

Ezi-Pos[®] CC-Link IE TSN

Servo Control System

- CC-Link IE TSN-compatible Low-Voltage Servo Control System
- CiA402 Drive Profile
- DC Power Supply Input (12 ~ 48 V DC)
- Auto-Tuning
- Torque-Off Function

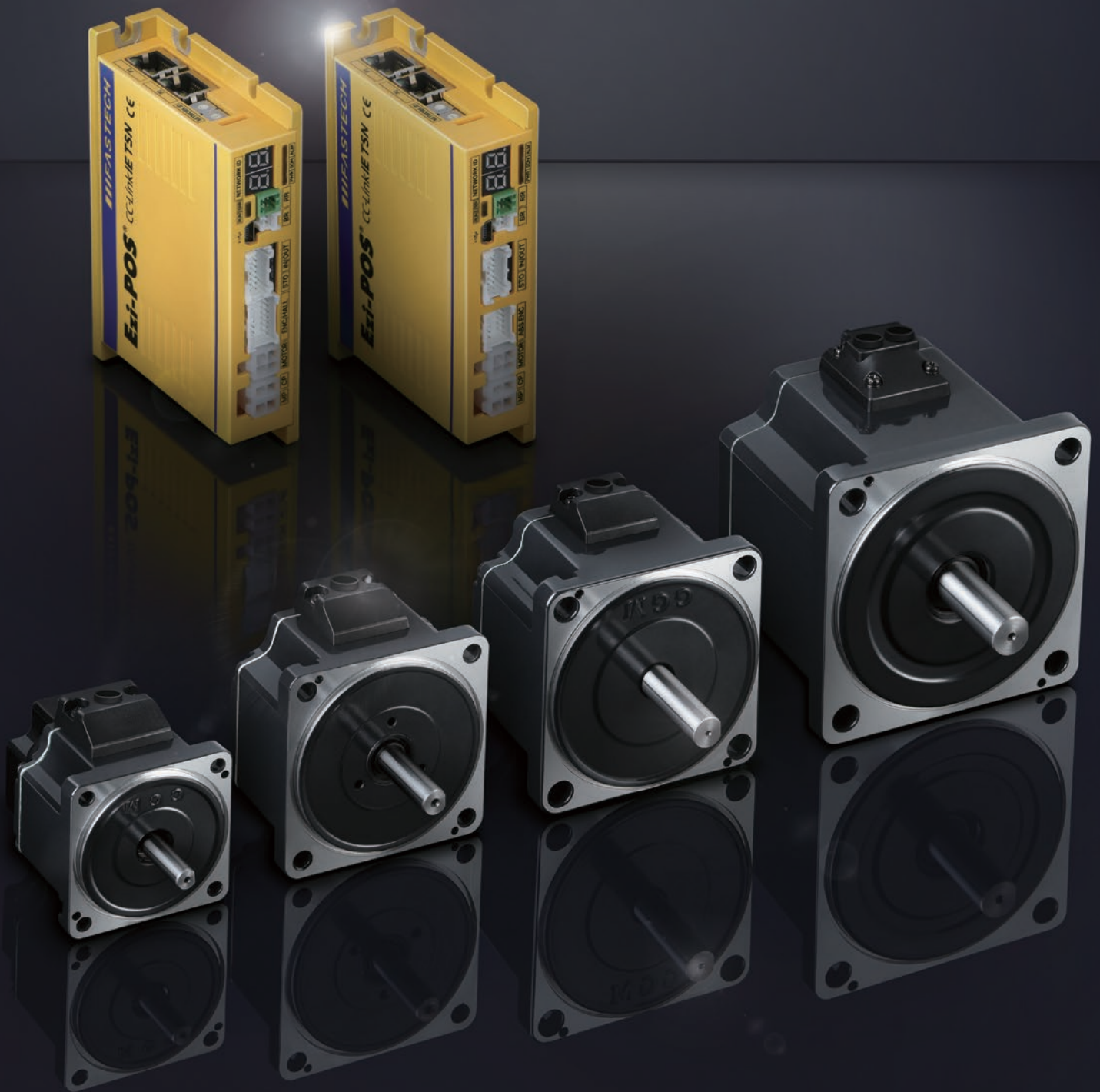
General-Purpose (G-Type) Motor Series



Fast Accurate Smooth Motion

Ezi-Pos[®] CC-LINK IE TSN

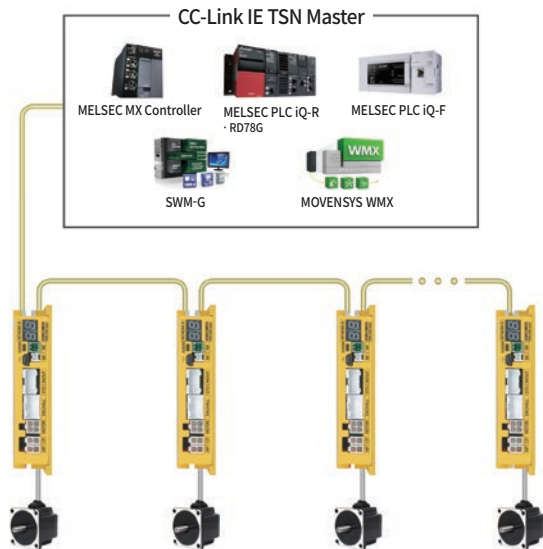
Servo Control System 



General-Purpose (G-Type) Motor Series

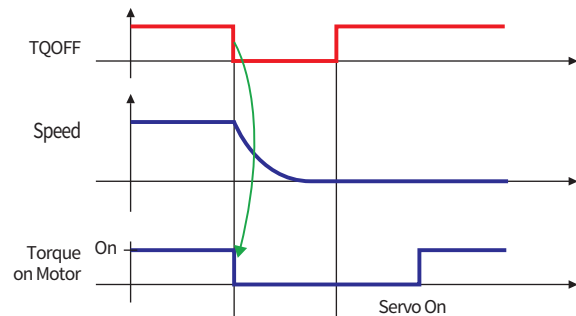
CC-Link IE TSN-compatible Motion Control

Ezi-POS CC-Link IE TSN is a servo control unit that supports CC-Link IE TSN, a high-speed Ethernet-based (1 Gbps, full-duplex) industrial network system. Ezi-POS CC-Link IE TSN employs CiA 402 drive profile and supports Cyclic Synchronous Position Mode, Profile Position Mode, and Homing Mode.



Torque-Off Function

Ezi-POS CC-Link IE TSN provides a hardware-based function to cut off power to the motor independently of CC-Link IE TSN communication. When the TQOFF input of the torque-off connector is detected, the drive immediately turns off the servo, and the motor stops.

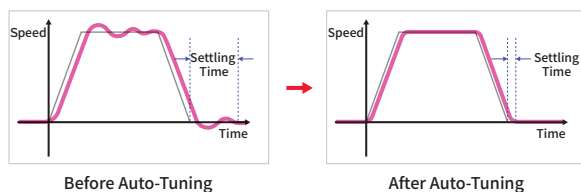


CAUTION

DO NOT use the Torque-Off function to stop or decelerate motors.

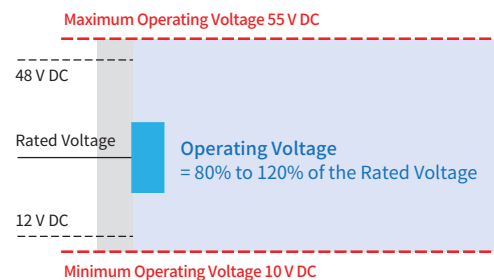
Auto-Tuning

Ezi-POS CC-Link IE TSN offers a simple and user-friendly Auto-Tuning function. The drive automatically estimates the system's load inertia and adjusts the optimal gain values. By using the user software (GUI), Auto-Tuning can be completed with just a few button clicks. During the tuning process, each step can be monitored in real time, and the results can be tested immediately.



Battery-compatible DC Power Input

Ezi-POS CC-Link IE TSN offers a low-voltage product lineup with a rated voltage of 12 to 48 V DC. It supports a wide operating voltage range (80 ~ 120 % of the rated voltage), features low power consumption, and enables high-efficiency motor control, making it ideal for battery-powered applications. The battery's charge status can also be continuously monitored by checking the drive's power voltage through the upper-level controller.



Ezi-POS CC-Link IE TSN Part Number Standard Combination

Ezi-POS-CT-A2A-G-GMX100AD-BK-P10

Series Name	
Model Name	
CT: CC-Link IE TSN	
Drive Series	
A: A Type	
Drive Output	
2 : 200 W	
Encoder Input Type	
A : Absolute Encoder	
Motor Type	
G : General Motor	
Motor ID	
GMX30AD : 30 W Motor GMX50AD : 50 W Motor GMX100AD : 100 W Motor GMX200AD : 200 W Motor * Encoder : 14-bit Single-Turn Absolute	
Brake	
No symbol : None BK : Brake	
Gearbox	
No symbol : None P: Parallel Shaft Gearbox H: Hollow Shaft Flat Gearbox	
Gear Ratio	
No symbol: None 5 : 1:5 10 : 1:10 15 : 1:15 20 : 1:20 30 : 1:30 50 : 1:50 100 : 1:100 200 : 1:200	

Unit Part Number	Motor Part Number	Drive Part Number
Ezi-POS-CT-A2A-G-GMX30AD	EzPM-G-GMX30AD	EzPD-CT-A2A-G-GMX30AD
Ezi-POS-CT-A2A-G-GMX50AD	EzPM-G-GMX50AD	EzPD-CT-A2A-G-GMX50AD
Ezi-POS-CT-A2A-G-GMX100AD	EzPM-G-GMX100AD	EzPD-CT-A2A-G-GMX100AD
Ezi-POS-CT-A2A-G-GMX200AD	EzPM-G-GMX200AD	EzPD-CT-A2A-G-GMX200AD

