

B10

APPLICATION
TRANSMISSION
Compact
single-axis robots
FLIP-X
Single-axis robots
PHASER
Linear motor
single-axis robots
XY-X
Cartesian
robots
YK-X
SCARA
robots
YP-X
Pick & place
robots
CLEAN
CONTROLLER INFORMATION
T type
F type
GF type
N type
B type

Ordering method

B10

Model	Motor installation direction	Option	Stroke	Cable length ¹⁾
	L: Motor leftward, horizontal position R: Motor rightward, horizontal position LU: Motor leftward, upper position RU: Motor rightward, upper position LD: Motor leftward, lower position RD: Motor rightward, lower position	Grease type None: Standard GC: Clean	150 to 2550 (100mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

TSX

Positioner ²⁾	Driver: Power-supply voltage / Power capacity	LCD monitor	I/O selection	Battery
TS-X	105: 100V/100W or less 205: 200V/100W or less	No entry: None L: With LCD	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board ³⁾	B: With battery (Absolute) N: None (Incremental)

SR1-X

Controller	05	Usable for CE	I/O selection	Battery
	Driver: Power capacity 05: 100W or less	No entry: Standard E: CE marking	N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	B: With battery (Absolute) N: None (Incremental)

RDV-X

Driver	2	05	RBR1
	Power-supply voltage 2: AC200V	Driver: Power capacity 05: 100W or less	Regenerative unit

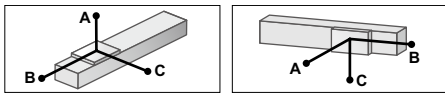
Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.510 for details on robot cable.
Note 2. See P.446 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.439.

Specifications

AC servo motor output (W)	100
Repeatability ^{Note 1} (mm)	+/- 0.04
Belt (mm)	Equivalent to lead 25
Maximum speed (mm/sec)	1875
Maximum payload (kg)	10
Stroke (mm)	150 to 2550 (100mm pitch)
Overall length (mm)	Stroke+397.5
Motor installation	Another
Maximum dimensions of cross section of main unit (mm)	W100 × H81
Cable length (m)	Standard: 3.5 / Option: 5.10
Linear guide type	4 rows of circular arc grooves × 1 rail
Position detector	Resolvers ^{Note 2}
Resolution (Pulse/rotation)	16384

Note 1. Positioning repeatability in one direction.
Note 2. Position detectors (resolvers) are common to incremental and absolute specifications. If the controller has a backup function then it will be absolute specifications.

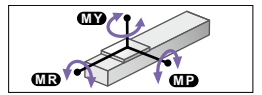
Allowable overhang^{Note}



	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)		
	A	B	C	A	B	C
3kg	1800	1392	1084	1144	1005	1734
5kg	1574	826	696	724	576	1199
8kg	1221	509	474	493	333	918
10kg	1171	403	407	414	254	869

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



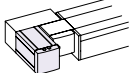
(Unit: N·m)		
MY	MP	MR
188	188	165

Controller

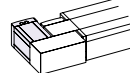
Controller	Operation method
SR1-X05 RCX221/222 RCX240/340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X105 TS-X205	I/O point trace / Remote command
RDV-X205-RBR1	Pulse train control

Motor installation The line-up consisting of six models of different motor installation position as follows.

