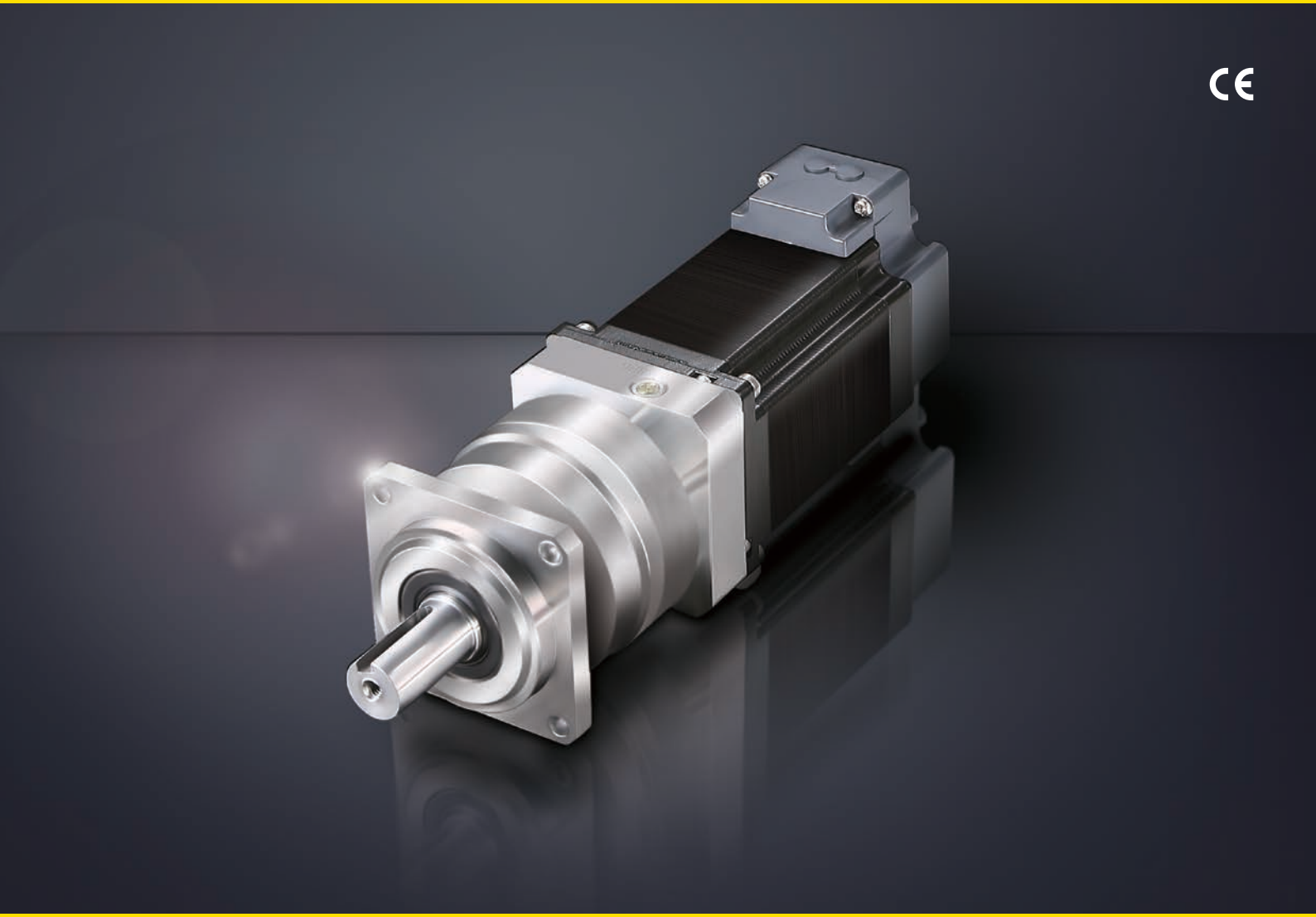
OPTION Gearbox



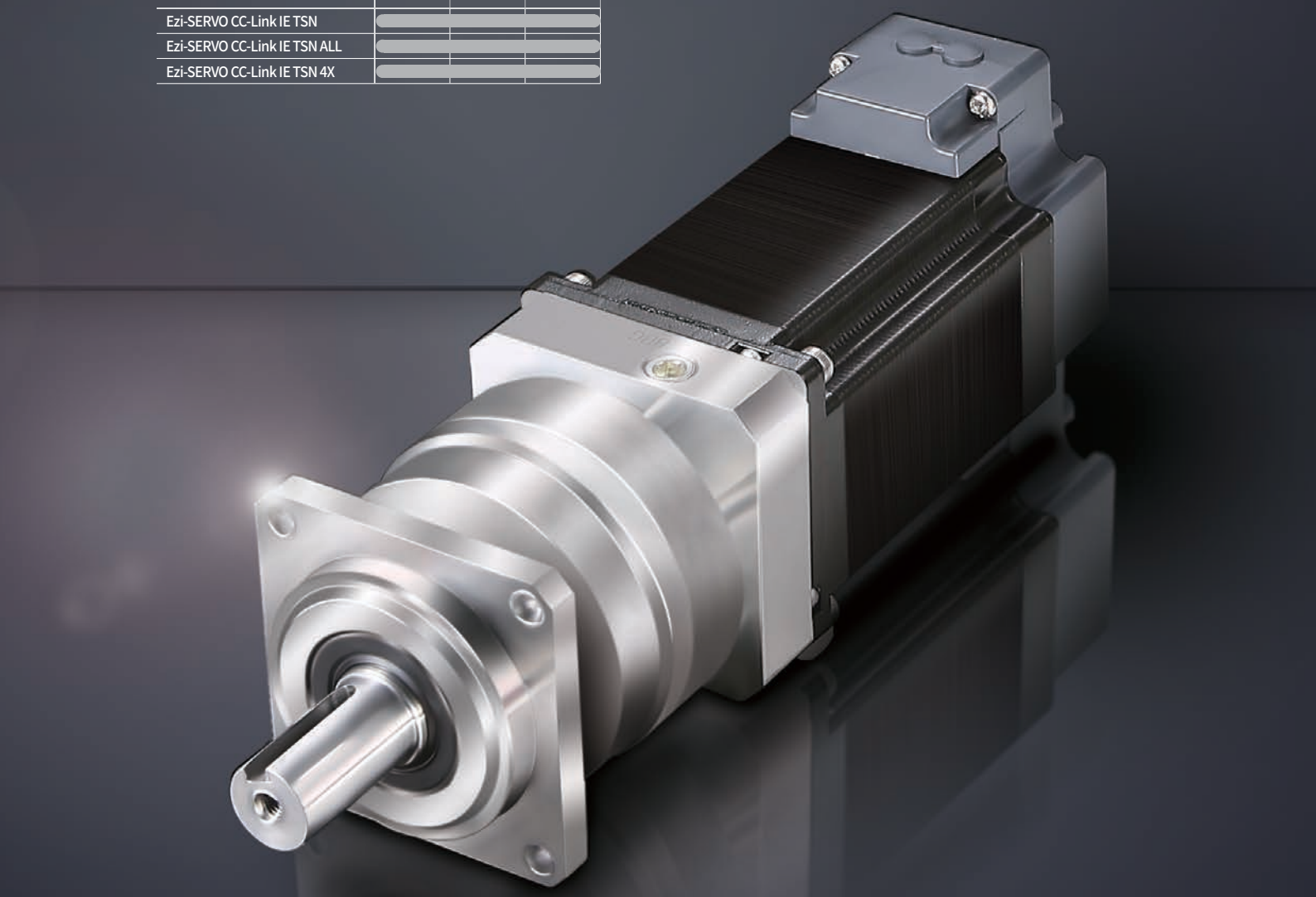
FASTECH

Fast Accurate Smooth Motion

OPTION Gearbox

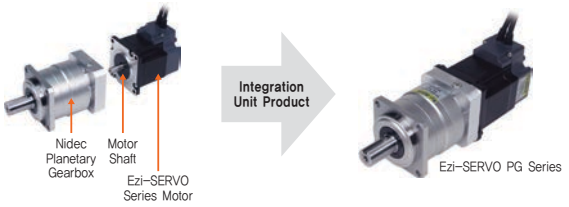
Overall Table of Gearbox

Name of Product	Gearbox frame size		
	42 mm	60 mm	
	Motor frame size		
	42 mm	56 mm	60 mm
Ezi-SERVO CC-Link IE TSN			
Ezi-SERVO CC-Link IE TSN ALL			
Ezi-SERVO CC-Link IE TSN 4X			



Adopt SHIMPO's high accuracy planetary gearbox

FASTECH's geared motors are integrated units that combine a stepper motor from the Ezi-SERVO series with a Nidec Drive Technology planetary gearbox.

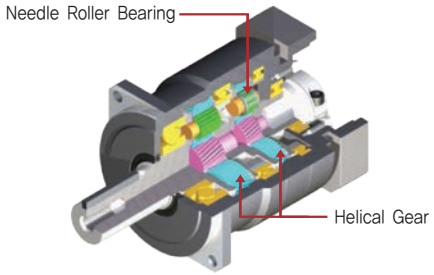


Resonance Minimization

Ezi-SERVO PG series by applying the planetary gearbox, gear ratio corres ponding to the overall operation speed of the stepper motor so low speed that occurs mainly in the resonance of a stepper motor can drive the motor to avoid the band itself and the system is very effective in reducing the vibration.

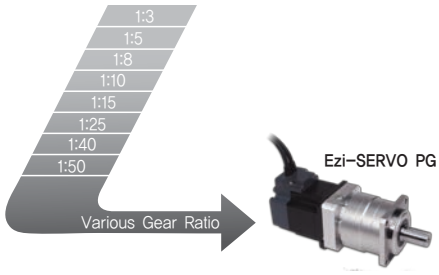
Vibration, Low Noise

The planetary gearboxes supplied by Nidec Drive Technology feature helical gears, ensuring extremely low vibration and noise levels. Both single-stage and two-stage gearboxes have a backlash of 3 arcmin or less, enabling high-speed, high-precision operation.



Various Gear Ratio

Ezi-SERVO series, Unit product between a variety of gear ratio of gearbox with closed loop stepper motor, enables to generate various high torque as small capacity of stepper and also can respond under any load with flexibility.

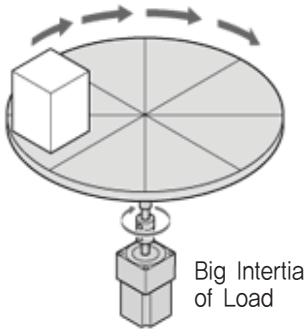


High Rigidity, High Torque

SHIMPO Planetary Gearbox, combined with Ezi-SERVO PG series, maximized allowable torque with using Needle Roller bearing and machined body to be internal gear so it enables compact design of gearbox and maximized durability.

Optimized Solution for Big Inertia of Rotation

Allowable load moment of inertia is proportional to the square of the gear ratio, Gearbox united Ezi-SERVO PG series enables fast positioning and smooth operation even under big intertia moment of load.



Ezi-SERVO PG

Long Life & Maintenance Free

Ezi-SERVO PG Series is Maintenance-free product.
No risk of grease leakage because of high viscosity of Anti-separation grease and it is maintenance free products because of lack of necessity for grease replacement.



