



# INTEGRATED JOINT MODULE



Zhongda Leader Realizes Infinite Possibility In Automation Application

# Motor Drivers Micro Motors Precision Reducers



**Headquarters** Ningbo Zhongda Leader Intelligent Transmission Co., Ltd.



**Subsidiary**  
Ningbo Zhongda Chuangyuan Precision Equipment Co., Ltd.



**Subsidiary**  
Foshan Zhongda Leader Drive Technology Co., Ltd.

Source Engineering, established in 1998 has been assisting OEM customers with their motion control needs for over 25 years. Our complete product line of motors, gearmotors, precision gearheads, standard and custom gives us the flexibility to provide a solution for a wide variety of industries and applications. Engineering, sales, technical support, and a stocking warehouse are located at our company headquarters in Ca.

Our Global manufacturing partner Ningbo Zhongda Leader Intelligent Transmission Co., Ltd has 9 branches and subsidiaries with 1800 employees. With their assistance, we can offer high-quality cost-effective products, R&D, special designs, and additional technical support to all our customers nationwide and overseas.

# NAMING RULES

ZDXX - XX - BXX - Z1/1/2

—  
Diameter

—  
Core height ratio

—  
Reductin ratio

—  
Brake and encoder

Take ZD155-25-B18-Z1/2 as an example :

