

Discontinue

ABSODEX

AX7000X Series

High-end model equipped with high-resolution encoder
Compatible function allows free combination of driver, actuator, and cable

- Max. torque: 22/45 N·m
- Supported driver: XS driver



Actuator specifications

| Item | | AX7022X | AX7045X |
|----------------------------------|-------------------|--|----------------|
| Max. output torque | N·m | 22 | 45 |
| Continuous output torque | N·m | 7 | 15 |
| Max. rotation speed | rpm | 240 (*1) | |
| Allowable axial load | N | 400 | |
| Allowable moment load | N·m | 20 | |
| Output shaft moment of inertia | kg·m ² | 0.0182 | 0.0254 |
| Allowable moment of load inertia | kg·m ² | 0.60 | 0.90 |
| Index accuracy (*3) | sec | ±30 | |
| Repeatability (*3) | sec | ±2 | |
| Output shaft friction torque | N·m | 2.5 | |
| Resolution | P/rev | 4,194,304 | |
| Motor insulation class | | Class F | |
| Motor withstand voltage | | 1,500 VAC 1 min | |
| Motor insulation resistance | | 10 MΩ or more 500 VDC | |
| Operating ambient temperature | | 0 to 40°C | |
| Operating ambient humidity | | 20 to 85% RH, no condensation | |
| Storage ambient temperature | | -20 to 80°C | |
| Storage ambient humidity | | 20 to 90% RH, no condensation | |
| Atmosphere | | No corrosive gas, explosive gas, or dust | |
| Weight | kg | 10.0 (12.9) *2 | 13.2 (16.1) *2 |
| Output shaft runout (*3) | mm | 0.03 | |
| Output shaft surface runout (*3) | mm | 0.03 | |
| Degree of protection | | IP20 | |

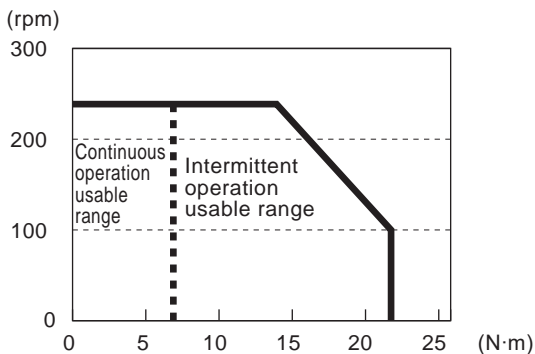
*1: Use at a speed of 80 rpm or less during continuous rotation operation.

*2: The values in () are the actuator weight with the mounting base option.

*3: Refer to the "Glossary" on page 64 for index accuracy, repeatability, output shaft runout and output shaft surface runout.

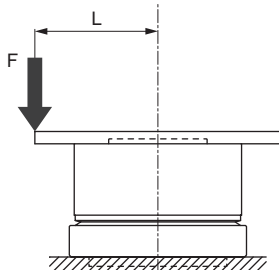
Speed/maximum torque characteristics

● AX7022X



* The graph shows the characteristics of three-phase 200 VAC.

(Note) Moment load (simple formula)

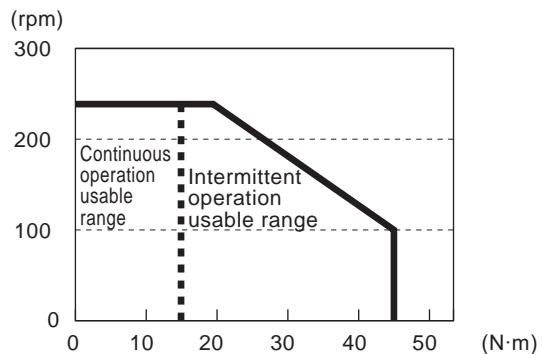


(Fig. a)

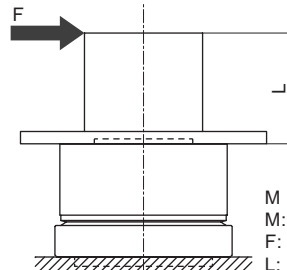
$$M \text{ (N·m)} = F \text{ (N)} \times L \text{ (m)}$$

M: Moment load
F: Load
L: Distance from the output shaft center

● AX7045X



* The graph shows the characteristics of three-phase 200 VAC.



(Fig. b)

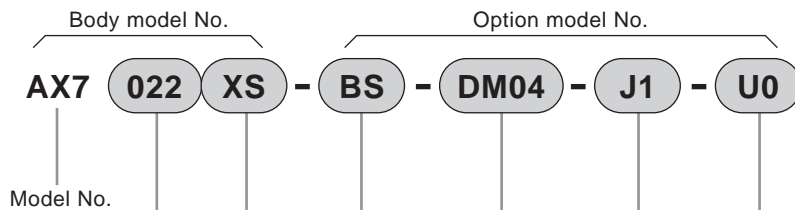
$$M \text{ (N·m)} = F \text{ (N)} \times (L + 0.02) \text{ (m)}$$

M: Moment load
F: Load
L: Distance from the output shaft flange surface

⚠ Always read the safety precautions on pages 73 to 78 before use.

How to order

- Set model No. (actuator, driver, cable)



A Size (max. torque)

B Driver type

C Mounting base

D Cable length *2

E Driver power voltage

F Interface specifications

| Code | Description |
|-----------------------------------|---|
| A Size (max. torque) | |
| 022 | 22 N·m |
| 045 | 45 N·m |
| B Driver type | |
| XS | XS driver |
| C Mounting base | |
| Blank | Standard (without mounting base) |
| BS | With mounting base |
| D Cable length | |
| DM00 | Without cable |
| DM02 | 2 m |
| DM04 | 4 m |
| DM06 | 6 m |
| DM08 | 8 m |
| DM10 | 10 m |
| DM15 | 15 m |
| DM20 | 20 m |
| E Driver power voltage | |
| Blank | Single-phase/three-phase 200 to 230 VAC |
| J1 | Single-phase 100 to 115 VAC |
| F Interface specifications | |
| U0 | Parallel I/O (NPN) |
| U2 | CC-Link |
| U4 | DeviceNet |

⚠ Precautions for model No. selection

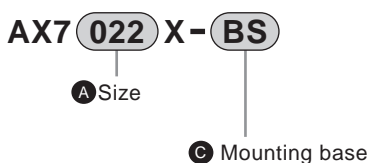
- *1: Select the driver according to the compatibility table below.

