

Accelerating the construction of smart factories with

CC-Link*IE TSN*

Supported Products Lineup



Ezi-STEP® CC-Link*IE TSN*
Micro Stepping System



Ezi-SERVO® CC-Link*IE TSN*
Closed Loop Stepping System



Ezi-SERVO® CC-Link*IE TSN*
Closed Loop Stepping System **ALL**



Ezi-SPEED® CC-Link*IE TSN*
BLDC Motor Speed Control System

CC-Link*IE TSN*



Ezi-SERVO® CC-Link*IE TSN*
Closed Loop Stepping System **4X**



Ezi-Pos® CC-Link*IE TSN*
Servo Control System



Ezi-IO® CC-Link*IE TSN*
Network Input/Output **DIO**



Ezi-ROBO® CC-Link*IE TSN*
Precise Actuator System **VZR**



Ezi-ROBO® CC-Link*IE TSN*
Precise Actuator System **IGH**

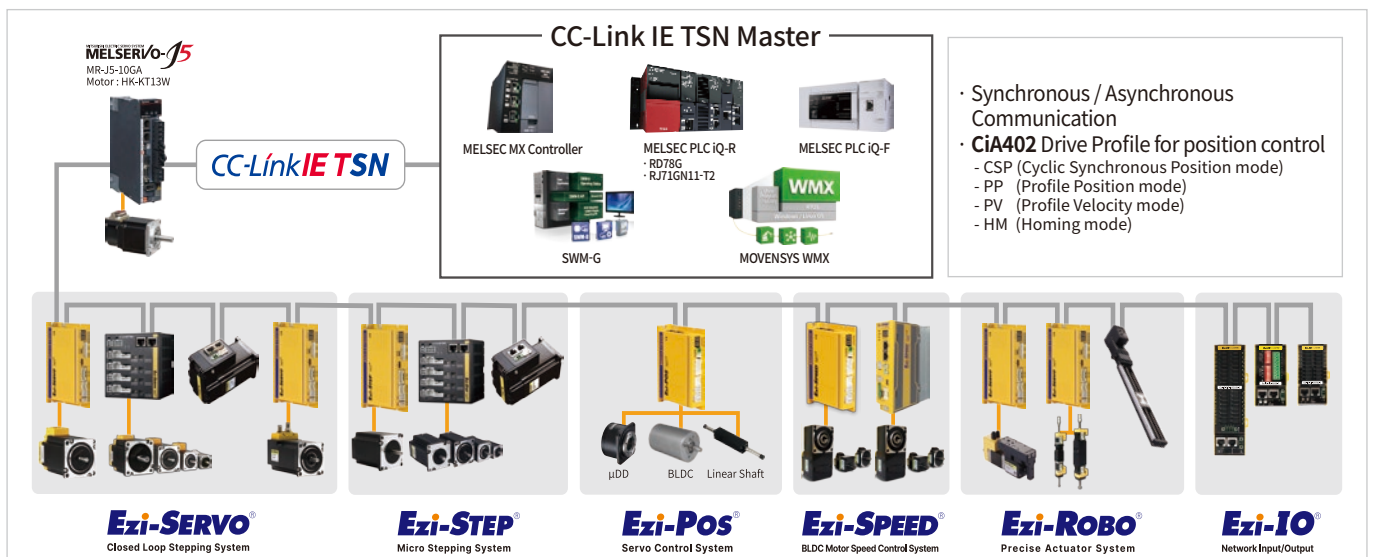


Fast Accurate Smooth Motion

FASTECH Brand Introduction

Series	Feature
 Ezi-SERVO® Closed Loop Stepping System	• Closed Loop Stepper System • Compatible with Industrial Networks (EtherCAT, CC-Link IE TSN, Ethernet, PROFINET & PROFIdrive) • Tuning Not Required, No Hunting • High Resolution Encoder(4,000 ~ 20,000 P/R), Fast Response • Low Heat Generation, High Torque • Drive Line-up (Industrial Network & Pulse Input Drive, Standard, Mini, Multi-axes & Motor+Drive Integrated type) • Motor Line-up (□20 mm ~ □86 mm, Incremental & Batteryless Absolute Encoder) • Options (Brake, Gearbox)
 Ezi-STEP® Micro Stepping System	• Microstepper System • Compatible with Industrial Networks (EtherCAT, CC-Link IE TSN, Ethernet, PROFINET & PROFIdrive) • Software Damping (Resonance & Vibration Suppression) • High Torque • Drive Line-up (Industrial Network & Pulse Input Drive, Standard, Mini, Multi-axes & Motor+Drive Integrated type) • Motor Line-up (□20 mm ~ □86 mm) • Options (Brake)
 Ezi-Pos® Servo Control System	• Low-Voltage Servo Control System • Compatible with Industrial Networks (EtherCAT, CC-Link IE TSN, Ethernet, PROFINET & PROFIdrive) • DC Power Supply Input (12 ~ 48 V DC) • Auto-tuning • Torque-Off Function • Various Motor Options (BLDC Motor, Servo Motor, Linear Motor, VCM, etc) • Various Position Sensor Options (Incremental/Absolute Encoders)
 Ezi-SPEED® BLDC Motor Speed Control System	• BLDC Motor Speed Control System • Compatible with Industrial Networks (EtherCAT, CC-Link IE TSN, Ethernet, PROFINET & PROFIdrive, Modbus-RTU, Modbus-TCP) • Power supply input (200 ~ 240 V AC, 12 ~ 48 V DC) • Compact · Light Weight · High Power · High Efficiency Brushless Motor • Wide Speed Range (50 ~ 4,000 r/min) • Stable Speed Regulation ($\pm 0.2\%$) • BLDC Motor Line-up (30, 60, 120, 200, 400 W)
 Ezi-ROBO® Precise Actuator System	• Precise Positioning Actuator System • Unit Solution Combining Ezi-SERVO + Actuator • Actuator Line-up (Compact Linear Actuator, Integrated guide-rail actuator, Vacuum Linear Rotary actuator, Hollow Rotary Table) • Compatible with Industrial Networks (EtherCAT, CC-Link IE TSN, Ethernet, PROFINET & PROFIdrive, Pulse Input)
 Ezi-IO® Network Input/Output	• Remote Input/Output Modules - DIO(Digital Input/Output) Series - AD(Analog-to-Digital Converter) Series - DA(Digital-to-Analog Converter) Series - CNT(High Speed Pulse Counter) Series • Compatible with Industrial Networks (EtherCAT, CC-Link IE TSN, Ethernet, PROFINET) • Simple and Easy Wiring • DIN Rail Mounting

CC-Link IE TSN Supported Products Lineup



■ CC-Link IE TSN Compatible Products Lineup

Series	Product	Feature	Image
Ezi-SERVO® Closed Loop Stepping System	Ezi-SERVO CC-Link IE TSN (Closed Loop Stepping System)	• CC-Link IE TSN-compatible Closed Loop Stepper System • CiA402 Drive Profile • Torque-Off Function • Tuning Not Required, No Hunting • High Resolution Encoder, Fast Response • Low Heat Generation, High Torque	 P.4
	Ezi-SERVO CC-Link IE TSN ABS (Closed Loop Stepping System + Batteryless Absolute Encoder)	• CC-Link IE TSN-compatible Closed Loop Stepper System • CiA402 Drive Profile • Long Life Cycle with Electronic Battery-less Multi-turn Absolute Encoder (Multi-turn : 16 bits, Single-turn : Max. 20,000 P/R) • No External Sensors Required, Simple Wiring • No Battery Replacement Required, Easy Maintenance • Torque-Off Function	 P.6
	Ezi-SERVO CC-Link IE TSN ALL (Motor + Drive Integrated Type)	• CC-Link IE TSN-compatible Closed Loop Stepper System • CiA402 Drive Profile • Motor + Drive Integrated • Space Saving, Reduced Wiring • Tuning Not Required, No Hunting • High Resolution Encoder, Fast Response • Low Heat Generation, High Torque	 P.8
	Ezi-SERVO CC-Link IE TSN 4X (Compact Multi Axis Drive)	• CC-Link IE TSN-compatible Closed Loop Stepper System • CiA402 Drive Profile • Compact Multi-Axis Drive (Max. 4-Axis) • Space Saving, Reduced Wiring • Tuning Not Required, No Hunting • High Resolution Encoder, Fast Response • Low Heat Generation, High Torque	 P.10
	Ezi-SERVO CC-Link IE TSN 4X ABS (Compact Multi Axis Drive + Batteryless Absolute Encoder)	• CC-Link IE TSN-compatible Closed Loop Stepper System • CiA402 Drive Profile • Compact Multi-Axis Drive (Max. 4-Axis) • Long Life Cycle with Electronic Battery-less Multi-turn Absolute Encoder (Multi-turn : 16 bits, Single-turn : Max. 20,000 P/R) • No Battery Replacement Required, Easy Maintenance • No External Sensors Required, Simple Wiring	 P.12
Ezi-STEP® Micro Stepping System	Ezi-STEP CC-Link IE TSN (Micro Stepping System)	• CC-Link IE TSN-compatible Microstepper System • CiA402 Drive Profile • Torque-Off Function • Software Damping (Resonance & Vibration Suppression) • High Torque	 P.14
	Ezi-STEP CC-Link IE TSN ALL (Motor + Drive Integrated Type)	• CC-Link IE TSN-compatible Microstepper System • CiA402 Drive Profile • Software Damping (Resonance & Vibration Suppression) • Motor + Drive Integrated • Space Saving, Reduced Wiring	 P.16
	Ezi-STEP CC-Link IE TSN 4X (Compact Multi Axis Drive)	• CC-Link IE TSN-compatible Microstepper System • CiA402 Drive Profile • Software Damping (Resonance & Vibration Suppression) • Compact Multi-Axis Drive (Max. 4-Axis) • Space Saving, Reduced Wiring	 P.18
Ezi-Pos® Servo Control System	Ezi-POS CC-Link IE TSN (Low-Voltage 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 • Various Motor Options (BLDC Motor, Servo Motor, Linear Motor, VCM, etc) • Various Position Sensor Options (Incremental/Absolute Encoders)	 P.20

CC-Link IE TSN Compatible Products Lineup

Series	Product	Feature	Image
Ezi-SPEED® BLDC Motor Speed Control System	Ezi-SPEED CC-Link IE TSN DC (BLDC Motor Speed Control System)	- CC-Link IE TSN-compatible Low Voltage BLDC Motor Speed Control System - DC Power Input (12 ~ 48 V DC) - Auto-tuning - Wide Speed Range (50 ~ 4,000 r/min) - Stable Speed Regulation ($\pm 0.2\%$)	 P.22
	Ezi-SPEED CC-Link IE TSN AC (BLDC Motor Speed Control System)	- CC-Link IE TSN-compatible BLDC Motor Speed Control System - AC Power Supply Input (200 ~ 240 V AC) - Compact · Light Weight · High Power · High Efficiency Brushless Motor - Wide Speed Range (50 ~ 4,000 r/min) - Stable Speed Regulation ($\pm 0.2\%$) - BLDC Motor Line-up (30, 60, 120, 200, 400 W)	 P.24
Ezi-ROBO® Precise Actuator System	Ezi-ROBO IGH (Integrated Guide High-rigidity Actuator)	- Slider Type Electric Actuator with Stepper Motor & Ball Screw - Repeatability ± 0.005 mm - High Strength Steel Frame - CiA402 Drive Profile - CC-Link IE TSN-compatible Closed Loop Stepper System - Tuning Not Required, No Hunting - Low Heat Generation, High Torque, High Resolution Encoder, Fast Response - Compatible with Integrated, Built-in Torque-Off Function, Multi-Axis Drive	 P.26
	Ezi-ROBO IGS (Integrated Guide Standard Actuator)	- Slider Type Electric Actuator with Stepper Motor & Ball Screw - Repeatability ± 0.005 mm - CiA402 Drive Profile - CC-Link IE TSN-compatible Closed Loop Stepper System - Tuning Not Required, No Hunting - Low Heat Generation, High Torque, High Resolution Encoder, Fast Response - Compatible with Integrated, Built-in Torque-Off Function, Multi-Axis Drive	 P.28
	Ezi-ROBO VZR (Vacuum, Z-axis Linear, Rotation Actuator)	- Slim Actuator with Hollow Shaft Motor & Ball Screw Spline - Vacuum(V) + Linear(Z) + Rotary(R), 3-in-1 Actuator - Repeatability ± 0.01 mm (Z Axis), $\pm 0.1^\circ$ (R Axis) - CiA402 Drive Profile - CC-Link IE TSN-compatible Closed Loop Stepper System - Tuning Not Required, No Hunting - Low Heat Generation, High Torque, High Resolution Encoder, Fast Response - Compatible with Built-in Torque-Off Function, Multi-Axis Drive	 P.30
	Ezi-ROBO CLA (Compact Linear Actuator)	- Compact Linear Actuator with Hollow Shaft Motor & Ball Screw - Repeatability ± 0.01 mm, Lost Motion ≤ 0.05 mm - CiA402 Drive Profile - CC-Link IE TSN-compatible Closed Loop Stepper System - Tuning Not Required, No Hunting - Low Heat Generation, High Torque, High Resolution Encoder, Fast Response - Compatible with Built-in Torque-Off Function, Multi-Axis Drive	 P.32
	Ezi-ROBO HG (Hollow Rotary Index Table)	- Hollow Rotary Index Table with Stepper Motor - Repeatability (± 10 arcsec) - Hollow Diameter (Max. $\varnothing 85$ mm) - Permissible Torque (Max. 170 N·m) - Axial Load (Max. 4000 N) - CiA402 Drive Profile - CC-Link IE TSN-compatible Closed Loop Stepper System - Tuning Not Required, No Hunting - Low Heat Generation, High Torque, High Resolution Encoder, Fast Response - Compatible with Built-in Torque-Off Function, Multi-Axis Drive	 P.34
Ezi-IO® Network Input/Output	Ezi-IO CC-Link IE TSN DIO (Digital Input/Output Module)	- CC-Link IE TSN-compatible Digital I/O Module - Input Filter Function - Simple and Easy Wiring - DIN Rail Mounting	 P.36
	Ezi-IO CC-Link IE TSN AD (Analog Input Module)	- CC-Link IE TSN-compatible Analog Input Module - Configurable Input Mode and Input Range - Moving Average Filtering - Simple and Easy Wiring - DIN Rail Mounting	 P.38
	Ezi-IO CC-Link IE TSN DA (Analog Output Module)	- CC-Link IE TSN-compatible Analog Output Module - Configurable Output Range - Calibration for Output Deviation - Simple and Easy Wiring - DIN Rail Mounting	 P.40
	Ezi-IO CC-Link IE TSN CNT (High Speed Counter Module)	- CC-Link IE TSN-compatible High Speed Counter Module - Line Receiver and DC Input Type Provided - Comparison Output Function - Simple and Easy Wiring - DIN Rail Mounting	 P.42

Ezi-SERVO[®] CC-Link IE TSN

Closed Loop Stepping System

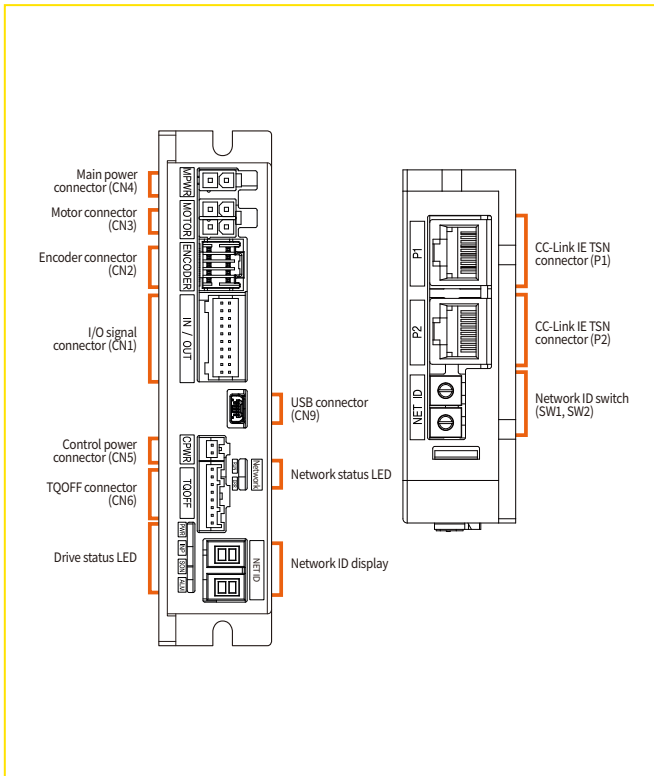
- CC-Link IE TSN-compatible Closed Loop Stepper System
- CiA402 Drive Profile
- Torque-Off Function
- Tuning Not Required, No Hunting
- High Resolution Encoder, Fast Response
- Low Heat Generation, High Torque



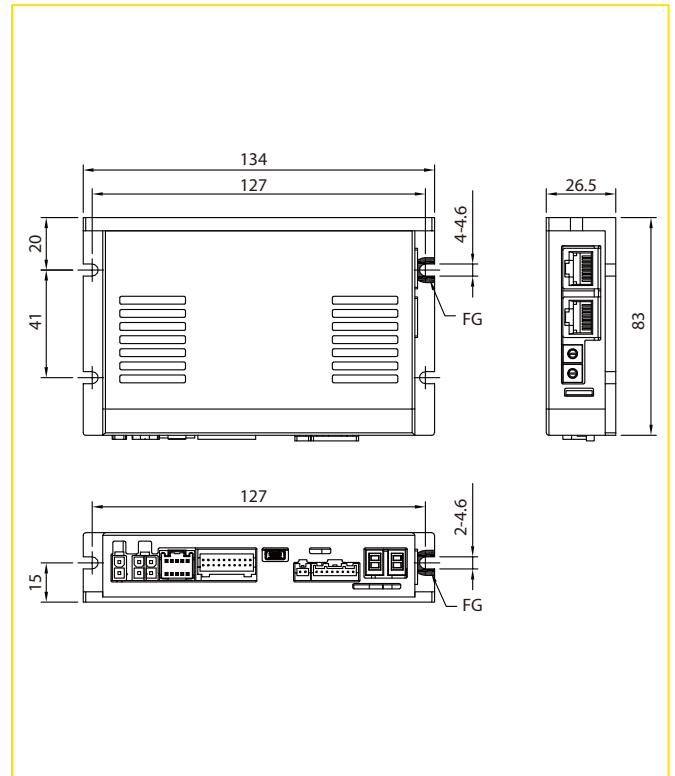
Specifications

Model		Ezi-SERVO-CT
Main Power Supply		24 V DC $\pm$ 10 %
Control Power Supply		24 V DC $\pm$ 10 %
Speed Control Range		0 ~ 3,000 r/min
Encoder Resolution [P/R]		4,000 / 10,000 / 16,000 / 20,000
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) and 6 user inputs
Digital Output		5 user outputs and 1 brake signal output
Torque-Off Function		2 inputs (TQOFF1, TQOFF2), 1 output (TQMON)
CC-Link IE TSN	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)
Status Display	7-SEG	IP Address or Error Code
	LED	Network status: Run, Error, LINK1/LINK2 Drive status: Power, In-Position, Servo On, Alarm

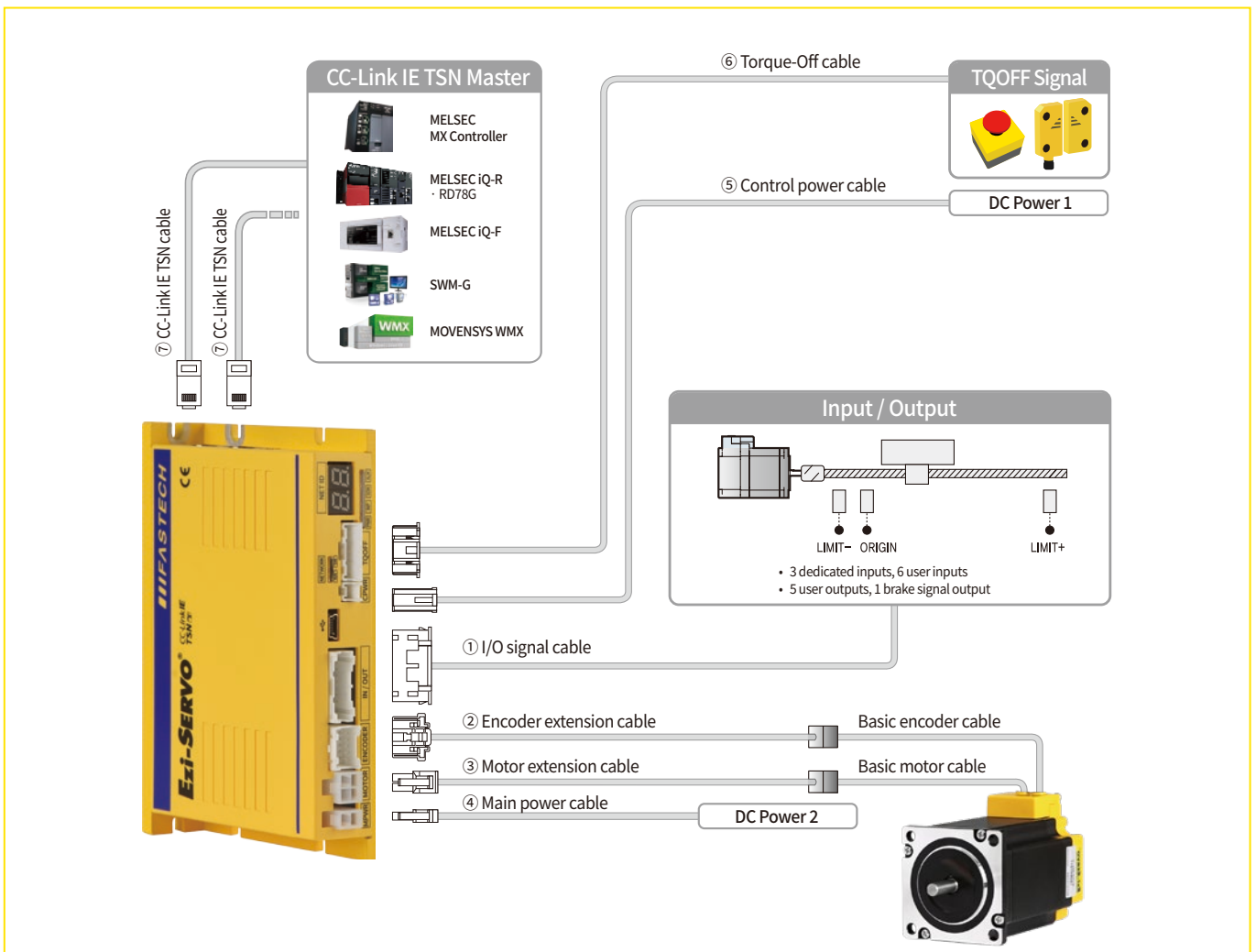
Module Overview



Dimension



System Configuration



Ezi-SERVO[®] CC-Link IE TSN

Closed Loop Stepping System **ABS**

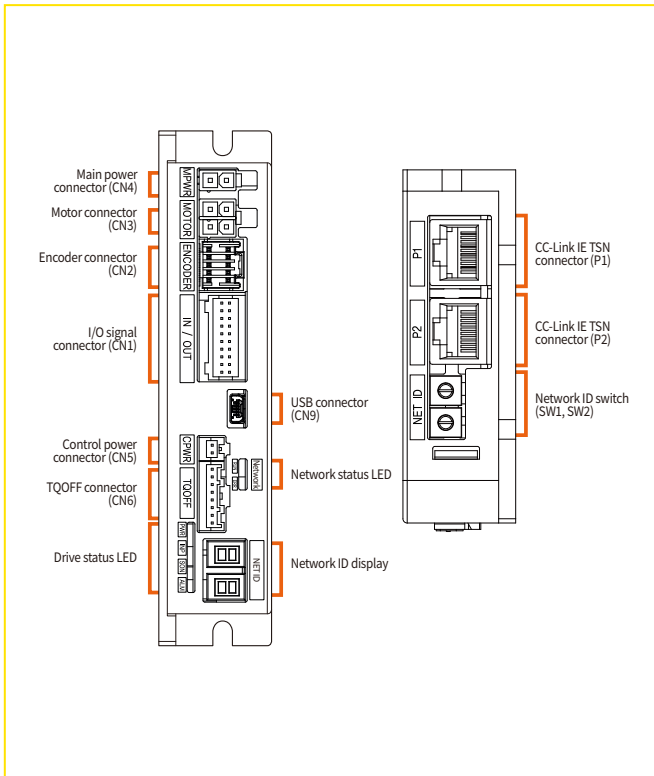
- CC-Link IE TSN-compatible Closed Loop Stepper System
- CiA402 Drive Profile
- Long Life Cycle with Electronic Battery-less Multi-turn Absolute Encoder
(Multi-turn : 16 bits, Single-turn : Max. 20,000 P/R)
- No External Sensors Required, Simple Wiring
- No Battery Replacement Required, Easy Maintenance
- Torque-Off Function



