

N18



Ordering method

N18-20

Model	Lead designation	Cable carrier entry location	Cable carrier specification	Origin position change	Grease type	Stroke	Cable length	Positioner	Driver: Power-supply voltage / Power capacity	Regenerative unit	LCD monitor	I/O selection	Battery
		RH: Horizontal, right LH: Horizontal, left RW: Wall, right LW: Wall, left	S: Standard C: Cable carrier M: Optional C: Cable carrier	Hori- zontal None: R side (Standard) Z: L side Wall None: L side (Standard) Z: R side	None: Standard GC: Clean	500 to 2500 (100mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	TSX TSX: TS-X	220 220: 200V/400 to 600W	R 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	B: With battery (Absolute) N: None (Incremental)

SR1-X	20	R	I/O selection	Battery
Controller	Driver: Power capacity 20: 400 to 600W	Usable for CE No entry: Standard E: CE marking	Regenerative unit R: With RGT	N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS

RDV-X	2	20	RBR1
Driver	Power-supply voltage 2: AC200V	Driver: Power capacity 20: 600W or less	Regenerative unit

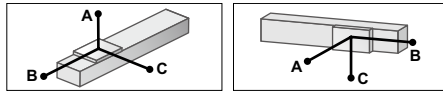
Note 1. To find information on cable carrier extraction directions see P.299.
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Specifications

AC servo motor output (W)	400
Repeatability (mm)	+/-0.01
Deceleration mechanism	Ball screw φ20
Ball screw lead (mm)	20
Maximum speed (mm/sec)	1200
Maximum payload (kg)	80
Rated thrust (N)	339
Stroke (mm)	500 to 2500 (100mm pitch)
Overall length (mm)	Stroke+362
Maximum dimensions of cross section of main unit (mm)	W180 × H115
Cable length (m)	Standard: 3.5 / Option: 5.10
Linear guide type	4 rows of circular arc grooves × 2 rail
Position detector	Resolvers
Resolution (Pulse/rotation)	16384

Note 1. Repeatability for single oscillation.
 Note 2. The maximum speed may not be reached when the moving distance is short.
 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.

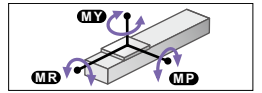
Allowable overhang



Horizontal installation (Unit: mm)	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)		
	A	B	C	A	B	C
Lead 20	30kg 3045	1629	1902	30kg 1928	1553	3045
	50kg 2602	961	1150	50kg 1157	885	2602
	80kg 2193	586	716	80kg 707	509	2193

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

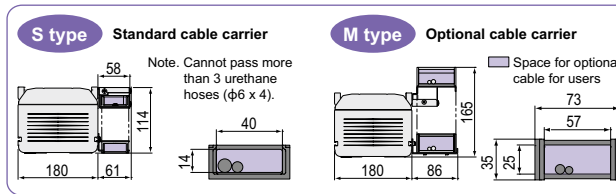


Static loading moment (Unit: N·m)		
MY	MP	MR
1161	1163	1021

Controller

Controller	Operation method
SR1-X20-R RCX320 RCX221/222 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	Pulse train control

