

# 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 2: 2mm	No entry: No brakes BK: Brakes provided	None: Standard Z: Non-motor side	None: Standard GC: Clean	50 to 400 (50mm pitch)	1L: 1m 3L: 3.5m 5L: 5m 10L: 10m 1K/3K/5K/10K (Flexible cable)		CN1: I/O flat cable 1m (Standard) CN2: Twisted-pair cable 2m (pulse train function)

Note 1. The robot cable is standard cable (1L/3L/5L/10L), but can be changed to flexible cable. See P.594 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 $\phi 8$ (Class C10)		
<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	
	<b>Vertical</b>	1.2	2.4
<b>Rated thrust (N)</b>		32	64
<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	2.4kg	56
Lead 6	3kg	515	58	135	Lead 6	3kg	107	24	Lead 6	3kg	41	42
	6kg	340	26	62		6kg	31	0		195	7.2kg	0
Lead 2	3kg	1585	58	142	Lead 2	3kg	113	24	Lead 2	3kg	41	42
	6kg	755	27	66		6kg	32	0		440	7.2kg	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 300mm stroke models.

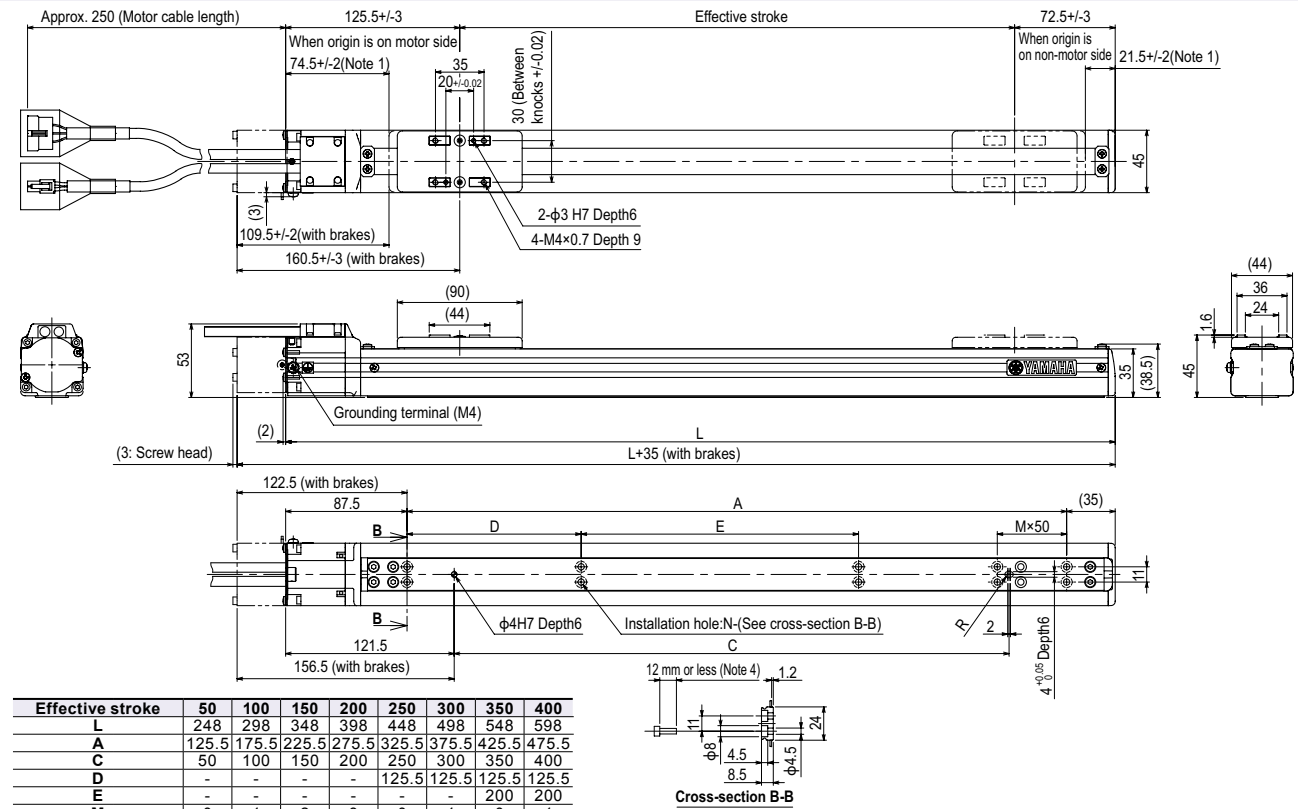
## Static loading moment

(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



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.



