

F10H

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

Ordering method

F10H

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	None: Standard Z: Non-motor side	None: Standard GC: Clean	Lead 20-10-5: 150 to 1000 (50mm pitch) Lead 30: 150 to 1000 (50mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

TSX

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

RDX

Driver	Driver: Power capacity	Regenerative unit
10	10: 200W or less	RBR1

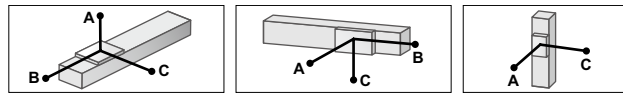
- Note 1. The model with a lead of 30mm cannot select specifications with brake (vertical specifications).
 Note 2. If selecting 5mm lead specifications then the origin point cannot be changed to the non-motor side.
 Note 3. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.518 for details on robot cable.
 Note 4. See P.454 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.447.

Specifications

AC servo motor output (W)	200		
Repeatability (mm)	±0.01		
Deceleration mechanism	Ball screw (Class C7)		
Ball screw lead (mm)	30	20	10
Maximum speed (mm/sec)	1800	1200	600
Maximum payload (kg)	Horizontal	Vertical	
	25	40	80
	8	20	30
Rated thrust (N)	113	170	683
Stroke (mm)	150 to 1000		
Overall length (mm)	Horizontal	Vertical	
	Stroke+355	Stroke+385	
Maximum dimensions of cross section of main unit (mm)	W110 × H71		
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 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. When the movement distance is short, the speed may not reach the maximum speed according to the payload.
 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.

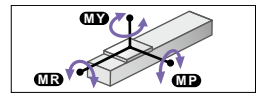
Allowable overhang



Lead	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)			Vertical installation (Unit: mm)				
	A	B	C	A	B	C	A	B	C		
Lead 30	10kg	1181	681	219	10kg	193	570	1062	4kg	1650	1650
	20kg	772	298	99	20kg	65	187	549	6kg	1104	1104
	10kg	1961	685	232	10kg	198	570	1786	8kg	832	832
Lead 20	20kg	949	301	103	20kg	65	187	732	10kg	927	927
	40kg	432	109	38	40kg	0	0	0	15kg	614	614
	30kg	1615	239	84	20kg	100	283	1981	20kg	458	458
Lead 10	50kg	1131	112	39	25kg	66	187	1546	15kg	752	752
	80kg	812	40	14	30kg	43	123	1223	20kg	560	560
	60kg	3091	112	39	20kg	94	379	7629	30kg	369	369
Lead 5	80kg	2330	64	23	25kg	93	264	5987			
	100kg	1733	36	12	30kg	66	187	4841			

- 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



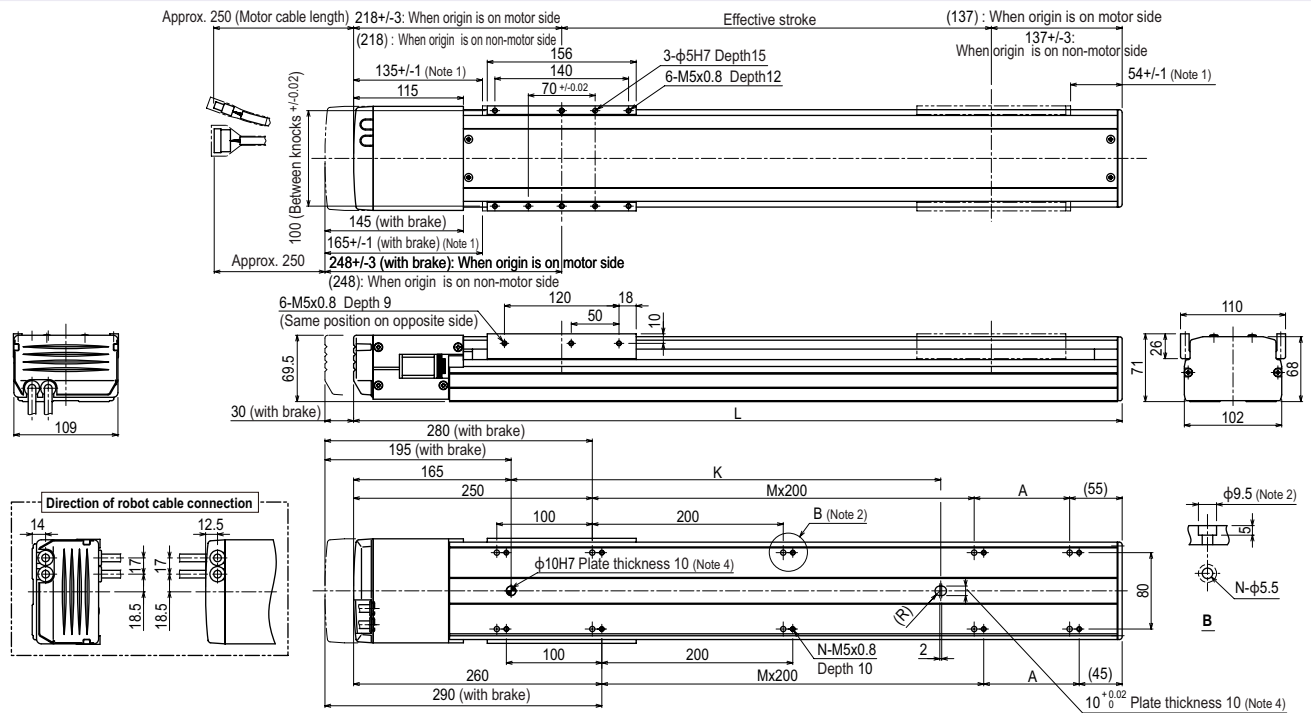
	MY	MP	MR
(Unit: N·m)	348	348	160

Controller

Controller	Operation method
SR1-X10 RCX221/222 RCX240/340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X110 TS-X210 RDX-10-RBR1	I/O point trace / Remote command / Pulse train control

