

C5L

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

Ordering method

C5L							ERCD	
Model	Lead designation 20: 20mm 12: 12mm 6: 6mm	Brake ^{Note 1} No entry: With no brake BK: With brake	Direction of air coupler installation L: Left (Standard) R: Right	Origin position change None: Standard Z: Non-motor side	Stroke 50 to 800 (50mm pitch)	Cable length ^{Note 2} 1L: 1m 3L: 3.5m 5L: 5m 10L: 10m 1K/3K/5K/10K (Flexible cable)	Controller	I/O connector specification 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 standard cable (1L/3L/5L/10L), but can be changed to flexible cable.
 See P.594 for details on robot cable.

Basic specifications

AC servo motor output (W)	30
Repeatability ^{Note 1} (mm)	+/- 0.02
Deceleration mechanism	Ball screw $\phi 12$ (Class C10)
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+236.5
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. CLASS 10 (0.1 μ m) 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

Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)	
	A	B	C	A	B	C	A	C
Lead 20	1584	324	745	679	303	1505	1.2kg	245
Lead 12	699	104	251	215	87	605	2.4kg	110
Lead 6	1166	159	406	364	126	1073		
Lead 20	551	59	155	123	28	438		
Lead 12	1194	104	294	3kg	259	72	354	
Lead 6	624	31	89	9kg	50	0	154	

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.

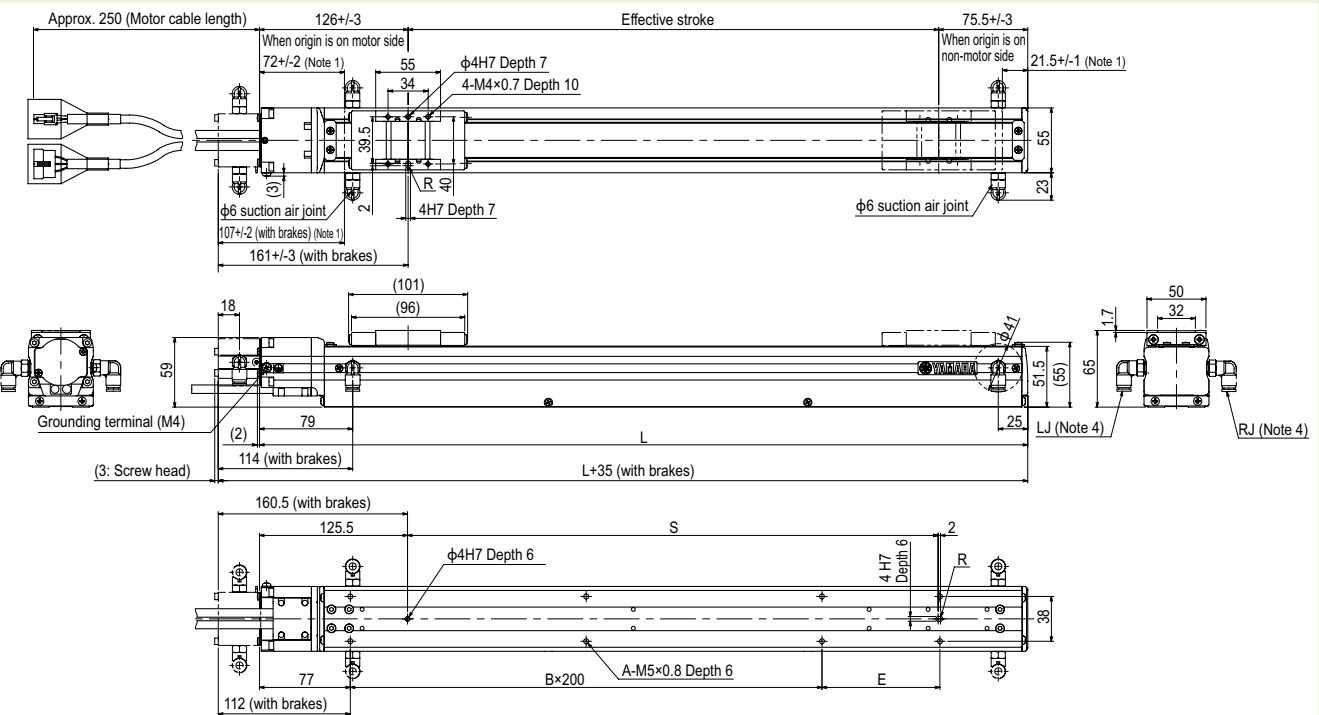
Static loading moment

(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 (mm/sec) ^{Note 5}	1000															
Lead 20	90%															
Lead 12	80%															
Lead 6	70%															
Speed setting	-															
	800															
	400															
	-															
	640															
	560															
	480															
	440															
	320															
	280															
	240															
	220															
	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 $\phi 6$ 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.