# T5L

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



## Ordering method

<b>T5L</b>							<b>ERCD</b>	
<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>Controller</b>	<b>I/O connector specification</b>
	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)	1L: 1m 3L: 3.5m 5L: 5m 10L: 10m 1K/3K/5K/10K (Flexible cable)		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 standard cable (1L/3L/5L/10L), but can be changed to flexible cable. See P.594 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 $\phi 12$ (Class C10)
<b>Ball screw lead (mm)</b>	20 12 6
<b>Maximum speed</b> <sup>Note 2</sup> (mm/sec)	1200 800 400
<b>Maximum payload (kg)</b>	<b>Horizontal</b> 3 5 9 <b>Vertical</b> - 1.2 2.4
<b>Rated thrust (N)</b>	19 32 64
<b>Stroke (mm)</b>	50 to 800 (50mm pitch)
<b>Overall length (mm)</b>	<b>Horizontal</b> Stroke+201.5 <b>Vertical</b> Stroke+239.5
<b>Maximum dimensions of cross section of main unit (mm)</b>	W55×H52
<b>Cable length (m)</b>	Standard: 3.5 / Option: 1.5, 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 <sup>Note</sup>

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

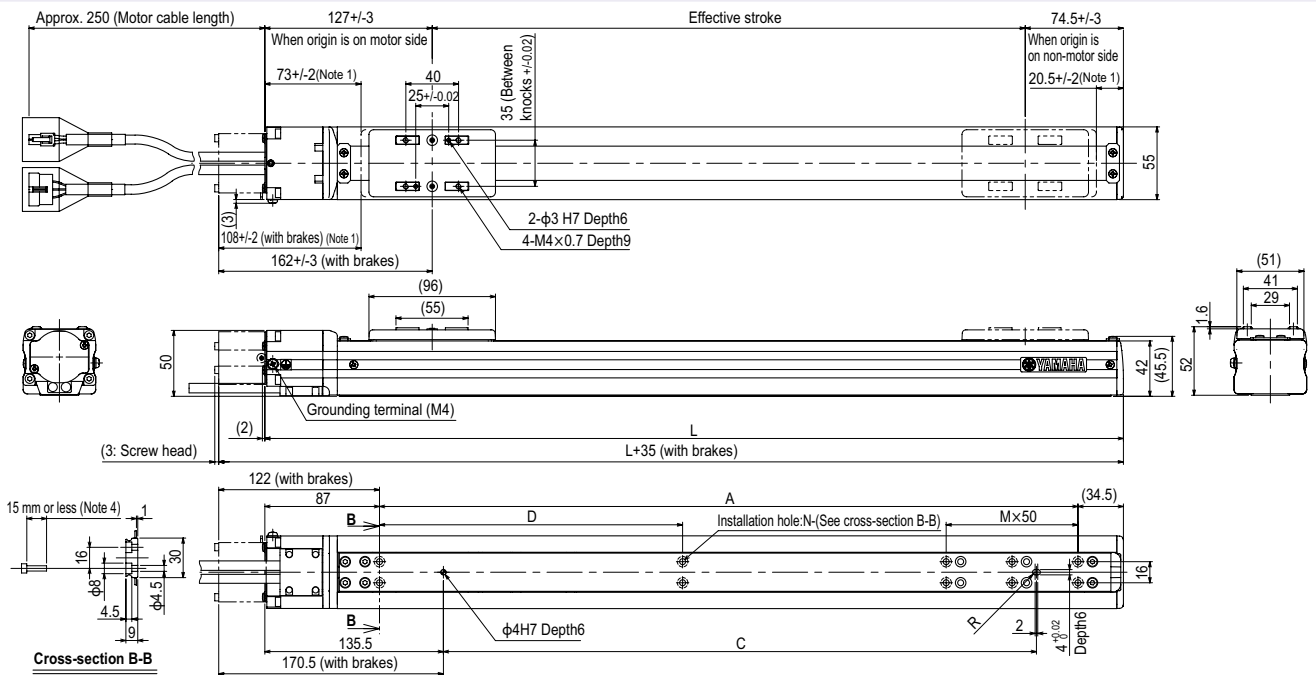
## Static loading moment

(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
<b>Weight (kg)</b> <sup>Note 3</sup>	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
<b>Maximum speed for each stroke</b> <sup>Note 5</sup> (mm/sec)						1200	800	400				960	840	720	660	
<b>Speed setting</b>												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 (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.  
 Note 6. External view of T5LH is identical to T5L.