Allowable Overhung Load and Allowable Thrust Load of PG series

Motor Size	Gear Raio	Allowable Overhung Load [N] Based on Center of Shaft	Allowable Thrust Load [N]
42 mm	1:03	240	270
	1:05	290	330
	1:08	340	410
	1:10	360	450
	1:15	410	540
	1:25	490	640
	1:40	570	640
	1:50	620	640
56, 60 mm	1:03	430	310
	1:05	510	390
	1:08	600	480
	1:10	640	530
	1:15	740	630
	1:25	870	790
	1:40	1000	970
	1:50	1100	1100

1. Drive Specification and Size
Please refer to the individual catalogue to check drive specification and size.

2. System Configuration and Setting/Operation
Please refer to the individual catalogue to check series'system configuration, Name and Function

3. External Wiring Diagram
Please refer to the individual catalogue to check series'external wiring diagram.

Part Numbering

In Case of Ezi-SERVO series

Unit Part Number	Motor Model Number	Drive Model Number
Ezi-SERVO-□-□-□-PN□	EzM-□-□-PN□	Not Change

※ It can be added PN□ at the end of model name of each series(T.he name of drive model is not changed)

ex) Numbering method when 1:10 reducer attached on 42mm of Ezi-SERVO ST series.

Unit Part Number	Motor Model Number	Drive Model Number
Ezi-SERVO-ST-42S-A-PN10	EzM-42S-A-PN10	EzS-PD-42S-A

How to Read Specifications

Model	Unit	42S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
① Maximum Holding Torque	N·m	0.57	0.95	1.52	1.90	2.76	4.60	7.36	9
② Rotor Inertia Moment	kg·m²	35 × 10^{-7}							
③ Backlash	arcmin	3				5			
④ Angle Transmission Error	arcmin	5				7			
⑤ Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
⑥ Resolution(10,000[ppr] Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
⑦ Permissible Tor	N·m	6	9	9	6	6	9	9	9
⑧ Maximum Torque	N·m	12	18	18	12	12	18	18	18
⑨ Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
⑩ Motor Weight	kg	0.89				0.99			

Description of Specification Items

No.	Item	Description
①	Maximum Holding Torque	This is the maximum torque that can be exerted through the gearbox when the motor is stopped. (Based on 100% of stop current) Use below the maximum torque of the gearbox.
②	Rotor Inertia Moment	It is the value of the moment of inertia of the motor.
③	Backlash	It is the gap between the gear and the gear, and it is the angle at which the gearbox shaft moves without external force when stopped
④	Angle Transmission Error	This is the transmission characteristic of the gearbox, which means the difference between the theoretical rotation angle and the actual rotation angle of the output shaft.
⑤	Reduction Gear Ra	It is the value obtained by dividing the number of output rotation by the number of input rotation.
⑥	Resolution	This is the angle at which the gearbox output shaft moves when the motor is driven by 1 pulse.
⑦	Permissible Torque	This value is a torque value at which the life of the motor becomes 20,000 hours when the input rotation speed is 3,000rpm. It refers to the permissible continuous torque.
⑧	Maximum Torque	This is the maximum torque allowed during acceleration/deceleration.
⑨	Permitted Speed Range	It is the range of rotation speed based on the output shaft of the gearbox.
⑩	Motor Weight	It is the sum of the weight of the gearbox and the motor.

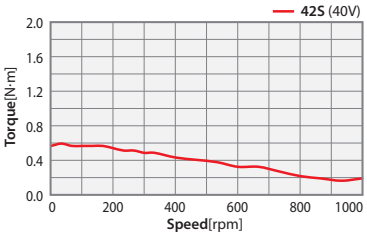
Specifications of Motor with Gearbox [42S]

Applicable Model
Ezi-SERVO CC-Link IE TSN

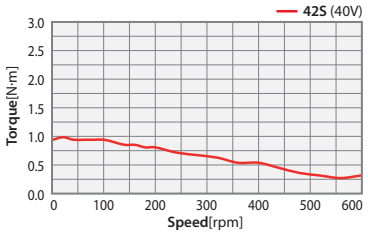
Model	Unit	42S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	0.57	0.95	1.52	1.90	2.76	4.60	7.36	9
Rotor Inertia Moment	kg·m²	35 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	0.89				0.99			

Torque Graph with Gearbox

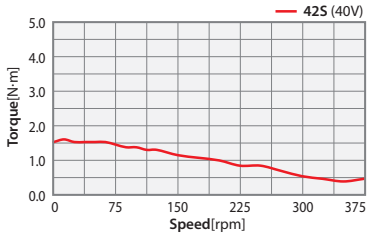
42S-PN3 Series



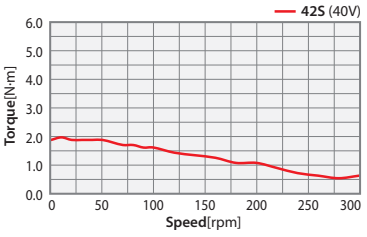
42S-PN5 Series



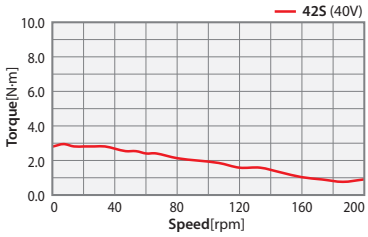
42S-PN8 Series



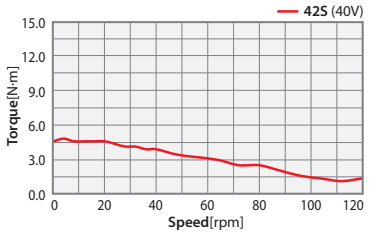
42S-PN10 Series



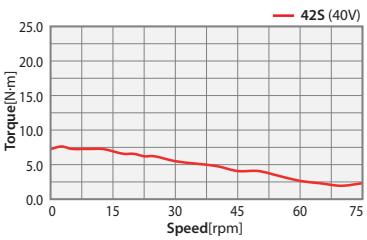
42S-PN15 Series



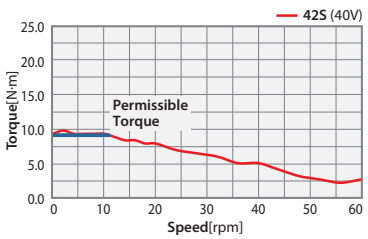
42S-PN25 Series



42S-PN40 Series



42S-PN50 Series



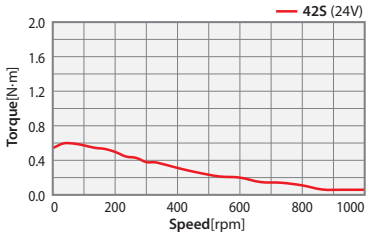
Specifications of Motor with Gearbox [42S]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

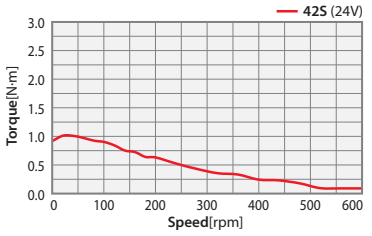
Model	Unit	42S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	0.55	0.92	1.47	1.84	2.67	4.46	7.13	9
Rotor Inertia Moment	kg·m²	35 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	0.89				0.99			

Torque Graph with Gearbox

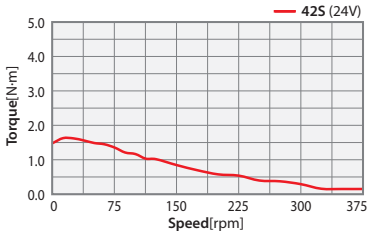
42S-PN3 Series



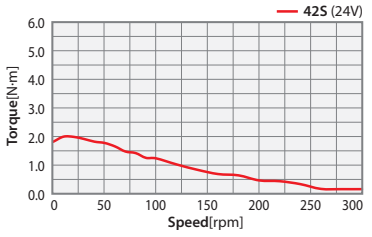
42S-PN5 Series



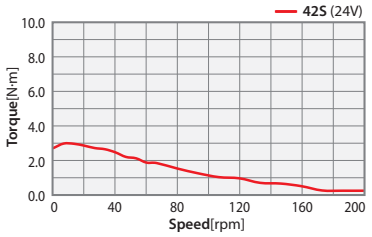
42S-PN8 Series



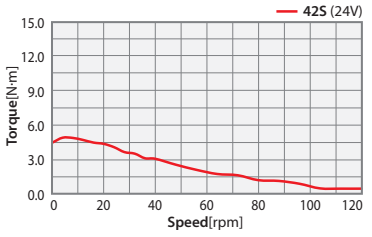
42S-PN10 Series



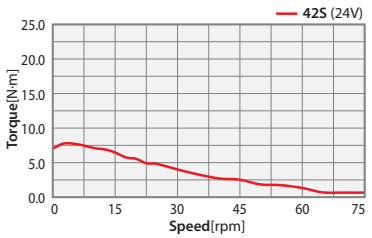
42S-PN15 Series



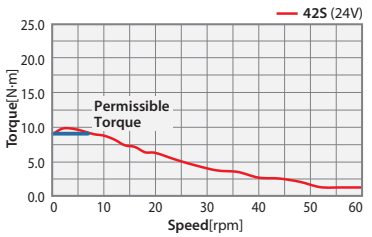
42S-PN25 Series



42S-PN40 Series



42S-PN50 Series



Specifications of Motor with Gearbox [42M]

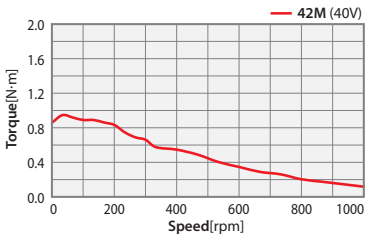
Applicable Model

Ezi-SERVO CC-Link IE TSN

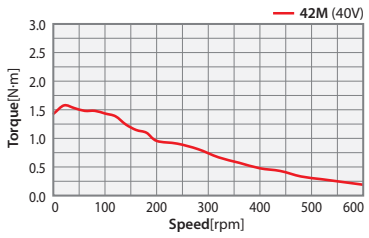
Model	Unit	42M							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	0.85	1.42	2.28	2.85	4.14	6.9	9	9
Rotor Inertia Moment	kg·m²	54 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	0.96				1.06			