Driver power voltage compatibility table

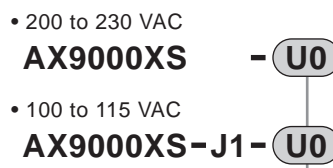
| Model | Drivers Type | XS driver | |
|---------|--------------|---|-----------------------------|
| | | Three-phase/single-phase 200 to 230 VAC | Single-phase 100 to 115 VAC |
| AX7022X | Blank | Blank | J1 |
| AX7045X | Blank | Blank | J1 |

- *2: Cable is a movable cable. Refer to page 21 for dimensions of the cable. Body lead-out cable is not a movable cable.
- *3: **C** When the "BS" option with the mounting base is selected, the positioning pin hole on the bottom is not available. The surface is treated with electroless nickel plating.
- *4: Positioning pin holes may not be surface treated.
- *5: The body surface of AX7022X and AX7045X is treated with electroless nickel plating.

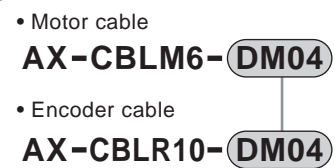
- Actuator body discrete model No.



- Driver discrete model No.



- Cable discrete model No.



D Cable length
(Note: "DM04" when cable length is 4 m)

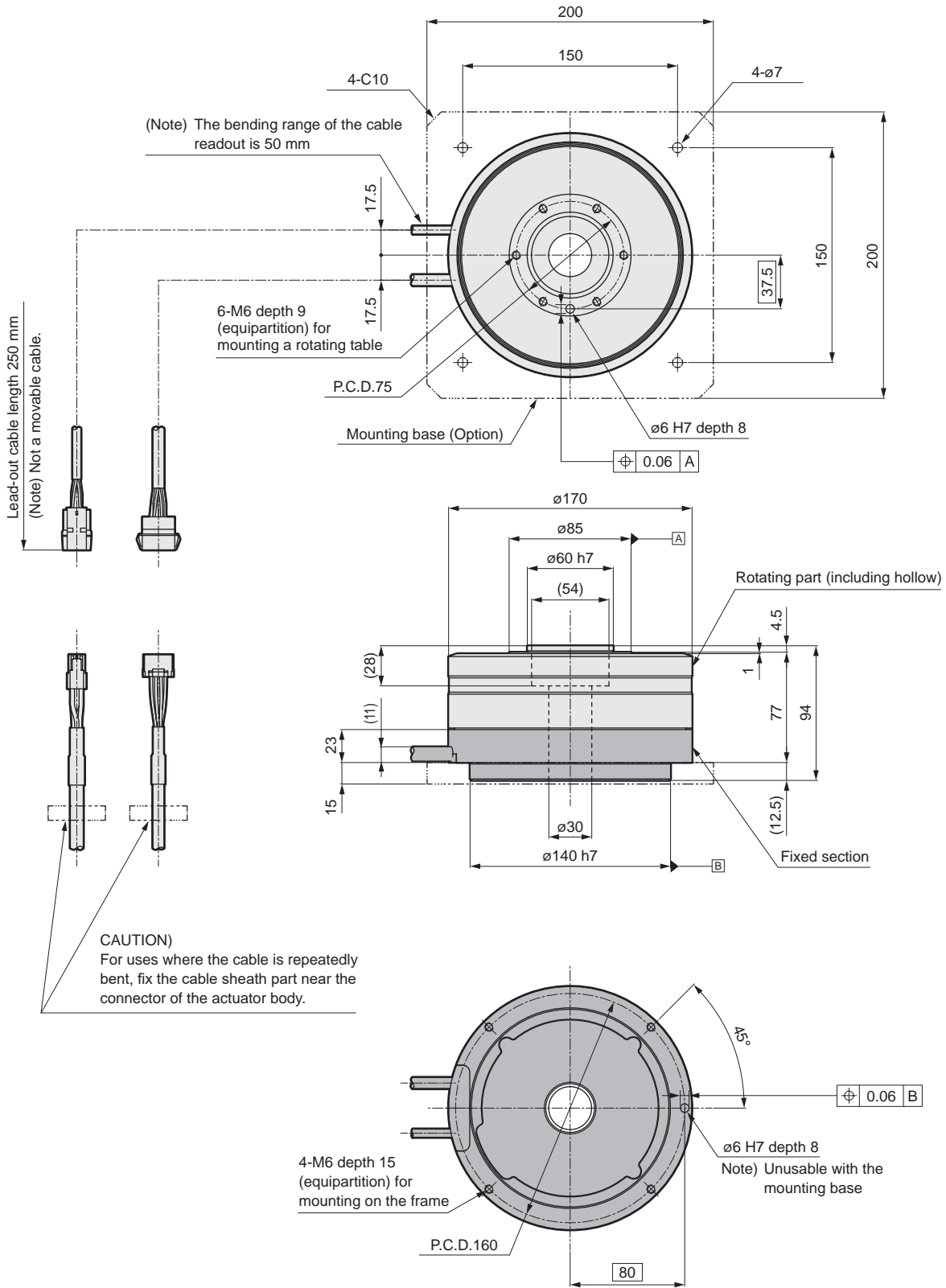
* Custom order products are RoHS non-compliant. Contact CKD as needed.

| | |
|-----------------|-----------------|
| Actuator | AX6000M |
| Drivers | AX9000MU |
| Actuator | AX7000X |
| Drivers | AX9000XS |
| Actuator | AX1000T |
| Actuator | AX2000T |
| Actuator | AX4000T |
| Drivers | AX9000TS/TH |
| Dialog terminal | AX0180 |
| Related parts | model No. table |

