



Company Profile

Fashion Star Technology Limited is located in Guangming District's China Merchants Technology Park, Guangming District, Shenzhen, 2 km from Shenzhen Guangming High-speed Railway Station. Metro Lines 13 and 6 pass through the park. With a cumulative investment of over RMB 50 million, the company is a high-tech enterprise specializing in the R&D and production of bus servo motors. It also provides systematic solutions for industrial applications such as artificial intelligence, robotics, automation, UAVs, medical care, and education.

- Council member of Shenzhen Robotics Association and member of Guangdong Robotics Association
- Team members come from The Hong Kong University of Science and Technology, Zhejiang University, University of Electronic Science and Technology of China, Xidian University, etc.
- Bus servo motor series products support UART, RS485, CAN bus and other communication protocols
- Open-source ROS2 / LeRobot robotic arm series, with multiple appearances at maker exhibitions in the Greater Bay Area and events such as Adventure X Hackathon
- Equipped with bipedal intelligent robots, OpenMV vision platform, force-control grippers, etc., and has obtained multiple national invention patents and independent intellectual property rights
- Supported by a complete quality management system; the company has passed ISO 9001 certification, achieving full-chain quality control from R&D and production to service
- Has carried out multiple teaching, research and competition collaborations with well-known universities in China, including Zhejiang University and Sun Yat-sen University

Patents and Honors



ISO9001:2015



双足人形机器人外观专利



机械爪外观专利



机械手臂外观专利



格斗机器人优秀产品奖



智能扎带机专利



扎带拉紧装置专利



一体化动力总成扎带机专利



扎带切断机构专利



伺服舵机优秀产品奖

Partners



Product Category

UART

UART Bus Servo Motors



- Bus networking with multi-turn control; position, speed and torque modes with real-time parameter readback
- All-metal gear train for high torque output; 360° programmable control for heavy-duty applications
- Ideal for robotic arms, DIY builds, STEM education and open-source hardware projects

RS-485

RS-485 Bus Servo Motors



- RS-485 differential communication with industrial-grade noise immunity in electrically noisy environments
- Scales to large synchronized multi-servo networks; waterproof industrial housing for long service life
- Suited to large legged platforms, automation equipment and outdoor large-scale robotics

PWM

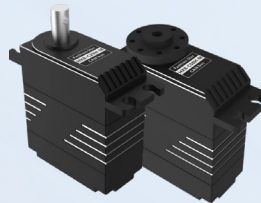
PWM Digital Servos



- Classic PWM drive protocol, compatible with standard RC receivers and mainstream controllers — plug and play, exceptional value
- Full line-up from micro low-torque to high-torque wide-voltage versions
- Ideal for RC cars, boats and aircraft, basic electronics and small creative builds

CAN bus

CAN Bus Servo Drives



- High-speed real-time CAN bus communication for distributed multi-node systems, with strong scalability
- Real-time status feedback, power-loss protection, high load capacity and industrial-grade reliability
- Built for smart chassis, AGV/AMR, high-end humanoid robots and precision equipment development

Robot Arms

Multi-DOF Robot Arms



- Bus-servo-driven coordinated multi-joint control for precise positioning and complex automation, with flexible configuration
- For AI education, scientific research, automation demonstrations and intelligent machine development

Humanoid Robots

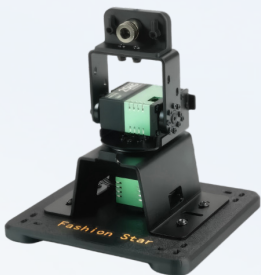
Multi-DOF Humanoid Robots



- Flexible actuation built on bus servos, supporting motion programming, gait control and adaptive posture adjustment
- For robot competitions, robotics education, research experiments and humanoid algorithm development