ZD155 motor type

25 Core height

B18 Ratio

Z Brake , 1 Single channel encoder , 2 Dual channel encod

## Product Features

High peak torque

Big torque density

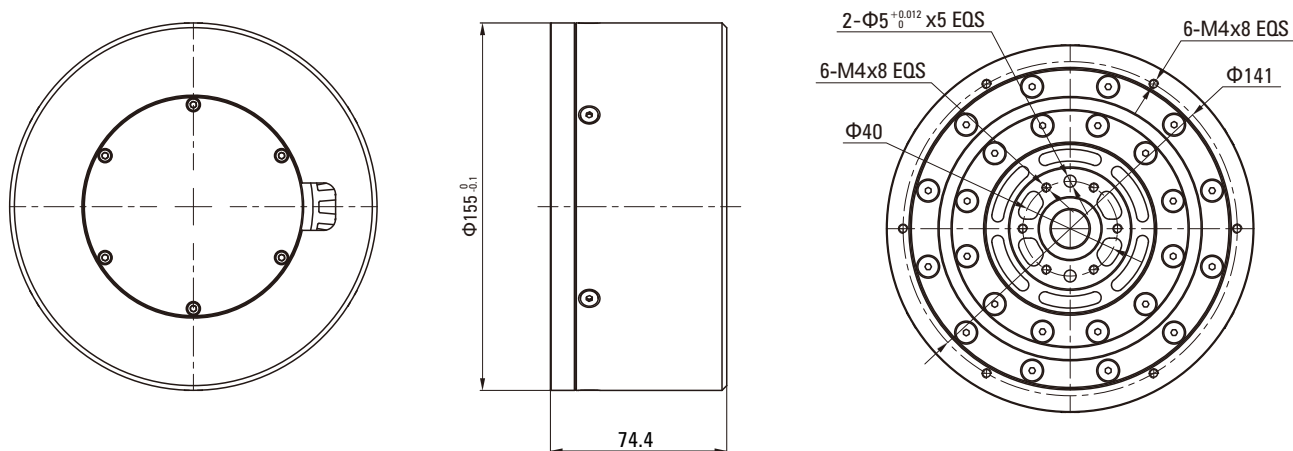
High torque transparency

High torque transparency



# ZD155 INTEGRATED JOINT SERIES

## ZD155-25-B18-1/2 Outline Dimension Diagram

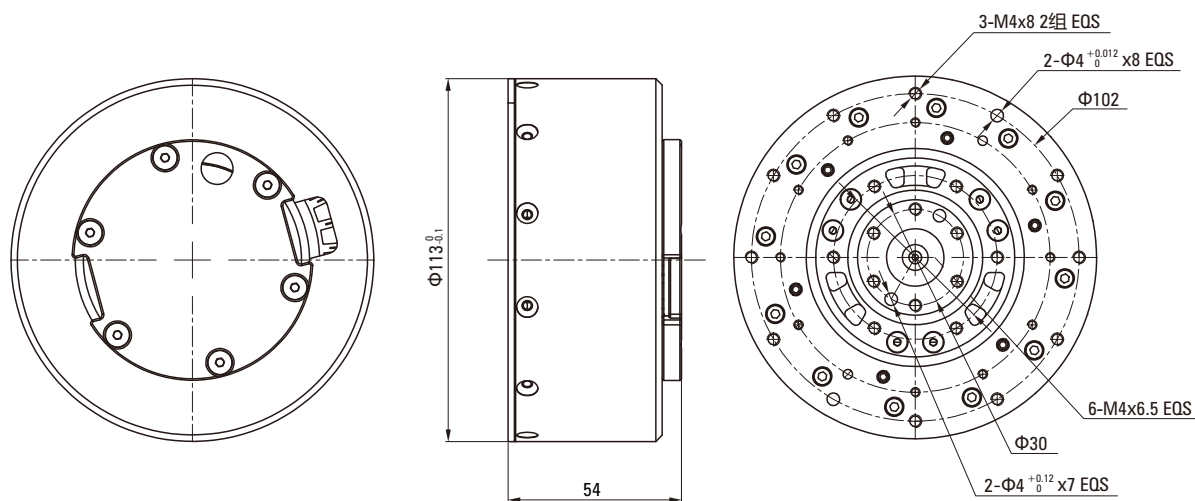


## Joint Parameters

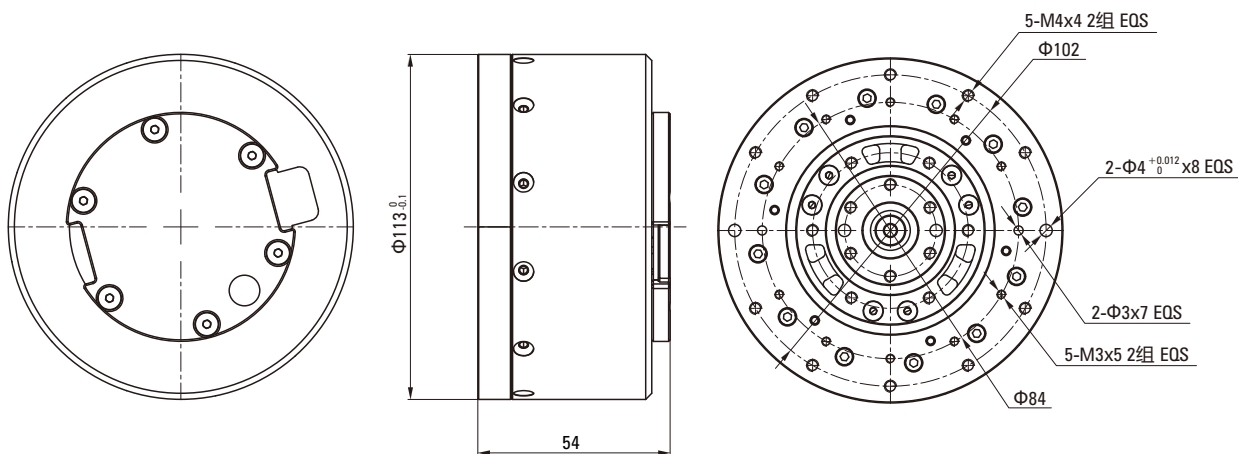
Item	ZD155-25-B18-1
Sizes	Φ155mm*74.4mm
Rated Voltage	60V
Peak Rotational Speed	100rpm
Rated Torque	160N.m
Rated Speed	70rpm
Rated Line Current	25A
20s Peak Torque	320N.m
20s Peak Line Current	60A
Line Resistance	0.31Ω
Wire Inductance	0.82mH
Back EMF Coefficient	57.5V/krpm
Torque Constant	6.4N.m/Arms
Velocity Constant	30rpm/V
Encoder Resolution	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA
Weight	2770g±20g
Pole	42
Torque Density	115Nm/Kg
Reduction Ratio	18:1