Combination of Motor with Parallel Shaft Gearbox and Drive

Unit Part Number	Motor Part Number	Drive Part Number	Gear Ratio	Unit Part Number	Motor Part Number	Drive Part Number	Gear Ratio
Ezi-POS-CT-A2A-G-GMX30AD-P5	EzPM-G-GMX30AD-P5	EzPD-CT-A2A-G-GMX30AD	1:5	Ezi-POS-CT-A2A-G-GMX100AD-P5	EzPM-G-GMX100AD-P5	EzPD-CT-A2A-G-GMX100AD	1:5
Ezi-POS-CT-A2A-G-GMX30AD-P10	EzPM-G-GMX30AD-P10		1:10	Ezi-POS-CT-A2A-G-GMX100AD-P10	EzPM-G-GMX100AD-P10		1:10
Ezi-POS-CT-A2A-G-GMX30AD-P15	EzPM-G-GMX30AD-P15		1:15	Ezi-POS-CT-A2A-G-GMX100AD-P15	EzPM-G-GMX100AD-P15		1:15
Ezi-POS-CT-A2A-G-GMX30AD-P20	EzPM-G-GMX30AD-P20		1:20	Ezi-POS-CT-A2A-G-GMX100AD-P20	EzPM-G-GMX100AD-P20		1:20
Ezi-POS-CT-A2A-G-GMX30AD-P30	EzPM-G-GMX30AD-P30		1:30	Ezi-POS-CT-A2A-G-GMX100AD-P30	EzPM-G-GMX100AD-P30		1:30
Ezi-POS-CT-A2A-G-GMX30AD-P50	EzPM-G-GMX30AD-P50		1:50	Ezi-POS-CT-A2A-G-GMX100AD-P50	EzPM-G-GMX100AD-P50		1:50
Ezi-POS-CT-A2A-G-GMX30AD-P100	EzPM-G-GMX30AD-P100		1:100	Ezi-POS-CT-A2A-G-GMX100AD-P100	EzPM-G-GMX100AD-P100		1:100
Ezi-POS-CT-A2A-G-GMX30AD-P200	EzPM-G-GMX30AD-P200		1:200	Ezi-POS-CT-A2A-G-GMX100AD-P200	EzPM-G-GMX100AD-P200		1:200
Ezi-POS-CT-A2A-G-GMX50AD-P5	EzPM-G-GMX50AD-P5	EzPD-CT-A2A-G-GMX50AD	1:5	Ezi-POS-CT-A2A-G-GMX200AD-P5	EzPM-G-GMX200AD-P5	EzPD-CT-A2A-G-GMX200AD	1:5
Ezi-POS-CT-A2A-G-GMX50AD-P10	EzPM-G-GMX50AD-P10		1:10	Ezi-POS-CT-A2A-G-GMX200AD-P10	EzPM-G-GMX200AD-P10		1:10
Ezi-POS-CT-A2A-G-GMX50AD-P15	EzPM-G-GMX50AD-P15		1:15	Ezi-POS-CT-A2A-G-GMX200AD-P15	EzPM-G-GMX200AD-P15		1:15
Ezi-POS-CT-A2A-G-GMX50AD-P20	EzPM-G-GMX50AD-P20		1:20	Ezi-POS-CT-A2A-G-GMX200AD-P20	EzPM-G-GMX200AD-P20		1:20
Ezi-POS-CT-A2A-G-GMX50AD-P30	EzPM-G-GMX50AD-P30		1:30	Ezi-POS-CT-A2A-G-GMX200AD-P30	EzPM-G-GMX200AD-P30		1:30
Ezi-POS-CT-A2A-G-GMX50AD-P50	EzPM-G-GMX50AD-P50		1:50	Ezi-POS-CT-A2A-G-GMX200AD-P50	EzPM-G-GMX200AD-P50		1:50
Ezi-POS-CT-A2A-G-GMX50AD-P100	EzPM-G-GMX50AD-P100		1:100	Ezi-POS-CT-A2A-G-GMX200AD-P100	EzPM-G-GMX200AD-P100		1:100
Ezi-POS-CT-A2A-G-GMX50AD-P200	EzPM-G-GMX50AD-P200		1:200	Ezi-POS-CT-A2A-G-GMX200AD-P200	EzPM-G-GMX200AD-P200		1:200

Combination of Motor with Hollow Shaft Flat Gearbox and Drive

Unit Part Number	Motor Part Number	Drive Part Number	Gear Ratio	Unit Part Number	Motor Part Number	Drive Part Number	Gear Ratio
Ezi-POS-CT-A2A-G-GMX30AD-H5	EzPM-G-GMX30AD-H5	EzPD-CT-A2A-G-GMX30AD	1:5	Ezi-POS-CT-A2A-G-GMX100AD-H5	EzPM-G-GMX100AD-H5	EzPD-CT-A2A-G-GMX100AD	1:5
Ezi-POS-CT-A2A-G-GMX30AD-H10	EzPM-G-GMX30AD-H10		1:10	Ezi-POS-CT-A2A-G-GMX100AD-H10	EzPM-G-GMX100AD-H10		1:10
Ezi-POS-CT-A2A-G-GMX30AD-H15	EzPM-G-GMX30AD-H15		1:15	Ezi-POS-CT-A2A-G-GMX100AD-H15	EzPM-G-GMX100AD-H15		1:15
Ezi-POS-CT-A2A-G-GMX30AD-H20	EzPM-G-GMX30AD-H20		1:20	Ezi-POS-CT-A2A-G-GMX100AD-H20	EzPM-G-GMX100AD-H20		1:20
Ezi-POS-CT-A2A-G-GMX30AD-H30	EzPM-G-GMX30AD-H30		1:30	Ezi-POS-CT-A2A-G-GMX100AD-H30	EzPM-G-GMX100AD-H30		1:30
Ezi-POS-CT-A2A-G-GMX30AD-H50	EzPM-G-GMX30AD-H50		1:50	Ezi-POS-CT-A2A-G-GMX100AD-H50	EzPM-G-GMX100AD-H50		1:50
Ezi-POS-CT-A2A-G-GMX30AD-H100	EzPM-G-GMX30AD-H100		1:100	Ezi-POS-CT-A2A-G-GMX100AD-H100	EzPM-G-GMX100AD-H100		1:100
Ezi-POS-CT-A2A-G-GMX30AD-H200	EzPM-G-GMX30AD-H200		1:200	Ezi-POS-CT-A2A-G-GMX100AD-H200	EzPM-G-GMX100AD-H200		1:200
Ezi-POS-CT-A2A-G-GMX50AD-H5	EzPM-G-GMX50AD-H5	EzPD-CT-A2A-G-GMX50AD	1:5	Ezi-POS-CT-A2A-G-GMX200AD-H5	EzPM-G-GMX200AD-H5	EzPD-CT-A2A-G-GMX200AD	1:5
Ezi-POS-CT-A2A-G-GMX50AD-H10	EzPM-G-GMX50AD-H10		1:10	Ezi-POS-CT-A2A-G-GMX200AD-H10	EzPM-G-GMX200AD-H10		1:10
Ezi-POS-CT-A2A-G-GMX50AD-H15	EzPM-G-GMX50AD-H15		1:15	Ezi-POS-CT-A2A-G-GMX200AD-H15	EzPM-G-GMX200AD-H15		1:15
Ezi-POS-CT-A2A-G-GMX50AD-H20	EzPM-G-GMX50AD-H20		1:20	Ezi-POS-CT-A2A-G-GMX200AD-H20	EzPM-G-GMX200AD-H20		1:20
Ezi-POS-CT-A2A-G-GMX50AD-H30	EzPM-G-GMX50AD-H30		1:30	Ezi-POS-CT-A2A-G-GMX200AD-H30	EzPM-G-GMX200AD-H30		1:30
Ezi-POS-CT-A2A-G-GMX50AD-H50	EzPM-G-GMX50AD-H50		1:50	Ezi-POS-CT-A2A-G-GMX200AD-H50	EzPM-G-GMX200AD-H50		1:50
Ezi-POS-CT-A2A-G-GMX50AD-H100	EzPM-G-GMX50AD-H100		1:100	Ezi-POS-CT-A2A-G-GMX200AD-H100	EzPM-G-GMX200AD-H100		1:100
Ezi-POS-CT-A2A-G-GMX50AD-H200	EzPM-G-GMX50AD-H200		1:200				

Specifications of Drive

Drive Part Number		EzPD-CT-A2A-G-GMX30AD EzPD-CT-A2A-G-GMX50AD EzPD-CT-A2A-G-GMX100AD	EzPD-CT-A2A-G-GMX200AD
Main Power Supply	Input Voltage	24 V DC $\pm$ 10 %	48 V DC $\pm$ 10 %
	Input Current	Maximum Rated Current 8.5 A (For motor-specific input current specifications, refer to the motor specification table.)	
Control Power (Optional)	Input Voltage	12 ~ 48 V DC $\pm$ 10 % (If the control power is not connected or its voltage is lower than the main power supply, the main power supply will be used instead.)	
	Current Consumption	4 W or lower	
Condition	Temperature	Operation: 0 ~ 45 °C Storage: -25 ~ 70 °C	
	Humidity	Operation: 85 % RH or less (no condensation) Storage: 85 % RH or less (no condensation)	
	Vibration Resistance	0.5 g	
	Protection Rating	IP20	
Functions	PWM Frequency	25 kHz	
	Current Control Cycle	40 μ s	
	Speed/Position Control Cycle	400 μ s	
	Speed Control Range	0 ~ 4,000 r/min	
	Encoder Interface	Absolute Encoder	
	Error Types	Overcurrent, Overspeed, Position Tracking Error, Overload, Overheating, Regenerative Overvoltage, Motor Connection Error, Encoder Connection Error, Main Power Undervoltage, In-Position Error, System Error, ROM Error, Motor Parameter Error, Main Power Overvoltage, Excessive Position Error, Emergency Stop Circuit Error	
	LED Indicators	Power status, Servo On status, and Alarm status	
	Brake Control	Output connector for brake control	
I/O Signals	Regenerative Resistor Control	Output connector for regenerative resistor control	
	Inputs	Dedicated Inputs: 3 points (LIMIT+, LIMIT-, ORIGIN), Photocoupler Input User Inputs: 2 points, Photocoupler Input	
	Outputs	User Outputs: 3 points, Photocoupler Output	
CC-Link IE TSN	Torque-Off	Dedicated Inputs: 2 points (TQOFF1, TQOFF2), Photocoupler Input	
	Communication Protocol	CC-Link IE TSN Class B	
	Operation Mode	CiA402 Drive Profile: Cyclic Synchronous Position Mode(CSP), Profile Position Mode(PP), Homing Mode(HM)	
	Synchronization	Minimum Cycle Time: 250 μ s / Synchronous Comm. (CSP, PP, HM) / Asynchronous Comm. (PP, HM)	

