

T9

- High lead: Lead 30
- Origin at non-motor side: Lead 10-20-30

Ordering method

T9 **SR1-X** **05**

Model	Lead designation	Brake	Option	Stroke	Cable length ^{Note 2}	Controller	Driver	Usable for CE marking	Regenerative unit ^{Note 4}	I/O selection	Battery
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	No entry; BK: Brakes provided	Origin position change None: Standard Z: Non-motor side ^{Note 1} Grease type None: Standard GC: Clean	150 to 1050 (50mm pitch)	3L: 3.5m (Standard) 5L: 5m 10L: 10m 3K/5K/10K ^{Note 2}	SR1-X TS-X ^{Note 3} RDX ^{Note 3}	05: 100W or less	No entry; Standard E: CE marking	No entry; None R: RG1 (SR1-X)	N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus YC: YC-Link ^{Note 5}	No entry; None (Incremental specification) B: Battery (Absolute specification)

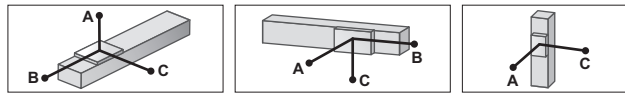
Note 1. If selecting 5mm lead specifications then the origin point cannot be changed to the non-motor side.
 Note 2. The robot cable is standard cable, but can be changed to bend-resistant cable. (not supported on RDX). See P.423 for details on robot cable.
 Note 3. To find TS-X, RDX selection options, see the ordering method listed on each controller's page (TS-X: P.355, RDX: P.365).
 Note 4. When using the SR1-X, TS-X, a regenerative unit is required when the movement stroke is 700mm or more and used perpendicularly. When using the RDX, the regenerative unit RBR1 is required regardless of the installation conditions.
 Note 5. Available only for the slave.

Specifications

AC servo motor output (W)	100			
Repeatability ^{Note 1} (mm)	±0.01			
Deceleration mechanism	Ball screw (Class C7)			
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
	Vertical	-	4	10
Rated thrust (N)	56	84	169	339
Stroke (mm)	150 to 1050 (50mm pitch)			
Overall length (mm)	Horizontal	Stroke+259		
	Vertical	Stroke+289		
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 ^{Note 3}			
Resolution (Pulse/rotation)	16384			

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 750mm, 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.

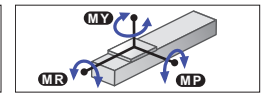
Allowable overhang^{Note}



Lead	Horizontal installation (Unit: mm)				Wall installation (Unit: mm)				Vertical installation (Unit: mm)		
	A	B	C	Stroke	A	B	C	Stroke	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
	30kg	455	73	75	30kg	0	0	61	4kg	545	545
Lead 20	5kg	1292	505	462	5kg	416	388	1186	8kg	280	280
	15kg	572	158	151	15kg	92	42	386	10kg	594	594
	30kg	455	73	75	30kg	0	0	61	10kg	221	221
Lead 10	20kg	617	119	127	10kg	193	132	910	15kg	135	135
	40kg	422	53	59	20kg	53	0	400	20kg	92	92
	55kg	420	36	40	10kg	197	133	2360			
Lead 5	50kg	722	42	47	20kg	54	0	985			
	60kg	657	33	37	30kg	0	0	427			
	80kg	577	23	25							

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



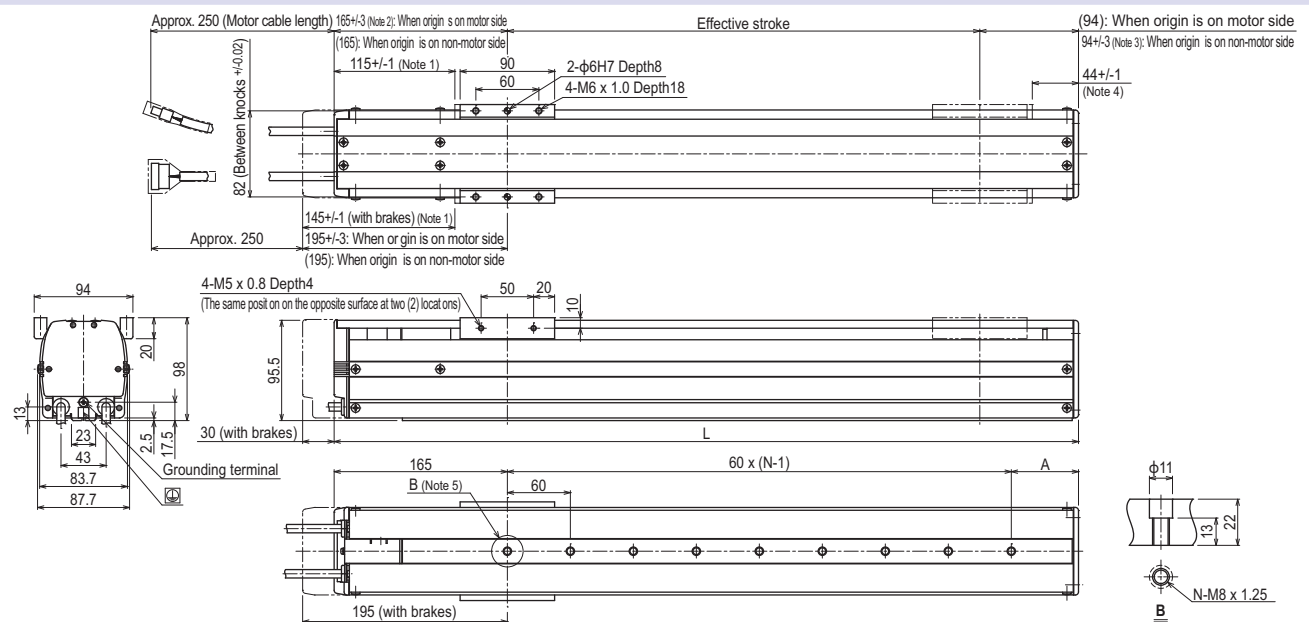
Static loading moment (Unit: N·m)		
MY	MP	MR
86	133	117

Controller

Controller	Operation method
SR1-X-05 ^{Note}	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X205 ^{Note}	I/O point trace
RDX-05-RBR1	Pulse train control

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

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Note 1. Distance from both ends to the mechanical stopper.
 Note 2. 167.5±1.4 when the high lead specification (Lead 30) is used.
 Note 3. 94±1.4 when the high lead specification (Lead 30) is used.
 Note 4. 41.5±1.1 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		
	L	409	459	509	559	609	659	709	759	809	859	909	959	1009	1059	1109	1159	1209	1259	1309	
A	64	54	44	94	84	74	64	54	44	94	84	74	64	54	44	94	84	74	64		
N	4	5	6	6	7	8	9	10	11	11	12	13	14	15	16	16	17	18	19		
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		
Maximum speed ^{Note 8} (mm/sec)	Lead 30	1800										1440	1170	900	810						
	Lead 20	1200										960	780	600	540						
	Lead 10	600										480	390	300	270						
	Lead 5	300										240	195	150	135						
Speed setting	-										80%	65%	50%	45%							

Note 8. When the stroke is longer than 750mm, 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.

APPLICATION
 TRANSERO
 Compact
 single-axis robots

FLIP-X
 Single-axis robots

PHASER
 Linear motor
 single-axis robots

XY-X
 Cartesian
 robots

YK-XG
 SCARA
 robots

YP-X
 Pick & place
 robots

CLEAN
 CONTROLLER INFORMATION

T type
 F type
 N type
 B/MMS/
 R type