



Ordering method

T4L						ERC		
Model	Lead designation	Brake	Origin position change	Grease type	Stroke	Cable length ^{Note 1}	Controller	I/O connector specification
	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

AC servo motor output (W)	30		
Repeatability ^{Note 1} (mm)	+/-0.02		
Deceleration mechanism	Ball screw φ8		
Ball screw lead (mm)	12	6	2
Maximum speed (mm/sec)	720	360	120
Maximum payload (kg)	Horizontal	4.5	6
	Vertical	1.2	2.4
Rated thrust (N)		64	153
		32	64
Stroke (mm)	50 to 400 (50mm pitch)		
Overall length (mm)	Horizontal	Stroke+198	
	Vertical	Stroke+236	
Maximum dimensions of cross section of main unit (mm)	W45 × H53		
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 2}		
Resolution (Pulse/rotation)	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^{Note}

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)	
	A	B	C	A	B	C	A	C
Lead 12	2kg	433	87	180	2kg	149	54	376
	4.5kg	223	33	75	4.5kg	50	1	148
Lead 6	3kg	515	58	135	3kg	107	24	380
	6kg	340	26	62	6kg	31	0	195
Lead 2	3kg	1585	58	142	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.

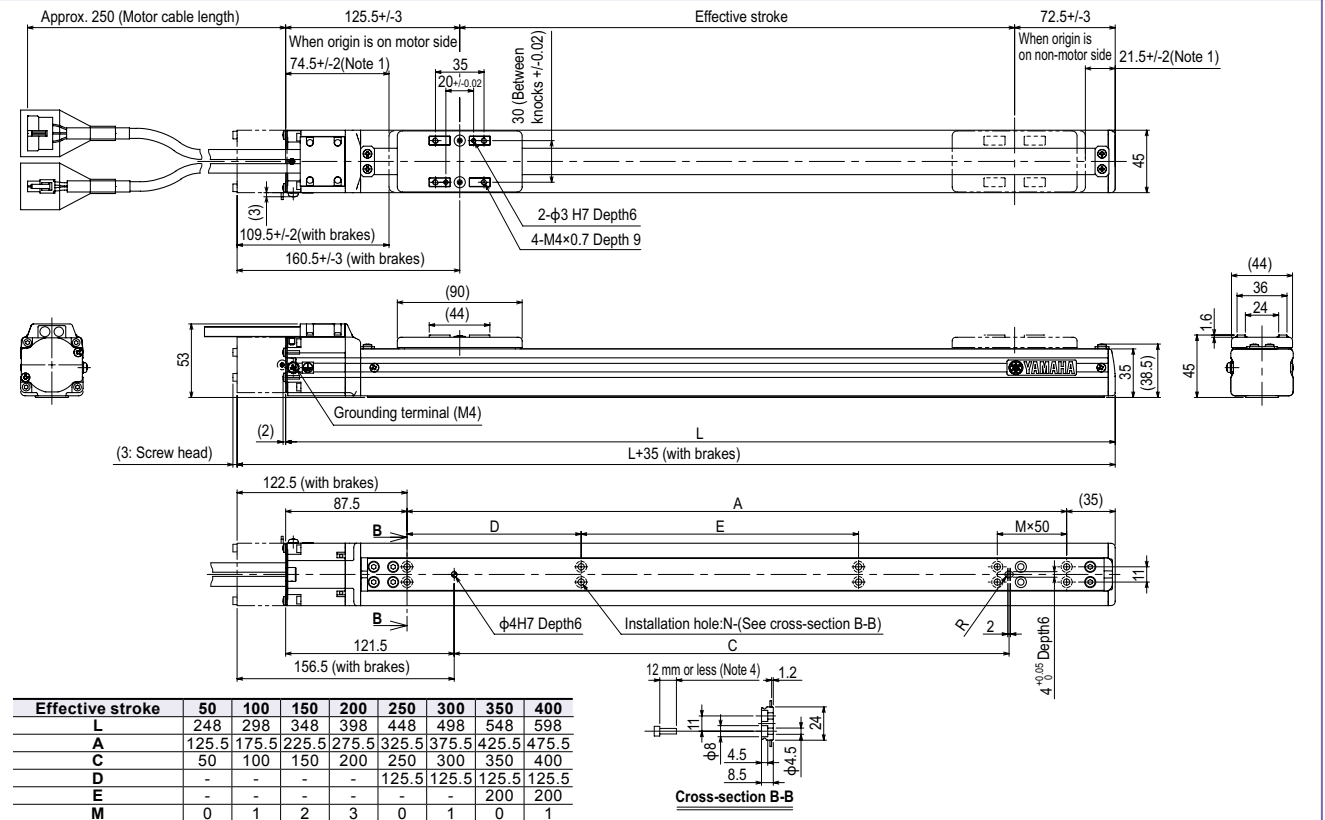
Static loading moment

(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
Weight (kg) ^{Note 3}	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9
Maximum speed for each stroke (mm/sec)	Lead 12	720						
	Lead 6	360						
	Lead 2	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 (M4×0.7) to be used for the installation work is 12mm or less.

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

T4LH

Origin on the non-motor side is selectable

