

T9

● High lead: Lead 30

● Origin on the non-motor side is selectable: Lead 10-20-30

Note. Strokes longer than 1050mm are special order items. Please consult us for delivery time.



Ordering method

T9

| | | | | | | |
|--------------|---|--|--|---|--|--|
| Model | Lead designation 30: 30mm 20: 20mm 10: 10mm 5: 5mm | Brake ^{Note 1} No entry: No brakes BK: Brakes provided | Origin position change None: Standard Z: Non-motor side ^{Note 2} | Grease type None: Standard GC: Clean | Stroke Lead 20-10-5: 150 to 1050 (50mm pitch) Lead 30: 150 to 1250 (50mm pitch) | Cable length ^{Note 3} 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) |
|--------------|---|--|--|---|--|--|

TSX

| | | | | | |
|---|---|---|---|---|---|
| Positioner ^{Note 4} TS-X | Driver: Power-supply voltage Power capacity 105: 100V/100W or less 205: 200V/100W or less | Regenerative unit No entry: None R: With RGT | LCD monitor No entry: None L: With LCD | I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 5} | Battery B: With battery (Absolute) N: None (Incremental) |
|---|---|---|---|---|---|

SR1-X 05

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

RDV-X 2 05 RBR1

| | | | |
|---------------|--|---|----------------------------------|
| Driver | Power-supply voltage 2: AC200V | Driver: Power capacity 05: 100W or less | Regenerative unit 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.594 for details on robot cable.
 Note 4. See P.498 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.60.

Specifications

| | |
|--|--|
| AC servo motor output (W) | 100 |
| Repeatability ^{Note 1} (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw (Class C7) |
| Ball screw lead (mm) | 30 20 10 5 |
| Maximum speed ^{Note 2} (mm/sec) | 1800 1200 600 300 |
| Maximum payload (kg) | Horizontal 15 30 55 80 Vertical - 4 10 20 |
| Rated thrust (N) | 56 84 169 339 |
| Stroke (mm) | 150 to 1250 ^{Note 3} (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+259 Vertical Stroke+289 |
| Maximum dimensions of cross section of main unit (mm) | W94 x H98 |
| Cable length (m) | Standard: 3.5 / Option: 5.10 |
| Linear guide type | 4 rows of circular arc grooves x 1 rail |
| Position detector | Resolvers ^{Note 4} |
| Resolution (Pulse/rotation) | 16384 |

- Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 700mm, 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. Strokes longer than 1050mm are available only for high lead (Lead 30). (Special order item)
 Note 4. 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

| | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | | | |
|----------------|------------------------------------|-----|-----|------------------------------|-----|-----|----------------------------------|------|------|------|
| | A | B | C | A | B | C | A | B | C | |
| Lead 30 | | | | | | | | | | |
| 5kg | 864 | 501 | 383 | 5kg | 348 | 384 | 776 | 1kg | 600 | 600 |
| 15kg | 491 | 156 | 140 | 15kg | 87 | 40 | 306 | 2kg | 1098 | 1098 |
| Lead 20 | | | | | | | | 4kg | 545 | 545 |
| 5kg | 1292 | 505 | 462 | 5kg | 416 | 388 | 1186 | 8kg | 280 | 280 |
| 15kg | 572 | 158 | 151 | 15kg | 92 | 42 | 386 | 10kg | 594 | 594 |
| Lead 10 | | | | | | | | 10kg | 221 | 221 |
| 30kg | 455 | 73 | 75 | 30kg | 0 | 0 | 61 | 15kg | 135 | 135 |
| 20kg | 617 | 119 | 127 | 10kg | 193 | 132 | 910 | 20kg | 92 | 92 |
| 40kg | 422 | 53 | 59 | 20kg | 53 | 0 | 400 | | | |
| 55kg | 420 | 36 | 40 | 30kg | 0 | 0 | 109 | | | |
| 50kg | 722 | 42 | 47 | 10kg | 197 | 133 | 2360 | | | |
| 60kg | 657 | 33 | 37 | 20kg | 54 | 0 | 985 | | | |
| 80kg | 577 | 23 | 25 | 30kg | 0 | 0 | 427 | | | |

