

EC-S6

EC-DS6

<With digital speed controller>

Simple Dust-proof

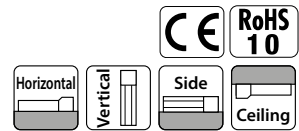
Straight Motor

Body Width 60mm

24v Stepper Motor

Model Specification Items

| | | | | | | | | | | | | |
|-----|--------------------------|----------|------|------|--------------------|------|---|--|--------------------------|--|---------|--|
| EC | Series | | Type | | Lead | | Stroke | | Power / I/O cable length | | Options | |
| | S6 | Standard | S | 20mm | 50 | 50mm | Refer to "Power / I/O Cable Length" below | | Refer to "Options" below | | | |
| DS6 | Digital speed controller | H | 12mm | 400 | 400mm (Every 50mm) | | | | | | | |
| | | M | 6mm | | | | | | | | | |
| | | L | 3mm | | | | | | | | | |



Stroke

| Stroke (mm) | S6 | DS6 | Stroke (mm) | S6 | DS6 |
|-------------|----|-----|-------------|----|-----|
| 50 | ○ | ○ | 250 | ○ | ○ |
| 100 | ○ | ○ | 300 | ○ | ○ |
| 150 | ○ | ○ | 350 | ○ | ○ |
| 200 | ○ | ○ | 400 | ○ | ○ |

Options

* Please check the Options reference pages to confirm each option.

| Name | Option code | Reference page |
|--|-------------|----------------|
| RCON-EC connection specification (Note 1) | ACR | 2-373 |
| Brake | B | 2-373 |
| Specified grease specification (Note 2) | G1/G5 | 2-381 |
| Foot bracket | FT | 2-377 |
| Non-motor end specification | NM | 2-384 |
| PNP specification | PN | 2-384 |
| Slider part roller specification (Note 3) | SR | 2-386 |
| split motor and controller power supply specification | TMD2 | 2-387 |
| Double slider specification (Note 2) (Note 3) (Note 4) | W | 2-111 |
| Battery-less absolute encoder specification | WA | 2-388 |
| Wireless communication specification | WL | 2-388 |
| Wireless axis operation specification | WL2 | 2-388 |

- (Note 1) If the RCON-EC connection specification (ACR) is selected, the PNP specification (PN) and split motor and controller power supply specification (TMD2) cannot be selected.
- (Note 2) Double slider specification (W) and specified grease specification (G1/G5) cannot be used together.
- (Note 3) When the slider part roller specification (SR) and double slider specification (W) are used together, the price for the slider part roller specification (SR) becomes double.
- (Note 4) There are some non-selectable leads. See P. 2-111 for details.



- The actuator specifications display the payload's maximum value, but it will vary depending on the acceleration and speed. If the energy-saving setting is enabled, the main specifications will change. Please refer to "Table of Payload by Speed/Acceleration" for more details.
- If performing push-motion operations, refer to the "Correlation between Torque and Current Limit" diagram. The torques listed are only reference values.
- Duty must be restricted depending on the ambient operating temperature.
- Pay close attention to the installation orientation.
- Reference value of the overhang load length is under 220mm (under 440mm for double slider specification) in the direction of Ma, Mb and Mc.
- The center of gravity of the attached object should be less than 1/2 of the overhang distance. Even when the overhang distance and load moment are within the allowable range, operating conditions should be moderated if some abnormal vibration or noise is observed.

Power / I/O Cable Length

Standard connector cable

| Cable code | Cable length | User wiring specification (flying leads) | RCON-EC connection specification (Note 6) (with connectors on both ends) |
|------------|--------------|--|--|
| | | CB-EC-PWBIO□□□-RB supplied | CB-REC-PWBIO□□□-RB supplied |
| 0 | No cable | ○ (Note 5) | ○ |
| 1 ~ 3 | 1 ~ 3m | ○ | ○ |
| 4 ~ 5 | 4 ~ 5m | ○ | ○ |
| 6 ~ 7 | 6 ~ 7m | ○ | ○ |
| 8 ~ 10 | 8 ~ 10m | ○ | ○ |

- (Note 5) Only terminal block connector is supplied. Please refer to P. 2-394 for details.
- (Note 6) If RCON-EC connection specification (ACR) is selected as an option.
- (Note) The robot cable is standard.

Four-way connector cable

| Cable code | Cable length | User wiring specification (flying leads) | RCON-EC connection specification (Note 7) (with connectors on both ends) |
|------------|--------------|--|--|
| | | CB-EC2-PWBIO□□□-RB supplied | CB-REC2-PWBIO□□□-RB supplied |
| S1 ~ S3 | 1 ~ 3m | ○ | ○ |
| S4 ~ S5 | 4 ~ 5m | ○ | ○ |
| S6 ~ S7 | 6 ~ 7m | ○ | ○ |
| S8 ~ S10 | 8 ~ 10m | ○ | ○ |

- (Note 7) If RCON-EC connection specification (ACR) is selected as an option.
- (Note) The robot cable is standard.