Pan-Tilt

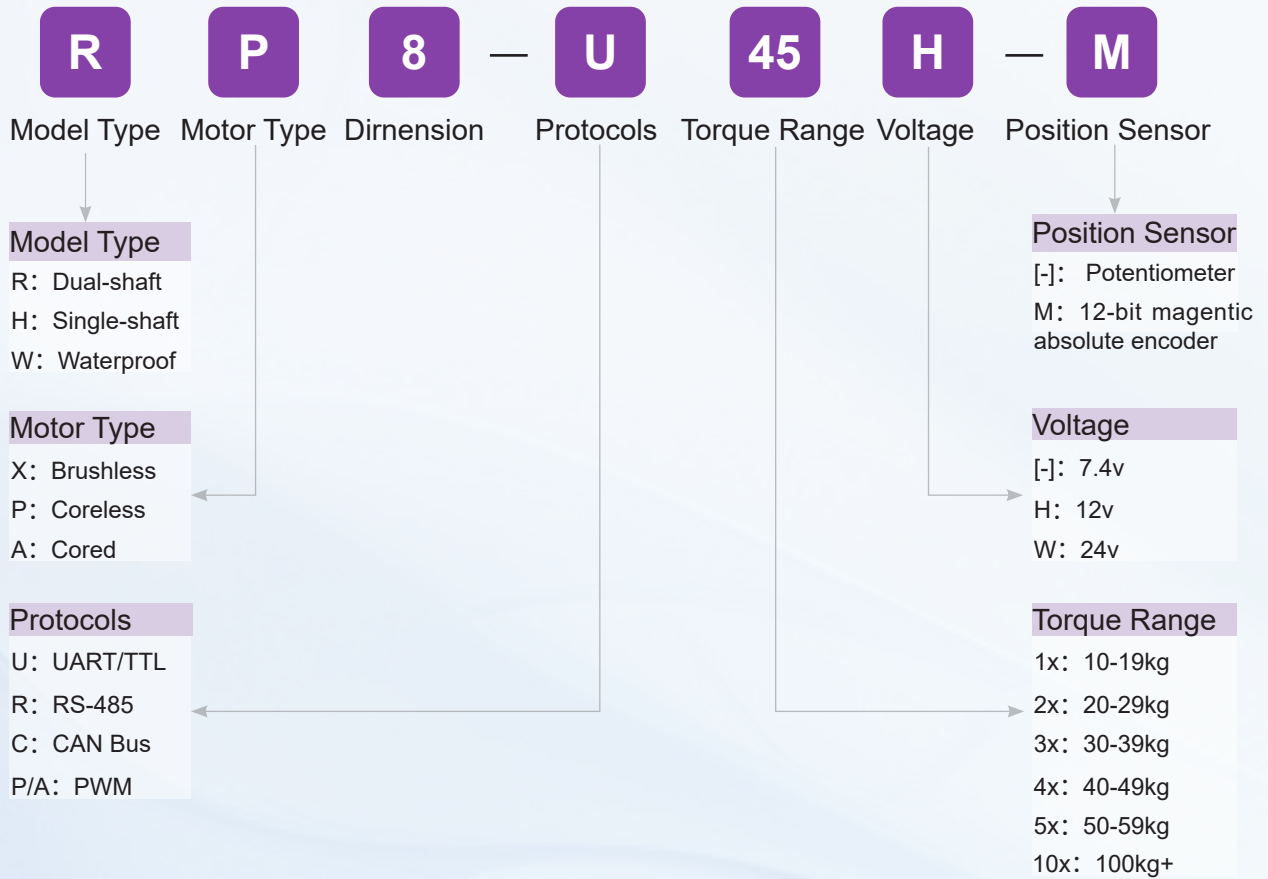
Image-Stabilized Pan-Tilt



- 25-45 kg-cm high torque; PWM / UART protocols; 4.8-8.4 V wide input range
- Low-power anti-vibration design with 360° rotation — smooth and responsive
- For camera gimbals, in-vehicle stabilization and live-streaming tracking



Model Naming Rules



Bus Servo RX6-U12H-M



UART

Brushless

12 kg

All-Metal Housing



RX6-U12H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp. , voltage, stall, power, and current protection with smart power limiting.

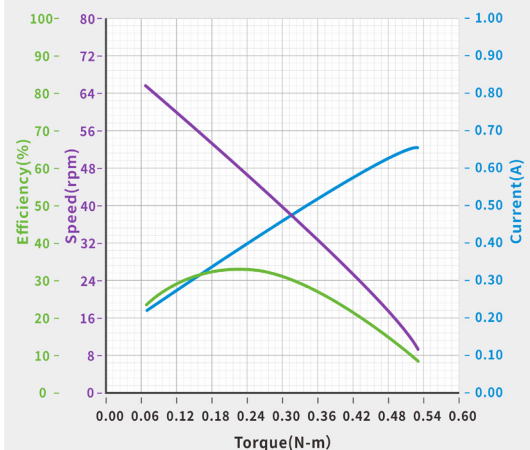
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	272:1
Output Shaft Spec	Ø10 Servo Horn
Connector Type	A2007-3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	33.5 × 21 × 23.4 mm 35 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	1.18 N·m (12 kg·cm)
Max Dynamic Torque	0.55 N·m (5.6 kg·cm)
Rated Torque	0.17 N·m (1.73 kg·cm)
No-load Speed	80 rpm (0.116 sec / 60°)
Rated Speed	64 rpm
Peak Current	< 1 A
No-load Current	< 130 mA
Standby Current	< 40 mA

Performance Graph



Bus Servo RP/HP6-U15H-M



UART

Coreless

15 kg

All-Metal Housing



RP6-U15H-M



HP6-U15H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp. , voltage, stall, power, and current protection with smart power limiting.

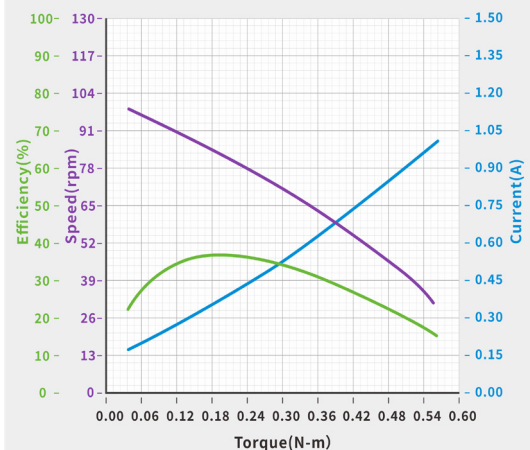
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Coreless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	257:1
Output Shaft Spec	Aluminum
Connector Type	A2007-3Pin
Gear Material	Full-metal gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	31.5 × 21 × 27.6 mm 42 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	1.47 N·m (15 kg·cm)
Max Dynamic Torque	0.59 N·m (6 kg·cm)
Rated Torque	0.18 N·m (1.8 kg·cm)
No-load Speed	100 rpm (0.100 sec / 60°)
Rated Speed	80 rpm (0.125 sec / 60°)
Peak Current	2 A
No-load Current	< 130 mA
Standby Current	< 50 mA

Performance Graph



Bus Servo RA/HA8-U25(H)-M



UART

Brushed

25kg

Full-Metal Gears



RA8-U25(H)-M



HA8-U25(H)-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

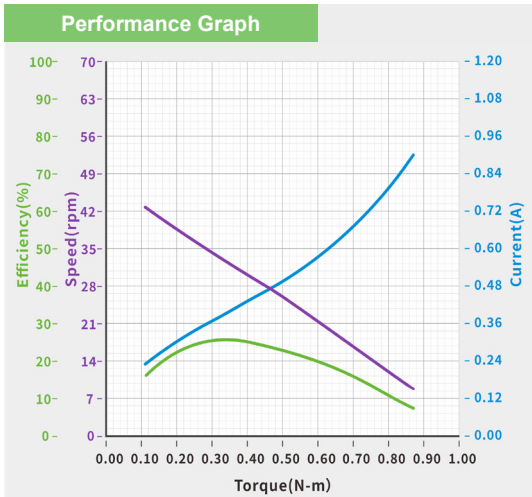
Temp. , voltage, stall, power, and current protection with smart power limiting.

Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	6.0 ~ 8.4 V / 9.0 ~ 12.6 V
Motor Type	Brushed Core Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	2,048 counts 360° (0.176°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	273:1
Output Spline Spec	Copper / Ø6 mm / 25T
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal copper/aluminum gear set
Housing Material	Aluminum alloy center case / engineering plastic upper and lower covers
Dimensions Weight	40 × 20 × 40 mm 63g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	2.45 N·m (25 kg·cm)
Max Dynamic Torque	0.88 N·m (9 kg·cm)
Rated Torque	0.44 N·m (3.4 kg·cm)
No-load Speed	51 rpm (0.198 sec / 60°)
Rated Speed	18 rpm (0.556 sec / 60°)
Peak Current	3 A
No-load Current	<200 mA
Standby Current	<30 mA



Bus Servo RA/HA8-U35(H)-M



UART

Brushed

35kg

Aluminum Alloy Gears



RA8-U35(H)-M



HA8-U35(H)-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp. , voltage, stall, power, and current protection with smart power limiting.