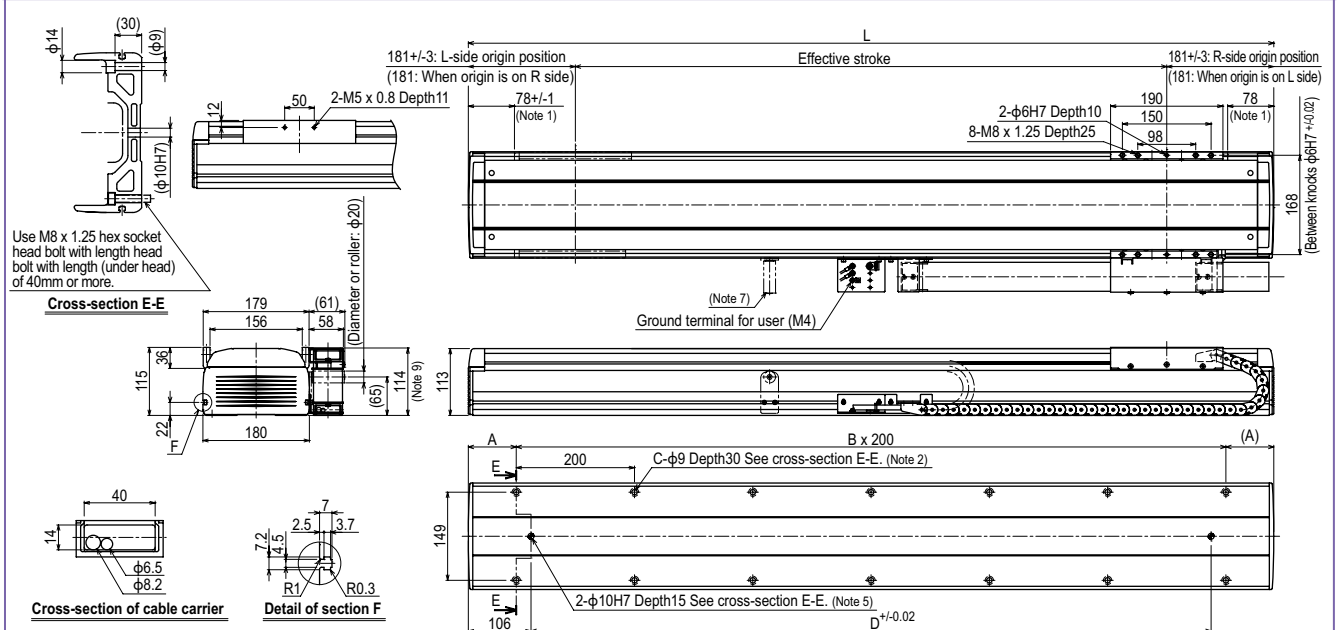
Cable carrier for users



S type Standard cable carrier
 Note. Cannot pass more than 3 urethane hoses (φ6 × 4).
 Dimensions: 180mm width, 61mm depth, 58mm height, 114mm total height.

M type Optional cable carrier
 Space for optional cable for users.
 Dimensions: 180mm width, 86mm depth, 166mm height, 73mm cable space, 57mm cable space, 35mm cable space.

N18: Horizontal installation / Standard Cable carrier specification



Cross-section E-E
 Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 40mm or more.
 Dimensions: 179mm total width, 156mm main width, 58mm height, 36mm depth, 115mm total height, 22mm bottom flange, 180mm main width.

Cross-section of cable carrier
 Dimensions: 40mm width, 14mm height, φ6.5mm hole, φ8.2mm hole.

Detail of section F
 Dimensions: 7mm total width, 2.5mm hole, 3.7mm hole, R1, R0.3.

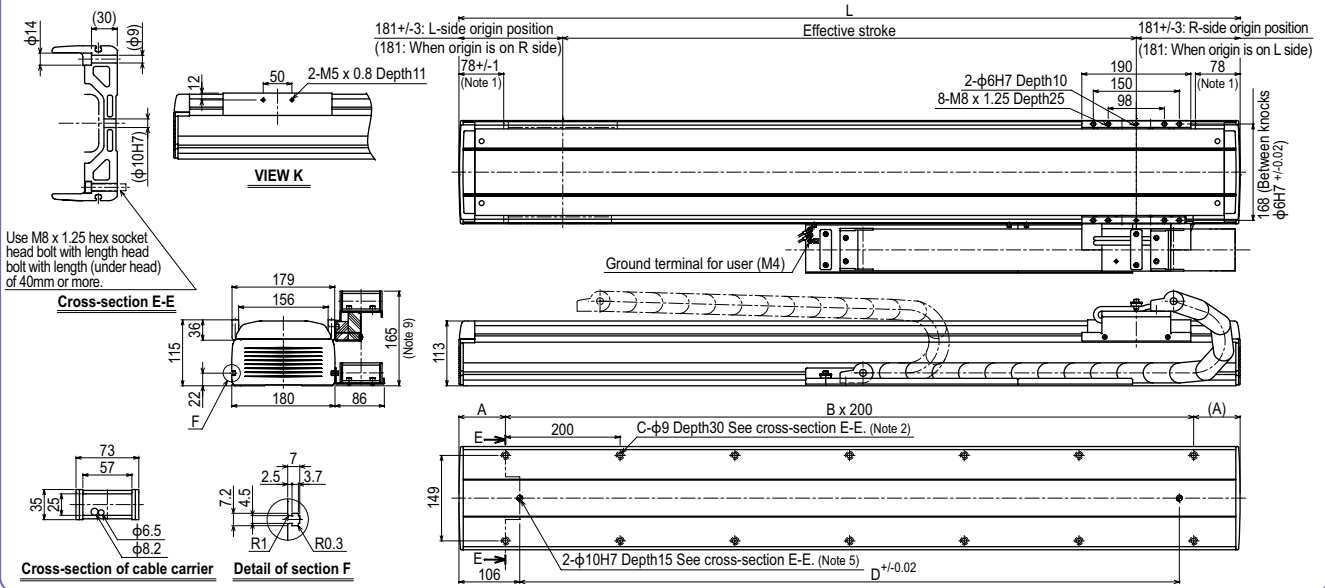
Main Drawing
 Shows horizontal installation with origin position (181±/3), effective stroke L, and cable carrier details. Dimensions include 78±/1, 190, 150, 98, 181±/3, 78, 168, 200, B x 200, 149, 106, 2-φ10H7 Depth15, D ±/0.02.