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Main Specifications

| Item | | Description | | | | |
|------------|-------------------------------------|--|------|-----|------|------|
| Lead | Ball screw lead (mm) | 20 | 12 | 6 | 3 | |
| Horizontal | Payload | Max. payload (kg) (energy-saving disabled) | 15 | 26 | 32 | 40 |
| | | Max. payload (kg) (energy-saving enabled) | 8 | 14 | 20 | 25 |
| | Speed / acceleration / deceleration | Max. speed (mm/s) | 800 | 700 | 450 | 225 |
| | | Min. speed (mm/s) | 25 | 15 | 8 | 4 |
| Vertical | Payload | Max. payload (kg) (energy-saving disabled) | 1 | 2.5 | 6 | 12.5 |
| | | Max. payload (kg) (energy-saving enabled) | 0.75 | 2 | 5 | 10 |
| | Speed / acceleration / deceleration | Max. speed (mm/s) | 800 | 700 | 450 | 225 |
| | | Min. speed (mm/s) | 25 | 15 | 8 | 4 |
| Push | Max. push force (N) | 67 | 112 | 224 | 449 | |
| | Max. push speed (mm/s) | 20 | 20 | 20 | 20 | |
| Brake | Brake specification | Non-excitation actuating solenoid brake | | | | |
| | Brake holding force (kgf) | 1 | 2.5 | 6 | 12.5 | |
| Stroke | Min. stroke (mm) | 50 | 50 | 50 | 50 | |
| | Max. stroke (mm) | 400 | 400 | 400 | 400 | |
| | Stroke pitch (mm) | 50 | 50 | 50 | 50 | |

| Item | Description |
|---|---|
| Driving system | Ball screw, $\phi 10\text{mm}$, rolled C10 |
| Positioning repeatability | $\pm 0.05\text{mm}$ |
| Lost motion | - (two-point positioning function; cannot be represented) |
| Base | Dedicated aluminum extruded material (A6063S5-T5 equivalent), black alumite treatment |
| Linear guide | Linear motion infinite circulating type |
| Static allowable moment | Ma: 48.5N·m |
| | Mb: 69.3N·m |
| | Mc: 97.1N·m |
| Dynamic allowable moment (Note 8) | Ma: 11.6N·m |
| | Mb: 16.6N·m |
| | Mc: 23.3N·m |
| Ambient operating temperature, humidity | 0 ~ 40°C, 85%RH or less (Non-condensing) |
| Degree of protection | IP20 |
| Vibration/shock resistance | 4.9m/s ² |
| Overseas standards | CE marking, RoHS directive |
| Motor type | Stepper motor ($\square 42$) |
| Encoder type | Incremental/battery-less absolute |
| Number of encoder pulses | 800 pulse/rev |

(Note 8) Based on the standard rated operation life of 5,000km. Operation life varies according to operating and mounting conditions.

Slider type moment direction

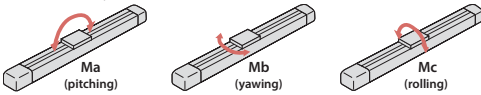


Table of Payload by Speed/Acceleration

Energy-saving setting disabled (The unit for payload is kg. If blank, operation is not possible.)

Lead 20

| Orientation | Horizontal | | | | | | Vertical | | | | | |
|--------------|------------------|-----|-----|---|-----|-----|------------------|-----|-----|---|-----|-----|
| | Acceleration (G) | | | | | | Acceleration (G) | | | | | |
| Speed (mm/s) | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 15 | 10 | 8 | 7 | 1 | 1 | | | | | | |
| 160 | 15 | 10 | 8 | 7 | 1 | 1 | | | | | | |
| 320 | 12 | 10 | 8 | 6 | 1 | 1 | | | | | | |
| 480 | 12 | 9 | 8 | 6 | 1 | 1 | | | | | | |
| 640 | 12 | 8 | 6 | 5 | 1 | 1 | | | | | | |
| 800 | 10 | 6.5 | 4.5 | 3 | 1 | 1 | | | | | | |

Lead 12

| Orientation | Horizontal | | | | | | Vertical | | | | | |
|--------------|------------------|-----|-----|----|-----|-----|------------------|-----|-----|---|-----|-----|
| | Acceleration (G) | | | | | | Acceleration (G) | | | | | |
| Speed (mm/s) | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 26 | 18 | 16 | 14 | 2.5 | 2.5 | | | | | | |
| 80 | 26 | 18 | 16 | 14 | 2.5 | 2.5 | | | | | | |
| 200 | 26 | 18 | 16 | 14 | 2.5 | 2.5 | | | | | | |
| 320 | 26 | 18 | 14 | 12 | 2.5 | 2.5 | | | | | | |
| 440 | 26 | 18 | 12 | 10 | 2.5 | 2.5 | | | | | | |
| 560 | 20 | 12 | 8 | 7 | 2.5 | 2.5 | | | | | | |
| 700 | 15 | 9 | 5 | 4 | 2 | 1 | | | | | | |