Torque Graph with Gearbox

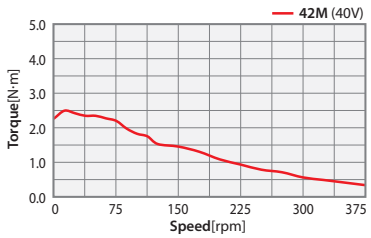
42M-PN3 Series



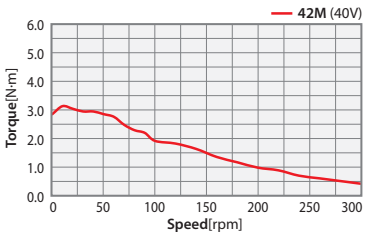
42M-PN5 Series



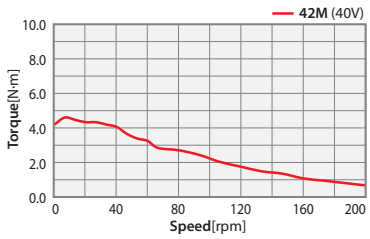
42M-PN8 Series



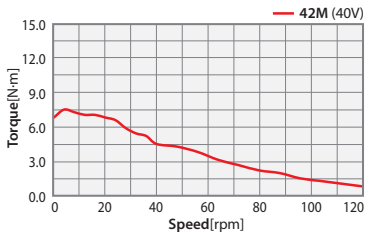
42M-PN10 Series



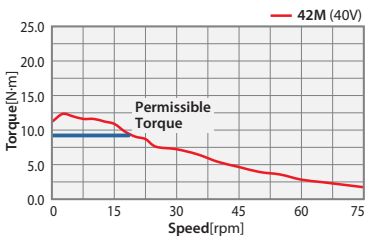
42M-PN15 Series



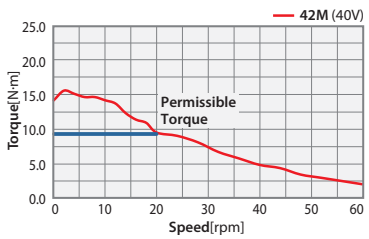
42M-PN25 Series



42M-PN40 Series



42M-PN50 Series



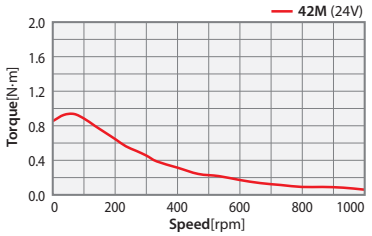
Specifications of Motor with Gearbox [42M]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

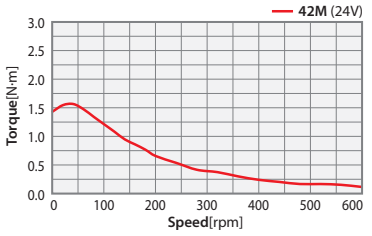
Model	Unit	42M							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	0.85	1.42	2.28	2.85	4.14	6.9	9	9
Rotor Inertia Moment	kg·m^2	54 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	0.96				1.06			

Torque Graph with Gearbox

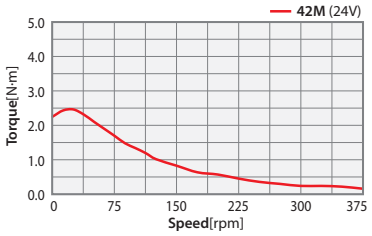
42M-PN3 Series



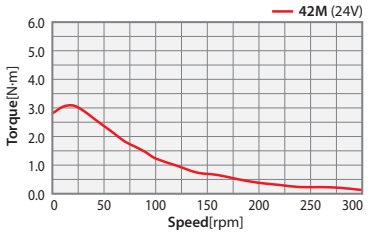
42M-PN5 Series



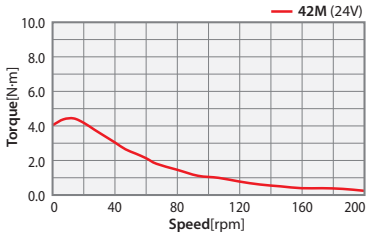
42M-PN8 Series



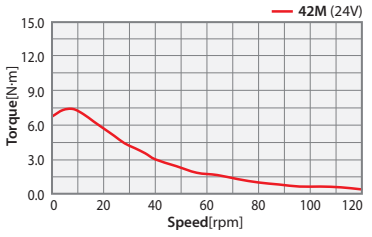
42M-PN10 Series



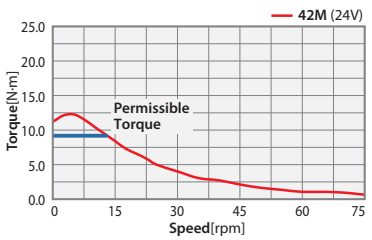
42M-PN15 Series



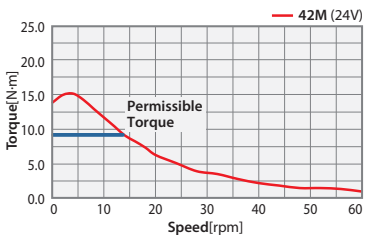
42M-PN25 Series



42M-PN40 Series



42M-PN50 Series



Specifications of Motor with Gearbox [42L]

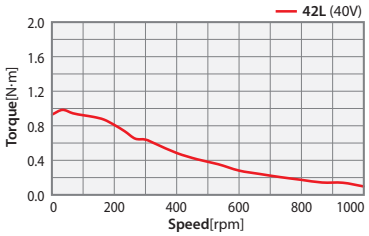
Applicable Model

Ezi-SERVO CC-Link IE TSN

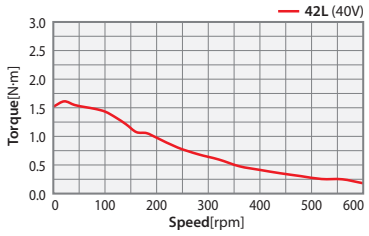
Model	Unit	42L							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	0.92	1.54	2.47	3.09	4.49	7.49	9	9
Rotor Inertia Moment	kg·m²	77 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	1.02				1.12			

Torque Graph with Gearbox

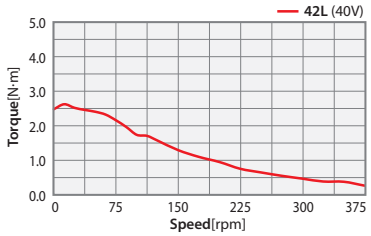
42L-PN3 Series



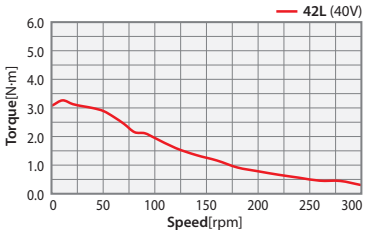
42L-PN5 Series



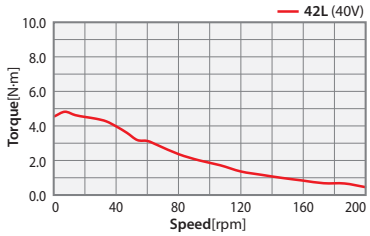
42L-PN8 Series



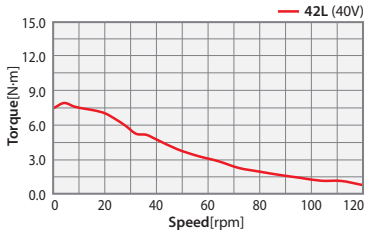
42L-PN10 Series



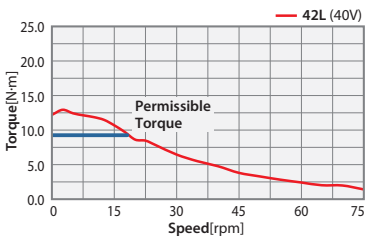
42L-PN15 Series



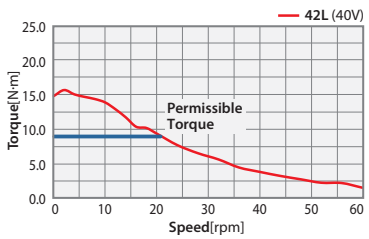
42L-PN25 Series



42L-PN40 Series



42L-PN50 Series



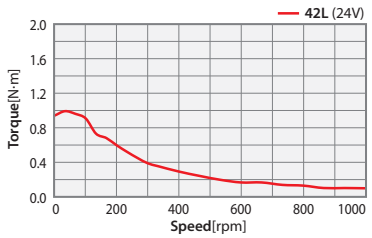
Specifications of Motor with Gearbox [42L]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

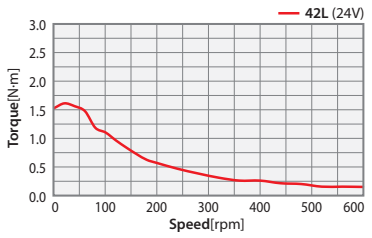
Model	Unit	42L							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	0.93	1.55	2.48	3.1	4.51	7.52	9	9
Rotor Inertia Moment	kg·m²	77 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	1.02				1.12			

Torque Graph with Gearbox

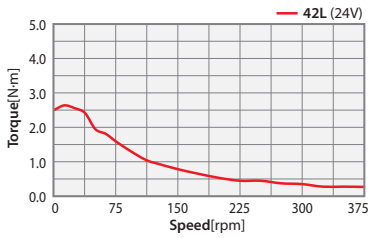
42L-PN3 Series



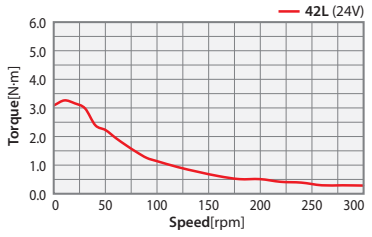
42L-PN5 Series



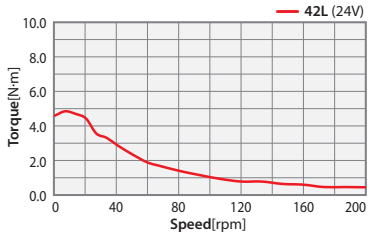
42L-PN8 Series



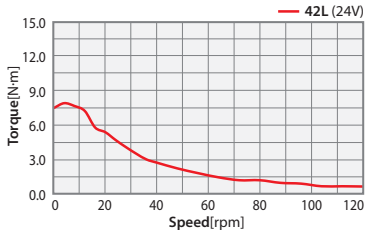
42L-PN10 Series



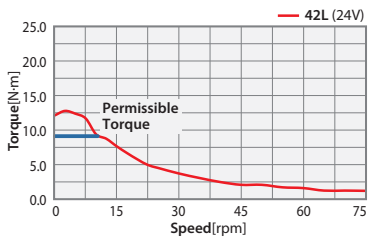
42L-PN15 Series



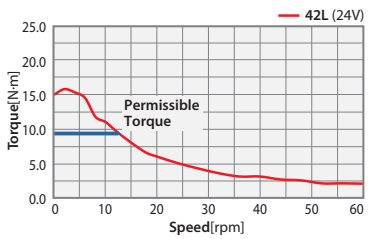
42L-PN25 Series



42L-PN40 Series



42L-PN50 Series



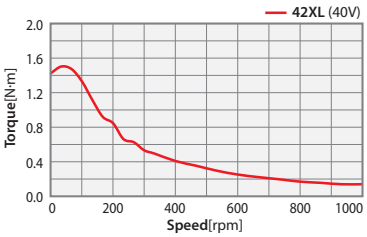
Specifications of Motor with Gearbox [42XL]

Applicable Model
Ezi-SERVO CC-Link IE TSN

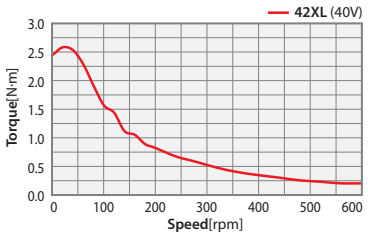
Model	Unit	42XL							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	1.45	2.42	3.87	4.84	6	9	9	9
Rotor Inertia Moment	kg·m²	114 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	1.15				1.25			

