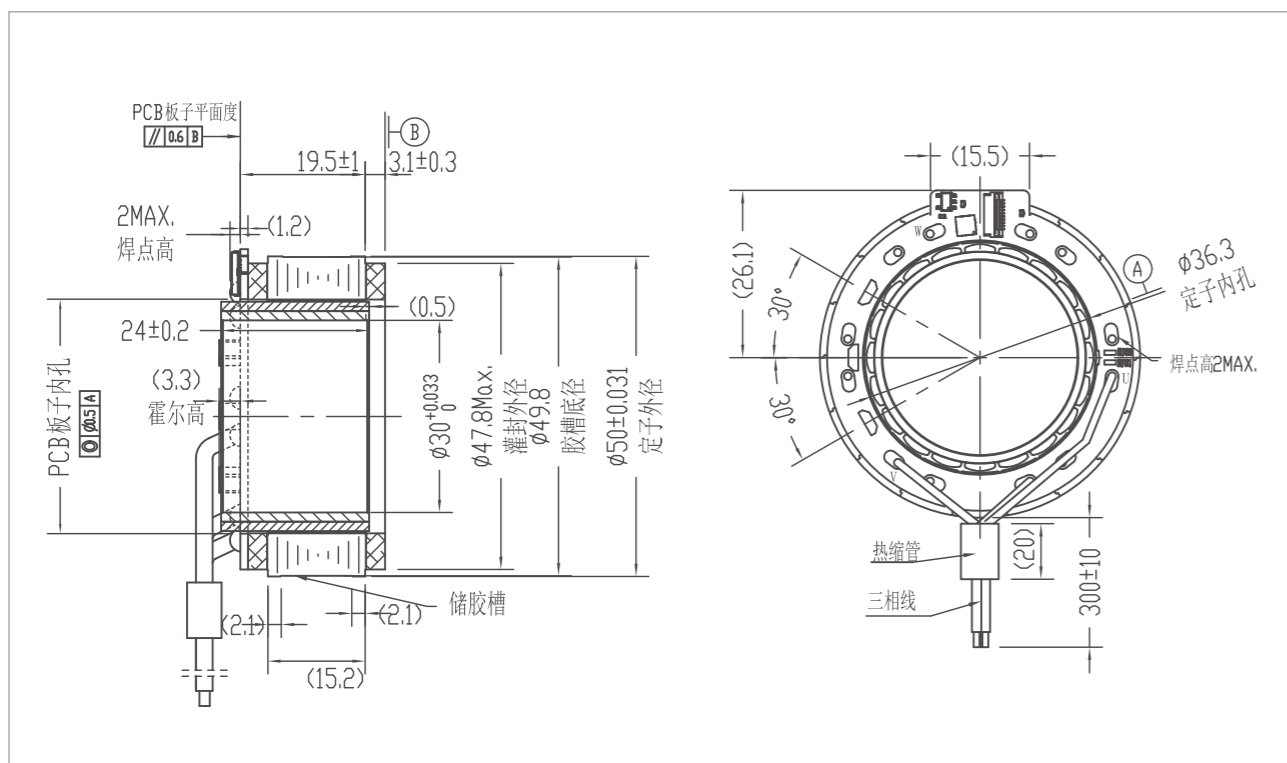
系列名 Series Name
RMD-FL
 电机简称 Motor Simplified Name
FL-50-15



