T5LH

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

Ordering method

T5LH □ □ □ □ □ □ — **TSX** □ □ □ □ □

Model	Lead designation	Brake	Origin position change	Grease type	Stroke	Cable length Note 1
	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)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

TSX

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**

Driver	Driver: Power capacity
	05: 100W or less

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

Specifications

AC servo motor output (W)		30
Repeatability Note 1 (mm)		+/-0.02
Deceleration mechanism		Ball screw φ12 (Class C10)
Ball screw lead		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: 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)

		A	B	C
Lead 20	1kg	967	324	598
	3kg	429	104	226
Lead 12	2kg	916	159	398
	5kg	436	60	152
Lead 6	3kg	1194	105	294
	9kg	624	31	89

Wall installation (Unit: mm)

		A	B	C
Lead 20	1kg	551	304	925
	3kg	185	89	378
Lead 12	2kg	347	141	800
	5kg	119	44	355
Lead 6	3kg	259	87	950
	9kg	50	15	385

Vertical installation (Unit: mm)

		A	C
Lead 12	1.2kg	240	239
Lead 6	2.4kg	109	110

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
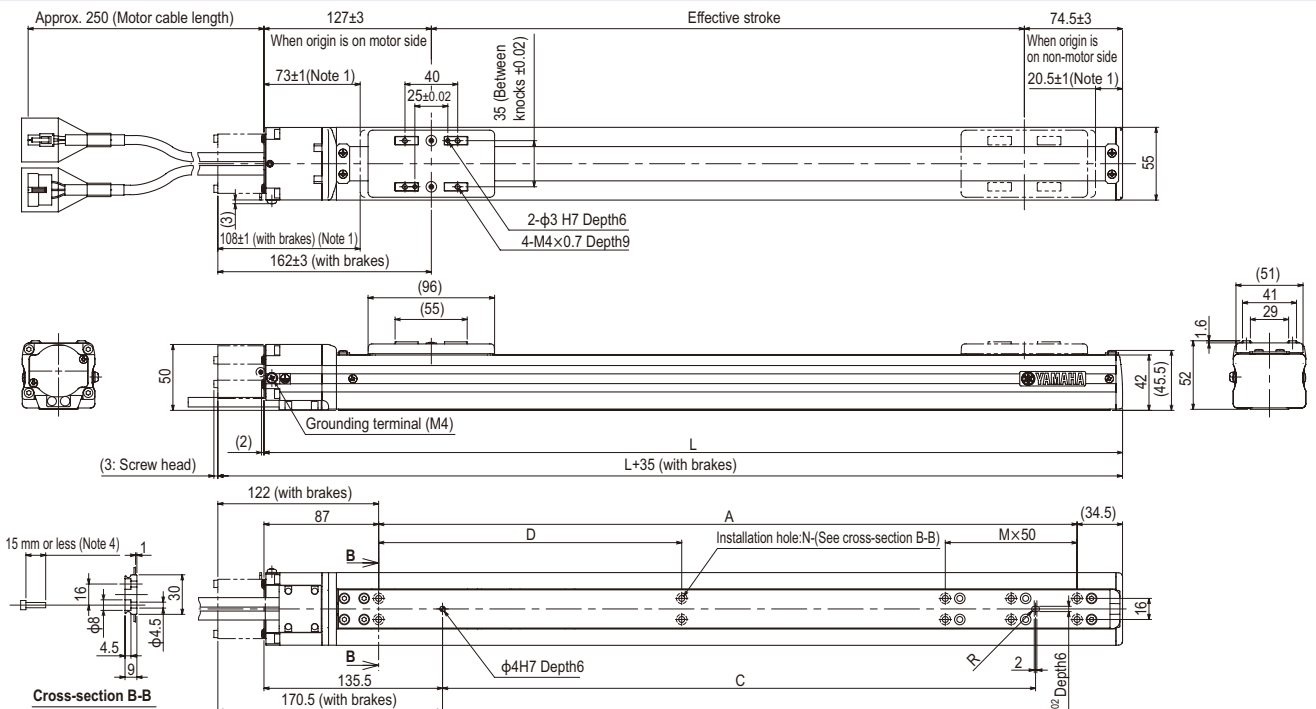Note. Service life is calculated for 600mm stroke models.

Static loading moment

(Unit: N·m)

MY	MP	MR
30	34	40

Controller

Controller	Operation method
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	Pulse train control

T5LH

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
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) — Lead 20	1200												960	840	720	660
Lead 12	800												640	560	480	440
Lead 6	400												320	280	240	220
Speed setting	-												80%	70%	60%	55%

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