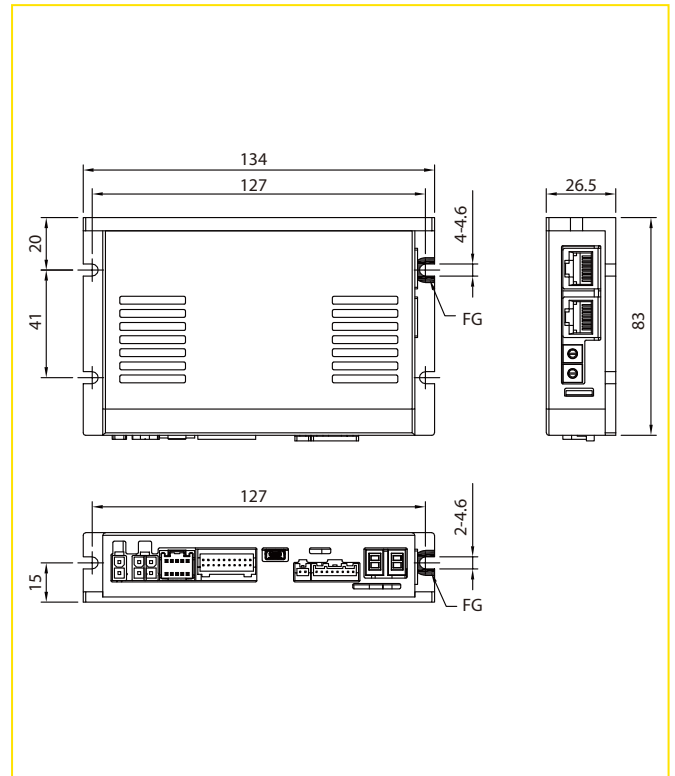
Specifications

Model		Ezi-SERVO-CT-ABS
Main Power Supply		24 V DC $\pm$ 10 %
Control Power Supply		24 V DC $\pm$ 10 %
Speed Control Range		0 ~ 3,000 r/min
Encoder Resolution [P/R]		Multi-turn : 16 bits, Single-turn : Max. 20,000 P/R
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) and 6 user inputs
Digital Output		5 user outputs and 1 brake signal output
Torque-Off Function		2 inputs (TQOFF1, TQOFF2), 1 output (TQMON)
CC-Link IE TSN	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)
Status Display	7-SEG	IP Address or Error Code
	LED	Network status: Run, Error, LINK1/LINK2 Drive status: Power, In-Position, Servo On, Alarm

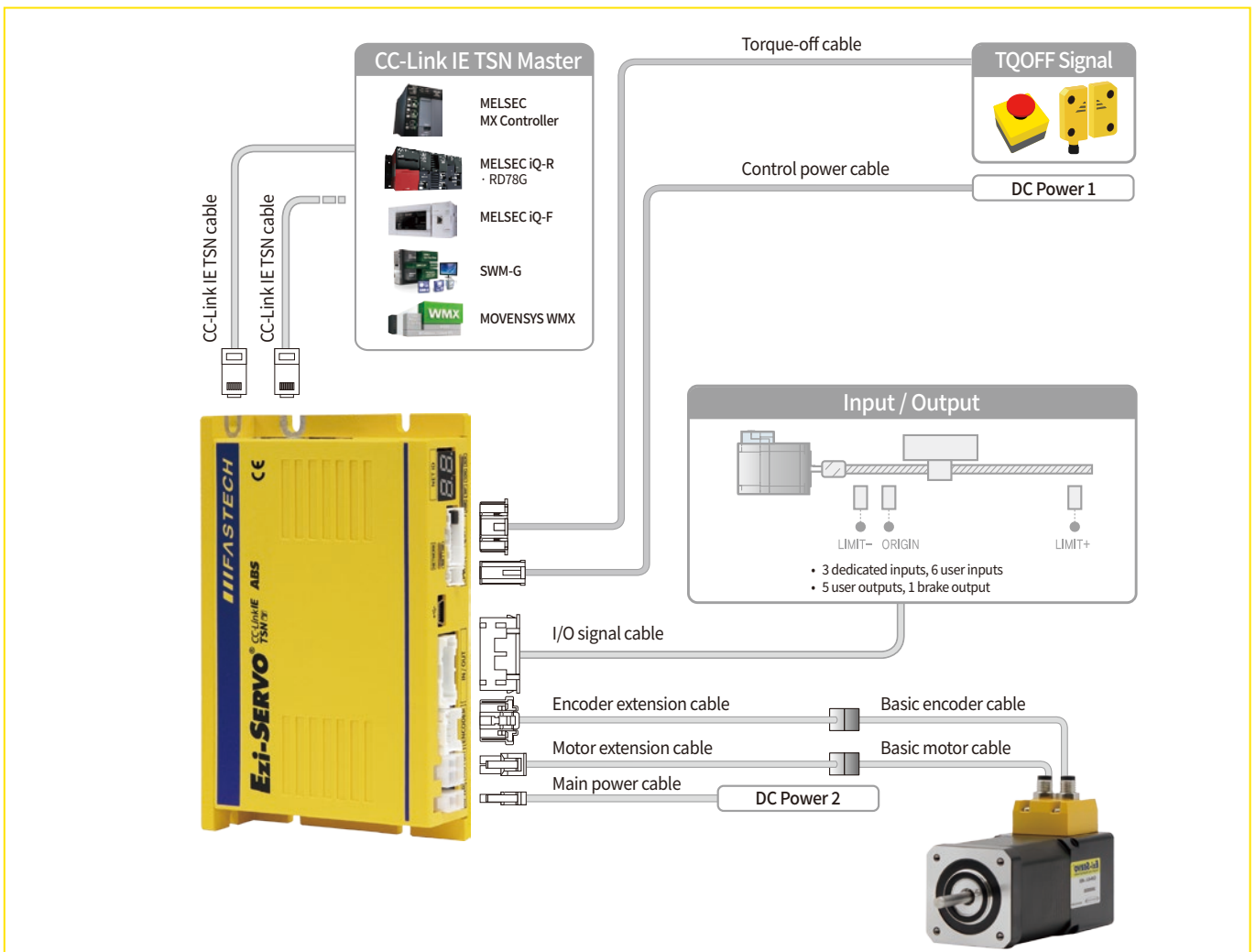
Module Overview



Dimension



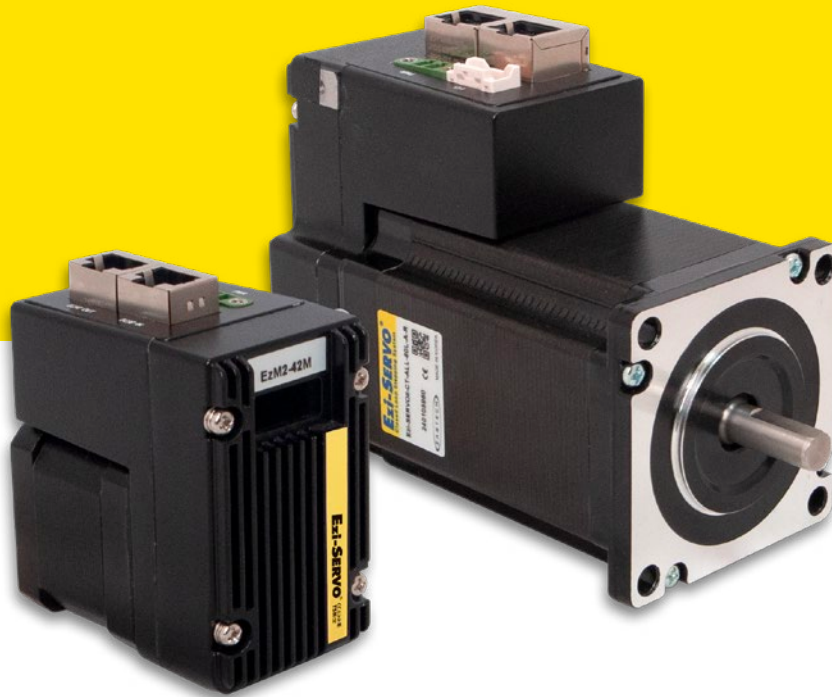
System Configuration



Ezi-SERVO[®] CC-Link IE TSN

Closed Loop Stepping System **ALL**

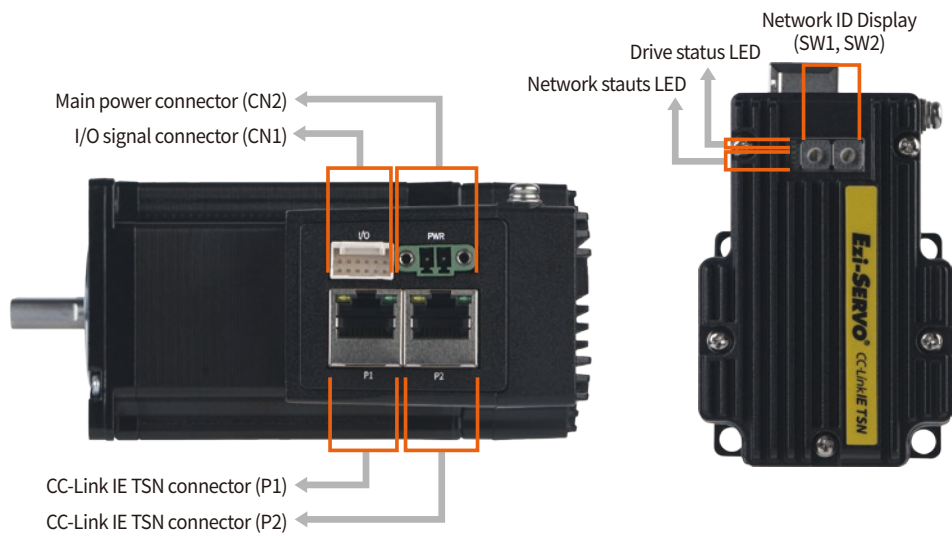
- CC-Link IE TSN-compatible Closed Loop Stepper System
- CiA402 Drive Profile
- Motor + Drive Integrated
- Space Saving, Reduced Wiring
- Tuning Not Required, No Hunting
- High Resolution Encoder, Fast Response
- Low Heat Generation, High Torque



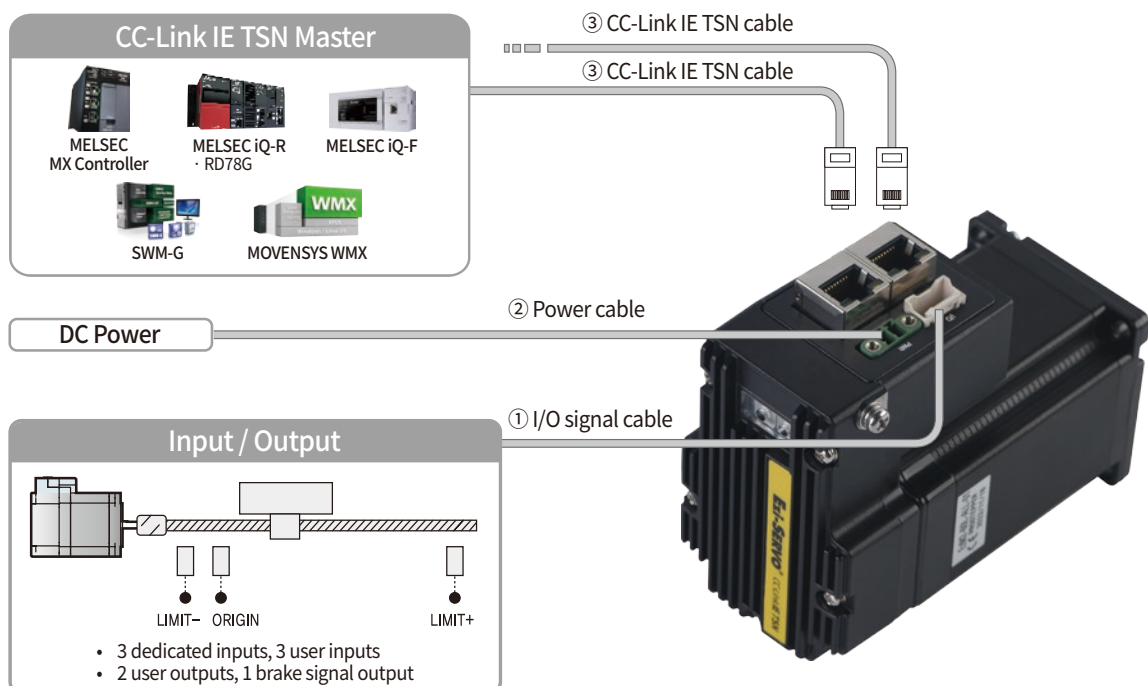
Specifications

Model		Ezi-SERVO-CT-ALL
Main Power Supply		24 V DC $\pm$ 10 %
Speed Control Range		0 ~ 2,000 r/min
Encoder Resolution [P/R]		10,000
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) and 3 user inputs
Digital Output		2 user outputs and 1 brake signal output
CC-Link IE TSN	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)
Status Display	LED	Network status: Run, Error, LINK1/LINK2 Drive status: ST1, ST2

Module Overview



System Configuration



Ezi-SERVO[®] CC-Link IE TSN

Closed Loop Stepping System 4X

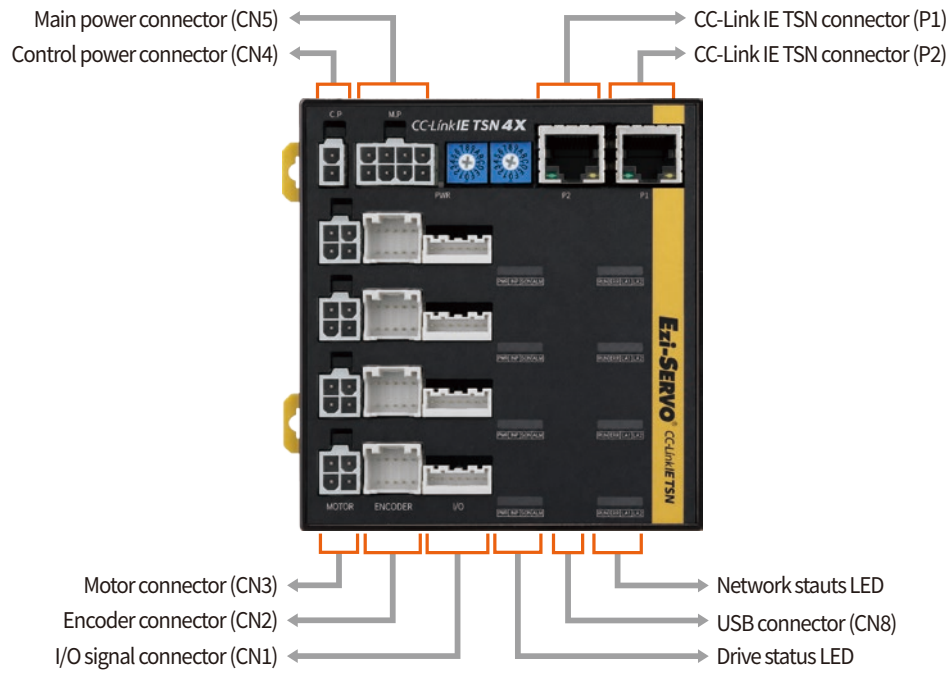
- CC-Link IE TSN-compatible Closed Loop Stepper System
- CiA402 Drive Profile
- Compact Multi-Axis Drive (Max. 4-Axis)
- Space Saving, Reduced Wiring
- Tuning Not Required, No Hunting
- High Resolution Encoder, Fast Response
- Low Heat Generation, High Torque



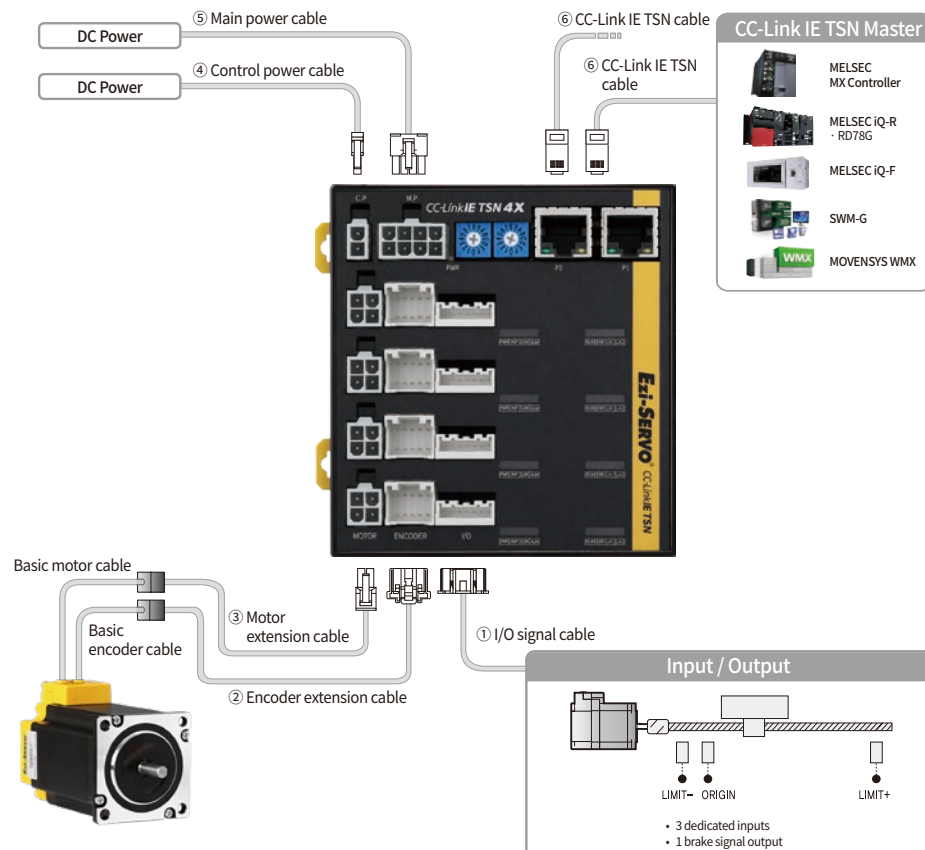
Specifications

Model		Ezi-SERVO-CT-4X Ezi-SERVO-CT-3X
Main Power Supply		24 V DC $\pm$ 10 %
Control Power Supply		24 V DC $\pm$ 10 %
Speed Control Range		0 ~ 3,000 r/min
Encoder Resolution [P/R]		4,000 / 10,000 / 16,000 / 20,000
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) for each axis
Digital Output		1 brake signal for each axis
CC-Link IE TSN	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)
Status Display	LED	Network status: Run, Error, LINK1/LINK2 Drive status: Power, In-Position, Servo On, Alarm
Dimension [mm]		100.4(W) x 100 (D) x 84(H)

Module Overview



System Configuration



Ezi-SERVO[®] CC-Link IE TSN

Closed Loop Stepping System 4X ABS

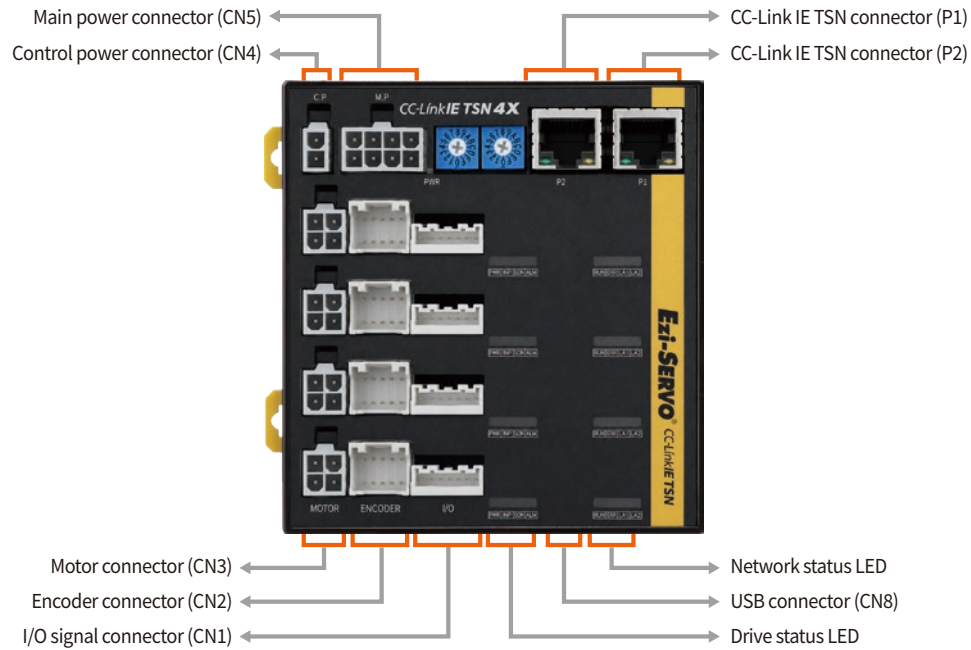
- CC-Link IE TSN-compatible Closed Loop Stepper System
- CiA402 Drive Profile
- Compact Multi-Axis Drive (Max. 4-Axis)
- Long Life Cycle with Electronic Battery-less Multi-turn Absolute Encoder (Multi-turn : 16 bits, Single-turn : Max. 20,000 P/R)
- No Battery Replacement Required, Easy Maintenance
- No External Sensors Required, Simple Wiring



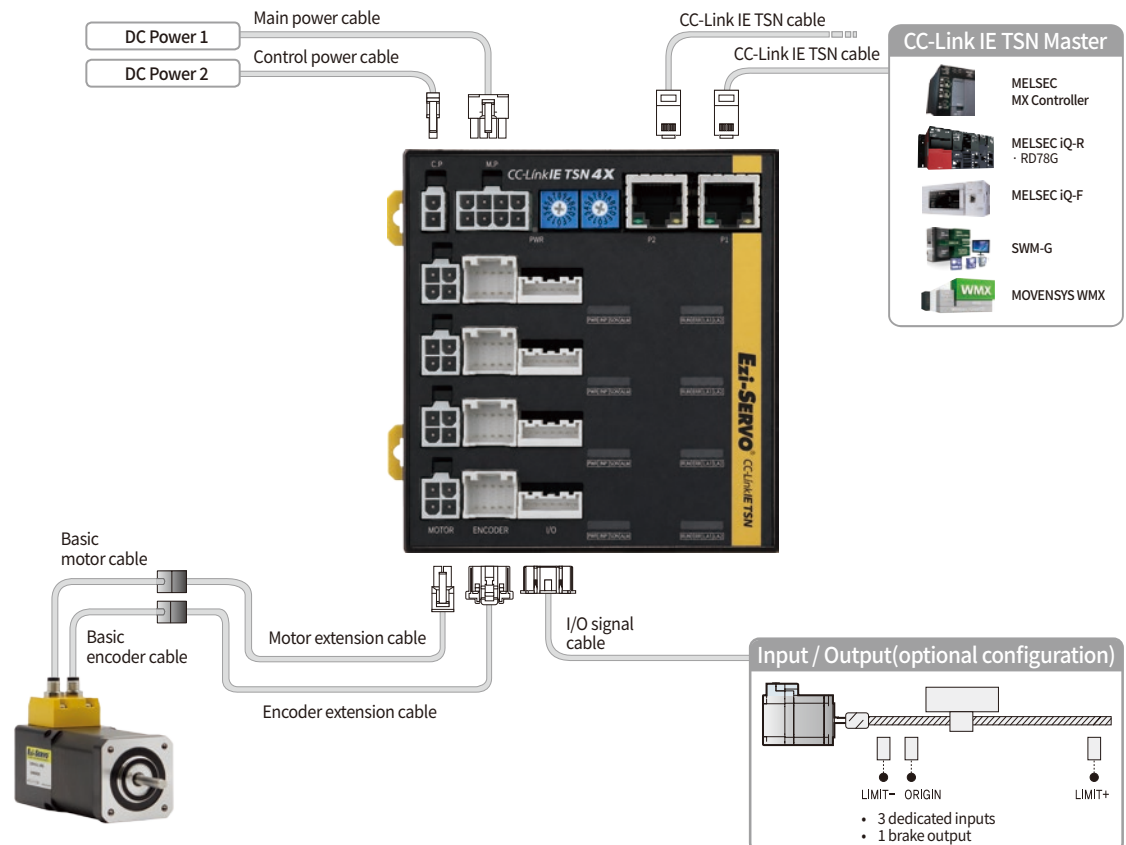
Specifications

Model		Ezi-SERVO-CT-4X-ABS Ezi-SERVO-CT-3X-ABS
Main Power Supply		24 V DC $\pm$ 10 %
Control Power Supply		24 V DC $\pm$ 10 %
Speed Control Range		0 ~ 3,000 r/min
Encoder Resolution [P/R]		Multi-turn : 16 bits, Single-turn : Max. 20,000 P/R
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) for each axis
Digital Output		1 brake signal for each axis
CC-Link IE TSN	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)
Status Display	LED	Network status: Run, Error, LINK1/LINK2 Drive status: Power, In-Position, Servo On, Alarm
Dimension [mm]		100.4(W) x 100 (D) x 84(H)