Lead 6

| Orientation | Horizontal | | | | | | Vertical | | | | | |
|--------------|------------------|-----|-----|----|-----|-----|------------------|-----|-----|---|-----|-----|
| | Acceleration (G) | | | | | | Acceleration (G) | | | | | |
| Speed (mm/s) | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 32 | 26 | 24 | 20 | 6 | 6 | | | | | | |
| 40 | 32 | 26 | 24 | 20 | 6 | 6 | | | | | | |
| 100 | 32 | 26 | 24 | 20 | 6 | 6 | | | | | | |
| 160 | 32 | 26 | 24 | 20 | 6 | 6 | | | | | | |
| 220 | 32 | 26 | 24 | 20 | 6 | 6 | | | | | | |
| 280 | 32 | 26 | 24 | 15 | 6 | 5.5 | | | | | | |
| 340 | 32 | 20 | 18 | 12 | 5 | 4.5 | | | | | | |
| 400 | 22 | 12 | 11 | 8 | 3.5 | 3.5 | | | | | | |
| 450 | 15 | 8 | 6 | 4 | 2 | 2 | | | | | | |

Lead 3

| Orientation | Horizontal | | | | | | Vertical | | | | | |
|--------------|------------------|-----|-----|----|------|------|------------------|-----|-----|---|-----|-----|
| | Acceleration (G) | | | | | | Acceleration (G) | | | | | |
| Speed (mm/s) | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 40 | 35 | 35 | 35 | 12.5 | 12.5 | | | | | | |
| 50 | 40 | 35 | 35 | 35 | 12.5 | 12.5 | | | | | | |
| 80 | 40 | 35 | 35 | 30 | 12.5 | 12.5 | | | | | | |
| 110 | 40 | 35 | 35 | 30 | 12.5 | 12.5 | | | | | | |
| 140 | 40 | 35 | 35 | 28 | 12.5 | 12.5 | | | | | | |
| 170 | 40 | 32 | 32 | 24 | 12.5 | 12 | | | | | | |
| 200 | 35 | 28 | 23 | 20 | 10 | 9 | | | | | | |
| 225 | 28 | 20 | 16 | 12 | 6 | | | | | | | |

Energy-saving setting enabled (The unit for payload is kg.)

Lead 20

| Orientation | Horizontal | | | | Vertical | | | |
|--------------|------------------|-----|------|------|------------------|-----|-----|-----|
| | Acceleration (G) | | | | Acceleration (G) | | | |
| Speed (mm/s) | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 |
| 0 | 8 | 5 | 0.75 | 0.75 | | | | |
| 160 | 8 | 5 | 0.75 | 0.75 | | | | |
| 320 | 8 | 5 | 0.75 | 0.75 | | | | |
| 480 | 8 | 4 | 0.75 | 0.75 | | | | |
| 640 | 6 | 3 | 0.75 | 0.75 | | | | |
| 800 | 4 | 1.5 | 0.75 | 0.75 | | | | |

Lead 12

| Orientation | Horizontal | | | | Vertical | | | |
|--------------|------------------|-----|-----|-----|------------------|-----|-----|-----|
| | Acceleration (G) | | | | Acceleration (G) | | | |
| Speed (mm/s) | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 |
| 0 | 14 | 10 | 2 | 2 | | | | |
| 80 | 14 | 10 | 2 | 2 | | | | |
| 200 | 14 | 10 | 2 | 2 | | | | |
| 320 | 14 | 10 | 2 | 2 | | | | |
| 440 | 11 | 7 | 1.5 | 1.5 | | | | |
| 560 | 7 | 2.5 | 1 | 1 | | | | |
| 680 | 4 | 1 | 0.5 | 0.5 | | | | |

Lead 6

| Orientation | Horizontal | | | | Vertical | | | |
|--------------|------------------|-----|-----|-----|------------------|-----|-----|-----|
| | Acceleration (G) | | | | Acceleration (G) | | | |
| Speed (mm/s) | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 |
| 0 | 20 | 14 | 5 | 5 | | | | |
| 40 | 20 | 14 | 5 | 5 | | | | |
| 100 | 20 | 14 | 5 | 5 | | | | |
| 160 | 20 | 14 | 5 | 5 | | | | |
| 220 | 16 | 14 | 4 | 4 | | | | |
| 280 | 13 | 7 | 2.5 | 2.5 | | | | |
| 340 | 10 | 1 | 1 | 1 | | | | |

Lead 3

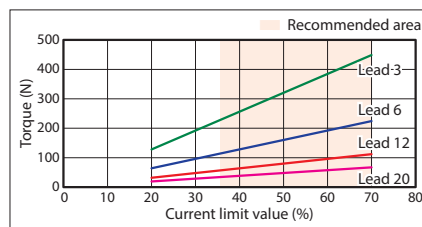
| Orientation | Horizontal | | | | Vertical | | | |
|--------------|------------------|-----|-----|-----|------------------|-----|-----|-----|
| | Acceleration (G) | | | | Acceleration (G) | | | |
| Speed (mm/s) | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 | 0.3 | 0.7 |
| 0 | 25 | 22 | 10 | 10 | | | | |
| 20 | 25 | 22 | 10 | 10 | | | | |
| 50 | 25 | 22 | 10 | 10 | | | | |
| 80 | 25 | 22 | 10 | 10 | | | | |
| 110 | 20 | 14 | 8 | 8 | | | | |
| 140 | 15 | 11 | 5 | 5 | | | | |
| 170 | 11 | 9 | 2 | 2 | | | | |