# T5LH

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



## Ordering method

<b>T5LH</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 2</sup> 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	<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 <sup>Note 4</sup>	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)
	<b>SR1-X</b>	<b>05</b>						<b>Controller</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>2</b>						<b>Driver</b>	<b>Power-supply voltage</b> 2: AC200V		<b>05</b>	<b>Driver: Power capacity</b> 05: 100W or less

- 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>	30
<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)	1200 800 400
<b>Maximum payload</b> (kg)	Horizontal 3 5 9 Vertical - 1.2 2.4
<b>Rated thrust (N)</b>	19 32 64
<b>Stroke (mm)</b>	50 to 800 (50mm pitch)
<b>Overall length (mm)</b>	Horizontal Stroke+201.5 Vertical Stroke+239.5
<b>Maximum dimensions of cross section of main unit (mm)</b>	W55×H52
<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

	Horizontal installation (Unit: mm)				Wall installation (Unit: mm)				Vertical installation (Unit: mm)		
	A	B	C	Stroke	A	B	C	Stroke	Lead 12	A	C
<b>Lead 20</b>	967	324	598	500	551	304	925	600	1.2kg	240	239
<b>Lead 12</b>	429	104	226	400	185	89	378	500	2.4kg	109	110
<b>Lead 6</b>	916	159	398	300	347	141	800	200			
	436	60	152	200	119	44	355	100			
	1194	105	294	100	3kg	259	87	950			
	624	31	89	50	9kg	50	15	385			

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.

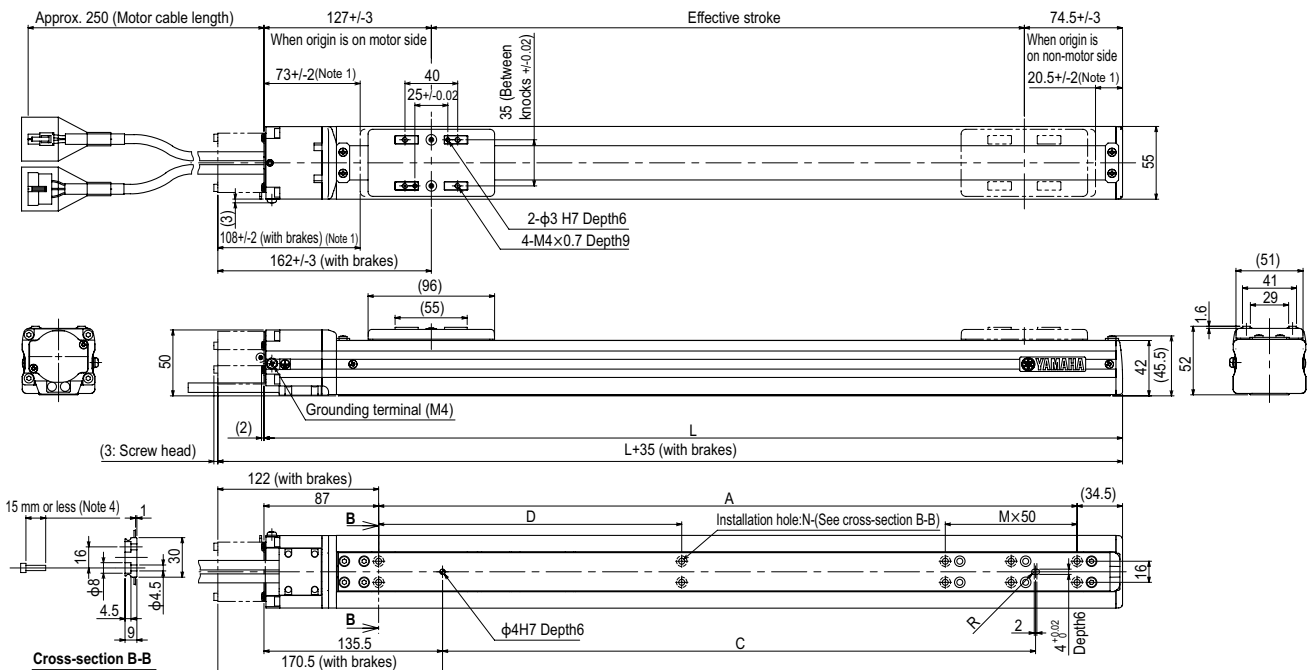
## Static loading moment

(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
RCX221/222	
RCX240/340	
TS-X105	I/O point trace / Remote command
TS-X205	
RDV-X205	Pulse train control