Module Overview



System Configuration



Ezi-STEP[®] CC-Link IE TSN

Micro Stepping System

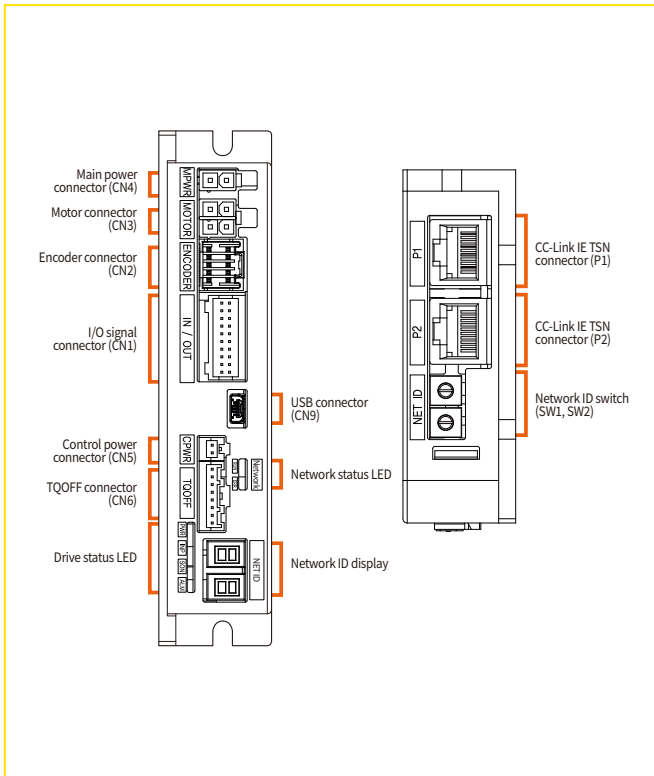
- CC-Link IE TSN-compatible Microstepper System
- CiA402 Drive Profile
- Torque-Off Function
- Software Damping (Resonance & Vibration Suppression)
- High Torque



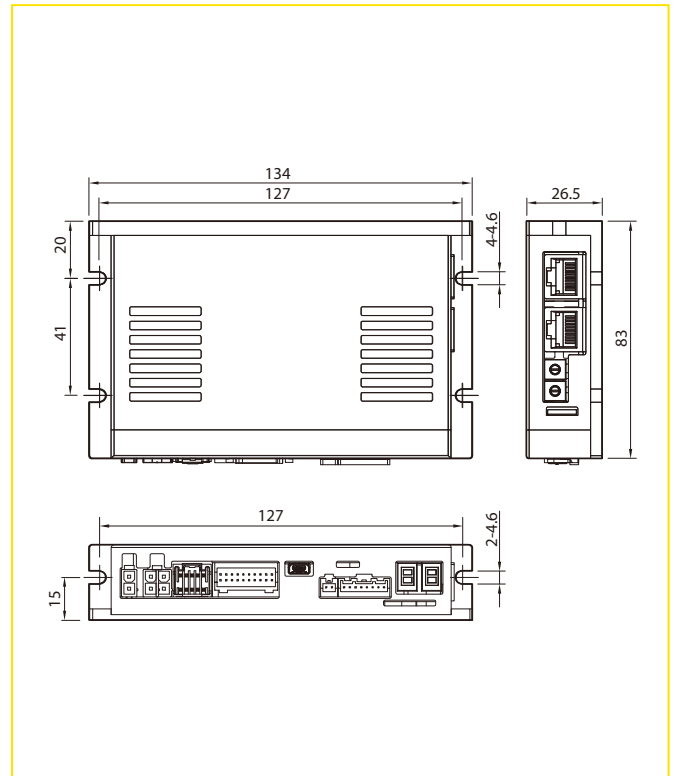
Specifications

Model		Ezi-STEP-CT
Main Power Supply		24 V DC $\pm 10\%$
Control Power Supply		24 V DC $\pm 10\%$
Motor Model		BM-20, 28, 42, 56, 60 Series
Speed Control Range		0 ~ 3,000 r/min
Reference Resolution [P/R]		500 / 1,000 / 1,600 / 2,000 / 3,200 / 3,600 / 4,000 / 5,000 / 6,400 / 8,000 / 10,000 / 20,000 / 25,000 / 36,000 / 40,000 / 50,000
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) and 6 user inputs
Digital Output		5 user outputs and 1 brake signal output
Torque-Off Function		2 inputs (TQOFF1, TQOFF2), 1 output (TQMON)
CC-Link IE TSN	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)
Status Display	7-SEG	IP Address or Error Code
	LED	Network status: Run, Error, LINK1/LINK2 Drive status: Power, Run, Step On, Alarm

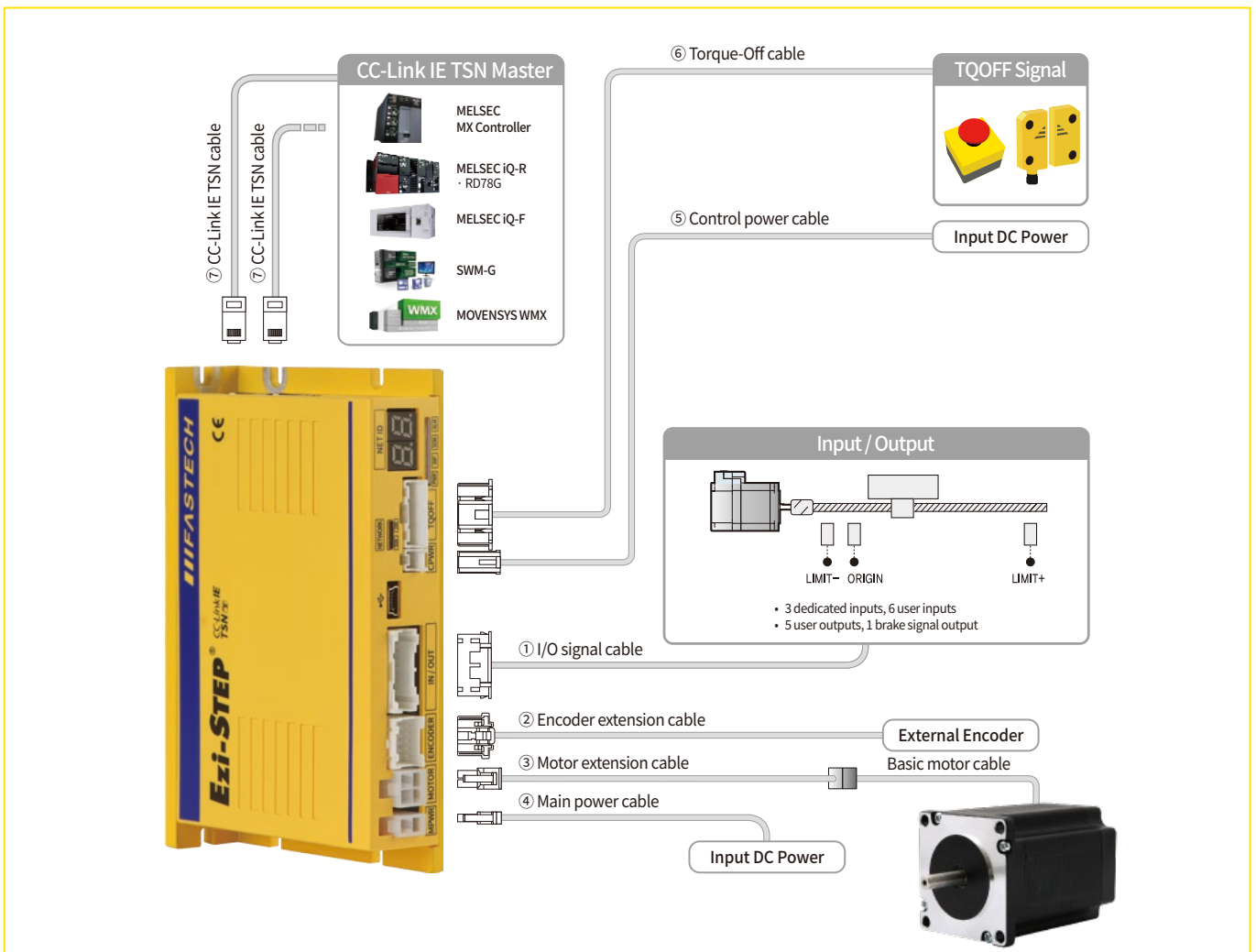
Module Overview



Dimension



System Configuration



Ezi-STEP[®] CC-Link IE TSN

Micro Stepping System ALL

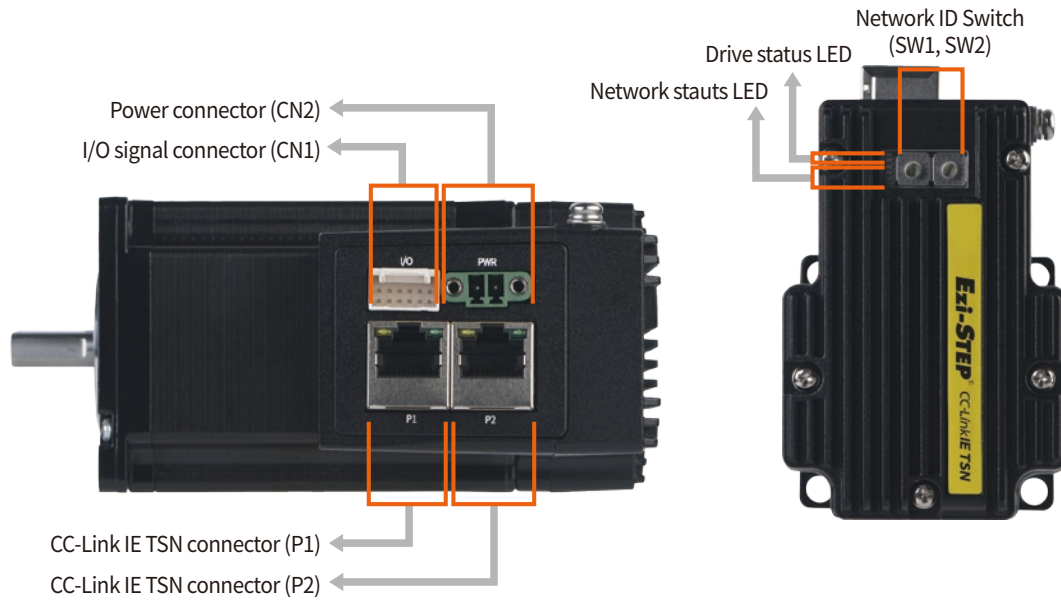
- CC-Link IE TSN-compatible Microstepper System
- CiA402 Drive Profile Support
- Software Damping (Resonance & Vibration Suppression)
- Motor + Drive Integrated
- Space Saving, Reduced Wiring



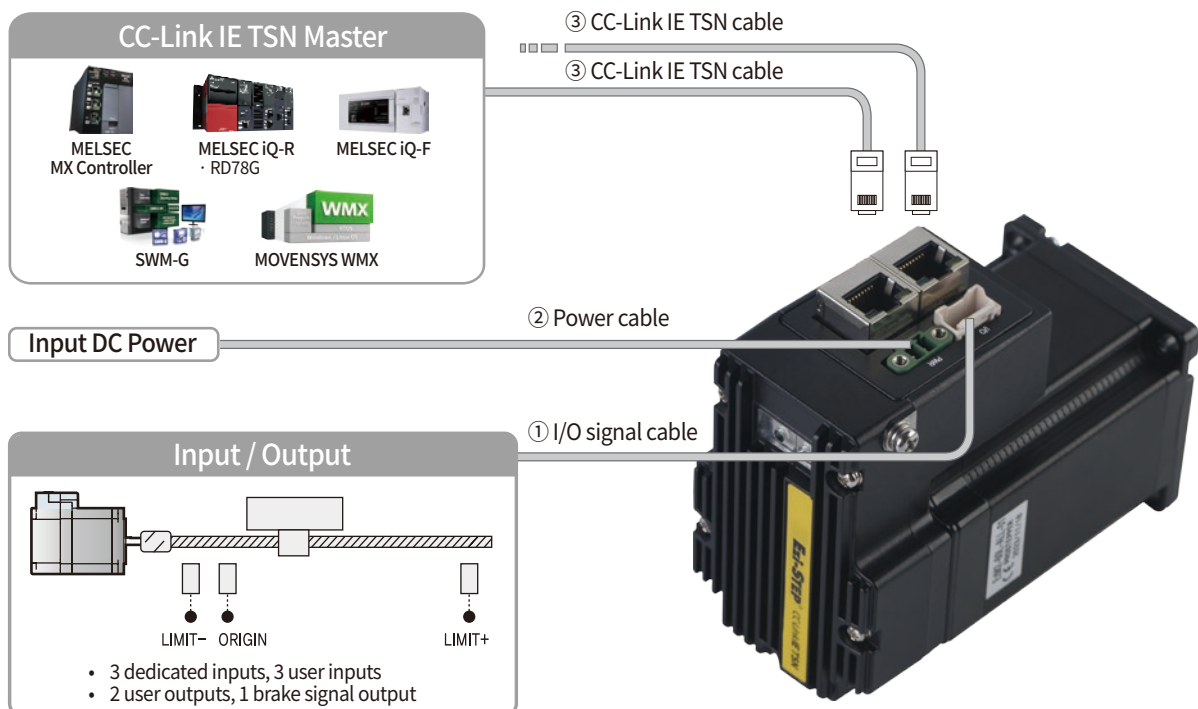
Specifications

Model		Ezi-STEP-CT-ALL-42	Ezi-STEP-CT-ALL-56	Ezi-STEP-CT-ALL-60
Main Power Supply		24 V DC $\pm$ 10 %		
Speed Control Range		0 ~ 3,000 r/min		
Reference Resolution [P/R]		500 / 1,000 / 1,600 / 2,000 / 3,200 / 3,600 / 4,000 / 5,000 / 6,400 / 8,000 / 10,000 / 20,000 / 25,000 / 36,000 / 40,000 / 50,000		
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) and 3 user inputs		
Digital Output		2 user outputs and 1 Brake signal output		
CC-Link IE TSN	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)		
Status Display	LED	Network status: Run, Error, LINK1/LINK2 Drive status: ST1, ST2		

Module Overview



System Configuration



Ezi-STEP[®] CC-Link IE TSN

Micro Stepping System 4X

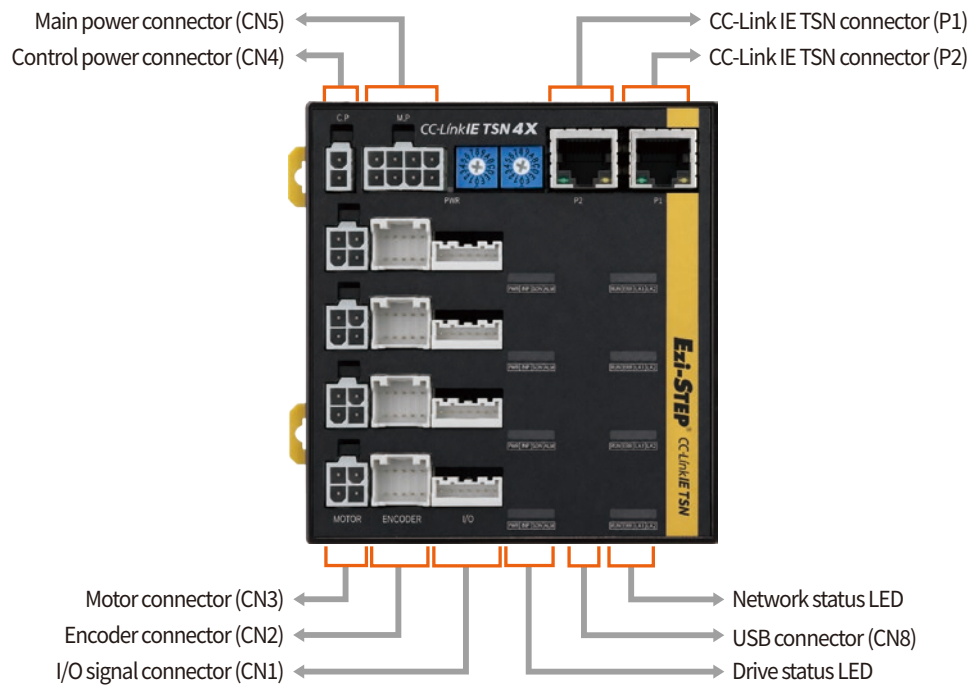
- CC-Link IE TSN-compatible Microstepper System
- CiA402 Drive Profile
- Software Damping (Resonance & Vibration Suppression)
- Compact Multi-Axis Drive (Max. 4-Axis)
- Space Saving, Reduced Wiring



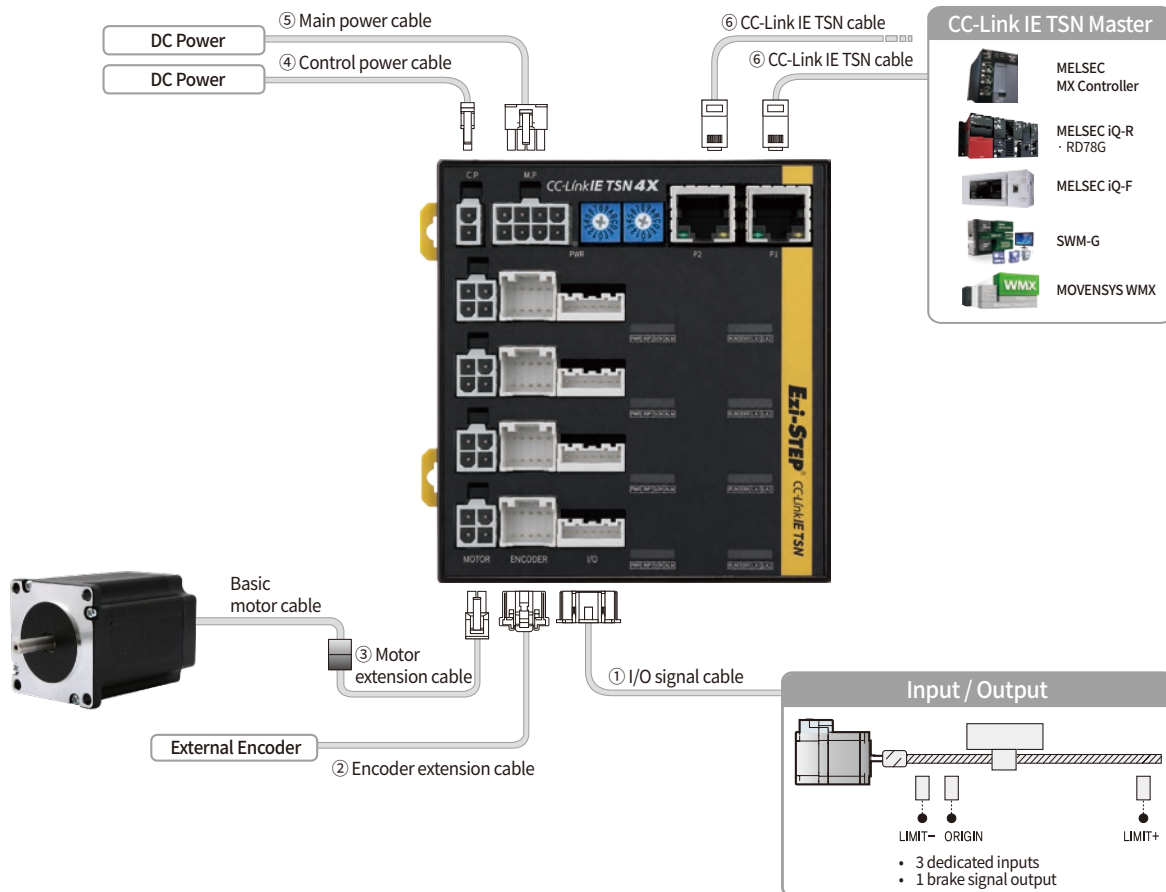
Specifications

Model		Ezi-STEP-CT-4X Ezi-STEP-CT-3X
Main Power Supply		24 V DC $\pm$ 10 %
Control Power Supply		24 V DC $\pm$ 10 %
Motor Model		BM-20, 28, 42, 56, 60 Series
Speed Control Range		0 ~ 3,000 r/min
Reference Resolution [P/R]		500 / 1,000 / 1,600 / 2,000 / 3,200 / 3,600 / 4,000 / 5,000 / 6,400 / 8,000 / 10,000 / 20,000 / 25,000 / 36,000 / 40,000 / 50,000
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN) for each axis
Digital Output		1 brake signal for each axis
CC-Link IE TSN	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)
Status Display	LED	Network status: Run, Error, LINK1/LINK2 Drive status: Power, In-Position, Step On, Alarm
Dimension [mm]		100.4(W) x 100 (D) x 84(H)

Module Overview



System Configuration



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
- Various Motor Options (BLDC Motor, Servo Motor, Linear Motor, VCM, etc)
- Various Position Sensor Options (Incremental/Absolute Encoders)

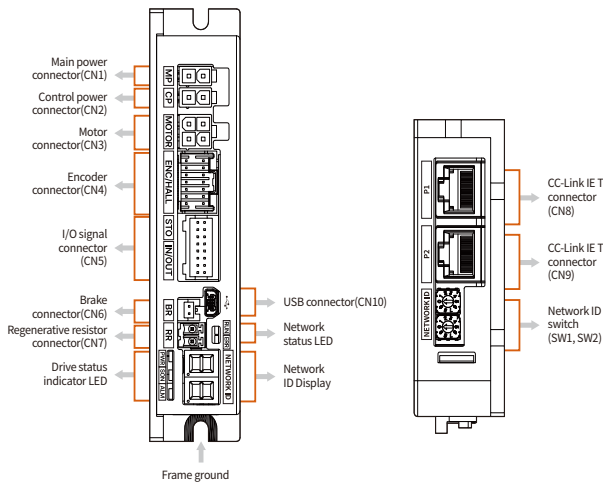


Specifications

Model		Ezi-POS-CT-A2A	Ezi-POS-CT-A2E
Power Supply		12 ~ 48 V DC $\pm$ 10 %	
Input Current (continuous / max)		~ 7 A / 10 A (< 60 s)	
Output Power (continuous / max)		~ 200 W / 350 W (< 60 s)	
PWM Frequency		25 kHz or 50 kHz	
Current Control Sampling Rate		25 kHz (40 μ s)	
Position/Speed Control Sampling Rate		2.5 kHz (400 μ s)	
Speed Control Range		0 ~ 12,000 r/min	
Position Sensor		Absolute Encoder: BiSS-C, RS-485	Incremental Encoder: A, /A, B, /B, Z, /Z
Digital Input		3 dedicated inputs (LIMIT+, LIMIT-, ORIGIN), 2 user inputs	
Digital Output		3 user outputs	
Torque-Off Function		2 inputs (TQOFF1, TQOFF2)	
Additional I/O	Brake	Fixed connector for external brake	
	Regeneration Resistor	Fixed connector for external regenerative resistor	
CC-Link IE TSN	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)	