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

F10H

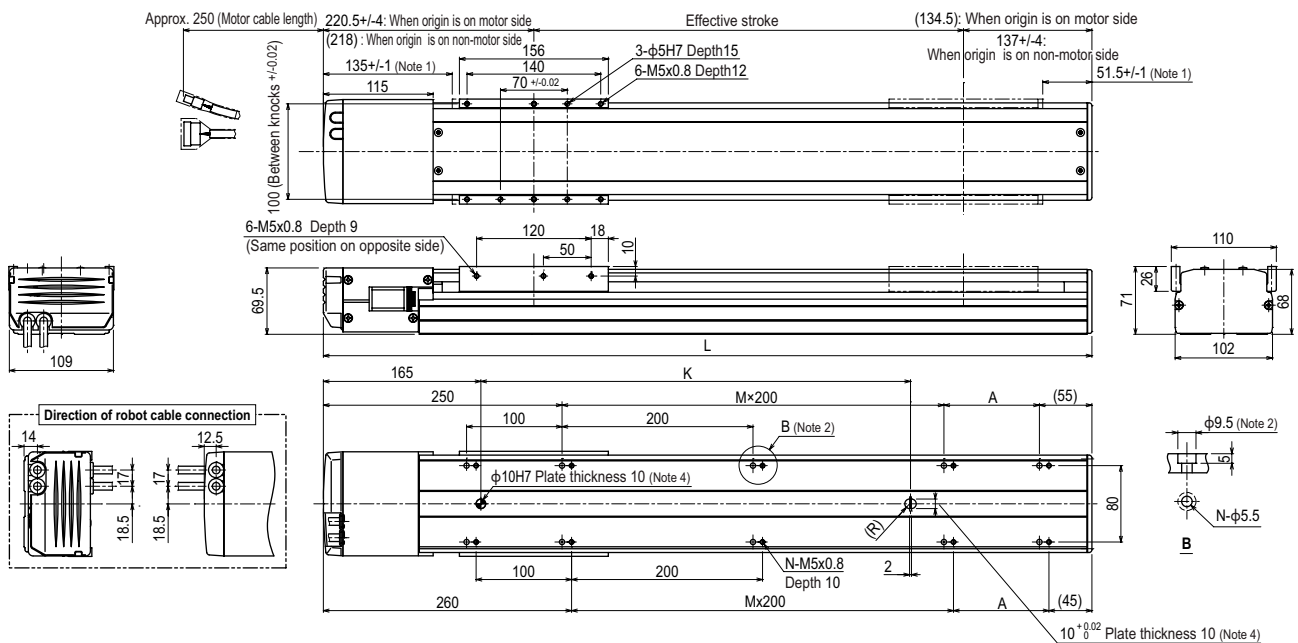


Effective stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
	L	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1155	1205	1255	1305	1355
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	
M	0	1	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	5	
N	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	
K	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
Weight (kg)	6.9	7.3	7.7	8.1	8.4	8.8	9.2	9.6	10.0	10.3	10.7	11.1	11.5	11.9	12.2	12.6	13.0	13.4	
Maximum speed (mm/sec)	Lead 30	1800																	
	Lead 20	1200																	
	Lead 10	600																	
	Lead 5	300																	
Speed setting	80%																		

- Note 1. Distance from both ends to the mechanical stopper.
 Note 2. When installing the unit, washers, etc., cannot be used in the φ9.5 counter bore hole.
 Note 3. Minimum bend radius of motor cable is R50.
 Note 4. When using this φ10 knock-pin hole to position the robot body, the knock-pin must not protrude more than 10mm inside the robot body.
 Note 5. 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.

Note 6. 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 above.

F10H High lead type: Lead 30



Effective stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
L	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1155	1205	1255	1305	1355	
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	
N	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	
K	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
Weight (kg) ^{Note 5}	6.9	7.3	7.7	8.1	8.4	8.8	9.2	9.6	10.0	10.3	10.7	11.1	11.5	11.9	12.2	12.6	13.0	13.4	
Maximum speed (mm/sec) ^{Note 6}	Lead 30											1440	1260	1080	900	720	630		
	Lead 20											960	840	720	600	480	420		
	Lead 10											480	420	360	300	240	210		
	Lead 5											240	210	180	150	120	105		
	Speed setting											80%	70%	60%	50%	40%	35%		

Note 1. Distance from both ends to the mechanical stopper.
 Note 2. When installing the unit, washers, etc., cannot be used in the φ9.5 counter bore hole.
 Note 3. Minimum bend radius of motor cable is R50.
 Note 4. When using this φ10 knock-pin hole to position the robot body, the knockpin must not protrude more than 10mm inside the robot body.
 Note 5. 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.
 Note 6. 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 above.