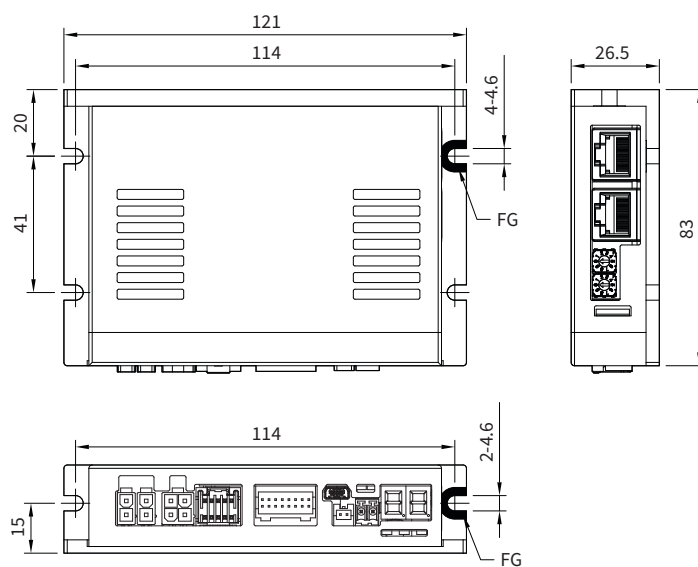
Dimensions of Drive [mm]

EzPD-CT-A2A-G-GMX30AD

EzPD-CT-A2A-G-GMX50AD

EzPD-CT-A2A-G-GMX100AD

EzPD-CT-A2A-G-GMX200AD

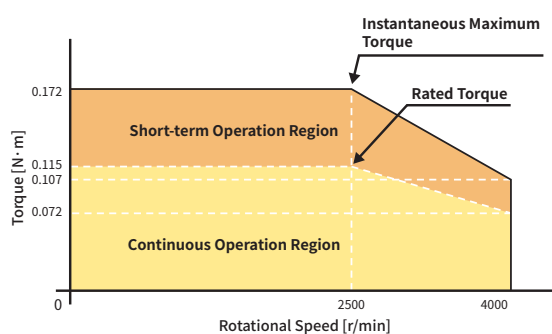


Specifications of Motor

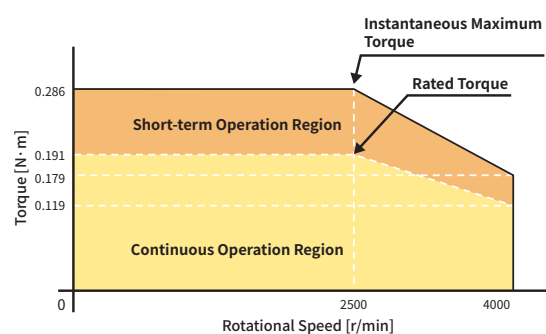
Motor Part Number			EzPM-G-GMX30AD	EzPM-G-GMX50AD	EzPM-G-GMX100AD	EzPM-G-GMX200AD
Motor Type			3-phase BLDC motor			
Rated Output (Continuous)	W		30	50	100	200
Rated Voltage	V		DC 24			DC 48
Main Power Rated Input Current	A		1.9	2.8	5.5	5.4
Main Power Maximum Input Current	A		2.9	4.2	7.1	6.0
Rated Torque	N·m		0.115	0.191	0.382	0.637
Rated Phase Current	Arms		1.787	2.976	5.366	6.196
Maximum Instantaneous Torque	N·m		0.172	0.286	0.497	0.732
Maximum Instantaneous Phase Current	Arms		2.615	4.336	6.870	7.011
Rated Rotational Speed	r/min		2500			3000
Maximum Rotational Speed	r/min		4000			
Encoder			Absolute Encoder (14-bit/rev)			
Motor Permissible Load Inertia Moment	$10^{-4}\text{kg} \cdot \text{m}^2$		1.7	4.7	12.2	13.2
Rotor Inertia	$10^{-4}\text{kg} \cdot \text{m}^2$		0.086	0.234	0.61	0.66
Weight	kg		0.6	0.9	1.4	2.3
		10 mm	70	120	160	197
		20 mm	100	140	170	220
Permissible Radial Load	N					
Permissible Axial Load	N		Less than half the motor unit weight			
Insulation Resistance	MΩ		Minimum 100 MΩ (measured with 500 V DC insulation resistance tester)			
Insulation Class			EN Standard, Class E (120 °C)			
Operating Temperature and Humidity			0 ~ 50 °C, 85 % RH or lower(no condensation)			
Storage Temperature and Humidity			-25 ~ 70 °C, 85 % RH or lower(no condensation)			

Standard Motor Torque

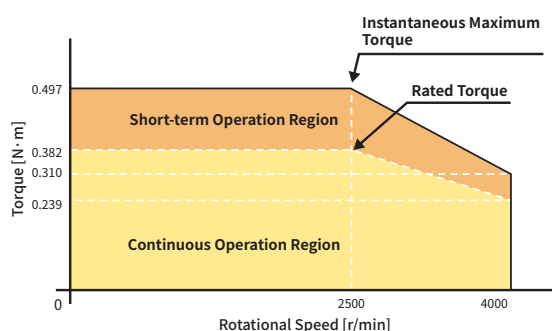
EzPM-G-GMX30AD



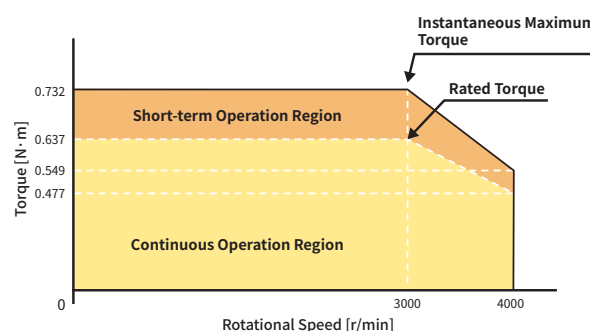
EzPM-G-GMX50AD



EzPM-G-GMX100AD

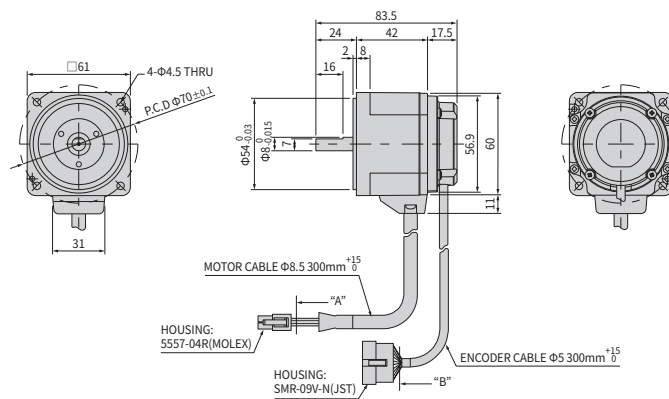


EzPM-G-GMX200AD

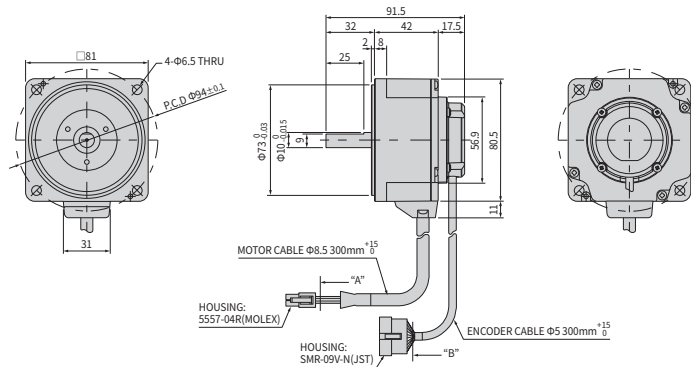


Dimensions of Motor [mm]

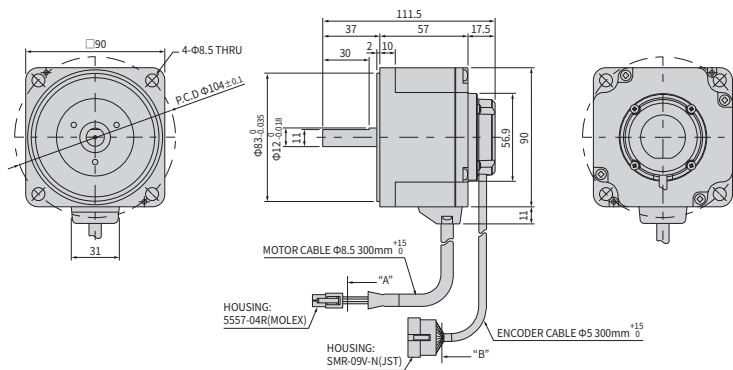
EzPM-G-GMX30AD



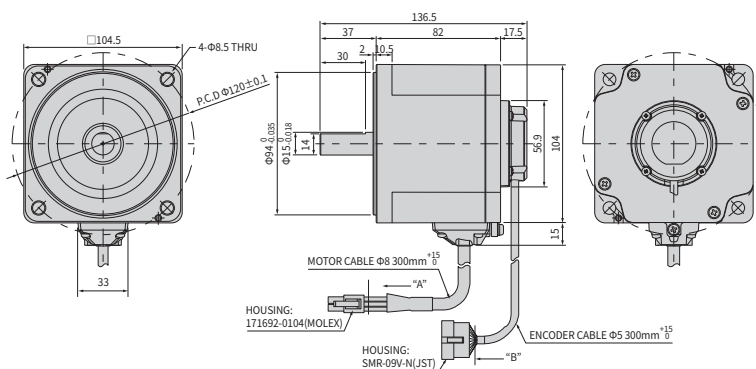
EzPM-G-GMX50AD



EzPM-G-GMX100AD



EzPM-G-GMX200AD



Parallel Shaft Gearbox Type Motor Specifications

EzPM-G-GMX30AD-P□

Unit Part Number	Motor Part Number	Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N]		Permissible Axial Load[N]
				0~2500 r/min	4000 r/min			Distance from Output Shaft End		
								10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX30AD-P5	EzPM-G-GMX30AD-P5	5	Max. 1	0.52	0.32	800	1.0	100	150	40
Ezi-POS-CT-A2A-G-GMX30AD-P10	EzPM-G-GMX30AD-P10	10		1.03	0.64	400		150	200	
Ezi-POS-CT-A2A-G-GMX30AD-P15	EzPM-G-GMX30AD-P15	15		1.55	0.97	266.7				
Ezi-POS-CT-A2A-G-GMX30AD-P20	EzPM-G-GMX30AD-P20	20		2.06	1.29	200				
Ezi-POS-CT-A2A-G-GMX30AD-P30	EzPM-G-GMX30AD-P30	30		2.96	1.85	133.3				
Ezi-POS-CT-A2A-G-GMX30AD-P50	EzPM-G-GMX30AD-P50	50		4.93	3.08	80				
Ezi-POS-CT-A2A-G-GMX30AD-P100	EzPM-G-GMX30AD-P100	100		6.0	6.0	40				
Ezi-POS-CT-A2A-G-GMX30AD-P200	EzPM-G-GMX30AD-P200	200		6.0	6.0	20				

EzPM-G-GMX50AD-P□

Unit Part Number	Motor Part Number	 Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N] Distance from Output Shaft End		Permissible Axial Load[N]
				0~2500 r/min	4000 r/min			10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX50AD-P5	EzPM-G-GMX50AD-P5	5	Max. 1	0.86	0.54	800	1.8	200	250	100
Ezi-POS-CT-A2A-G-GMX50AD-P10	EzPM-G-GMX50AD-P10	10		1.72	1.07	400		300	350	
Ezi-POS-CT-A2A-G-GMX50AD-P15	EzPM-G-GMX50AD-P15	15		2.58	1.61	266.7				
Ezi-POS-CT-A2A-G-GMX50AD-P20	EzPM-G-GMX50AD-P20	20		3.44	2.15	200				
Ezi-POS-CT-A2A-G-GMX50AD-P30	EzPM-G-GMX50AD-P30	30		4.93	3.08	133.3		450	550	
Ezi-POS-CT-A2A-G-GMX50AD-P50	EzPM-G-GMX50AD-P50	50		8.21	5.13	80				
Ezi-POS-CT-A2A-G-GMX50AD-P100	EzPM-G-GMX50AD-P100	100		16.0	10.27	40				
Ezi-POS-CT-A2A-G-GMX50AD-P200	EzPM-G-GMX50AD-P200	200		16.0	16.0	20				

※ The motor model name refers to the combination of motor and gearbox.