Torque Graph with Gearbox

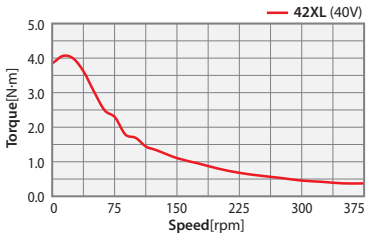
42XL-PN3 Series



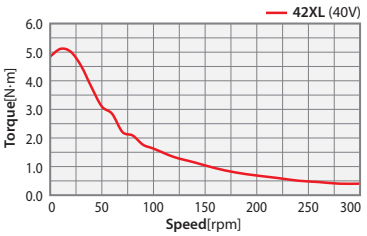
42XL-PN5 Series



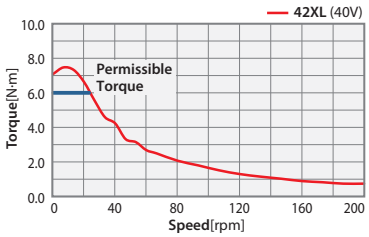
42XL-PN8 Series



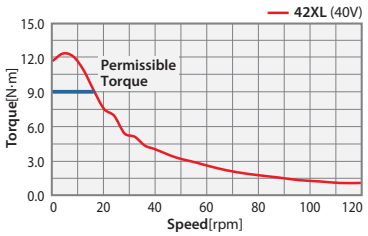
42XL-PN10 Series



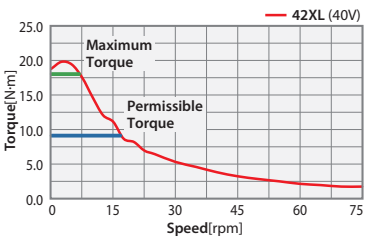
42XL-PN15 Series



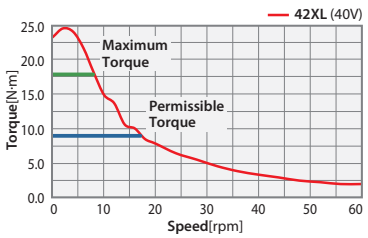
42XL-PN25 Series



42XL-PN40 Series



42XL-PN50 Series



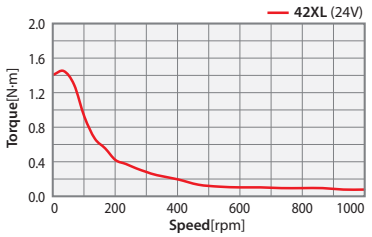
Specifications of Motor with Gearbox [42XL]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

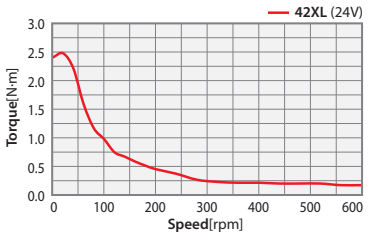
Model	Unit	42XL							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	1.42	2.38	3.8	4.76	6	9	9	9
Rotor Inertia Moment	kg·m²	114 × 10^{-7}							
Backlash	arcmin	3				5			
Angle Transmission Error	arcmin	5				7			
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	6	9	9	6	6	9	9	9
Maximum Torque	N·m	12	18	18	12	12	18	18	18
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	1.15				1.25			

Torque Graph with Gearbox

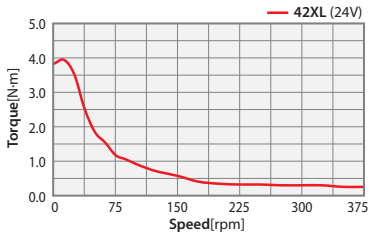
42XL-PN3 Series



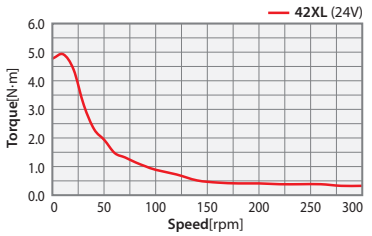
42XL-PN5 Series



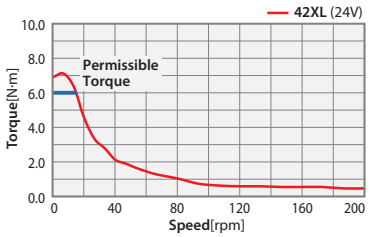
42XL-PN8 Series



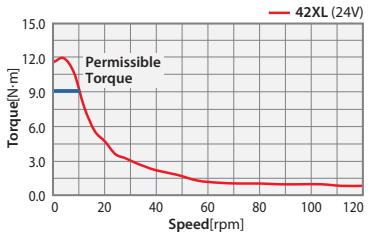
42XL-PN10 Series



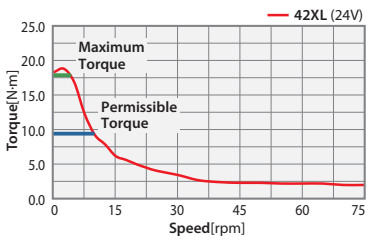
42XL-PN15 Series



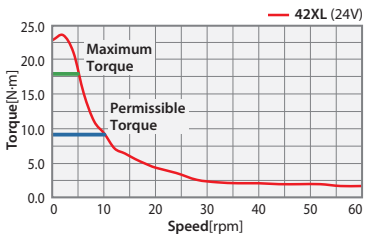
42XL-PN25 Series



42XL-PN40 Series



42XL-PN50 Series



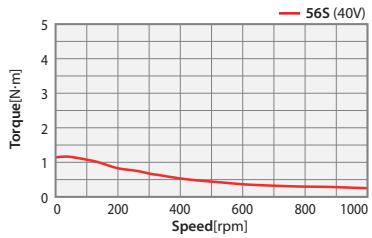
Specifications of Motor with Gearbox [56S]

Applicable Model
Ezi-SERVO CC-Link IE TSN

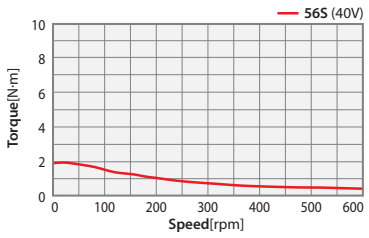
Model	Unit	56S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	1.1	1.9	3.0	3.8	5.5	9.3	14.9	18.6
Rotor Inertia Moment	kg·m^2	180 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	1.94				2.14			

Torque Graph with Gearbox

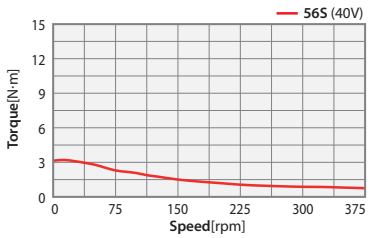
56S-PN3 Series



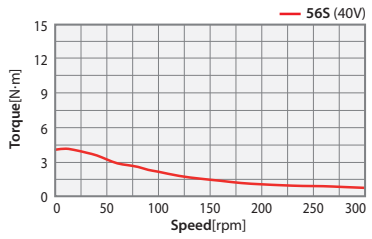
56S-PN5 Series



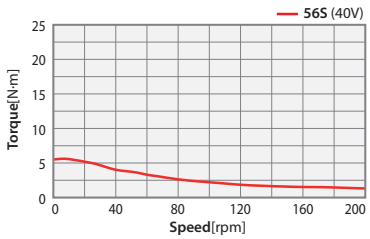
56S-PN8 Series



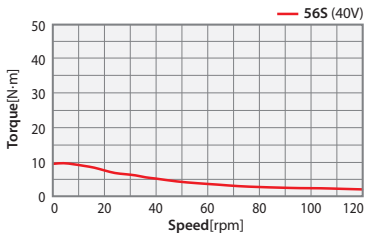
56S-PN10 Series



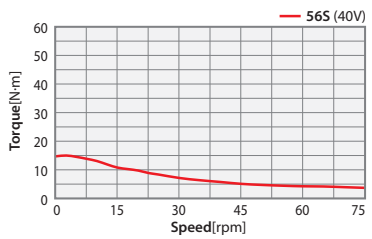
56S-PN15 Series



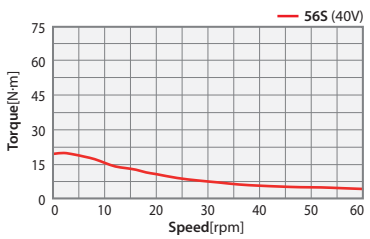
56S-PN25 Series



56S-PN40 Series



56S-PN50 Series



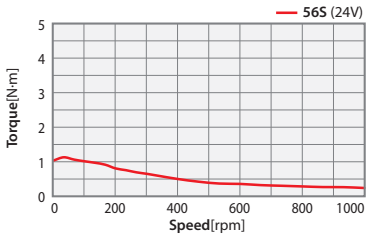
Specifications of Motor with Gearbox [56S]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

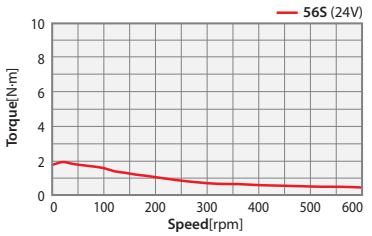
Model	Unit	56S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	1	1.7	2.8	3.5	5.1	8.6	13.8	17.2
Rotor Inertia Moment	kg·m^2	180 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	1.9				2.1			

Torque Graph with Gearbox

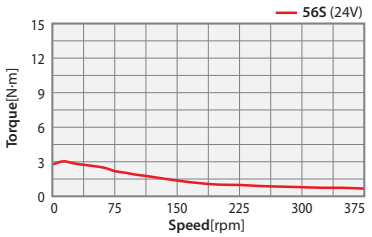
56S-PN3 Series



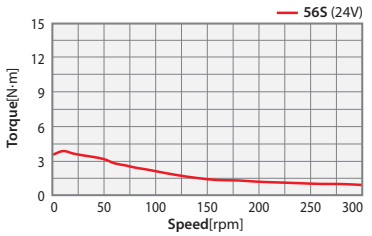
56S-PN5 Series



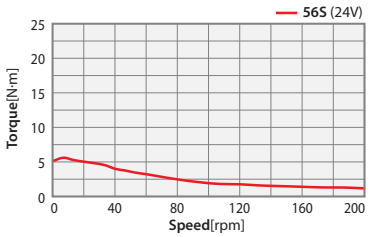
56S-PN8 Series



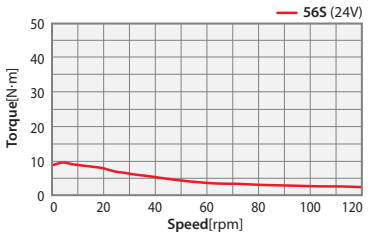
56S-PN10 Series



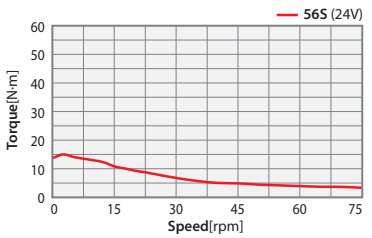
56S-PN15 Series



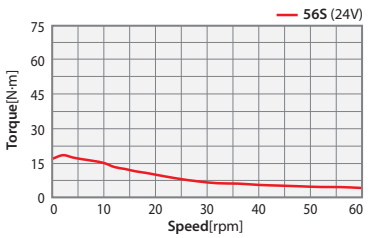
56S-PN25 Series



56S-PN40 Series



56S-PN50 Series



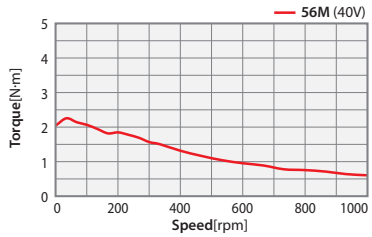
Specifications of Motor with Gearbox [56M]