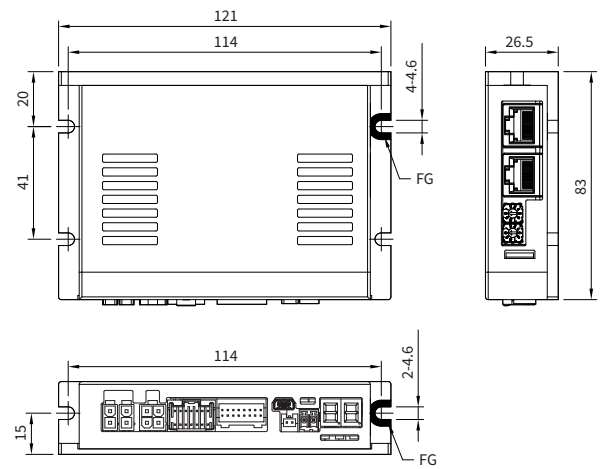
Module Overview

Ezi-POS-CT-A2E



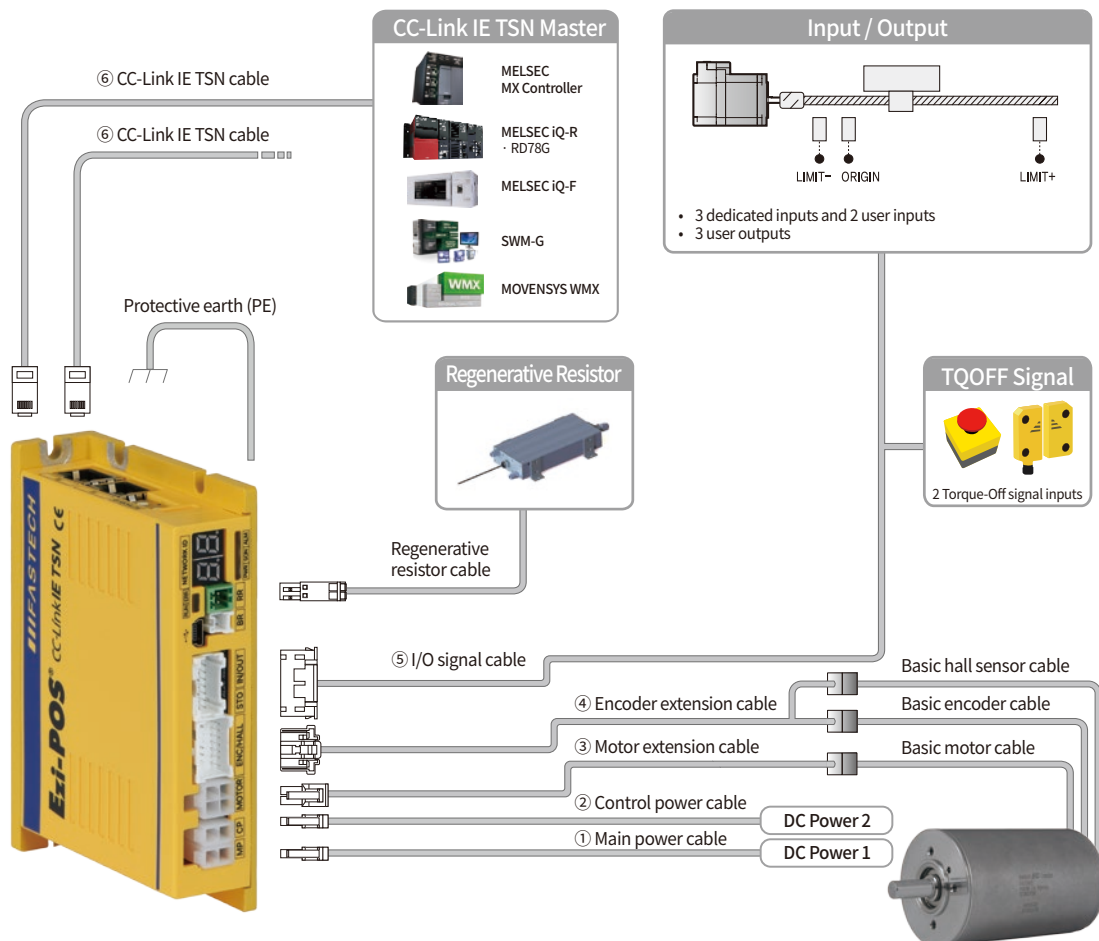
Dimension

Ezi-POS-CT-A2E



System Configuration

Ezi-POS-CT-A2E



Ezi-SPEED[®] CC-Link IE TSN

BLDC Motor Speed Control System DC

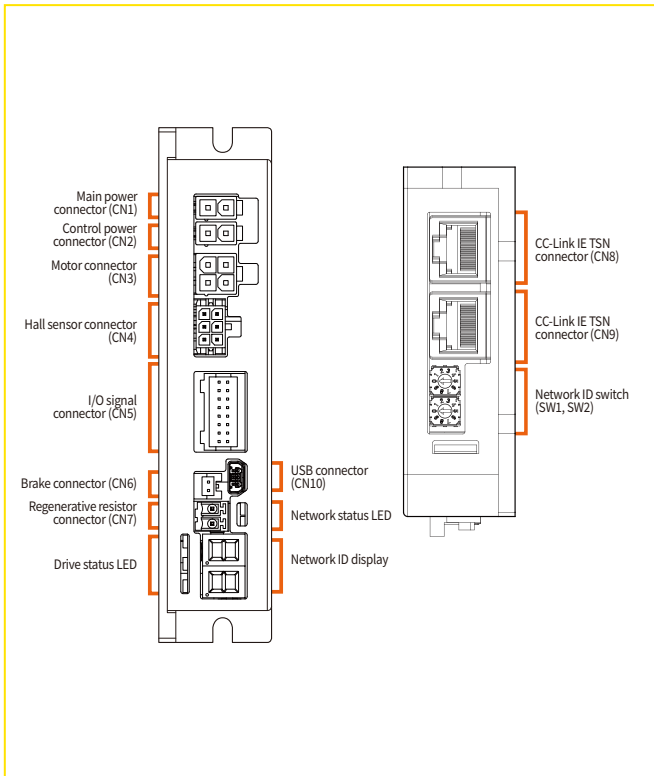
- CC-Link IE TSN-compatible Low Voltage BLDC Motor Speed Control System
- DC Power Input (12 ~ 48 V DC)
- Auto-tuning
- Wide Speed Range (50 ~ 4,000 r/min)
- Stable Speed Regulation ($\pm 0.2\%$)



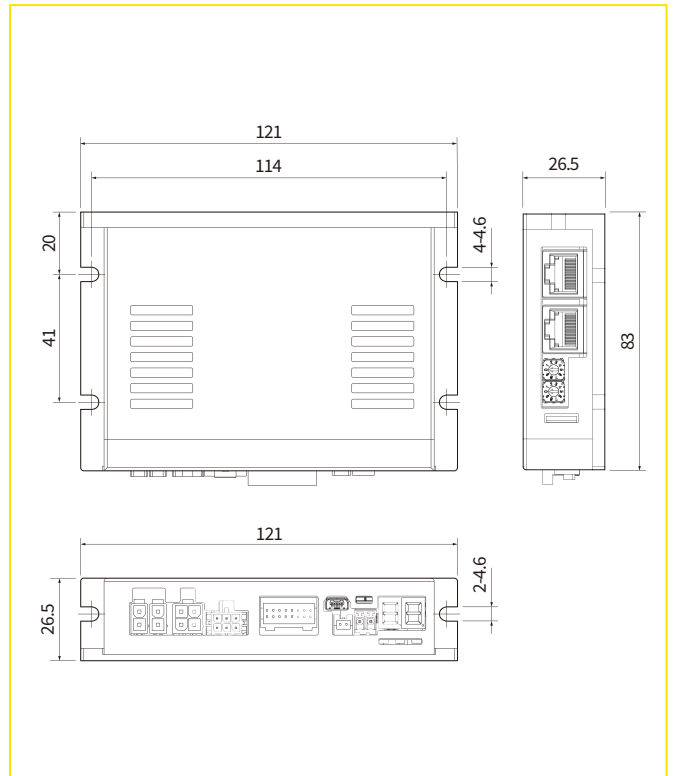
Specifications

Model		Ezi-SPEED-CT-A2H
Power Supply		12 ~ 48 V DC $\pm 10\%$
Input Current (continuous / max)		~7 A / 10 A (< 60 s)
Output Power (continuous / max)		~200 W / 350 W (< 60 s)
PWM Frequency		25 kHz or 50 kHz
Current Control Sampling Rate		25 kHz (40 μ s)
Speed Control Sampling Rate		2.5 kHz (400 μ s)
Speed Control Range		50 ~ 4,000 r/min
Position Sensor		Hall Sensor: H1, H2, H3
Digital Input		5 programmable inputs
Digital Output		3 programmable outputs
Torque-OFF Function		2 inputs (TQOFF1, TQOFF2)
Additional I/O	Brake	Fixed connector for external brake
	Regeneration Resistor	Fixed connector for external regenerative resistor
CC-Link IE TSN	Communication Protocol	CC-Link IE TSN Class B
	Operation Mode	IO-Map Command Mode(Manufacturer-specific), Velocity Mode(VL)
	Synchronization	Minimum Cycle Time: 250 μ s / Synchronous Communication(VL) / Asynchronous Communication(VL)

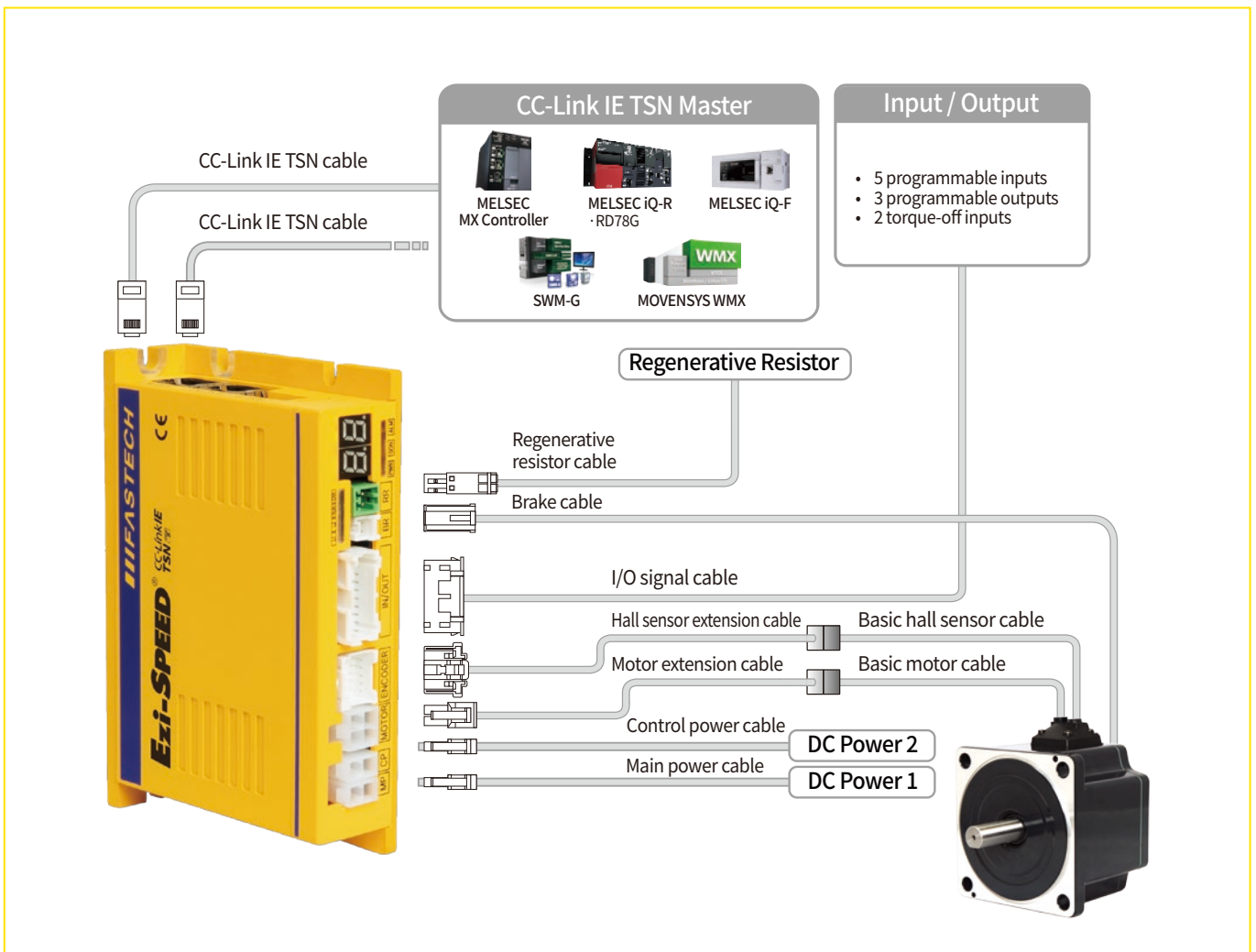
Module Overview



Dimension



System Configuration



Ezi-SPEED[®] CC-Link IE TSN

BLDC Motor Speed Control System

- CC-Link IE TSN-compatible BLDC Motor Speed Control System
- AC Power Supply Input (200 ~ 240 V AC)
- Compact · Light Weight · High Power · High Efficiency Brushless Motor
- Wide Speed Range (50 ~ 4,000 r/min)
- Stable Speed Regulation ($\pm 0.2\%$)
- BLDC Motor Line-up (30, 60, 120, 200, 400 W)

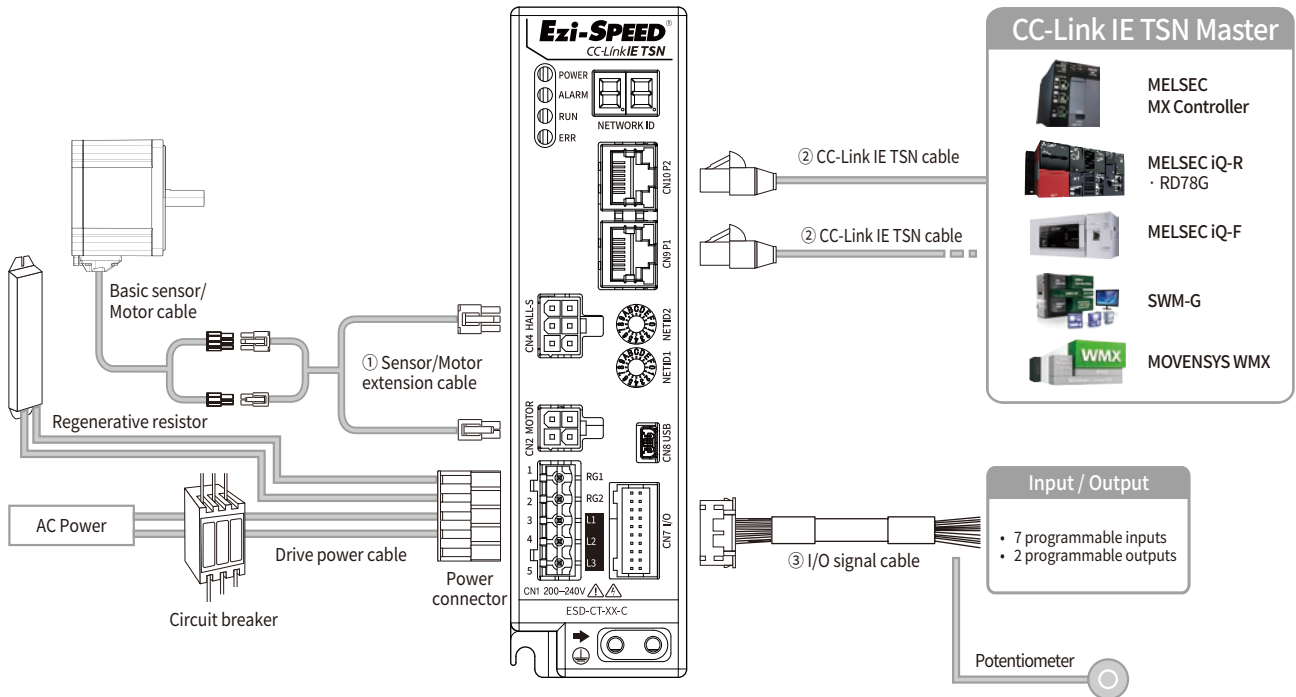


Specifications

□: Motor flange size
■: Shaft figuration

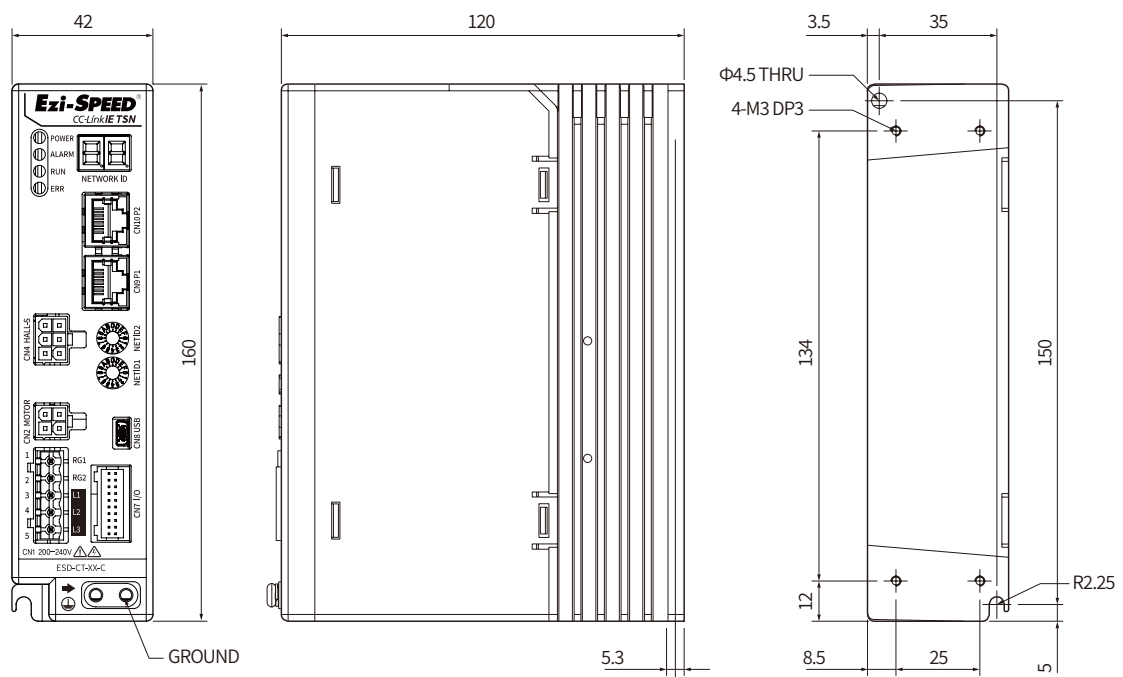
Model		Ezi-SPEED-CT-□-■-30	Ezi-SPEED-CT-□-■-60	Ezi-SPEED-CT-□-■-120	Ezi-SPEED-CT-□-■-200	Ezi-SPEED-CT-□-■-400
Rated Output Power (Continuous)		30 W	60 W	120 W	200 W	400 W
Power Supply	Rated Voltage	Single-phase 200 ~ 240 V / Three-phase 200 ~ 240 V				
	Rated Frequency	50/60 Hz $\pm 5\%$				
	Rated Input Current	Single-Phase : 0.88 A Three-Phase : 0.51 A	Single-Phase : 1.55 A Three-Phase : 0.90 A	Single-Phase : 2.43 A Three-Phase : 1.41 A	Single-Phase : 3.42 A Three-Phase : 1.97 A	Single-Phase : 5.64 A Three-Phase : 3.26 A
	Maximum Input Current	Single-Phase : 1.9 A Three-Phase : 1.1 A	Single-Phase : 2.8 A Three-Phase : 1.7 A	Single-Phase : 4.5 A Three-Phase : 2.6 A	Single-Phase : 5.47 A Three-Phase : 3.16 A	Single-Phase : 7.85 A Three-Phase : 4.53 A
Rated Phase Current		0.21 A	0.36 A	0.85 A	1.65 A	2.37 A
Rated Torque		0.096 N·m	0.191 N·m	0.382 N·m	0.637 N·m	1.27 N·m
Maximum Instantaneous Torque		0.144 N·m	0.287 N·m	0.573 N·m	1.15 N·m	1.91 N·m
Rated Speed		3,000 r/min				
Speed Control Range		50 ~ 4,000 r/min				
Speed Regulation		$\pm 0.2\%$ or less / Conditions : 0~Rated Torque, Rated Speed, Rated Voltage, Normal Temperature				
Digital Input		7 programmable inputs				
Digital Output		2 programmable outputs				
CC-Link IE TSN	Communication Protocol	CC-Link IE TSN Class B				
	Operation Mode	IO-Map Command Mode(Manufacturer-specific), Velocity Mode(VL)				
	Synchronization	Minimum Cycle Time: 250 μ s / Synchronous Communication(VL) / Asynchronous Communication(VL)				

System Configuration



Dimension

Unit [mm]



Ezi-ROBO[®] CC-Link IE TSN

Precise Actuator System IGH

- Slider Type Electric Actuator with Stepper Motor & Ball Screw
- Repeatability ± 0.005 mm
- High Strength Steel Frame
- CiA402 Drive Profile
- CC-Link IE TSN-compatible Closed Loop Stepper System
- Tuning Not Required, No Hunting
- Low Heat Generation, High Torque, High Resolution Encoder, Fast Response
- Compatible with Integrated, Built-in Torque-Off Function, Multi-Axis Drive



IGH-15/23

Model			Ezi-ROBO-IGH-15S-□	Ezi-ROBO-IGH-23S-□	Ezi-ROBO-IGH-23C-□
Actuator Type		[mm]	Cover	Cover	Anti-dust
Lead		[mm]	1, 2	2, 5	2, 5
Guide Rail Length		[mm]	100 ~ 200	150 ~ 300	150 ~ 300
Stroke		[mm]	60 ~ 160	76 ~ 226	66 ~ 216
Repeatability		[mm]	± 0.005 (± 0.003)	± 0.005 (± 0.003)	± 0.005 (± 0.003)
Maximum Speed	Standard Motor	[mm/s]	Lead 1: 40, Lead 2: 80	Lead 2: 80, Lead 5: 200	Lead 2: 80, Lead 5: 200
	Motor + Drive Integrated	[mm/s]	-	Lead 2: 65, Lead 5: 165	Lead 2: 65, Lead 5: 165
Permissible load	Horizontal	[kg]	1.5	7.5	7.5
	Vertical	[kg]	1	5	5
Permissible Moment		[N·m]	M _P : 10 M _V : 11 M _R : 28	M _P : 46 M _V : 51 M _R : 134	M _P : 29 M _V : 69 M _R : 34

※ IGH-15S is compatible only with Built-in Torque-Off Functioni, and Multi-Axis Drives.