## T5LH



Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>L</b>	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
<b>A</b>	130	180	230	280	330	380	430	480	530	580	630	680	730	780	830	880
<b>C</b>	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>D</b>	-	-	-	-	-	230	230	230	230	230	230	230	230	230	230	230
<b>M</b>	0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9
<b>N</b>	4	6	8	10	12	14	6	8	10	12	14	16	18	20	22	24
<b>Weight (kg)</b> <sup>Note 3</sup>	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
<b>Maximum speed for each stroke</b> <sup>Note 5</sup> (mm/sec)	-															
<b>Speed setting</b>	-															

- 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.

# T6L

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



## Ordering method

### T6L

Model	Lead designation	Brake	Origin position change	Grease type	Stroke	Cable length
	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 5K/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™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board	B: With battery (Absolute) N: None (Incremental)

### SR1-X

Controller	Driver: Power capacity	Usable for CE	I/O selection	Battery
05	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)

### RDV-X

Driver	Power-supply voltage	Driver: Power capacity	Regenerative unit
2	2: AC200V	05: 100W or less	RBR1

- 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

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

Installation	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
Lead 20	2kg 319	184	234	2kg 234	152	265	1kg 355	352	
Lead 12	6kg 98	37	77	6kg 61	13	71	2kg 165	165	
Lead 6	10kg 64	0	55	10kg 30	0	42	4kg 70	72	
Lead 12	3kg 624	125	335	3kg 293	96	510	2kg 171	172	
Lead 6	8kg 273	41	121	8kg 89	14	210	4kg 73	74	
Lead 6	12kg 216	24	77	12kg 43	0	130	8kg 23	26	
Lead 6	5kg 694	73	236	5kg 204	45	530			
Lead 6	10kg 374	33	109	10kg 72	0	245			
Lead 6	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.