单编码器 Single Encoder

型号 Actuator Full Name	货品编码 Product Code
RMD-FL-50-15-200	1106040000000000

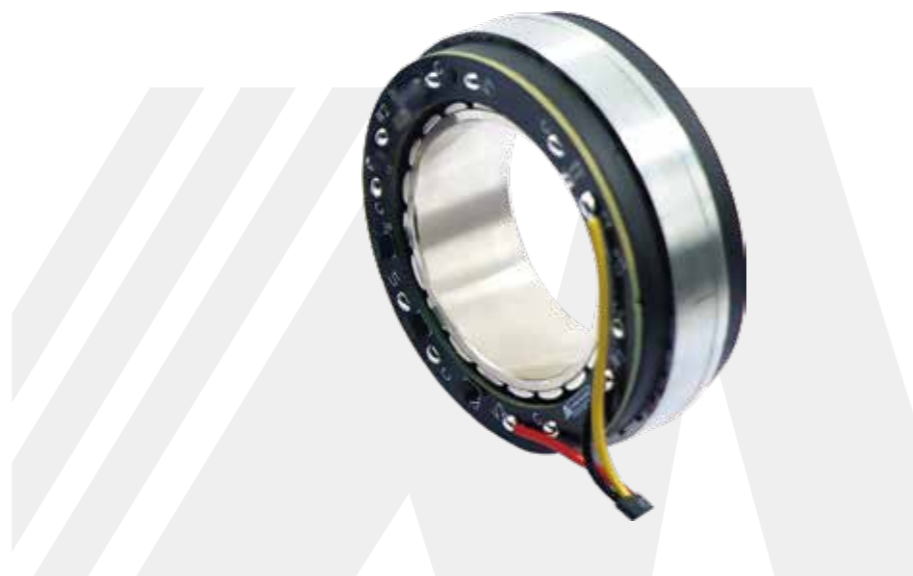
尺寸安装图 Installation Drawing



产品参数 Product Parameters

参数 Parameters	单位 Unit	FL-50-15
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	3800
空载电流 No Load Current	A	0.38
额定转速 Rated Speed	RPM	3000
额定转矩 Rated Torque	N.m	0.5
额定功率 Rated Power	W	199
额定电流 Rated Current	A	4.3
峰值扭矩 Peak Torque	N.m	1.5
峰值电流 Peak Current	A	12.9
效率 Efficiency	%	>81%
反电势常数 Back-EMF Constant)	Vdc/Krpm	8.12
扭矩常数 Torque Constant	N.m/A	0.12
线电阻 Phase to Phase Resistance	Ω	0.59
线电感 Phase to Phase Inductance	mH	0.27
极对数 Pole Pair	—	10
齿槽转矩 Cogging Torque	mN.m	—
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Payload	N	—
径向负载 Radial Payload	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.15
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—

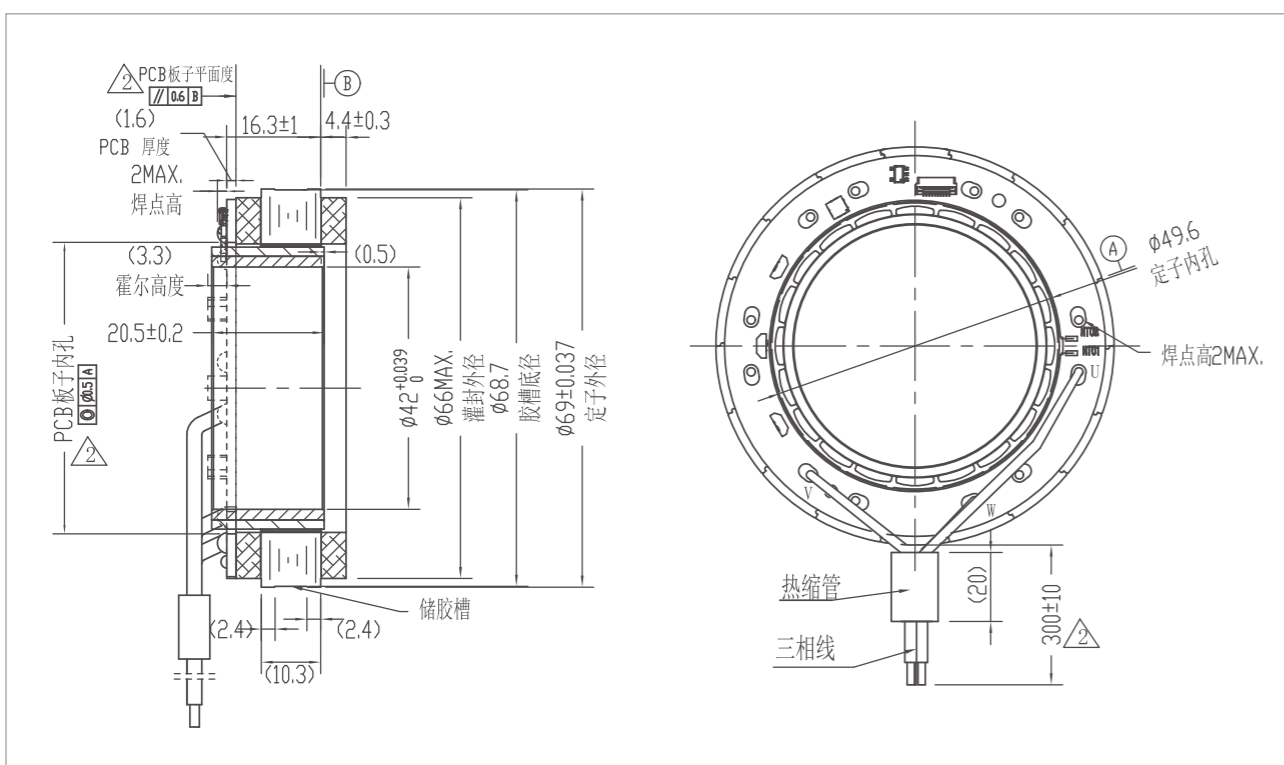
系列名 Series Name
RMD-FL
 电机简称 Motor Simplified Name
FL-70-10



