F17L

Origin on the non-motor side is selectable

Note. Upper robot cable (U) on models with brakes is a special order item, so please consult our sales office or sales representative for assistance. (External dimensions: overall length + 20 mm)

Ordering method

F17L - 50 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead designation	Brake	Cable entry location	Origin position change	Grease type	Stroke	Cable length Note 2
	50	No entry: No brakes BK: Brakes provided	No entry: Standard (S) U: From the top Note 1 R: From the right L: From the left	None: Standard Z: Non-motor side	None: Standard GC: Clean	1100 to 2050 (50mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

TSX - 220 - R - [ ] - [ ] - [ ] - [ ]

Positioner Note 3	Driver: Power-supply voltage / Power capacity Note 4	Regenerative unit	LCD monitor	I/O selection	Battery
TSX: TS-X	220: 200V/400 to 600W	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 5	B: With battery (Absolute) N: None (Incremental)

SR1-X - 20 - [ ] - R - [ ] - [ ]

Controller	Driver: Power capacity Note 4	Usable for CE	Regenerative unit	I/O selection	Battery
SR1-X	20: 400 to 600W	No entry: Standard E: CE marking	R: With RG1	N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	B: With battery (Absolute) N: None (Incremental)

RDV-X - 2 - 20 - [ ]

Driver	Power-supply voltage	Driver: Power capacity Note 4	Regenerative unit
RDV-X	2: AC200V	20: 600W or less	RBR1 (Horizontal) RBR2 (Vertical)

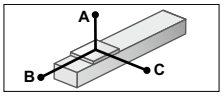
Note 1. Upper robot cable (U) on models equipped with brake is a special-order item.
Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.
Note 3. See P.600 for DIN rail mounting bracket.
Note 4. Acceleration / deceleration is different depending the Positioner or Controller or Driver.
Note 5. Select this selection when using the gateway function.

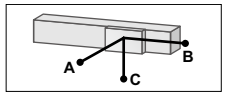
Specifications

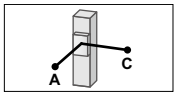
AC servo motor output (W)		600
Repeatability Note 1 (mm)		+/-0.02
Deceleration mechanism		Ball screw ϕ25
Ball screw lead (mm)		50
Maximum speed Note 2 (mm/sec)		2200
Maximum payload (kg)	Horizontal	50
	Vertical	10
Rated thrust (N)		204
Stroke (mm)		1100 to 2050 (50mm pitch)
Overall length (mm)	Horizontal	Stroke+475
	Vertical	Stroke+505
Maximum dimensions of cross section of main unit (mm)		W168 × H100
Cable length (m)		Standard: 3.5 / Option: 5,10
Linear guide type		4 rows of circular arc grooves × 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 1200mm, 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)

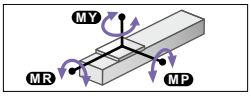
		A	B	C
Lead 50	10kg	2720	2681	4000
	30kg	1185	821	3045
	50kg	680	449	2602

Vertical installation (Unit: mm)

		A	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



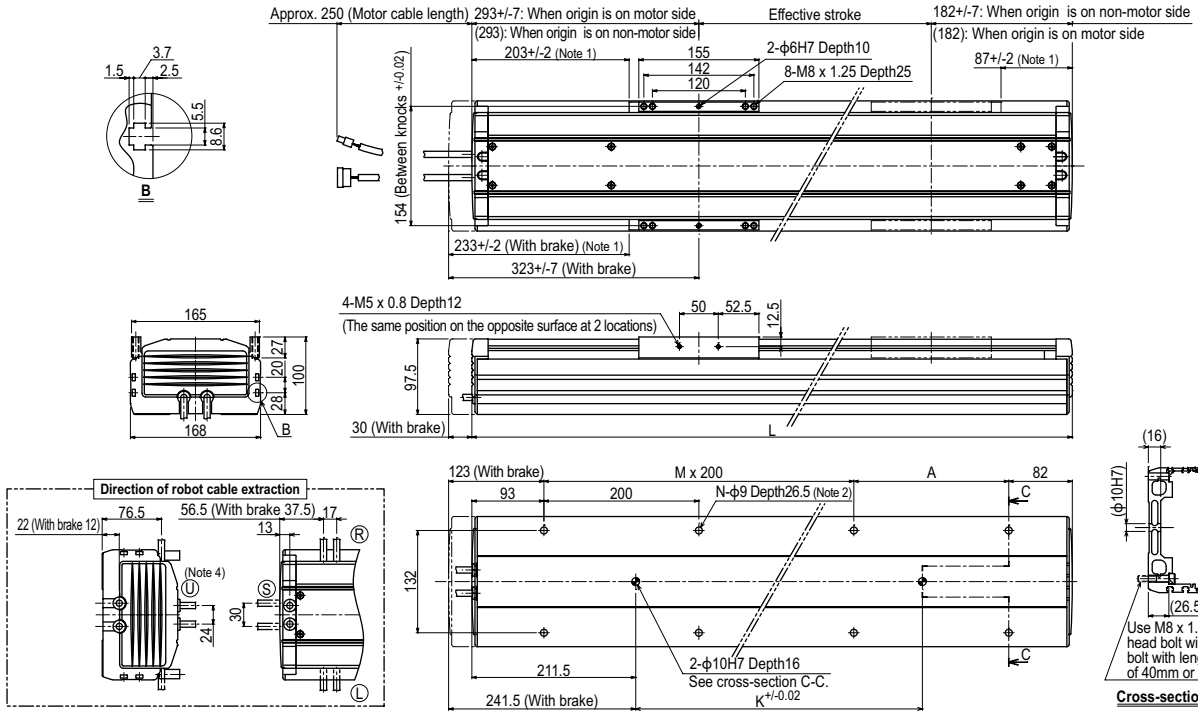
(Unit: N·m)

MY	MP	MR
1032	1034	908

Controller

Controller	Operation method
SR1-X20-R RCX320 RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220-R	I/O point trace / Remote command
RDV-X220-RBR1 (Horizontal) RDV-X220-RBR2 (Vertical)	Pulse train control

F17L



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
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. (External dimensions: overall length + 20 mm)

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	24	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%

Note 5. When the stroke exceeds 1200mm, although depending on the moving range, the ball screw may resonate (critical speed). In that case, make adjustment to lower the speed on the program using the maximum speed given in the above table as a guide.

Controller | SR1-X ▶ 618 | TS-X ▶ 592 | RDV-X ▶ 606