AX7000X Series

Dimensions

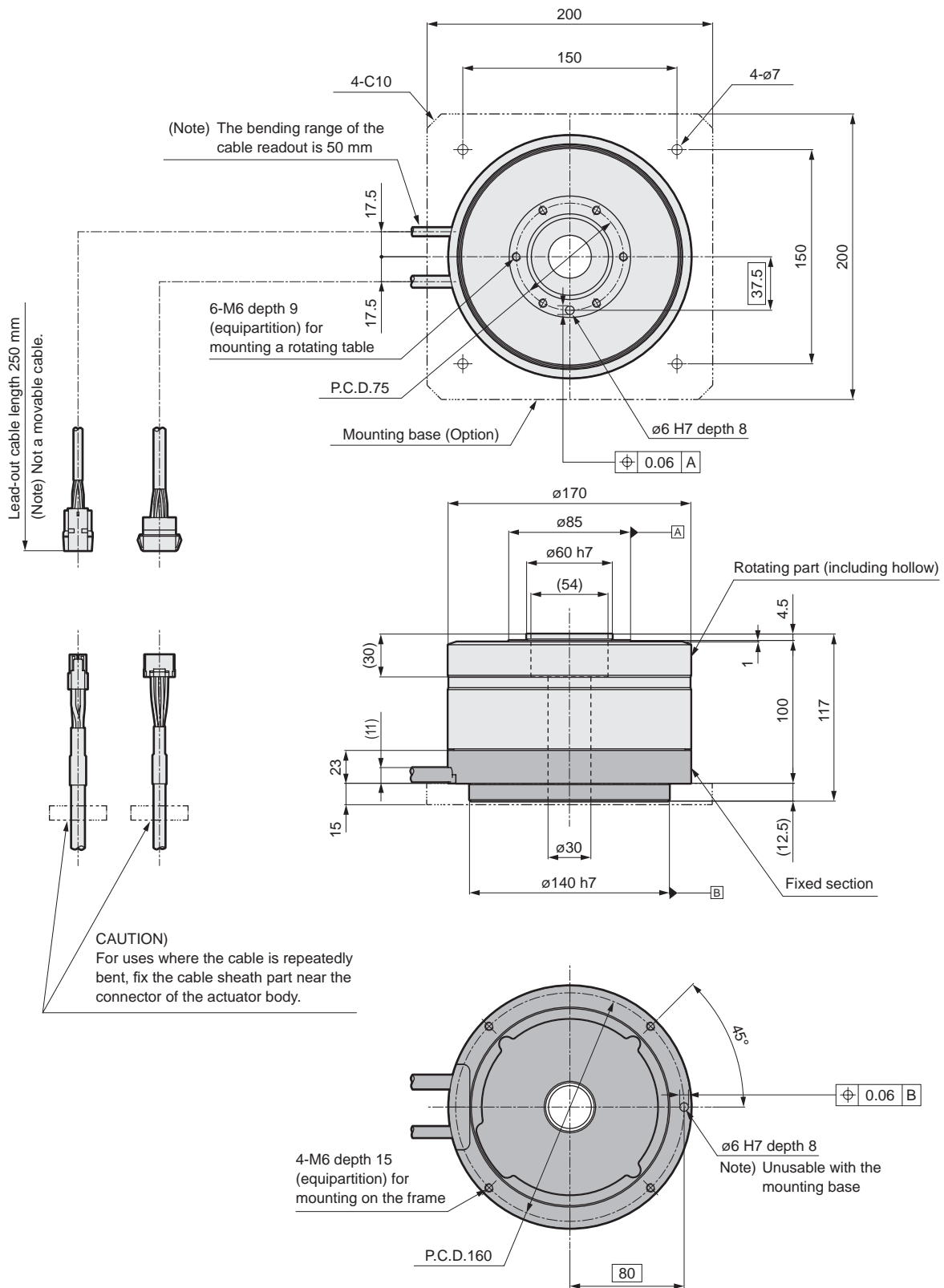
● AX7022X



*1) The origin position of the actuator may differ from that shown in the dimensions.
The origin offset function allows you to set a desired origin position.

Dimensions

● AX7045X



| |
|----------------------------------|
| Actuator AX6000M |
| Drivers AX9000MU |
| Actuator AX7000X |
| Drivers AX9000XS |
| Actuator AX1000T |
| Actuator AX2000T |
| Actuator AX4000T |
| Drivers AX9000TS/TH |
| Dialog terminal AX0180 |
| Related parts model No. table |

*1) The origin position of the actuator may differ from that shown in the dimensions.
The origin offset function allows you to set a desired origin position.

Discontinue

ABSODEX (AX7000X Series)

XS driver

Interface specifications: parallel I/O (NPN)
CC-Link
DeviceNet



Features

- Power supply is divided into main power supply and control power supply
- Smaller/lighter weight (resin body adopted)
- 7-segment LED 2-digit display
- Compatible with encoder output (parallel I/O only)
- Serial communication options available
- Driving conditions enabled to be set or directed by the host controller (CC-Link and DeviceNet only)

General specifications

| Item | Model | |
|-------------------------------|---|---|
| | XS driver AX9000XS | |
| Power supply voltage | Main power supply | Three phase, single phase 200 VAC ±10% to 230 VAC ±10% 100 VAC ±10% to 115 VAC ±10% (J1 Option) (*1) |
| | Control power | 200 VAC ±10% to 230 VAC ±10% 100 VAC ±10% to 115 VAC ±10% (J1 Option) (*1) |
| Power frequency | 50/60 Hz | |
| Rated input current | 200 VAC: 1.8 A | |
| | 100 VAC: 2.4 A | |
| Rated output current | 1.9 A | |
| Structure | Driver and controller integrated (open type) | |
| Operating ambient temperature | 0 to 50°C | |
| Operating ambient humidity | 20 to 90% RH (no condensation) | |
| Storage ambient temperature | -20 to 65°C | |
| Storage ambient humidity | 20 to 90% RH (no condensation) | |
| Atmosphere | No corrosive gas or dust | |
| Anti-noise | 1,000 V (P-P), pulse width 1 µsec, rising 1 nsec impulse noise test, induction noise (capacitive coupling) | |
| Vibration resistance | 4.9 m/s ² | |
| Weight | Approx. 1.6 kg | |
| Degree of protection | IP2X (excluding CN4 and CN5) | |

- *1) If a 200 to 230 VAC power supply is connected by mistake when using power voltage 100 to 115 VAC specifications (-J1 option), the driver internal circuit will be damaged.
- *2) If the main power is cut off while the actuator is rotating, the rotation may continue due to inertia.
- *3) After the main power supply is cut OFF, the motor may rotate by the residual voltage of the driver.