Stroke and Max Speed

| Lead (mm) | Energy-saving setting | 50 ~ 200 | 250 | 300 | 350 | 400 |
|-----------|-----------------------|--------------|------|------|------|------|
| | | (Every 50mm) | (mm) | (mm) | (mm) | (mm) |
| 20 | Disabled | 800 | | 727 | 566 | |
| | Enabled | 800 | | 727 | 566 | |
| 12 | Disabled | 700 | 521 | 392 | 305 | |
| | Enabled | 680 | 521 | 392 | 305 | |
| 6 | Disabled | 450 | 371 | 265 | 199 | 155 |
| | Enabled | 340 | 265 | 199 | 155 | |
| 3 | Disabled | 225 | 188 | 134 | 100 | 78 |
| | Enabled | 170 | 134 | 100 | 78 | |

(Unit: mm/s)

Correlation between Torque and Current Limit

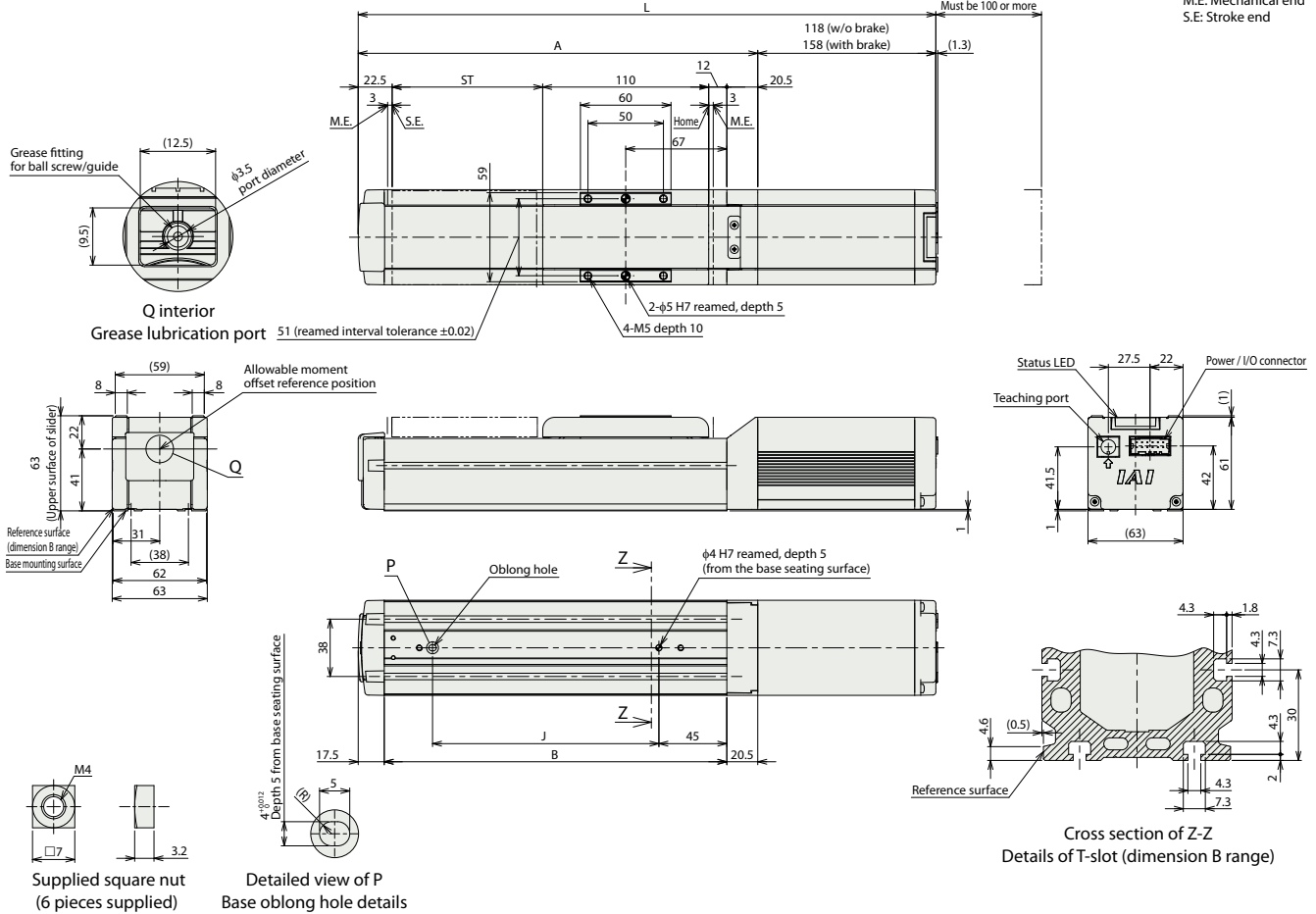


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(Note) When the slider is returning to its home position, be careful of interference from surrounding objects, as it will travel until it reaches the M.E.