※ The weight indicates the total weight of the motor combined with the gearbox.

※ Specifications and characteristics not listed above are identical to those of the standard motor.

Parallel Shaft Gearbox Type Motor Specifications

EzPM-G-GMX100AD-P□

Unit Part Number	Motor Part Number	⬜ Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N]		Permissible Axial Load[N]
				0~2500 r/min	4000 r/min			Distance from Output Shaft End		
								10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX100AD-P5	EzPM-G-GMX100AD-P5	5	Max. 1	1.72	1.07	800	2.7	300	400	150
Ezi-POS-CT-A2A-G-GMX100AD-P10	EzPM-G-GMX100AD-P10	10		3.44	2.15	400		400	500	
Ezi-POS-CT-A2A-G-GMX100AD-P15	EzPM-G-GMX100AD-P15	15		5.16	3.22	266.7				
Ezi-POS-CT-A2A-G-GMX100AD-P20	EzPM-G-GMX100AD-P20	20		6.88	4.30	200				
Ezi-POS-CT-A2A-G-GMX100AD-P30	EzPM-G-GMX100AD-P30	30		9.85	6.16	133.3		500	650	
Ezi-POS-CT-A2A-G-GMX100AD-P50	EzPM-G-GMX100AD-P50	50		16.42	10.27	80				
Ezi-POS-CT-A2A-G-GMX100AD-P100	EzPM-G-GMX100AD-P100	100		30.0	20.53	40				
Ezi-POS-CT-A2A-G-GMX100AD-P200	EzPM-G-GMX100AD-P200	200		30.0	30.0	20				

EzPM-G-GMX200AD-P□

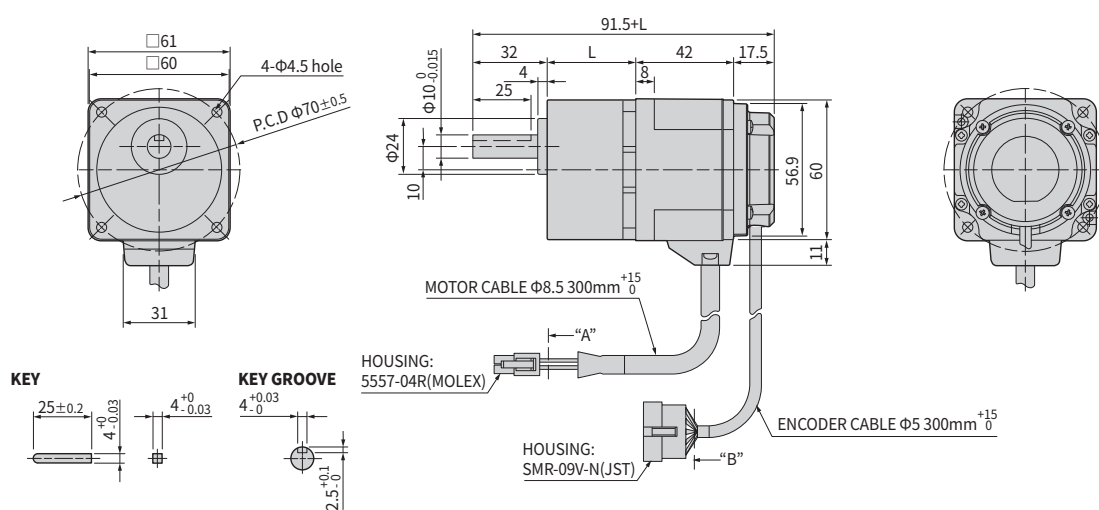
Unit Part Number	Motor Part Number	 Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N] Distance from Output Shaft End		Permissible Axial Load[N]
				0~3000 r/min	4000 r/min			10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX200AD-P5	EzPM-G-GMX200AD-P5	5	Max. 1	2.86	2.15	800	5.3	550	800	200
Ezi-POS-CT-A2A-G-GMX200AD-P10	EzPM-G-GMX200AD-P10	10		5.73	4.30	400				
Ezi-POS-CT-A2A-G-GMX200AD-P15	EzPM-G-GMX200AD-P15	15		8.59	6.45	266.7				
Ezi-POS-CT-A2A-G-GMX200AD-P20	EzPM-G-GMX200AD-P20	20		11.46	8.59	200				
Ezi-POS-CT-A2A-G-GMX200AD-P30	EzPM-G-GMX200AD-P30	30		16.42	12.32	133.3		1000	1250	300
Ezi-POS-CT-A2A-G-GMX200AD-P50	EzPM-G-GMX200AD-P50	50		27.37	20.53	80				
Ezi-POS-CT-A2A-G-GMX200AD-P100	EzPM-G-GMX200AD-P100	100		51.57	38.67	40				
Ezi-POS-CT-A2A-G-GMX200AD-P200	EzPM-G-GMX200AD-P200	200		70.0	70.0	20		1400	1700	400

- ※ The motor model name refers to the combination of motor and gearbox.
 ※ The weight indicates the total weight of the motor combined with the gearbox.
 ※ Specifications and characteristics not listed above are identical to those of the standard motor.

Parallel Shaft Gearbox Type Motor Specifications [mm]

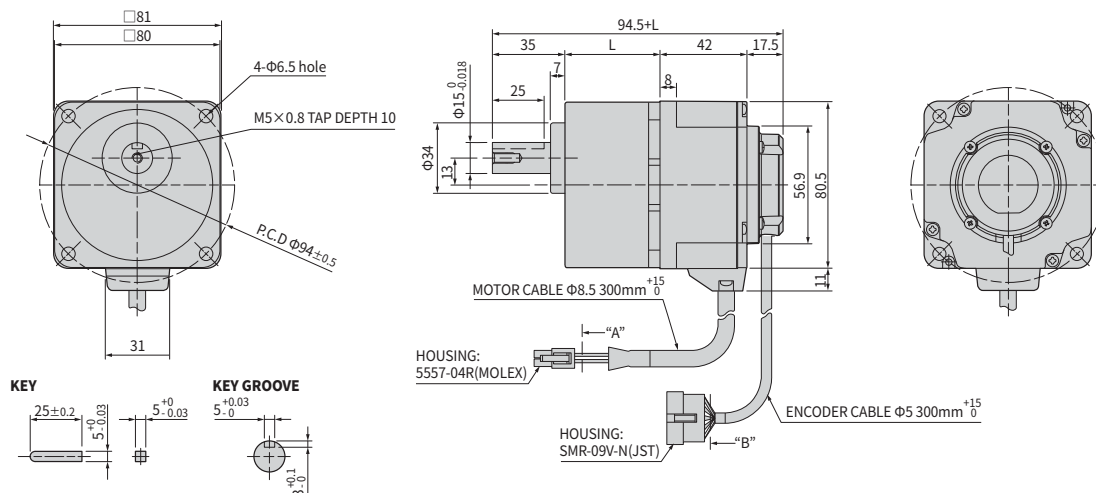
EzPM-G-GMX30AD-P□

Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications	L[mm]
Ezi-POS-CT-A2A-G-GMX30AD-P□	EzPM-G-GMX30AD-P□	5, 10, 15, 20	M4X50	34
		30, 50, 100	M4X55	38
		200	M4X60	43



EzPM-G-GMX50AD-P□

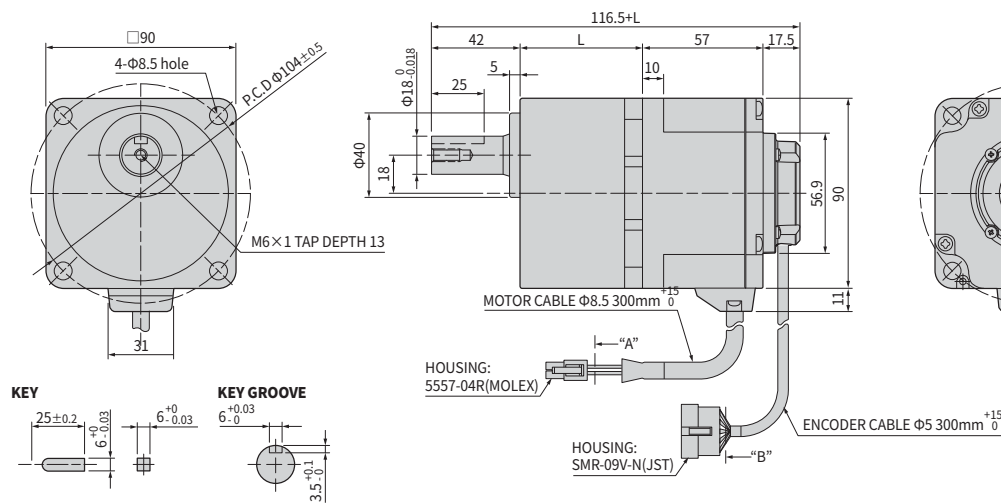
Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications	L[mm]
Ezi-POS-CT-A2A-G-GMX50AD-P□	EzPM-G-GMX50AD-P□	5, 10, 15, 20	M6X65	41
		30, 50, 100	M6X70	46
		200	M6X75	51