Breaker capacity

| Actuator model No. | Driver model No. | Rush current (A) | | Breaker capacity |
|--------------------|------------------|--------------------|------------------------------------|-------------------|
| | | Single phase 100 V | Single-phase/ three-phase 200 V | Rated current (A) |
| AX7022X, AX7045X | AX9000XS | 16 (*1) | 56 (*1) | 10 |

*1) The value of the rush current is a representative value at 115 VAC and 230 VAC.

How to order

- 200 to 230 VAC

AX9000XS - U0

- 100 to 115 VAC

AX9000XS-J1-U0

Interface specifications
U0: Parallel I/O(NPN)
U2: CC-Link
U4: DeviceNet

Performance specifications

| Item | Description |
|-------------------------|--|
| No. of control axes | 1 axis, 4,194,304 pulses/1 rotation |
| Angle setting unit | ° (degree), pulse, indexing No. |
| Angle min. setting unit | 0.001°, 1 pulse |
| Speed setting unit | sec, rpm |
| Speed setting range | 0.01 to 100 sec/0.11 to 240 rpm |
| Equal divisions | 1 to 255 |
| Max. command value | 8-digit numeric input ±99,999,999 |
| Timer | 0.01 to 99.99 sec |
| Programming language | NC |
| Programming method | Set data through RS232C port with a PC or other terminal. |
| Operation mode | Auto, MDI, jog, single block, servo OFF, pulse train input mode Network operation mode |
| Coordinates | Absolute, incremental [5 types] |
| Acceleration curve | Modified Sine (MS), Modified Constant Velocity (MC/MC2), Modified Trapezoid (MT), Trapezoid (TR) |
| Status display | LED display CHARGE = Main power supply POWER = Control power |
| Operation display | Display with 7-segment LED (2 digits) |
| Communication interface | RS-232C compliant |
| I/O signal | Refer to interface specification pages. |
| Program capacity | Approx. 6,000 characters (256) |
| Electronic thermal | Overheating protection for actuator |

⚠ Always read the safety precautions on pages 73 to 78 before use.

* Custom order products are RoHS non-compliant.

Parallel I/O (NPN)

CN3 Input signal

| Pin No. | Signal name | Logic | Determination |
|---------|---|----------|---------------|
| 1 to 2 | External power supply input +24 V ±10% | | |
| 3 to 4 | External power supply input GND | | |
| 5 | Program No. selection input (Bit 0) | Positive | Level |
| 6 | Program No. selection input (Bit 1) | Positive | Level |
| 7 | Program No. selection input (Bit 2) | Positive | Level |
| 8 | Program No. selection input (Bit 3) | Positive | Level |
| 9 | Program No. setting 2nd digit input/ Program No. selection input (Bit 4) | Positive | Edge Level |
| 10 | Program No. setting 1st digit input/ Program No. selection input (Bit 5) | Positive | Edge Level |
| 11 | Reset input | Positive | Edge |
| 12 | Origin return directive input | Positive | Edge |
| 13 | Start input | Positive | Edge |
| 14 | Servo on input/ Program stop input | Positive | Level Edge |
| 15 | Ready return/Continuous rotation stop input | Positive | Edge |
| 16 | Answer input/Position deviation counter reset input | Positive | Edge |
| 17 | Emergency stop input | Load | Level |
| 18 | Brake release input | Positive | Level |

CN3 Output signal

| Pin No. | Signal name | Logic |
|---------|---|----------|
| 33 | M code output (Bit 0) | Positive |
| 34 | M code output (Bit 1) | Positive |
| 35 | M code output (Bit 2) | Positive |
| 36 | M code output (Bit 3) | Positive |
| 37 | M code output (Bit 4) | Positive |
| 38 | M code output (Bit 5) | Positive |
| 39 | M code output (Bit 6) | Positive |
| 40 | M code output (Bit 7) | Positive |
| 41 | Imposition output | Positive |
| 42 | Positioning completion output | Positive |
| 43 | Start input wait output | Positive |
| 44 | Alarm output 1 | Load |
| 45 | Alarm output 2 | Load |
| 46 | Output 1 during indexing/Origin position output | Positive |
| 47 | Output 2 during indexing/Servo state output | Positive |
| 48 | Ready output | Positive |
| 49 | Segment position strobe output | Positive |
| 50 | M code strobe output | Positive |

CN3 pulse train input signal

| Pin No. | Signal name |
|---------|---------------------|
| 19 | PULSE/UP/A phase |
| 20 | -PULSE/-UP/-A phase |
| 21 | DIR/ DOWN/ B phase |
| 22 | -DIR/-DOWN/-B phase |

CN3 encoder output signal (Incremental)

| Pin No. | Signal name |
|---------|-------------------------------|
| 23 | A phase (Line driver output) |
| 24 | -A phase (Line driver output) |
| 25 | B phase (Line driver output) |
| 26 | -B phase (Line driver output) |
| 27 | Z phase (Line driver output) |
| 28 | -Z phase (Line driver output) |

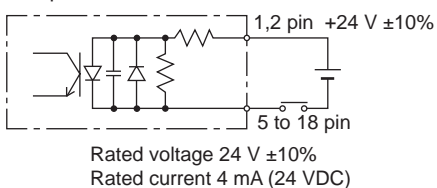
Input/output circuit specifications

| Description | 1 circuit current (mA) | Max. points (Circuit) | Max. current (mA) | Max. power consumption (mA) |
|-------------------------|------------------------|-----------------------|-------------------|-----------------------------|
| Input circuit | 4 | 14 | 56 | 1106 |
| Output circuit | 50 | 18 | 900 | |
| Brake output (BK+, BK-) | 75 | 2 | 150 | |

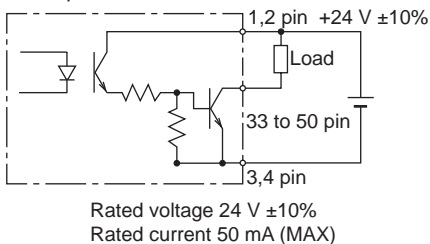
* The maximum simultaneous output points of the output circuit are 14 points out of 18 points.