Controller: 100V / 200V



Ordering method

T4LH

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

TSX

Positioner ^{Note 2}	Driver: Power-supply voltage / Power capacity	LCD monitor	I/O selection	Battery
TSX: 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: PROFIBUS GW: No I/O board ^{Note 3}	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
2	2: AC200V	05: 100W or less

Note 1. 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 2. See P.634 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.96.

Specifications

AC servo motor output (W)	30
Repeatability ^{Note 1} (mm)	+/-0.02
Deceleration mechanism	Ball screw φ8
Ball screw lead (mm)	12 6 2
Maximum speed (mm/sec)	720 360 120
Maximum payload (kg)	Horizontal: 4.5, 6, 7.2 Vertical: 1.2, 2.4, 7.2
Rated thrust (N)	32 64 153
Stroke (mm)	50 to 400 (50mm pitch)
Overall length (mm)	Horizontal: Stroke+198 Vertical: Stroke+236
Maximum dimensions of cross section of main unit (mm)	W45 × H53
Cable length (m)	Standard: 3.5 / Option: 5, 10
Linear guide type	2 rows of gothic arch grooves × 1 rail
Position detector	Resolvers ^{Note 2}
Resolution (Pulse/rotation)	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^{Note}

	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	C	
Lead 12	2kg: 341	90	174	2kg: 140	73	300	1.2kg	122	121
Lead 6	4.5kg: 172	37	72	4.5kg: 47	22	119	2.4kg	56	57
Lead 2	3kg: 355	58	134	3kg: 105	42	260	3kg	41	42
	6kg: 235	27	62	6kg: 31	11	135	7.2kg	0	0
	3kg: 1105	59	142	3kg: 113	42	810			
	6kg: 520	27	66	6kg: 32	11	305			

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.

