C6L

- High lead: Lead 20
- Origin at non-motor side

Ordering method

C6L - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - **TSX** [ ] - [ ] - [ ] - [ ]

Model	Lead designation	Brake	Direction of air coupler installation	Origin position change	Stroke	Cable length Note 1
	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)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

Positioner	Driver: Power-supply voltage / Power capacity	LCD monitor	I/O selection	Battery
TS-X	105: 100V/100W or less 205: 200V/100W or less	No entry: None L: With LCD	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet	B: With battery (Absolute) N: None (Incremental)

SR1-X - **05** [ ] - [ ] - [ ]

Controller	Driver: Power capacity	Usable for CE	I/O selection	Battery
	05: 100W or less	No entry: Standard E: CE marking	N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus	B: With battery (Absolute) N: None (Incremental)

RDX - **05** - **RBR1**

Driver	Driver: Power capacity	Regenerative unit
	05: 100W or less	

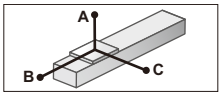
Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable.

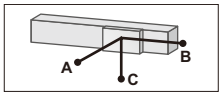
Basic specifications

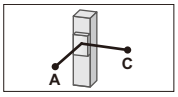
AC servo motor output (W)		60		
Repeatability Note 1 (mm)		+/-0.02		
Deceleration mechanism		Ball screw ϕ12 (Class C10)		
Ball screw lead (mm)		20	12	6
Maximum speed (mm/sec)		1000	800	400
Maximum payload (kg)	Horizontal	10	12	30
	Vertical	-	4	8
Rated thrust (N)		51	85	170
Stroke (mm)		50 to 800 (50mm pitch)		
Overall length (mm)	Horizontal	Stroke+247.5		
	Vertical	Stroke+282.5		
Maximum outside dimension of body cross-section (mm)		W65×H56		
Cable length (m)		Standard: 3.5 / Option: 5, 10		
Degree of cleanliness		CLASS 3 Note 2		
Intake air (Nℓ/min) Note 3		80	50	30

Note 1. Positioning repeatability in one direction.
Note 2. Per 1cf (0.1μm base), 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	2kg	433	192	295
	6kg	145	59	104
	10kg	110	33	75
Lead 12	3kg	622	125	336
	8kg	271	41	121
	12kg	214	24	76
Lead 6	5kg	692	73	236
	10kg	372	33	109
	30kg	157	0	25

Wall installation (Unit: mm)

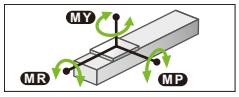
		A	B	C
Lead 20	2kg	300	174	365
	6kg	83	44	105
	10kg	43	18	71
Lead 12	3kg	291	96	317
	8kg	87	13	110
	12kg	41	0	126
Lead 6	5kg	202	45	237
	10kg	70	5	97
	30kg	0	0	0

Vertical installation (Unit: mm)

		A	C
Lead 12	1kg	353	351
	2kg	163	164
	4kg	68	70
Lead 6	2kg	169	170
	4kg	71	73
	8kg	21	24

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



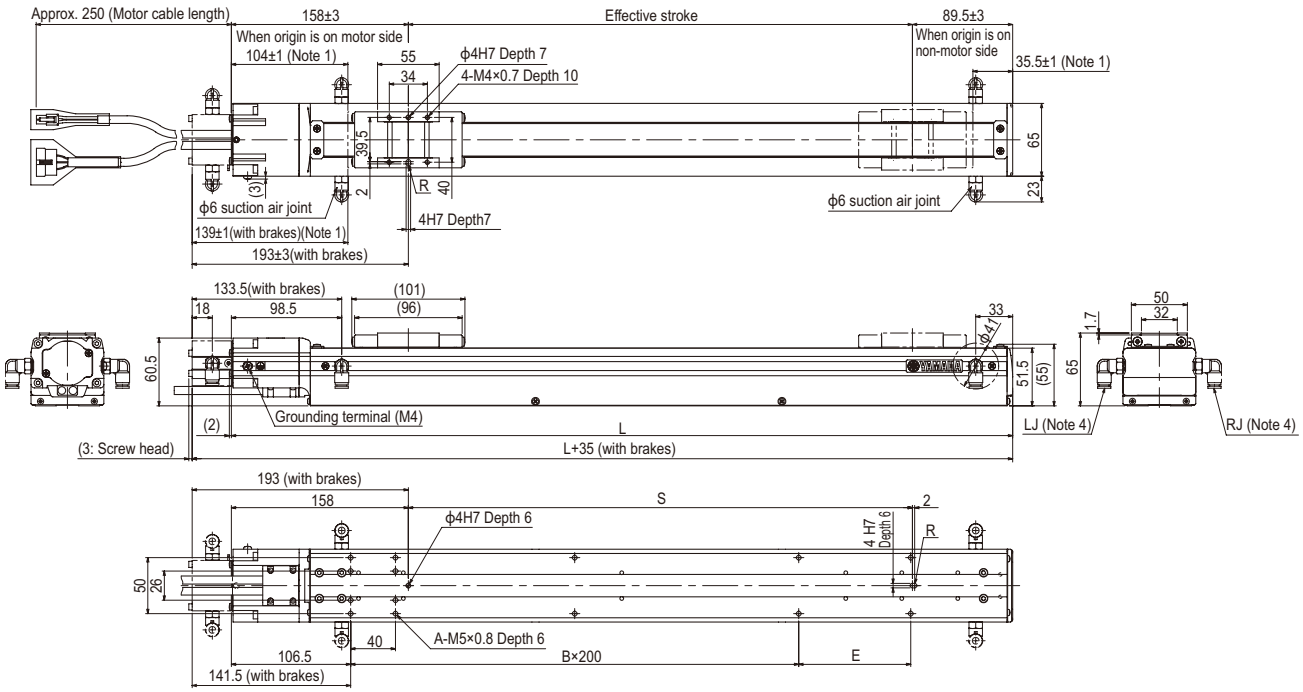
(Unit: N·m)

MY	MP	MR
35	40	50

Controller

Controller	Operation method
SR1-X05	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X105 TS-X205	I/O point trace / Remote command
RDX-05-RBR1	Pulse train control

C6L



Effective stroke		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L		297.5	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	847.5	897.5	947.5	997.5	1047.5
A		10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
B		0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
E		150	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		2.6	2.9	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.4	5.7	6.0	6.3	6.6	6.8
Maximum speed for each stroke Note 5 (mm/sec)	Lead 20	1000													900	800	700
	Speed setting	-													90%	80%	70%
	Lead 12	800												680	600	520	480
	Lead 6	400												340	300	260	240
	Speed setting	-												85%	75%	65%	60%

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 ϕ6 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.