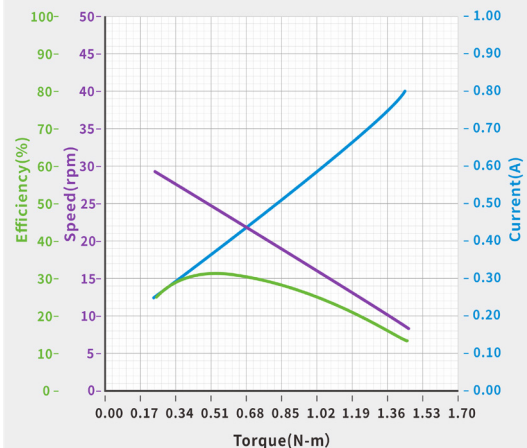
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	6.0 ~ 8.4 V / 9.0 ~ 12.6 V
Motor Type	Brushed Core Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	2,048 counts 360° (0.176°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	378:1
Output Spline Spec	Copper / Ø6 mm / 25T
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal copper/aluminum gear set
Housing Material	Aluminum alloy center case / engineering plastic upper and lower covers
Dimensions Weight	40 × 20 × 40 mm 55g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	3.43 N·m (35 kg·cm)
Max Dynamic Torque	1.27 N·m (13 kg·cm)
Rated Torque	0.54 N·m (5.5 kg·cm)
No-load Speed	34 rpm (0.298 sec / 60°)
Rated Speed	16 rpm (0.625 sec / 60°)
Peak Current	3 A
No-load Current	<200 mA
Standby Current	<30 mA

Performance Graph



Bus Servo RX/HX8-U45H-M



UART

Brushless

45 kg

Stainless Steel Gears



RX8-U45H-M



HX8-U45H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

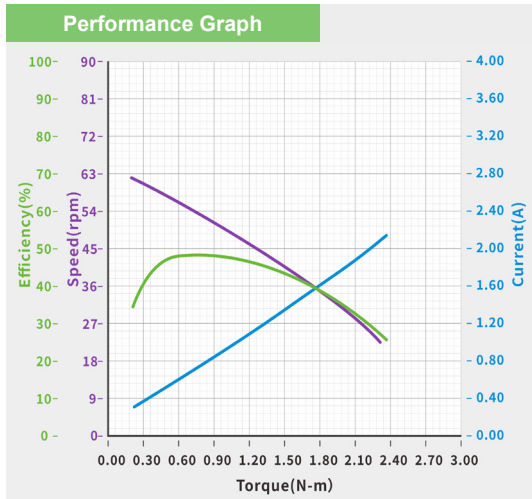
Temp. , voltage, stall, power, and current protection with smart power limiting.

Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	Stainless Steel / Ø6 mm / 25T
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Aluminum alloy center case / engineering plastic upper and lower covers
Dimensions Weight	40 × 20 × 40 mm 78 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	3.92 N·m (40 kg·cm)
Max Dynamic Torque	2.26 N·m (23 kg·cm)
Rated Torque	0.88 N·m (9 kg·cm)
No-load Speed	66 rpm (0.151 sec / 60°)
Rated Speed	52 rpm (0.192 sec / 60°)
Peak Current	5.5 A
No-load Current	<300 mA
Standby Current	<40 mA



Bus Servo RX/HX8-U26H-M



UART

Brushless

26 kg

Stainless Steel Gears



RX8-U26H-M



HX8-U26H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp. , voltage, stall, power, and current protection with smart power limiting.

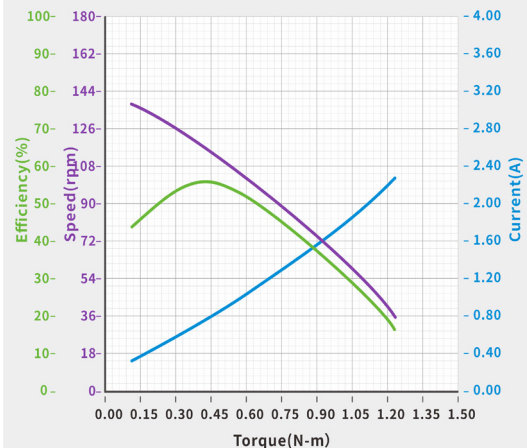
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	173:1
Output Spline Spec	Stainless Steel / Ø6 mm / 25T
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 78g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	2.55 N·m (26 kg·cm)
Max Dynamic Torque	1.18 N·m (12 kg·cm)
Rated Torque	0.44 N·m (4.5 kg·cm)
No-load Speed	142 rpm (0.070 sec / 60°)
Rated Speed	116 rpm (0.086 sec / 60°)
Peak Current	5.5 A
No-load Current	<300 mA
Standby Current	<40 mA

Performance Graph



Bus Servo RX/HX8-U28H-M



UART

Brushless

28 kg

Stainless Steel Gears



RX8-U28H-M



HX8-U28H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

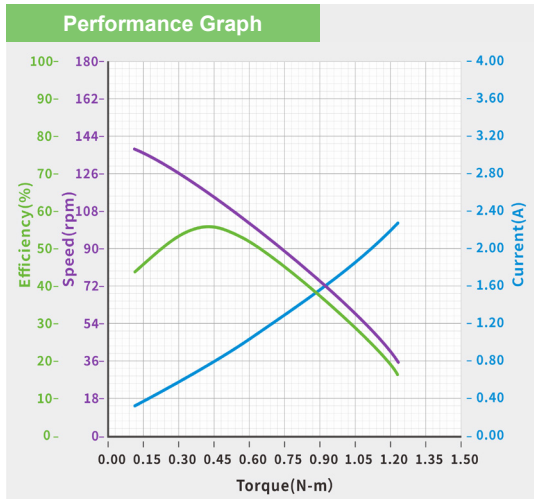
Temp. , voltage, stall, power, and current protection with smart power limiting.

Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	173:1
Output Spline Spec	Stainless Steel / Ø6 mm / 25T
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 86 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	2.74 N·m (28 kg·cm)
Max Dynamic Torque	1.18 N·m (12 kg·cm)
Rated Torque	0.44 N·m (4.5 kg·cm)
No-load Speed	142 rpm (0.070 sec / 60°)
Rated Speed	116 rpm (0.086 sec / 60°)
Peak Current	5.5 A
No-load Current	<300 mA
Standby Current	<40 mA



Bus Servo RX/HX8-U29H-M



UART

Brushless

28 kg

Stainless Steel Gears



RX8-U29H-M



HX8-U29H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp. , voltage, stall, power, and current protection with smart power limiting.

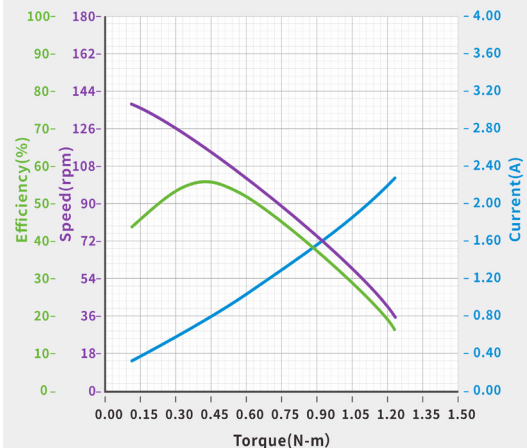
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	173:1
Output Spline Spec	Stainless Steel / Ø6 mm / D-type
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 86g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	2.74 N·m (28 kg·cm)
Max Dynamic Torque	1.18 N·m (12 kg·cm)
Rated Torque	0.44 N·m (4.5 kg·cm)
No-load Speed	142 rpm (0.070 sec / 60°)
Rated Speed	116 rpm (0.086 sec / 60°)
Peak Current	5.5 A
No-load Current	<300 mA
Standby Current	<40 mA

Performance Graph



Bus Servo RX/HX8-U50H-M



UART

Brushless

50 kg

Stainless Steel Gears



RX8-U50H-M



HX8-U50H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

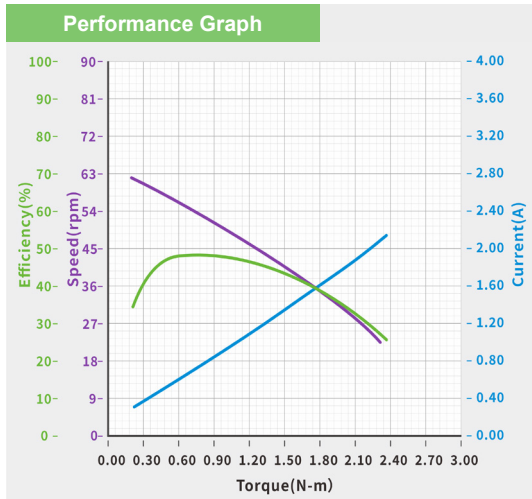
Temp., voltage, stall, power, and current protection with smart power limiting.

Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	Stainless Steel / Ø6 mm / 25T
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Aluminum alloy center case / engineering plastic upper and lower covers
Dimensions Weight	40 × 20 × 40 mm 86 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	4.90 N·m (50 kg·cm)
Max Dynamic Torque	2.26 N·m (23 kg·cm)
Rated Torque	0.88 N·m (9 kg·cm)
No-load Speed	66 rpm (0.151 sec / 60°)
Rated Speed	52 rpm (0.192 sec / 60°)
Peak Current	5.5 A
No-load Current	<300 mA
Standby Current	<40 mA



Bus Servo RX/HX8-U51H-M



UART

Brushless

50 kg

Stainless Steel Gears



RX8-U51H-M



HX8-U51H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp., voltage, stall, power, and current protection with smart power limiting.

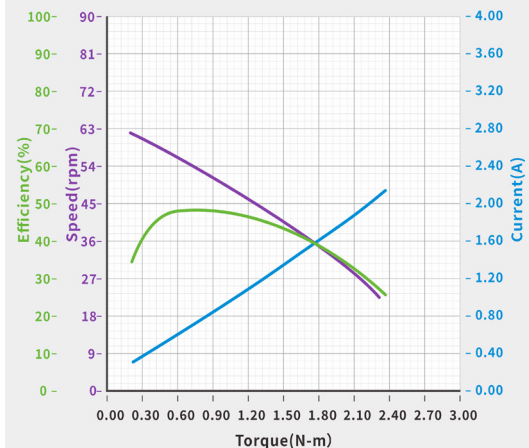
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	Stainless Steel / Ø6 mm / D-type
Connector Type	PH2.0 – 3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 86g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	4.90 N·m (50 kg·cm)
Max Dynamic Torque	2.26 N·m (23 kg·cm)
Rated Torque	0.88 N·m (9 kg·cm)
No-load Speed	66 rpm (0.151 sec / 60°)
Rated Speed	52 rpm (0.192 sec / 60°)
Peak Current	5.5 A
No-load Current	<300 mA
Standby Current	<40 mA

Performance Graph



Bus Servo RX18-U100/101H-M



UART

Brushless

100 kg

Stainless Steel Gears



RX18-U100H-M



RX18-U101H-M

Bidirectional Comm.

Single-parameter and full-status readback: angle, temp., power, voltage, and current.

±1,024-Turn Control

Multi-turn position control with position readback.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Built-In Protections

Temp. , voltage, stall, power, and current protection with smart power limiting.