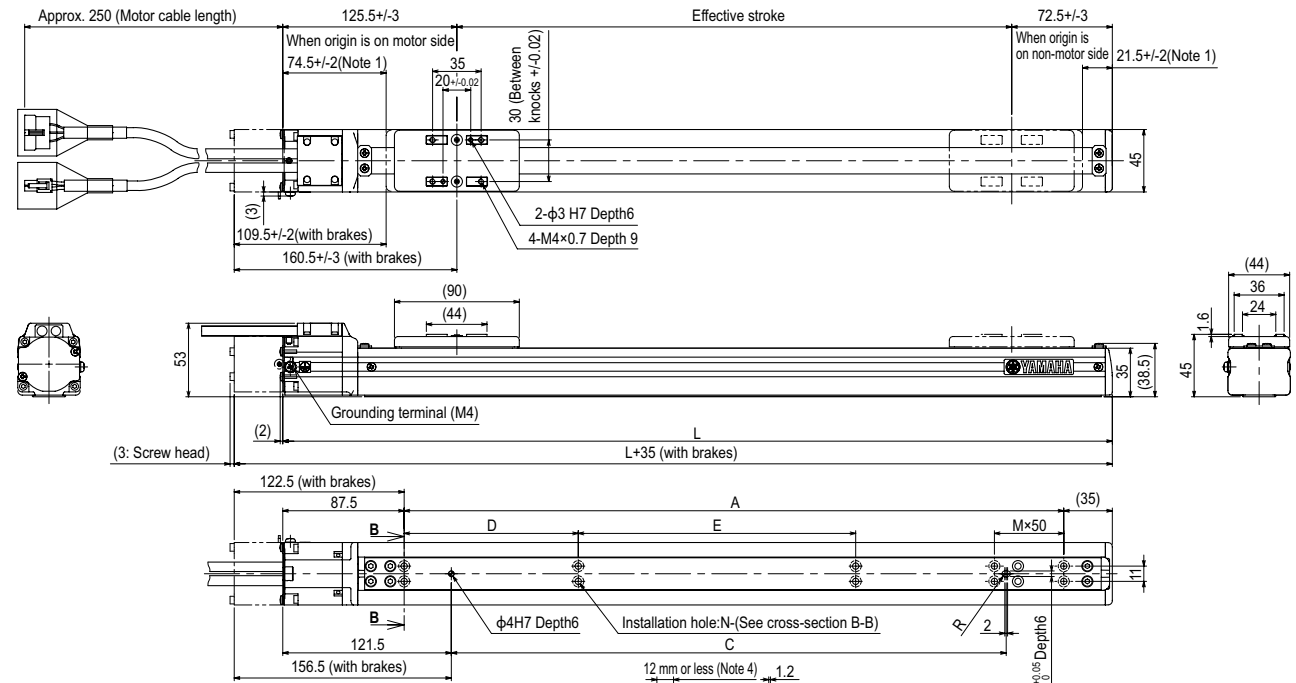
Static loading moment

(Unit: N·m)		
MY	MP	MR
15	19	18

Controller

Controller	Operation method
SR1-X05	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX320	
RCX221/222 RCX340	
TS-X105	I/O point trace / Remote command
TS-X205	Pulse train control
RDV-X205	

T4LH



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	200
M	0	1	2	3	0	1	0	1
N	4	6	8	10	6	8	8	10
Weight (kg) ^{Note 3}	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9
Maximum speed for each stroke (mm/sec)	Lead 12	720						
	Lead 6	360						
	Lead 2	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 (M4×0.7) 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

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.732 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)	W55xH52
Cable length (m)	Standard: 3.5 / Option: 1.5, 10
Linear guide type	2 rows of gothic arch grooves x 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	A	C	
Lead 20	1kg: 600	3kg: 323	6kg: 683	1kg: 600	3kg: 291	6kg: 600	1.2kg: 242	2.4kg: 240	
Lead 12	2kg: 675	3kg: 103	5kg: 247	2kg: 215	3kg: 73	5kg: 589	1.2kg: 113	2.4kg: 113	
Lead 6	2kg: 1170	3kg: 159	5kg: 406	2kg: 368	3kg: 127	5kg: 1082			
Lead 12	3kg: 555	5kg: 59	9kg: 155	3kg: 127	5kg: 30	9kg: 449			
Lead 6	3kg: 1498	5kg: 104	9kg: 294	3kg: 263	5kg: 73	9kg: 970			
Lead 12	5kg: 628	9kg: 31	9kg: 89	5kg: 54	9kg: 0	9kg: 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.