ST: Stroke
M.E: Mechanical end
S.E: Stroke end



Dimensions by stroke

| Stroke | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|--------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| L | Without brake | 333 | 383 | 433 | 483 | 533 | 583 | 633 | 683 |
| | With brake | 373 | 423 | 473 | 523 | 573 | 623 | 673 | 723 |
| A | | 215 | 265 | 315 | 365 | 415 | 465 | 515 | 565 |
| B | | 177 | 227 | 277 | 327 | 377 | 427 | 477 | 527 |
| J | | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 |

Mass by stroke

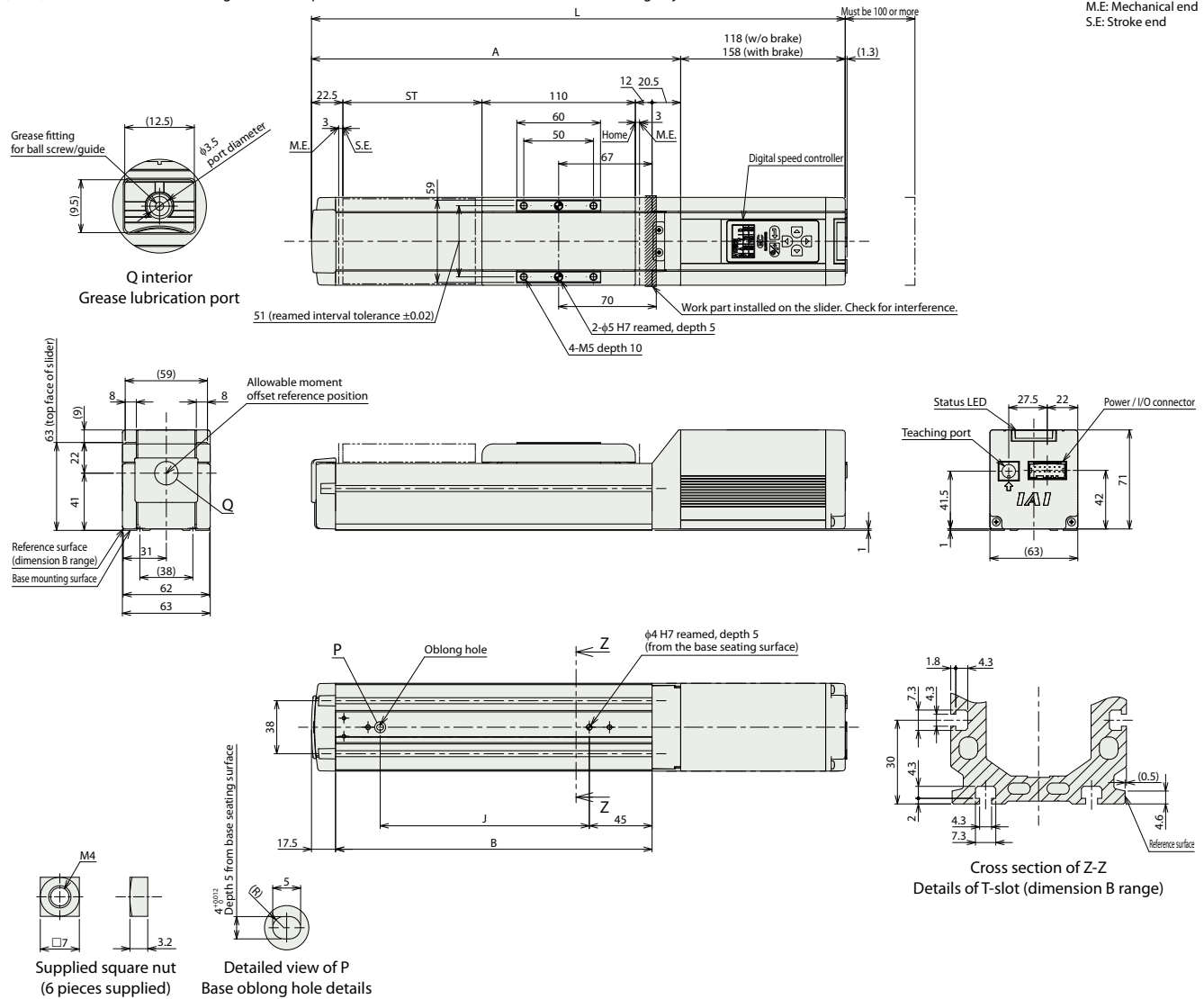
| Stroke | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|-----------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Mass (kg) | Without brake | 1.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 | 3.2 |
| | With brake | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 | 3.2 | 3.4 |

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(Note) When the slider is returning to its home position, be careful of interference from surrounding objects, as it will travel until it reaches the M.E.

