

C5L

● High lead: Lead 20

● Origin at non-motor side



Ordering method

C5L							ERCD	
Model	Lead designation 20: 20mm 12: 12mm 6: 6mm	Brake 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 1} 3L: 3.5m 5L: 5m 10L: 10m 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 robot cable is standard cable (3L/5L/10L), but can be changed to flexible 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
	Vertical	-	1.2
Rated thrust (N)	Horizontal	19	32
	Vertical	64	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×H52		
Cable length (m)	Standard: 3.5 / Option: 5, 10		
Degree of cleanliness	CLASS 3 ^{Note 2}		
Intake air (N ℓ /min) ^{Note 3}	80	50	30

Note 1. Positioning repeatability in one direction.

Note 2. Per 1cf (0.1 μ m base), when suction blower is used.

Note 3. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang ^{Note}

Installation	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)	
	A	B	C	A	B	C	A	C
Horizontal installation (Unit: mm)	1kg	1584	324	745	1kg	679	303	1505
	3kg	699	104	251	3kg	215	87	605
	2kg	1166	159	406	2kg	364	126	1073
Wall installation (Unit: mm)	5kg	551	59	155	5kg	123	28	438
	3kg	1194	104	294	3kg	259	72	354
	9kg	624	31	89	9kg	50	0	154
Vertical installation (Unit: mm)	1.2kg	246	245					
	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.

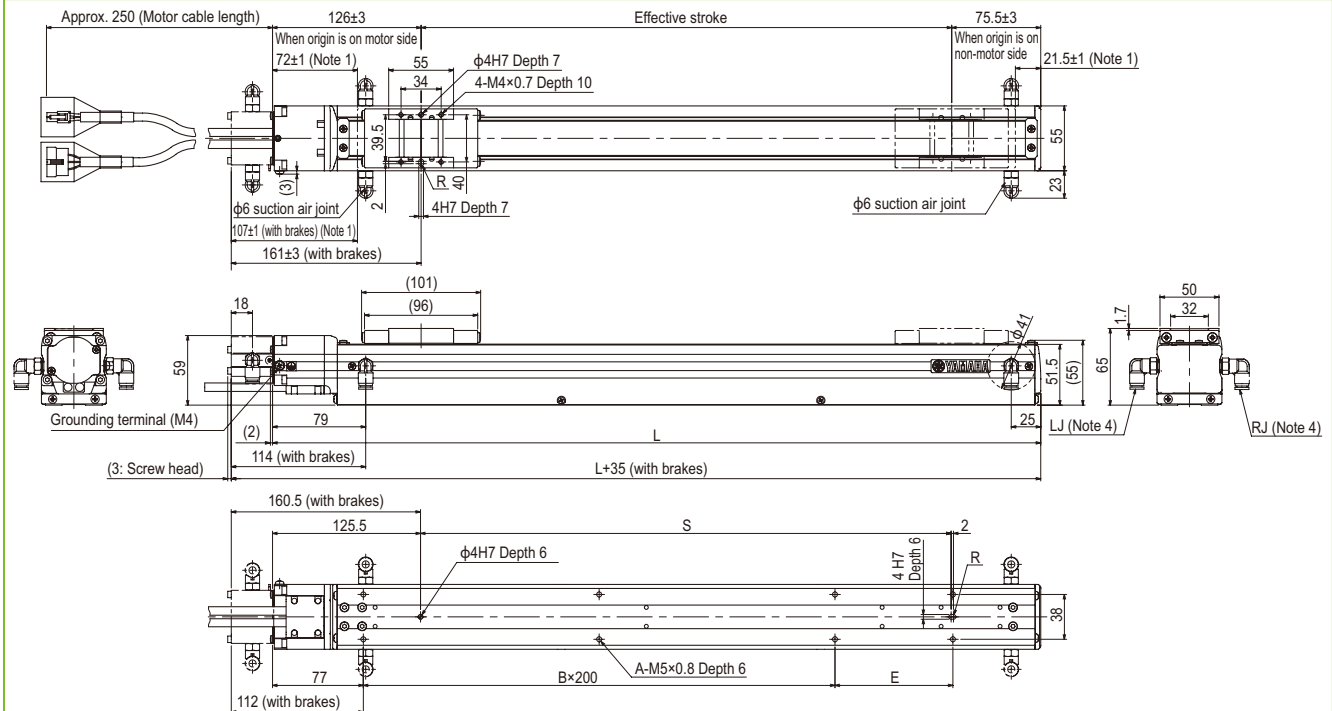
Static loading moment

(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
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														
	Lead 12	800														
	Lead 6	400														
	Speed setting	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

Note1. Distance from both ends to the mechanical stopper.

Note2. Minimum bend radius of motor cable is R30.

Note3. 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.

Note4. Either right or left can be selected for the installation direction for the $\phi 6$ intake air joint. (The left side is the standard.)

Note5. 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.

Note6. External view of C5LH is identical to C5L.