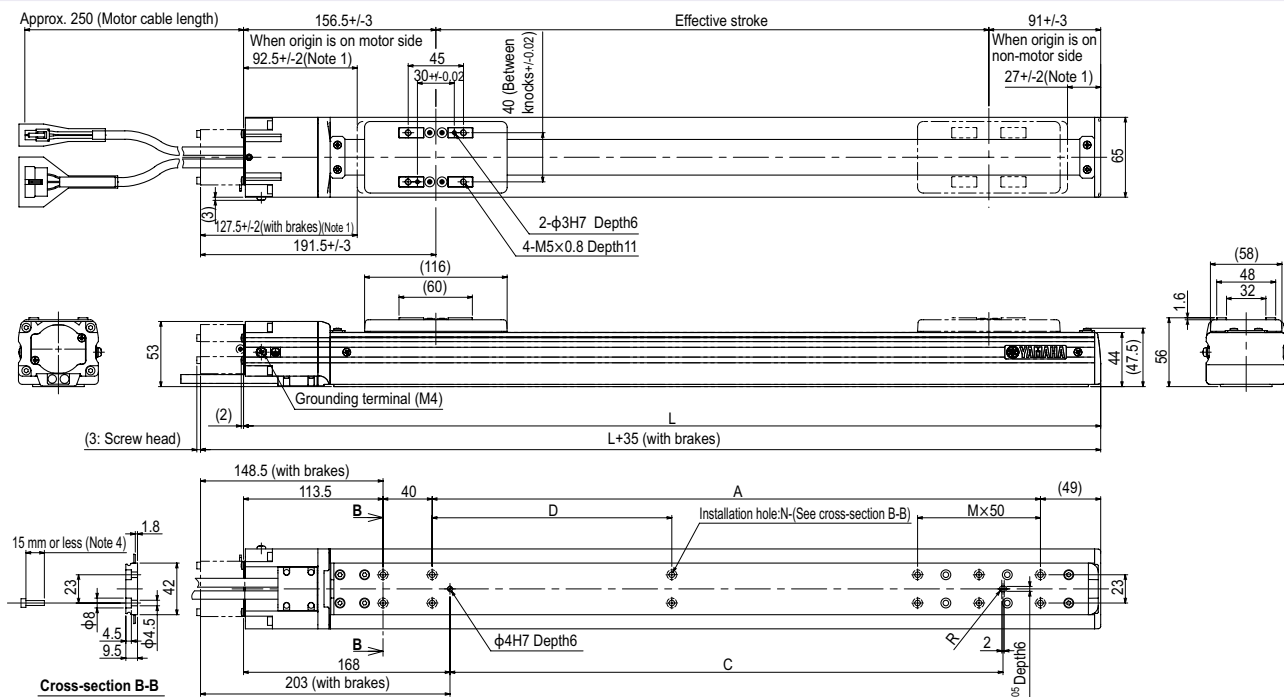
## Static loading moment

(Unit: N·m)		
MY	MP	MR
35	40	50

## Controller

Controller	Operation method
SR1-X05	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X105	I/O point trace / Remote command
TS-X205	Remote command
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)	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 (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.



# T9H

● High lead: Lead 30

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

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

## Ordering method

<b>T9H</b>						
<b>Model</b>	<b>Lead designation</b> 30: 30mm 20: 20mm 10: 10mm 5: 5mm	<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 <sup>Note 2</sup>	<b>Grease type</b> None: Standard GC: Clean	<b>Stroke</b> Lead 20-10-5: 150 to 1050 (50mm pitch) Lead 30: 150 to 1250 (50mm pitch)	<b>Cable length</b> <sup>Note 3</sup> 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

<b>TSX</b>					
<b>Positioner</b> <sup>Note 4</sup> TS-X	<b>Driver: Power-supply voltage</b> Power capacity 110: 100V/200W 210: 200V/200W	<b>Regenerative unit</b> No entry: None R: With RGT	<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 <sup>Note 5</sup>	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)

<b>SR1-X</b>	<b>10</b>				
<b>Controller</b>	<b>Driver: Power capacity</b> 10: 200W	<b>Usable for CE</b> No entry: Standard E: CE marking	<b>Regenerative unit</b> No entry: None R: With RGT	<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>2</b>	<b>10</b>	<b>RBR1</b>
<b>Driver</b>	<b>Power-supply voltage</b> 2: AC200V	<b>Driver: Power capacity</b> 10: 200W or less	<b>Regenerative unit</b>

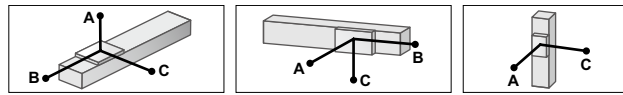
- Note 1. The model with a lead of 30mm cannot select specifications with brake (vertical specifications).  
 Note 2. If selecting 10mm-5mm lead specifications then the origin point cannot be changed to the non-motor side.  
 Note 3. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.594 for details on robot cable.  
 Note 4. See P.498 for DIN rail mounting bracket.  
 Note 5. Select this selection when using the gateway function. For details, see P.60.

## Specifications

<b>AC servo motor output (W)</b>	200
<b>Repeatability</b> <sup>Note 1</sup> (mm)	+/-0.01
<b>Deceleration mechanism</b>	Ball screw (Class C7)
<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> 25 40 80 100 <b>Vertical</b> - 8 20 30
<b>Rated thrust (N)</b>	113 170 341 683
<b>Stroke (mm)</b>	150 to 1250 <sup>Note 3</sup> (50mm pitch)
<b>Overall length (mm)</b>	<b>Horizontal</b> Stroke+273 <b>Vertical</b> Stroke+303
<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.

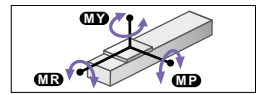
## Allowable overhang



	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C	A	B	C	A	B	C	
<b>Lead 30</b>										
10kg	415	286	183	10kg	140	120	323	4kg	515	515
20kg	270	105	93	20kg	41	0	123	6kg	334	334
10kg	667	244	225	10kg	170	128	549	8kg	244	244
20kg	330	112	107	20kg	46	0	182	10kg	217	217
40kg	162	42	47	40kg	0	0	0	15kg	133	133
10kg	392	75	81	10kg	52	0	335	20kg	90	90
50kg	297	40	44	50kg	24	0	235	15kg	135	135
80kg	265	21	24	80kg	0	0	108	20kg	92	92
60kg	477	22	37	60kg	54	0	710	20kg	92	92
80kg	412	22	25	80kg	25	0	505	30kg	49	49
100kg	362	16	18	100kg	0	0	355			

