N15

Ordering method

N15 - 20 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead designation	Cable carrier entry location Note 1	Cable carrier specification	Origin position change	Grease type	Stroke	Cable length Note 2
N15	20	RH: Horizontal, right LH: Horizontal, left RW: Wall, right LW: Wall, left	S: Standard Cable carrier M: Optional Cable carrier	Horizontal: None: R side (Standard); Z: L side Wall: None: L side (Standard); Z: R side	None: Standard GC: Clean	500 to 2000 (100mm 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	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 4	B: With battery (Absolute) N: None (Incremental)

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

Controller	Driver: Power capacity	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 - RBR1

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

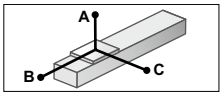
Note 1. To find information on cable carrier extraction directions see P.299.
Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
Note 3. See P.634 for DIN rail mounting bracket.
Note 4. Select this selection when using the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

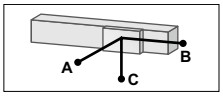
Specifications

AC servo motor output (W)	400
Repeatability Note 1 (mm)	+/-0.01
Deceleration mechanism	Ball screw ϕ15
Ball screw lead (mm)	20
Maximum speed Note 2 (mm/sec)	1200
Maximum payload (kg)	50
Rated thrust (N)	339
Stroke (mm)	500 to 2000 (100mm pitch)
Overall length (mm)	Stroke+330
Maximum dimensions of cross section of main unit (mm)	W145 × H120
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. 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 Note





Horizontal installation (Unit: mm)

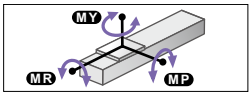
		A	B	C
Lead 20	10kg	3048	2322	1259
	30kg	1489	841	500
	50kg	1278	544	344

Wall installation (Unit: mm)

		A	B	C
Lead 20	10kg	1258	1823	2449
	30kg	428	545	1039
	50kg	248	289	749

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)

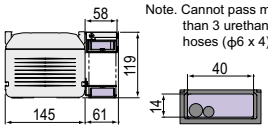
MY	MP	MR
691	692	608

Controller

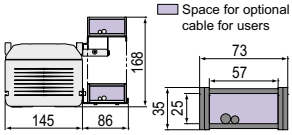
Controller	Operation method
SR1-X20-R RCX320 RCX221/222 RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220-R	I/O point trace / Remote command
RDV-X220-RBR1	Pulse train control