CN3 input/output circuit specifications

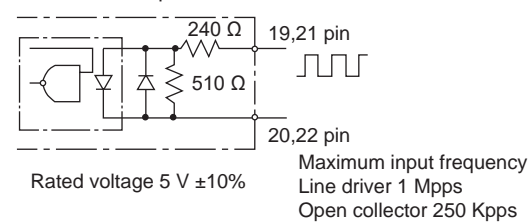
● Input circuit



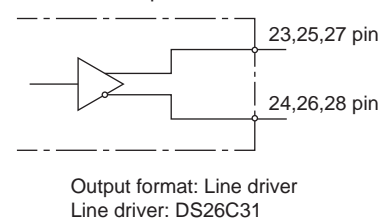
● Output circuit



● Pulse train input circuit



● Encoder output circuit



Always read the safety precautions on pages 73 to 78 before use.

* Custom order products are RoHS non-compliant.

Actuator AX6000M
 Drivers AX9000MU
 Actuator AX7000X
 Drivers AX9000XS
 Actuator AX1000T
 Actuator AX2000T
 Actuator AX4000T
 Drivers AX9000TS/TH
 Dialog terminal AX0180
 Related parts model No. table

XS driver

CC-Link

Communication specifications

| Item | Specifications |
|------------------------------------|---|
| Power supply | 5 VDC is supplied from the servo amplifier. |
| CC-Link version | Ver.1.10 |
| Number of occupied stations (type) | 2 stations (Remote device station) |
| Remote input points | 48 point |
| Remote output points | 48 point |
| Remote register input/output | Input 8 words/Output 8 words |
| Communication speed | 10 M/5 M/2.5 M/625 k/156 kbps (Selected by parameter setting) |
| Connection cable | CC-Link Ver.1.10 compliant cable (3 core cable with shield) |
| Transmission format | HDL compliant |
| Remote station No. | 1 to 63 (Set by a parameter) |
| Number of connected units | For remote device station only Max. 32 units/2 stations occupied |
| Monitor function | Present position within 1 rotation (degree, pulse), position deviation, amount, program No., electronic thermal, rotation speed, alarm, parameter, operation mode |

I/O signal

PLC → AX (Input)

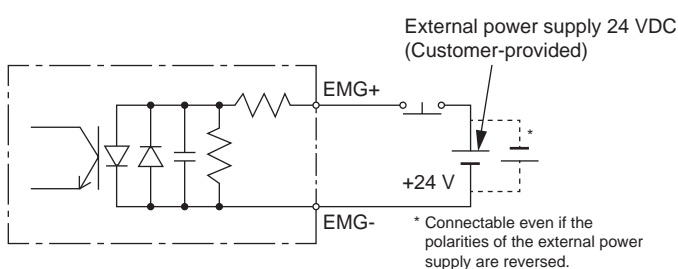
| Device No. | Signal name | Logic | Determination |
|----------------------|--|----------|---------------|
| RYn0 | Program No. selection input (Bit 0) | Positive | Level |
| RYn1 | Program No. selection input (Bit 1) | Positive | Level |
| RYn2 | Program No. selection input (Bit 2) | Positive | Level |
| RYn3 | Program No. selection input (Bit 3) | Positive | Level |
| RYn4 | Program No. setting 2nd digit input /Program No. selection input (Bit 4) | Positive | Edge level |
| RYn5 | Program No. setting 1st digit input /Program No. selection input (Bit 5) | Positive | Edge level |
| RYn6 | Reset input | Positive | Edge |
| RYn7 | Origin return directive input | Positive | Edge |
| RYn8 | Start input | Positive | Edge |
| RYn9 | Servo on input /Program stop input | Positive | Level edge |
| RYnA | Ready return input /Continuous rotation stop input | Positive | Edge |
| RYnB | Answer input /Position deviation counter reset input | Positive | Edge |
| RYnC | Emergency stop input | Load | Level |
| RYnD | Brake release input | Positive | Level |
| RYnE | Job operation input (CW direction) | Positive | Edge |
| RYnF | Job operation input (CCW direction) | Positive | Edge |
| RY(n+1)0 | Unusable /Travel unit selection input (Bit 0) | Positive | Level |
| RY(n+1)1 | Unusable /Travel unit selection input (Bit 1) | Positive | Level |
| RY(n+1)2 | Unusable /Travel speed unit selection input | Positive | Level |
| RY(n+1)3 | Operation by table, Operation by data input Switching input | Positive | Level |
| RY(n+1)4 to RY(n+1)F | Unusable | | |
| RY(n+2)0 | Monitor output execution request | Positive | Level |
| RY(n+2)1 | Command code execution request | Positive | Edge |
| RY(n+2)2 to RY(n+2)F | Unusable | | |
| RY(n+3)0 to RY(n+3)F | Unusable | | |

AX (Output) → PLC

| Device No. | Signal name | Logic |
|----------------------|--|----------|
| RXn0 | M code output (Bit 0) | Positive |
| RXn1 | M code output (Bit 1) | Positive |
| RXn2 | M code output (Bit 2) | Positive |
| RXn3 | M code output (Bit 3) | Positive |
| RXn4 | M code output (Bit 4) | Positive |
| RXn5 | M code output (Bit 5) | Positive |
| RXn6 | M code output (Bit 6) | Positive |
| RXn7 | M code output (Bit 7) | Positive |
| RXn8 | Imposition output | Positive |
| RXn9 | Positioning completion output | Positive |
| RXnA | Start input wait output | Positive |
| RXnB | Alarm output 1 | Load |
| RXnC | Alarm output 2 | Load |
| RXnD | Output 1 during indexing /Origin position output | Positive |
| RXnE | Output 2 during indexing /Servo state output | Positive |
| RXnF | Ready output | Positive |
| RX(n+1)0 | Segment position strobe output | Positive |
| RX(n+1)1 | M code strobe output | Positive |
| RX(n+1)2 to RX(n+1)F | Unusable | |
| RX(n+2)0 | Monitoring | Positive |
| RX(n+2)1 | Command code execution completed | Positive |
| RX(n+2)2 to RX(n+2)F | Unusable | |
| RX(n+3)0 to RX(n+3)A | Unusable | |
| RX(n+4)B | Remote READY | Positive |
| RX(n+3)C to RX(n+3)F | Unusable | |

* n is determined by the setting of the station No.

