

B14



Ordering method

B14 - [] - [] - [] - **SR1-X** - **05** - [] - [] - [] - []

| Model | Motor installation direction | Option | Stroke | Cable length ^{Note 1} | Controller | Driver | Usable for CE | Regenerative unit | I/O selection | Battery |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------|-------------------------------------------|---------------------------------|--------------------------------|-------------------------------------|-------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| | 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 3050 (100mm pitch) | 3L: 3.5m (Standard) 5L: 5m 10L: 10m | SR1-X TS-X ^{Note 2} | 05: 100W or less 105 (TS-X) | No entry: Standard E: CE marking | No entry: None | N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus YC: YC-Link ^{Note 3} | No entry: None (Incremental specification) B: Battery (Absolute specification) |

Note 1. The robot cable is standard cable, but can be changed to bend-resistant cable. (consult factory)
 Note 2. To find TS-X selection options, see the ordering method listed on each controller's page.
 Note 3. Available only for the SR1-X slave.

Basic specifications

| | |
|-------------------------------------------------------|-----------------------------------------|
| AC servo motor output (W) | 100 |
| Repeatability ^{Note 1} (mm) | +/- 0.04 |
| Belt (mm) | Equivalent to lead 25mm |
| Maximum speed (mm/sec) | 1875 |
| Maximum payload (kg) | 20 |
| Stroke (mm) | 150 to 3050 (100mm pitch) |
| Overall length (mm) | Stroke+425.5 |
| Motor installation | Another Stroke+338 |
| Maximum dimensions of cross section of main unit (mm) | W146 x H94 |
| 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 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 |
| 5kg | 2159 | 1228 | 943 | 5kg | 1064 | 816 | 1468 |
| 10kg | 1389 | 623 | 548 | 10kg | 564 | 377 | 888 |
| 20kg | 1102 | 320 | 348 | 20kg | 305 | 156 | 615 |

Note 1. 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 |
| 226 | 227 | 199 |

Controller

| Controller | Operation method |
|------------|----------------------------------------------------------------------------------------------|
| SR1-X-05 | Programming / I/O point trace (BCD) / Remote command / Operation using RS-232C communication |
| TS-X105 | I/O point trace (BCD) |