单编码器 Single Encoder

型号 Actuator Full Name	货品编码 Product Code
RMD-FL-70-10-250	1106050000000000

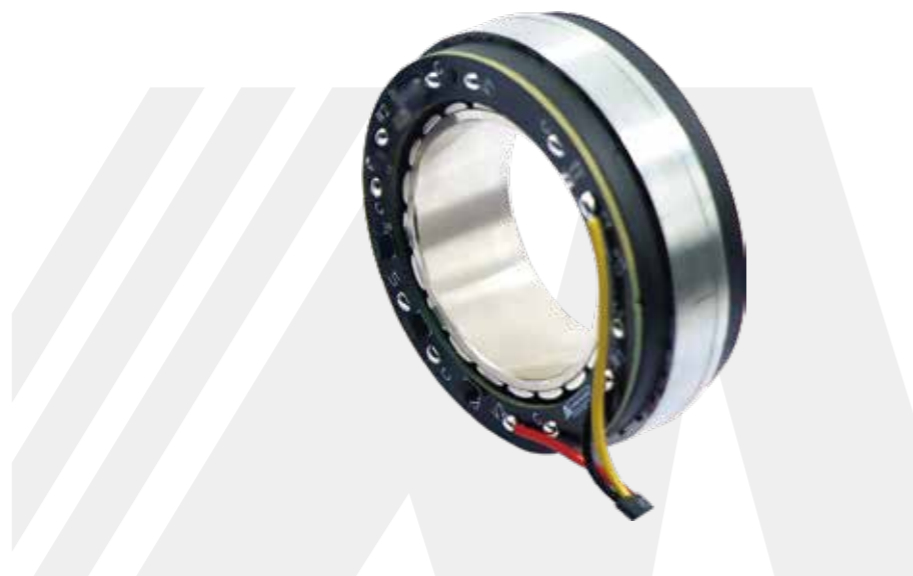
尺寸安装图 Installation Drawing



产品参数 Product Parameters

参数 Parameters	单位 Unit	FL-70-10
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	3500
空载电流 No Load Current	A	0.42
额定转速 Rated Speed	RPM	2800
额定转矩 Rated Torque	N.m	0.55
额定功率 Rated Power	W	201
额定电流 Rated Current	A	4.6
峰值扭矩 Peak Torque	N.m	1.65
峰值电流 Peak Current	A	13.8
效率 Efficiency	%	>82%
反电势常数 Back-EMF Constant)	Vdc/Krpm	8.34
扭矩常数 Torque Constant	N.m/A	0.12
线电阻 Phase to Phase Resistance	Ω	0.42
线电感 Phase to Phase Inductance	mH	0.51
极对数 Pole Pair	—	10
齿槽转矩 Cogging Torque	mN.m	—
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Payload	N	—
径向负载 Radial Payload	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.24
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—

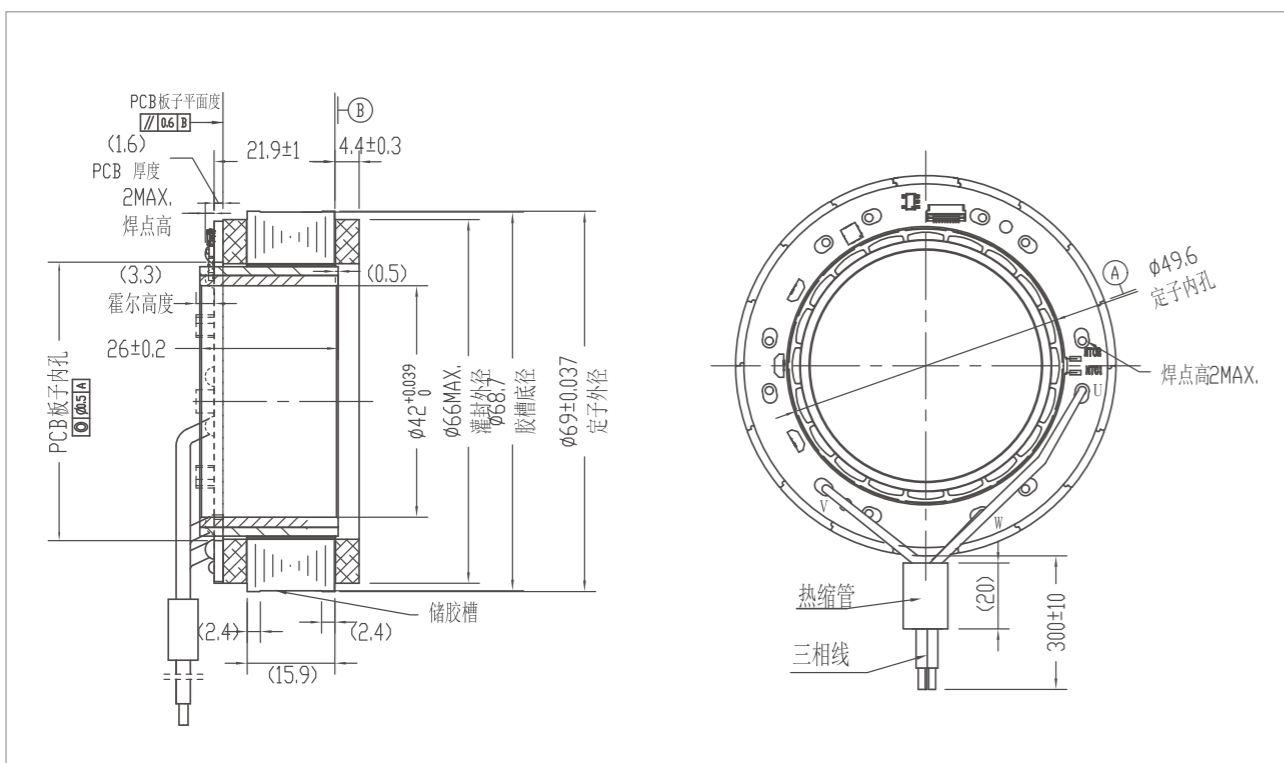
系列名 Series Name
RMD-FL
电机简称 Motor Simplified Name
FL-70-16