Applicable Model
Ezi-SERVO CC-Link IE TSN

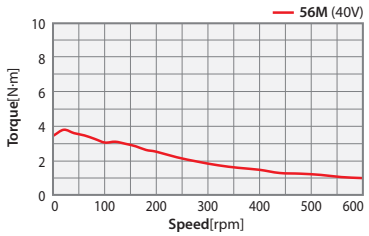
Model	Unit	56M							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	2.0	3.4	5.4	6.8	9.9	16.6	27	27
Rotor Inertia Moment	kg·m^2	280 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2.15				2.35			

Torque Graph with Gearbox

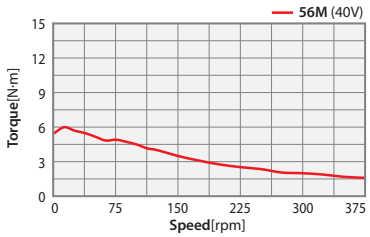
56M-PN3 Series



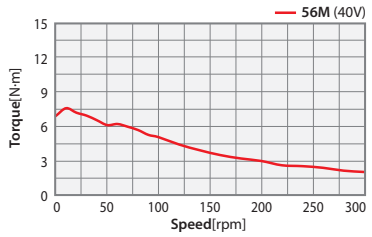
56M-PN5 Series



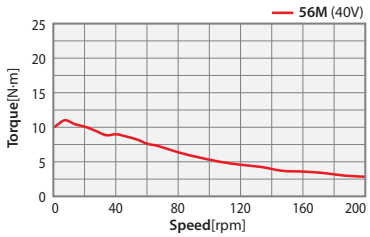
56M-PN8 Series



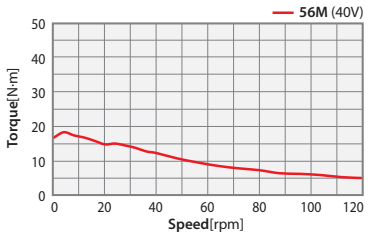
56M-PN10 Series



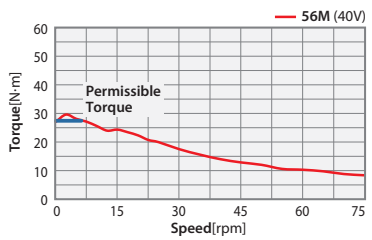
56M-PN15 Series



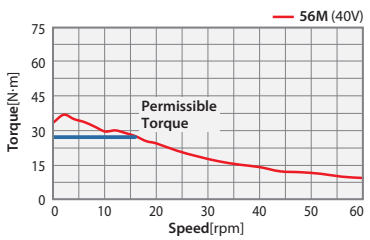
56M-PN25 Series



56M-PN40 Series



56M-PN50 Series



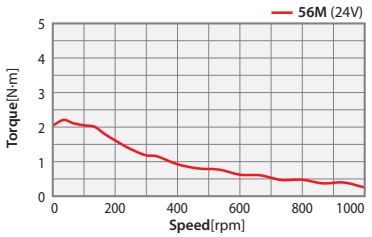
Specifications of Motor with Gearbox [56M]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

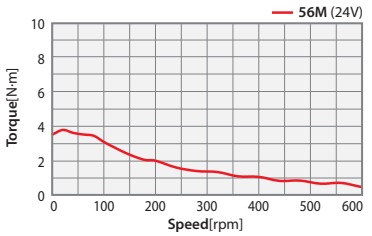
Model	Unit	56M							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	2	3.4	5.5	6.9	10	16.7	27	27
Rotor Inertia Moment	kg·m^2	280 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2.1				2.3			

Torque Graph with Gearbox

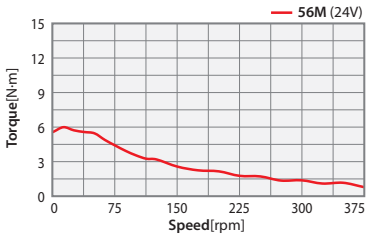
56M-PN3 Series



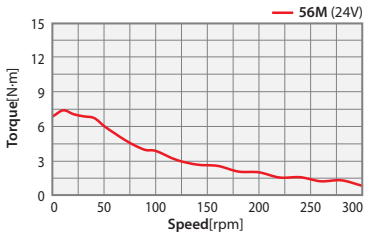
56M-PN5 Series



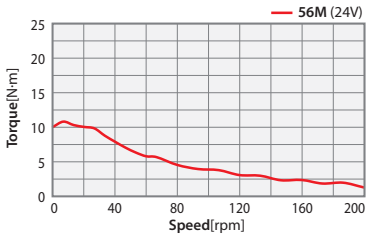
56M-PN8 Series



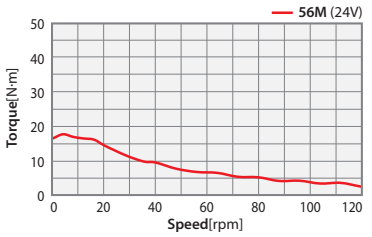
56M-PN10 Series



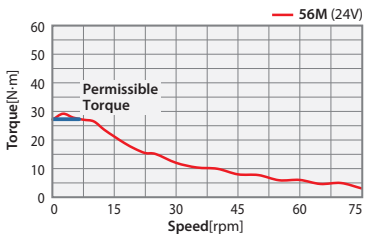
56M-PN15 Series



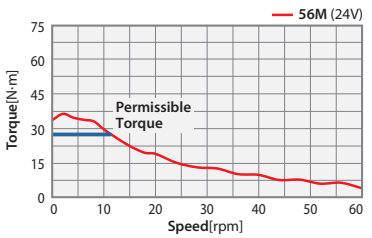
56M-PN25 Series



56M-PN40 Series



56M-PN50 Series



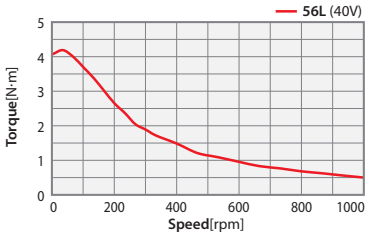
Specifications of Motor with Gearbox [56L]

Applicable Model
Ezi-SERVO CC-Link IE TSN

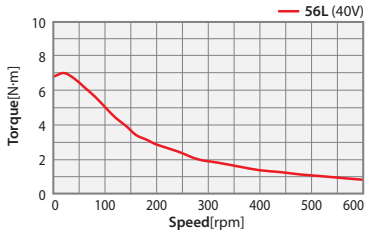
Model	Unit	56L							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	4.0	6.8	10.8	13.6	18	27	27	27
Rotor Inertia Moment	kg·m^2	520 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2.52				2.72			

Torque Graph with Gearbox

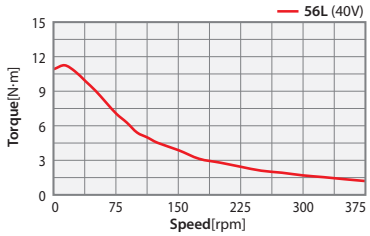
56L-PN3 Series



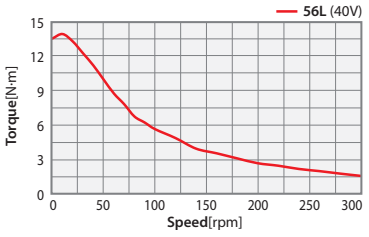
56L-PN5 Series



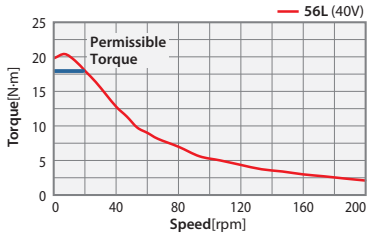
56L-PN8 Series



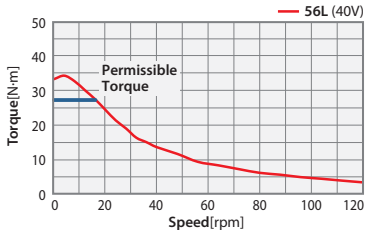
56L-PN10 Series



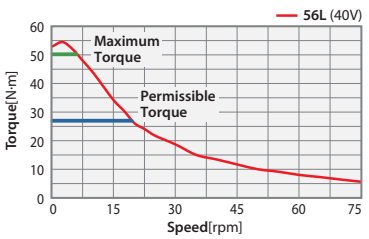
56L-PN15 Series



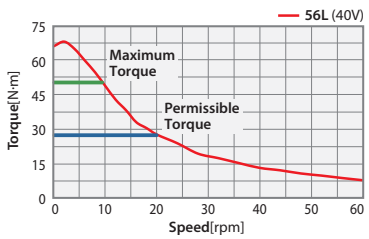
56L-PN25 Series



56L-PN40 Series



56L-PN50 Series



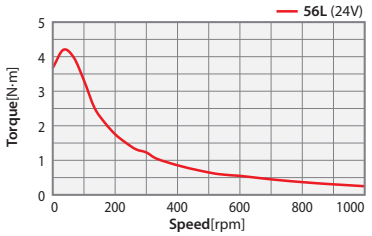
Specifications of Motor with Gearbox [56L]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

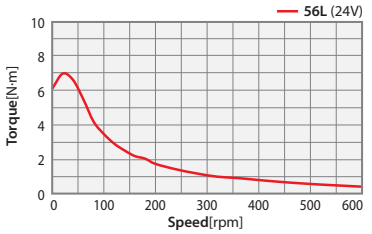
Model	Unit	56L							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	3.6	6	9.7	12.1	18	27	27	27
Rotor Inertia Moment	kg·m^2	520 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2.55				2.75			

