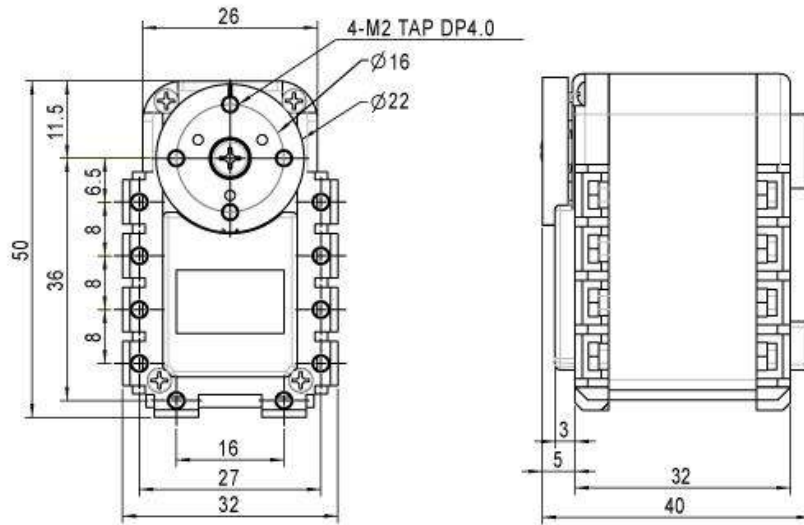


# AX-12A / AX-12W Dimensional and Technical Data

## Dimension

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## DYNAMIXEL AX-12W

### \*\* INCLUDES

Description		Qty
DYNAMIXEL	AX-12W	1
HORN	AX-HORN	1/assembled
	Horn Spacer	1
FRAME	BPF-WA/BU Set	1
	FP04-F3	1
CABLE	3P Cable 200mm	1
BOLT/NUT	Bolt PHS M2*6	16pcs
	Bolt PHS M3*10	1
	N1 NUT M2	16pcs

### \*\* HW SPECS

Product Name	DYNAMIXEL AX-12W		
Weight	52.9g		
Dimension	32mm x 50mm x 40mm		
Gear Ratio	32 : 1		
Operation Voltage (V)	9	11.1	12
Stall Torque (N.m)	0.2 (at 12V)		
Stall Current (A)	1.1	1.3	1.4
<b>No Load Speed (RPM)</b>	<b>360</b>	<b>430</b>	<b>470</b>
Motor	Cored Motor		
<b>Minimum Control Angle</b>	<b>about 0.29 degrees x 1,024</b>		
Operating Range	Actuator Mode : 300 degrees Wheel Mode : Endless Rotation		
<b>Operating Voltage</b>	<b>9~12V (Recommended voltage : 11.1V)</b>		
Operating Temperature	-5C ~ 70C		
Command Signal	Digital Packet		
Protocol	Half-duplex Asynchronous Serial Communication (8bit,1 stop, No Parity)		
Link (physical)	TTL Level Multi Drop (daisy chain type connection)		
Default ID	1		

## Dynamixel AX-12A

### \*\* INCLUDES

Description		Qty
DYNAMIXEL	AX-12A	1
HORN	B01-HORN	1/assembled
FRAME	FP04-F2	1
	FP04-F3	1
	BPF-WA/BU Set	1
CABLE	3P Cable 200mm	1
BOLT/NUT	Bolt PHS M2*6	16pcs
	Bolt PHS M3*10	1
	N1 NUT M2	16pcs

### \*\* HW SPECS

<b>Product name</b>	<b>DYNAMIXEL AX-12A</b>
Weight	54.6g
Dimension	32mm x 50mm x 40mm
Gear Ratio	254 : 1
Operation Voltage (V)	12
<b>Stall Torque (N.m)</b>	<b>1.5 (12V)</b>
Stall Current (A)	1.5
<b>No Load Speed (RPM)</b>	<b>59 (12V)</b>
Motor	Cored Motor
<b>Minimum Control Angle</b>	<b>about 0.29 degrees x 1,024</b>
Operating Range	Actuator Mode : 300 degrees Wheel Mode : Endless turn
<b>Operating Voltage</b>	<b>9~12V (Recommended voltage : 11.1V)</b>
Max. Current	900mA
Standby Current	50mA
Operating Temperature	-5C ~ 70C
Command Signal	Digital Packet
Protocol	Half duplex Asynchronous Serial Communication (8bit,1 stop,No Parity)
Link (physical)	TTL Level Multi Drop (daisy chain type Connector)
ID	254 ID (0~253)
Baud Rate	7843bps ~ 1 Mbps
Feedback Functions	Position, Temperature, Load, Input Voltage, etc.
Material	Case : Engineering Plastic Gear : Engineering Plastic
<b>Position Sensor</b>	<b>Potentiometer</b>
<b>Default Setting</b>	<b>ID #1 (1 Mbps)</b>