

# T4L

Origin on the non-motor side is selectable

Controller: 24V



## Ordering method

<b>T4L</b>							<b>ERC</b>	
<b>Model</b>	<b>Lead designation</b>	<b>Brake</b>	<b>Origin position change</b>	<b>Grease type</b>	<b>Stroke</b>	<b>Cable length</b> <sup>Note 1</sup>	<b>Controller</b>	<b>I/O connector specification</b>
	12: 12mm 6: 6mm Z: 2mm	No entry: No brakes BK: Brakes provided	None: Standard Z: Non-motor side	None: Standard GC: Clean	50 to 400 (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 robot cable is flexible and resists bending. See P.732 for details on robot cable.

## Specifications

<b>AC servo motor output (W)</b>	30		
<b>Repeatability</b> <sup>Note 1</sup> (mm)	+/-0.02		
<b>Deceleration mechanism</b>	Ball screw $\phi 8$		
<b>Ball screw lead (mm)</b>	12	6	2
<b>Maximum speed (mm/sec)</b>	720	360	120
<b>Maximum payload (kg)</b>	<b>Horizontal</b>		
	4.5	6	6
	<b>Vertical</b>		
	1.2	2.4	7.2
<b>Rated thrust (N)</b>	32	64	153
<b>Stroke (mm)</b>	50 to 400 (50mm pitch)		
<b>Overall length (mm)</b>	<b>Horizontal</b>		
	Stroke+198		
	<b>Vertical</b>		
	Stroke+236		
<b>Maximum dimensions of cross section of main unit (mm)</b>	W45 x H53		
<b>Cable length (m)</b>	Standard: 3.5 / Option: 1.5, 10		
<b>Linear guide type</b>	2 rows of gothic arch grooves x 1 rail		
<b>Position detector</b>	Resolvers <sup>Note 2</sup>		
<b>Resolution (Pulse/rotation)</b>	16384		

Note 1. Positioning repeatability in one direction.

Note 2. 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<sup>Note</sup>

Horizontal installation (Unit: mm)				Wall installation (Unit: mm)				Vertical installation (Unit: mm)						
Lead	Weight	A	B	Lead	Weight	A	B	Lead	Weight	C				
Lead 12	2kg	433	87	180	Lead 12	2kg	149	54	Lead 12	1.2kg	125	125		
	4.5kg	223	33	75		4.5kg	50	1		148	Lead 6	2.4kg	56	57
	3kg	515	58	135		3kg	107	24		380		Lead 2	3kg	41
6kg	340	26	62	6kg	31	0	195	7.2kg	0	0				
Lead 6	3kg	515	58	135	Lead 6	3kg	107	24	380					
	6kg	340	26	62		6kg	31	0	195					
Lead 2	3kg	1585	58	142	Lead 2	3kg	113	24	1180					
	6kg	755	27	66		6kg	32	0	440					

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 300mm stroke models.

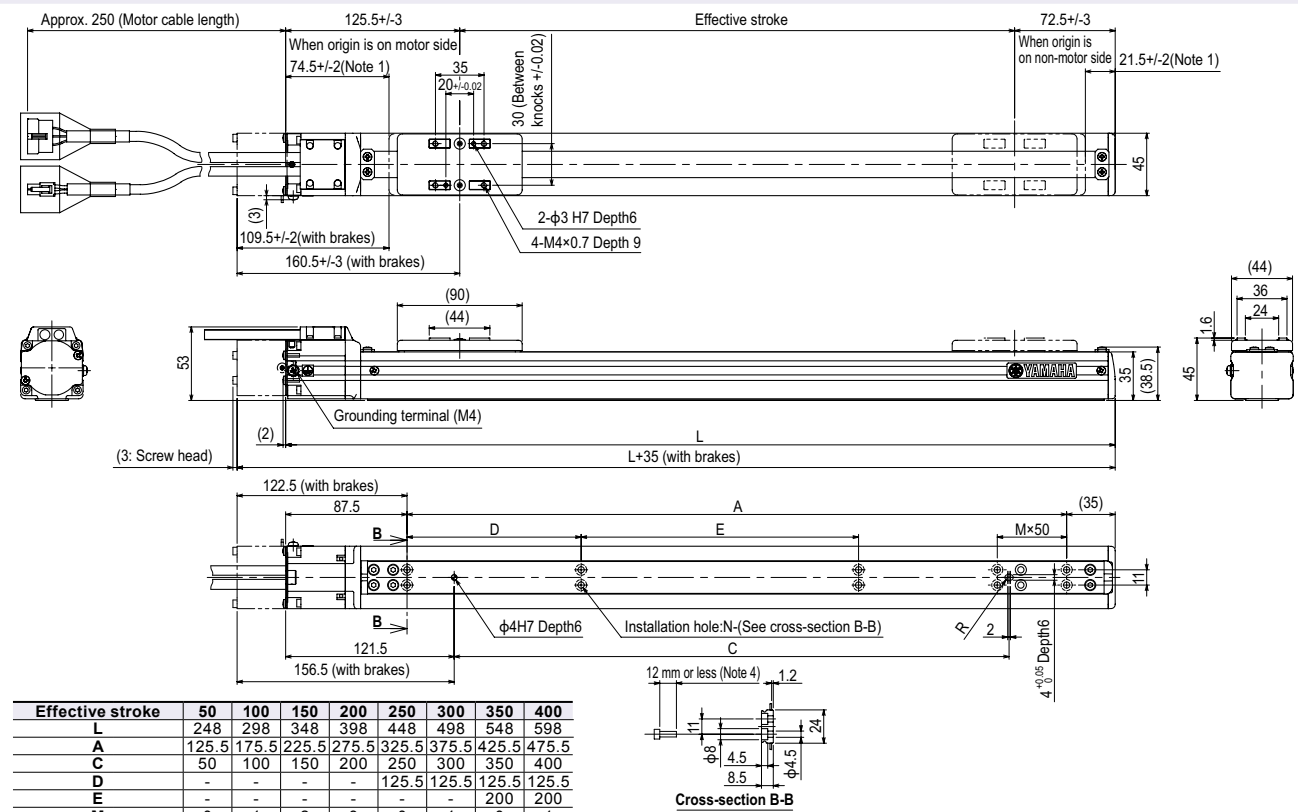
## Static loading moment

(Unit: N·m)		
MY	MP	MR
15	19	18

## Controller

Controller	Operation method
ERC	Pulse train control / Programming / I/O point trace / Remote command / Operation using RS-232C communication

## T4L



Effective stroke	50	100	150	200	250	300	350	400
L	248	298	348	398	448	498	548	598
A	125.5	175.5	225.5	275.5	325.5	375.5	425.5	475.5
C	50	100	150	200	250	300	350	400
D	-	-	-	-	125.5	125.5	125.5	125.5
E	-	-	-	-	-	200	200	-
M	0	1	2	3	0	1	0	1
N	4	6	8	10	6	8	8	10
<b>Weight (kg)</b> <sup>Note 3</sup>	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9
<b>Maximum speed for each stroke (mm/sec)</b>	<b>Lead 12</b>	720						
	<b>Lead 6</b>	360						
	<b>Lead 2</b>	120						

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 12mm or less.

Note 5. External view of T4LH is identical to T4L.