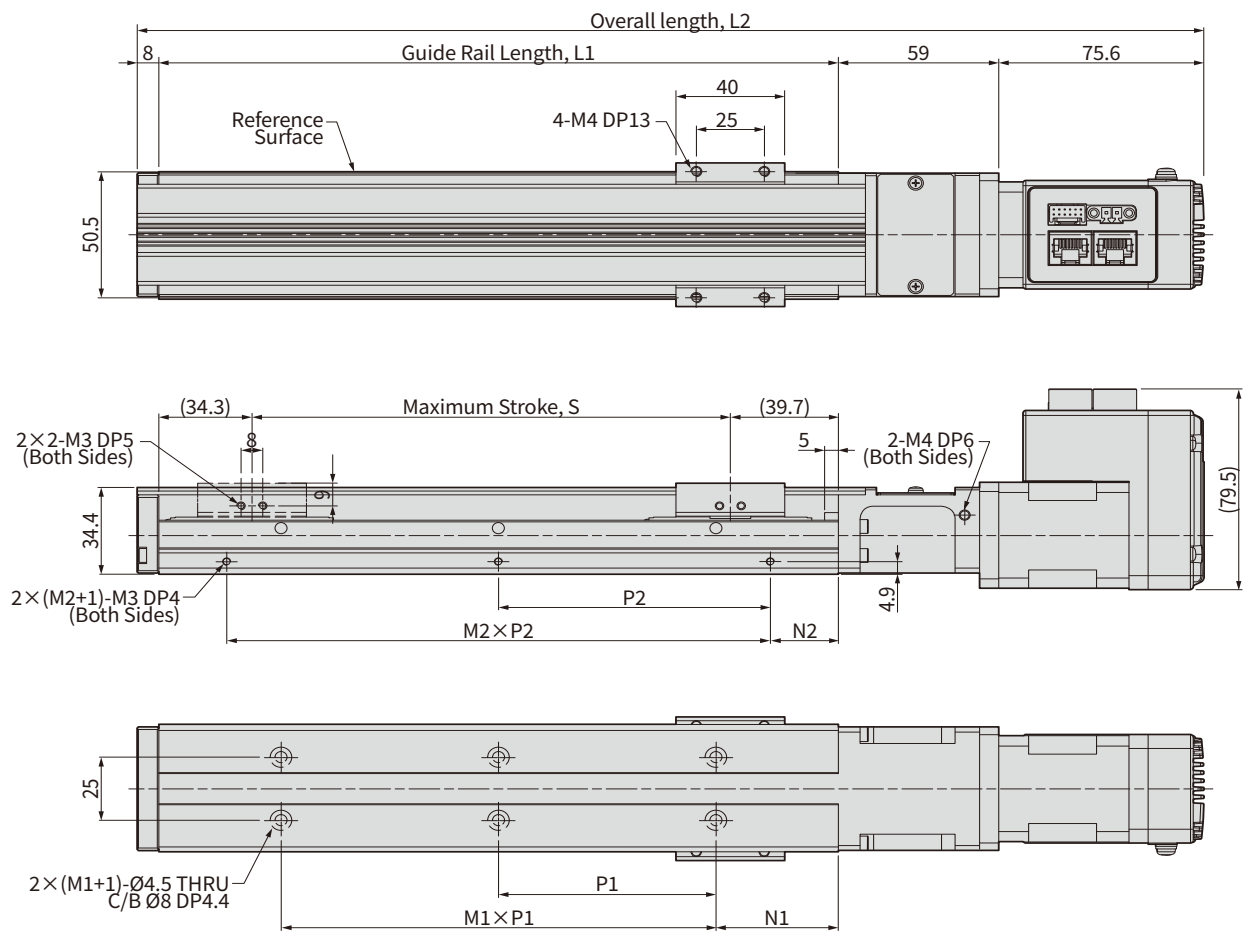
IGH-30

Model			Ezi-ROBO-IGH-30S-□	Ezi-ROBO-IGH-30C-□
Actuator Type		[mm]	Cover	Anti-dust
Lead		[mm]	5, 10	5, 10
Guide Rail Length		[mm]	150 ~ 500	150 ~ 500
Stroke		[mm]	60 ~ 410	50 ~ 400
Repeatability		[mm]	± 0.005	± 0.005
Maximum Speed	Standard Motor	[mm/s]	Lead 5: 200, Lead 10: 400	Lead 5: 200, Lead 10: 400
	Motor + Drive Integrated	[mm/s]	Lead 5: 165, Lead 10: 330	Lead 5: 165, Lead 10: 330
Permissible load	Horizontal	[kg]	15	15
	Vertical	[kg]	12	12
Permissible Moment		[N·m]	M _P : 101 M _V : 120 M _R : 260	M _P : 43 M _V : 118 M _R : 50

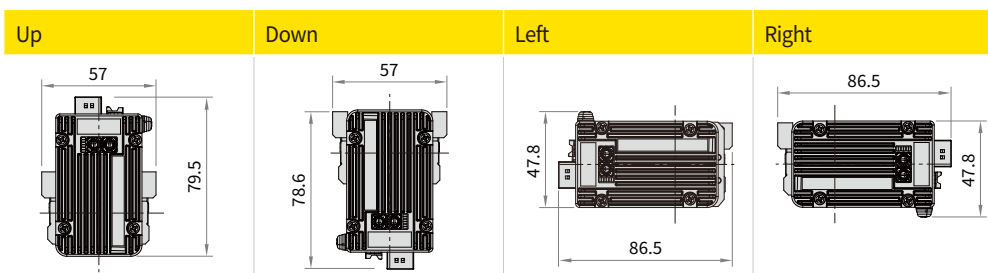
Dimension (IGH-23S)

Unit [mm]

Guide Rail Length, L1	Overall Length, L2		Stroke, S	N1	M1XP1	N2	M2XP2
	ALL Motor	BT Motor					
150	292.6	298	76	35	1 X 80	25	1 X 100
200	342.6	348	126	20	2 X 80	50	
250	392.6	398	176	45	3 X 80	25	2 X 100
300	442.6	448	226	30		50	



Motor Direction



Ezi-ROBO[®] CC-Link IE TSN

Precise Actuator System IGS

- Slider Type Electric Actuator with Stepper Motor & Ball Screw
- Repeatability ± 0.005 mm
- CiA402 Drive Profile
- CC-Link IE TSN-compatible Closed Loop Stepper System
- Tuning Not Required, No Hunting
- Low Heat Generation, High Torque, High Resolution Encoder, Fast Response
- Compatible with Integrated, Built-in Torque-Off Function, Multi-Axis Drive



IGS-30/40

Model			Ezi-ROBO-IGS-30S-□		Ezi-ROBO-IGS-40S-□ Ezi-ROBO-IGS-40PL-□				
Lead		[mm]	2		2, 5				
Stroke		[mm]	50	100	50	100	150	200	250
Repeatability		[mm]	± 0.005		± 0.005				
Maximum Speed	Standard Motor	[mm/s]	80		Lead 2: 80, Lead 5: 200				
	Motor + Drive Integrated	[mm/s]	-		Lead 2: 65, Lead 5: 165				
Permissible load	Horizontal	[kg]	2.5		4				
	Vertical	[kg]	2		3				
Permissible Moment		[N · m]	M_P : 23.2 M_Y : 23.2 M_R : 43.7		M_P : 34.7 M_Y : 34.7 M_R : 64.8				

※ IGS-30S is compatible only with Built-in Torque-Off Function, and Multi-Axis Drives.

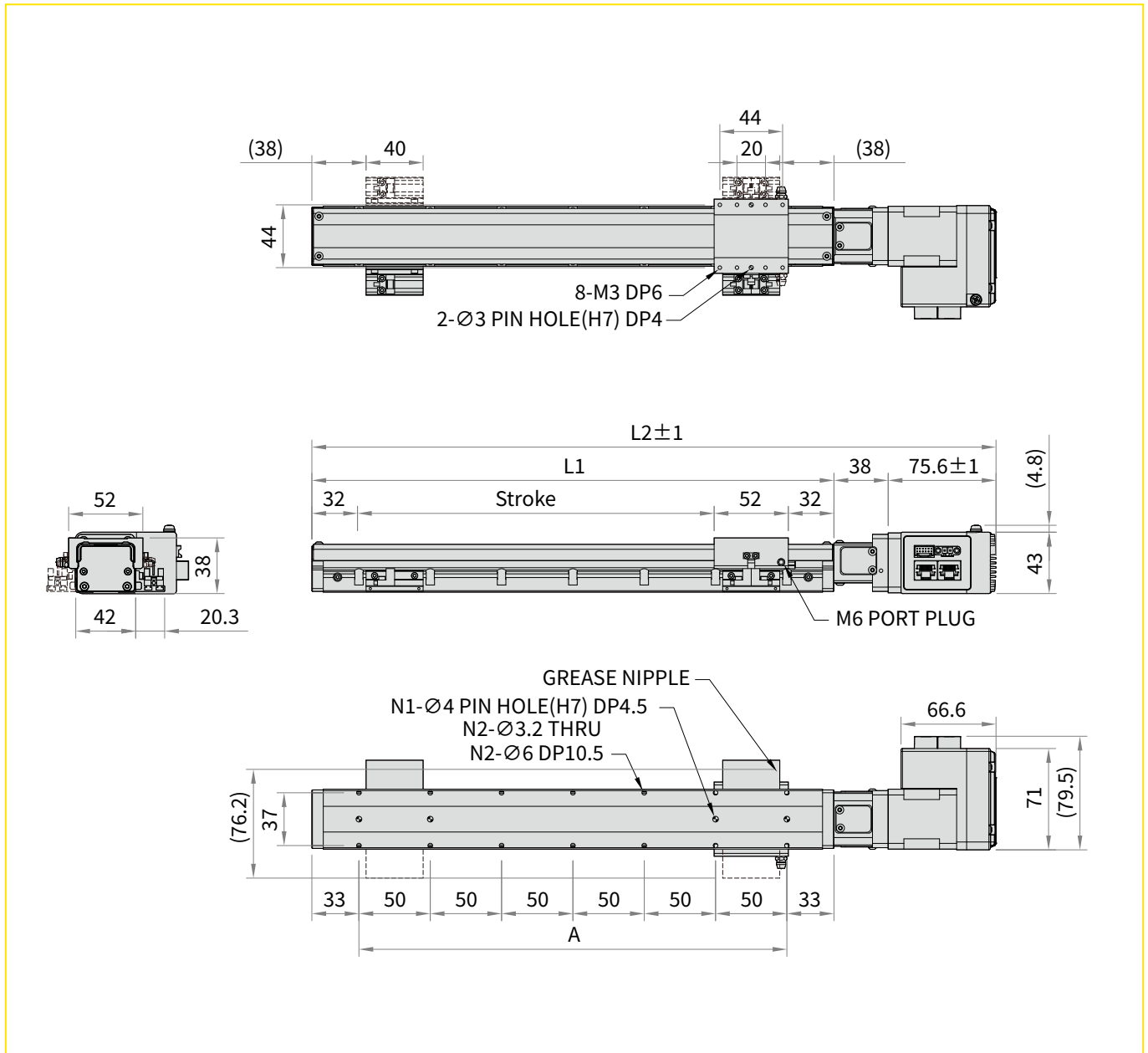
IGS-50/60

Model			Ezi-ROBO-IGS-50S-□ Ezi-ROBO-IGS-50PL-□		Ezi-ROBO-IGS-60S-□				
Lead		[mm]	5, 10		5, 10				
Stroke		[mm]	50 ~ 500		50 ~ 500				
Repeatability		[mm]	± 0.005		± 0.005				
Maximum Speed	Standard Motor	[mm/s]	Lead 5: 200, Lead 10: 400		Lead 5: 200, Lead 10: 400				
	Motor + Drive Integrated	[mm/s]	Lead 5: 165, Lead 10: 330		Lead 5: 165, Lead 10: 330				
Permissible load	Horizontal	[kg]	10		13				
	Vertical	[kg]	Lead 5: 9.5, Lead 10: 7.5		Lead 5: 10, Lead 10: 12.5				
Permissible Moment		[N · m]	M_P : 131.4 M_Y : 131.4 M_R : 164		M_P : 172.1 M_Y : 172.1 M_R : 224.9				

Dimension (IGS-40S)

Unit [mm]

Stroke, S	L1	Overall Length, L2		Number of Pin Holes for Positioning, N1	Number of Holes for Product Fastening, N2	Distance Between Holes for Product Fastening (Min.), A
		ALL Motor	BT Motor			
50	166	279.6	285	3	6	100
100	216	329.6	335	4	8	150
150	266	379.6	385	4	10	200
200	316	429.6	435	4	12	250
250	366	479.6	485	4	14	300



Motor Direction

Up	Down	Left	Right

Ezi-ROBO[®] CC-Link IE TSN

Precise Actuator System VZR

- Slim Actuator with Hollow Shaft Motor & Ball Screw Spline
- Vacuum(V) + Linear(Z) + Rotary(R), 3-in-1 Actuator
- Repeatability ± 0.01 mm (Z Axis), $\pm 0.1^\circ$ (R Axis)
- CiA402 Drive Profile
- CC-Link IE TSN-compatible Closed Loop Stepper System
- Tuning Not Required, No Hunting
- Low Heat Generation, High Torque, High Resolution Encoder, Fast Response
- Compatible with Built-in Torque-Off Function, Multi-Axis Drive

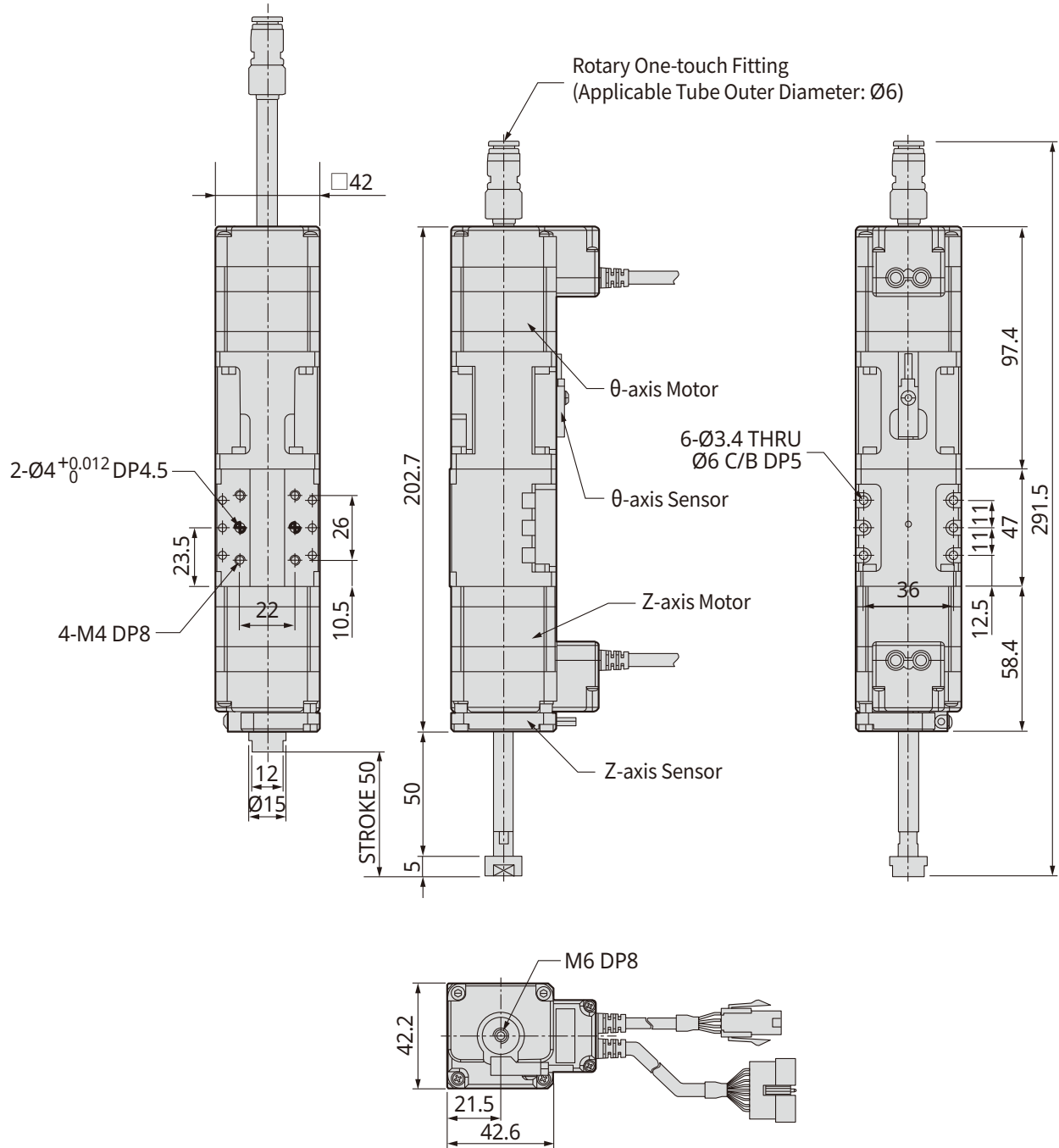


Specifications

Model			Ezi-ROBO-VZR-28-50-P6-28-D-N-□ Ezi-ROBO-VZR-28-50-P6-28-D-P-□	Ezi-ROBO-VZR-42-50-P10-42-B-N-□ Ezi-ROBO-VZR-42-50-P10-42-B-P-□
Lead		[mm]	6	10
Repeatability	Z Axis	[mm]	± 0.01	± 0.01
	θ Axis	[deg]	± 0.1	± 0.1
Maximum Speed	Z Axis	[mm/s]	72	200
	θ Axis	[rev/s]	3	3
Maximum Acceleration	Z Axis	[mm/s ²]	0.6	1
	θ Axis	[rad/s ²]	120π	120π
Permissible Load		[kg]	0.5	1.5
Reference Thrust Force		[N]	7	15
Permissible Moment		[kg·m ²]	0.15×10^{-4}	0.35×10^{-4}
Stroke		[mm]	50	50

■ Dimension (VZR-42)

Unit [mm]



Ezi-ROBO[®] CC-Link IE TSN

Precise Actuator System CLA

- Compact Linear Actuator with Hollow Shaft Motor & Ball Screw
- Repeatability ± 0.01 mm, Lost Motion ≤ 0.05 mm
- CiA402 Drive Profile
- CC-Link IE TSN-compatible Closed Loop Stepper System
- Tuning Not Required, No Hunting
- Low Heat Generation, High Torque, High Resolution Encoder, Fast Response
- Compatible with Built-in Torque-Off Function, Multi-Axis Drive



CLAT (Table Type)

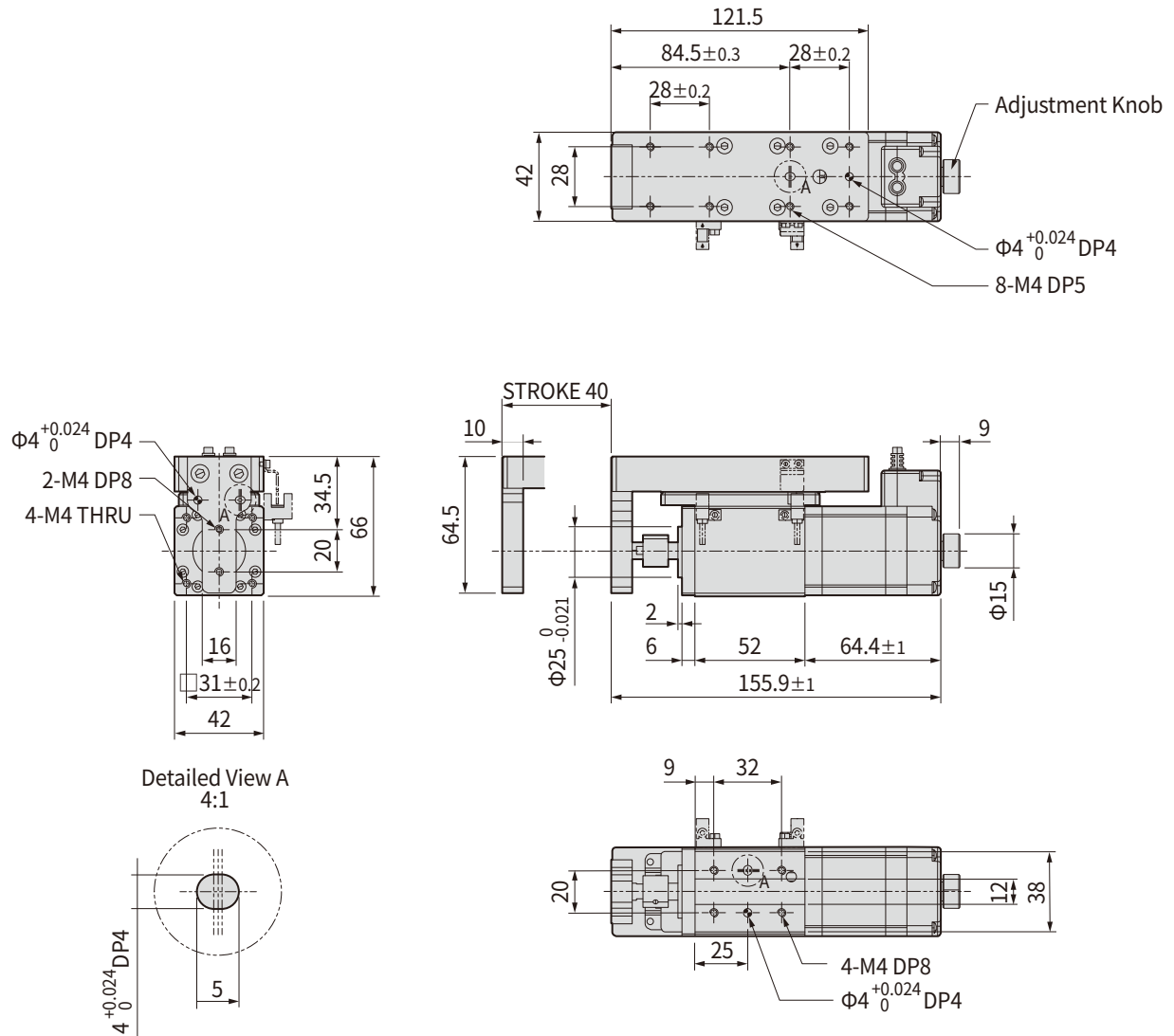
Model		Ezi-ROBO-CLAT-20-25R1-□	Ezi-ROBO-CLAT-28-30R1-□	Ezi-ROBO-CLAT-42-40R2-□ Ezi-ROBO-CLAT-42-40R8-□		Ezi-ROBO-CLAT-56-50R4-□
Lead	[mm]	1	1	2	8	4
Repeatability	[mm]	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01
Lost Motion	[mm]	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05
Permissible Moment	Static [N·m]	$M_P: 0.10 \quad M_V: 0.05 \quad M_R: 0.15$	$M_P: 0.3 \quad M_V: 0.24 \quad M_R: 1.5$	$M_P: 1.3 \quad M_V: 1.0 \quad M_R: 2.5$		$M_P: 2.5 \quad M_V: 2.0 \quad M_R: 5.0$
	Dynamic [N·m]					
Permissible Load	Horizontal [kg]	1	4	8	5	10
	Vertical [kg]	0.5	2	4	3	5
Stroke	[mm]	25	30	40	40	50
Maximum Speed	[mm/s]	20	20	50	150	50

CLAR (Rod Type)

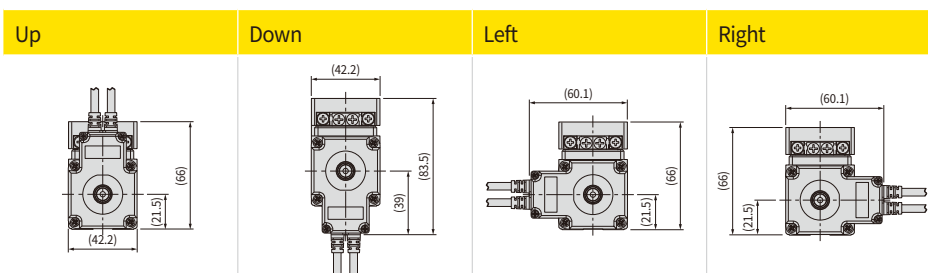
Model		Ezi-ROBO-CLAR-20-25R1-□	Ezi-ROBO-CLAR-28-30R1-□	Ezi-ROBO-CLAR-42-40R2-□ Ezi-ROBO-CLAR-42-40R8-□		Ezi-ROBO-CLAR-56-50R4-□
Lead	[mm]	1	1	2	8	4
Repeatability	[mm]	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01
Lost Motion	[mm]	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05
Permissible Load	Horizontal [kg]	1	4	8	5	10
	Vertical [kg]	0.5	2	4	3	5
Stroke	[mm]	25	30	40	40	50
Maximum Speed	[mm/s]	20	20	50	150	50

Dimension (CLAT-42)

Unit [mm]



Cable Direction



Ezi-ROBO[®] CC-Link IE TSN

Precise Actuator System HG

- Hollow Rotary Index Table with Stepper Motor
- Repeatability (± 10 arcsec)
- Hollow Diameter (Max. $\varnothing 85$ mm)
- Permissible Torque (Max. 170 N·m)
- Axial Load (Max. 4000 N)
- CiA402 Drive Profile
- CC-Link IE TSN-compatible Closed Loop Stepper System
- Tuning Not Required, No Hunting
- Low Heat Generation, High Torque, High Resolution Encoder, Fast Response
- Compatible with Built-in Torque-Off Function, Multi-Axis Drive



Specifications

Model	Ezi-ROBO-HG60-05-42XL-□	Ezi-ROBO-HG100-08-60L-□	Ezi-ROBO-HG130S-18-60L-□	Ezi-ROBO-HG170S-20-60L-□	Ezi-ROBO-HG170S-36-60L-□	Ezi-ROBO-HG170S-20-86L-□	Ezi-ROBO-HG170S-36-86L-□
Motor	42XL	60L	60L	60L		86L	
Output Table Supporting Bearing	Ball Bearing	Tapered Roller + Ball bearing	Cross Roller Bearing				
Permissible Torque [N·m]	4.5	12	34	170	107	170	107
Inertia Moment [kg·m ²]	$2,330 \times 10^{-7}$	$3,898 \times 10^{-6}$	$3,127 \times 10^{-5}$	$4,752 \times 10^{-5}$	$12,351 \times 10^{-5}$	$7,484 \times 10^{-5}$	$21,203 \times 10^{-5}$
Permissible Speed [r/min]	300	200	200	150	150	150	150
Gear Ratio	1:5	1:8	1:18	1:20	1:36	1:20	1:36
Holding Torque [N·m]	2.2	12	25.1	27.8	50.2	96.1	107
Repeatability [arcsec]	$\pm 10 (\pm 0.0028^\circ)$						
Lost Motion [arcmin]	$2 (\pm 0.033^\circ)$						
Angular Transmission Accuracy [arcmin]	$4 (0.067^\circ)$						
Permissible Axial Load [N]	100	500	2,000	3,900	4,000	3,900	4,000
Permissible Moment Load [N·m]	2	10	50	152	200	152	200
Runout of Output Table Surface [mm]	0.03	0.015	0.07	0.07	0.07	0.07	0.07
Runout of Output Table Inner (Outer) Dia. [mm]	0.03	0.015	0.04	0.04	0.04	0.04	0.04
Parallelism of Output Table [mm]	0.05	0.03	0.07	0.07	0.07	0.07	0.07
Degree of Protection ^{*1}	IP40						
Mass of Actuator Unit [kg]	1.6	4.0	6.3	8.7	8.7	11.9	11.9