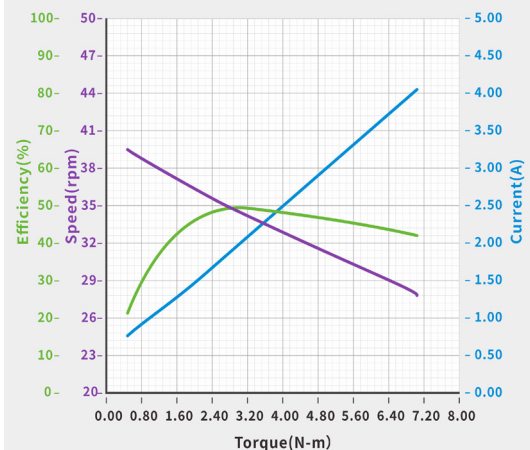
Basic Specifications

Parameter	Value
Communication	UART TTL Half-duplex
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position (±180°) Multi-turn Position (±1,024 counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	392:1
Output Spline Spec	Stainless Steel 15T
Connector Type	5264-3Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	63 × 34 × 47 mm 230 g / 260g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Static Stall Torque	9.80 N·m (100 kg·cm)
Max Dynamic Torque	4.90 N·m (50 kg·cm)
Rated Torque	3.14 N·m (32 kg·cm)
No-load Speed	42 rpm (0.238 sec / 60°)
Rated Speed	35 rpm (0.286 sec / 60°)
Peak Current	13 A
No-load Current	< 300 mA
Standby Current	< 50 mA

Performance Graph



Bus Servo HX8-R28/29H-M



RS485

Brushless

28 kg

Stainless Steel Gears



HX8-R28H-M



HX8-R29H-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

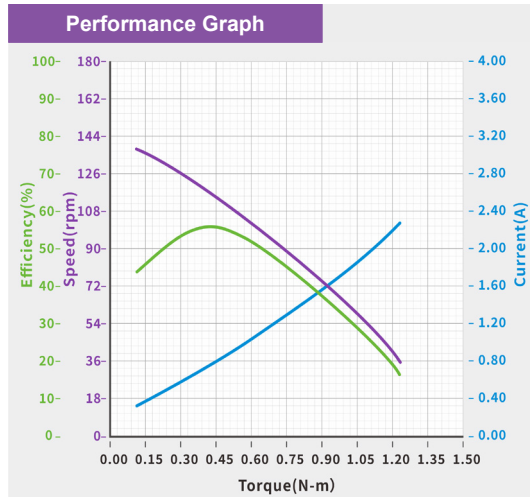
Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	173:1
Output Spline Spec	Stainless Steel $\varnothing 6$ mm 25T / D-type
Connector Type	PH2.0 – 4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 96 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	2.74 N·m (28 kg·cm)
Max Dynamic Torque	1.18 N·m (12 kg·cm)
Rated Torque	0.44 N·m (4.5 kg·cm)
Rated Speed	116 rpm (0.086 sec / 60°)
No-load Speed	142 rpm (0.070 sec / 60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	5.5 A



Bus Servo HX8-R28/29W-M



RS485

Brushless

28 kg

Stainless Steel Gears



HX8-R28W-M



HX8-R29W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

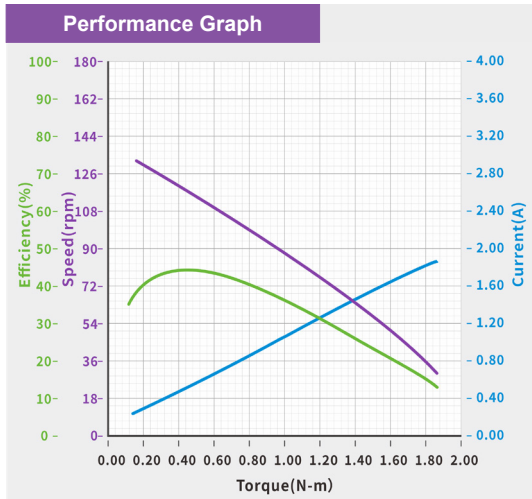
Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	173:1
Output Spline Spec	Stainless Steel $\varnothing 6$ mm 25T / D-type
Connector Type	PH2.0 – 4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 96 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	2.74 N·m (28 kg·cm)
Max Dynamic Torque	1.47 N·m (15 kg·cm)
Rated Torque	0.44 N·m (4.5 kg·cm)
Rated Speed	116 rpm (0.086 sec / 60°)
No-load Speed	142 rpm (0.070 sec / 60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	3 A



Bus Servo HX8-R50/51H-M



RS485

Brushless

50 kg

Stainless Steel Gears



HX8-R50H-M



HX8-R51H-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

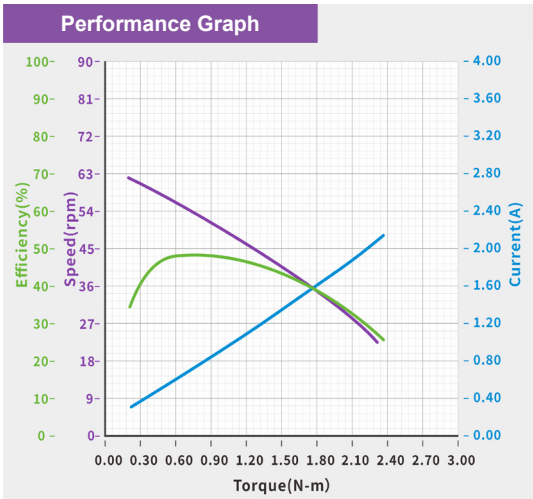
Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	Stainless Steel $\varnothing 6$ mm 25T / D-type
Connector Type	PH2.0 – 4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 96 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	4.90 N·m (50 kg·cm)
Max Dynamic Torque	2.26 N·m (23 kg·cm)
Rated Torque	0.88 N·m (9 kg·cm)
Rated Speed	52 rpm (0.192 sec / 60°)
No-load Speed	66 rpm (0.151 sec / 60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	5.5 A



Bus Servo HX8-R50/51W-M



RS485

Brushless

50 kg

Stainless Steel Gears



HX8-R50W-M



HX8-R51W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

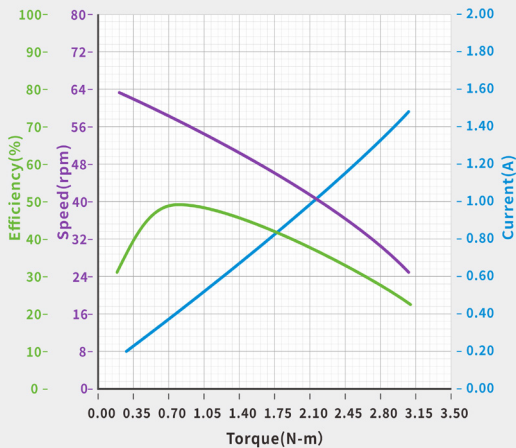
Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	Stainless Steel $\varnothing 6$ mm 25T / D-type
Connector Type	PH2.0 – 4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 40 mm 96 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	4.90 N·m (50 kg·cm)
Max Dynamic Torque	2.75 N·m (28 kg·cm)
Rated Torque	0.88 N·m (9 kg·cm)
Rated Speed	52 rpm (0.192 sec / 60°)
No-load Speed	66 rpm (0.151 sec / 60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	3 A