Parallel Shaft Gearbox Type Motor Specifications [mm]

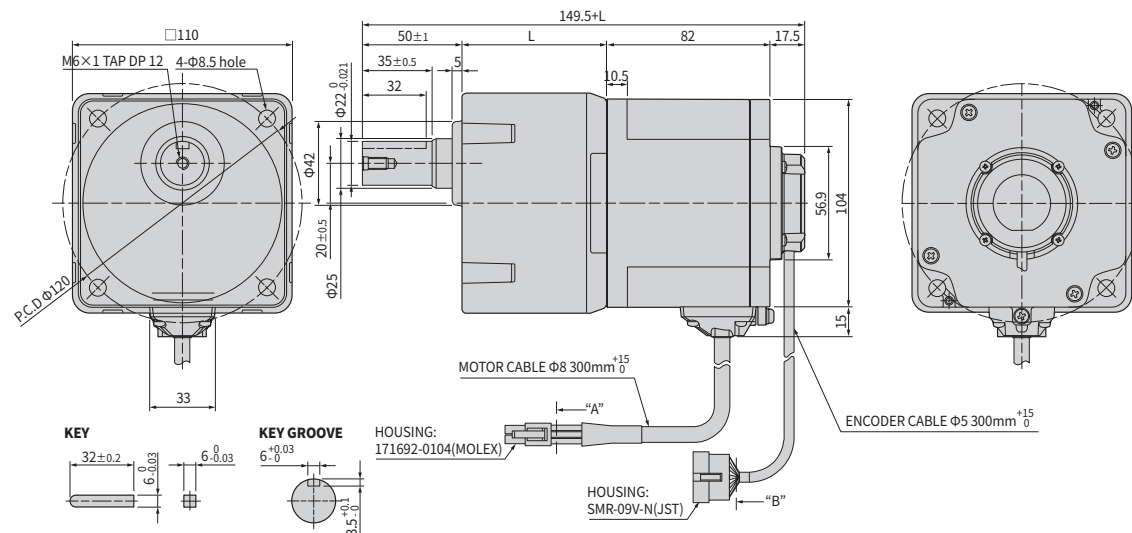
EzPM-G-GMX100AD-P□

Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications	L[mm]
Ezi-POS-CT-A2A-G-GMX100AD-P□	EzPM-G-GMX100AD-P□	5, 10, 15, 20	M8X75	45
		30, 50, 100	M8X90	58
		200	M8X95	64



EzPM-G-GMX200AD-P□

Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications	L[mm]
Ezi-POS-CT-A2A-G-GMX200AD-P□	EzPM-G-GMX200AD-P□	5, 10, 15, 20	M8X95	60
		30, 50	M8X110	72
		100, 200	M8X120	86



Hollow Shaft Flat Gearbox Type Motor Specifications

EzPM-G-GMX30AD-H□

Unit Part Number	Motor Part Number	Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N]		Permissible Axial Load[N]
				0~2500 r/min	4000 r/min			Distance from Mounting Surface		
								10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX30AD-H5	EzPM-G-GMX30AD-H5	5	Max. 1	0.46	0.29	800	1.3	450	370	200
Ezi-POS-CT-A2A-G-GMX30AD-H10	EzPM-G-GMX30AD-H10	10		0.97	0.61	400				
Ezi-POS-CT-A2A-G-GMX30AD-H15	EzPM-G-GMX30AD-H15	15		1.46	0.91	266.7				
Ezi-POS-CT-A2A-G-GMX30AD-H20	EzPM-G-GMX30AD-H20	20		1.95	1.22	200				
Ezi-POS-CT-A2A-G-GMX30AD-H30	EzPM-G-GMX30AD-H30	30		2.92	1.83	133.3				
Ezi-POS-CT-A2A-G-GMX30AD-H50	EzPM-G-GMX30AD-H50	50		4.87	3.04	80		500	400	
Ezi-POS-CT-A2A-G-GMX30AD-H100	EzPM-G-GMX30AD-H100	100		9.74	6.09	40				
Ezi-POS-CT-A2A-G-GMX30AD-H200	EzPM-G-GMX30AD-H200	200		17.0	12.18	20				

EzPM-G-GMX50AD-H□

Unit Part Number	Motor Part Number	 Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N]		Permissible Axial Load[N]
				0~2500 r/min	4000 r/min			Distance from Mounting Surface		
								10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX50AD-H5	EzPM-G-GMX50AD-H5	5	Max. 1	0.81	0.51	800	2.4	800	660	400
Ezi-POS-CT-A2A-G-GMX50AD-H10	EzPM-G-GMX50AD-H10	10		1.62	1.01	400				
Ezi-POS-CT-A2A-G-GMX50AD-H15	EzPM-G-GMX50AD-H15	15		2.44	1.52	266.7				
Ezi-POS-CT-A2A-G-GMX50AD-H20	EzPM-G-GMX50AD-H20	20		3.25	2.03	200				
Ezi-POS-CT-A2A-G-GMX50AD-H30	EzPM-G-GMX50AD-H30	30		4.87	3.04	133.3				
Ezi-POS-CT-A2A-G-GMX50AD-H50	EzPM-G-GMX50AD-H50	50		8.12	5.07	80		1200	1000	
Ezi-POS-CT-A2A-G-GMX50AD-H100	EzPM-G-GMX50AD-H100	100		16.23	10.15	40				
Ezi-POS-CT-A2A-G-GMX50AD-H200	EzPM-G-GMX50AD-H200	200		32.47	20.29	20				

- ※ The motor model name refers to the combination of motor and gear reducer.
- ※ The weight indicates the total weight of the motor combined with the gear reducer.
- ※ Specifications and characteristics not listed above are identical to those of the standard motor.

Hollow Shaft Flat Gearbox Type Motor Specifications

EzPM-G-GMX100AD-H□

Unit Part Number	Motor Part Number	□ Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N] Distance from Mounting Surface		Permissible Axial Load[N]
				0~2500 r/min	4000 r/min			10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX100AD-H5	EzPM-G-GMX100AD-H5	5	Max. 1	1.62	1.01	800	3.5	900	770	500
Ezi-POS-CT-A2A-G-GMX100AD-H10	EzPM-G-GMX100AD-H10	10		3.25	2.03	400				
Ezi-POS-CT-A2A-G-GMX100AD-H15	EzPM-G-GMX100AD-H15	15		4.87	3.04	266.7		1300	1110	
Ezi-POS-CT-A2A-G-GMX100AD-H20	EzPM-G-GMX100AD-H20	20		6.49	4.06	200				
Ezi-POS-CT-A2A-G-GMX100AD-H30	EzPM-G-GMX100AD-H30	30		9.74	6.09	133.3		1500	1280	
Ezi-POS-CT-A2A-G-GMX100AD-H50	EzPM-G-GMX100AD-H50	50		16.23	10.15	80				
Ezi-POS-CT-A2A-G-GMX100AD-H100	EzPM-G-GMX100AD-H100	100		32.47	20.29	40				
Ezi-POS-CT-A2A-G-GMX100AD-H200	EzPM-G-GMX100AD-H200	200		64.94	40.58	20				

EzPM-G-GMX200AD-H□

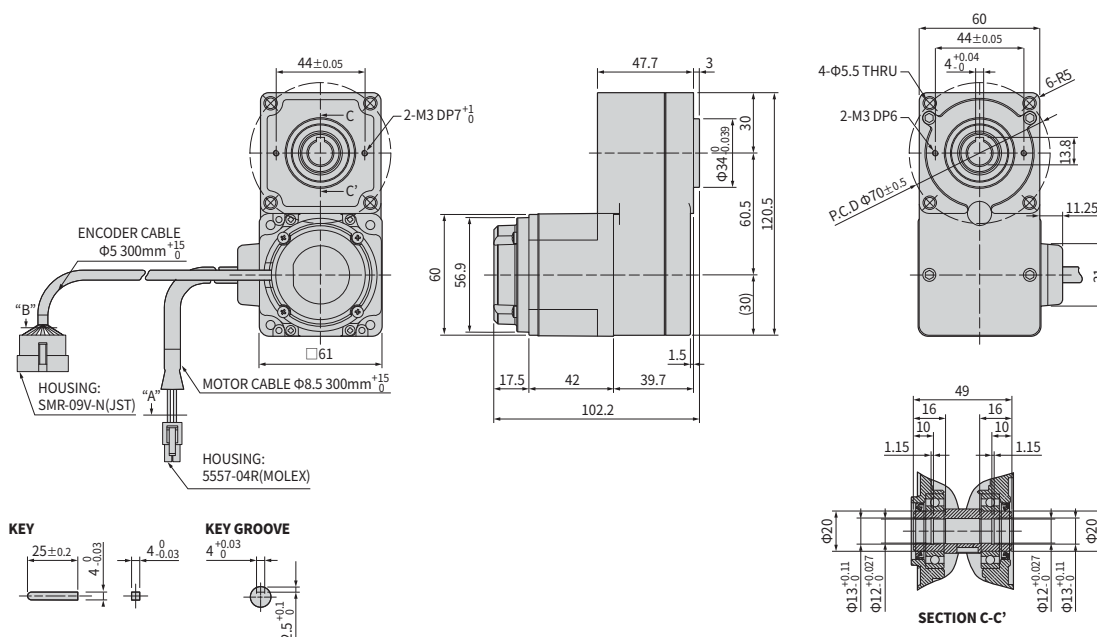
Unit Part Number	Motor Part Number	□ Gear Ratio	Back lash [°]	Rated Torque[Nm]		Max. Speed [r/min]	Weight [kg]	Permissible Radial Load[N] Distance from Mounting Surface		Permissible Axial Load[N]
				0~3000 r/min	4000 r/min			10 mm	20 mm	
Ezi-POS-CT-A2A-G-GMX200AD-H5	EzPM-G-GMX200AD-H5	5	Max. 1	2.71	2.03	800	7.1	1230	1070	800
Ezi-POS-CT-A2A-G-GMX200AD-H10	EzPM-G-GMX200AD-H10	10		5.41	4.06	400				
Ezi-POS-CT-A2A-G-GMX200AD-H15	EzPM-G-GMX200AD-H15	15		8.12	6.09	266.7		1680	1470	
Ezi-POS-CT-A2A-G-GMX200AD-H20	EzPM-G-GMX200AD-H20	20		10.82	8.12	200				
Ezi-POS-CT-A2A-G-GMX200AD-H30	EzPM-G-GMX200AD-H30	30		16.23	12.18	133.3				
Ezi-POS-CT-A2A-G-GMX200AD-H50	EzPM-G-GMX200AD-H50	50		27.06	20.29	80		2040	1780	
Ezi-POS-CT-A2A-G-GMX200AD-H100	EzPM-G-GMX200AD-H100	100		54.11	40.58	40				

※ The motor model name refers to the combination of motor and gear reducer.
 ※ The weight indicates the total weight of the motor combined with the gear reducer.
 ※ Specifications and characteristics not listed above are identical to those of the standard motor.

