C4L

● Origin on the non-motor side is selectable

Ordering method

C4L – [ ] – [ ] – [ ] – [ ] – [ ] – [ ] – ERCD – [ ]

Model	Lead designation	Brake	Direction of air coupler installation	Origin position change	Stroke	Cable length Note 1	Controller	I/O connector specification
	12: 12mm 6: 6mm 2: 2mm	No entry: With no brake BK: With brake	LJ: Left (Standard) RJ: Right	None: Standard Z: Non-motor side	50 to 400 (50mm pitch)	1K: 1m 3K: 3.5m 5K: 5m 10K: 10m		CN1: I/O flat cable 1m (Standard) CN2: Twisted-pair cable 2m (pulse train function)

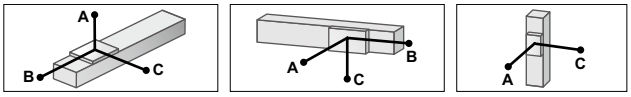
Note 1. The robot cable is flexible and resists bending. See P.732 for details on robot cable.

Basic specifications

AC servo motor output (W)		30		
Repeatability Note 1 (mm)		+/-0.02		
Deceleration mechanism		Ball screw ϕ8		
Ball screw lead (mm)		12	6	2
Maximum speed (mm/sec)		720	360	120
Maximum payload (kg)	Horizontal	4.5	6	6
	Vertical	1.2	2.4	7.2
Rated thrust (N)		32	64	153
Stroke (mm)		50 to 400 (50mm pitch)		
Overall length (mm)	Horizontal	Stroke+205		
	Vertical	Stroke+243		
Maximum outside dimension of body cross-section (mm)		W45×H55		
Cable length (m)		Standard: 3.5 / Option: 1,5, 10		
Degree of cleanliness		ISO CLASS 3 (ISO14644-1) Note 2		
Intake air (Nℓ/min) Note 3		50	30	15

Note 1. Positioning repeatability in one direction.
Note 2. CLASS 10 (0.1μm) FED-STD-209D or equivalent when a suction blower is used.
Note 3. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang Note



Horizontal installation (Unit: mm)

		A	B	C
Lead 12	2kg	429	87	179
	4.5kg	219	32	74
Lead 6	3kg	511	58	135
	6kg	336	26	62
Lead 2	3kg	1571	58	142
	6kg	751	27	66

Wall installation (Unit: mm)

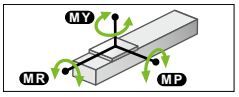
		A	B	C
Lead 12	2kg	145	52	368
	4.5kg	46	0	139
Lead 6	3kg	103	22	370
	6kg	27	0	185
Lead 2	3kg	109	23	1150
	6kg	27	0	420

Vertical installation (Unit: mm)

		A	C
Lead 12	1.2kg	121	122
Lead 6	2.4kg	52	54
Lead 2	3kg	37	39
	7.2kg	0	0

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 300mm stroke models.

Static loading moment



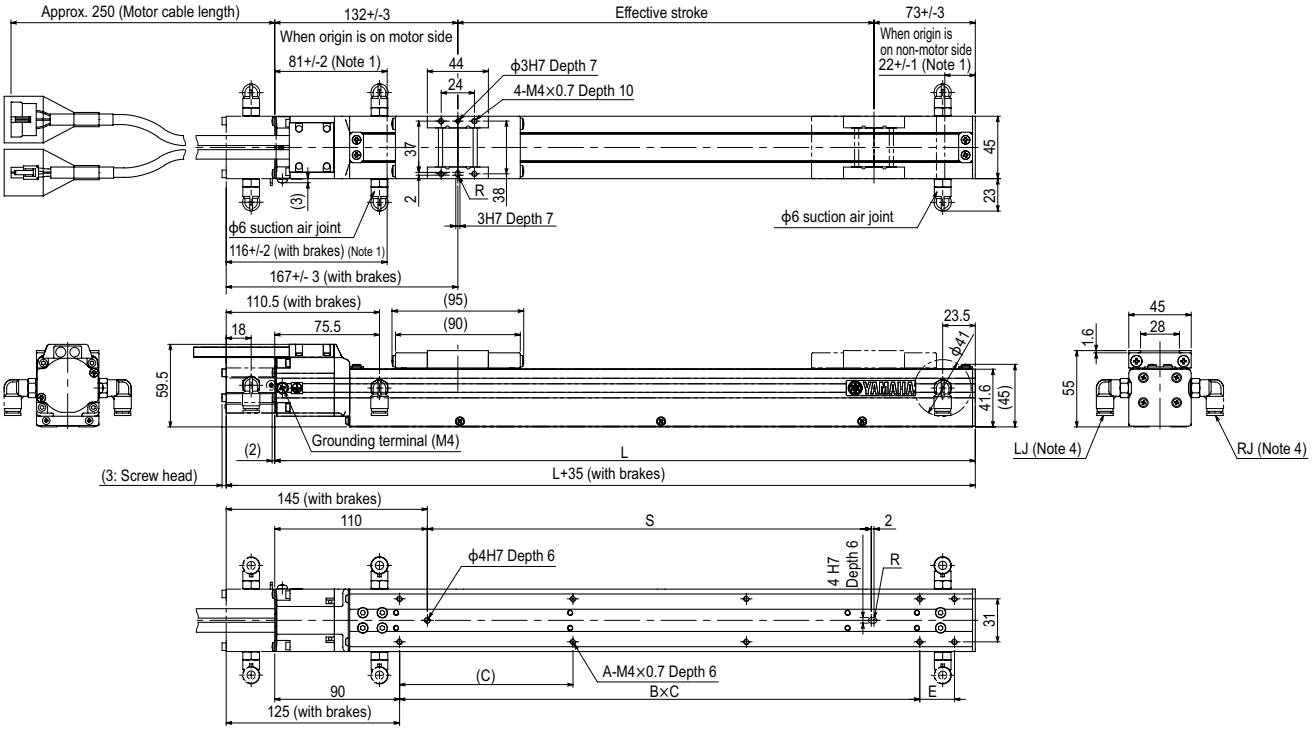
(Unit: N·m)

MY	MP	MR
15	19	18

Controller

Controller	Operation method
ERCD	Pulse train control / Programming / I/O point trace / Remote command / Operation using RS-232C communication

C4L



Effective stroke	50	100	150	200	250	300	350	400
L	255	305	355	405	455	505	555	605
A	4	6	6	8	8	10	10	10
B	1	2	2	2	2	3	3	4
C	150	100	125	125	125	125	125	125
E	0	0	0	50	100	25	75	0
S	70	120	170	220	270	320	370	420
Weight (kg) Note 3	1.4	1.5	1.7	1.8	2	2.1	2.3	2.4
Maximum speed for each stroke (mm/sec) Lead 12	720							
Lead 6	360							
Lead 2	120							

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Minimum bend radius of motor cable is R30.
Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
Note 4. Either right or left can be selected for the installation direction for the ϕ6 intake air joint. (The left side is the standard.)
Note 5. External view of C4LH is identical to C4L.