



C5L

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

Ordering method

C5L

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} 1K: 1m 3K: 3.5m 5K: 5m 10K: 10m	ERCD	Controller	I/O connector specification CN1: I/O flat cable 1m (Standard) CN2: Twisted-pair cable 2m (pulse train function)
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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.596 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	Vertical	
	3	5	9
	-	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 (0.1μm) 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

Installation	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
Lead 20	1kg	1584	324	745	1kg	679	303	1505	
	3kg	699	104	251	3kg	215	87	605	
	2kg	1166	159	406	2kg	364	126	1073	
Lead 12	5kg	551	59	155	5kg	123	28	438	
	3kg	1194	104	294	3kg	259	72	354	
	9kg	624	31	89	9kg	50	0	154	
Lead 6	2kg	1166	159	406	2kg	364	126	1073	
	5kg	551	59	155	5kg	123	28	438	

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.

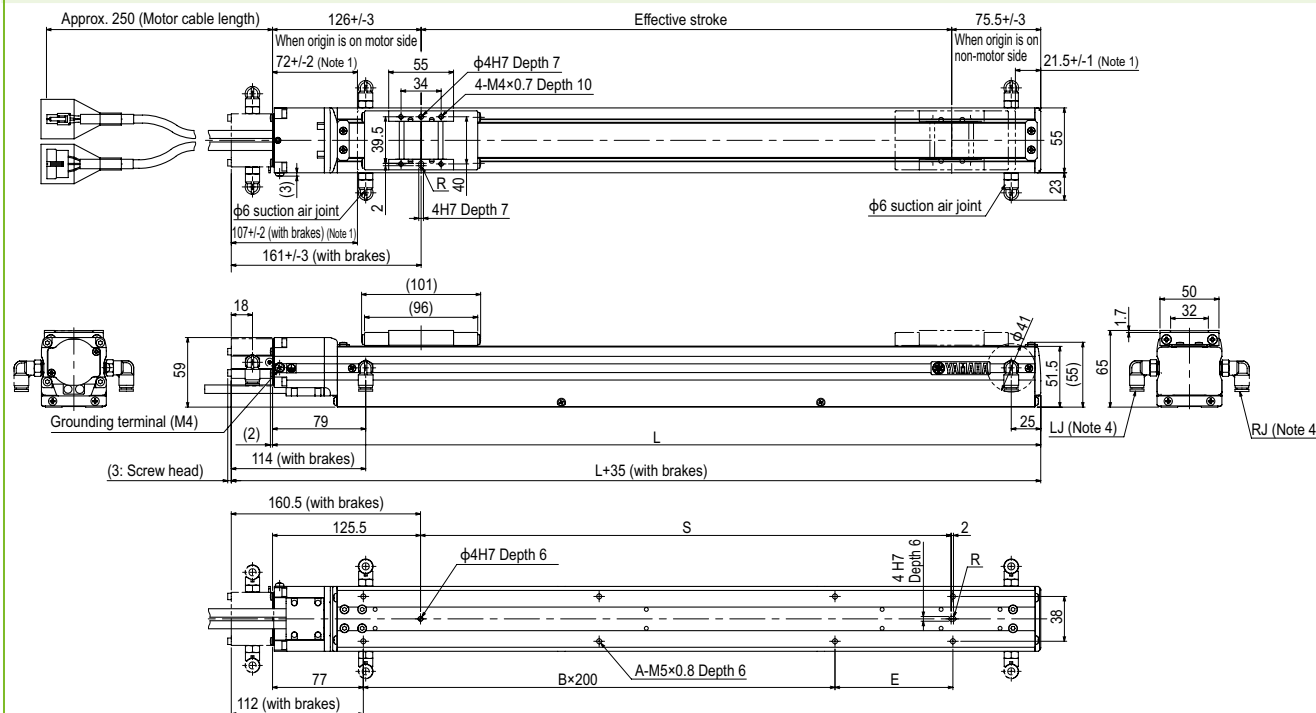
Static loading moment

Moment	Static loading moment (Unit: N·m)	
	MY	MP
1.2kg	246	245
2.4kg	110	110

Controller

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

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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
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	-														
Speed setting	Lead 12	800														
	Lead 6	400														
Speed setting	Lead 20	90%														
	Lead 12	80%														
Speed setting	Lead 6	70%														
	Lead 20	80%														
Speed setting	Lead 12	70%														
	Lead 6	60%														

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.