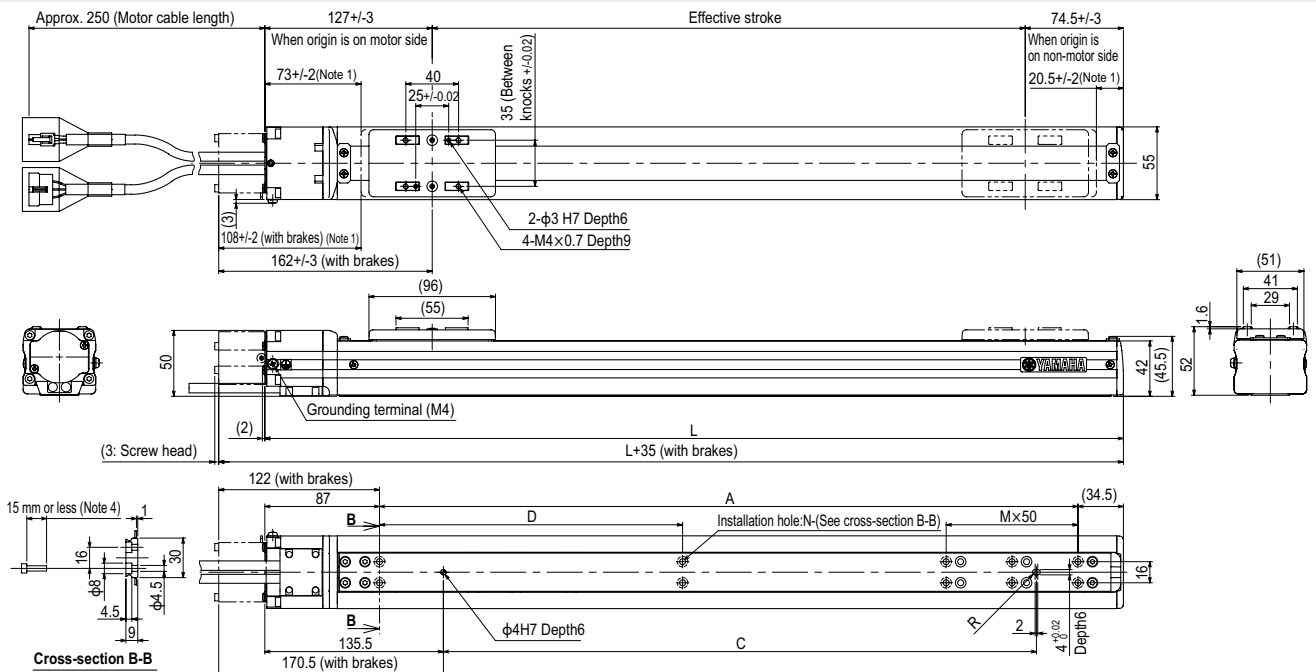
Static loading moment

(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)	-															
Speed setting	-															

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

T5LH	Model	Lead designation 20: 20mm 12: 12mm 6: 6mm	Brake ^{Note 1} No entry: No brakes BK: Brakes provided	Origin position change None: Standard Z: Non-motor side	Grease type None: Standard GC: Clean	Stroke 50 to 800 (50mm pitch)	Cable length ^{Note 2} 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	TSX	Positioner ^{Note 3} TSX: TS-X	Driver: Power supply voltage / Power capacity 105: 100V/100W or less 205: 200V/100W or less	LCD monitor No entry: None L: With LCD	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 4}	Battery B: With battery (Absolute) N: None (Incremental)
								SR1-X	Controller	05 05: 100W or less	Usable for CE No entry: Standard E: CE marking	I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	Battery B: With battery (Absolute) N: None (Incremental)
								RDV-X	Driver	2 2: AC200V	05 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.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Specifications

AC servo motor output (W)	30
Repeatability ^{Note 1} (mm)	+/-0.02
Deceleration mechanism	Ball screw ϕ 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: 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

	Horizontal installation (Unit: mm)				Wall installation (Unit: mm)				Vertical installation (Unit: mm)		
	1kg	A	B	C	1kg	A	B	C	Lead 12	A	C
Lead 20	967	324	598	925	551	304	925	925			
Lead 12	429	104	226	378	185	89	378	800	1.2kg	240	239
Lead 6	916	159	398	800	347	141	800	355	2.4kg	109	110
Lead 20	436	60	152	950	119	44	355	950			
Lead 12	1194	105	294	950	259	87	950	950			
Lead 6	624	31	89	385	50	15	385	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.