# ZD113 INTEGRATED JOINT SERIES

■ ZD113-20-B10-1/2 Outline Dimension Diagram



■ ZD113-20-B18-1/2 Outline Dimension Diagram

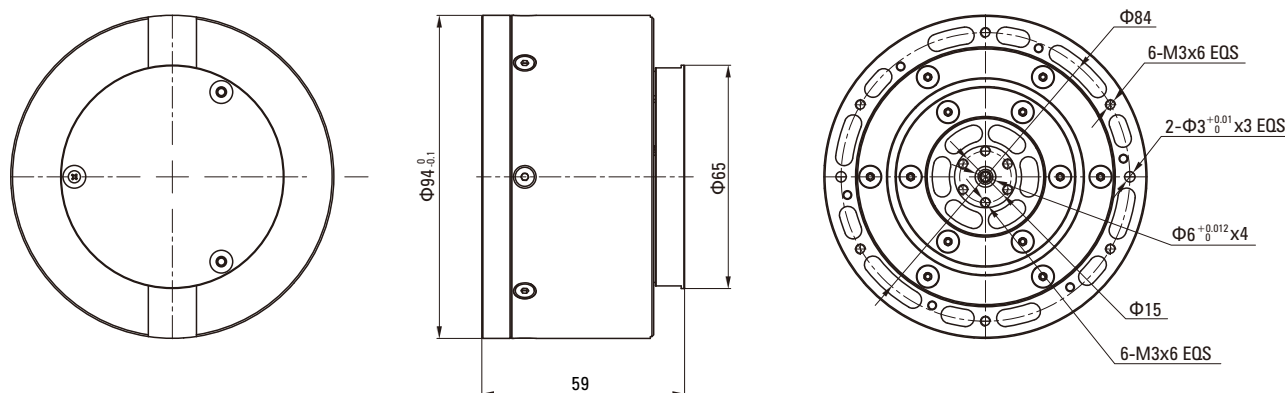


## Joint Parameters

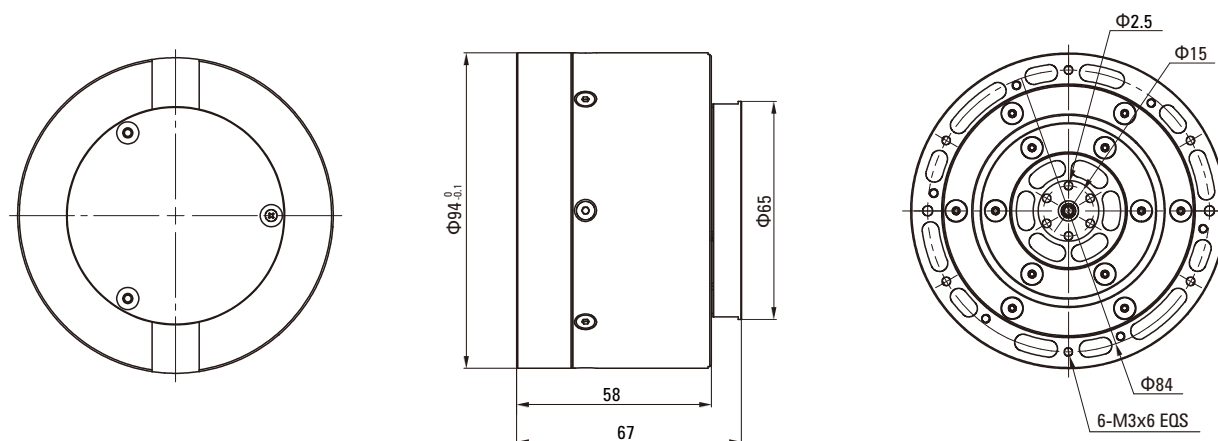
Item	ZD113-20-B10-1	ZD113-20-B18-1
Sizes	Φ113mm*54mm	Φ113mm*63mm
Rated Voltage	60V	60V
Peak Rotational Speed	330rpm	185rpm
Rated Torque	32N.m	57.6N.m
Rated Speed	120rpm	75rpm
Rated Line Current	17A	17A
20s Peak Torque	96N.m	175N.m
20s Peak Line Current	50.75A	50.75A
Line Resistance	0.074Ω	0.074Ω
Wire Inductance	0.078mH	0.078mH
Back EMF Coefficient	17.47V/krpm	17.47V/krpm
Torque Constant	1.9N.m/Arms	3N.m/Arms
Velocity Constant	55rpm/V	55rpm/V
Encoder Resolution	Motor side 18bit	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA	500VAC, 5s, 5mA
Weight	1300g±20g	1540g±20g
Pole	42	42
Torque Density	73Nm/Kg	112Nm/Kg
Reduction Ratio	10:1	18:1