单编码器 Single Encoder

型号 Actuator Full Name	货品编码 Product Code
RMD-FL-70-16-360	1106060000000000

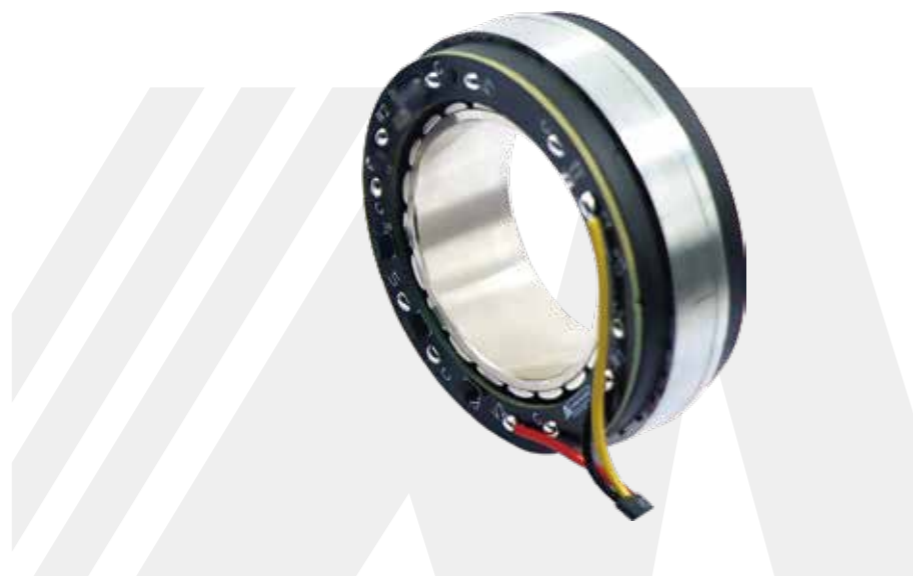
尺寸安装图 Installation Drawing



产品参数 Product Parameters

参数 Parameters	单位 Unit	FL-70-16
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	3000
空载电流 No Load Current	A	0.41
额定转速 Rated Speed	RPM	2400
额定转矩 Rated Torque	N.m	1.3
额定功率 Rated Power	W	408
额定电流 Rated Current	A	9.2
峰值扭矩 Peak Torque	N.m	2.6
峰值电流 Peak Current	A	27.6
效率 Efficiency	%	>83%
反电势常数 Back-EMF Constant)	Vdc/Krpm	9.86
扭矩常数 Torque Constant	N.m/A	0.14
线电阻 Phase to Phase Resistance	Ω	0.24
线电感 Phase to Phase Inductance	mH	0.27
极对数 Pole Pair	—	10
齿槽转矩 Cogging Torque	mN.m	—
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Payload	N	—
径向负载 Radial Payload	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.28
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—

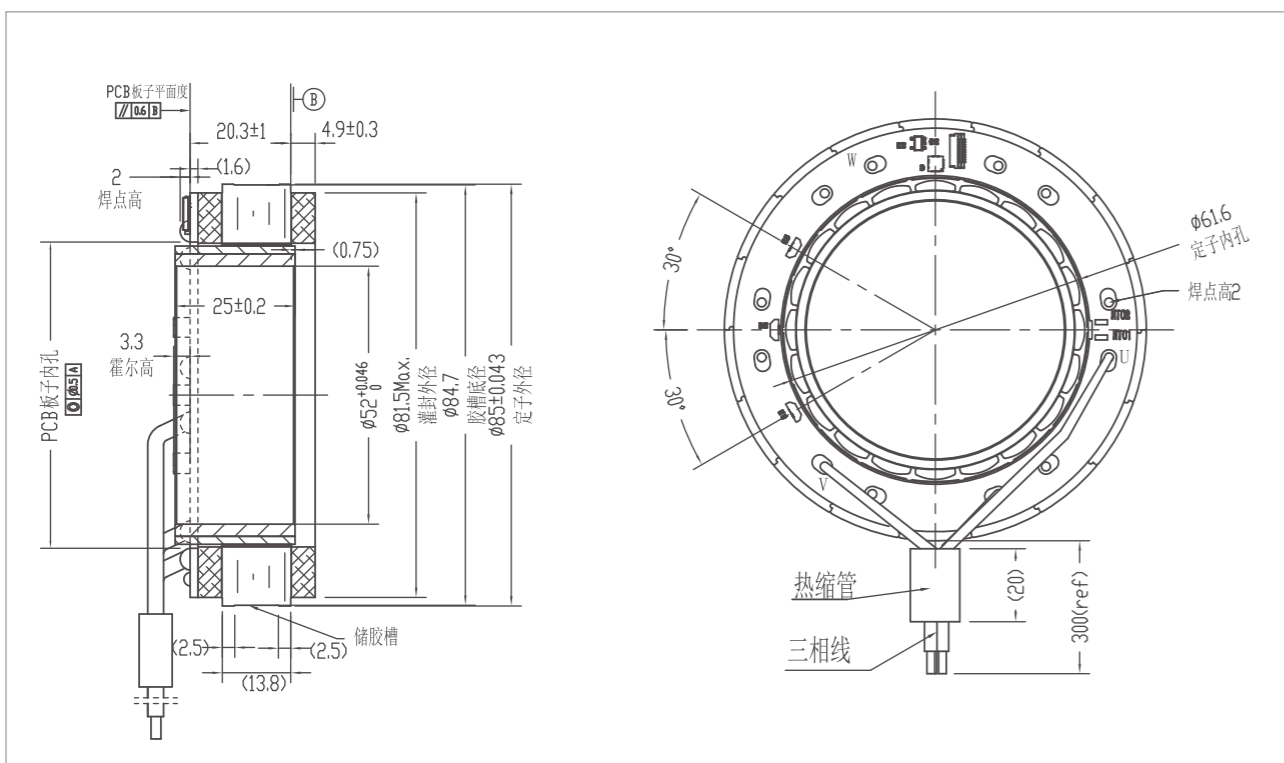
系列名 Series Name
RMD-FL
 电机简称 Motor Simplified Name
FL-85-13