Performance Graph



Bus Servo RX18-R100/101H-M



RS485

Brushless

100 kg

Stainless Steel Gears



RX18-R100H-M



RX18-R100H-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

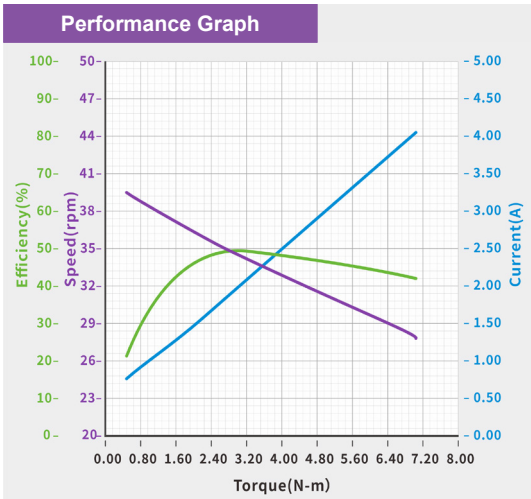
Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	9.0 ~ 12.6 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	392:1
Output Spline Spec	Stainless Steel 15T
Connector Type	5264-4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	63 × 34 × 47 mm 230 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	9.80 N·m (100 kg·cm)
Max Dynamic Torque	4.90 N·m (50 kg·cm)
Rated Torque	3.14 N·m (32 kg·cm)
Rated Speed	35 rpm (0.286 sec / 60°)
No-load Speed	42 rpm (0.238 sec / 60°)
No-load Current	<300 mA
Standby Current	<50 mA
Peak Current	13 A



Bus Servo HX8-R100/101W-M



RS485

Brushless

100 kg

Stainless Steel Gears



HX8-R100W-M



HX8-R101W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

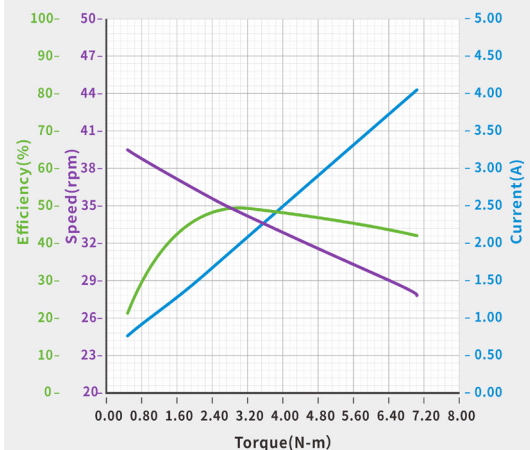
Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	392:1
Output Spline Spec	Stainless Steel 15T
Connector Type	5264-4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	63 × 34 × 47 mm 230 g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	9.80 N·m (100 kg·cm)
Max Dynamic Torque	4.90 N·m (50 kg·cm)
Rated Torque	3.14 N·m (32 kg·cm)
Rated Speed	35 rpm (0.286 sec / 60°)
No-load Speed	42 rpm (0.238 sec / 60°)
No-load Current	<300 mA
Standby Current	<50 mA
Peak Current	13 A

Performance Graph



Bus Servo WX8-R50W-M



RS485

Brushless

Waterproof

Stainless Steel Gears



WX8-R50W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

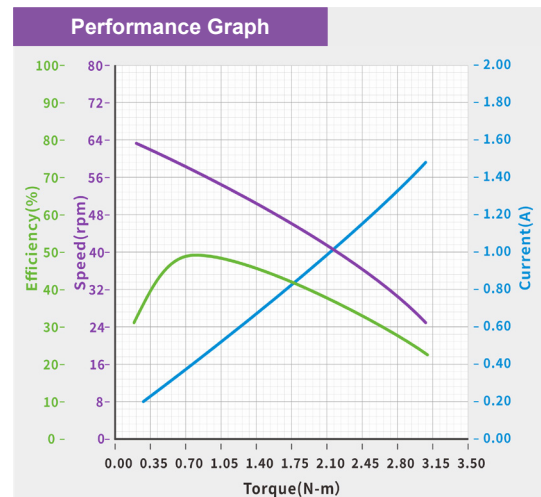
Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

Basic Specifications

Parameter	Value
Communication	RS-485
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	8 × M3, Ø34 mm; Optional Dummy Shaft
Connector Type	Micro 4-core waterproof connector, Ø19 male
Gear Material	Full-metal stainless-steel gear set
Housing Material	Black Anodized Aluminum Alloy
Dimensions Weight	54 × 34 × 87 mm 420 g (including cable)
Cable Length	70 cm $\pm$ 5 cm
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	4.90N · m (50kg-cm)
Max Dynamic Torque	2.75N · m (28kg-cm)
Rated Torque	0.88N · m (9kg-cm)
Rated Speed	52rpm (0.192sec@60°)
No-load Speed	66rpm (0.151sec@60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	3 A



Bus Servo HX8-C28/29W-M



CAN Bus

Brushless

28 kg

Stainless Steel Gears



HX8-C28W-M



HX8-C29W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

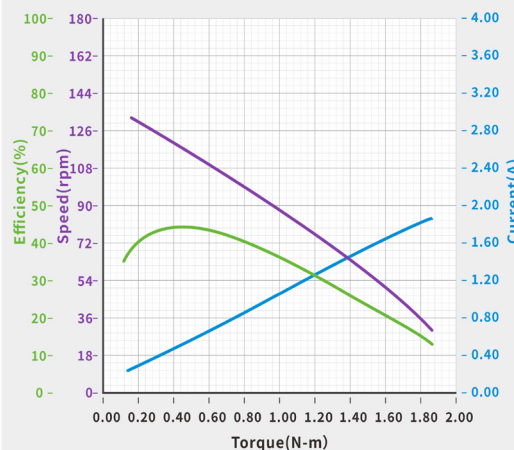
Basic Specifications

Parameter	Value
Communication	CAN Bus
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	173:1
Output Spline Spec	Stainless Steel $\varnothing 6$ mm 25T / D-type
Connector Type	PH2.0-4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 46 mm 95g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	2.74 N·m (28 kg·cm)
Max Dynamic Torque	1.47 N·m (15 kg·cm)
Rated Torque	0.44 N·m (4.5 kg·cm)
Rated Speed	116 rpm (0.086 sec / 60°)
No-load Speed	142 rpm (0.070 sec / 60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	3 A