# ZD94 INTEGRATED JOINT SERIES

■ ZD94-18-B10-1/2 Outline Dimension Diagram



■ ZD94-18-B18-1/2 Outline Dimension Diagram

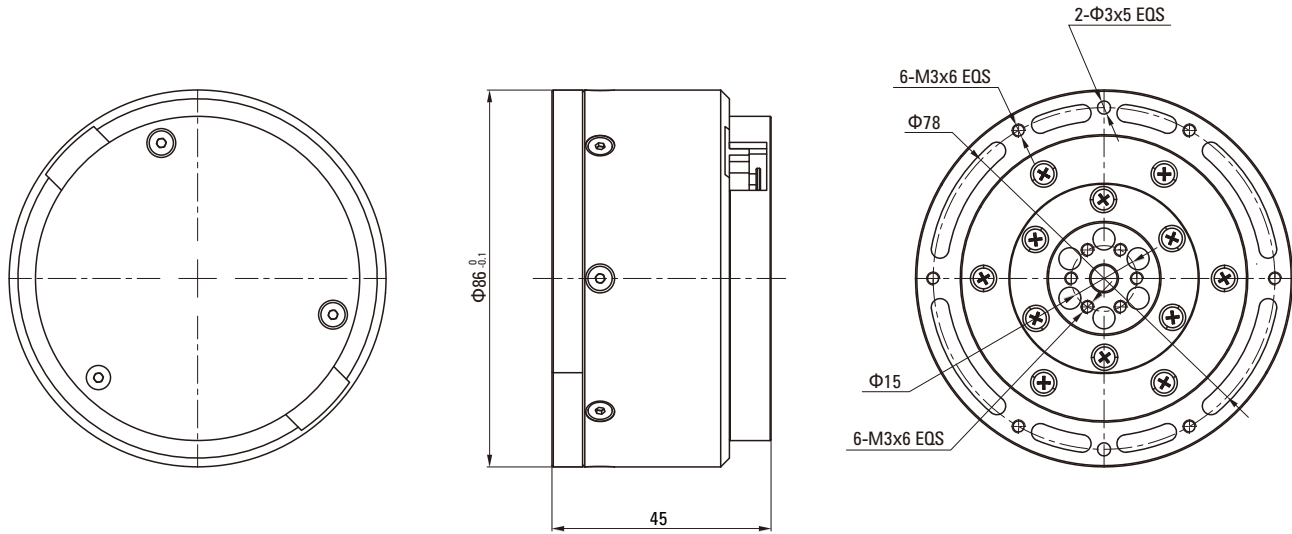


## Joint Parameters

Item	ZD94-18-B10-1	ZD94-18-B18-1
Sizes	Φ94mm*59mm	Φ94mm*67mm
Rated Voltage	60V (24V~60V)	60V (24V~60V)
Peak Rotational Speed	400rpm	280rpm
Rated Torque	20N.m	35N.m
Rated Speed	120rpm	70rpm
Rated Line Current	19A	19A
20s Peak Torque	60N.m	108N.m
20s Peak Line Current	62A	62A
Line Resistance	0.053Ω	0.053Ω
Wire Inductance	0.0435mH	0.0435mH
Back EMF Coefficient	9.4V/krpm	9.4V/krpm
Torque Constant	1.05N.m/Arms	1.89N.m/Arms
Velocity Constant	67rpm/V	67rpm/V
Encoder Resolution	Motor side 18bit	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA	500VAC, 5s, 5mA
Weight	1000g±20g	1300g±20g
Pole	42	42
Torque Density	60Nm/Kg	83Nm/Kg
Reduction Ratio	10:1	18:1

# ZD86 INTEGRATED JOINT SERIES

## ZD86-10-B10-1/2 Outline Dimension Diagram

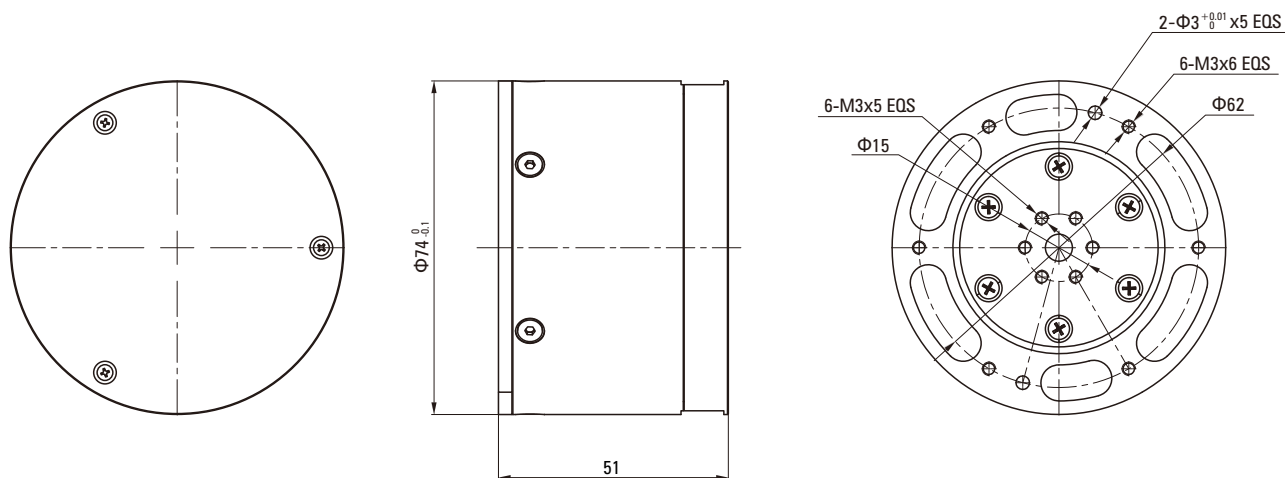


## Joint Parameters

Item	ZD86-10-B10-1	ZD86-10-B36-1
Sizes	Φ86mm*45mm	Φ86mm*44.5mm
Rated Voltage	60V (24V~60V)	60V (24V~60V)
Peak Rotational Speed	500rpm	200rpm
Rated Torque	8.5N.m	30.5N.m
Rated Speed	200rpm	55rpm
Rated Line Current	21A	21A
20s Peak Torque	25.5N.m	92N.m
20s Peak Line Current	63A	63A
Line Resistance	0.059Ω	0.059Ω
Wire Inductance	0.032mH	0.032mH
Back EMF Coefficient	6.16V/krpm	6.16V/krpm
Torque Constant	0.40N.m/Arms	1.45N.m/Arms
Velocity Constant	83rpm/V	83rpm/V
Encoder Resolution	Motor side 18bit	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA	500VAC, 5s, 5mA
Weight	800g±20g	1000g±20g
Pole	42	42
Torque Density	32Nm/Kg	92Nm/Kg
Reduction Ratio	10:1	36:1