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. When using φ9 holes for installation, do not use a washer, spring washer, etc. in the main unit.
 Note 3. When shipped from the factory, the horizontal model has the origin on the right side and the wall model has the origin on the left side. (This diagram shows the machine whose cable carrier taken out from right.)
 Note 4. If the model is a standard cable carrier specification, it is not possible to pass 3 or more φ6 × 4 urethane air hoses.
 Note 5. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 6. Contact us for vertical installation.
 Note 7. For the robot with more than 2,100 stroke, a roller is installed to prevent the cable carrier hanging.
 Note 8. Weight of models with no brake. The weight of brake-attached models is 1 kg heavier than the models with no brake shown in the table.
 Note 9. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

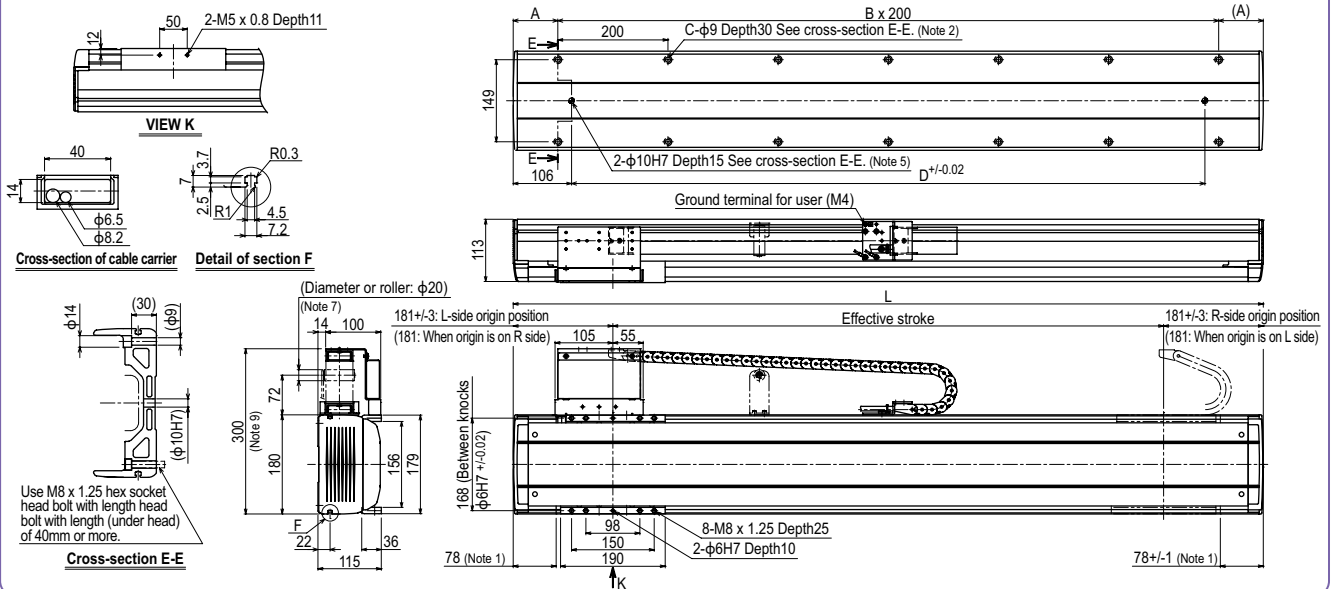
Effective stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	862	962	1062	1162	1262	1362	1462	1562	1662	1762	1862	1962	2062	2162	2262	2362	2462	2562	2662	2762	2862
A	131	81	131	81	131	81	131	81	131	81	131	81	131	81	131	81	131	81	131	81	131
B	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
C	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28
D	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
Weight (kg)	27	29	31	33	35	37	39	41	43	45	47	48	50	52	54	56	58	60	62	64	66

- Articulated robots
- YA
- Linear conveyor modules
- LCM
- Single-axis robots
- CX
- Multi-axis single-axis actuator
- Robomity
- Compact single-axis robots
- TRANSEVO
- Single-axis robots
- FLIP-X
- Linear motor single-axis robots
- PHASER
- Cartesian robots
- XY-X
- SCARA robots
- YK-X
- Pick & place robots
- YP-X
- CLEAN
- CONTROLLER
- INFORMATION
- T type
- F type
- GF type
- N type
- BR type

N18: Horizontal installation / Optional Cable carrier specification RH



N18: Wall installation / Standard Cable carrier specification RW



N18: Wall installation / Optional Cable carrier specification RW