Hollow Shaft Flat Gearbox Type Motor Specifications[mm]

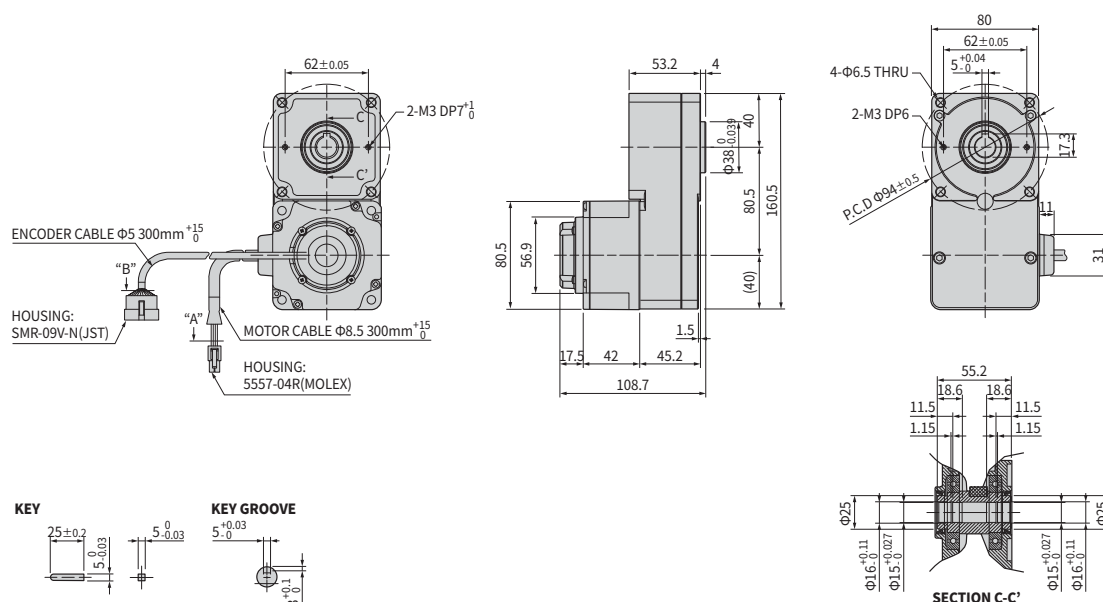
EzPM-G-GMX30AD-H

Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications
Ezi-POS-CT-A2A-G-GMX30AD-H	EzPM-G-GMX30AD-H	5, 10, 15, 20, 30, 50, 100, 200	M5X65



EzPM-G-GMX50AD-H

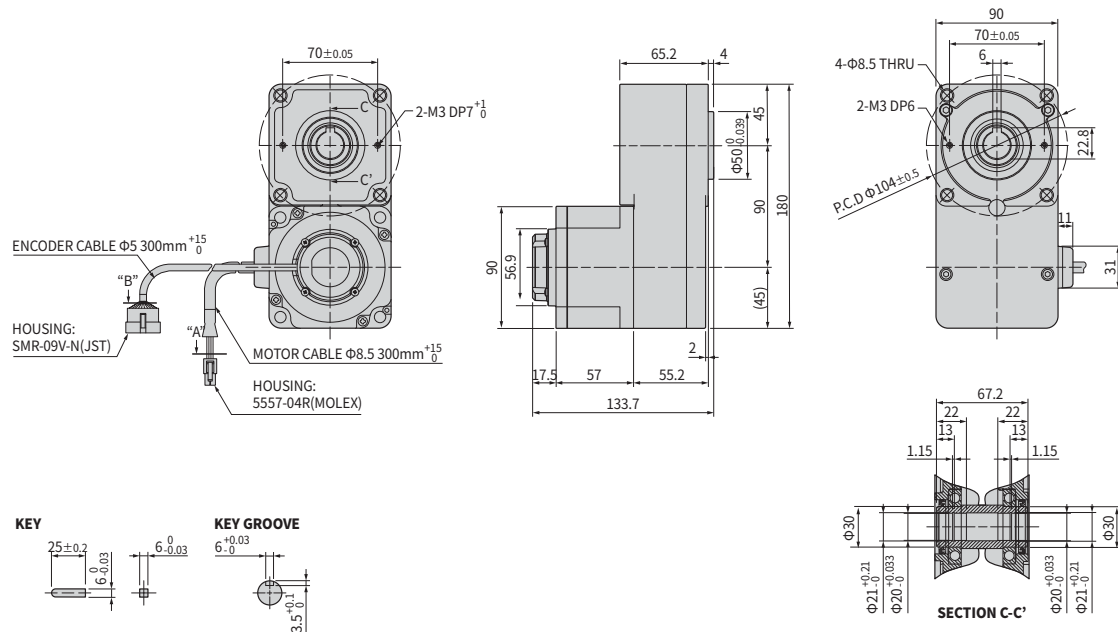
Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications
Ezi-POS-CT-A2A-G-GMX50AD-H	EzPM-G-GMX50AD-H	5, 10, 15, 20, 30, 50, 100, 200	M6X70



Hollow Shaft Flat Gearbox Type Motor Specifications[mm]

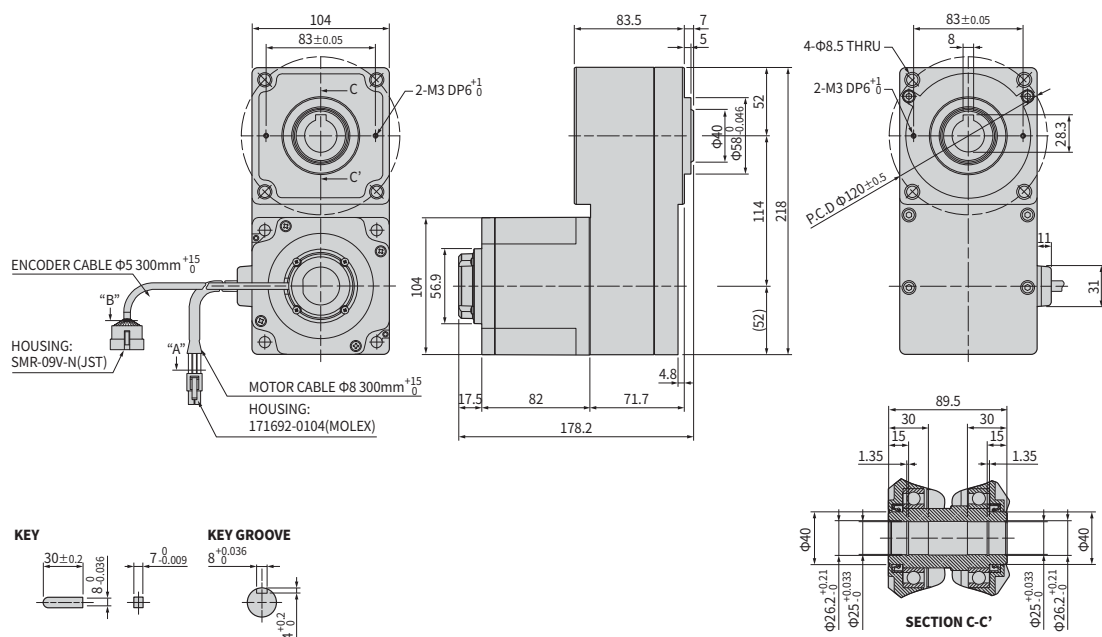
EzPM-G-GMX100AD-H□

Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications
Ezi-POS-CT-A2A-G-GMX100AD-H□	EzPM-G-GMX100AD-H□	5, 10, 15, 20, 30, 50, 100, 200	M8X90



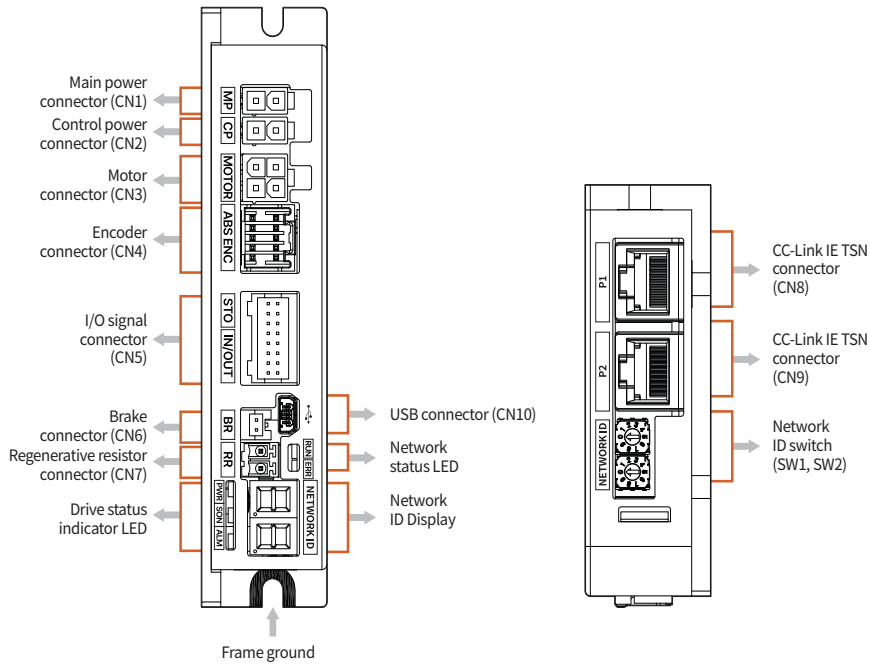
EzPM-G-GMX200AD-H□

Unit Part Number	Applied Motor Part Number	□ Gear Ratio	Applicable Bolt Specifications
Ezi-POS-CT-A2A-G-GMX200AD-H□	EzPM-G-GMX200AD-H□	5, 10, 15, 20, 30, 50, 100	M8X100



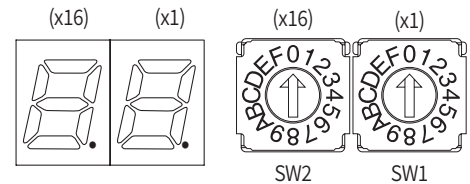
Settings and Operation

EzPD-CT-A2A-G-GMX30AD
EzPD-CT-A2A-G-GMX50AD
EzPD-CT-A2A-G-GMX100AD
EzPD-CT-A2A-G-GMX200AD



1. Network ID Display and Switches(SW1, SW2)

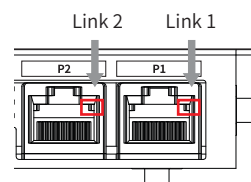
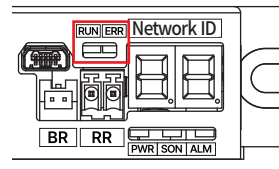
These switches are used to configure the fourth octet of the IP address. The value is displayed on the 7-segment LED in hexadecimal format. SW1 sets the X16 digit, and SW2 sets the X1 digit.
(For more details, please refer to the relevant user manual.)



