Panasonic **INDUSTRY**





AC Servo Driver MINAS A6 Family

Special Order Product

MINAS A6BU Series



Application Highlighted

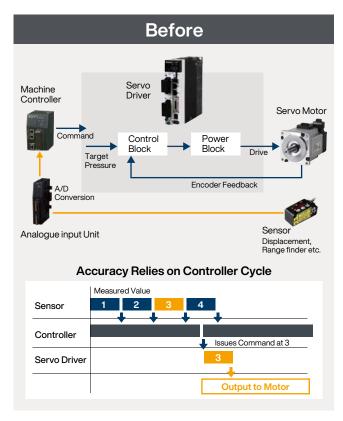
Displacement Sensor Direct Control

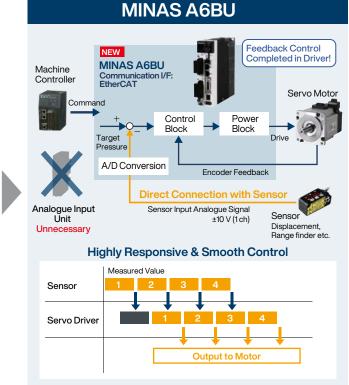
Responsive

Accurate

Simple

- Highly Responsive Control by Direct Sensor Input
- Simplifies System Configuration & Controller Program



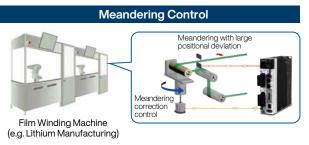


Application Examples Gap Control

Automatic Dispenser

Focus Control

Laser Process Machine



Demo video of displacement control

^{*} EtherCAT is a registered trademark of patented technology licensed from Beckhoff Automation GmbH in Germany.

Product Line-up

Rated output Line-up

| | | Rated output of applicable motor | | |
|--------------------|-------------------------------------|----------------------------------|------------------|------------------|
| | | 50 W~ 400 W | 750 W~ 1.5 kW | 1.8 kW~ 22 kW |
| Input power supply | Single Phase AC100 V~120 V | • | _ | _ |
| | Single/Three Phase AC200 V~240 V | • | • | _ |
| | Three Phase AC200 V~240 V | _ | _ | • |

Applicable Motor



Middle Inertia/

Flat Type





Middle Inertia/

Low Speed Large Torque

MHMF High Inertia

Motor details



MQMF with gear reducer



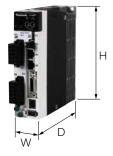
MHMF with gear reducer

A6BU Common Specification

| Item | | | | Description | | |
|------------------|---------------|---------------------------------------|--------------|---|--|--|
| Description | 100 V | Main circuit power supply | | Single-phase 100~120 V 50/60 Hz | | |
| | type | Control circuit power supply | | Single-phase 100~120 V 50/60 Hz | | |
| | 200 V type | Main circuit power supply | A to D-Frame | Single/Three Phase 200~240 V 50/60 Hz | | |
| | | | E to H-Frame | Three Phase 200~240 V 50/60 Hz | | |
| | | Control circuit power supply | A to D-Frame | Single-phase 200~240 V 50/60 Hz | | |
| | | | E to H-Frame | Single-phase 200~240 V 50/60 Hz | | |
| Encoder feedback | | | | 23-bit (8388608 resolution), 7-wire serial absolute encoder | | |
| Control signal | | Input | | 10 general inputs | | |
| | | Output | | 6 general outputs | | |
| Analog signal | | Input | | 3 inputs (16 bit A/D 1 input, 12 bit A/D 2 inputs) Only 16bit A/D input is supported for pressure sensor input. | | |
| | | Output | | 2 outputs (analog monitor 1, analog monitor 2) | | |

| | Item | | Description | |
|----|---------------|----------|---|--|
| | Pulse signal | Output | 2 outputs | |
| | Communication | EtherCAT | Real-time operation command transmission, parameter setting, status monitoring, etc. | |
| | function | USB | Connect to a computer for parameter setting or status monitoring, etc. | |
| | Control mode | | Position control: profile position control (pp), cyclic position control (csp), home return position control (hm) | |
| | | | Velocity control: profile velocity control (pv), cyclic velocity control (csv) | |
| | | | Torque control: profile torque control (tq), cyclic torque control (cst) | |
|) | | | * Please use the position correction function by analog input in csp mode. | |
| 2) | | | * It is possible to switch between the above control modes using EtherCAT communication commands | |

Dimension



*The photo shows the appearance of the A-Frame. Appearance varies by sizes. Separately secure space for the mating connector and lead wires.

| Frame | W [mm] | H [mm] () includes mounting hardware | D [mm] () includes the power supply connector and motor connector on the Driver main unit side | Product weight [kg] |
|---------|-----------|--------------------------------------|--|--|
| A Frame | 40 | 150 (180) | 130 (150) | Approx. 0.8 |
| B Frame | 55 | 150 (180) | 130 (150) | Approx. 1.0 |
| C Frame | 65 | 150 (180) | 170 (191) | Approx. 1.6 |
| D Frame | 85 | 150 (180) | 170 (191) | Approx. 2.1 |
| E Frame | 85 | 168 (198) | 196.5 (216) | Approx. 2.7 |
| F Frame | 130 | 220 (250) | 219.5 | Approx. 5.2 |
| G Frame | 184 | 220 (257) | 257 | Approx. 8.2 |
| H Frame | 244 | 390 | 222 | Approx. 14.2 (240 A)* 15.2 (360 A)* |

*Maximum current rating.

^{*}As for 400V, NOT available in some regions. Please check with each our sales office.