Cable carrier for users

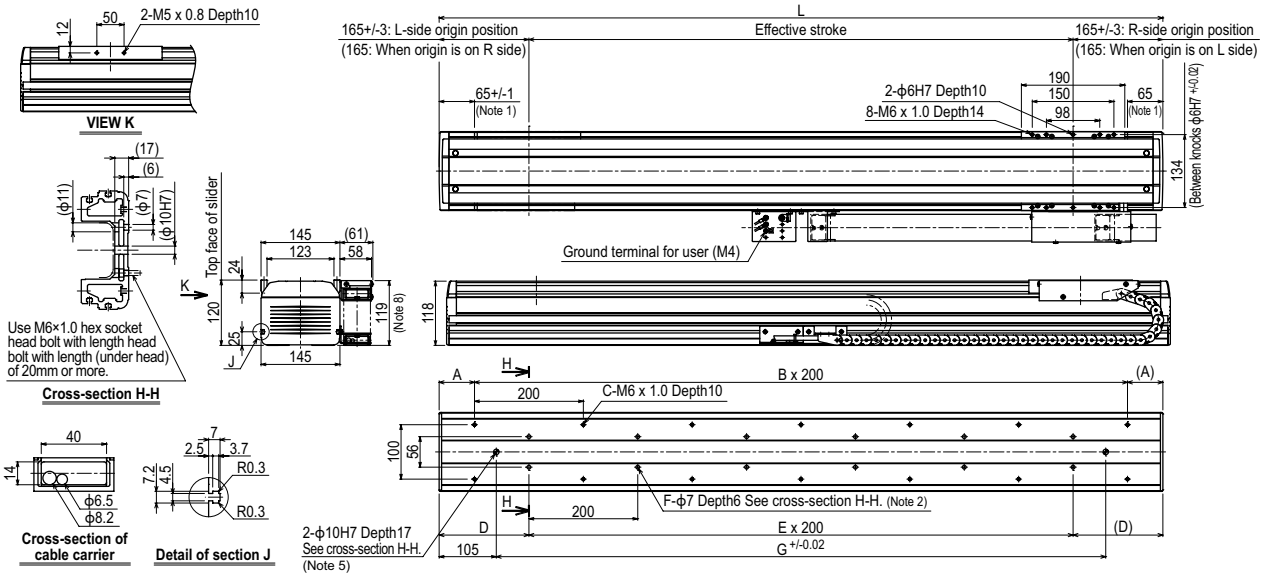
S type Standard cable carrier



M type Optional cable carrier



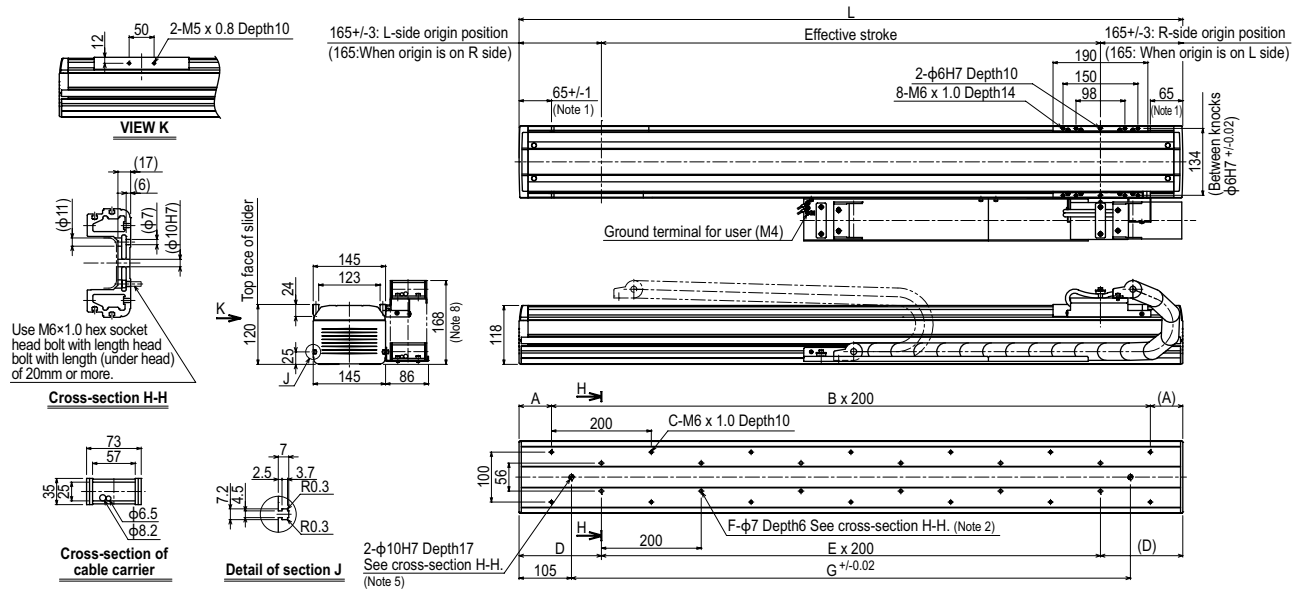
N15: Horizontal installation / Standard Cable carrier specification RH