TB3 Input circuit specifications (Machine stops)



Rated voltage 24 V ±10%, Rated current 5 mA or less

Safety precautions

- Reserve a sufficient distance between the communication cable and power cable (motor cable, power supply cable, etc.).
- Placing the communication cable and power cable close to each other or bundling these cables makes communication unstable due to noise, possibly resulting in a communication error or retry.
- For details on the installation of a communication cable, refer to the CC-Link installation manuals.

DeviceNet

Communication specifications

| Item | Specifications |
|---|--|
| Power supply for communication | 11 to 25 VDC |
| Current consumption of power supply for communication | 50 mA or less |
| Communication protocol | DeviceNet compliant: Remote I/O |
| Number of occupied nodes | Input 8 bytes/Output 8 bytes |
| Communication speed | 500 k/250 k/125 kbps (Selected by parameter setting) |
| Connection cable | DeviceNet compliant cable (5-wire cable with shield, 2 signal lines, 2 power cables, 1 shield) |
| Node address | 0 to 63 (Set by a parameter) |
| Number of connected units | Max. 64 units (including the master) |
| Monitor function | Present position within 1 rotation (degree, pulse), position deviation amount, program No., electronic thermal, rotation speed, alarm, parameter, operation mode |

I/O signal

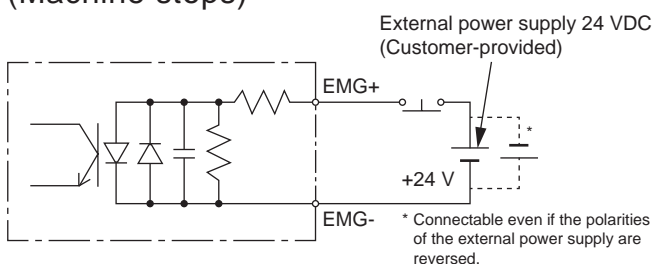
PLC → AX (Input)

| Byte No. | Signal name | Logic | Determination |
|----------|--|----------|---------------|
| 0.0 | Program No. selection input (Bit 0) | Positive | Level |
| 0.1 | Program No. selection input (Bit 1) | Positive | Level |
| 0.2 | Program No. selection input (Bit 2) | Positive | Level |
| 0.3 | Program No. selection input (Bit 3) | Positive | Level |
| 0.4 | Program No. setting 2nd digit input /Program No. selection input (Bit 4) | Positive | Edge level |
| 0.5 | Program No. setting 1st digit input /Program No. selection input (Bit 5) | Positive | Edge level |
| 0.6 | Reset input | Positive | Edge |
| 0.7 | Origin return directive input | Positive | Edge |
| 1.0 | Start input | Positive | Edge |
| 1.1 | Servo on input /Program stop input | Positive | Level edge |
| 1.2 | Ready return input /Continuous rotation stop input | Positive | Edge |
| 1.3 | Answer input /Position deviation counter reset input | Positive | Edge |
| 1.4 | Emergency stop input | Load | Level |
| 1.5 | Brake release input | Positive | Level |
| 1.6 | Job operation input (CW direction) | Positive | Edge |
| 1.7 | Job operation input (CCW direction) | Positive | Edge |
| 2.0 | Parameter No. (Bit 8) /Travel unit selection input (Bit 0) | Positive | Level |
| 2.1 | Parameter No. (Bit 9) /Travel unit selection input (Bit 1) | Positive | Level |
| 2.2 | Parameter No. (Bit 10) /Travel speed unit selection input | Positive | Level |
| 2.3 | Operation by table, Operation by data input /Switching input | Positive | Level |
| 2.4 | Unusable | | |
| 2.5 | Unusable | | |
| 2.6 | Monitor output execution request | Positive | Level |
| 2.7 | Command code execution request | Positive | Edge |
| 3.0 | Parameter No. (Bit 0) /Unusable | Positive | Level |
| 3.1 | Parameter No. (Bit 1) /Unusable | Positive | Level |
| 3.2 | Parameter No. (Bit 2) /Unusable | Positive | Level |
| 3.3 | Parameter No. (Bit 3) /Unusable | Positive | Level |
| 3.4 | Parameter No. (Bit 4) /Unusable | Positive | Level |
| 3.5 | Parameter No. (Bit 5) /Unusable | Positive | Level |
| 3.6 | Parameter No. (Bit 6) /Unusable | Positive | Level |
| 3.7 | Parameter No. (Bit 7) /Unusable | Positive | Level |

AX (Output) → PLC

| Byte No. | Signal name | Logic |
|------------|--|----------|
| 0.0 | M code output (Bit 0) | Positive |
| 0.1 | M code output (Bit 1) | Positive |
| 0.2 | M code output (Bit 2) | Positive |
| 0.3 | M code output (Bit 3) | Positive |
| 0.4 | M code output (Bit 4) | Positive |
| 0.5 | M code output (Bit 5) | Positive |
| 0.6 | M code output (Bit 6) | Positive |
| 0.7 | M code output (Bit 7) | Positive |
| 1.0 | Imposition output | Positive |
| 1.1 | Positioning completion output | Positive |
| 1.2 | Start input wait output | Positive |
| 1.3 | Alarm output 1 | Load |
| 1.4 | Alarm output 2 | Load |
| 1.5 | Output 1 during indexing /Origin position output | Positive |
| 1.6 | Output 2 during indexing /Servo state output | Positive |
| 1.7 | Ready output | Positive |
| 2.0 | Segment position strobe output | Positive |
| 2.1 | M code strobe output | Positive |
| 2.2 to 2.5 | Unusable | |
| 2.6 | Monitoring | Positive |
| 2.7 | Command code execution completed | Positive |
| 3.0 to 3.7 | Unusable | |