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

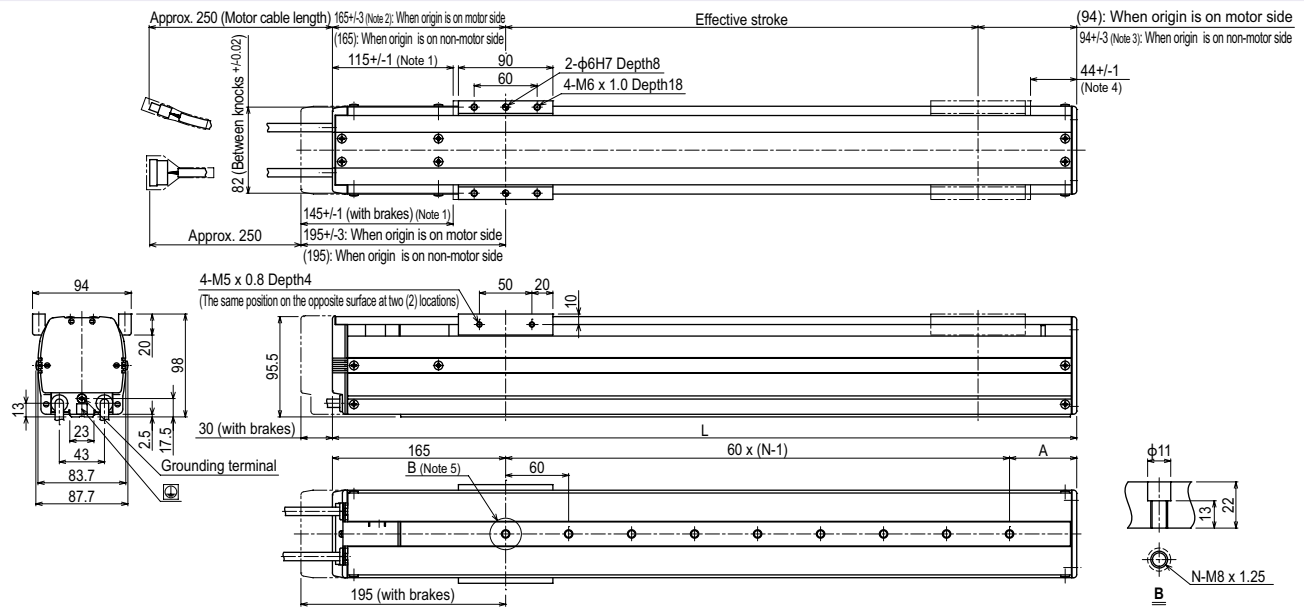
| | MY | MP | MR |
|-------------|----|-----|-----|
| (Unit: N·m) | 86 | 133 | 117 |

Controller

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

Note. Regenerative unit is required when the models used vertically with 700mm or larger stroke.

T9



- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. 167.5±4 when the high lead specification (Lead 30) is used.
 Note 3. 94±4 when the high lead specification (Lead 30) is used.
 Note 4. 41.5±1 when the high lead specification (Lead 30) is used.
 Note 5. When installing the unit, washers, etc., cannot be used in the φ11 counter bore hole.
 Note 6. Minimum bend radius of motor cable is R5.
 Note 7. 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.

| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 ^{Note 9} | 1150 ^{Note 9} | 1200 ^{Note 9} | 1250 ^{Note 9} | |
|--|----------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------------------------|------------------------|------------------------|------------------------|------|
| | L | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | 1159 | 1209 | 1259 | 1309 | 1359 | 1409 | 1459 | 1509 |
| A | 64 | 54 | 44 | 94 | 84 | 74 | 64 | 54 | 44 | 94 | 84 | 74 | 64 | 54 | 44 | 94 | 84 | 74 | 64 | 54 | 44 | 94 | 84 | |
| N | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 16 | 17 | 18 | 19 | 20 | 21 | 21 | 22 | |
| Weight (kg) ^{Note 7} | 5.5 | 5.9 | 6.2 | 6.6 | 6.9 | 7.3 | 7.6 | 8.0 | 8.3 | 8.7 | 9.0 | 9.4 | 9.7 | 10.0 | 10.3 | 10.7 | 11.0 | 11.4 | 11.7 | 12.1 | 12.5 | 12.9 | 13.3 | |
| Maximum speed ^{Note 8} (mm/sec) | Lead 30 | 1800 | | | | | | | | | | | | | | | | | | | | | | |
| | Lead 20 | 1200 | | | | | | | | | | | | | | | | | | | | | | |
| | Lead 10 | 600 | | | | | | | | | | | | | | | | | | | | | | |
| | Lead 5 | 300 | | | | | | | | | | | | | | | | | | | | | | |
| Speed setting | - | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

- Note 8. When the stroke is longer than 700mm, 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.
 Note 9. Strokes longer than 1050mm are special order items. Please contact us for speed setting.