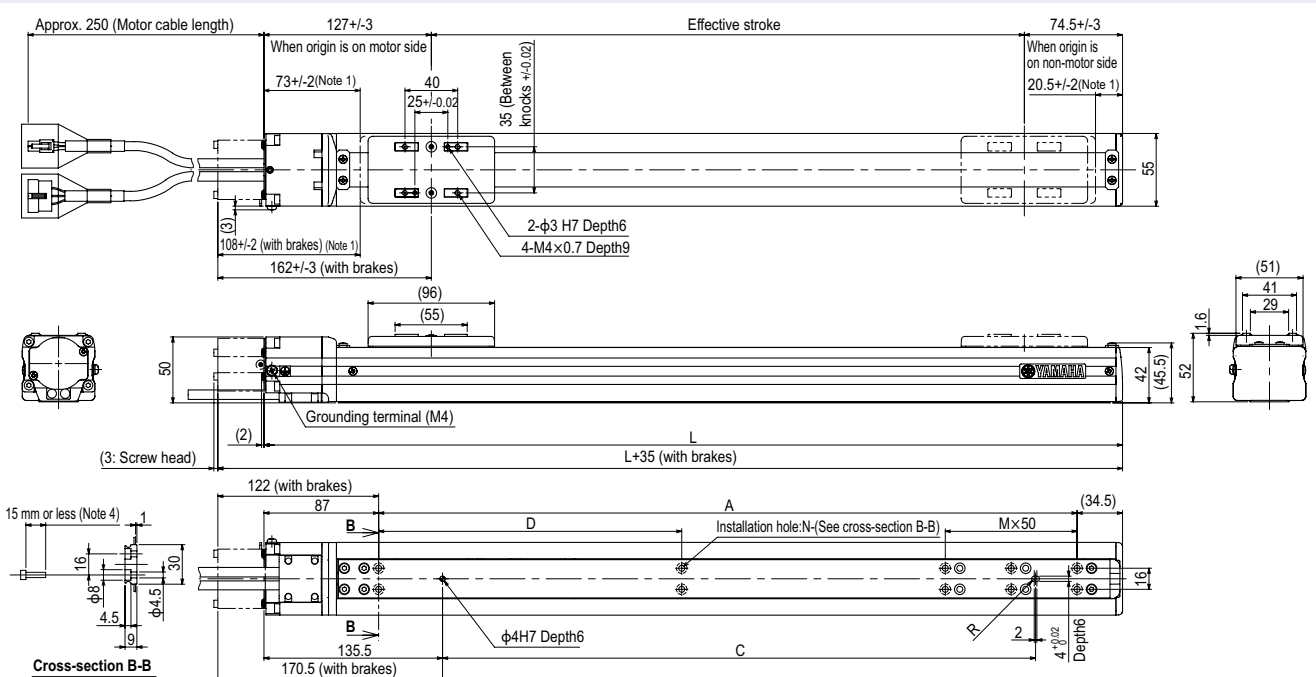
Static loading moment

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

T5LH



Effective stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	251	530	535	541	545	551	560	565	571	575	580	585	591	595	5100	5100
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)	-															
Speed setting	-															

- 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.

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)	Note 3 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
TSX: 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.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Specifications

AC servo motor output (W)	60
Repeatability (mm)	+/-0.02
Deceleration mechanism	Ball screw $\phi 12$
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 × 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