单编码器 Single Encoder

型号 Actuator Full Name	货品编码 Product Code
RMD-FL-85-13-500	1106070000000000

尺寸安装图 Installation Drawing



产品参数 Product Parameters

参数 Parameters	单位 Unit	FL-85-13
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	3000
空载电流 No Load Current	A	0.37
额定转速 Rated Speed	RPM	2400
额定转矩 Rated Torque	N.m	1.3
额定功率 Rated Power	W	408
额定电流 Rated Current	A	9.4
峰值扭矩 Peak Torque	N.m	3.9
峰值电流 Peak Current	A	28.2
效率 Efficiency	%	>82%
反电势常数 Back-EMF Constant)	Vdc/Krpm	9.65
扭矩常数 Torque Constant	N.m/A	0.14
线电阻 Phase to Phase Resistance	Ω	0.19
线电感 Phase to Phase Inductance	mH	0.31
极对数 Pole Pair	—	10
齿槽转矩 Cogging Torque	mN.m	—
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Payload	N	—
径向负载 Radial Payload	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.44
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—

RMD-FLO系列产品命名规则 RMD-FLO SERIES NAMING CONVENTIONS

RMD-FLO-70-15-200



- ① 品牌名称: RMD (Reducer Motor Drive)
Brand Name R-Reducer M-Motor D-Drive
- ② FLO代表系列名: 外转子无框力矩电机模组
FLO Stands For The Series Name: Outer rotor frameless torque motor Actuator
- ③ 转子外径70
Rotor outer diameter
- ④ 定子叠高15
Stator stack height
- ⑤ 额定功率 200W
Rated power 200W

例如 For example

型号 RMD-FLO-90-15-400

说明

- RMD: 品牌名
- FLO: 外转无框力矩系列
- 90: 转子外径
- 15: 定子叠高
- 400: 额定功率

Model RMD-FLO-90-15-400

Illustrate

- RMD: Brand Name
- FLO: External Rotating Frameless Torque Series
- 90: Rotor outer diameter
- 15: Stator stack height
- 400: Rated power