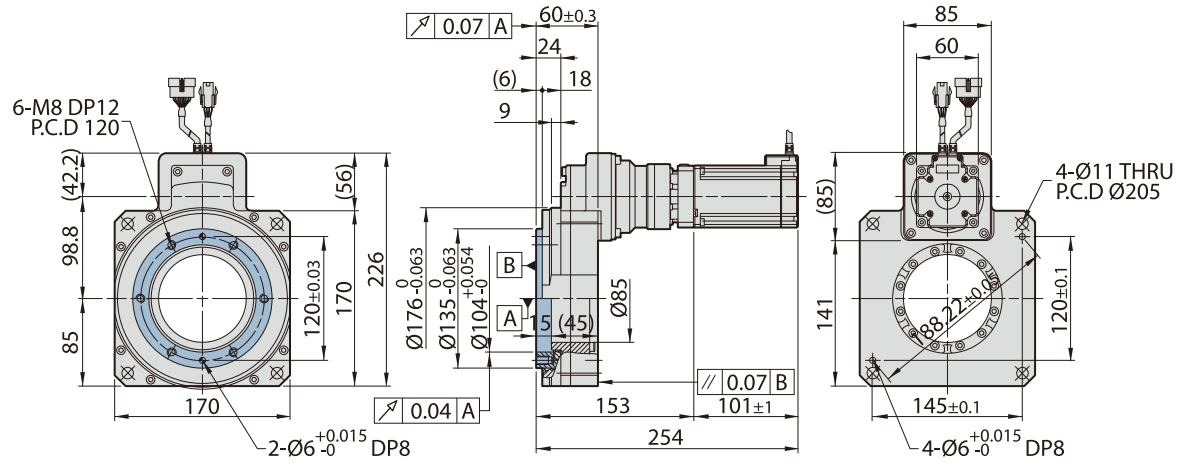
*1: IP20 for motor connector

Dimension (HG170S)

Unit [mm]

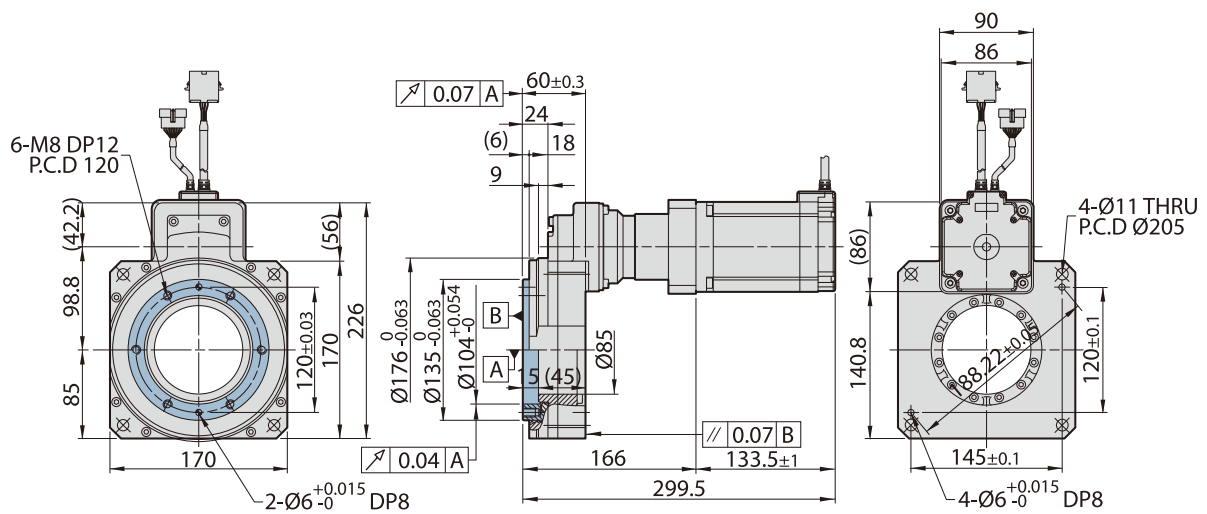
Ezi-ROBO-HG170S-20-60L-□

Ezi-ROBO-HG170S-36-60L-□



Ezi-ROBO-HG170S-20-86L-□

Ezi-ROBO-HG170S-36-86L-□

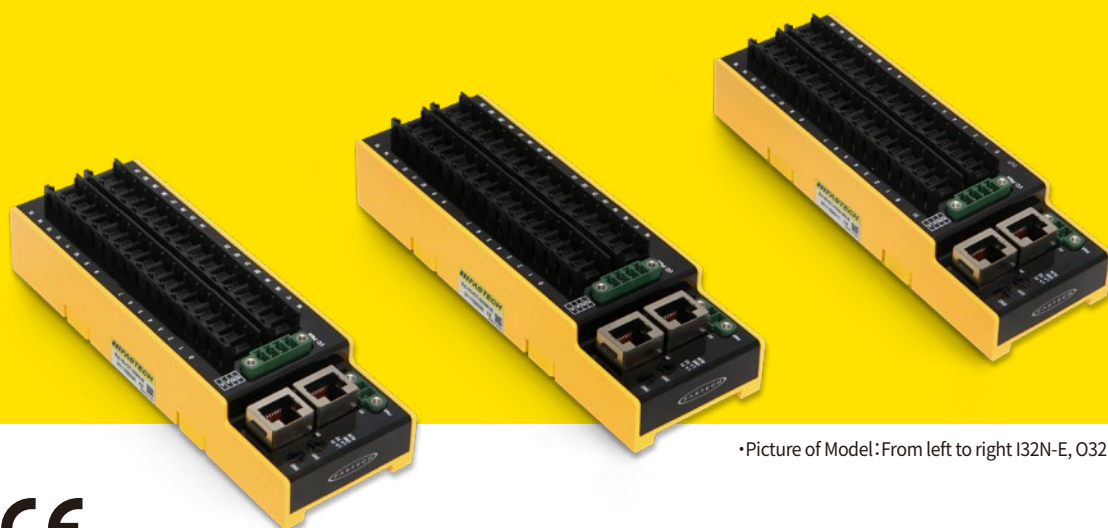


※ □ is a drive type.

Ezi-IO[®] CC-Link IE TSN

Network Input/Output DIO

- CC-Link IE TSN-compatible Digital I/O Module
- Input Filter Function
- Simple and Easy Wiring
- DIN Rail Mounting



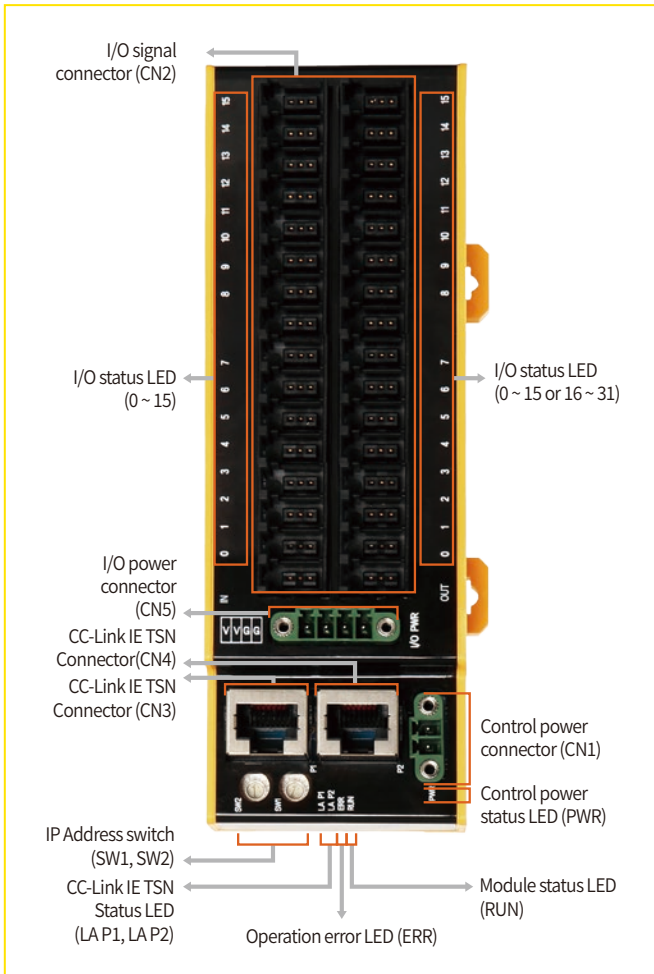
•Picture of Model: From left to right I32N-E, O32N-E, I16O16N-E



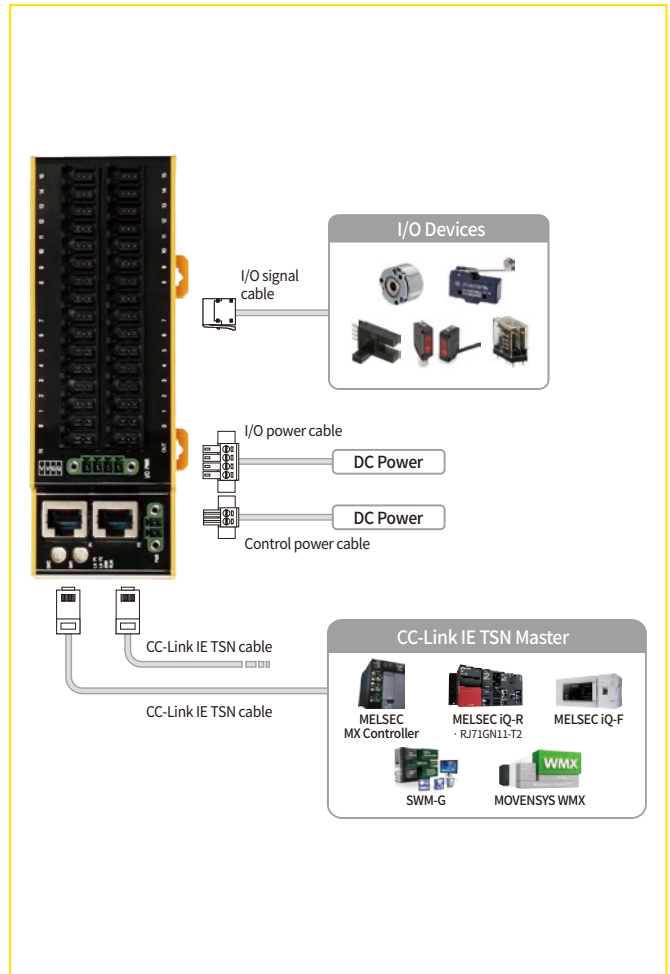
Specifications

Model			Ezi-IO-CT-I32N-E	Ezi-IO-CT-O32N-E	Ezi-IO-CT-I16O16N-E
Control Power Supply			24 V DC ± 10 %		
Function	Input	Number of Input Channels	32 CH	-	16 CH
		Rated Input Voltage	24 V DC		24 V DC
		Rated Input Current	5 mA/CH		5 mA/CH
		Isolation Method	Photocoupler Isolation		Photocoupler Isolation
		Common Method	16 CH/COM		16 CH/COM
		Input Filter	Max. 40 ms(Filter Resolution: 200 μs)		Max. 40 ms(Filter Resolution: 200 μs)
		Off→On Response Time	10 μs or lower		10 μs or lower
	On→Off Response Time	70 μs or lower	70 μs or lower		
	Output	Number of Output Channels	-	32 CH	16 CH
		Rated Output Voltage		24 V DC	24 V DC
		Rated Output Current		0.5 A/CH (3 A/COM)	0.5 A/CH (3 A/COM)
		Isolation Method		Photocoupler Isolation	Photocoupler Isolation
		Common Method		16 CH / COM	16 CH/COM
		Off→On Response Time		4 μs or lower	4 μs or lower
On→Off Response Time		190 μs or lower		190 μs or lower	
LED Display			• PWR : Power Status • RUN : Module Status • ERR : Operation Error • LA P1, LA P2 : CC-Link IE TSN Status		
			Input 0~31 Status	Output 0~31 Status	Input 0~15 / Output 0~15 Status
CC-Link IE TSN	Communication Protocol	CC-Link IE TSN Class B			
	Synchronization	Asynchronous Mode, Synchronous Mode			

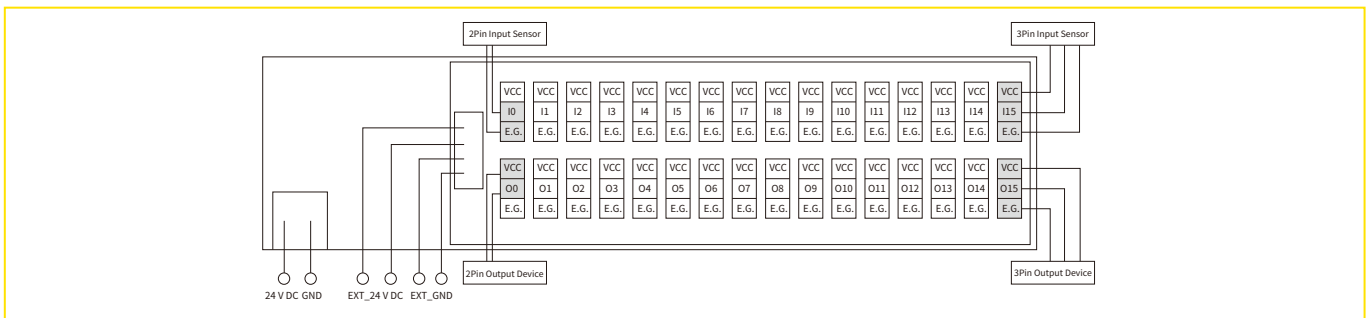
Module Overview



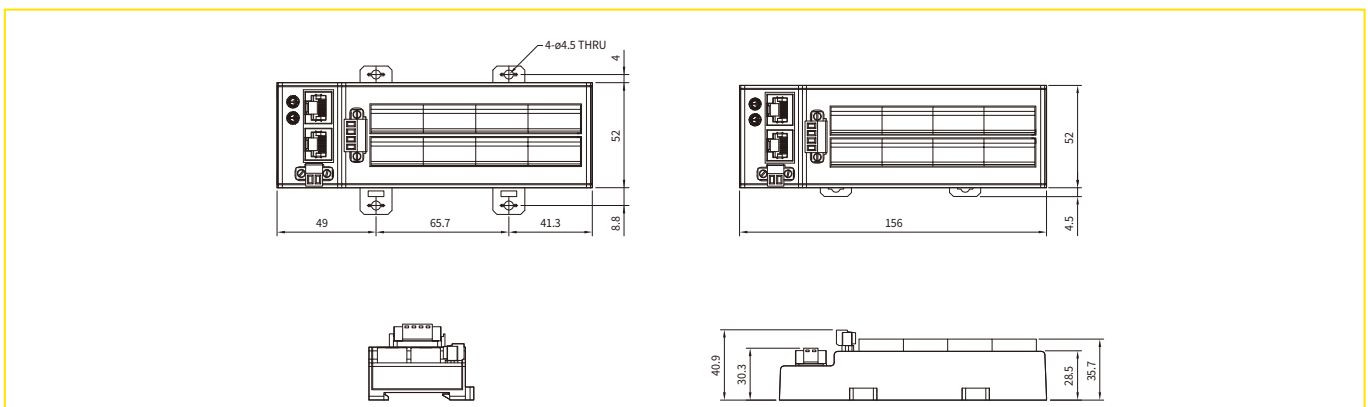
System Configuration



Wiring Example(Ezi-IO-CT-I16O16N-E)



Dimension



Ezi-IO[®] CC-Link IE TSN

Network Input/Output AD

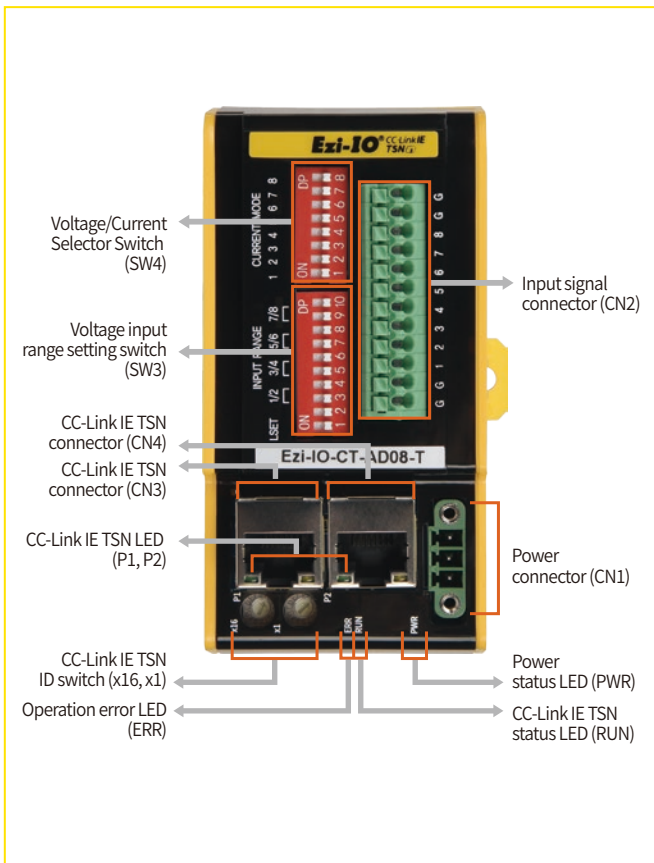
- CC-Link IE TSN-compatible Analog Input Module
- Configurable Input Mode and Input Range
- Moving Average Filtering
- Simple and Easy Wiring
- DIN Rail Mounting



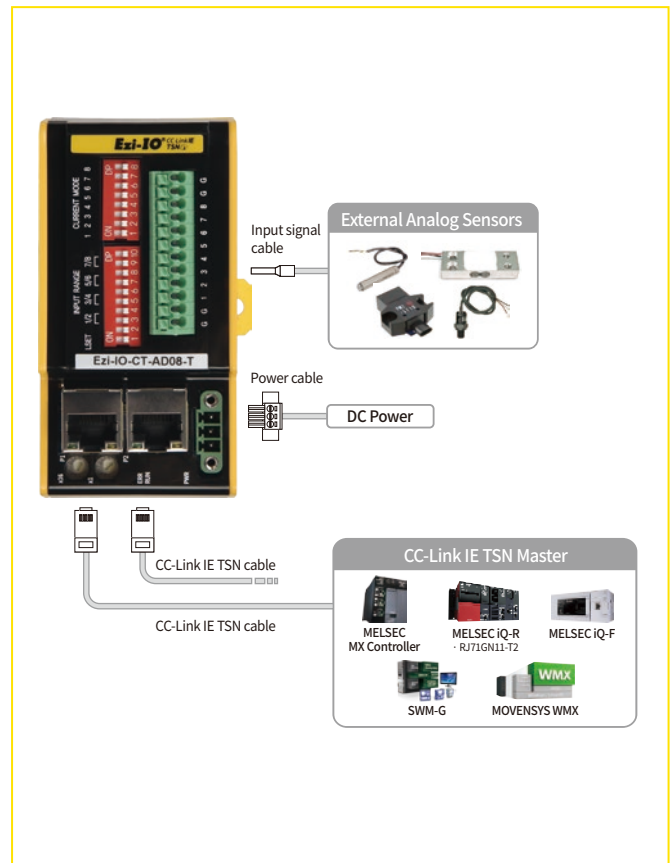
Specifications

Model		Ezi-IO-CT-AD08-T	
Input Mode		Voltage Input	Current Input
Power Supply		24 V DC $\pm 10\%$	
Function	Number of Input Channels	8 CH	
	Max. Signal Input	$\pm 15\text{ V}$	$\pm 30\text{ mA}$
	Input Range	$-10 \sim 10\text{ V}$ / $-5 \sim 5\text{ V}$ / $-2.5 \sim 2.5\text{ V}$ / $0 \sim 10\text{ V}$	$0 \sim 20\text{ mA}$
	Input Range Setting Method	· Parameter Setting Window (Separate settings for CH1 ~ CH8) · DIP Switch (Separate settings for CH1/CH2, CH3/CH4, CH5/CH6, CH7/CH8)	
	Input Impedance	$1\text{ M}\Omega$	$249\ \Omega$
	Max. Resolution	$1/8,191$ (Full Scale)	
	Accuracy	$25\text{ }^{\circ}\text{C}$	$\pm 0.3\%$ (Full Scale)
		$0 \sim 50\text{ }^{\circ}\text{C}$	$\pm 0.6\%$ (Full Scale)
	Conversion Cycle	$200\ \mu\text{s}/8\text{ CH}$	
CC-Link IE TSN	A/D Converted Data	$-10 \sim 10\text{ V}$: $-4,096 \sim 4,095$ $-5 \sim 5\text{ V}$: $-4,096 \sim 4,095$	$-2.5 \sim 2.5\text{ V}$: $-4,096 \sim 4,095$ $0 \sim 10\text{ V}$: $0 \sim 8,191$
	Isolation Method	Between analog input and communication connections : Digital isolation (Between channels : Non-isolated)	
LED Display		PWR : Power Status , RUN : Module Status ERR : Operation Error, LA P1, LA P2 : CC-Link IE TSN Status	
CC-Link IE TSN	Communication Protocol	CC-Link IE TSN Class B	
	Synchronization	Asynchronous Mode, Synchronous Mode	

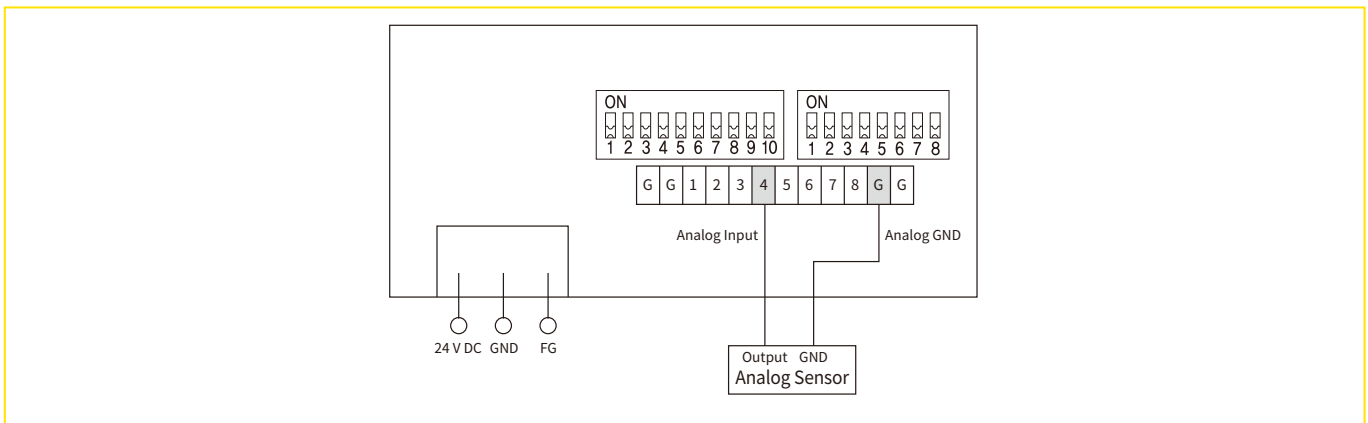
Module Overview



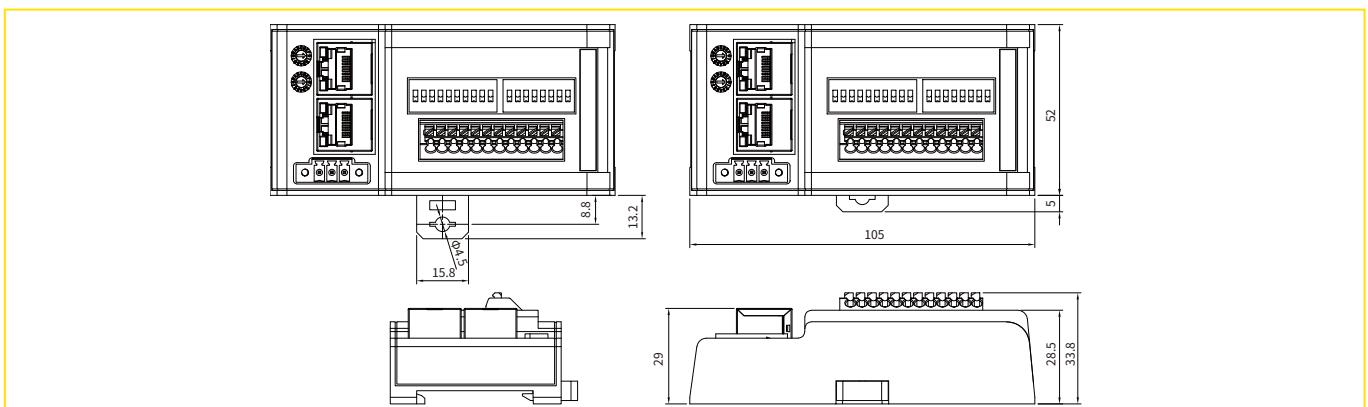
System Configuration



Wiring Example (Ezi-IO-CT-AD08-T)



