

# C4

Standard

## Robot ordering method

C4 - 12 - BK - 300 - 3L - ERCX - E - B

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

Note: It will be a customer's choice.

### Basic specifications

AC servo motor output (W)	30		
Repeatability (mm) <sup>Note 1</sup>	+/-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)	32	64	153
Stroke (mm)	50 to 300 (50 pitch)		
Cable length (m)	3.5 (Standard), 5, 10		
Controller	Horizontal	ERCX, ERCD	
	Vertical	ERCX, ERCD	
Degree of cleanliness	CLASS 10 <sup>Note 2</sup>		
Intake air (ℓ/min)	20 to 30 <sup>Note 3</sup>		

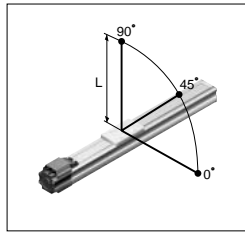
Note 1: Repeatability for single oscillation.

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.

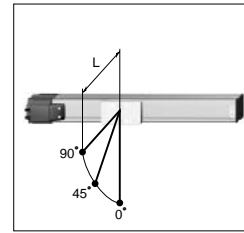
Note 4: Please consult YAMAHA when using the specification with the origin positioned on the other side of the motor.

### Tolerable overhang amount<sup>Note</sup>



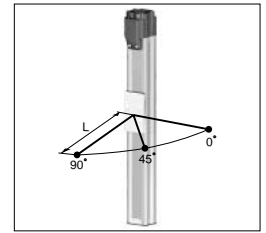
During horizontal use (Unit: mm)

	0°	45°	90°
Lead 12	2kg: 140	2kg: 165	2kg: 250
Lead 6	4.5kg: 65	4.5kg: 85	4.5kg: 130
Lead 2	3kg: 220	3kg: 235	3kg: 450
Lead 2	6kg: 90	6kg: 130	6kg: 180
Lead 2	3kg: 220	3kg: 305	3kg: 750
Lead 2	6kg: 115	6kg: 160	6kg: 500



During wall installation use (Unit: mm)

	0°	45°	90°
Lead 12	2kg: 200	2kg: 140	2kg: 110
Lead 6	4.5kg: 100	4.5kg: 50	4.5kg: 50
Lead 2	3kg: 360	3kg: 185	3kg: 150
Lead 2	6kg: 140	6kg: 70	6kg: 55
Lead 2	3kg: 600	3kg: 240	3kg: 170
Lead 2	6kg: 400	6kg: 80	6kg: 60



During vertical use (Unit: mm)

	0°	45°	90°
Lead 12	1.2kg: 100	1.2kg: 75	1.2kg: 115
Lead 6	2.4kg: 60	2.4kg: 45	2.4kg: 70
Lead 2	3kg: 45	3kg: 35	3kg: 55
Lead 2	7.2kg: 8	7.2kg: 6	7.2kg: 10

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) <sup>Note 4</sup>	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.