# ZD74 INTEGRATED JOINT SERIES

## ZD74-13-B10-1/2 Outline Dimension Diagram

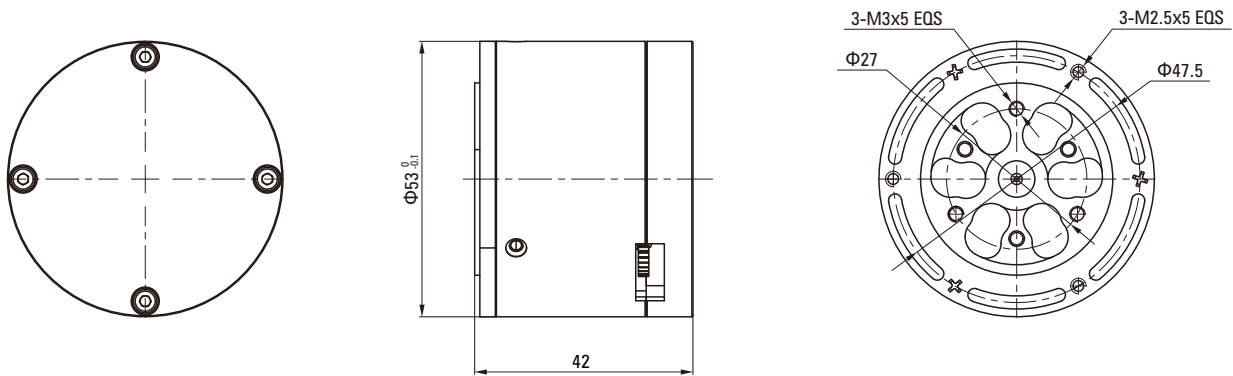


## Joint Parameters

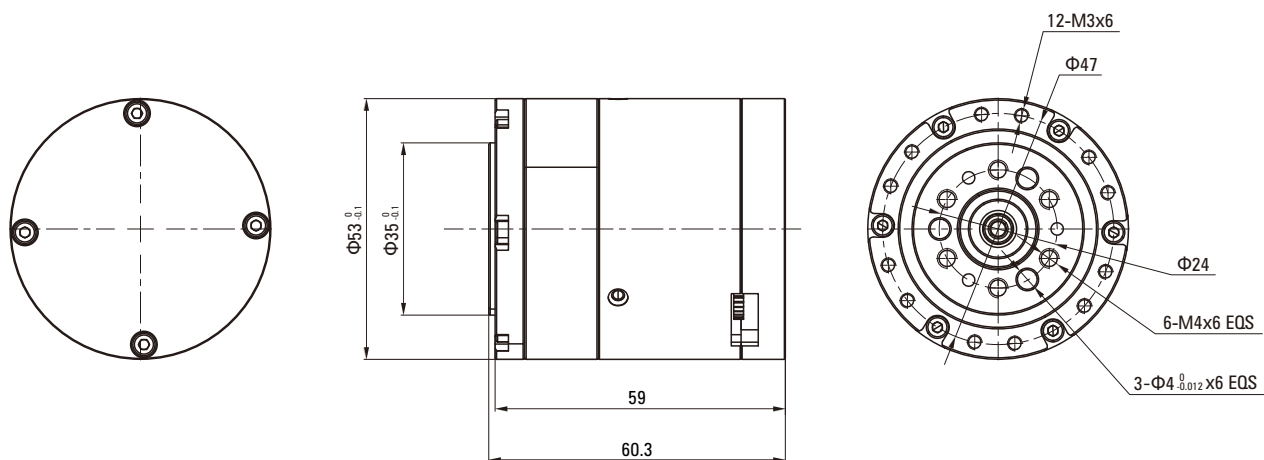
Item	ZD74-13-B10-1	ZD74-13-B36-1
Sizes	Φ74mm*51mm	Φ74mm*78mm
Rated Voltage	48V	48V
Peak Rotational Speed	400rpm	100rpm
Rated Torque	7.5N.m	23N.m
Rated Speed	180rpm	50rpm
Rated Line Current	7.57A	7.57A
20s Peak Torque	21.5N.m	65N.m
20s Peak Line Current	22.5A	22.5A
Line Resistance	0.27Ω	0.27Ω
Wire Inductance	0.34mH	0.34mH
Back EMF Coefficient	7.27V/krpm	7.27V/krpm
Torque Constant	1N.m/Arms	3N.m/Arms
Velocity Constant	83rpm/V	83rpm/V
Encoder Resolution	Motor side 18bit	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA	500VAC, 5s, 5mA
Weight	650g±20g	900g±20g
Pole	28	28
Torque Density	33Nm/Kg	72Nm/Kg
Reduction Ratio	10:1	36:1