TB3 Input circuit specifications (Machine stops)



Rated voltage 24 V ±10%, Rated current 5 mA or less

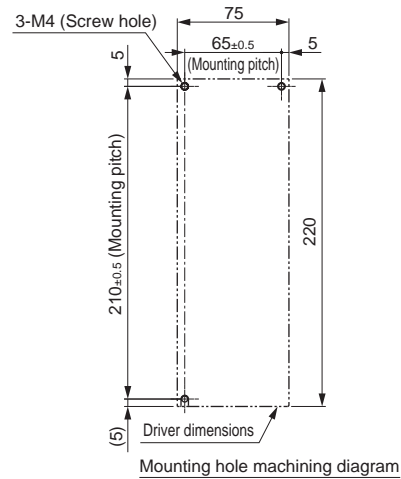
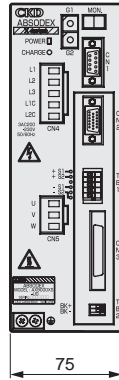
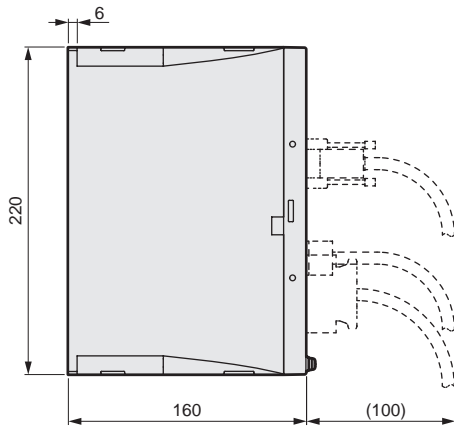
Safety precautions

- Reserve a sufficient distance between the communication cable and power cable (motor cable, power supply cable, etc.).
- Placing the communication cable and power cable close to each other or bundling these cables makes communication unstable due to noise, possibly resulting in a communication error or retry.
- For details on the installation of communication cables, refer to the DeviceNet installation manuals.

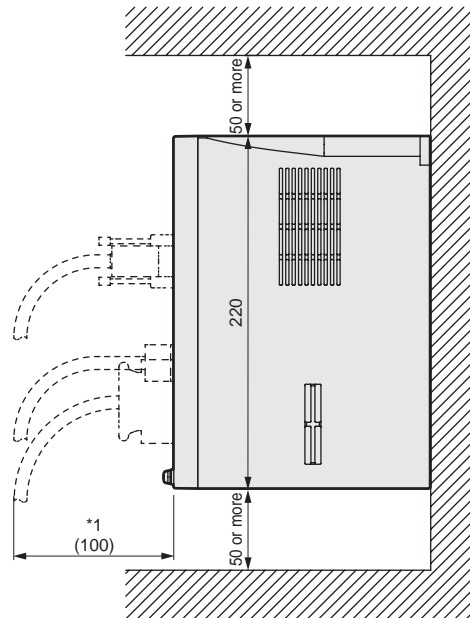
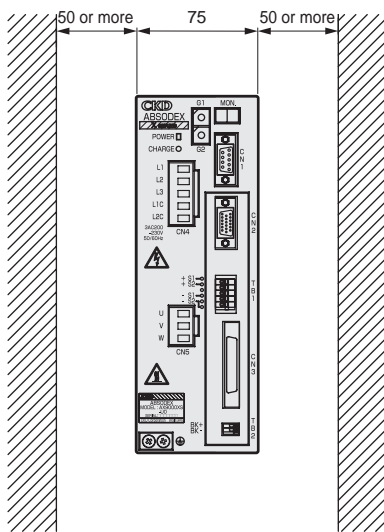
| | |
|-----------------|-----------------|
| Actuator | AX6000M |
| Drivers | AX9000MU |
| Actuator | AX7000X |
| Drivers | AX9000XS |
| Actuator | AX1000T |
| Actuator | AX2000T |
| Actuator | AX4000T |
| Drivers | AX9000TS/TH |
| Dialog terminal | AX0180 |
| Related parts | model No. table |

XS driver

Dimensions



Installation Dimension



*1) Determine the dimension with extra allowance according to a cable you want to use.

Safety precautions

- The ABSODEX driver does not have a dust-proof/waterproof structure. To prevent dust, water, oil or other substances from entering the driver, provide protection according to the working environment.
- Install the ABSODEX driver away from other devices, walls or other structures by 50 mm or more from the top, bottom and sides. When heat is generated from other drivers or devices, check that the ambient temperature does not exceed 50°C.

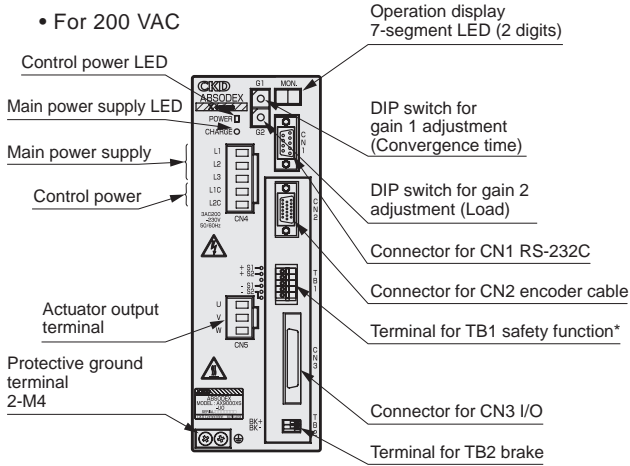
Accessories supplied with the driver

| Model No. | Specifications | CN3 Connector | Power supply connector (CN4) | Motor cable connector (CN5) |
|-------------|-------------------|---|----------------------------------|----------------------------------|
| AX9000XS-U0 | Parallel I/O(NPN) | 10150-3000PE (Plug) 10350-52A0-008 (Shell) Sumitomo 3M Ltd. | PC4/5-ST-7.62 Phoenix Contact | PC4/3-ST-7.62 Phoenix Contact |
| AX9000XS-U2 | CC-Link | BLZP5.08HC/05/180F AU OR BX Weidmüller | | |
| AX9000XS-U4 | DeviceNet | MSTB2.5/5-STF-5.08AUM Phoenix Contact | | |