2. Network Status LED

These LEDs indicate the communication status of CC-Link IE TSN.
Link1/Link2 LEDs are located at the upper right corner of CC-Link IE TSN ports(P1, P2).

Indicator	Color	Status	Description
RUN	Green	OFF	Power off
		Single Flash	Not connected to master
		Double Flash	Pre-operational state
		Blinking	Safe-operational state
		Interval Off	Operational state
Indicator	Color	Status	Description
ERR	Red	OFF	No error or power off
		Blinking	Drive error
		Single Flash	CC-Link IE TSN communication error
		Double Flash	IP address conflict error
Indicator	Color	Status	Description
Link1/ Link2	Green	OFF	Link inactive
		ON	Link active



3. Drive Status LED

Indicator	Color	Function	Description
PWR	Green	Power Input Indicator	Lights up when power is supplied and the drive is operating normally. (During initialization or firmware update, the indicator blinks.)
SON	Orange	Servo ON / OFF Indicator	Lights up when Servo is on; turns off when Servo is off.
ALM	Red	Alarm Indicator	Blinks repeatedly when an error occurs.

List of error types by the the number of LED blinking

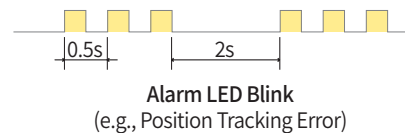
No.	Error Code	Error Type	Cause
1	E-001	Overcurrent Error	Excessive current flowed through the motor drive components ^{*1}
2	E-002	Overspeed Error	Motor drive speed exceeds the allowable limit ^{*1}
3	E-003	Position Tracking Error	Position error (difference between command and actual position) exceeds the set value during operation ^{*2}
4	E-004	Overload Error	Load exceeding the motor's continuous maximum torque applied for a certain period ^{*1}
5	E-005	Overtemperature Error	Internal temperature of the drive exceeds 85 °C
6	E-006	Regenerative Overvoltage	Internal motor drive voltage exceeds the limit due to increased back EMF or regenerative operation ^{*1}
7	E-007	Motor Connection Error	Abnormal connection between the drive and the motor
8	E-008	Encoder Connection Error	Abnormal connection between the drive and the encoder
9	E-009	Main Power Undervoltage Error	Main power voltage is below the minimum allowable value ^{*1}
10	E-010	In-position Error	Position error exceeding the set value continues for more than 3 seconds after operation completion ^{*2}
11	E-011	System Error	Internal system error in the drive
12	E-012	ROM Error	Error in the parameter storage device (ROM)
13	E-013	Motor Parameter Error	Motor parameters are unset or exceed the normal range
14	E-014	Main Power Overvoltage Error	Main power voltage exceeds the allowable limit ^{*1}
15	E-015	Excessive Position Error	Excessive position error occurs after the motor has completed its operation ^{*2}
16	E-016	Emergency Stop Circuit Error	TQOFF1 and TQOFF2 input states do not match

^{*1}: Each threshold or setting is fixed and varies depending on the motor.

^{*2}: Each threshold or setting is predefined but can be modified via parameters.

※ When an alarm occurs, the 7-segment display will show the error code instead of "Network ID."

※ For more details, please refer to the respective user manual.



4. Main Power / Control Power Connectors (CN1, CN2)

(CN1)

No.	Function	I/O
1	DC_MAIN	Inputs
2	GND	Inputs



(CN2)

No.	Function	I/O
1	DC_CON	Inputs
2	GND	Inputs

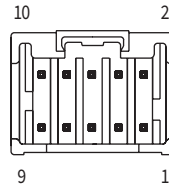
5. Motor Connector (CN3)

No.	Function	I/O
1	F.GND	---
2	U Phase	Outputs
3	W Phase	Outputs
4	V Phase	Outputs



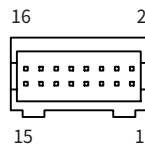
6. Encoder Connector (CN4)

No.	Function	I/O
1	SL+	Inputs
2	SL-	Inputs
3	MA+	Inputs
4	MA-	Inputs
5	CS	Outputs
6	MON	Inputs
7	5VDC	Outputs
8	GND	Outputs
9	F.GND	----
10	F.GND	----



7. I/O Connector (CN5)

No.	Function	I/O
1	LIMIT+	Inputs
2	LIMIT-	Inputs
3	ORIGIN	Inputs
4	Digital In1	Inputs
5	Digital In2	Inputs
6	Digital Out1	Outputs
7	Digital Out2	Outputs
8	Digital Out3	Outputs
9	OUT_COM	Inputs
10	IN_COM	Inputs
11	TQOFF1_P	Inputs
12	TQOFF1_N	Inputs
13	TQOFF2_P	Inputs
14	TQOFF2_N	Inputs
15	OVRTQ	Inputs
16	GND	Outputs



8. Brake Connector (CN6)

No.	Function	I/O
1	BRAKE+	Outputs
2	BRAKE-	Outputs



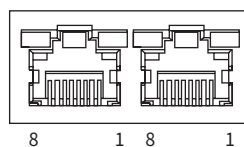
9. Regenerative Resistor Connector (CN7)

No.	Function	I/O
1	RR+	Outputs
2	RR-	Outputs

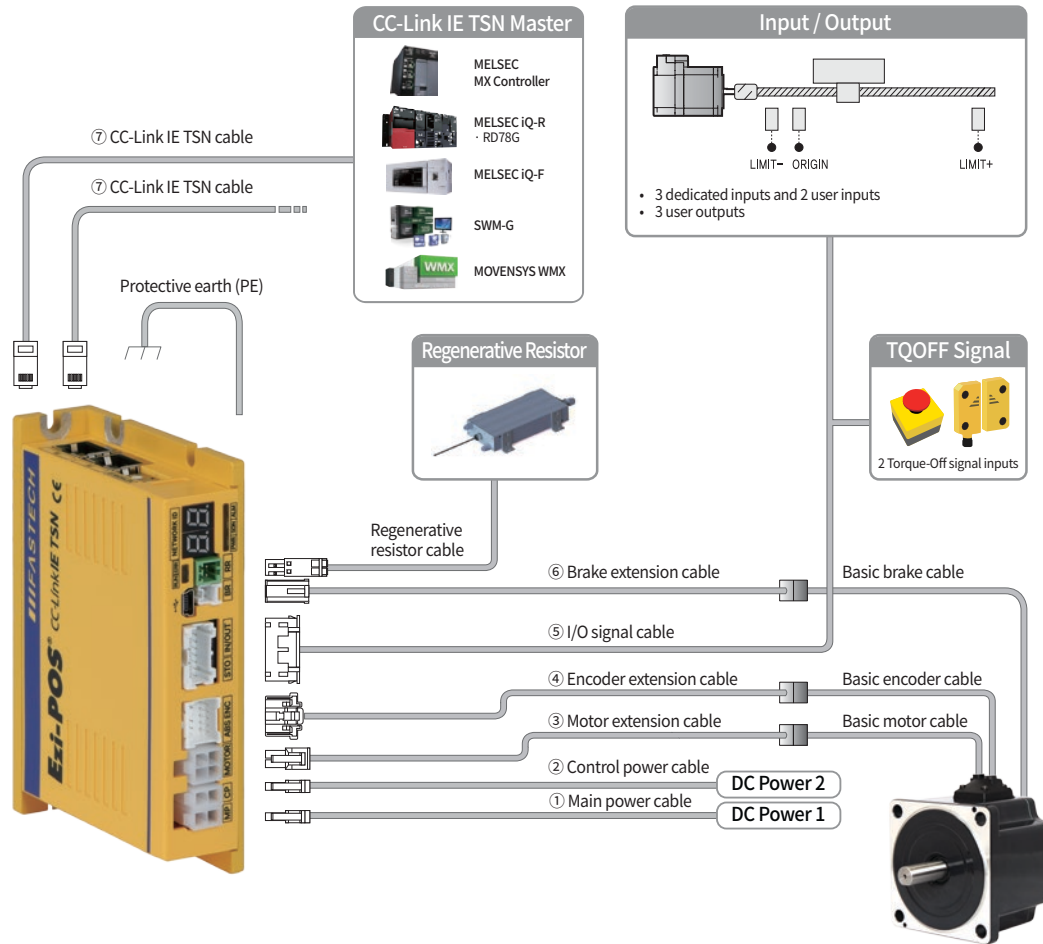


10. CC-Link IE TSN Connector (CN8, CN9)

No.	Function	No.	I/O
1	DA+	6	DB-
2	DA-	7	DD+
3	DB+	8	DD-
4	DC+	Connector Hood	F.GND
5	DC-		



System Configuration



Cable Type	Max. Cable Length	Remarks
① Main Power Cable	2 m	Options (Sold separately)
② Control Power Cable	2 m	
③ Motor Extension Cable	5 m	
④ Encoder Extension Cable	5 m	
⑤ I/O Signal Cable	5 m	
⑥ Brake Extension Cable	5 m	
Regenerative Resistor Cable	2 m	Not for Sale
⑦ CC-Link IE TSN Cable	100 m	Options (Sold separately)
Basic Encoder Cable	0.3 m (Basic length)	Basic cables are attached to motors.
Basic Motor Cable	0.3 m (Basic length)	

1. Accessories

① Drive Connector

Purpose	Item	Model Name		Manufacturer
		EzPD-CT-A2A-G-GMX30AD EzPD-CT-A2A-G-GMX50AD EzPD-CT-A2A-G-GMX100AD	EzPD-CT-A2A-G-GMX200AD	
Main Power(CN1)	Housing	5557-02R		MOLEX
	Terminal	5556T	5556T3	
Control Power(CN2)	Housing	5557-02R		MOLEX
	Terminal	5556T		
Motor(CN3)	Housing	5557-04R		MOLEX
	Terminal	5556T	5556T3	
Encoder(CN4)	Housing	51353-1000		MOLEX
	Terminal	56134-9000		
I/O Signal(CN5)	Housing	PADP-16V-1-S		JST
	Terminal	SPH-002T-P0.5L		
Brake(CN6)	Housing	PAP-02V-S		JST
	Terminal	SPHD-002T-P0.5		
Regenerative Resistor(CN7)	Terminal Block	ESC250V-02P		DINKLE

※ The connectors above are supplied with the product. If you are using other parts, please make sure they meet the specifications.

