

C4/C4H

Standard

Robot ordering method

| C4 - 12 - BK - 300 - 3L - ERCX - E | | Note 1 - B1 | | | | | | |
|------------------------------------|---------------------------------|--|------------------------|--|-----------------------|---|--|-----------------------------|
| Model | Lead designation | Brake | Stroke | Cable length | Applicable controller | Usable for CE | Network option | Battery |
| | -12: 12mm -6: 6mm -2: 2mm | No entry: No brakes BK: Brakes provided | 50 to 300 (50mm pitch) | -3L: 3.5m (Standard) -5L: 5m -10L: 10m | ERCX ERCD | No entry: Standard E: CE specification | No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet | -B1: 700mAh -B2: 2000mAh |

| C4H - 12 - BK - 300 - 3L - SR1-X-05 - E | | Note 1 - N - B | | | | | | | |
|---|---------------------------------|--|------------------------|--|-----------------------|--|---|---|---|
| Model | Lead designation | Brake | Stroke | Cable length | Applicable controller | Driver | Usable for CE | Inputs/Outputs selection | Battery |
| | -12: 12mm -6: 6mm -2: 2mm | No entry: No brakes BK: Brakes provided | 50 to 300 (50mm pitch) | -3L: 3.5m (Standard) -5L: 5m -10L: 10m | | -05: 100W or less -10: 200W -20: 400 to 600W | No entry: Standard E: CE specification | -N: NPN -P: PNP -CC: CC-Link -DN: DeviceNet -PB: Profibus -YC: YC-Link | No entry: None (fluoresent specification) -B: Battery (Absolute specification) |

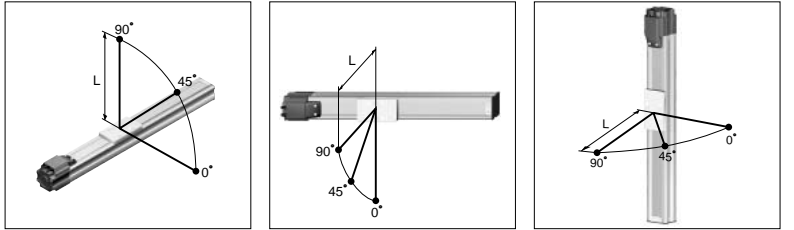
Note 1: It will be a customer's choice.
Note 2: Available only for the slave.

Basic specifications

| | | | |
|--------------------------------------|----------------------------|------------|------------|
| AC servo motor output (W) | 30 | | |
| Repeatability (mm) ^{Note 1} | +/-0.02 | | |
| Deceleration mechanism | Ball screw (Class C10) | | |
| Ball screw lead (mm) | 12 | 6 | 2 |
| Maximum speed (mm/sec) | 720 | 360 | 120 |
| Maximum payload (kg) | Horizontal | 4.5 | 6 |
| | Vertical | 1.2 | 2.4 |
| Rated thrust (N) | Horizontal | 64 | 153 |
| | Vertical | 32 | 64 |
| Stroke (mm) | 50 to 300 (50 pitch) | | |
| Cable length (m) | 3.5 (Standard), 5, 10 | | |
| Controller | C4 | Horizontal | ERCX, ERCD |
| | | Vertical | |
| | C4H | Horizontal | SR1-X-05 |
| | | Vertical | |
| Degree of cleanliness | CLASS 10 ^{Note 2} | | |
| Intake air (ℓ/min) | 20 to 30 ^{Note 3} | | |

Note 1: Repeatability for single oscillation.
Note 2: Per 1cf (0.1μm base), when the suction blower is used.
Note 3: The necessary intake amount varies depending on the use conditions and environment.
Note 4: Please consult YAMAHA when using the specification with the origin positioned on the other side of the motor.

Tolerable overhang amount ^{Note}



| During horizontal use (Unit: mm) | | During wall installation use (Unit: mm) | | During vertical use (Unit: mm) | | | | | |
|----------------------------------|-------|---|-----|--------------------------------|----------|----------|-------|-----|-----|
| | | 0° | 45° | 90° | | 0° | 45° | 90° | |
| Lead 1/2 | 2kg | 140 | 165 | 250 | Lead 1/2 | 2kg | 200 | 140 | 110 |
| | 4.5kg | 65 | 85 | 130 | | Lead 1/2 | 4.5kg | 100 | 50 |
| Lead 6 | 3kg | 220 | 235 | 450 | Lead 6 | | 3kg | 360 | 185 |
| | 6kg | 90 | 130 | 180 | | Lead 6 | 6kg | 140 | 70 |
| Lead 2 | 3kg | 220 | 305 | 750 | Lead 2 | | 3kg | 600 | 240 |
| | 6kg | 115 | 160 | 500 | | Lead 2 | 6kg | 400 | 80 |

Note: Distance from center of slider top to center of gravity of object being transported.

Direction of air coupler for suction installation

| Effective stroke | 50 | 100 | 150 | 200 | 250 | 300 |
|-------------------------------|-----|-----|-----|-----|-----|-----|
| A | 4 | 6 | 6 | 8 | 8 | 10 |
| B | 1 | 2 | 2 | 2 | 2 | 3 |
| C | 150 | 100 | 125 | 125 | 125 | 125 |
| E | 0 | 0 | 0 | 50 | 100 | 25 |
| L0 | 255 | 305 | 355 | 405 | 455 | 505 |
| L1 | 290 | 340 | 390 | 440 | 490 | 540 |
| S | 70 | 120 | 170 | 220 | 270 | 320 |
| Weight (kg) ^{Note 4} | 1.3 | 1.4 | 1.6 | 1.7 | 1.8 | 2.0 |

Note 1: Length from both ends to mechanical stopper position.
Note 2: Either right or left can be selected for the installation direction for the 6 intake air joint.
Note 3: The minimum bend radius of the motor cable is R50.
Note 4: This is the weight of the model without a brake.
The weight of the model equipped with a brake is 0.1kg heavier than this value.