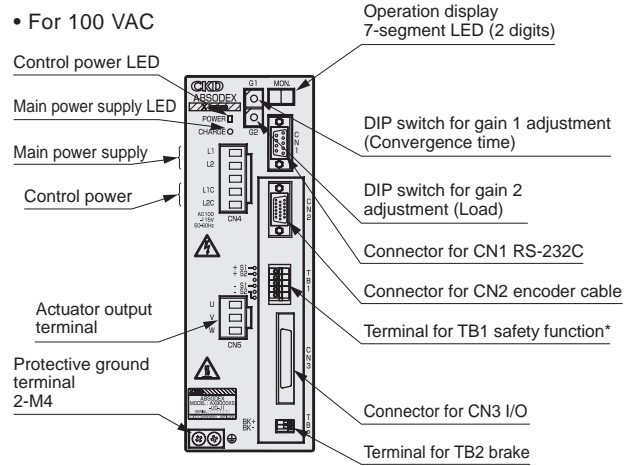
Panel Details

● Parallel I/O (NPN)

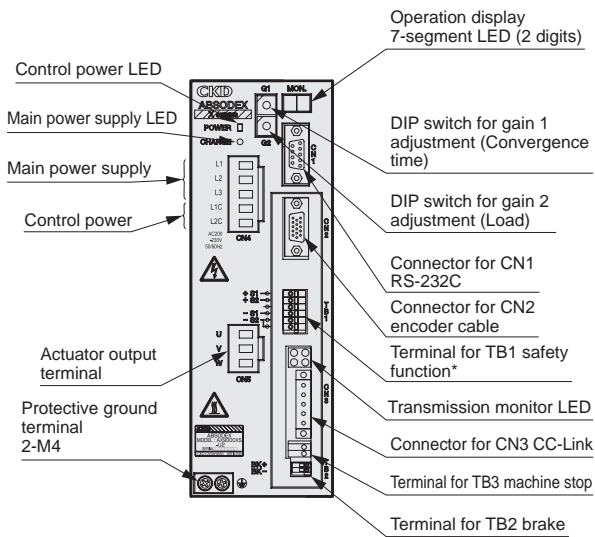
- For 200 VAC



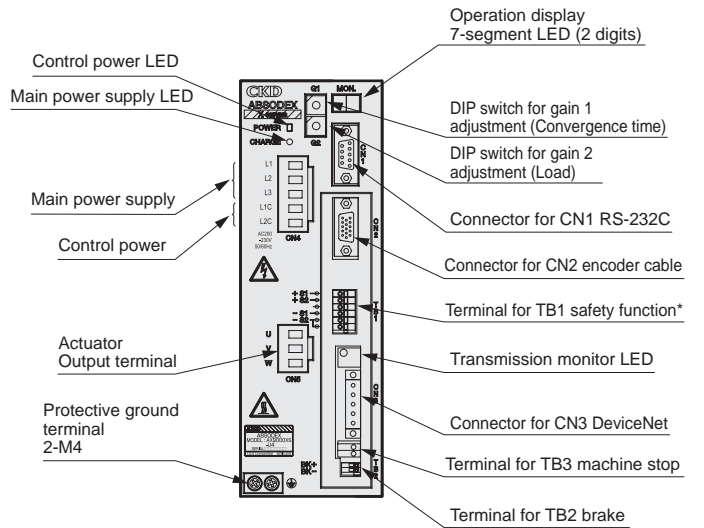
- For 100 VAC



● CC-Link



● DeviceNet



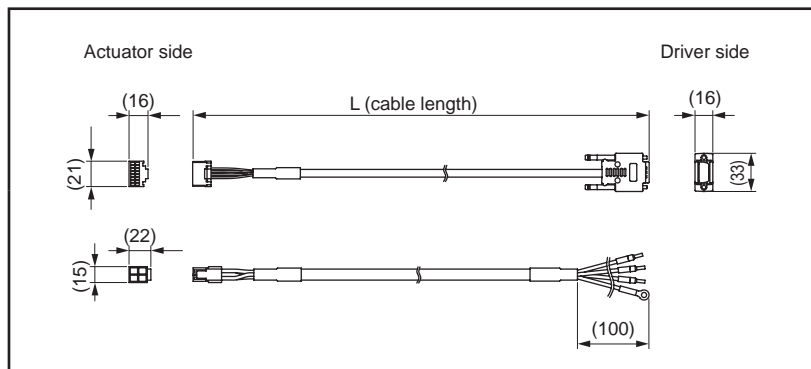
* Safety features (TB1) of this product are not compliant with the certification for safety standards compliance.

| | | | | | | | | | |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|---------------------------|----------------------------------|
| Actuator AX6000M | Drivers AX9000MU | Actuator AX7000X | Drivers AX9000XS | Actuator AX1000T | Actuator AX2000T | Actuator AX4000T | Drivers AX9000TS/TH | Dialog terminal AX0180 | Related parts model No. table |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|---------------------------|----------------------------------|

AX7000X Series

Cable specifications

Cable dimensions



| Product name/model No. | Minimum cable bending radius |
|---|------------------------------|
| Encoder cable AX-CBLR10-DM□□ (*1) | 60 mm |
| Motor cable AX-CBLM6-DM□□ (*1) | 110 mm |

*1) □□ indicates the cable length.

Safety precautions

- Connect the correct motor cable and driver by checking the mark tube of the cable and the display of the driver.
- For applications where the cable is bent repeatedly, fix the cable sheath near the actuator body connector before use.
- The lead-out cable of the actuator section is not movable. Make sure to secure the cable at the connector so that it does not move. Do not lift up the body by the lead-out cable or apply excessive force to the cable. Doing so may activate the malfunction alarm or cause the connector to break or become disconnected.
- When connecting the cable, fully insert the connector. Also, tighten the connector mounting screws and fixing screws securely.
- Do not modify the cable by cutting it, extending it, etc. Such modifications may cause failure or malfunction.
- For cable length L, refer to the cable length in "How to Order".