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

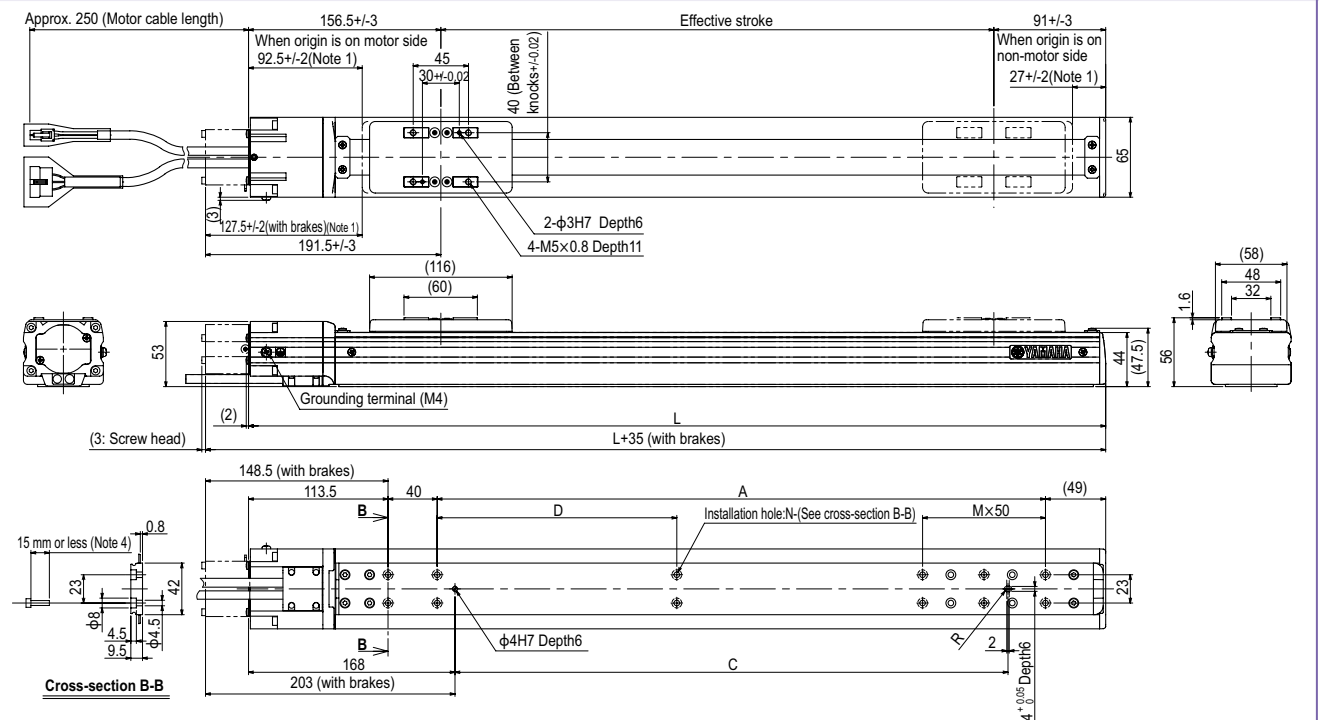
Static loading moment

(Unit: N·m)		
MY	MP	MR
35	40	50

Controller

Controller	Operation method
SR1-X05	Programming / I/O point trace
RXC320	Remote command / Operation
RXC221/222	using RS-232C communication
RXC340	
TS-X105	I/O point trace / Remote command
TS-X205	
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	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	-														

- 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.

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					SR1-X		RDV-X									
Model	Lead designation	Brake ^{Note 1}	Origin position change	Grease type	Stroke	Cable length ^{Note 2}	Positioner ^{Note 4}	Driver: Power-supply voltage	Regenerative unit	LCD monitor	I/O selection	Battery	Controller	Driver: Power capacity	Usable for CE	Regenerative unit	I/O selection	Battery	Driver	Power-supply voltage	Driver: Power capacity	Regenerative unit
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	No entry/No brakes BK: Brakes provided	None: Standard Z: Non-motor side ^{Note 2}	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: PROFINET GW: No I/O board ^{Note 5}	B: With battery (Absolute) N: None (Incremental)	SR1-X	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)	RDV-X	2: AC200V	05: 100W or less	RBR1

- 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

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

Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
Lead 30	5kg 864	501	383	5kg 348	384	776	1kg 600	600	
	15kg 491	156	140	15kg 87	40	306	2kg 1098	1098	
Lead 20	5kg 1292	505	462	5kg 416	388	1186	4kg 545	545	
	15kg 572	158	151	15kg 92	42	386	8kg 280	280	
Lead 10	30kg 455	73	75	30kg 0	0	61	10kg 217	217	
	20kg 617	119	127	10kg 193	132	910	10kg 221	221	
Lead 5	40kg 422	53	59	20kg 53	0	400	15kg 135	135	
	55kg 420	36	40	30kg 0	0	109	20kg 92	92	
	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