ST: Stroke
M.E: Mechanical end
S.E: Stroke end



■ Dimensions by stroke

| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | |
|--------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| L | Without brake | 333 | 383 | 433 | 483 | 533 | 583 | 633 | 683 |
| | With brake | 373 | 423 | 473 | 523 | 573 | 623 | 673 | 723 |
| A | 215 | 265 | 315 | 365 | 415 | 465 | 515 | 565 | |
| B | 177 | 227 | 277 | 327 | 377 | 427 | 477 | 527 | |
| J | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | |

■ Mass by stroke

| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | |
|-----------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Mass (kg) | Without brake | 1.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 | 3.2 |
| | With brake | 2.1 | 2.3 | 2.5 | 2.7 | 2.9 | 3.1 | 3.3 | 3.5 |

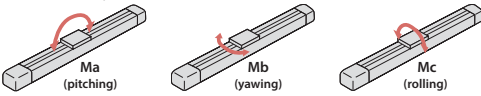
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Main Specifications (double slider specification)

| Item | | Description | | | |
|---|-------------------------------------|--|---|-----|------|
| Lead | Ball screw lead (mm) | 12 | 6 | 3 | |
| | Payload | Max. payload (kg) (energy-saving disabled) | 24 | 30 | 38 |
| Max. payload (kg) (energy-saving enabled) | | 12 | 18 | 23 | |
| Horizontal | Speed / acceleration / deceleration | Max. speed (mm/s) | 700 | 450 | 225 |
| | | Min. speed (mm/s) | 15 | 8 | 4 |
| | | Rated acceleration/deceleration (G) | 0.3 | 0.3 | 0.3 |
| | | Max. acceleration/deceleration (G) | 1 | 1 | 1 |
| | | Max. push force (N) | 112 | 224 | 449 |
| Vertical | Payload | Max. payload (kg) (energy-saving disabled) | — | 4 | 10 |
| | | Max. payload (kg) (energy-saving enabled) | — | 3 | 8 |
| Push | Speed / acceleration / deceleration | Max. speed (mm/s) | — | 340 | 200 |
| | | Min. speed (mm/s) | — | 8 | 4 |
| | | Rated acceleration/deceleration (G) | — | 0.3 | 0.3 |
| | | Max. acceleration/deceleration (G) | — | 0.5 | 0.5 |
| | | Max. push speed (mm/s) | 20 | 20 | 20 |
| Brake | Stroke | Max. push force (N) | 20 | 20 | 20 |
| | | Max. push speed (mm/s) | 20 | 20 | 20 |
| Stroke | Brake | Brake specification | Non-excitation actuating solenoid brake | | |
| | | Brake holding force (kgf) | 2.5 | 6 | 12.5 |
| | | Min. nominal stroke (mm) | 200 | 200 | 200 |
| | | Min. effective stroke (mm) | 50 | 50 | 50 |
| | | Max. nominal stroke (mm) | 400 | 400 | 400 |
| Push | Stroke | Max. effective stroke (mm) | 250 | 250 | 250 |
| | | Stroke pitch (mm) | 50 | 50 | 50 |

(Note) Nominal stroke: Stroke shown in the model number.
Effective stroke: Stroke available for actual operation.
(Note) Lead 12 cannot be mounted vertically.

Slider type moment direction



| Item | Description |
|---|---|
| Driving system | Ball screw, φ10mm, rolled C10 |
| Positioning repeatability | ±0.05mm |
| Lost motion | - (two-point positioning function; cannot be represented) |
| Base | Dedicated aluminum extruded material (A6063SS-T5 equivalent), black alumite treatment |
| Linear guide | Linear motion infinite circulating type |
| Static allowable moment | Ma: 364N-m |
| | Mb: 520N-m |
| | Mc: 129N-m |
| Dynamic allowable moment (Note 9) | Ma: 106N-m |
| | Mb: 152N-m |
| | Mc: 37.9N-m |
| Ambient operating temperature, humidity | 0 ~ 40°C, 85%RH or less (Non-condensing) |
| Degree of protection | IP20 |
| Vibration/shock resistance | 4.9m/s ² |
| Overseas standards | CE marking, RoHS directive |
| Motor type | Stepper motor (□42) |
| Encoder type | Incremental/battery-less absolute |
| Number of encoder pulses | 800 pulse/rev |

(Note 9) Based on the standard rated operation life of 5,000km. Operation life varies according to operating and mounting conditions. Confirm the operation life on P. 1-244.

Table of Payload by Speed/Acceleration (double slider specification)

Energy-saving setting disabled (The unit for payload is kg. If blank, operation is not possible.)

Lead 12

| Orientation | Speed (mm/s) | Horizontal | | | | Vertical | |
|-------------|--------------|------------------|-----|-----|---|----------|-----|
| | | Acceleration (G) | | | | | |
| | | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 24 | 16 | 14 | 12 | | | |
| 80 | 24 | 16 | 14 | 12 | | | |
| 200 | 24 | 16 | 14 | 12 | | | |
| 320 | 24 | 16 | 10 | 8 | | | |
| 440 | 20 | 12 | 8 | 6 | | | |
| 560 | 12 | 6 | 4 | 2 | | | |
| 700 | 5 | 1 | | | | | |

Lead 6

| Orientation | Speed (mm/s) | Horizontal | | | | Vertical | |
|-------------|--------------|------------------|-----|-----|---|----------|-----|
| | | Acceleration (G) | | | | | |
| | | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 30 | 24 | 22 | 18 | 4 | 4 | |
| 40 | 30 | 24 | 22 | 18 | 4 | 4 | |
| 100 | 30 | 24 | 22 | 18 | 4 | 4 | |
| 160 | 30 | 24 | 22 | 18 | 4 | 4 | |
| 220 | 30 | 24 | 20 | 16 | 4 | 4 | |
| 280 | 28 | 22 | 18 | 10 | 3 | 3 | |
| 340 | 20 | 12 | 10 | 6 | 1 | 1 | |
| 400 | 6 | 4 | 1 | | | | |
| 450 | 1 | | | | | | |

