

# F14H

● 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

### F14H

Model	Lead designation	Brake	Cable entry location	Origin position change	Grease type	Stroke	Cable length
	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)

- 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.614 for details on robot cable.  
 Note 4. See P.522 for DIN rail mounting bracket.  
 Note 5. Select this selection when using the gateway function. For details, see P.66.

### TSX

Positioner	Driver: Power-supply voltage	Regenerative unit	LCD monitor	I/O selection	Battery
TS-X	Power capacity 110: 100V/200W 210: 200V/200W	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	B: With battery (Absolute) N: None (Incremental)

### SR1-X

Controller	Driver: Power capacity	Usable for CE	Regenerative unit	I/O selection	Battery
10	10: 200W	No entry: Standard E: CE marking	No entry: None R: With RGT	N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFINET	B: With battery (Absolute) N: None (Incremental)

### RDV-X

Driver	Power-supply voltage	Driver: Power capacity	Regenerative unit
2	2: AC200V	10: 200W or less	

## Specifications

AC servo motor output (W)	200	
Repeatability (mm)	+/-0.01	
Deceleration mechanism	Ball screw φ15	
Ball screw lead (mm)	30	20 10 5
Maximum speed (mm/sec)	1800	1200 600 300
Maximum payload (kg)	Horizontal	Vertical
	25 40 80 100	8 20 30
Rated thrust (N)	113	170 341 683
Stroke (mm)	150 to 1250 (50mm pitch)	
Overall length (mm)	Horizontal	Vertical
	Stroke+320	Stroke+350
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	
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	C	
Lead 30	10kg 2152	1673	934	10kg 975	1219	1625	4kg 2400	2016	
	25kg 1847	691	533	25kg 482	426	1257	6kg 1699	1364	
Lead 20	10kg 2265	1674	961	10kg 999	1220	1711	8kg 1301	1051	
	20kg 1402	855	537	20kg 515	558	987	10kg 1370	1106	
Lead 10	40kg 1047	445	324	40kg 263	227	635	15kg 906	732	
	30kg 1953	583	485	30kg 419	338	1282	20kg 678	548	
	50kg 1655	365	328	50kg 240	162	934	20kg 767	619	
	80kg 1720	242	238	80kg 134	62	756	25kg 612	494	
Lead 5	60kg 2443	311	317	60kg 209	117	1398	30kg 503	407	
	80kg 2193	242	253	80kg 135	62	1120			
	100kg 2000	202	214	100kg 90	29	900			

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

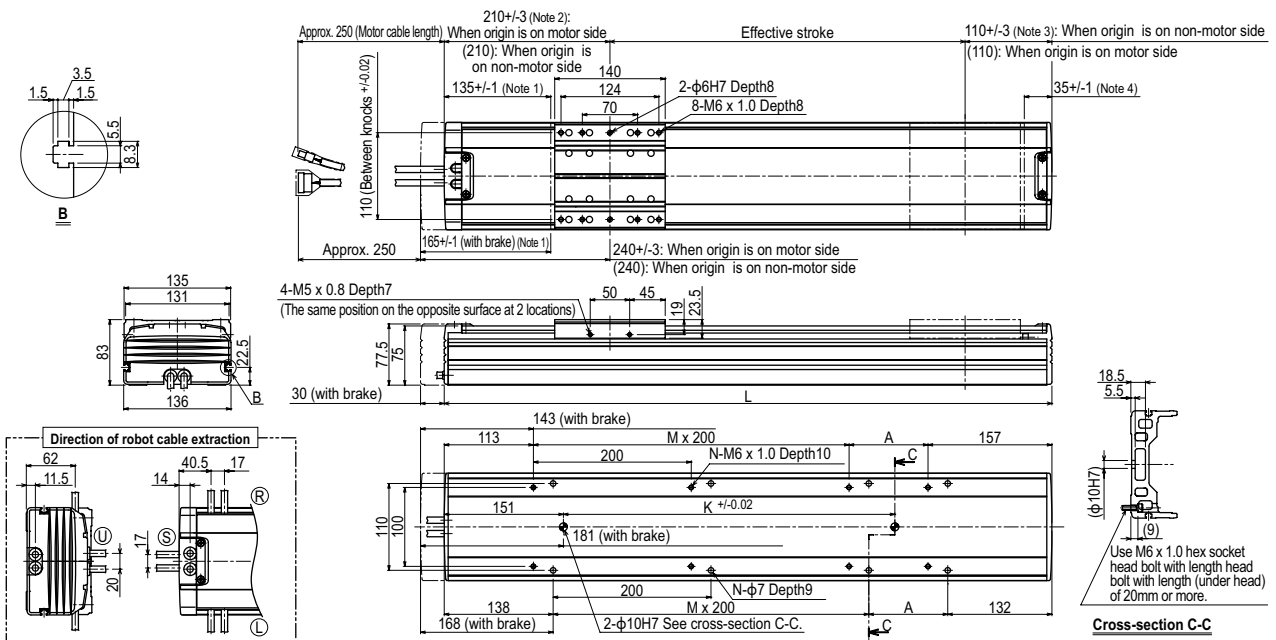
(Unit: N·m)		
MY	MP	MR
551	552	485

## Controller

Controller	Operation method
SR1-X10 Note	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RX320	
RX221/222	
RX340	
TS-X110 Note	I/O point trace / Remote command
TS-X210 Note	
RDV-X210-RBR1	Pulse train control

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

### F14H



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.  
 Note 2. 212.5+/-4 when the high lead specification (Lead 30) is used.  
 Note 3. 110+/-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.  
 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.

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	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520
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	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
K	240	240	240	420	420	420	600	600	600	600	600	780	780	960	960	960	960	960	1140	1140	1140	1140	1320
Weight (kg)	7.5	8.2	8.8	9.5	10.1	10.8	11.4	12.1	12.7	13.4	13.9	14.6	15.2	15.9	16.5	17.2	17.8	18.5	19.1	19.8	20.4	21.1	21.7
Lead 30	1800																						
Lead 20	1200																						
Lead 10	600																						
Lead 5	300																						
Speed setting	-																						
Maximum speed (mm/sec)	-																						
	80%																						
	65%																						
	50%																						
	45%																						

Controller

SR1-X ▶ 540

TS-X ▶ 514

RDV-X ▶ 528