

# T9

● High lead: Lead 30

● Origin on the non-motor side is selectable: Lead 10-20-30

Note. Strokes longer than 1050mm are special order items. Please consult us for delivery time.



## Ordering method

T9						TSX						
<b>Model</b>	<b>Lead designation</b>	<b>Brake</b> <sup>Note 1</sup>	<b>Origin position change</b>	<b>Grease type</b>	<b>Stroke</b>	<b>Cable length</b> <sup>Note 2</sup>	<b>Positioner</b> <sup>Note 4</sup>	<b>Driver: Power-supply voltage</b>	<b>Regenerative unit</b>	<b>LCD monitor</b>	<b>I/O selection</b>	<b>Battery</b>
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	No entry: No brakes BK: Brakes provided	None: Standard Z: Non-motor side <sup>Note 2</sup>	None: Standard GC: Clean	Lead 20-10-5: 150 to 1050 (50mm pitch) Lead 30: 150 to 1250 (50mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	TSX: TS-X	105: 100V/100W or less 205: 200V/100W or less	No entry: None R: With RGT	No entry: None L: With LCD	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFIBET GW: No I/O board <sup>Note 5</sup>	B: With battery (Absolute) N: None (Incremental)
							<b>SR1-X</b>	<b>05</b>	<b>Usable for CE</b>	<b>Regenerative unit</b>	<b>I/O selection</b>	<b>Battery</b>
							Controller	05: 100W or less	No entry: Standard E: CE marking	No entry: None R: With RG1	N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	B: With battery (Absolute) N: None (Incremental)
							<b>RDV-X</b>	<b>2</b>	<b>Power-supply voltage</b>	<b>05</b>	<b>RBR1</b>	<b>Regenerative unit</b>
							Driver	2: AC200V		05: 100W or less		

- Note 1. The model with a lead of 30mm cannot select specifications with brake (vertical specifications).  
 Note 2. If selecting 5mm lead specifications then the origin point cannot be changed to the non-motor side.  
 Note 3. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.  
 Note 4. See P.634 for DIN rail mounting bracket.  
 Note 5. Select this selection when using the gateway function. For details, see P.96.

## Specifications

<b>AC servo motor output (W)</b>	100
<b>Repeatability</b> <sup>Note 1</sup> (mm)	+/-0.01
<b>Deceleration mechanism</b>	Ball screw $\phi 15$
<b>Ball screw lead (mm)</b>	30 20 10 5
<b>Maximum speed</b> <sup>Note 2</sup> (mm/sec)	1800 1200 600 300
<b>Maximum payload (kg)</b>	<b>Horizontal</b> 15 30 55 80 <b>Vertical</b> - 4 10 20
<b>Rated thrust (N)</b>	56 84 169 339
<b>Stroke (mm)</b>	150 to 1250 <sup>Note 3</sup> (50mm pitch)
<b>Overall length (mm)</b>	<b>Horizontal</b> Stroke+259 <b>Vertical</b> Stroke+289
<b>Maximum dimensions of cross section of main unit (mm)</b>	W94 × H98
<b>Cable length (m)</b>	Standard: 3.5 / Option: 5.10
<b>Linear guide type</b>	4 rows of circular arc grooves × 1 rail
<b>Position detector</b>	Resolvers <sup>Note 4</sup>
<b>Resolution (Pulse/rotation)</b>	16384

- Note 1. Positioning repeatability in one direction.  
 Note 2. When the stroke is longer than 700mm, 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. Strokes longer than 1050mm are available only for high lead (Lead 30). (Special order item)  
 Note 4. 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

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
<b>Lead 30</b>									
5kg	864	501	383	5kg	348	384	776		
15kg	491	156	140	15kg	87	40	306		
30kg	1292	505	462	30kg	416	388	1186		
40kg	572	158	151	40kg	92	42	386		
50kg	455	73	75	50kg	0	0	61		
20kg	617	119	127	20kg	193	132	910		
40kg	422	53	59	40kg	53	0	400		
55kg	420	36	40	55kg	0	0	109		
50kg	722	42	47	10kg	197	133	2360		
60kg	657	33	37	20kg	54	0	985		
80kg	577	23	25	30kg	0	0	427		