Torque Graph with Gearbox

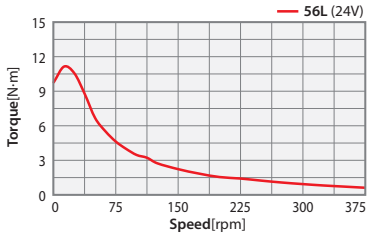
56L-PN3 Series



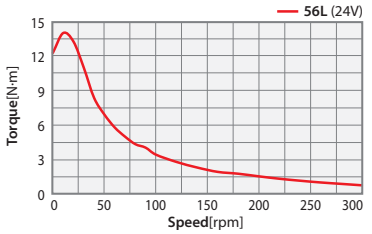
56L-PN5 Series



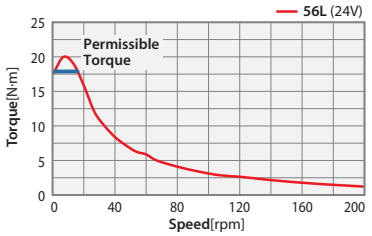
56L-PN8 Series



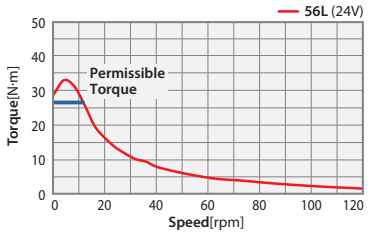
56L-PN10 Series



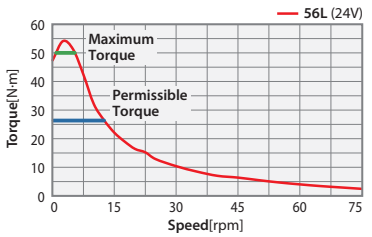
56L-PN15 Series



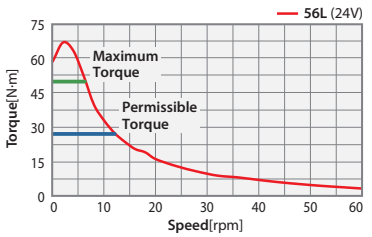
56L-PN25 Series



56L-PN40 Series



56L-PN50 Series



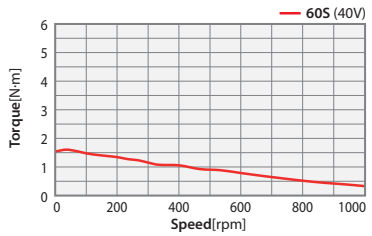
Specifications of Motor with Gearbox [60S]

Applicable Model
Ezi-SERVO CC-Link IE TSN

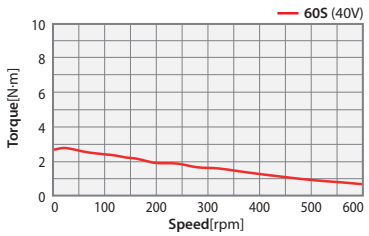
Model	Unit	60S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	1.5	2.5	4.0	5.1	7.4	12.3	19.8	24.7
Rotor Inertia Moment	kg·m^2	240 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2				2.2			

Torque Graph with Gearbox

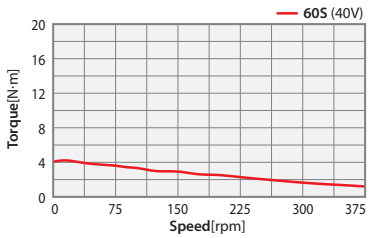
60S-PN3 Series



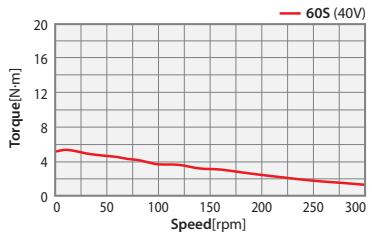
60S-PN5 Series



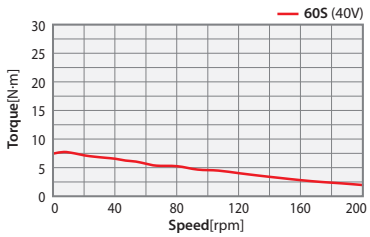
60S-PN8 Series



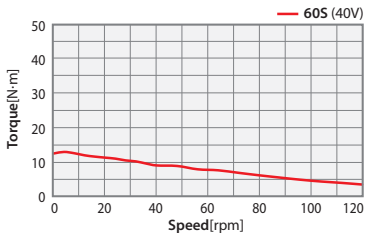
60S-PN10 Series



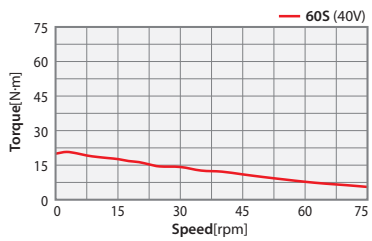
60S-PN15 Series



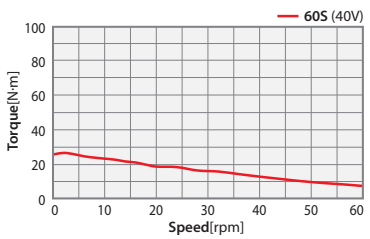
60S-PN25 Series



60S-PN40 Series



60S-PN50 Series



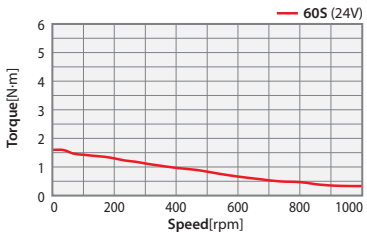
Specifications of Motor with Gearbox [60S]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

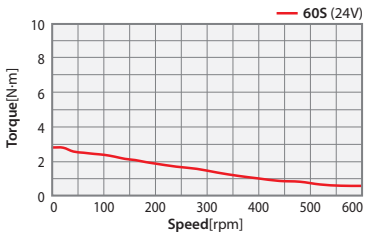
Model	Unit	60S							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	1.6	2.7	4.4	5.5	8	13.4	21.4	26.8
Rotor Inertia Moment	kg·m^2	240 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2				2.2			

Torque Graph with Gearbox

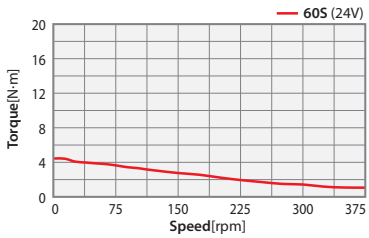
60S-PN3 Series



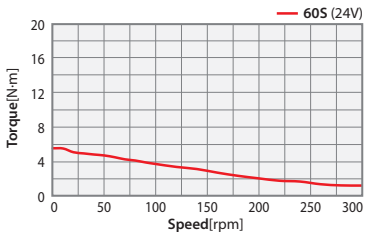
60S-PN5 Series



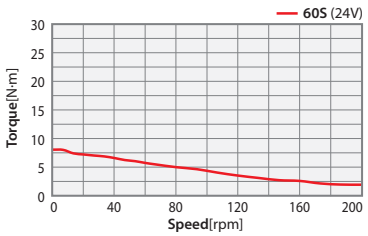
60S-PN8 Series



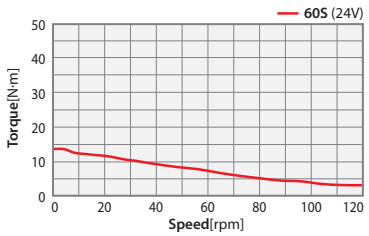
60S-PN10 Series



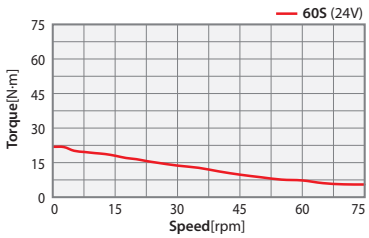
60S-PN15 Series



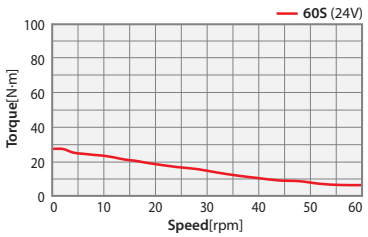
60S-PN25 Series



60S-PN40 Series



60S-PN50 Series



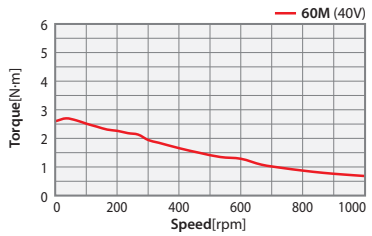
Specifications of Motor with Gearbox [60M]

Applicable Model
Ezi-SERVO CC-Link IE TSN

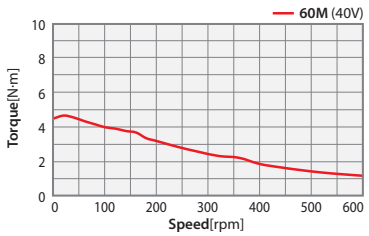
Model	Unit	60M							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	2.6	4.4	7.0	8.8	12.8	21.4	27	27
Rotor Inertia Moment	kg·m^2	490 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2.3				2.5			

Torque Graph with Gearbox

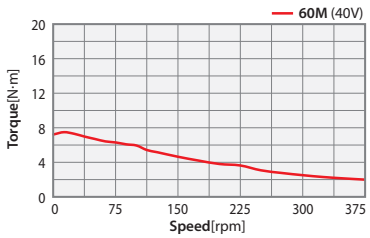
60M-PN3 Series



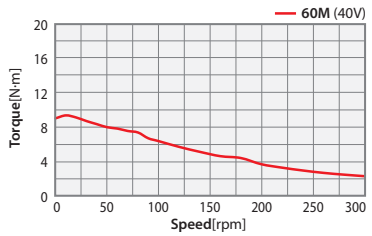
60M-PN5 Series



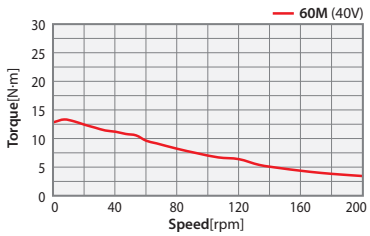
60M-PN8 Series



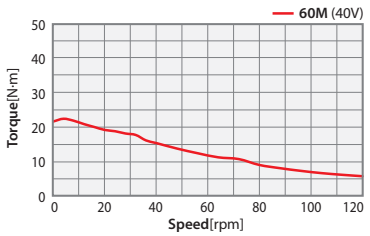
60M-PN10 Series



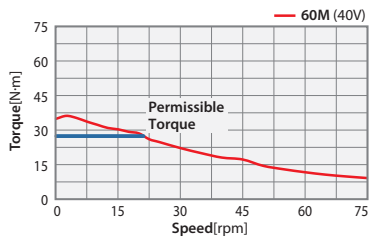
60M-PN15 Series



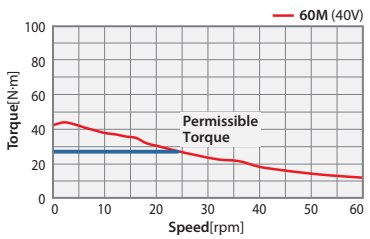
60M-PN25 Series



60M-PN40 Series



60M-PN50 Series



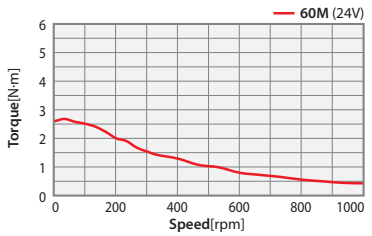
Specifications of Motor with Gearbox [60M]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

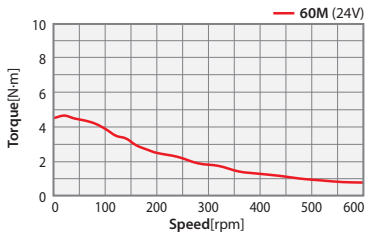
Model	Unit	60M							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	2.6	4.4	7.0	8.8	12.8	21.4	27	27
Rotor Inertia Moment	kg·m^2	490 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	2.3				2.5			