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

B14 R type

VIEW H

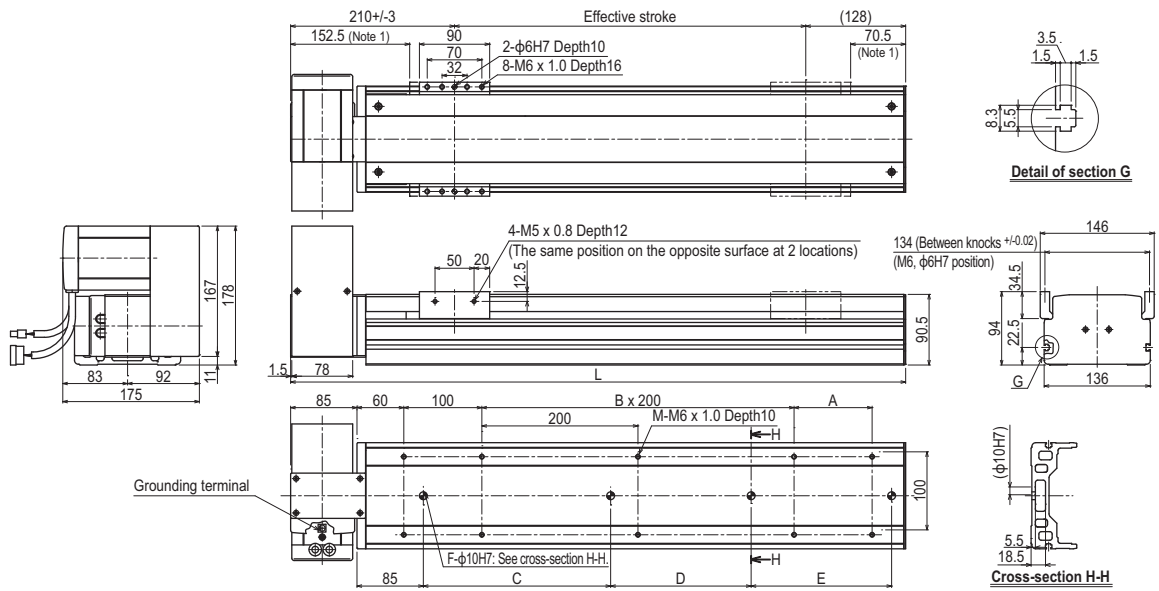
Detail of section G

Cross-section J-J

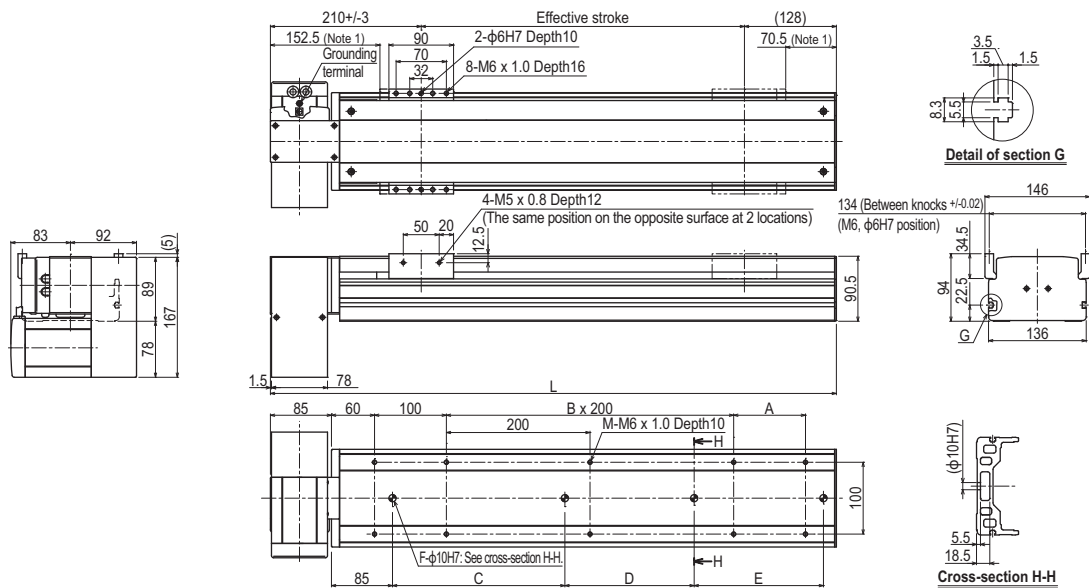
Note 1. Distance from both ends to the mechanical stopper.
 Note 2. Motor can be installed in upward, downward or horizontal positions versus the robot movement axis. (This figure shows the horizontal direction.)
 Note 3. Motor can be installed on the right or left side of the robot movement axis. (This figure shows the rightward direction.)
 Note 4. Cables can be extracted in upward, downward, forward or rearward di. (This figure shows the forward direction.)
 Note 5. As the carriage is made of extracted aluminum, its width dimension may slightly differ from the value above.

| Effective stroke | 150 | 250 | 350 | 450 | 550 | 650 | 750 | 850 | 950 | 1050 | 1150 | 1250 | 1350 | 1450 | 1550 | 1650 | 1750 | 1850 | 1950 | 2050 | 2150 | 2250 | 2350 | 2450 | 2550 | 2650 | 2750 | 2850 | 2950 | 3050 |
|------------------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L | 488 | 588 | 688 | 788 | 888 | 988 | 1088 | 1188 | 1288 | 1388 | 1488 | 1588 | 1688 | 1788 | 1888 | 1988 | 2088 | 2188 | 2288 | 2388 | 2488 | 2588 | 2688 | 2788 | 2888 | 2988 | 3088 | 3188 | 3288 | 3388 |
| M | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 22 | 22 | 24 | 24 | 26 | 26 | 28 | 28 | 30 | 30 | 32 | 32 | 34 | 34 | 36 |
| A | - | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 |
| B | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 |
| C | 240 | 420 | 420 | 600 | 600 | 780 | 780 | 960 | 960 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 | 1140 |
| D | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| E | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| F | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| Weight (kg) | 9.6 | 10.8 | 12 | 13.1 | 14.3 | 15.5 | 16.6 | 17.8 | 19 | 20.2 | 21.3 | 22.5 | 23.7 | 24.8 | 26 | 27.2 | 28.3 | 29.5 | 30.7 | 31.9 | 33 | 34.2 | 35.4 | 36.5 | 37.7 | 38.9 | 40 | 41.2 | 42.4 | 43.6 |

B14 RU type



B14 RD type



B14 LU type