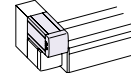
L type Leftward at horizontal position



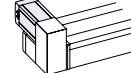
R type Rightward at horizontal position



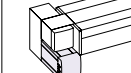
LU type Leftward at upper position



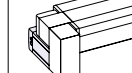
RU type Rightward at upper position



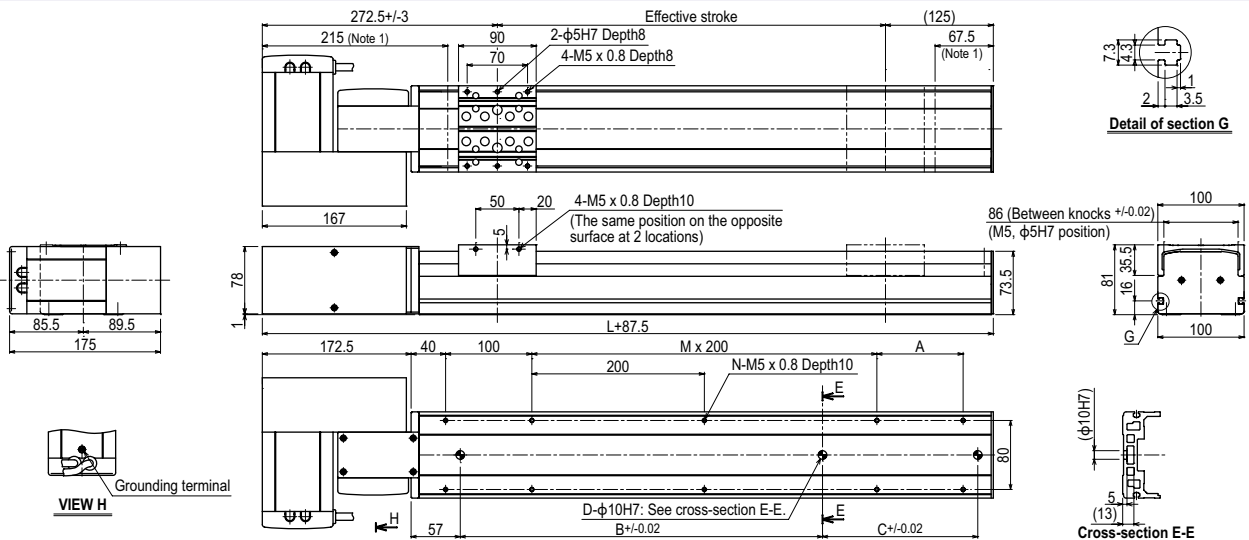
LD type Leftward at lower position



RD type Rightward at lower position



B10 R type (Motor rightward, horizontal position)

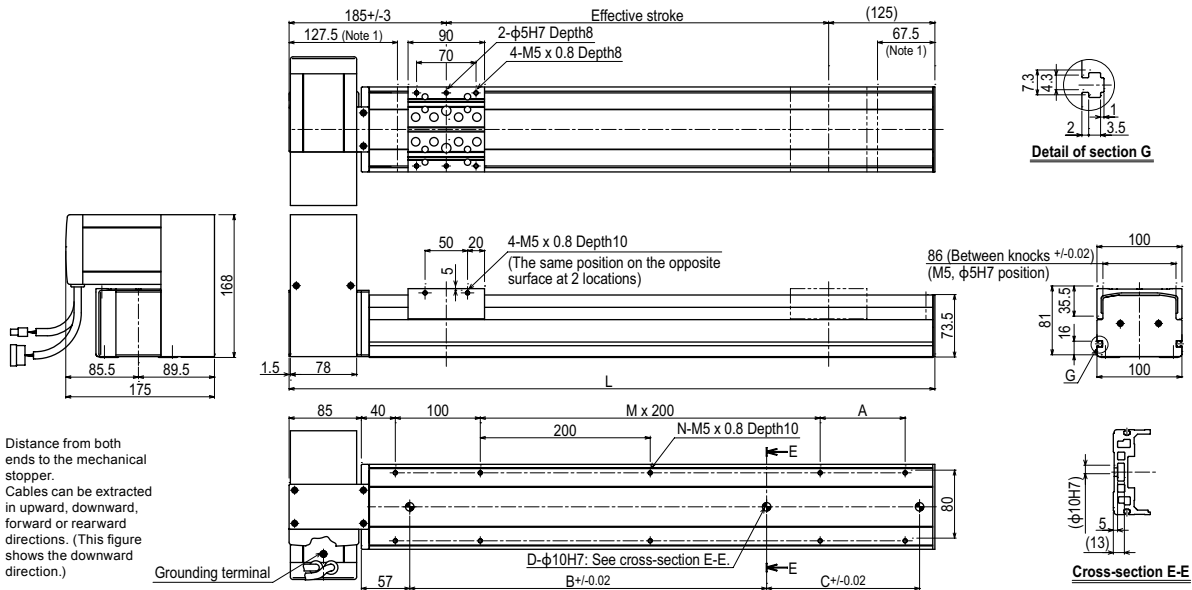


Effective stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350
L	460	510	560	610	660	710	760	810	860	910	960	1010	1060	1110	1160	1210	1260	1310	1360	1410	1460	1510	1560	1610	1660
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
B	240	240	240	420	420	420	600	600	600	600	780	780	780	780	960	960	960	960	1140	1140	1140	1140	1320	1320	1320
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
M	-	1	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
N	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18
Weight (kg)	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.5	14.9	15.3	15.7	16.1	16.5	16.9

Effective stroke	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550
L	1710	1760	1810	1860	1910	1960	2010	2060	2110	2160	2210	2260	2310	2360	2410	2460	2510	2560	2610	2660	2710	2760	2810	2860
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
B	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
C	-	240	240	240	420	420	420	600	600	600	780	780	780	780	960	960	960	960	1140	1140	1140	1140	1320	1320
D	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
M	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	11	12	12	12
N	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	28	30	30	30
Weight (kg)	17.3	17.7	18.0	18.4	18.8	19.2	19.6	20.0	20.4	20.8	21.2	21.6	22.0	22.4	22.8	23.2	23.6	24.0	24.4	24.8	25.2	25.6	25.9	26.3