# ZD53 INTEGRATED JOINT SERIES

■ ZD53-10-B10-1/2 Outline Dimension Diagram



■ ZD53-18-B36-1/2 Outline Dimension Diagram

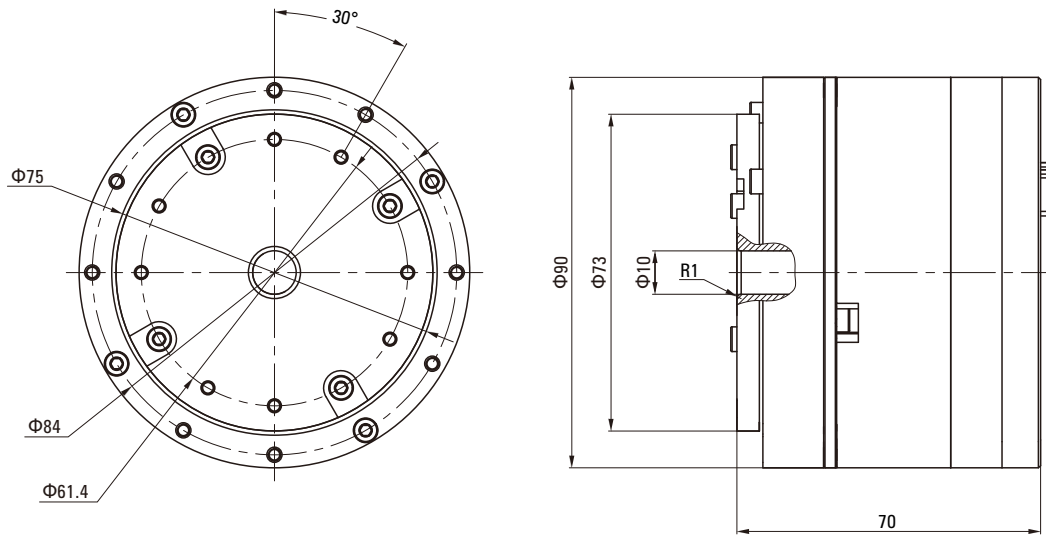


## Joint Parameters

Item	ZD53-10-B10-1	ZD53-10-B36-1
Sizes	Φ53mm*42mm	Φ53mm*60.3mm
Rated Voltage	24V	24V
Peak Rotational Speed	170rpm	45rpm
Rated Torque	4N.m	12N.m
Rated Speed	70rpm	20rpm
Rated Line Current	2.85A	2.85A
20s Peak Torque	11.5N.m	35N.m
20s Peak Line Current	8.55A	8.55A
Line Resistance	1.799Ω	1.799Ω
Wire Inductance	0.951mH	0.951mH
Back EMF Coefficient	7.24V/krpm	7.24V/krpm
Torque Constant	1.4N.m/Arms	4.2N.m/Arms
Velocity Constant	71rpm/V	71rpm/V
Encoder Resolution	Motor side 18bit	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA	500VAC, 5s, 5mA
Weight	240g±20g	433g±20g
Pole	28	28
Torque Density	48Nm/Kg	80Nm/Kg
Reduction Ratio	10:1	36:1