Lead 3

| Orientation | Speed (mm/s) | Horizontal | | | | Vertical | |
|-------------|--------------|------------------|-----|-----|----|----------|-----|
| | | Acceleration (G) | | | | | |
| | | 0.3 | 0.5 | 0.7 | 1 | 0.3 | 0.5 |
| 0 | 38 | 33 | 33 | 33 | 10 | 10 | |
| 50 | 38 | 33 | 33 | 33 | 10 | 10 | |
| 80 | 38 | 33 | 33 | 28 | 10 | 10 | |
| 110 | 38 | 33 | 33 | 28 | 10 | 10 | |
| 140 | 38 | 33 | 30 | 26 | 10 | 10 | |
| 170 | 36 | 28 | 26 | 20 | 8 | 8 | |
| 200 | 30 | 22 | 14 | 9 | 3 | 2 | |
| 225 | 15 | 4 | 1 | | | | |

Energy-saving setting enabled (The unit for payload is kg.)

Lead 12

| Orientation | Speed (mm/s) | Horizontal | | | Vertical |
|-------------|--------------|------------------|-----|-----|----------|
| | | Acceleration (G) | | | |
| | | 0.3 | 0.7 | 0.3 | 0.3 |
| 0 | 12 | 8 | | | |
| 80 | 12 | 8 | | | |
| 200 | 12 | 8 | | | |
| 320 | 12 | 8 | | | |
| 440 | 9 | 3 | | | |
| 560 | 2 | | | | |

Lead 6

| Orientation | Speed (mm/s) | Horizontal | | | Vertical |
|-------------|--------------|------------------|-----|-----|----------|
| | | Acceleration (G) | | | |
| | | 0.3 | 0.7 | 0.3 | 0.3 |
| 0 | 18 | 12 | | | 3 |
| 40 | 18 | 12 | | | 3 |
| 100 | 18 | 12 | | | 3 |
| 160 | 18 | 12 | | | 3 |
| 220 | 14 | 12 | | | 2 |
| 280 | 8 | 4 | | | |
| 340 | 1 | | | | |

Lead 3

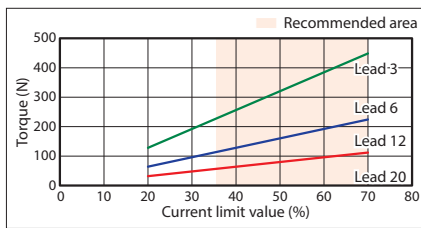
| Orientation | Speed (mm/s) | Horizontal | | | Vertical |
|-------------|--------------|------------------|-----|-----|----------|
| | | Acceleration (G) | | | |
| | | 0.3 | 0.7 | 0.3 | 0.3 |
| 0 | 23 | 20 | | | 8 |
| 20 | 23 | 20 | | | 8 |
| 50 | 23 | 20 | | | 8 |
| 80 | 23 | 20 | | | 8 |
| 110 | 18 | 12 | | | 6 |
| 140 | 12 | 8 | | | 3 |
| 170 | 8 | 4 | | | 1 |

Stroke and Max Speed (double slider specification)

| Lead | Nominal stroke | 200 | 250 | 300 | 350 | 400 |
|------|-----------------------|------------------|----------|----------|------|------|
| | | Effective stroke | 50 | 100 | 150 | 200 |
| (mm) | Energy-saving setting | (mm) | (mm) | (mm) | (mm) | (mm) |
| | | 12 | Disabled | 700 | | |
| | Enabled | 560 | | | | |
| 6 | Disabled | 450<340> | | 371<340> | | |
| | Enabled | 340<220> | | | | |
| 3 | Disabled | 225<200> | | 188 | | |
| | Enabled | 170 | | | | |

(Note) Values in brackets <> are for vertical use. (Unit: mm/s)
(Note) Nominal stroke: Stroke shown in the model number.
(Note) Effective stroke: Stroke available for actual operation.

Correlation between Torque and Current Limit (double slider specification)



(Note) Same values as single slider specification.

■ Dimensions (double slider specification)