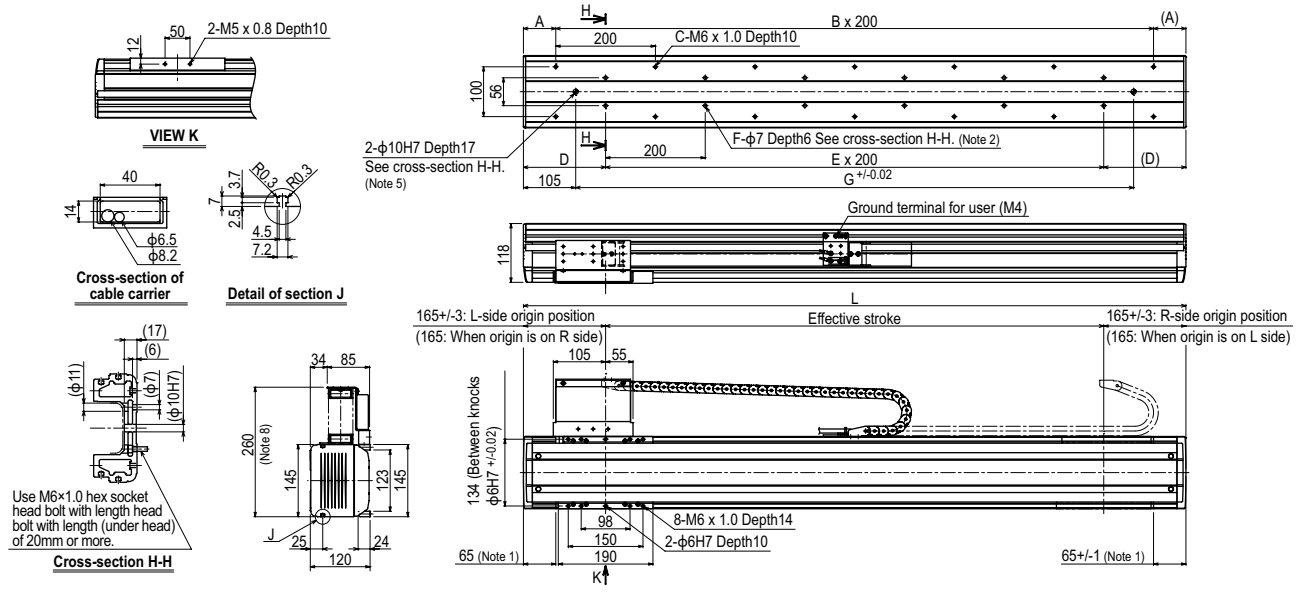
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. When using ϕ7 holes for installation, do not use a washer, spring washer, etc. in the main unit.
Note 3. When shipped from the factory, the horizontal model has the origin on the right side and the wall model has the 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. 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 8. 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
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
A	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
B	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
C	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
D	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
E	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
F	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
G	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
Weight (kg) Note 7	19	20	22	23	24	26	27	29	30	32	33	35	36	38	39	40

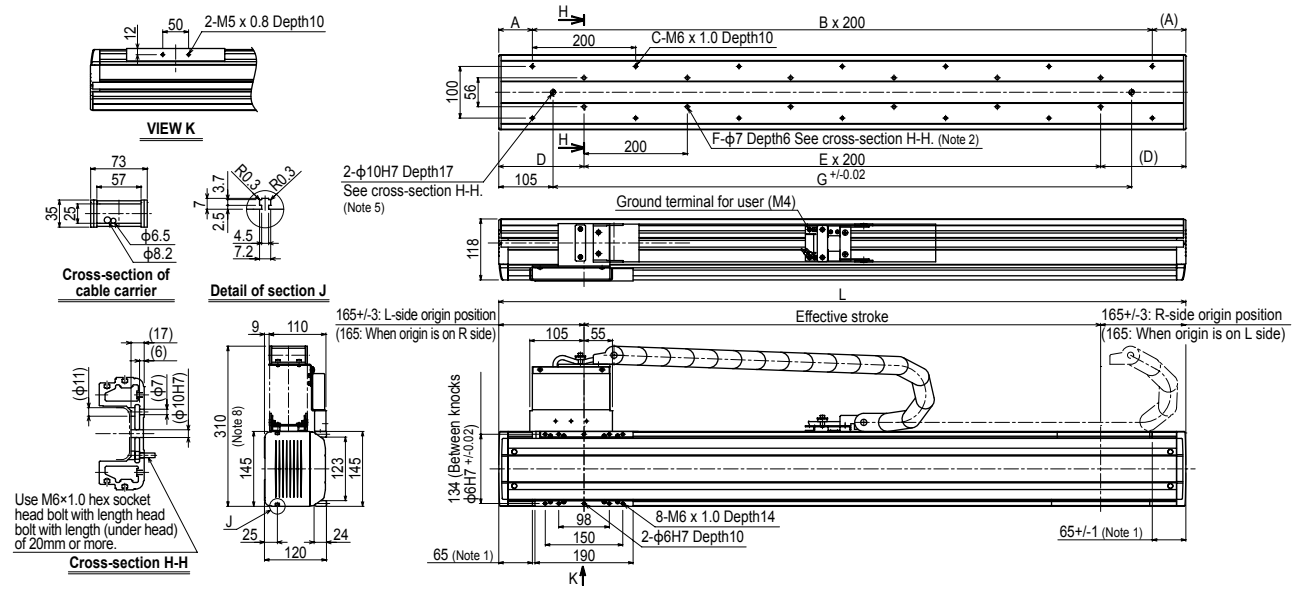
N15: Horizontal installation / Optional Cable carrier specification RH