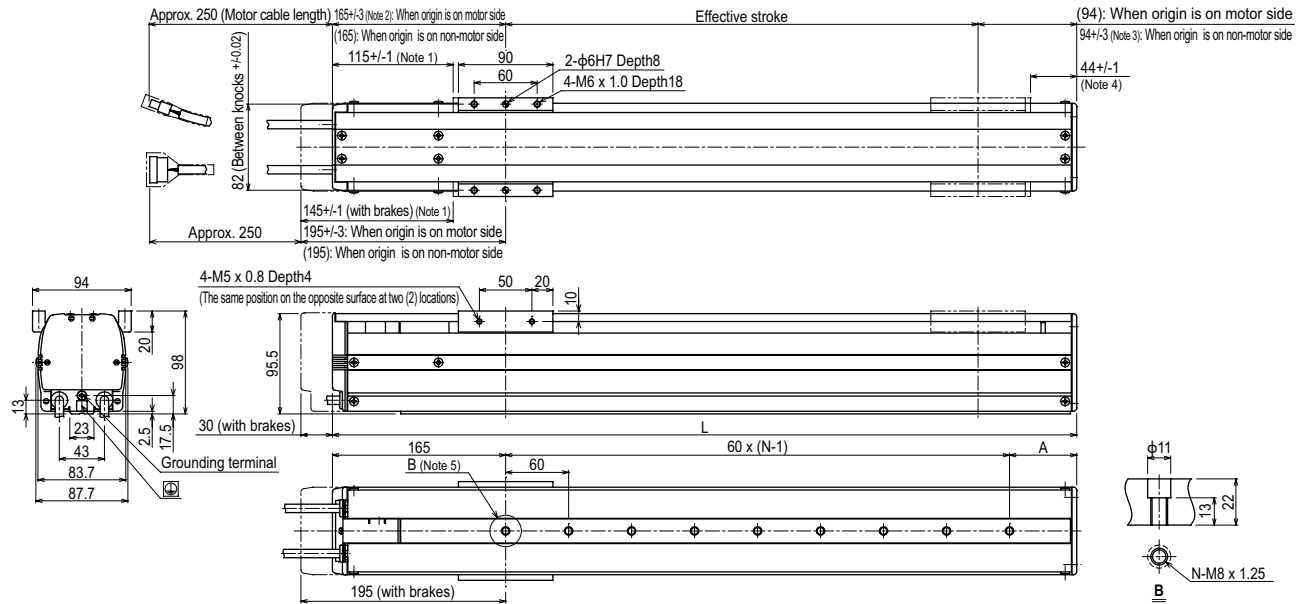
(Unit: N·m)		
MY	MP	MR
86	133	117

Controller

Controller	Operation method
SR1-X05 ^{Note}	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RXC320	
RCX221/222	
RCX340	
TS-X105 ^{Note}	I/O point trace / Remote command
TS-X205 ^{Note}	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±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 ϕ 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 ^{Note 9}	1150 ^{Note 9}	1200 ^{Note 9}	1250 ^{Note 9}	
	L	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	1359	1409	1459	1509
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) ^{Note 7}	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 ^{Note 8} (mm/sec)	Lead 30	1800																						
	Lead 20	1200																						
	Lead 10	600																						
	Lead 5	300																						
Speed setting	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.

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

T9H		Model		Lead designation		Brake		Origin position change		Grease type		Stroke		Cable length	

TSX		Positioner		Driver		Regenerative unit		LCD monitor		I/O selection		Battery	

SR1-X		Controller		Driver		Regenerative unit		I/O selection		Battery	

RDV-X		Driver		Power-supply voltage		Regenerative unit		RBR1	

- 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.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

AC servo motor output (W)	200		
Repeatability (mm)	±0.01		
Deceleration mechanism	Ball screw φ15		
Ball screw lead (mm)	30	20	10
Maximum speed (mm/sec)	1800	1200	600
Maximum payload (kg)	Horizontal	Vertical	
Rated thrust (N)	113	170	341
Stroke (mm)	150 to 1250 (50mm pitch)		
Overall length (mm)	Stroke+273		
Maximum dimensions of cross section of main unit (mm)	W94 × H98		
Cable length (m)	Standard: 3.5 / Option: 5.10		
Linear guide type	4 rows of circular arc grooves × 1 rail		
Position detector	Resolvers		
Resolution (Pulse/rotation)	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

Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)		
	A	B	C	A	B	C	A	B	C
Lead 30	10kg: 415	286	183	10kg: 140	120	323	4kg: 515	515	515
Lead 20	10kg: 270	105	93	10kg: 41	0	123	6kg: 334	334	334
Lead 10	10kg: 667	244	225	10kg: 170	128	549	8kg: 244	244	244
Lead 5	10kg: 330	112	107	10kg: 46	0	182	10kg: 217	217	217
Lead 30	40kg: 162	42	47	40kg: 0	0	0	15kg: 133	133	133
Lead 20	40kg: 392	75	81	20kg: 52	0	335	20kg: 90	90	90
Lead 10	40kg: 297	40	44	25kg: 24	0	235	15kg: 135	135	135
Lead 5	80kg: 265	21	24	30kg: 0	0	108	20kg: 92	92	92
Lead 30	60kg: 477	22	37	20kg: 54	0	710	30kg: 49	49	49
Lead 20	80kg: 412	22	25	25kg: 25	0	505			
Lead 10	100kg: 362	16	18	30kg: 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

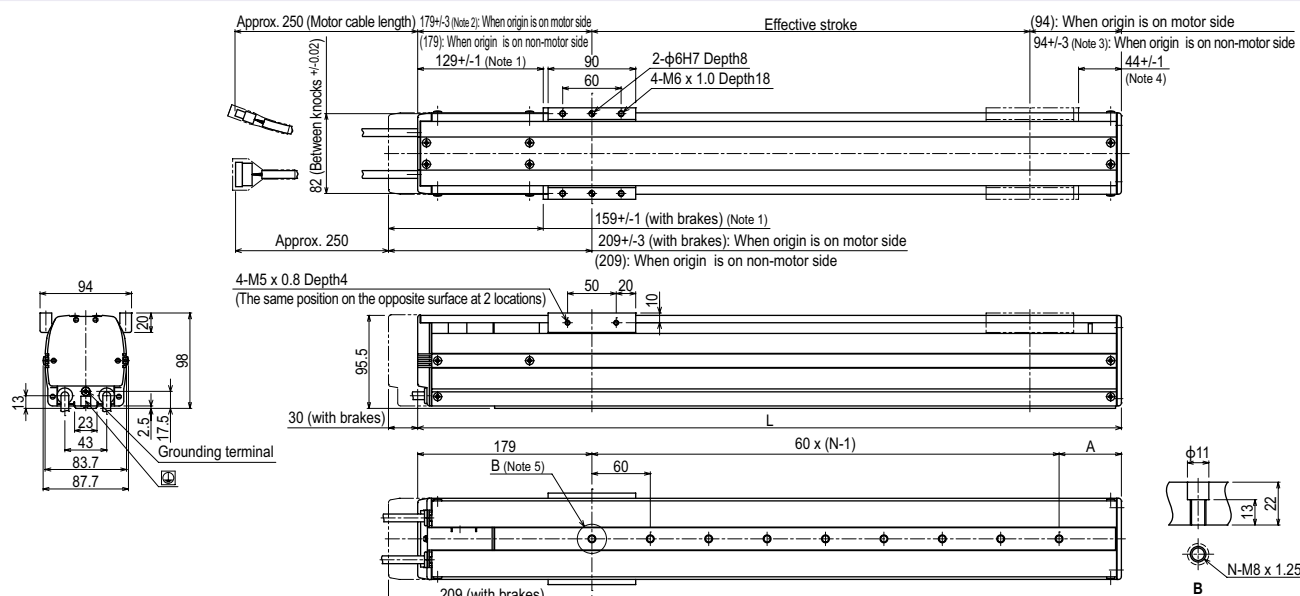
MY	MP		MR	
	86	133	117	117

Controller

Controller	Operation method
SR1-X10	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RXC320	
RXC221/222	
RXC340	
TS-X110	I/O point trace / Remote command
TS-X210	Pulse train control
RDV-X210-RBR1	

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	1150	1200	1250
	L	423	473	523	573	623	673	723	773	823	873	923	973	1023	1073	1123	1173	1223	1273	1323	1373	1423	1473
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)	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
Maximum speed (mm/sec)	Lead 30	1800																					
	Lead 20	1200																					
	Lead 10	600																					
	Lead 5	300																					
Speed setting	-																						

- 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.