Torque Graph with Gearbox

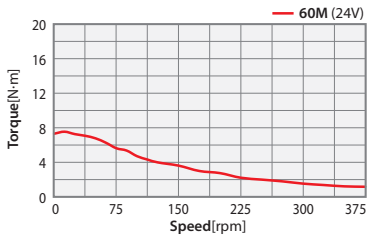
60M-PN3 Series



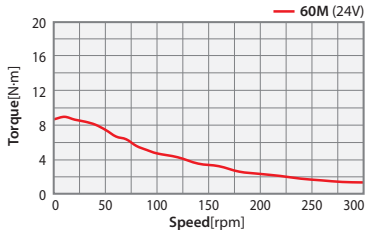
60M-PN5 Series



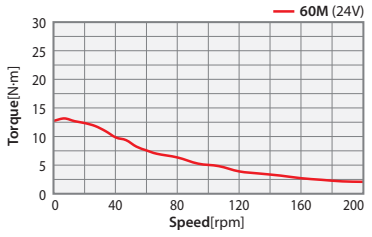
60M-PN8 Series



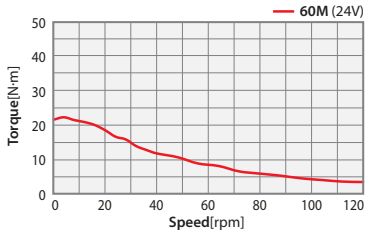
60M-PN10 Series



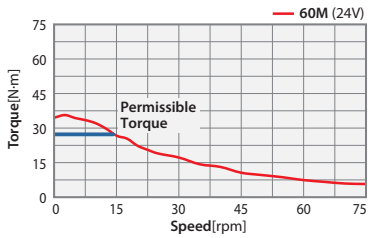
60M-PN15 Series



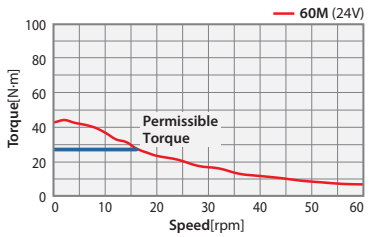
60M-PN25 Series



60M-PN40 Series



60M-PN50 Series



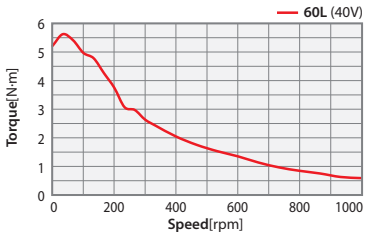
Specifications of Motor with Gearbox [60L]

Applicable Model
Ezi-SERVO CC-Link IE TSN

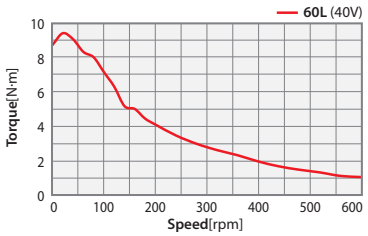
Model	Unit	60L							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	5.2	8.7	13.9	18	18	27	27	27
Rotor Inertia Moment	kg·m^2	690 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	3				3.2			

Torque Graph with Gearbox

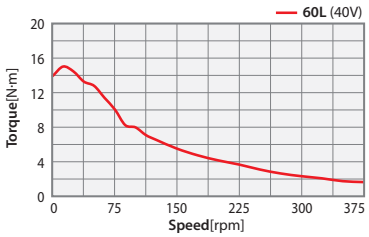
60L-PN3 Series



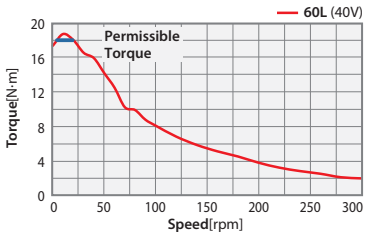
60L-PN5 Series



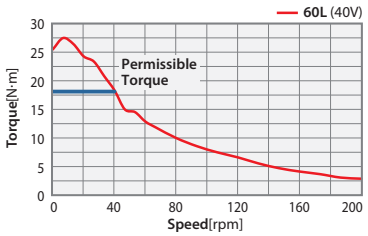
60L-PN8 Series



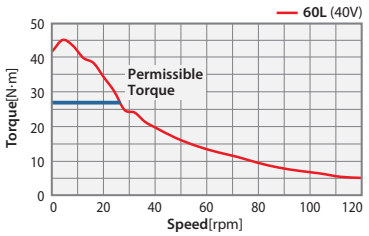
60L-PN10 Series



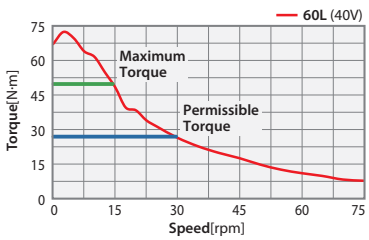
60L-PN15 Series



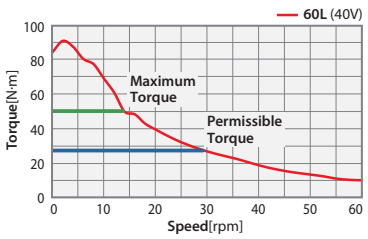
60L-PN25 Series



60L-PN40 Series



60L-PN50 Series



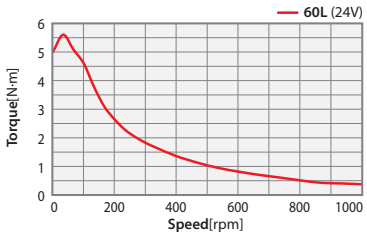
Specifications of Motor with Gearbox [60L]

Applicable Model	
Ezi-SERVO CC-Link IE TSN 4X	Ezi-SERVO CC-Link IE TSN ALL

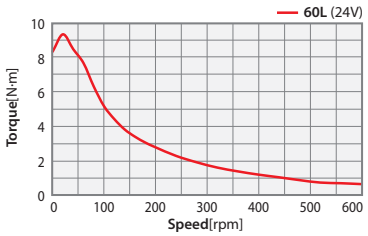
Model	Unit	60L							
		PN3	PN5	PN8	PN10	PN15	PN25	PN40	PN50
Maximum Holding Torque	N·m	4.9	8.3	13.2	16.6	18	27	27	27
Rotor Inertia Moment	kg·m^2	690 × 10^{-7}							
Backlash	arcmin	3							
Angle Transmission Error	arcmin	5							
Reduction Gear Ratio	-	1:3	1:5	1:8	1:10	1:15	1:25	1:40	1:50
Resolution(10,000 P/R Standard)	°	0.012	0.0072	0.0045	0.0036	0.0024	0.00144	0.0009	0.00072
Permissible Torque	N·m	18	27	27	18	18	27	27	27
Maximum Torque	N·m	35	50	50	35	35	50	50	50
Permitted Speed Range	r/min	0 ~ 1000	0 ~ 600	0 ~ 375	0 ~ 300	0 ~ 200	0 ~ 120	0 ~ 75	0 ~ 60
Motor Weight	kg	3				3.2			

Torque Graph with Gearbox

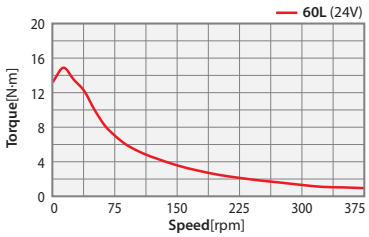
60L-PN3 Series



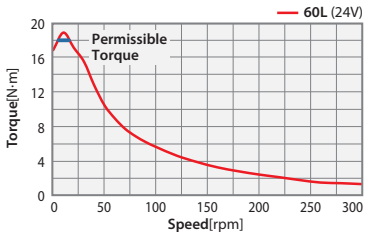
60L-PN5 Series



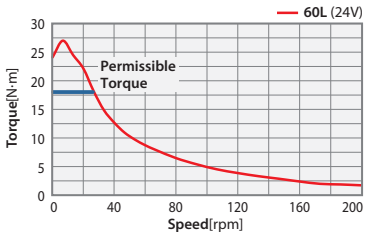
60L-PN8 Series



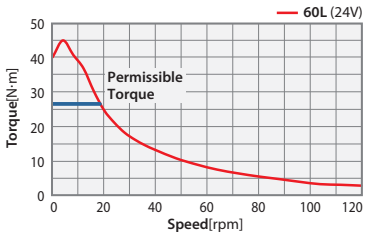
60L-PN10 Series



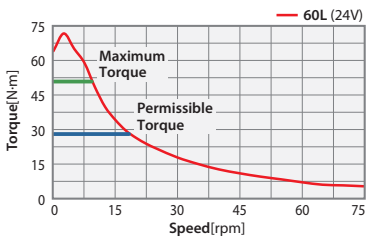
60L-PN15 Series



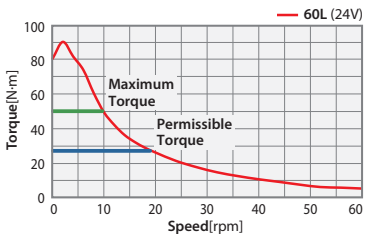
60L-PN25 Series



60L-PN40 Series



60L-PN50 Series

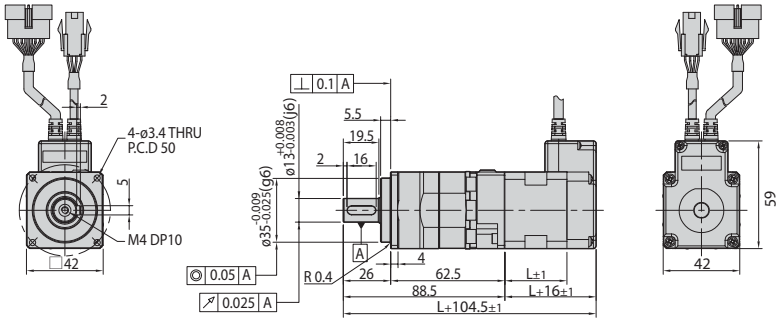


Dimensions of Motor with Gearbox [42 mm]