N15: Wall installation / Standard Cable carrier specification RW



N15: Wall installation / Optional Cable carrier specification RW



N15D

Double carriage

Ordering method

N15D - 20 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead designation	Installation direction	Cable carrier specification	Option	Stroke	Cable length	Controller Note 1
N15D	20	H: Horizontal installation W: Wall installation	S: Standard Cable carrier M: Optional Cable carrier	Grease type: None: Standard, GC: Clean	250 to 1750 (100mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) Note 3	RCX320 RCX222HP SR1-X (2 units) Note 2 TS-X (2 units) Note 2 RDV-X (2 units) Note 2

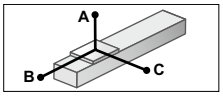
Note 1. To find controller selection options, see the ordering method on each controller page.
Note 2. 2 units are required when using SR1-X, TS-X or RDV-X.
Note 3. If a flexible cable is needed for the SR1-X, TS-X, or RDV-X, then select 3K/5K/10K. On the RCX320/RCX222HP, the standard cable is a flexible cable, so enter 3L/5L/10L when ordering.

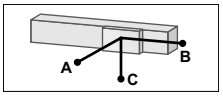
Specifications

AC servo motor output (W)	400
Repeatability Note 1 (mm)	+/-0.01
Deceleration mechanism	Ball screw ϕ15
Ball screw lead (mm)	20
Maximum speed Note 2 (mm/sec)	1200
Maximum payload (kg)	50
Rated thrust (N)	339
Stroke (mm)	250 to 1750 (100mm pitch)
Overall length (mm)	Stroke+330
Maximum dimensions of cross section of main unit (mm)	W145 × H120
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. 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 Note





Horizontal installation (Unit: mm)

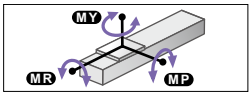
		A	B	C
Lead 20	10kg	3048	2322	1259
	30kg	1489	841	500
	50kg	1278	544	344

Wall installation (Unit: mm)

		A	B	C
Lead 20	10kg	1258	1823	2449
	30kg	428	545	1039
	50kg	248	289	749

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
691	692	608

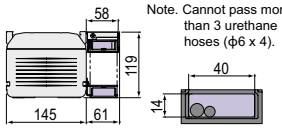
Controller

Controller	Operation method
RCX320-R RCX222HP-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
SR1-X20-R Note	
TS-X220-R Note	I/O point trace / Remote command
RDV-X20-RBR1 Note	Pulse train control

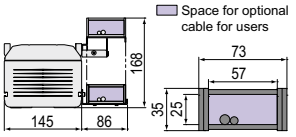
Note. 2 units are required when using SR-1, TS-X or RDV-X.