Dimension



Ezi-IO[®] CC-Link IE TSN

Network Input/Output DA

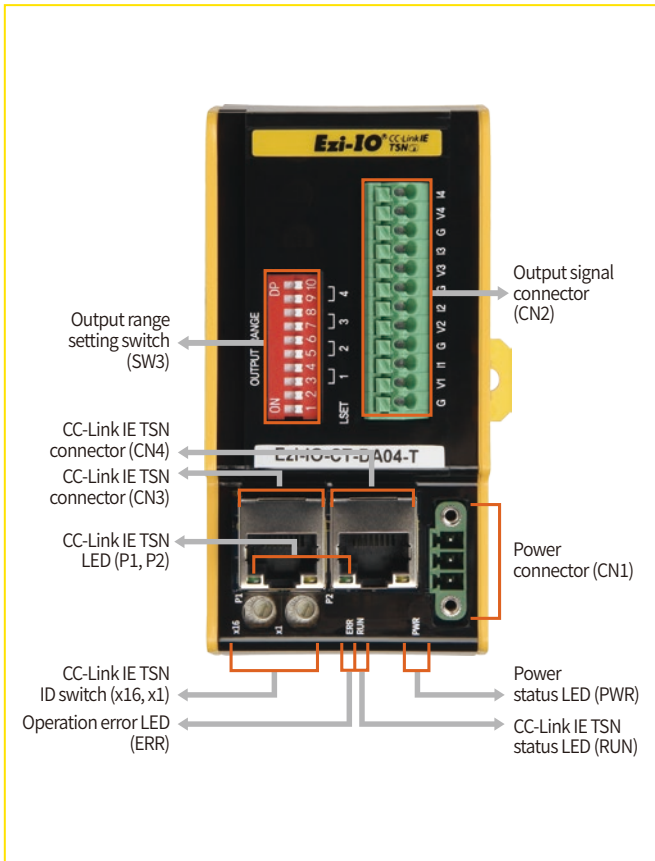
- CC-Link IE TSN-compatible Analog Output Module
- Configurable Output Range
- Calibration for Output Deviation
- Simple and Easy Wiring
- DIN Rail Mounting



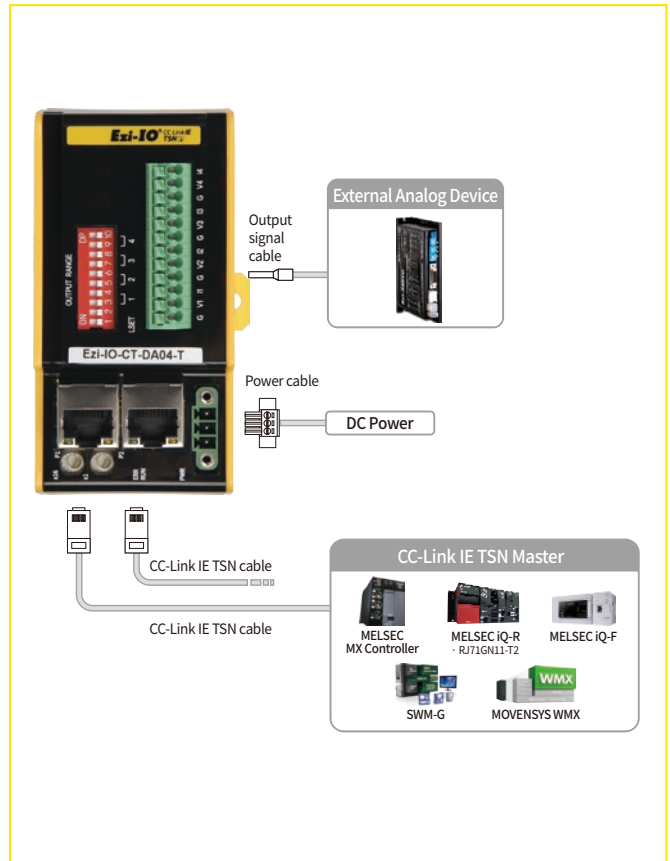
Specifications

Model		Ezi-IO-CT-DA04-T	
Output Mode		Voltage Output	Current Output
Power Supply		24 V DC $\pm$ 10 %	
Function	Number of Output Channels	4 CH	
	Output Range	· 0 ~ 5 V / 1 ~ 5 V / 0 ~ 10 V / -10 ~ 10 V	· 0 ~ 20 mA / 4 ~ 20 mA
	Output Range Setting Method	· Parameter Setting Window (Separate settings for CH1 ~ CH4) · DIP Switch (Separate settings for CH1 ~ CH4)	
	External Load Resistance	1 M Ω or higher	400 Ω or lower
	Max. Resolution	1/50,000 (Full Scale)	
	Accuracy	25 °C	$\pm$ 0.3 % (Full Scale)
		0 ~ 50 °C	$\pm$ 0.4 % (Full Scale)
	Conversion Cycle	500 μ s / 4CH	
	D/A Converted Data	· -25,000 ~ 25,000 (-10 ~ 10 V output range) · 0 ~ 25,000 (Other output ranges except -10 ~ 10 V)	· 0 ~ 25,000
Isolation Method		Between analog output and communication connections : Digital isolation (Between channels : Non-isolated)	
LED Display		PWR : Power Status , RUN : Module Status ERR : Operation Error, LA P1, LA P2 : CC-Link IE TSN Status	
CC-Link IE TSN	Communication Protocol	CC-Link IE TSN Class B	
	Synchronization	Asynchronous Mode, Synchronous Mode	

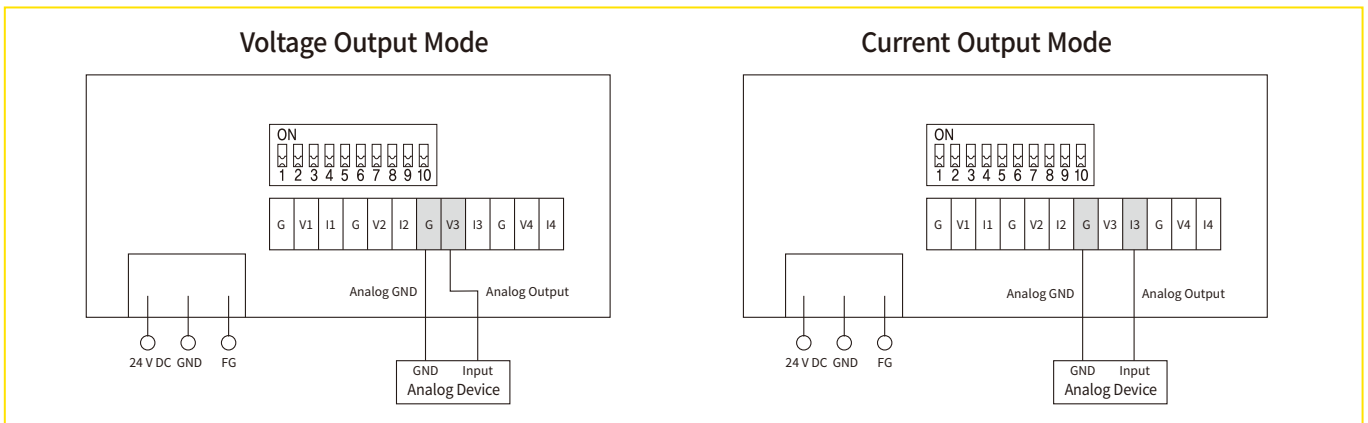
Module Overview



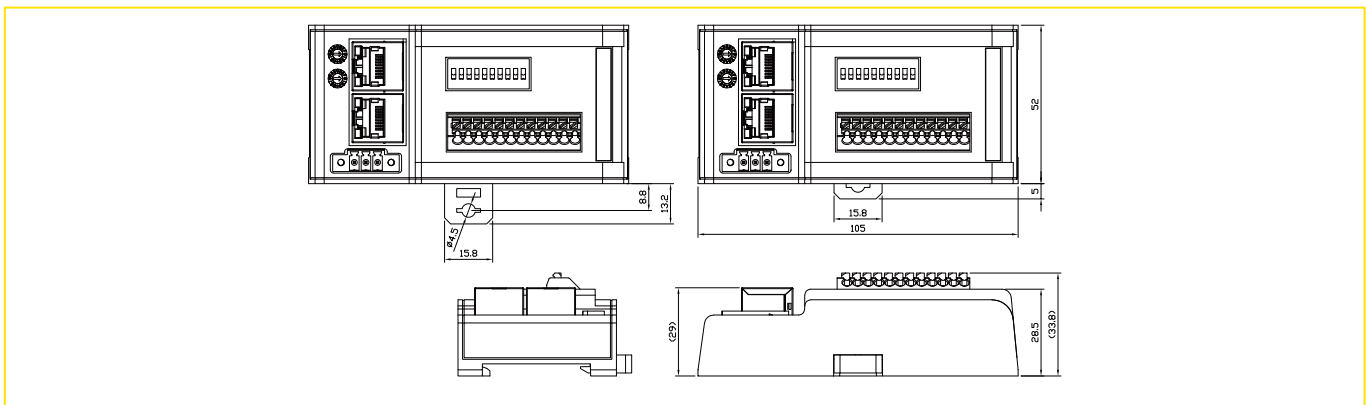
System Configuration



Wiring Example (Ezi-IO-CT-DA04-T)



Dimension



Ezi-IO[®] CC-Link IE TSN

Network Input/Output CNT

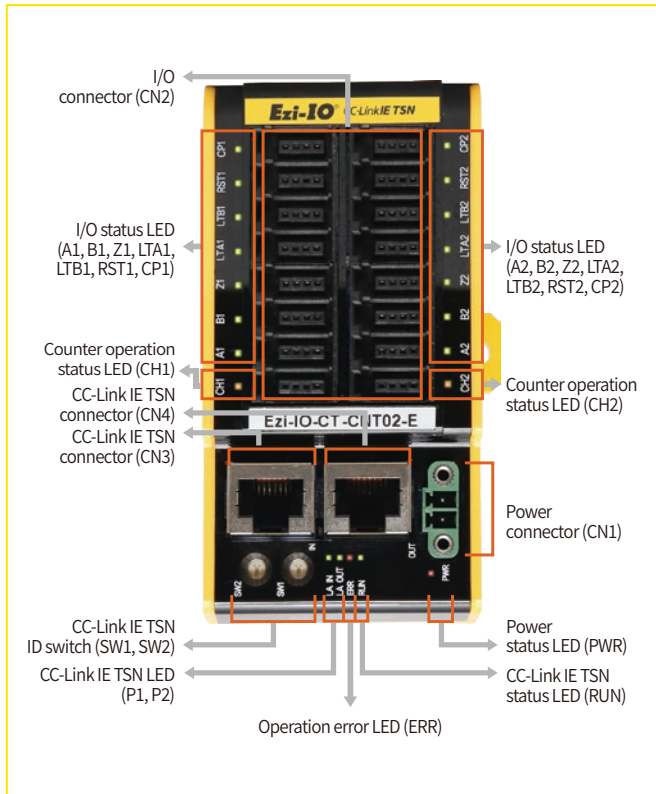
- CC-Link IE TSN-compatible High Speed Counter Module
- Line Receiver and DC Input Type Provided
- Comparison Output Function
- Simple and Easy Wiring
- DIN Rail Mounting



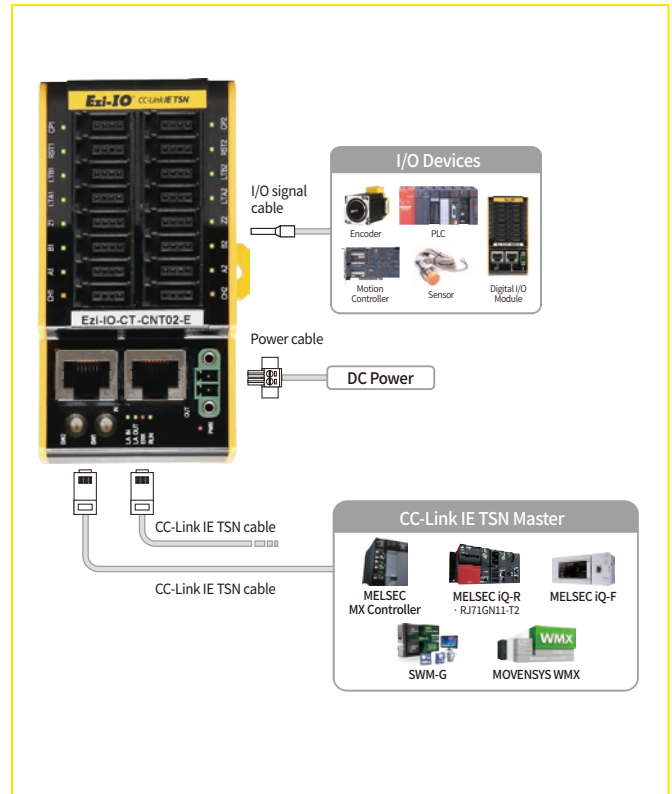
Specifications

Model		Ezi-IO-CT-CNT02-E		
Power Supply		24 V DC ± 10 %		
Function	Number of Channels		2 CH	
	Count Range		0 ~ 4, 294, 967, 295 (32 bit)	
	Counter Function		· Counter Value Latch · Counter Value Reset · Counter Value Preset · Pulse Rate Measurement · Comparison Output	
	Pulse Input	Input Signal	3 dedicated Inputs (A phase, B phase, Z phase) for each channel	
		Input Type	Line Receiver Input (Line Driver Output Support)	DC Input (NPN/PNP Open Collector Output Supported)
		Rated Input Voltage	5 V DC	24 V DC, 5 V DC
		Rated Input Current	6.3 mA	
		Pulse Input Method	· Phase Differential Pulse Input (Multiplication X2, X4) · 1 Pulse Input (Pulse/Direction Input) · 2 Pulse (CW/CCW Input)	
		Max Input Frequency	· A Phase, B Phase: Phase Differential Pulse Input: 1 MHz (When multiplied by 4, 4 MHz), 1 Pulse / 2 Pulse Input: 4 MHz · Z Phase: 100 kHz	
	Control Input	Isolation Method	Photocoupler Isolation	
		Input Signal	3 dedicated Inputs (Latch A, Latch B, Reset) for each channel	
		Input Type	DC Input (NPN/PNP Open Collector Output Supported)	
		Rated Input Voltage	24 V DC	5 V DC
		Rated Input Current	4.4 mA	4.6 mA
		Comparison Output	Output Signal	1 dedicated Input (Comparison Output) for each channel
	Output Type		TTL Output	Open Collector Output (Transistor Output)
	Rated Output Voltage		5 V DC	30 V DC or lower
	Rated Phase Current		Max. 20 mA	Max. 20 mA
LED Display		PWR : Power Status , RUN : Module Status ERR : Operation Error, LA P1, LA P2 : CC-Link IE TSN Status		
CC-Link IE TSN	Communication Protocol	CC-Link IE TSN Class B		
	Synchronization	Asynchronous Mode, Synchronous Mode		

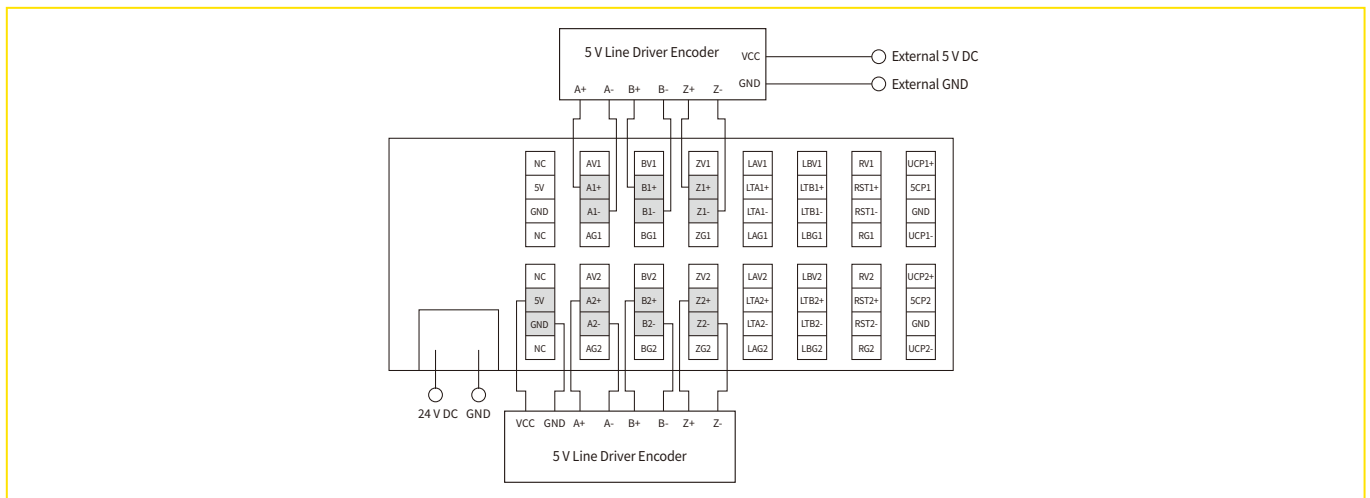
Module Overview



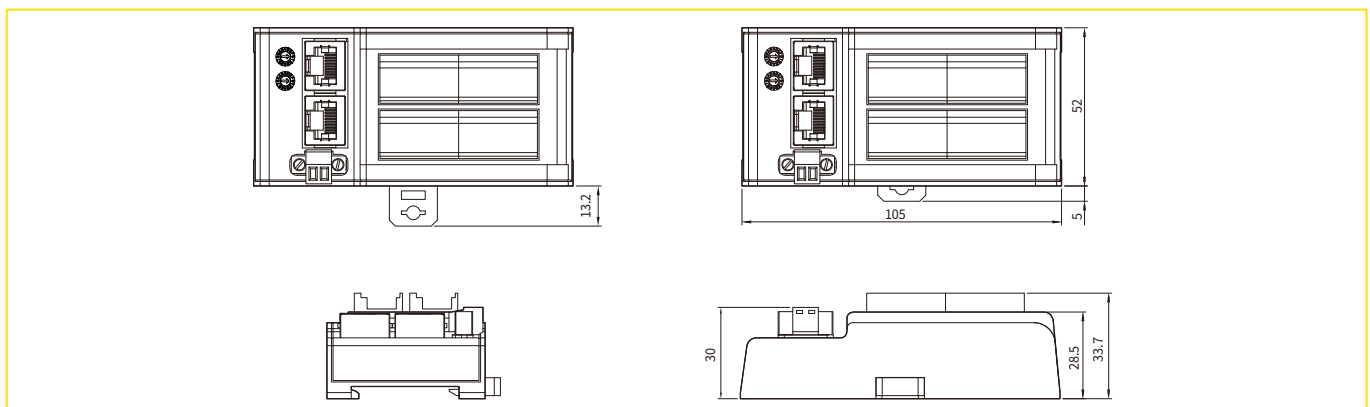
System Configuration



Wiring Example (Ezi-IO-CT-CNT02-E)



Dimension

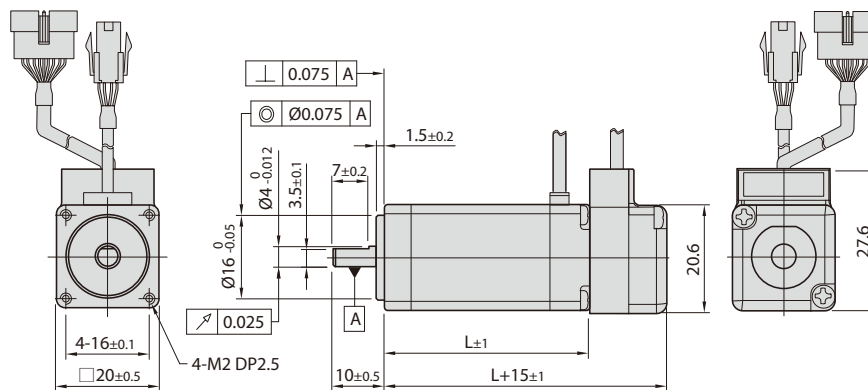


Motors for **Ezi-SERVO®** Series

Closed Loop Stepping System

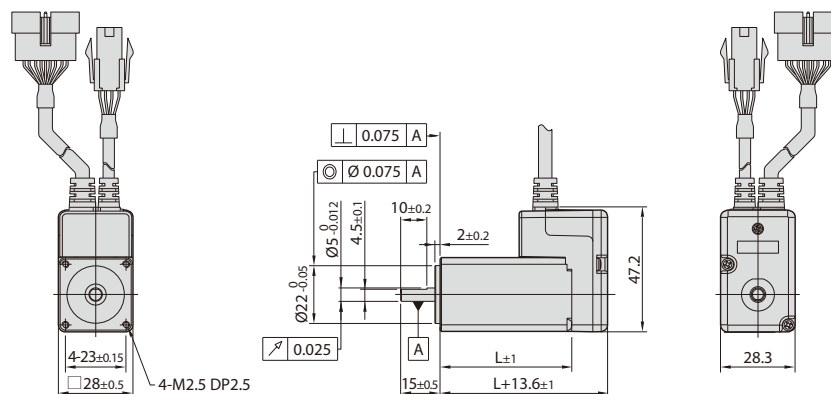


Dimensions of Motor [mm]



20 mm

Model name	Length(L)
EzM2-20M	28
EzM2-20L	38

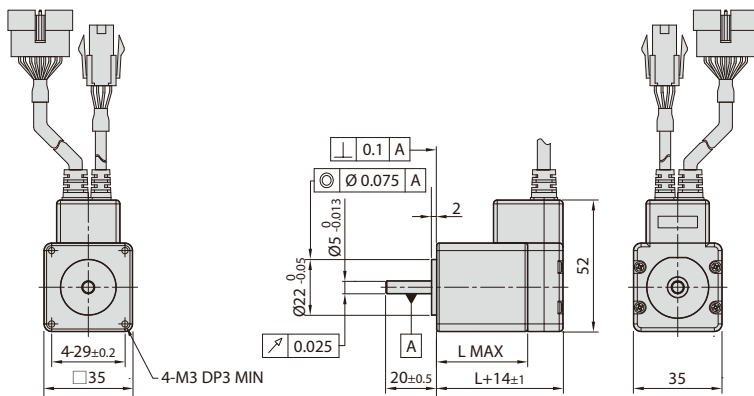


28 mm

(Stopper type)

Model name	Length(L)
EzM2-28SM	32
EzM2-28 mm	45
EzM2-28LM	50

※ When ordering 28 mm Stopper type of motor, please add "M" after standard motor model number.

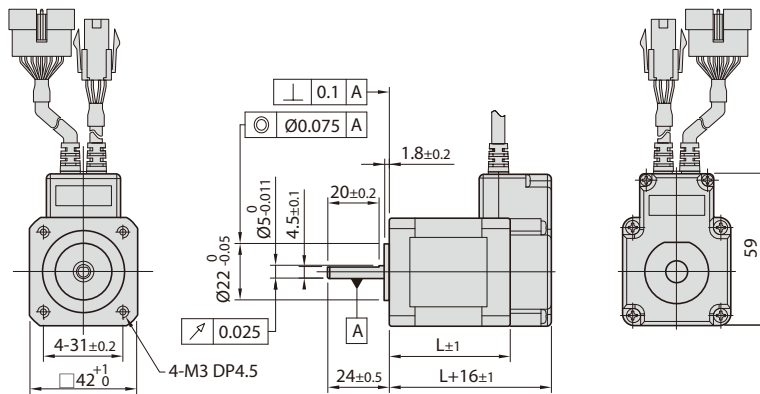


35 mm

(Stopper type)

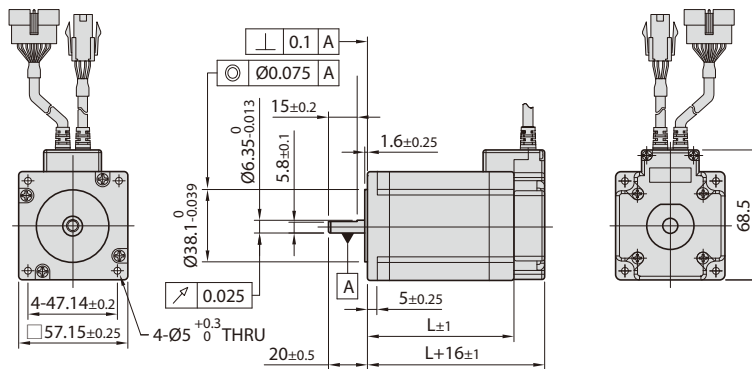
Model name	Length(L)
EzM2-35 mm	32
EzM2-35LM	36

※ When ordering 35 mm Stopper type of motor, please add "M" after standard motor model number.



