

# T6L

- High lead: Lead 20
- Origin on the non-motor side is selectable
- Controller: 100V / 200V



## Ordering method

<b>T6L</b>	<b>Model</b>	<b>Lead designation</b> 20: 20mm 12: 12mm 6: 6mm	<b>Brake</b> <sup>Note 1</sup> No entry: No brakes BK: Brakes provided	<b>Origin position change</b> None: Standard Z: Non-motor side	<b>Grease type</b> None: Standard GC: Clean	<b>Stroke</b> 50 to 800 (50mm pitch)	<b>Cable length</b> <sup>Note 3</sup> 3L: 3.5m 5L: 5m 10L: 10m 5K/5K/10K (Flexible cable)	<b>TSX</b>	<b>Positioner</b> <sup>Note 3</sup> TS-X	<b>Driver: Power-supply voltage / Power capacity</b> 105: 100V/100W or less 205: 200V/100W or less	<b>LCD monitor</b> No entry: None L: With LCD	<b>I/O selection</b> NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)		
								<b>SR1-X</b>	<b>Controller</b>	<b>05</b>	<b>Driver: Power capacity</b> 05: 100W or less	<b>Usable for CE</b> No entry: Standard E: CE marking	<b>I/O selection</b> N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)	
								<b>RDV-X</b>	<b>Driver</b>	<b>2</b>	<b>Power-supply voltage</b> 2: AC200V	<b>05</b>	<b>Driver: Power capacity</b> 05: 100W or less	<b>RBR1</b>	<b>Regenerative unit</b>

Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).  
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.594 for details on robot cable.  
 Note 3. See P.498 for DIN rail mounting bracket.  
 Note 4. Select this selection when using the gateway function. For details, see P.60.

## Specifications

<b>AC servo motor output (W)</b>	60
<b>Repeatability</b> <sup>Note 1</sup> (mm)	+/-0.02
<b>Deceleration mechanism</b>	Ball screw $\phi 12$ (Class C10)
<b>Ball screw lead (mm)</b>	20 12 6
<b>Maximum speed</b> <sup>Note 2</sup> (mm/sec)	1333 800 400
<b>Maximum payload (kg)</b>	<b>Horizontal</b> 10 12 30 <b>Vertical</b> - 4 8
<b>Rated thrust (N)</b>	51 85 170
<b>Stroke (mm)</b>	50 to 800 (50mm pitch)
<b>Overall length (mm)</b>	<b>Horizontal</b> Stroke+247.5 <b>Vertical</b> Stroke+285.5
<b>Maximum dimensions of cross section of main unit (mm)</b>	W65×H56
<b>Cable length (m)</b>	Standard: 3.5 / Option: 5,10
<b>Linear guide type</b>	2 rows of gothic arch grooves × 1 rail
<b>Position detector</b>	Resolvers <sup>Note 3</sup>
<b>Resolution (Pulse/rotation)</b>	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

Installation	Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)				
		A	B	C	A	B	C	A	B	C		
Horizontal	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
Wall	20	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
Vertical	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.

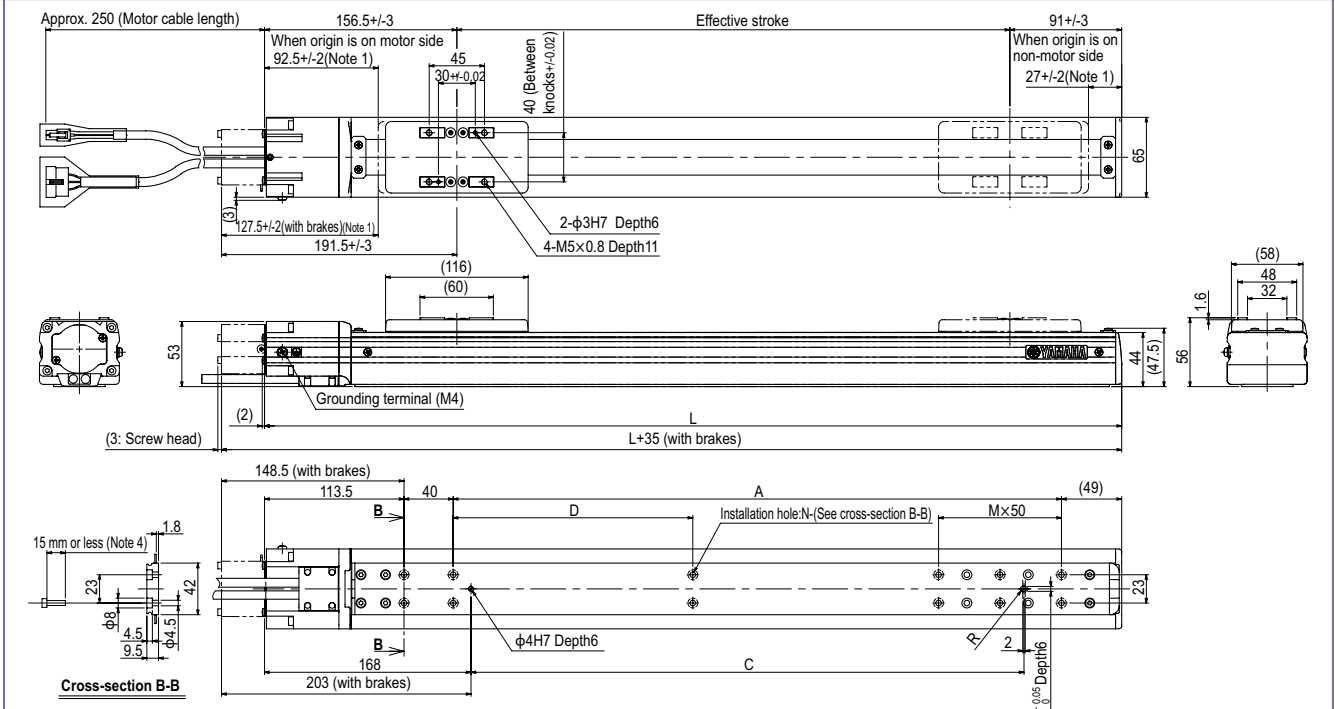
## Static loading moment

Direction	Value (Unit: N·m)
MY	35
MP	40
MR	50

## Controller

Controller	Operation method
SR1-X05	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX221/222	
RCX240/340	
TS-X105	I/O point trace / Remote command
TS-X205	
RDV-X205-RBR1	Pulse train control

## T6L



Effective stroke	Stroke (mm)															
	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) <sup>Note 3</sup>	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 <sup>Note 5</sup> (mm/sec)	Lead 20	1333														
	Lead 12	800														
	Lead 6	400														
	Speed setting	85% 75% 65% 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. The under-head length of the hex socket-head bolt (M4x0.7) 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.