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

## Static loading moment

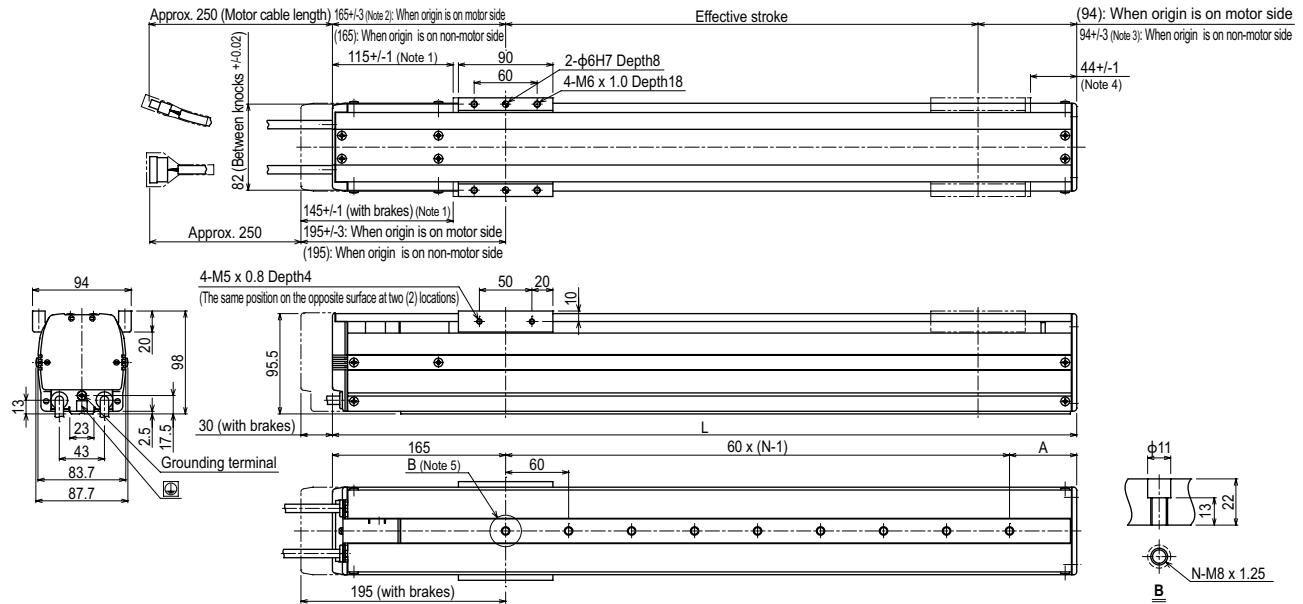
	(Unit: N·m)		
	MY	MP	MR
	86	133	117

## Controller

Controller	Operation method
SR1-X05 <sup>Note</sup>	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RXC320	
RXC221/222	
RXC340	
TS-X105 <sup>Note</sup>	I/O point trace / Remote command
TS-X205 <sup>Note</sup>	Remote command
RDV-X205-RBR1	Pulse train control

Note. Regenerative unit is required when the models used vertically with 700mm or larger stroke.

## T9



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.  
 Note 2. 167.5±1 when the high lead specification (Lead 30) is used.  
 Note 3. 94±1 when the high lead specification (Lead 30) is used.  
 Note 4. 41.5±1 when the high lead specification (Lead 30) is used.  
 Note 5. When installing the unit, washers, etc., cannot be used in the  $\phi 11$  counter bore hole.  
 Note 6. Minimum bend radius of motor cable is R5.  
 Note 7. Weight of models with no brake. The weight of brake-attached models is 0.5 kg heavier than the models with no brake shown in the table.

Effective stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100 <sup>Note 9</sup>	1150 <sup>Note 9</sup>	1200 <sup>Note 9</sup>	1250 <sup>Note 9</sup>
	L	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	1359	1409	1459
A	64	54	44	94	84	74	64	54	44	94	84	74	64	54	44	94	84	74	64	54	44	94	84
N	4	5	6	6	7	8	9	10	11	11	12	13	14	15	16	16	17	18	19	20	21	21	22
Weight (kg) <sup>Note 7</sup>	5.5	5.9	6.2	6.6	6.9	7.3	7.6	8.0	8.3	8.7	9.0	9.4	9.7	10.0	10.3	10.7	11.0	11.4	11.7	12.1	12.5	12.9	13.3
Maximum speed <sup>Note 8</sup> (mm/sec)	Lead 30	1800																					
	Lead 20	1200																					
	Lead 10	600																					
	Lead 5	300																					
Speed setting	80%																						

- Note 8. When the stroke is longer than 700mm, 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 above.  
 Note 9. Strokes longer than 1050mm are special order items. Please contact us for speed setting.