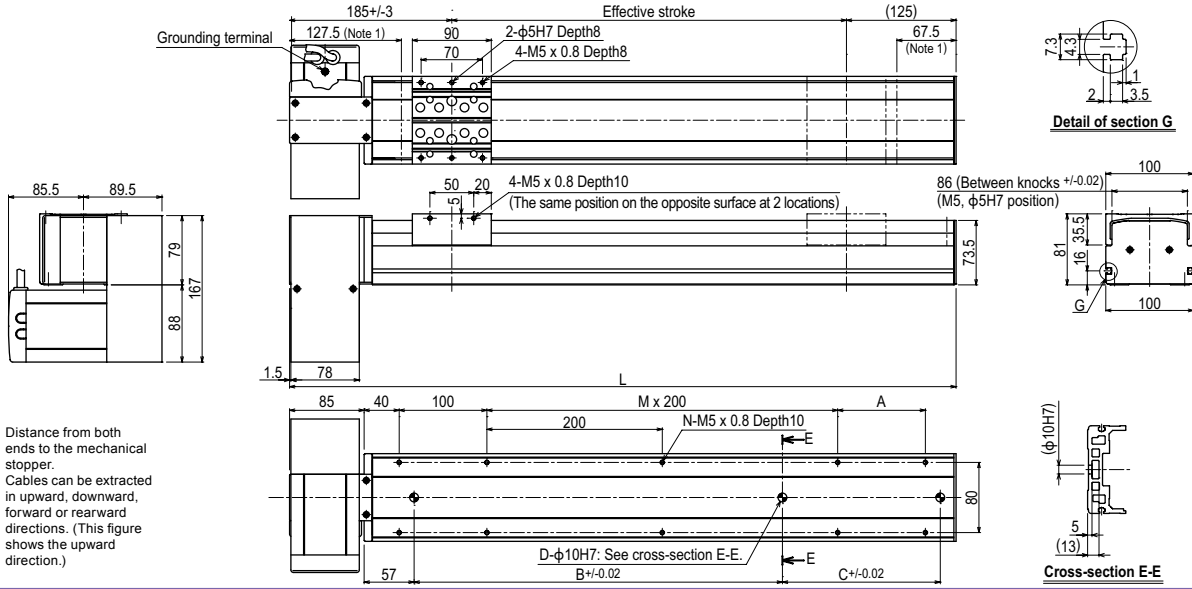
Note 1. Distance from both ends to the mechanical stopper.
Note 2. Cables can be extracted in upward, downward, forward or rearward directions. (This figure shows the forward direction.)

B10 RU type (Motor rightward, upper position)



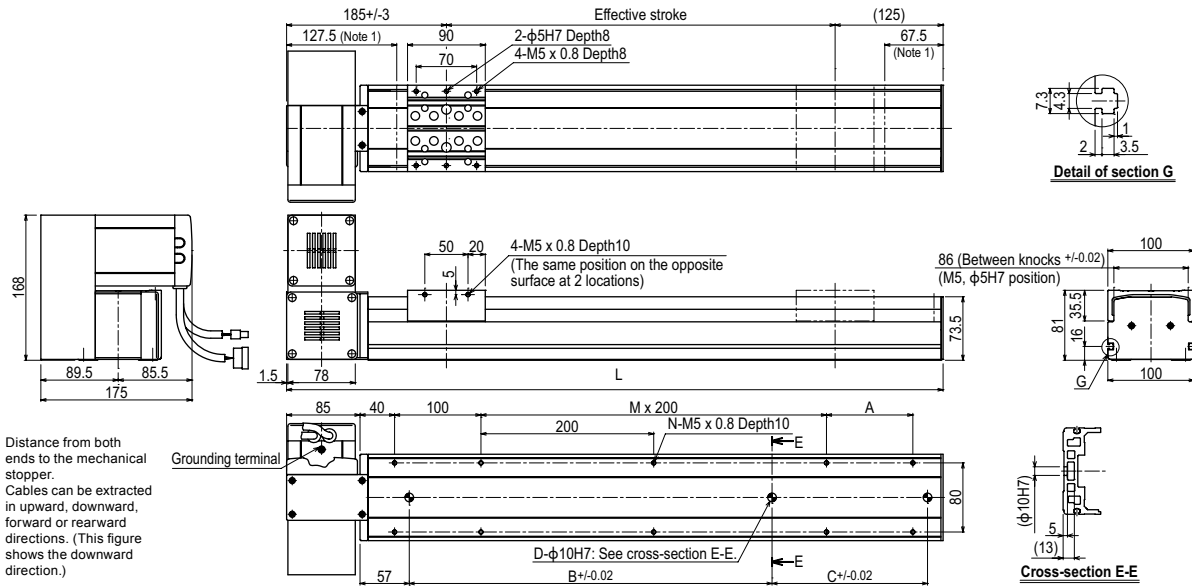
Note 1. Distance from both ends to the mechanical stopper.
 Note 2. Cables can be extracted in upward, downward, forward or rearward directions. (This figure shows the downward direction.)

B10 RD type (Motor rightward, lower position)



Note 1. Distance from both ends to the mechanical stopper.
 Note 2. Cables can be extracted in upward, downward, forward or rearward directions. (This figure shows the upward direction.)

B10 LU type (Motor leftward, upper position)



Note 1. Distance from both ends to the mechanical stopper.
 Note 2. Cables can be extracted in upward, downward, forward or rearward directions. (This figure shows the downward direction.)