Performance Graph



Bus Servo HX8-C50/51W-M



CAN Bus

Brushless

50 kg

Stainless Steel Gears



HX8-C50W-M



HX8-C51W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

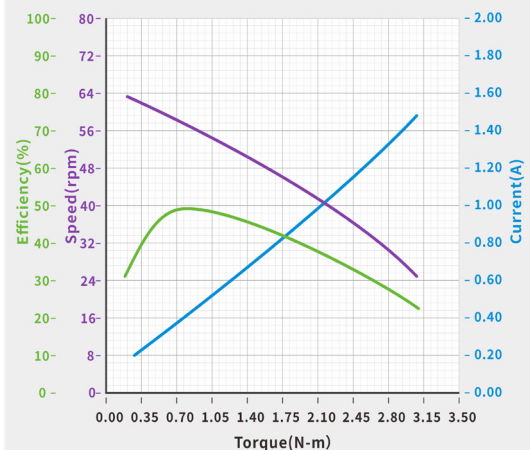
Basic Specifications

Parameter	Value
Communication	CAN Bus
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	387:1
Output Spline Spec	Stainless Steel $\varnothing 6$ mm 25T / D-type
Connector Type	PH2.0-4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	40 × 20 × 46 mm 95g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	4.90 N·m (50 kg·cm)
Max Dynamic Torque	2.75 N·m (28 kg·cm)
Rated Torque	0.88 N·m (9 kg·cm)
Rated Speed	52 rpm (0.192 sec / 60°)
No-load Speed	66 rpm (0.151 sec / 60°)
No-load Current	<300 mA
Standby Current	<40 mA
Peak Current	3 A

Performance Graph



Bus Servo RX18-C100/101W-M



CAN Bus

Brushless

100 kg

Stainless Steel Gears



RX18-C100W-M



RX18-C101W-M

360° Continuous Multi-Turn

Supports continuous multi-turn angle control and position readback within $\pm 1,024$ turns.

Power-Off Position Memory

Automatically records the position before power-off; no zero calibration required after power-on.

Trapezoidal Accel / Decel

Built-in accel/decel control for smooth motion.

3 Stop Modes

Torque hold, torque release, and damping control.

Zero-Point Setup

Set zero position via software or command for easy calibration.

Damping Mode

Allows manual angle adjustment under external force, with dynamically adjustable damping coefficient.

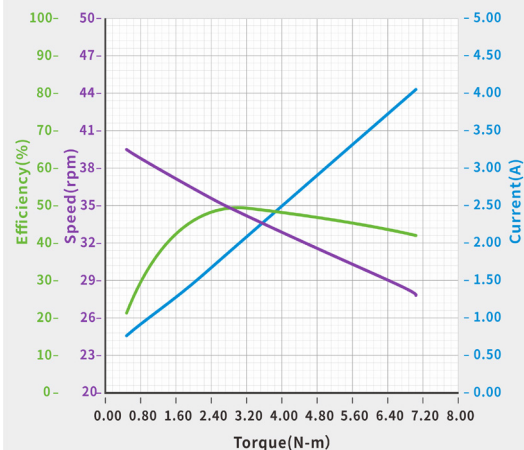
Basic Specifications

Parameter	Value
Communication	CAN Bus
Operating Voltage	24 V
Motor Type	Brushless Motor
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Resolution	4,096 counts / 360° (0.088°)
Operating Modes	Single-turn Position ($\pm 180^\circ$) Multi-turn Position ($\pm 1,024$ counts) Damping Mode
Readback Parameters	Angle Temperature Power Voltage Current
Processor	32-bit MCU
Baud Rate	9,600 bps ~ 1 Mbps
ID Range	0 ~ 254
Gear Ratio	392:1
Output Spline Spec	Stainless Steel 15T
Connector Type	5264-4Pin
Gear Material	Full-metal stainless-steel gear set
Housing Material	Full Aluminum Alloy
Dimensions Weight	63 × 34 × 47 mm 242g
Operating Temperature	-10 ~ 60 °C

Performance Specifications

Parameter	Value
Max Static Torque	9.80 N·m (100 kg·cm)
Max Dynamic Torque	4.90 N·m (50 kg·cm)
Rated Torque	3.14 N·m (32 kg·cm)
Rated Speed	35 rpm (0.286 sec / 60°)
No-load Speed	42 rpm (0.238 sec / 60°)
No-load Current	<300 mA
Standby Current	<50 mA
Peak Current	13 A

Performance Graph



Bus Servo RX18-A100(H)-M



PWM

Brushless 180°

100 kg

Stainless Steel Gears



RX18-A100-M



RX18-A100H-M

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V / 9.0 ~ 12.6 V
Motor Type	Brushless
Position Sensor	12-bit Contactless Absolute Encoder (Magnetic)
Effective Angle	±180° (Customizable)
Rotation Direction	Counterclockwise (500→2500 μsec) (Customizable)
PWM Period Range	3 ~ 40 ms
Dead Band	2 μs
Gear Ratio	392:1
Output Shaft Spec.	Stainless Steel / 15T
Output Spline Support	Dual Bearings
Interface	5264-3Pin
Housing Material	All-Aluminum Alloy
Dimensions Weight	63 × 34 × 47 mm 230 g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Static Stall Torque	9.80 N · m (100 kg · cm)
Max Dynamic Torque	4.40 N · m (45 kg · cm)
No-load Speed	42 rpm (0.238 s / 60°)
Stall Current	24 A / 13 A
No-load Current	<700 mA
Standby Current	<60 mA / <50 mA