外转子无框力矩电机模组
Outer rotor frameless torque motor module

FLO系列-无框电机 Frameless Motor

大直径、大中空、强劲动力

Large Diameter、Big Hollow Shaft、Strong Torque

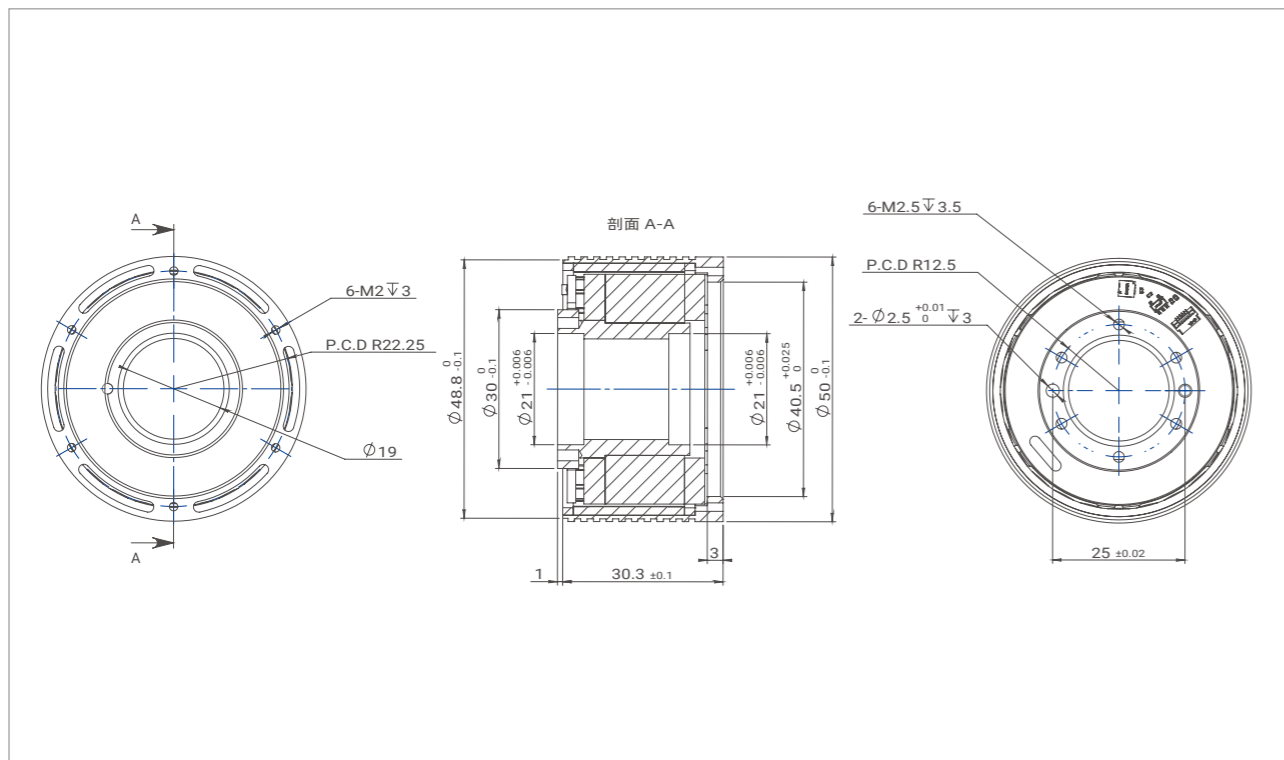


系列名 Series Name
RMD-FLO
 电机简称 Motor Simplified Name
FLO-50-15



型号 Actuator Full Name	货品编码 Product Code
RMD-FLO-50-15-100	1107010000000000

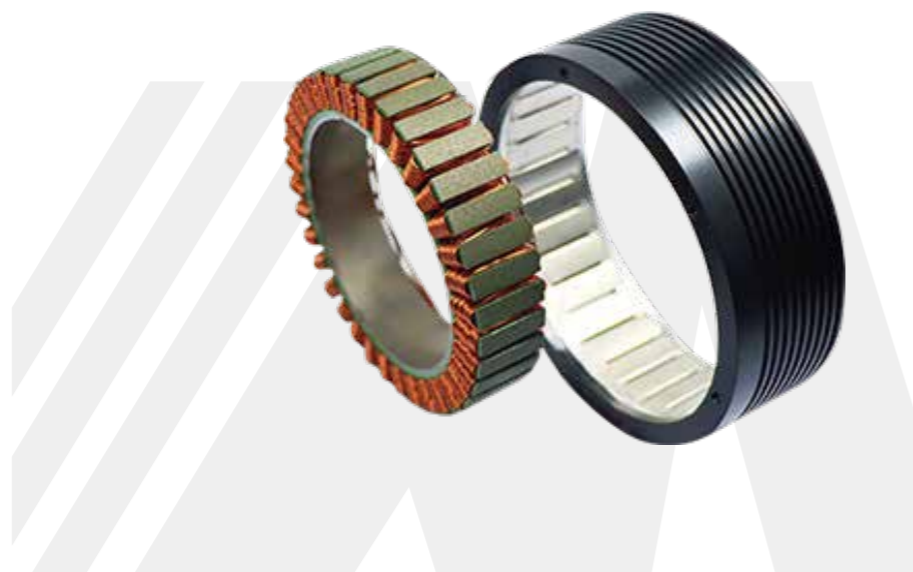
尺寸安装图 Installation Drawing



产品参数 Product Parameters

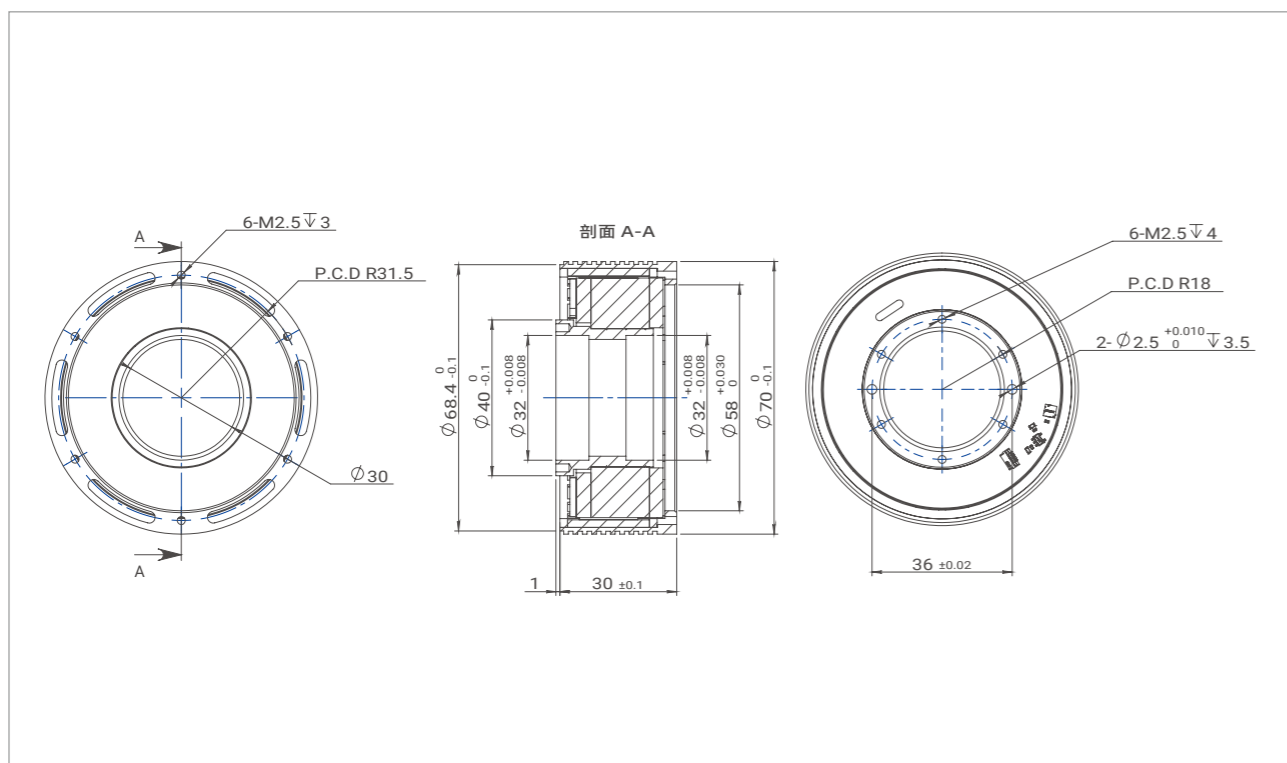
参数 Parameters	单位 Unit	FLO-50-15
输入电压 Input Voltage	V	24
空载转速 No Load Speed	RPM	3000
空载电流 No Load Current	A	0.32
额定转速 Rated Speed	RPM	2500
额定转矩 Rated Torque	N.m	0.35
额定功率 Rated Power	W	91.6
额定电流 Rated Current	A	4.9
峰值扭矩 Peak Torque	N.m	0.87
峰值电流 Peak Current	A	14.7
效率 Efficiency	%	>83%
反电势常数 Back-EMF Constant)	Vdc/Krpm	7.93
扭矩常数 Torque Constant	N.m/A	0.07
线电阻 Phase to Phase Resistance	Ω	0.4
线电感 Phase to Phase Inductance	mH	0.19
极对数 Pole Pair	—	13
齿槽转矩 Cogging Torque	mN.m	12
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Payload	N	—
径向负载 Radial Payload	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.19
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—