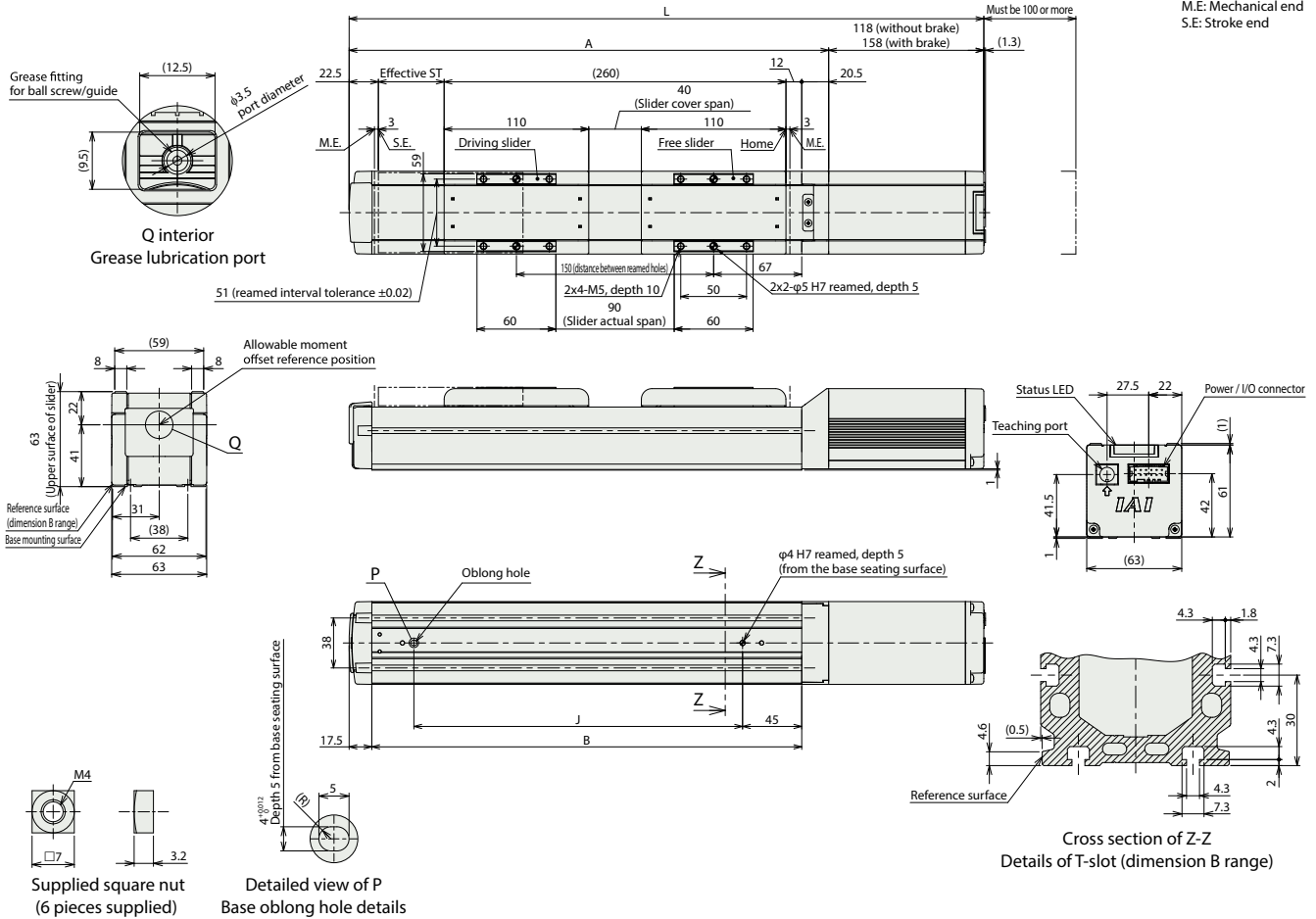
■ EC-(D)S6 (double slider specification)

CAD drawings can be downloaded from our website.
www.intelligentactuator.com



(Note) When the slider is returning to its home position, be careful of interference from surrounding objects, as it will travel until it reaches the M.E.
 (Note) External view of the motor differs for product with a digital speed controller.
 Refer to the external view for single slider with digital speed controller for details.
 (Note) Connect the slider according to the slider cover span or distance between reamed holes shown in the drawing.

ST: Stroke
M.E: Mechanical end
S.E: Stroke end



■ Dimensions by stroke

| | | 200 | 250 | 300 | 350 | 400 |
|---|------------------|-----|-----|-----|-----|-----|
| L | Nominal stroke | 200 | 250 | 300 | 350 | 400 |
| | Effective stroke | 50 | 100 | 150 | 200 | 250 |
| | Without brake | 483 | 533 | 583 | 633 | 683 |
| | With brake | 523 | 573 | 623 | 673 | 723 |
| A | | 365 | 415 | 465 | 515 | 565 |
| B | | 327 | 377 | 427 | 477 | 527 |
| J | | 250 | 300 | 350 | 400 | 450 |

■ Mass by stroke

| | | 200 | 250 | 300 | 350 | 400 | |
|-----------|----------------------------------|---------------|------|------|------|------|------|
| Mass (kg) | Nominal stroke | 200 | 250 | 300 | 350 | 400 | |
| | Effective stroke | 50 | 100 | 150 | 200 | 250 | |
| | Without digital speed controller | Without brake | 2.67 | 2.87 | 3.07 | 3.27 | 3.47 |
| | | With brake | 2.87 | 3.07 | 3.27 | 3.47 | 3.67 |
| | With digital speed controller | Without brake | 2.67 | 2.87 | 3.07 | 3.27 | 3.47 |
| | | With brake | 2.97 | 3.17 | 3.37 | 3.57 | 3.77 |

(Note) Mass is added by 0.27kg of additional slider to the single slider specification.

■ Applicable Controllers

(Note) EC series is equipped with a built-in controller. Please refer to P. 2-391 for details on built-in controllers.

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