Cable carrier for users

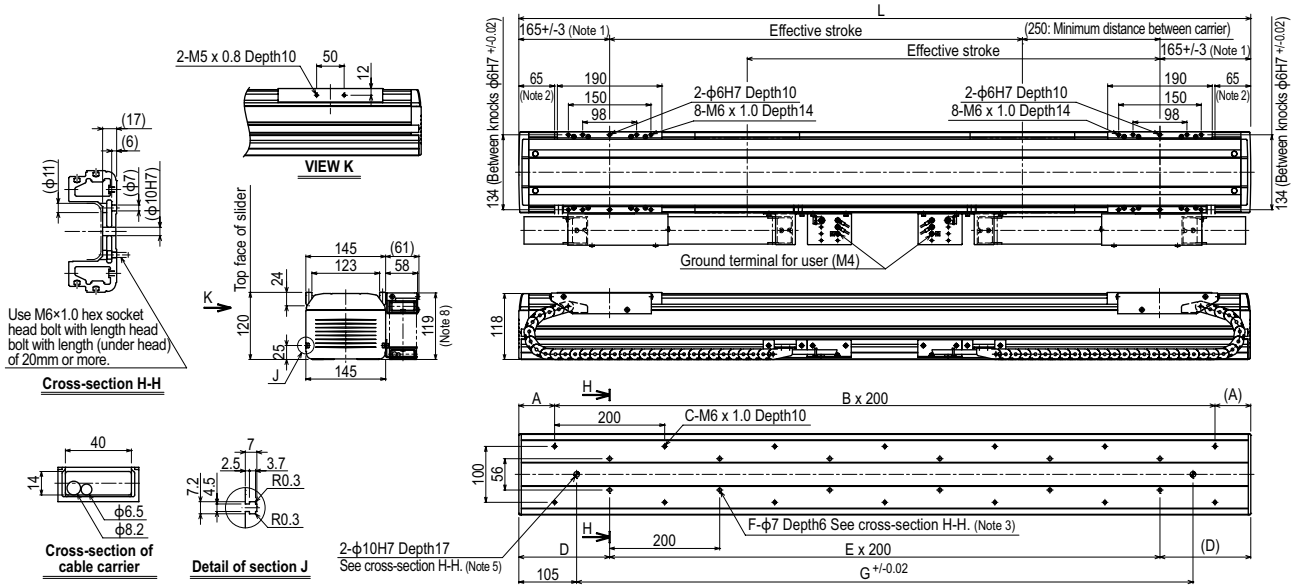
S type Standard cable carrier



M type Optional cable carrier



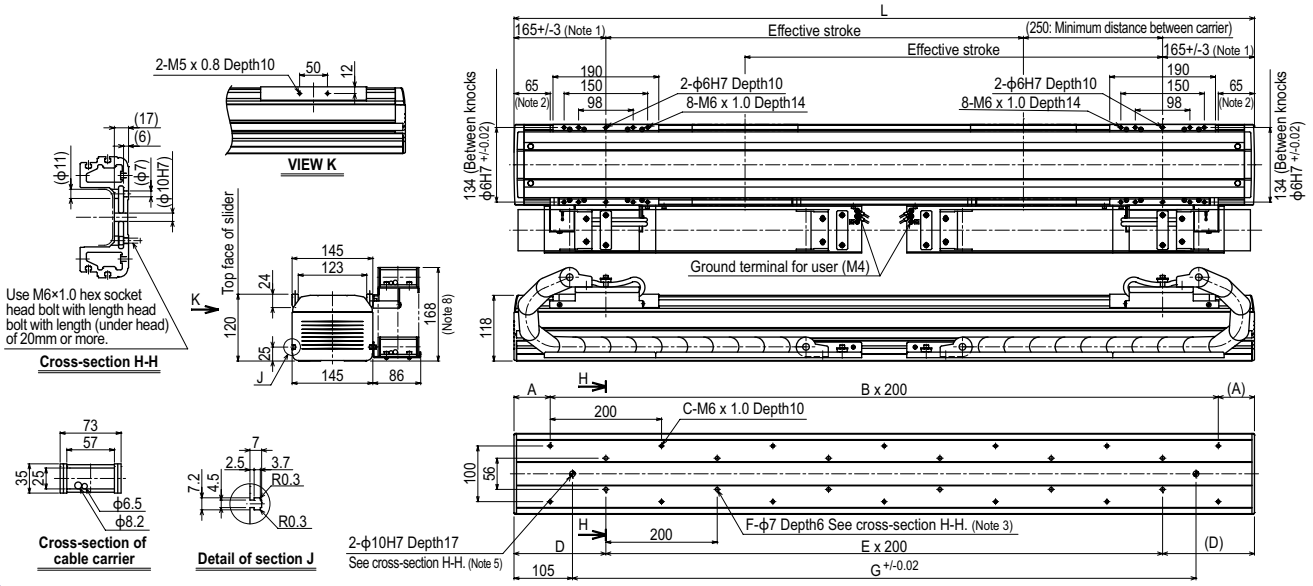
N15D: Horizontal installation / Standard Cable carrier specification