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



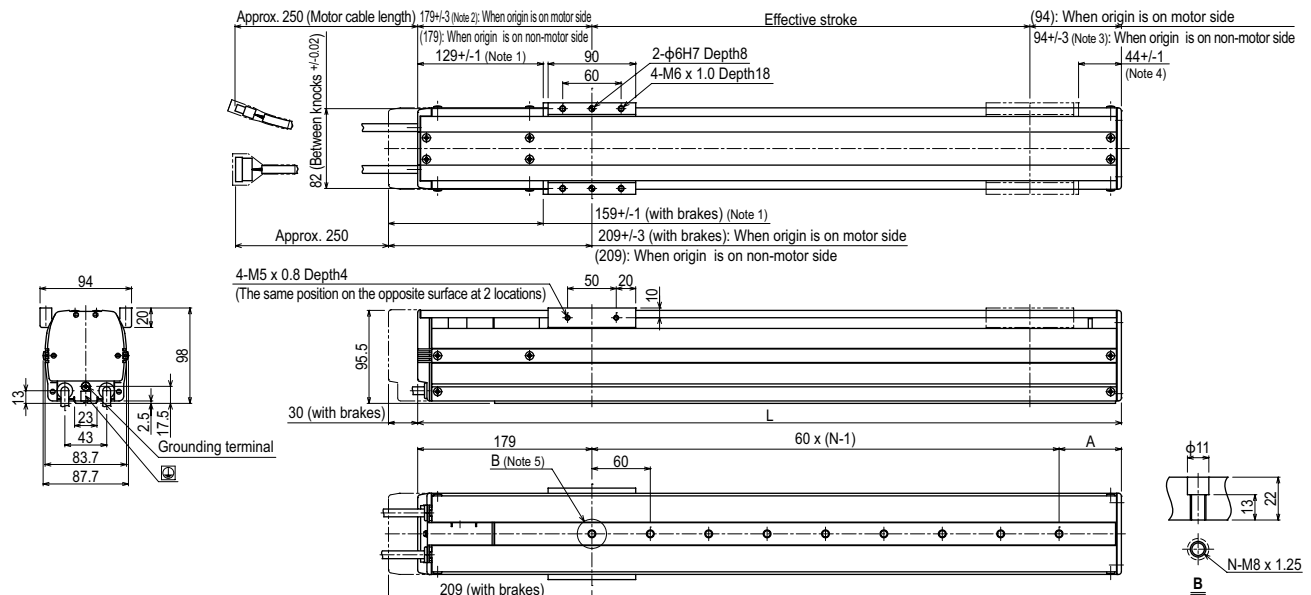
(Unit: N·m)		
MY	MP	MR
86	133	117

## Controller

Controller	Operation method
SR1-X10 <sup>Note</sup> RCX221/222 RCX240/340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X110 <sup>Note</sup> TS-X210 <sup>Note</sup> RDV-X210-RBR1	I/O point trace / Remote command / Pulse train control

Note. When using the unit vertically, a regeneration unit is required.

## T9H



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.  
 Note 2. 181.5+/-4 when the high lead specification (Lead 30) is used.  
 Note 3. 94+/-4 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 φ11 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>						
<b>L</b>	423	473	523	573	623	673	723	773	823	873	923	973	1023	1073	1123	1173	1223	1273	1323	1373	1423	1473	1523						
<b>A</b>	64	54	44	94	84	74	64	54	44	94	84	74	64	54	44	94	84	74	64	54	44	94	84						
<b>N</b>	4	5	6	6	7	8	9	10	11	11	12	13	14	15	16	16	17	18	19	20	21	21	22						
<b>Weight (kg)</b> <sup>Note 7</sup>	5.8	6.2	6.5	6.9	7.3	7.7	8.0	8.4	8.8	9.1	9.5	9.9	10.2	10.6	11.0	11.4	11.7	12.1	12.5	12.9	13.3	13.7	14.1						
<b>Maximum speed</b> <sup>Note 8</sup> (mm/sec)	1800																1200	600	300										
<b>Speed setting</b>	-																80%	65%	50%	45%									

- 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.