42 mm

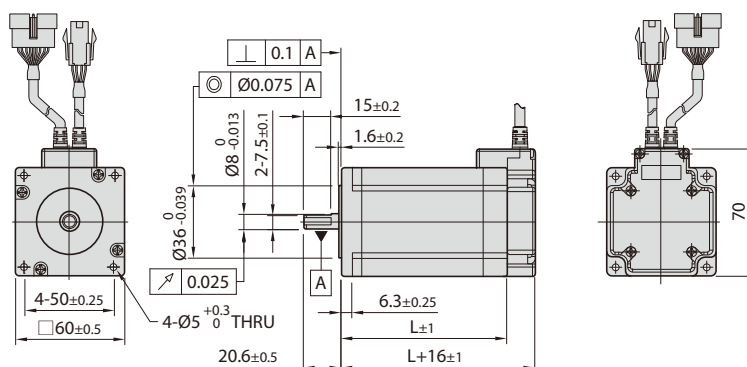
Model name	Length(L)
EzM2-42S	34
EzM2-42M	40
EzM2-42L	48
EzM2-42XL	60



56 mm

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

※ There are 2 kinds size of front shaft diameter for EzM2-56 series as Ø 6.35 and Ø 8.0.



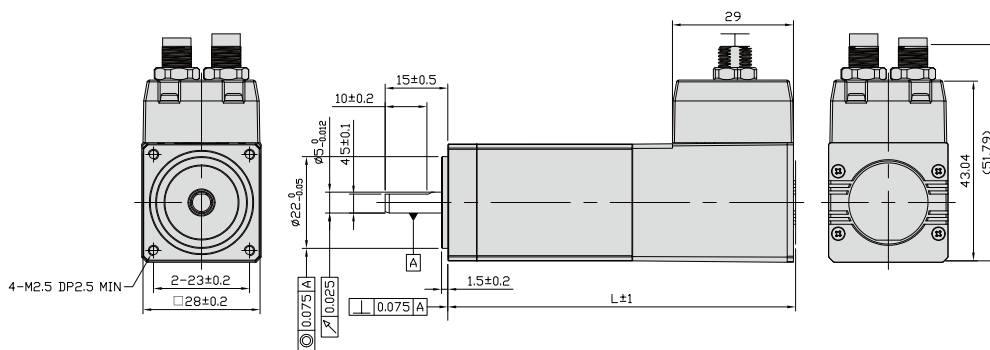
60 mm

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

Motors for **Ezi-SERVO®** **ABS** **Series**
Closed Loop Stepping System

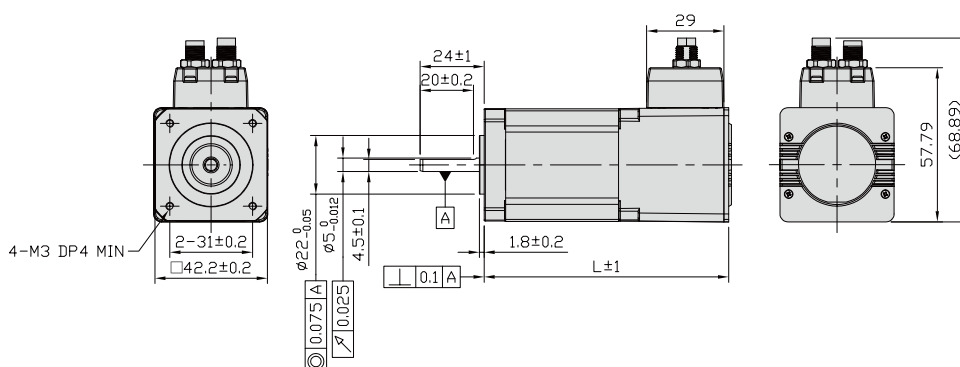


Dimensions of Motor [mm]



28 mm

Model name	Length(L)
EzM2-28S-AB	63.7
EzM2-28M-AB	76.7
EzM2-28L-AB	83.3



42 mm

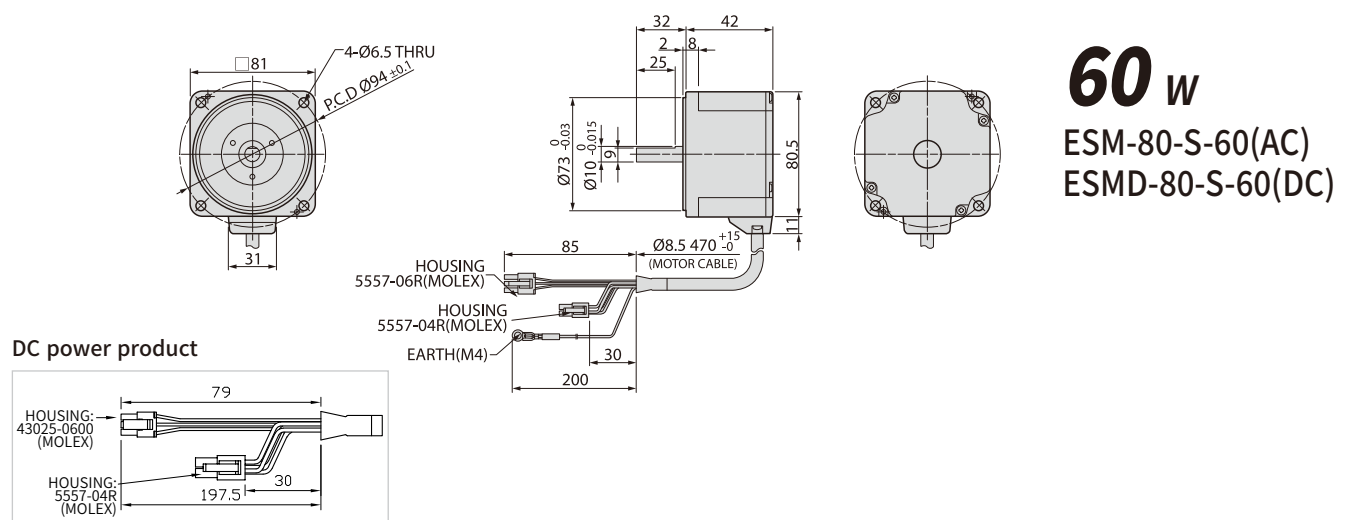
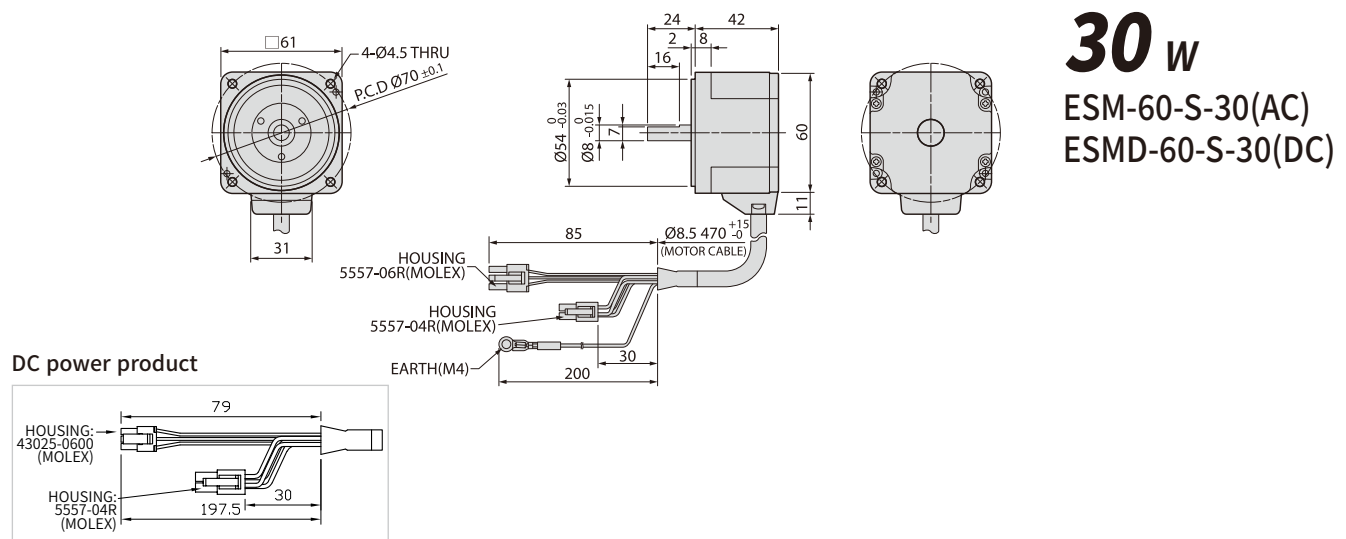
Model name	Length(L)
EzM2-42S-AB	65.7
EzM2-42M-AB	71.7
EzM2-42L-AB	79.7
EzM2-42XL-AB	91.7

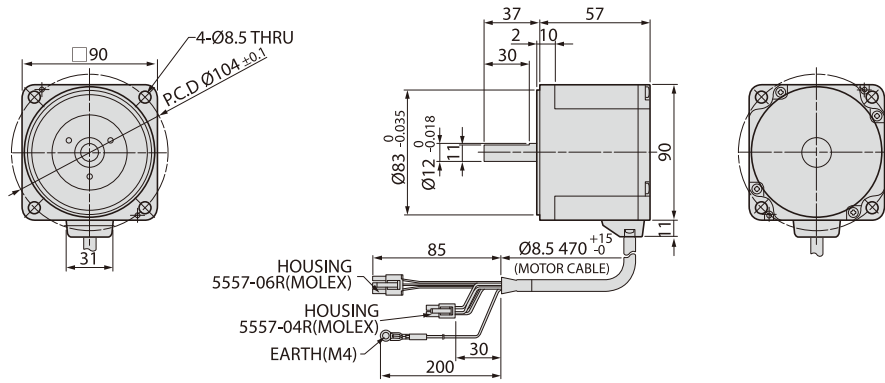
Motors & Gearboxes for **Ezi-SPEED®** Series

BLDC Motor Speed Control System



Dimensions of Motors [mm]

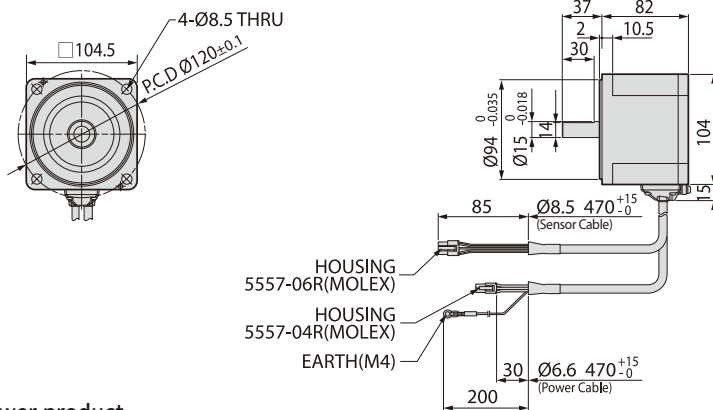
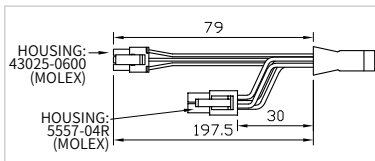




120_W

ESM-90-S-120(AC)
ESMD-90-S-120(DC)

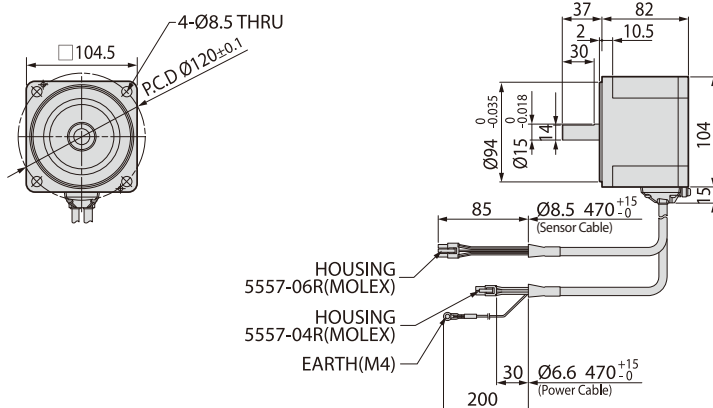
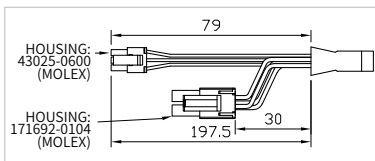
DC power product



200_W

ESM-104-S-200(AC)
ESMD-104-S-200(DC)

DC power product



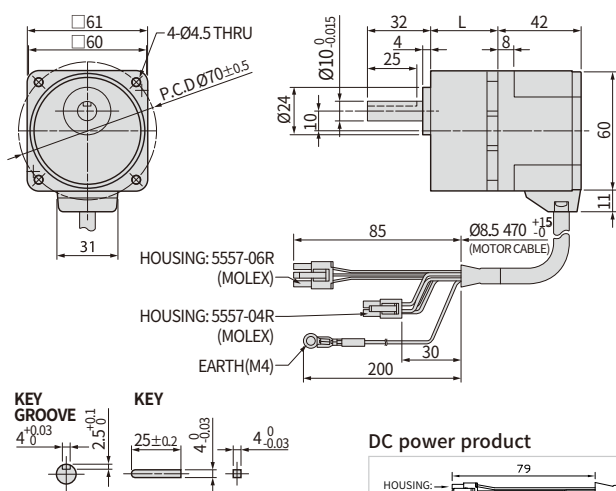
400_W

ESM-104-S-400(AC)

Dimensions of Motors & Parallel Gearboxes [mm]

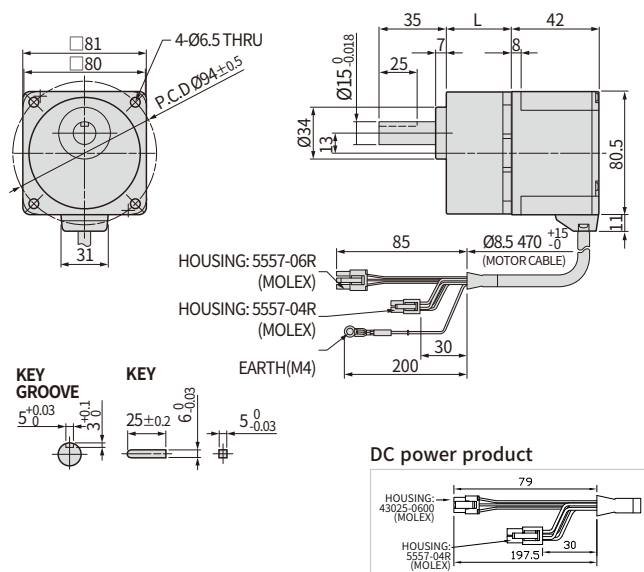
30 W

Gearbox Part Number	□ Gear Ratio	Mounting Bolt	L [mm]
ESG-60-H-R□-P	5, 10, 15, 20	M4×50	34
	30, 50, 100	M4×55	38
	200	M4×60	43



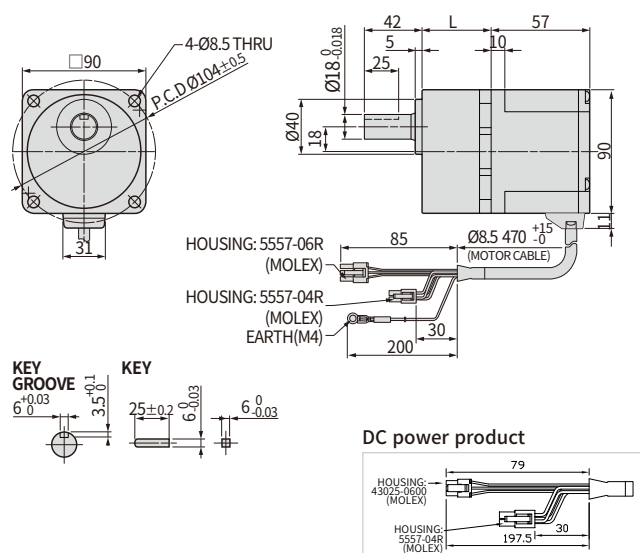
60 W

Gearbox Part Number	□ Gear Ratio	Mounting Bolt	L [mm]
ESG-80-H-R□-P	5, 10, 15, 20	M4×65	41
	30, 50, 100	M4×70	46
	200	M4×75	51



120 W

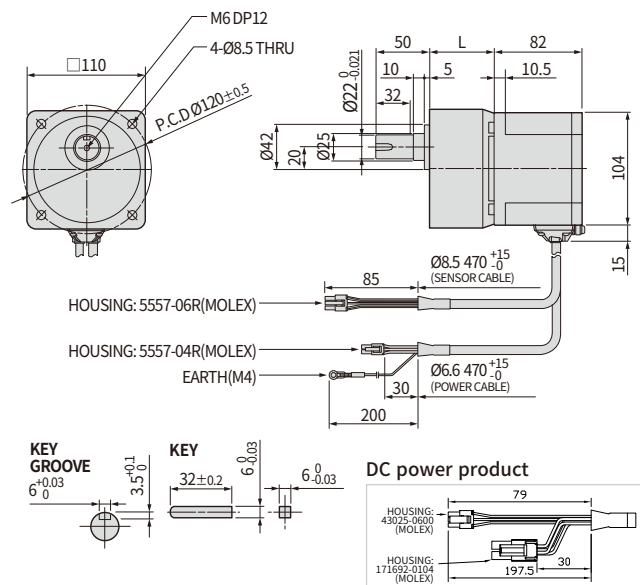
Gearbox Part Number	□ Gear Ratio	Mounting Bolt	L [mm]
ESG-90-H-R□-P	5, 10, 15, 20	M8×75	45
	30, 50, 100	M8×90	58
	200	M8×95	64



200 W 400 W

Gearbox Part Number	□ Gear Ratio	Mounting Bolt	L [mm]
ESG-104-H-R□-P	5, 10, 15, 20	M8×95	60
	30, 50	M8×110	72
	100, 200	M8×120	86

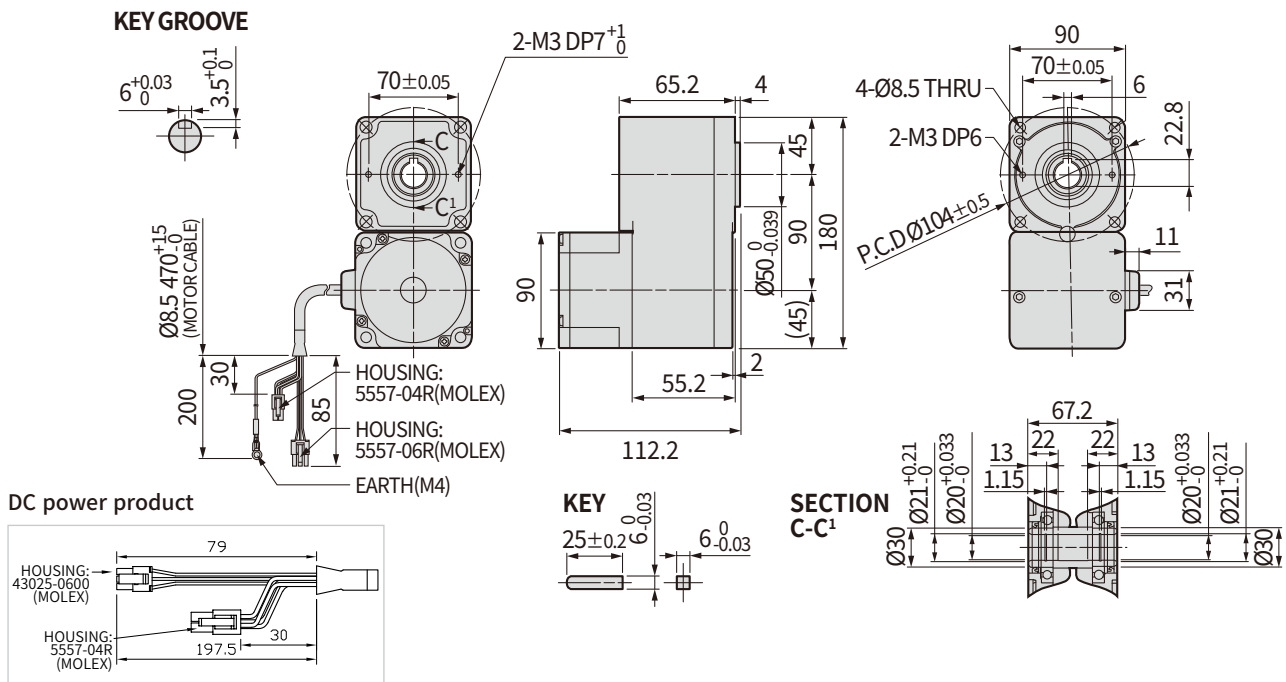
* DC power product : 200 W only



Dimensions of Motors & Hollow Flat Gearboxes [mm]

120_w

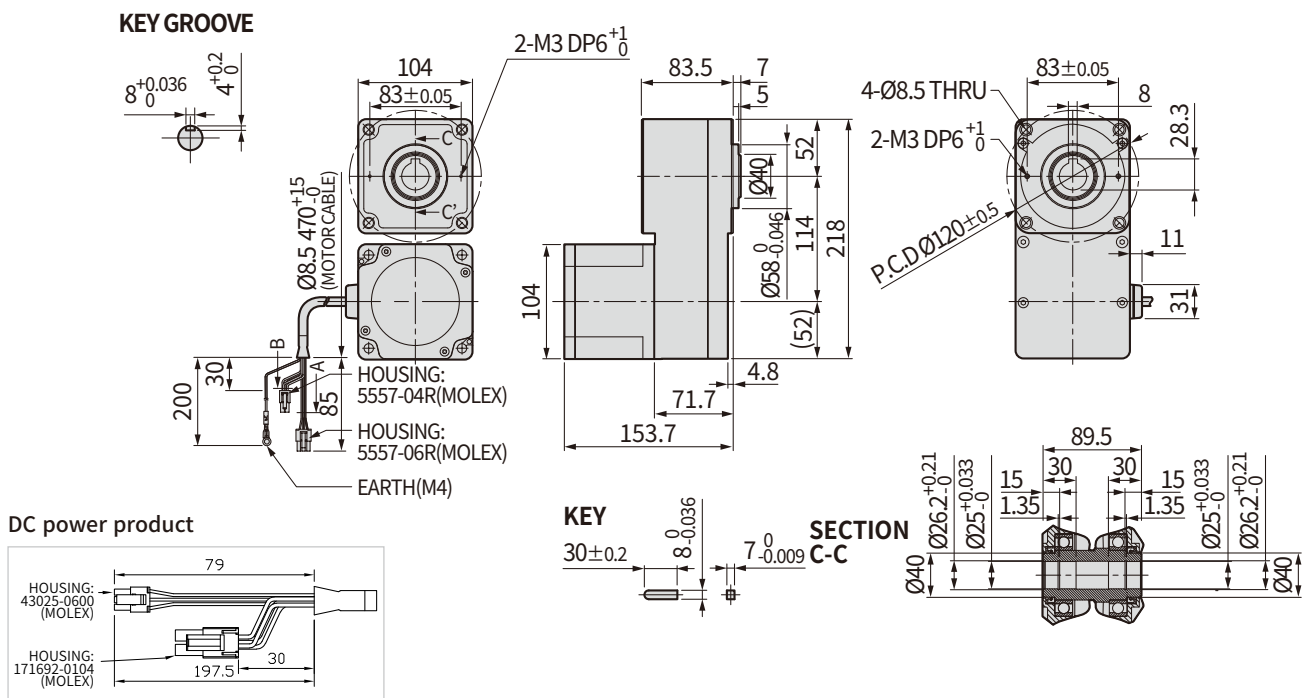
Gearbox Part Number	Gear Ratio	Mounting Bolt
ESG-80-H-R□-H	5, 10, 15, 20, 30, 50, 100, 200	M6×70



200_w 400_w

Gearbox Part Number	Gear Ratio	Mounting Bolt
ESG-80-H-R□-H	5, 10, 15, 20, 30, 50, 100, 200	M6×70

* DC power product : 200 W only



OPTION Brake



Ezi-SERVO Series
Ezi-STEP Series

Model	Motor / brake Size		
	42 mm	56 mm	60 mm
Ezi-SERVO CC-Link IE TSN	0	0	0
Ezi-SERVO CC-Link IE TSN 4X	0	0	0
Ezi-SERVO CC-Link IE TSN ALL	0	0	0
Ezi-STEP CC-Link IE TSN	0	0	0

OPTION Gearbox



Ezi-SERVO Series

Model	Gearbox Size		
	42 mm	60 mm	
	Motor Size		
	42 mm	56 mm	60 mm
Ezi-SERVO CC-Link IE TSN	0	0	0
Ezi-SERVO CC-Link IE TSN 4X	0	0	0
Ezi-SERVO CC-Link IE TSN ALL	0	0	0

※ Gear Ratio: 3, 5, 8, 10, 15, 25, 40, 50

CC-Link IE TS/M



Fast Accurate Smooth Motion

FASTECH Co., Ltd.

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※ 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.