

T5L

- High lead: Lead 20
- Origin on the non-motor side is selectable
- Controller: 24V



Ordering method

T5L							ERCD	
Model	Lead designation	Brake ^{Note 1}	Origin position change	Grease type	Stroke	Cable length ^{Note 2}	Controller	I/O connector specification
	20: 20mm 12: 12mm 6: 6mm	No entry: No brakes BK: Brakes provided	None: Standard Z: Non-motor side	None: Standard GC: Clean	50 to 800 (50mm pitch)	1K: 1m 3K: 3.5m 5K: 5m 10K: 10m		CN1: I/O flat cable 1m (Standard) CN2: Twisted-pair cable 2m (pulse train function)

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.614 for details on robot cable.

Specifications

AC servo motor output (W)	30
Repeatability ^{Note 1} (mm)	+/-0.02
Deceleration mechanism	Ball screw $\phi 12$
Ball screw lead (mm)	20 12 6
Maximum speed ^{Note 2} (mm/sec)	1200 800 400
Maximum payload (kg)	Horizontal 3 5 9 Vertical - 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+239.5
Maximum dimensions of cross section of main unit (mm)	W55×H52
Cable length (m)	Standard: 3.5 / Option: 1.5, 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}

Horizontal installation (Unit: mm)				Wall installation (Unit: mm)				Vertical installation (Unit: mm)			
	A	B	C		A	B	C	Lead 12	A	C	
Lead 20	1kg 600	323	683	Lead 20	1kg 600	291	600	Lead 6	1.2kg	242	240
	3kg 675	103	247		3kg 215	73	589				
Lead 12	2kg 1170	159	406	Lead 12	2kg 368	127	1082	Lead 6	2.4kg	113	113
	5kg 555	59	155		5kg 127	30	449				
Lead 6	3kg 1498	104	294	Lead 6	3kg 263	73	970				
	9kg 628	31	89	Lead 6	9kg 54	0	400				

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.

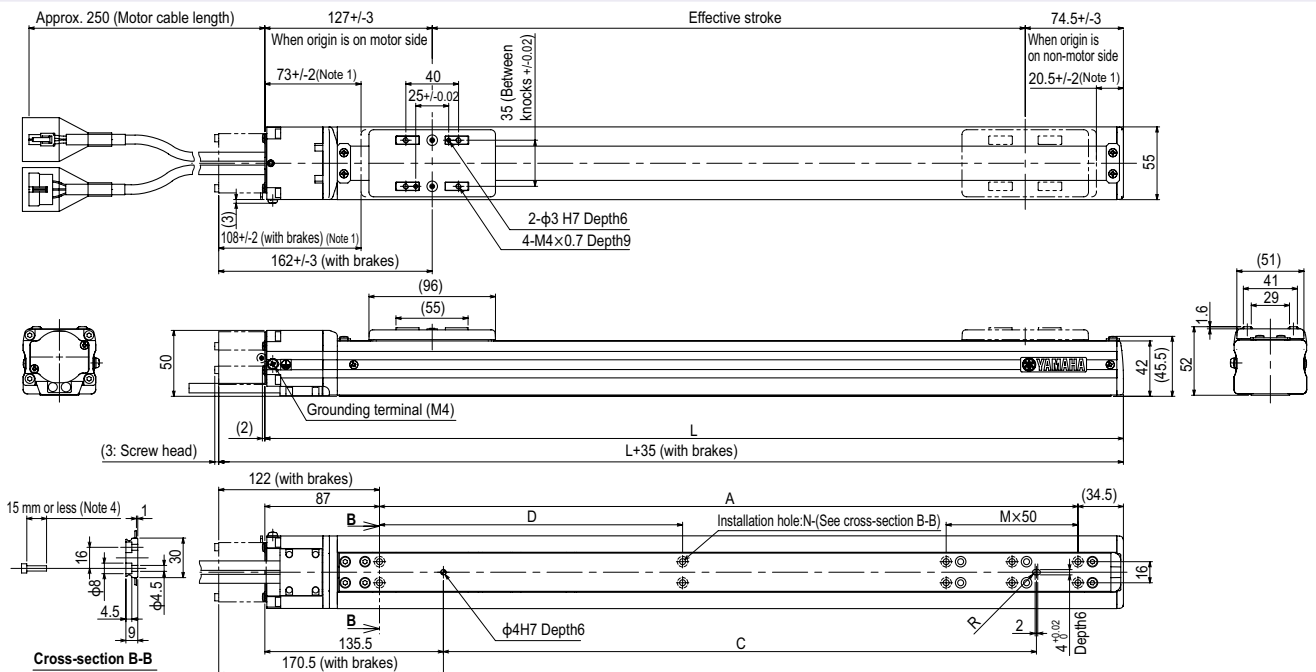
Static loading moment

(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

T5L



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	1001.5				
A	130	180	230	280	330	380	430	480	530	580	630	680	730	780	830	880				
C	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800				
D	-	-	-	-	-	230	230	230	230	230	230	230	230	230	230	230				
M	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9				
N	4	6	8	10	12	14	6	8	10	12	14	16	18	20	22	24				
Weight (kg) ^{Note 3}	1.7	1.8	2.0	2.2	2.3	2.5	2.7	2.8	3.0	3.2	3.3	3.5	3.7	3.8	4.0	4.2				
Maximum speed for each stroke ^{Note 5} (mm/sec)	1200						960						840				720		660	
Lead 20	800						640						560				480		440	
Lead 6	400						320						280				240		220	
Speed setting	-						80%						70%				60%		55%	

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 (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.
Note 6. External view of T5LH is identical to T5L.