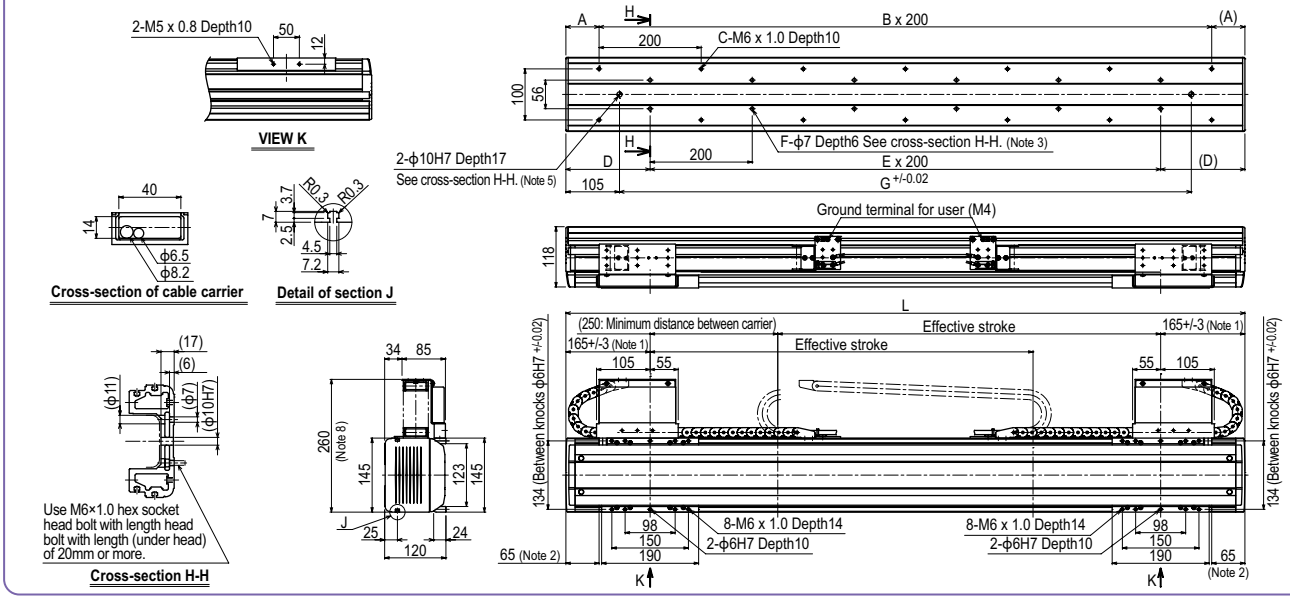
Note 1. Position of table carriage when searched to the origin.
Note 2. Stop positions are determined by the mechanical stoppers at both ends.
Note 3. When using ϕ7 holes for installation, do not use a washer, spring washer, etc. in the main unit.
Note 4. If the model is a standard cable carrier specification, 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. 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 8. 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	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
A	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
B	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
C	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
D	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
E	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
F	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
G	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
Weight (kg) Note 7	24	26	27	29	30	32	33	35	36	38	39	40	42	43	45	46

