

F17L



Ordering method

F17L - 50						SR1-X	20		R			
Model	Lead designation	Brake ^{Note 1} No entry: No brakes BK: Brakes provided	Cable entry location No entry: Standard (S) U: From the top R: From the right L: From the left	Option Origin position: None/Standard Z: Non-change motor side Grease: None/Standard type GC: Clean	Stroke 1100 to 2050 (50mm pitch)	Cable length ^{Note 2} 3L: 3.5m (Standard) 5L: 5m 10L: 10m 3K/5K/10K ^{Note 2}	Controller SR1-X TS-X ^{Note 3} RDX ^{Note 3}	Driver 20: 400 to 600W	Usable for CE No entry: Standard E: CE marking	Regenerative unit R: RG1 (SR1-X)	I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus YC: YC-Link ^{Note 4}	Battery No entry: None (Incremental specification) B: Battery (Absolute specification)

Note 1. Vertical installation (with brake) are only supported on the SR1-X and TS-X. The RDX supports only horizontal installation.

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. Available only for the slave.

Specifications

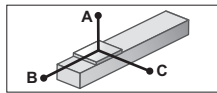
AC servo motor output (W)	600
Repeatability ^{Note 1} (mm)	+/-0.02
Deceleration mechanism	Ball screw (Class C10)
Ball screw lead (mm)	50
Maximum speed ^{Note 2} (mm/sec)	2200
Maximum payload (kg)	
Horizontal	50
Vertical	10
Rated thrust (N)	204
Stroke (mm)	1100 to 2050 (50mm pitch)
Overall length (mm)	
Horizontal	Stroke+475
Vertical	Stroke+505
Maximum dimensions of cross section of main unit (mm)	W168 x H100
Cable length (m)	Standard: 3.5 / Option: 5,10
Linear guide type	4 rows of circular arc grooves x 2 rail
Position detector	Resolvers ^{Note 3}
Resolution (Pulse/rotation)	16384

Note 1. Positioning repeatability in one direction.

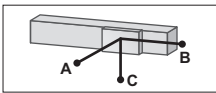
Note 2. When the stroke is longer than 1250mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

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.

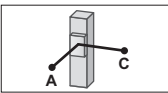
Allowable overhang ^{Note}



Horizontal installation (Unit: mm)		A	B	C
Lead 50	10kg	4000	2755	2608
	30kg	3045	895	1175
	50kg	2602	523	715



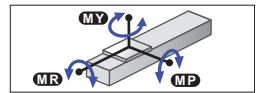
Wall installation (Unit: mm)		A	B	C
Lead 50	10kg	2720	2681	4000
	30kg	1185	821	3045
	50kg	680	449	2602



Vertical installation (Unit: mm)		A	B	C
Lead 50	2kg	1200	1200	
	5kg	3000	3000	
	10kg	2650	2650	

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

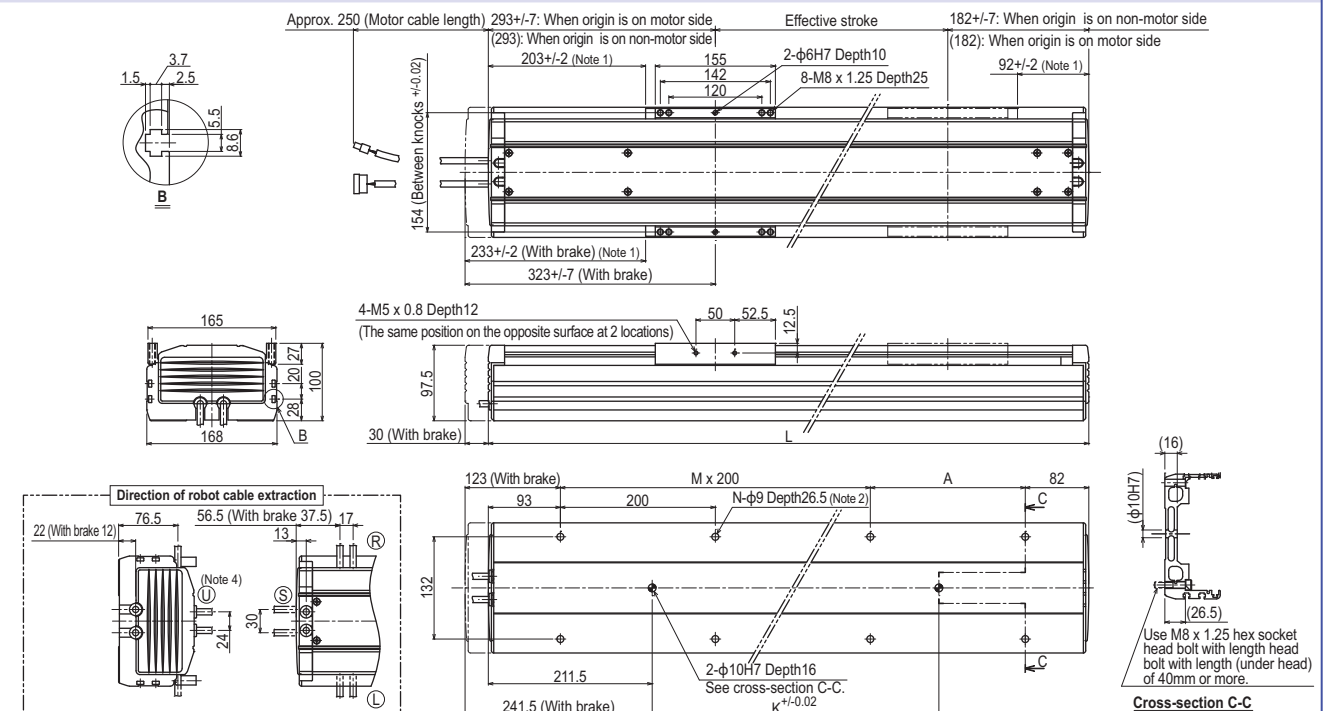


(Unit: N·m)		
MY	MP	MR
1032	1034	908

Controller

Controller	Operation method
SR1-X-20-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220-R	I/O point trace
RDX-20-RBR1	Pulse train control

F17L



Note 1. Length from both ends to mechanical stopper position.

Note 2. It is not allowed to use a counter bore washer, etc. when installing the main unit.

Note 3. This is the weight of the model without a brake. The weight of the model equipped with a brake is 1.2kg heavier than this value.

Note 4. Make a separate consultation with us regarding robot cable (brake specifications) U extraction.

Effective stroke	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050
L	1575	1625	1675	1725	1775	1825	1875	1925	1975	2025	2075	2125	2175	2225	2275	2325	2375	2425	2475	2525
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11
N	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	26	26	26	26
K	1140	1140	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
Weight (kg) ^{Note 3}	34.1	34.9	35.8	36.7	37.6	38.4	39.3	40.2	41.1	42	42.9	43.8	44.7	45.6	46.5	47.3	48.2	49.1	50	50.9
Maximum speed ^{Note 5} (mm/sec)	Lead 50	2200			1900			1500			1200			900			800			
	Speed setting	—			86%			68%			54%			40%			36%			