系列名 Series Name
RMD-FLO
 电机简称 Motor Simplified Name
FLO-70-15



型号 Actuator Full Name	货品编码 Product Code
RMD-FLO-70-15-200	1107020000000000

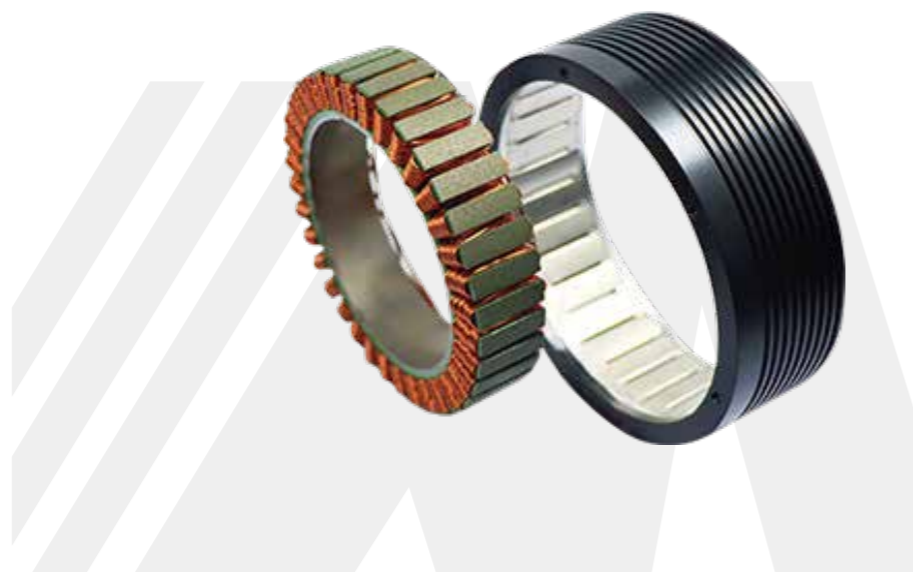
尺寸安装图 Installation Drawing



产品参数 Product Parameters

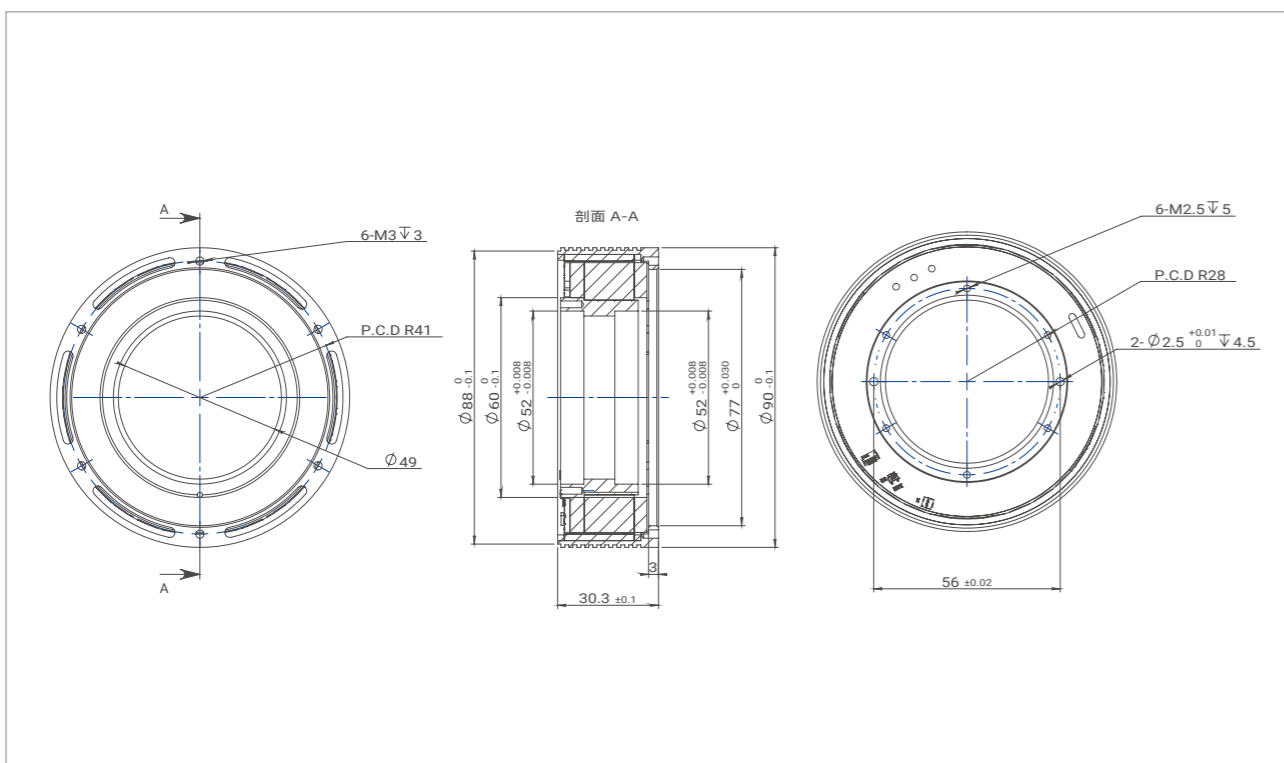
参数 Parameters	单位 Unit	FLO-70-15
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	2800
空载电流 No Load Current	A	0.21
额定转速 Rated Speed	RPM	2400
额定转矩 Rated Torque	N.m	0.8
额定功率 Rated Power	W	200
额定电流 Rated Current	A	4.4
峰值扭矩 Peak Torque	N.m	2
峰值电流 Peak Current	A	13.2
效率 Efficiency	%	>84%
反电势常数 Back-EMF Constant)	Vdc/Krpm	17
扭矩常数 Torque Constant	N.m/A	0.18
线电阻 Phase to Phase Resistance	Ω	0.5
线电感 Phase to Phase Inductance	mH	0.55
极对数 Pole Pair	—	13
齿槽转矩 Cogging Torque	mN.m	30.83
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Paylaod	N	—
径向负载 Radial Paylaod	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.33
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—

系列名 Series Name
RMD-FLO
 电机简称 Motor Simplified Name
FLO-90-15



型号 Actuator Full Name	货品编码 Product Code
RMD-FLO-90-15-400	1107030000000000

尺寸安装图 Installation Drawing



产品参数 Product Parameters

参数 Parameters	单位 Unit	FLO-90-15
输入电压 Input Voltage	V	48
空载转速 No Load Speed	RPM	2250
空载电流 No Load Current	A	0.35
额定转速 Rated Speed	RPM	1600
额定转矩 Rated Torque	N.m	1.5
额定功率 Rated Power	W	252
额定电流 Rated Current	A	6.6
峰值扭矩 Peak Torque	N.m	3.75
峰值电流 Peak Current	A	19.8
效率 Efficiency	%	>83%
反电势常数 Back-EMF Constant)	Vdc/Krpm	21.1
扭矩常数 Torque Constant	N.m/A	0.23
线电阻 Phase to Phase Resistance	Ω	0.35
线电感 Phase to Phase Inductance	mH	0.28
极对数 Pole Pair	—	17
齿槽转矩 Cogging Torque	mN.m	64
接线方式 3 Phase Connection	—	Y
反驱力矩 Anti-Force Torque	N.m	—
背隙 Backlash	Arcsec/ Arcmin	—
轴向负载 Axial Payload	N	—
径向负载 Radial Payload	N	—
转动惯量 Inertia	Kg.cm ²	—
编码器类型及接口 Encoder Type&Interface	—	Hall+INC
重复定位精度 Repeat Position Accuracy	Degree	—
通信方式 Communication	—	—
重量 Weight	kg	0.46
绝缘等级 insulation grade	—	F
防护等级 level of protection	—	—



全球代理 Global Distributor

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