② Motor Connector

Purpose	Item	Model Name		Manufacturer
		EzPM-G-GMX30AD EzPM-G-GMX50AD EzPM-G-GMX100AD	EzPM-G-GMX200AD	
Motor	Housing	5559-04P	105411-0104	MOLEX
	Terminal	5558T	76823-0321	
Encoder	Housing	SMP-09V-NC		JST
	Terminal	SHF-001T-0.8BS		
Brake	Housing	PALR-02VF		JST
	Terminal	SPAL-001T-P0.5		

※ The above connectors are provided with the product. When using other components, please ensure they meet the required specifications.

2. Options

① Main Power Supply Cable

This cable is used to connect the Ezi-POS CC-Link IE TSN drive to the main power supply.

Purpose	Drive	Model Name	Length [m]	Cable Type	Remarks
Drive-to-Main Power Connection	EzPD-CT-A2A-G-GMX30AD EzPD-CT-A2A-G-GMX50AD EzPD-CT-A2A-G-GMX100AD	CPA2S-P1-001F	1	Fixed Type	Max. Cable Length: 2 m
		CPA2S-P1-002F	2		
		CPA2S-P1-001M	1	Flexible Type	
		CPA2S-P1-002M	2		
	EzPD-CT-A2A-G-GMX200AD	CPA2S-P2-001F	1	Fixed Type	
		CPA2S-P2-002F	2		
		CPA2S-P2-001M	1	Flexible Type	
		CPA2S-P2-002M	2		

② Control Power Cable

This cable is used to connect the Ezi-POS CC-Link IE TSN drive to the control power supply.

Purpose	Drive	Length [m]	Cable Type	Remarks
Drive-to-Control Power Connection	CSVO-P-001F	1	Fixed Type	Max. Cable Length: 2 m
	CSVO-P-002F	2		
	CSVO-P-001M	1	Flexible Type	
	CSVO-P-002M	2		

③ Motor Extension Cable

This extension cable is used to connect the Ezi-POS CC-Link IE TSN drive to the motor.

Purpose	Drive	Model Name	Length [m]	Cable Type	Remarks
Drive-to-Motor Basic Cable Connection	EzPD-CT-A2A-G-GMX30AD EzPD-CT-A2A-G-GMX50AD EzPD-CT-A2A-G-GMX100AD	CPA2S-M1-001F	1	Fixed Type	Max. Cable Length: 5 m
		CPA2S-M1-002F	2		
		CPA2S-M1-003F	3		
		CPA2S-M1-005F	5		
		CPA2S-M1-001M	1	Flexible Type	
		CPA2S-M1-002M	2		
		CPA2S-M1-003M	3		
		CPA2S-M1-005M	5		
	EzPD-CT-A2A-G-GMX200AD	CPA2S-M2-001F	1	Fixed Type	
		CPA2S-M2-002F	2		
		CPA2S-M2-003F	3		
		CPA2S-M2-005F	5		
		CPA2S-M2-001M	1	Flexible Type	
		CPA2S-M2-002M	2		
		CPA2S-M2-003M	3		
		CPA2S-M2-005M	5		

④ Encoder Extension Cable

This extension cable is used to connect the Ezi-POS CC-Link IE TSN drive to the encoder.

Purpose	Model Name	Length [m]	Cable Type	Remarks
Drive-to-Encoder Basic Cable Connection	CSVO-E-001F	1	Fixed Type	Max. Cable Length: 5 m
	CSVO-E-002F	2		
	CSVO-E-003F	3		
	CSVO-E-005F	5		
	CSVO-E-001M	1	Flexible Type	
	CSVO-E-002M	2		
	CSVO-E-003M	3		
	CSVO-E-005M	5		

* For cable lengths other than those listed in the table (in 1-meter increments), please contact FASTECH separately.

⑤ I/O Signal Cable

This cable is used to connect the Ezi-POS CC-Link IE TSN drive to input / output devices.

Purpose	Model Name	Length [m]	Cable Type	Remarks
Drive-to-I/O Device Connection	CPA2S-IO-001F	1	Fixed Type	Max. Cable Length: 5 m
	CPA2S-IO-002F	2		
	CPA2S-IO-003F	3		
	CPA2S-IO-005F	5		
	CPA2S-IO-001M	1	Flexible Type	
	CPA2S-IO-002M	2		
	CPA2S-IO-003M	3		
	CPA2S-IO-005M	5		

* For cable lengths other than those listed in the table (in 1-meter increments), please contact FASTECH separately.

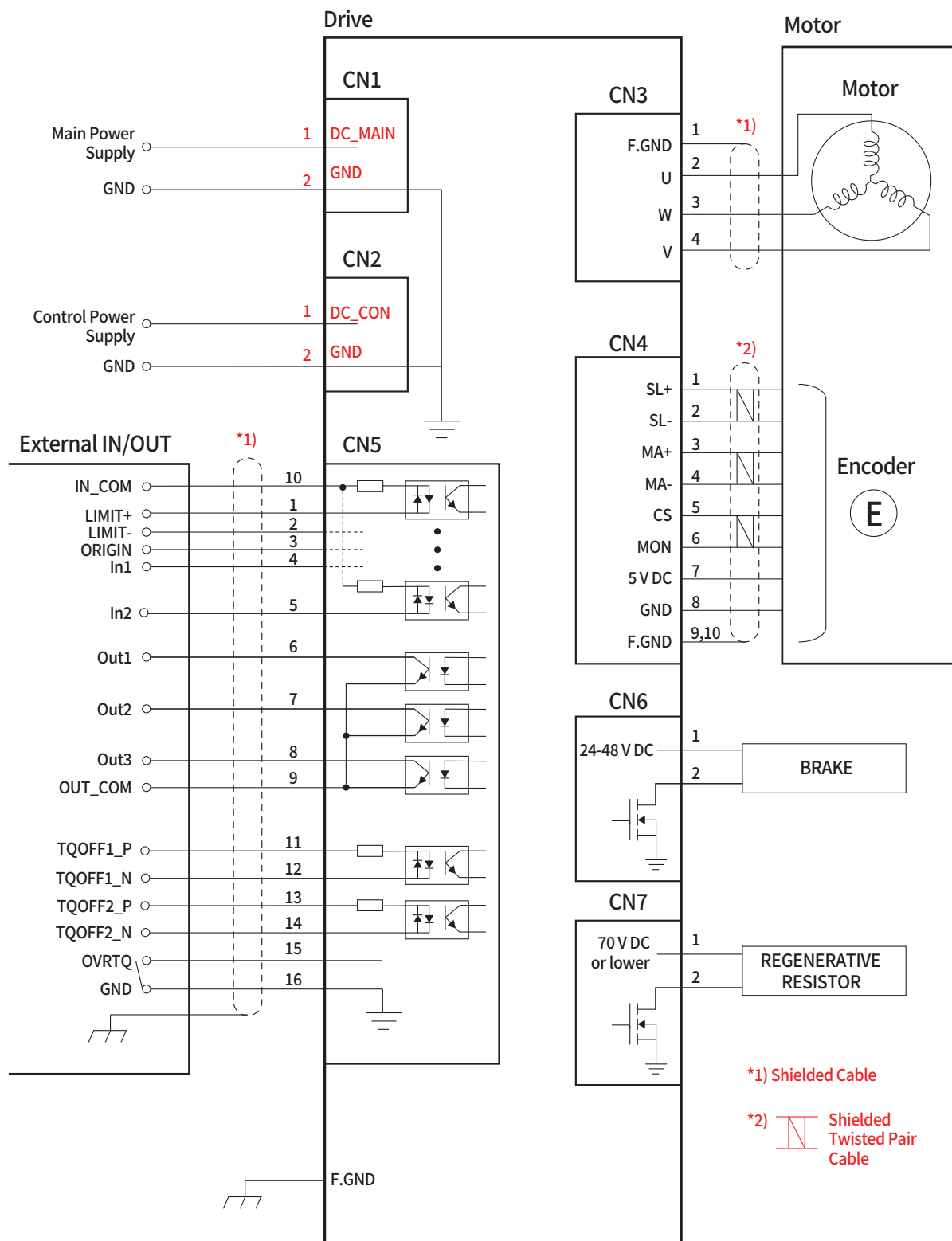
⑥ Brake Extension Cable

Purpose	Model Name	Length [m]	Cable Type	Remarks
Drive-to-Brake Basic Cable Connection	CPA2S-B-001F	1	Fixed Type	Max. Cable Length: 5 m
	CPA2S-B-002F	2		
	CPA2S-B-003F	3		
	CPA2S-B-005F	5		
	CPA2S-B-001M	1	Flexible Type	
	CPA2S-B-002M	2		
	CPA2S-B-003M	3		
	CPA2S-B-005M	5		

⑦ CC-Link IE TSN Cable

Purpose	Model Name	Length [m]	Remarks
Drive-to-Brake Basic Cable Connection	CPA2S-B-001F	1	Max. Cable Length: 5 m
	CPA2S-B-002F	2	
	CPA2S-B-003F	3	
	CPA2S-B-005F	5	

External Wiring Diagram



CAUTION

To ensure the safe and proper use of the products listed in this catalog, please be sure to read the user manual thoroughly before use.

※ When connecting the I/O cable between the drive and the master controller, be sure to turn off the power to both the master controller and the drive. Failure to do so may result in electric shock or product damage.



Fast Accurate Smooth Motion

FASTECH Co., Ltd.

FASTECH Headquarters : (Postal Code:14502) Rm#1201 ~ 1202, 401-dong, Bucheon Techno-Park, 655
Pyeongcheon-ro, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea
TEL : +82-32-234-6317 FAX : +82-32-234-6302 E-mail : sales@fastech-motions.com

FASTECH JAPAN : (〒 450-0001 Aichi) Nagoya, Nakamura Ward, Nagono, 1-Chome 47-1
Nagoya International Center Bldg. 18th Floor
TEL : +81-70-6588-5905 E-Mail : sales_japan@fastech-motions.com

Homepage : cltsn.fastech-motions.com/en | www.fastech-motions.com

※ Please note that the color and size of the products in this catalog may differ depending on the measurement method and the specifications can be changed without prior notice for quality improvement.