Bus Servo RP/HP8-A46



PWM

Coreless 270°

45 kg

Stainless Steel Gears



RP8-A46



HP8-A46

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V
Motor Type	Coreless
Position Sensor	Potentiometer
Effective Angle	270° (@500→2500 μ s)
Rotation Direction	Counterclockwise (500→2500 μ s)
PWM Period Range	3 ~ 40 ms
Dead Band	2 μ s
Gear Ratio	273:1
Output Spline Spec	Stainless Steel $\varnothing$ 6 mm 25T
Output Spline Support	Dual Ball Bearings
Interface	PH2.0 x 2
Case Material	Aluminum alloy middle section / upper & lower engineering plastic shells
Dimensions Weight	40 × 20 × 46 mm 65g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Stall Torque	@8.4V: 49 kg-cm @7.4V: 45 kg-cm @6.0V: 39 kg-cm
No-Load Speed	@8.4V: 0.085 sec / 60° @7.4V: 0.098 sec / 60° @6.0V: 0.118 sec / 60°
Stall Current	6 A
No-load Current	300 mA
Standby Current	50 mA

Bus Servo RP/HP8-A45



PWM

Coreless 180°

45 kg

Stainless Steel Gears



RP8-A45



HP8-A45

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V
Motor Type	Coreless
Position Sensor	Potentiometer
Effective Angle	180° (@500→2500 μs)
Rotation Direction	Counterclockwise (500→2500 μs)
PWM Period Range	3 ~ 40 ms
Dead Band	2 μs
Gear Ratio	273:1
Output Spline Spec	Stainless Steel Ø6 mm 25T
Output Spline Support	Dual Ball Bearings
Interface	PH2.0 x 2
Case Material	Aluminum alloy middle section / upper & lower engineering plastic shells
Dimensions Weight	40 × 20 × 46 mm 65g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Stall Torque	@8.4 V: 49 kg · cm @7.4 V: 45 kg · cm @6.0 V: 39 kg · cm
No-Load Speed	@8.4 V: 0.085 sec @ 60° @7.4 V: 0.098 sec @ 60° @6.0 V: 0.118 sec @ 60°
Stall Current	6 A
No-load Current	300 mA
Standby Current	50 mA

Bus Servo RA/HA8-P36



PWM

Cored 270°

35 kg

Aluminum Gears



RP8-A36



HP8-A36

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V
Motor Type	Cored
Position Sensor	Potentiometer
Effective Angle	270° (@500→2500 μs)
Rotation Direction	Counterclockwise (500→2500 μs)
PWM Period Range	3 ~ 20 ms
Dead Band	2 μs
Gear Ratio	378:1
Output Spline Spec.	Aluminium / Ø6 mm / 25T
Output Spline Support	Dual Ball Bearings
Interface	PH2.0 x 2
Case Material	Aluminum alloy middle section / upper & lower engineering plastic shells
Dimensions Weight	40 x 20 x 40 mm 52g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Stall Torque	@8.4 V: 39 kg · cm @7.4 V: 35 kg · cm @6.0 V: 31 kg · cm
No-Load Speed	@8.4 V: 0.183 sec @ 60° @7.4 V: 0.208 sec @ 60° @6.0 V: 0.256 sec @ 60°
Stall Current	3 A
No-load Current	200 mA
Standby Current	20 mA

Bus Servo RA/HA8-P35



PWM

Cored180°

35 kg

Aluminum Gears



RP8-P35



HP8-P35

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V
Motor Type	Cored
Position Sensor	Potentiometer
Effective Angle	180° (@500→2500 μ s)
Rotation Direction	Counterclockwise (500→2500 μ s)
PWM Period Range	3 ~ 20 ms
Dead Band	2 μ s
Gear Ratio	378:1
Output Spline Spec.	Aluminium / $\varnothing$ 6 mm / 25T
Output Spline Support	Dual Ball Bearings
Interface	PH2.0 x 2
Case Material	Aluminum alloy middle section / upper & lower engineering plastic shells
Dimensions Weight	40 × 20 × 40 mm 52g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Stall Torque	@8.4 V: 39 kg · cm @7.4 V: 35 kg · cm @6.0 V: 29 kg · cm
No-Load Speed	@8.4 V: 0.183 sec @ 60° @7.4 V: 0.208 sec @ 60° @6.0 V: 0.256 sec @ 60°
Stall Current	3 A
No-load Current	200 mA
Standby Current	20 mA

Bus Servo RA/HA8-P26



PWM

Cored 270°

25 kg

Copper Gears



RA8-P26



HA8-P26

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V
Motor Type	Cored
Position Sensor	Potentiometer
Effective Angle	270° (@500→2500 μs)
Rotation Direction	Counterclockwise (500→2500 μs)
PWM Period Range	3 ~ 20 ms
Dead Band	2 μs
Gear Ratio	273:1
Output Spline Spec.	Copper / Ø6 mm / 25T
Output Spline Support	Dual Ball Bearings
Interface	PH2.0 x 2
Case Material	Aluminum alloy middle section / upper & lower engineering plastic shells
Dimensions Weight	40 × 20 × 40 mm 62g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Stall Torque	@8.4 V: 30 kg · cm @7.4 V: 25 kg · cm @6.0 V: 20 kg · cm
No-Load Speed	@8.4 V: 0.139 sec @ 60° @7.4 V: 0.150 sec @ 60° @6.0 V: 0.171 sec @ 60°
Stall Current	3 A
No-load Current	300 mA
Standby Current	50 mA

Bus Servo RA/HA8-P25



PWM

Cored 180°

25 kg

Copper Gears



RA8-P25



HA8-P25

Basic Specifications

Parameter	Value
Protocol Type	PWM
Input Voltage	4.8 ~ 8.4 V
Motor Type	Cored
Position Sensor	Potentiometer
Effective Angle	180° (@500→2500 μs)
Rotation Direction	Counterclockwise (500→2500 μs)
PWM Period Range	3 ~ 20 ms
Dead Band	2 μs
Gear Ratio	273:1
Output Spline Spec.	Copper / Ø6 mm / 25T
Output Spline Support	Dual Ball Bearings
Interface	PH2.0 x 2
Case Material	Aluminum alloy middle section / upper & lower engineering plastic shells
Dimensions Weight	40 × 20 × 40 mm 62g
Protection	Stall Overtemperature Overvoltage Protection

Performance Specifications

Parameter	Value
Stall Torque	@8.4 V: 30 kg · cm @7.4 V: 25 kg · cm @6.0 V: 20 kg · cm
No-Load Speed	@8.4 V: 0.139 sec @ 60° @7.4 V: 0.150 sec @ 60° @6.0 V: 0.171 sec @ 60°
Stall Current	3 A
No-load Current	300 mA
Standby Current	50 mA