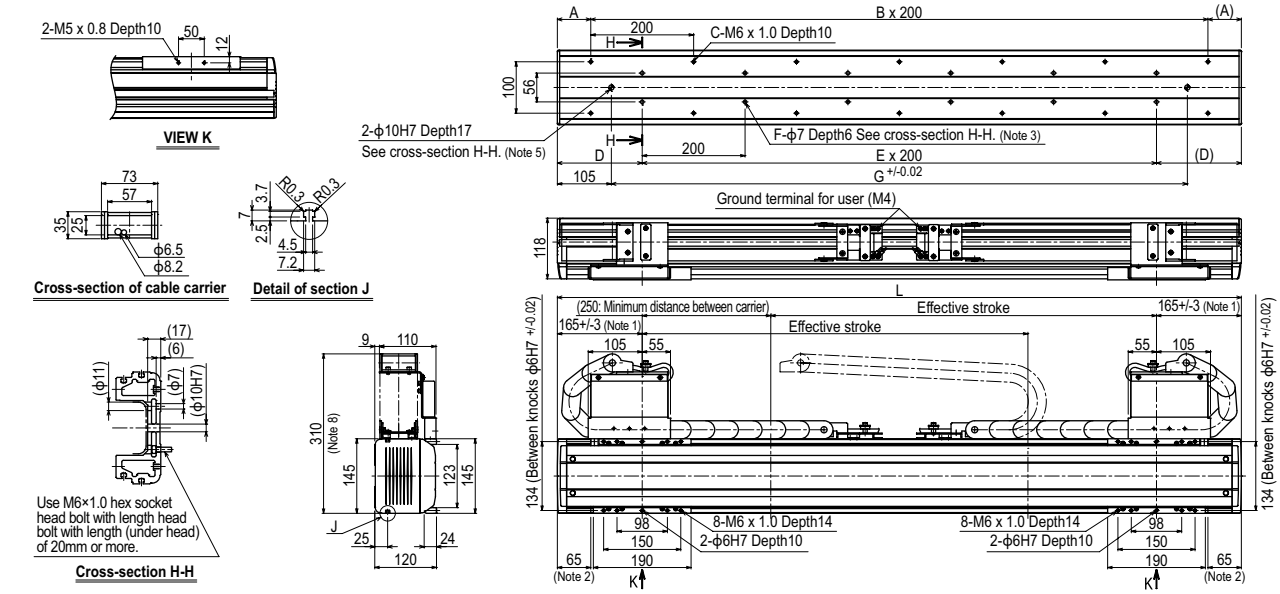
N15D: Horizontal installation / Optional Cable carrier specification



N15D: Wall installation / Standard Cable carrier specification



N15D: Wall installation / Optional Cable carrier specification



N18

Ordering method

N18 - 20 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead designation	Cable carrier entry location [Note 1]	Cable carrier specification	Origin position change	Grease type	Stroke	Cable length [Note 2]
N18	20	RH: Horizontal, right LH: Horizontal, left RW: Wall, right LW: Wall, left	S: Standard Cable carrier M: Optional Cable carrier	Horizontal: 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 - 220 - R - [ ] - [ ] - [ ]

Positioner [Note 3]	Driver: Power-supply voltage / Power capacity	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 4]	B: With battery (Absolute) N: None (Incremental)

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

Controller	Driver: Power capacity	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 - RBR1

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

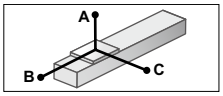
Note 1. To find information on cable carrier extraction directions see P.299.
Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
Note 3. See P.634 for DIN rail mounting bracket.
Note 4. Select this selection when using the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

