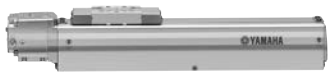
C5L

- High lead: Lead 20
- Origin on the non-motor side is selectable



Ordering method

C5L							ERCD	
Model	Lead designation	Brake Note 1	Direction of air coupler installation	Origin position change	Stroke	Cable length Note 2	Controller	I/O connector specification
	20: 20mm 12: 12mm 6: 6mm	No entry: With no brake BK: With brake	LJ: Left (Standard) RJ: Right	None: Standard Z: Non-motor side	50 to 800 (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)

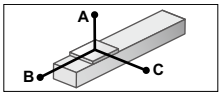
Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
Note 2. The robot cable is flexible and resists bending. See P.692 for details on robot cable.

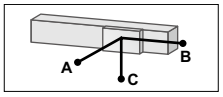
Basic specifications

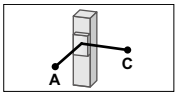
AC servo motor output (W)		30		
Repeatability Note 1 (mm)		+/-0.02		
Deceleration mechanism		Ball screw φ12		
Ball screw lead (mm)		20	12	6
Maximum speed (mm/sec)		1000	800	400
Maximum payload (kg)	Horizontal	3	5	9
	Vertical	-	1.2	2.4
Rated thrust (N)		19	32	64
Stroke (mm)		50 to 800 (50mm pitch)		
Overall length (mm)	Horizontal	Stroke+201.5		
	Vertical	Stroke+239.5		
Maximum outside dimension of body cross-section (mm)		W55×H65		
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		80	50	30

Note 1. Positioning repeatability in one direction.
Note 2. When 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 20	1kg	1584	324	745
	3kg	699	104	251
	2kg	1166	159	406
Lead 12	5kg	551	59	155
	3kg	1194	104	294
Lead 6	9kg	624	31	89

Wall installation (Unit: mm)

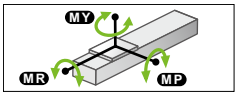
		A	B	C
Lead 20	1kg	679	303	1505
	3kg	215	87	605
	2kg	364	126	1073
Lead 12	5kg	123	28	438
	3kg	259	72	354
Lead 6	9kg	50	0	154

Vertical installation (Unit: mm)

		A	C
Lead 12	1.2kg	246	245
Lead 6	2.4kg	110	110

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 600mm stroke models.

Static loading moment



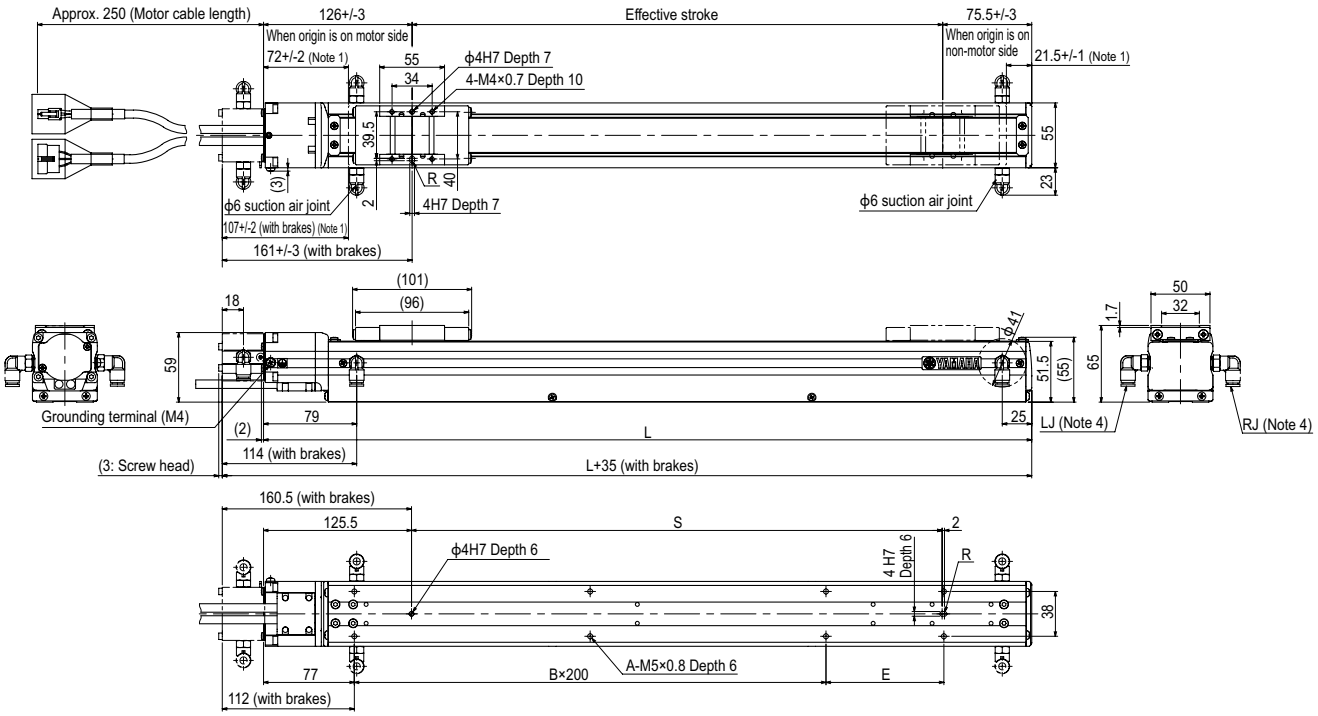
(Unit: N·m)

MY	MP	MR
30	34	40

Controller

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

C5L



Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	251.5	301.5	351.5	401.5	451.5	501.5	551.5	601.5	651.5	701.5	751.5	801.5	851.5	901.5	951.5	1001.5
A	4	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12
B	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
E	100	200	200	100	100	200	200	100	100	200	200	100	100	200	200	100
S	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Weight (kg) Note 3	1.7	2.0	2.2	2.5	2.7	3.0	3.2	3.4	3.7	3.9	4.2	4.4	4.7	4.9	5.1	5.4
Maximum speed for each stroke Note 5 (mm/sec) Lead 20	1000													900	800	700
Speed setting	-													90%	80%	70%
Lead 12	800												640	560	480	440
Lead 6	400												320	280	240	220
Speed setting	-												80%	70%	60%	55%

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. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
Note 6. External view of C5LH is identical to C5L.

Controller ERCD ▶ 612