

T6L

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



Ordering method

T6L	Model	Lead designation 20: 20mm 12: 12mm 6: 6mm	Brake No entry: No brakes BK: Brakes provided	Origin position change None: Standard Z: Non-motor side	Grease type None: Standard GC: Clean	Stroke 50 to 800 (50mm pitch)	Cable length ^{Note 1} 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	TSX	Positioner TS-X	Driver: Power supply voltage / Power capacity 105: 100V/100W or less 205: 200V/100W or less	LCD monitor No entry: None L: With LCD	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet	Battery B: With battery (Absolute) N: None (Incremental)
								SR1-X	Controller	Driver: Power capacity 05: 100W or less	Usable for CE No entry: Standard E: CE marking	I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus	Battery B: With battery (Absolute) N: None (Incremental)
								RDX	Driver	Driver: Power capacity 05: 100W or less	Regenerative unit RBR1		

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

Specifications

AC servo motor output (W)	60
Repeatability ^{Note 1} (mm)	+/-0.02
Deceleration mechanism	Ball screw $\phi 12$ (Class C10)
Ball screw lead (mm)	20 12 6
Maximum speed ^{Note 2} (mm/sec)	1333 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+285.5
Maximum dimensions of cross section of main unit (mm)	W65×H56
Cable length (m)	Standard: 3.5 / Option: 5,10
Linear guide type	2 rows of gothic arch grooves × 1 rail
Position detector	Resolvers ^{Note 3}
Resolution (Pulse/rotation)	16384

Note 1. Positioning repeatability in one direction.
 Note 2. 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 below.
 Note 3. Position detectors (resolvers) are common to incremental and absolute specifications. If the controller has a backup function then it will be absolute specifications.

Allowable overhang ^{Note}

Installation	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
Lead 20	2kg 319	184	234	2kg 234	152	265	1kg 355	352	
6kg	98	37	77	6kg 61	13	71	2kg 165	165	
10kg	64	0	55	10kg 30	0	42	4kg 70	72	
Lead 12	3kg 624	125	335	3kg 293	96	510	2kg 171	172	
8kg	273	41	121	8kg 89	14	210	4kg 73	74	
12kg	216	24	77	12kg 43	0	130	8kg 23	26	
Lead 6	5kg 694	73	236	5kg 204	45	530			
10kg	374	33	109	10kg 72	0	245			
30kg	159	0	25	30kg 0	0	0			

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.

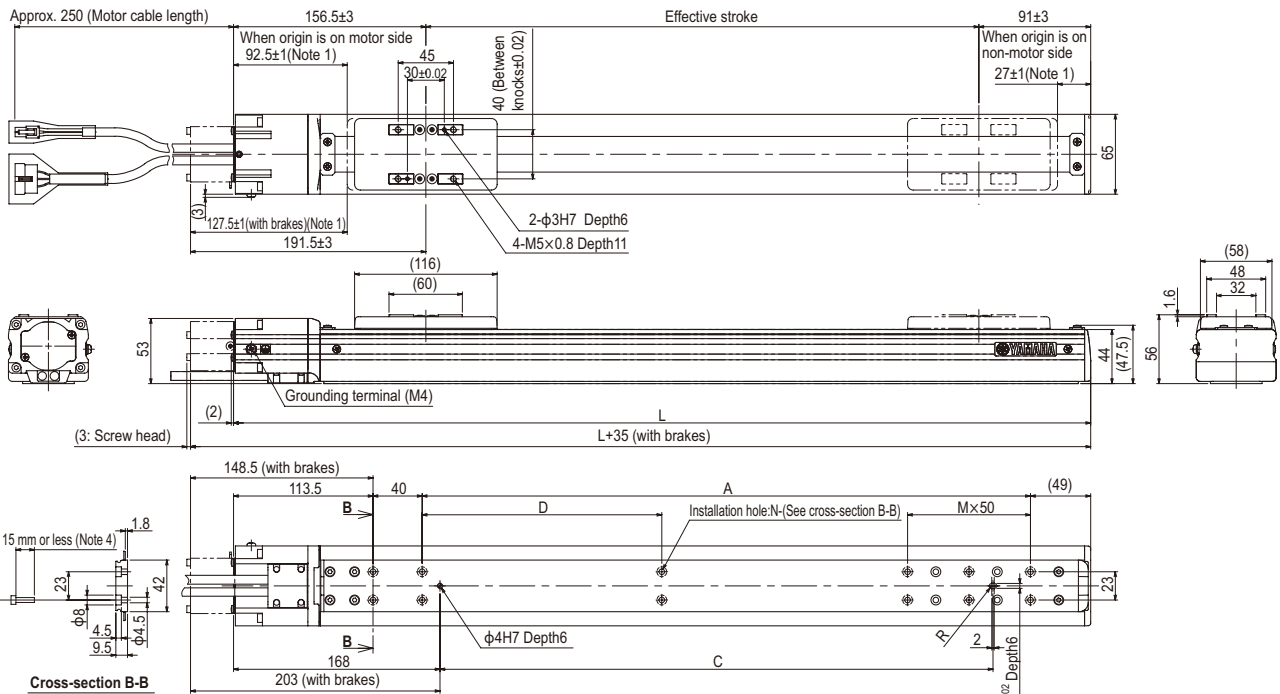
Static loading moment

	MY	MP	MR
(Unit: N·m)	35	40	50

Controller

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

T6L



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	95	145	195	245	295	345	395	445	495	545	595	645	695	745	795	845		
C	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
D	-	-	-	-	-	-	195	195	195	195	195	195	195	195	195	195		
M	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9		
N	6	8	10	12	14	16	8	10	12	14	16	18	20	22	24	26		
Weight (kg) ^{Note 3}	2.4	2.6	2.8	3.1	3.3	3.5	3.7	4.0	4.2	4.4	4.6	4.8	5.1	5.3	5.5	5.7		
Maximum speed for each stroke ^{Note 5} (mm/sec)	1333						800						400					
Speed setting	-						85%						75%					

Note 1. Distance from both ends to the mechanical stopper.
 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. The under-head length of the hex socket-head bolt (M4×0.7) to be used for the installation work is 15mm or less.
 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.