

F14

● High lead: Lead 30

● Origin on the non-motor side is selectable

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

Ordering method

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Model	Lead designation	Brake ^{Note 1}	Cable entry location	Origin position change	Grease type	Stroke	Cable length ^{Note 2}
	30: 30mm 20: 20mm 10: 10mm 5: 5mm	No entry: No brakes BK: Brakes provided	No entry: Standard (S) U: From the top R: From the right L: From the left	None: Standard Z: Non-motor side	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

Positioner ^{Note 3}	Driver: Power supply voltage	Regenerative unit	LCD monitor	I/O selection	Battery
TSX: TS-X	Power capacity 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 4}	B: With battery (Absolute) N: None (Incremental)

SR1-X

Controller	Driver: Power capacity	Usable for CE	Regenerative unit	I/O selection	Battery
05	05: 100W or less	No entry: Standard E: CE marking	No entry: None R: With RGT	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	

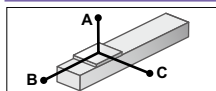
- Note 1. The model with a lead of 30mm cannot select specifications with brake (vertical specifications).
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.
 Note 3. See P.600 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function.

Specifications

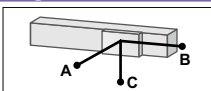
AC servo motor output (W)	100
Repeatability ^{Note 1} (mm)	+/-0.01
Deceleration mechanism	Ball screw φ15
Ball screw lead (mm)	30 20 10 5
Maximum speed ^{Note 2} (mm/sec)	1800 1200 600 300
Maximum payload (kg)	Horizontal 15 30 55 80 Vertical 4 10 20
Rated thrust (N)	56 84 169 339
Stroke (mm)	150 to 1250 ^{Note 3} (50mm pitch)
Overall length (mm)	Horizontal Stroke+255 Vertical Stroke+285
Maximum dimensions of cross section of main unit (mm)	W136 × H83
Cable length (m)	Standard: 3.5 / Option: 5.10
Linear guide type	4 rows of circular arc grooves × 2 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^{Note}



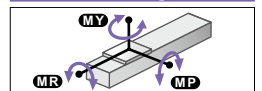
Horizontal installation (Unit: mm)	A	B	C
Lead 30	5kg 1756	1364	863
Lead 20	15kg 1236	467	438
Lead 10	5kg 2153	1366	980
Lead 5	15kg 1193	465	430
Lead 30	30kg 1266	245	294
Lead 20	15kg 1193	465	430
Lead 10	20kg 1132	353	361
Lead 5	40kg 872	183	218
Lead 30	55kg 946	140	184
Lead 20	50kg 1575	158	222
Lead 10	60kg 1493	135	194
Lead 5	80kg 1466	107	159



Wall installation (Unit: mm)	A	B	C
Lead 30	5kg 951	969	1286
Lead 20	15kg 408	277	803
Lead 10	5kg 1066	974	1578
Lead 5	15kg 402	276	775
Lead 30	30kg 219	105	678
Lead 20	20kg 312	189	690
Lead 10	40kg 140	57	402
Lead 5	55kg 92	0	345
Lead 30	30kg 246	107	1095
Lead 20	40kg 167	64	798
Lead 10	60kg 88	20	508

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



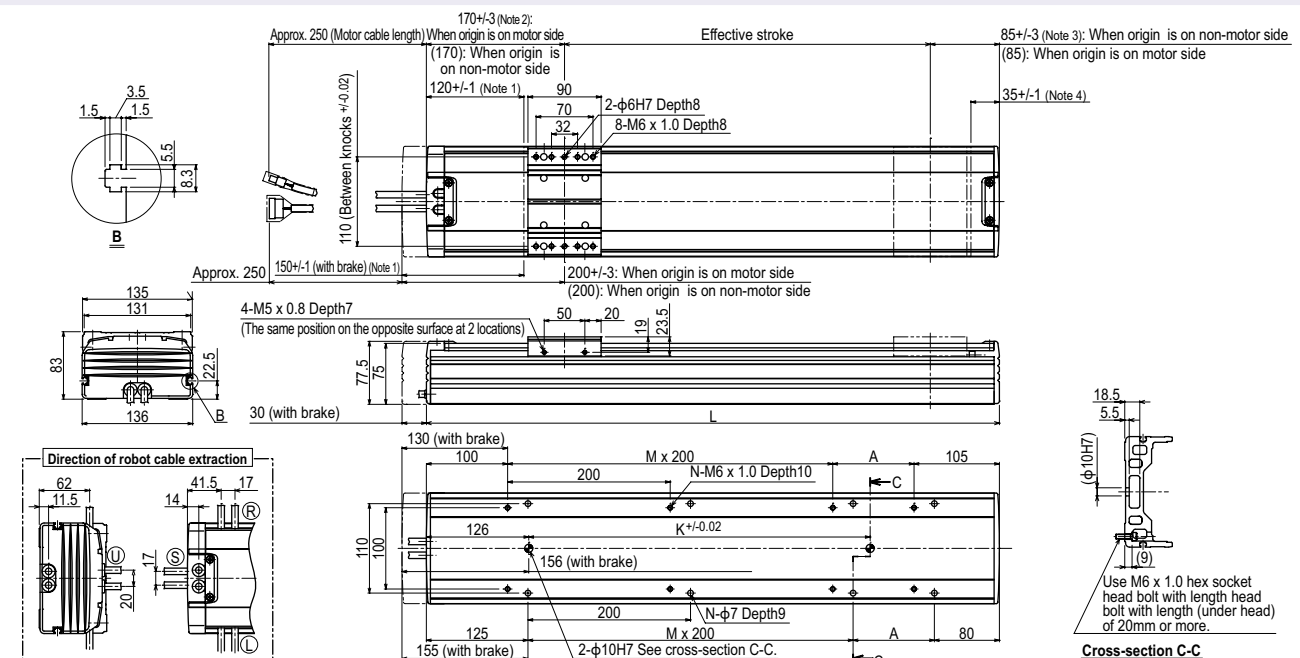
(Unit: N·m)	MY	MP	MR
232	233	204	

Controller

Controller	Operation method
SR1-X05 ^{Note} RCX320 RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X105 ^{Note} TS-X205 ^{Note} RDV-X205-RBR1	I/O point trace / Remote command / 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. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. 172.5±/4 when the high lead specification (Lead 30) is used.
 Note 3. 85±/4 when the high lead specification (Lead 30) is used.
 Note 4. 32.5±/1 when the high lead specification (Lead 30) is used.
 Note 5. Minimum bend radius of motor cable is R50.
 Note 6. Weight of models with no brake. The weight of brake-attached models is 0.7 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 <small>Note 8</small>	1150 <small>Note 8</small>	1200 <small>Note 8</small>	1250 <small>Note 8</small>		
L	405	455	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1155	1205	1255	1305	1355	1405	1455	1505		
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100		
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	6	6	6		
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	16	16	16		
K	240	240	240	240	420	420	420	420	600	600	600	600	780	780	780	780	960	960	960	960	1140	1140	1140		
Weight (kg) <small>Note 6</small>	6.2	6.9	7.5	8.2	8.8	9.5	10.1	10.8	11.4	12.1	12.6	13.4	13.9	14.6	15.2	15.9	16.5	17.2	17.8	18.5	19.1	19.8	20.4		
Maximum speed (mm/sec) <small>Note 7</small>	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 7. 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 8. Strokes longer than 1050mm are special order items. Please contact us for speed setting.