Applicable Model

Ezi-SERVO CC-Link IE TSN	Ezi-SERVO CC-Link IE TSN 4X

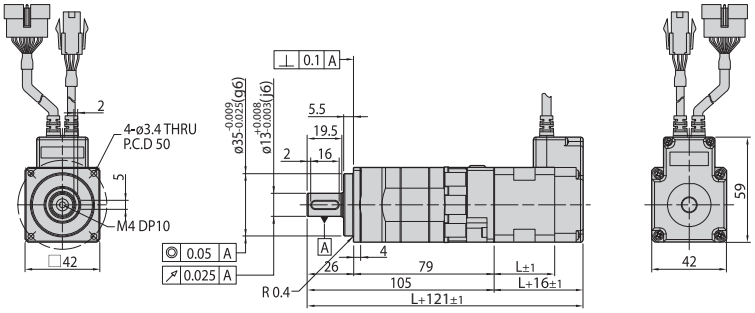
Gear Ratio 3, 5, 8, 10 : Single



42 *mm*

Model name	Length(L)
EzM2-42S	34
EzM2-42M	40
EzM2-42L	48
EzM2-42XL	60

Gear Ratio 15, 25, 40, 50 : Double



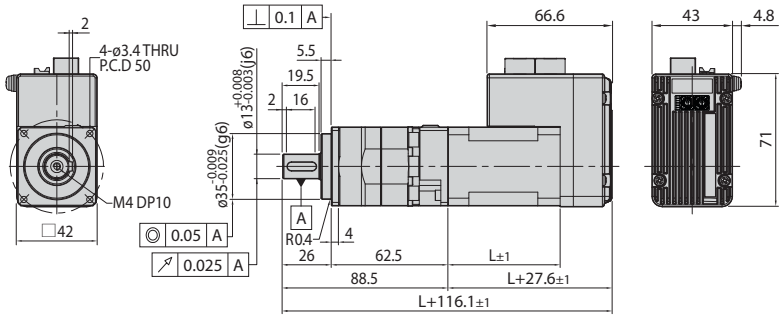
42 *mm*

Model name	Length(L)
EzM2-42S	34
EzM2-42M	40
EzM2-42L	48
EzM2-42XL	60

Applicable Model

Ezi-SERVO CC-Link IE TSN ALL

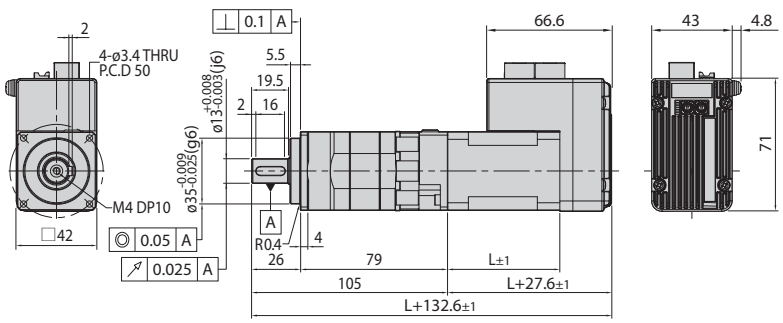
Gear Ratio 3, 5, 8, 10 : Single



42 *mm*

Model name	Length(L)
42M	40
42L	48
42XL	60

Gear Ratio 15, 25, 40, 50 : Double



42 *mm*

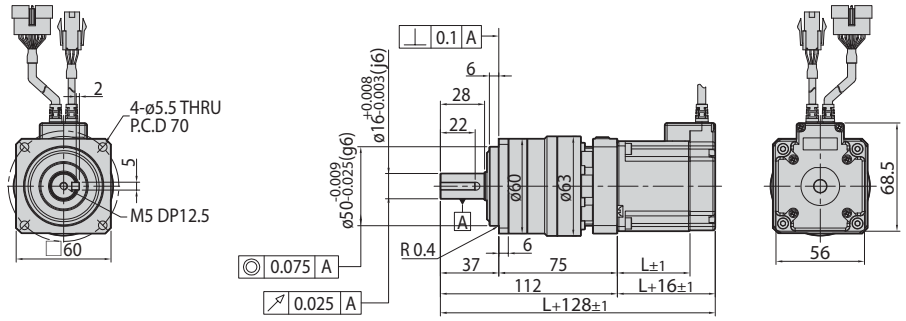
Model name	Length(L)
42M	40
42L	48
42XL	60

Dimensions of Motor with Gearbox [56 mm]

Applicable Model

Ezi-SERVO CC-Link IE TSN	Ezi-SERVO CC-Link IE TSN 4X

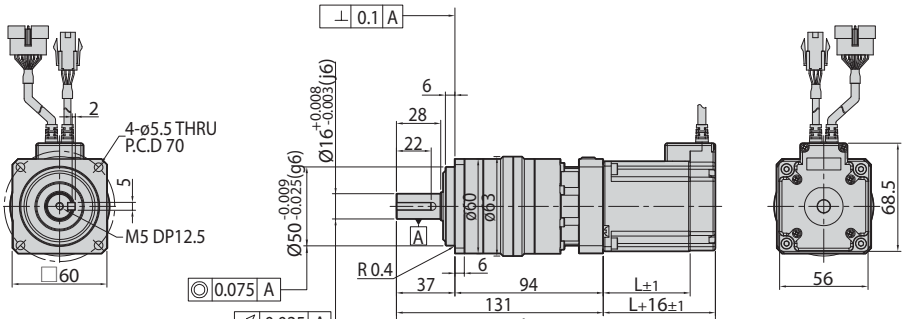
Gear Ratio 3, 5, 8, 10 : Single



56 *mm*

Model name	Length(L)
EzM2-56S	46
EzM2-56M	55
EzM2-56L	80

Gear Ratio 15, 25, 40, 50 : Double



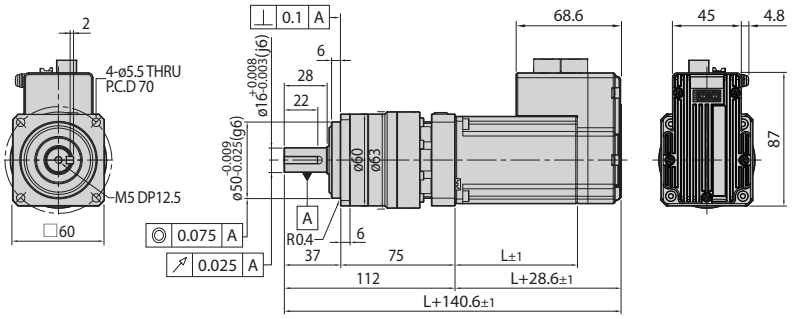
56 *mm*

Model name	Length(L)
EzM2-56S	46
EzM2-56M	55
EzM2-56L	80

Applicable Model

Ezi-SERVO CC-Link IE TSN ALL

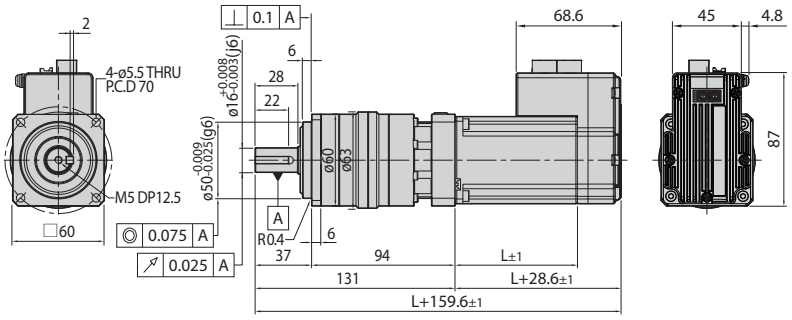
Gear Ratio 3, 5, 8, 10 : Single



56 *mm*

Model name	Length(L)
56S	46
56M	55
56L	80

Gear Ratio 15, 25, 40, 50 : Double



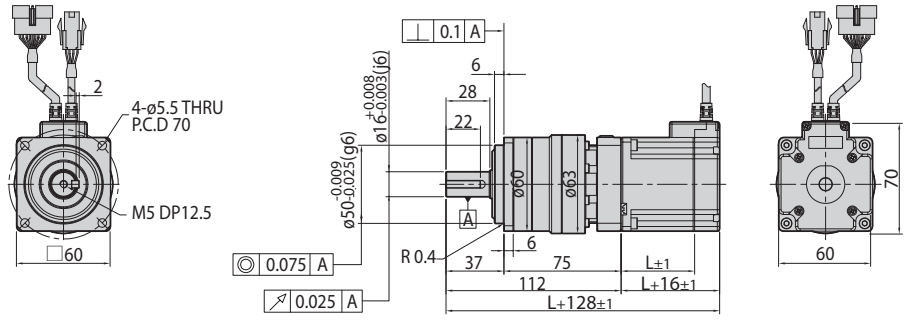
56 *mm*

Model name	Length(L)
56S	46
56M	55
56L	80

Dimensions of Motor with Gearbox [60 mm]

Applicable Model	
Ezi-SERVO CC-Link IE TSN	Ezi-SERVO CC-Link IE TSN 4X

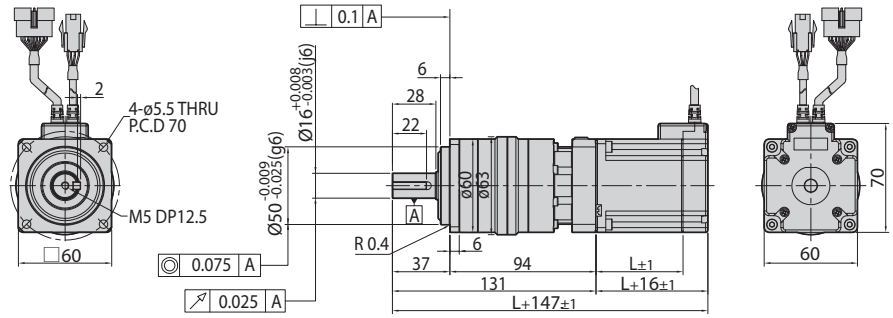
Gear Ratio 3, 5, 8, 10 : Single



60 mm

Model name	Length(L)
EzM2-60S	47
EzM2-60M	56
EzM2-60L	85

Gear Ratio 15, 25, 40, 50 : Double

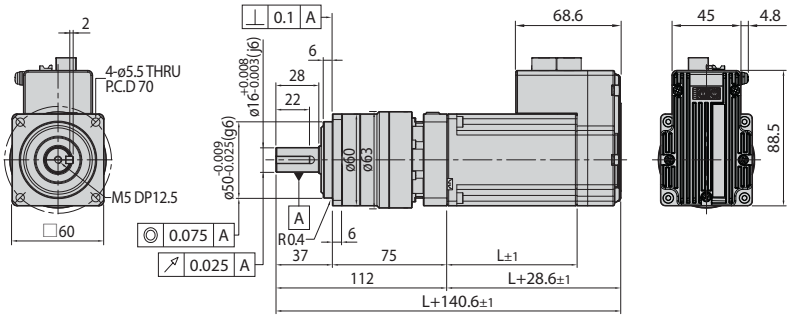


60 mm

Model name	Length(L)
EzM2-60S	47
EzM2-60M	56
EzM2-60L	85

Applicable Model
Ezi-SERVO CC-Link IE TSN ALL

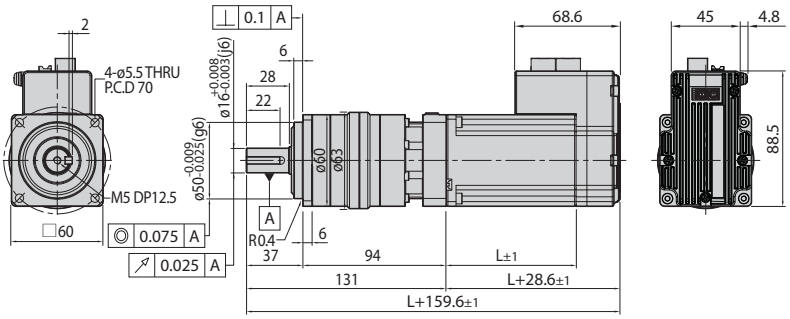
Gear Ratio 3, 5, 8, 10 : Single



60 mm

Model name	Length(L)
60S	47
60M	56
60L	85

Gear Ratio 15, 25, 40, 50 : Double



60 mm

Model name	Length(L)
60S	47
60M	56
60L	85

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