# ZD90 INTEGRATED JOINT SERIES

## ZD90-13-B10-1/2 Outline Dimension Diagram

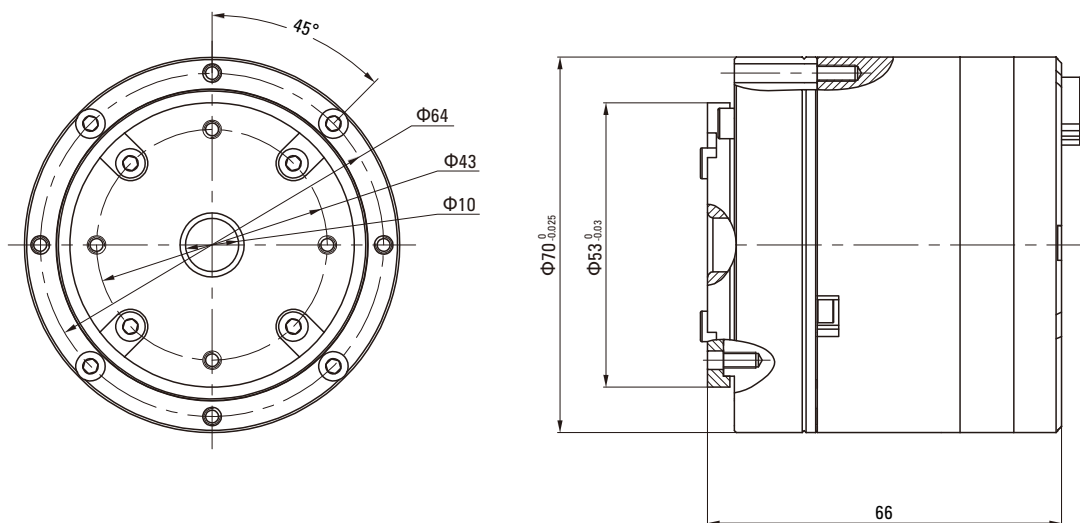


## Joint Parameters

Item	ZD90-13-B100-2
Sizes	Φ90mm*70mm
Rated Voltage	60V
Peak Rotational Speed	60rpm
Rated Torque	104N.m
Rated Speed	30rpm
Rated Line Current	17.5A
20s Peak Torque	208N.m
20s Peak Line Current	33.05A
Line Resistance	0.111Ω
Wire Inductance	138.71mH
Back EMF Coefficient	6.34V/krpm
Torque Constant	0.06N.m/Arms
Velocity Constant	100rpm/V
Encoder Resolution	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA
Weight	925g±20g
Pole	14
Torque Density	224Nm/Kg
Reduction Ratio	10:1

# ZD70 INTEGRATED JOINT SERIES

## ZD70-16-B50-1/2 Outline Dimension Diagram



## Joint Parameters

Item	ZD70-16-B50-2
Sizes	Φ70mm*66mm
Rated Voltage	60V
Peak Rotational Speed	72rpm
Rated Torque	25N.m
Rated Speed	50rpm
Rated Line Current	3.7A
20s Peak Torque	50N.m
20s Peak Line Current	7.78A
Line Resistance	1.54Ω
Wire Inductance	1690.95mH
Back EMF Coefficient	7.457V/krpm
Torque Constant	0.13N.m/Arms
Velocity Constant	60rpm/V
Encoder Resolution	Motor side 18bit
Insulation Resistance/Stator Winding	500VDC, 10MΩ
High Voltage Resistance/Stator and Casing	500VAC, 5s, 5mA
Weight	720g±20g
Pole	7
Torque Density	70Nm/Kg
Reduction Ratio	50:1

# CATALOGUE



PRECISION HARMONIC REDUCER



CYCLOIDAL PIN WHEEL  
PRECISION REDUCER



TRANSMISSION PLANETARY  
GEAR MOTOR



SERVO DRIVER  
BRUSHLESS DRIVER  
INDUSTRIAL VEHICLE DRIVER  
AC SPEED CONTROLLER



DC BRUSHLESS GEAR MOTOR



MOTOR ROLLER





# INTEGRATED JOINT MODULE CATALOGUE

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