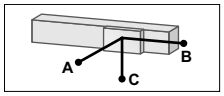
Specifications

AC servo motor output (W)	400
Repeatability [Note 1] (mm)	+/-0.01
Deceleration mechanism	Ball screw ϕ20
Ball screw lead (mm)	20
Maximum speed [Note 2] (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 [Note 3]
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 [Note]





Horizontal installation (Unit: mm)

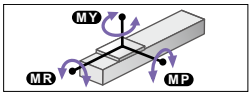
		A	B	C
Lead 20	30kg	3045	1629	1902
	50kg	2602	961	1150
	80kg	2193	586	716

Wall installation (Unit: mm)

		A	B	C
Lead 20	30kg	1928	1553	3045
	50kg	1157	885	2602
	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



(Unit: N·m)

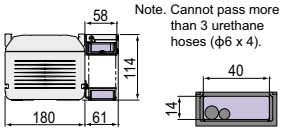
MY	MP	MR
1161	1163	1021

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

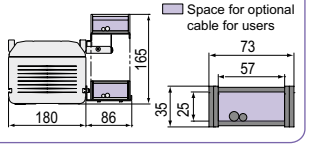
Cable carrier for users

S type Standard cable carrier

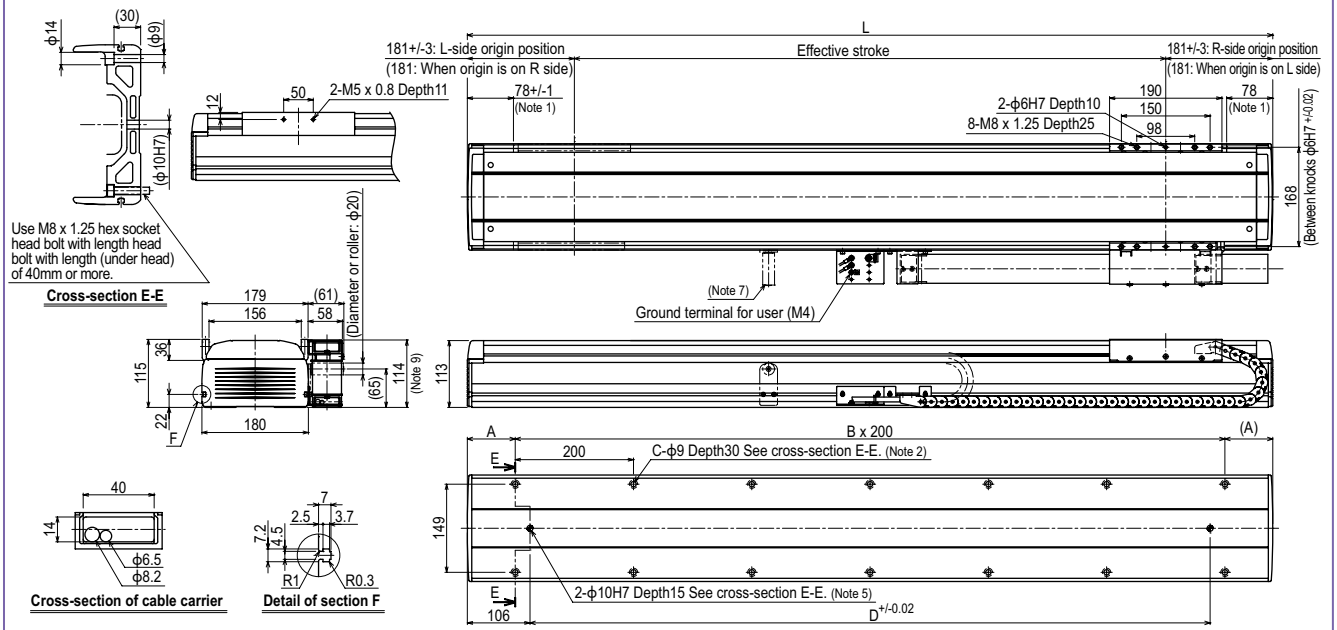


Note. Cannot pass more than 3 urethane hoses (ϕ6 x 4).

M type Optional cable carrier



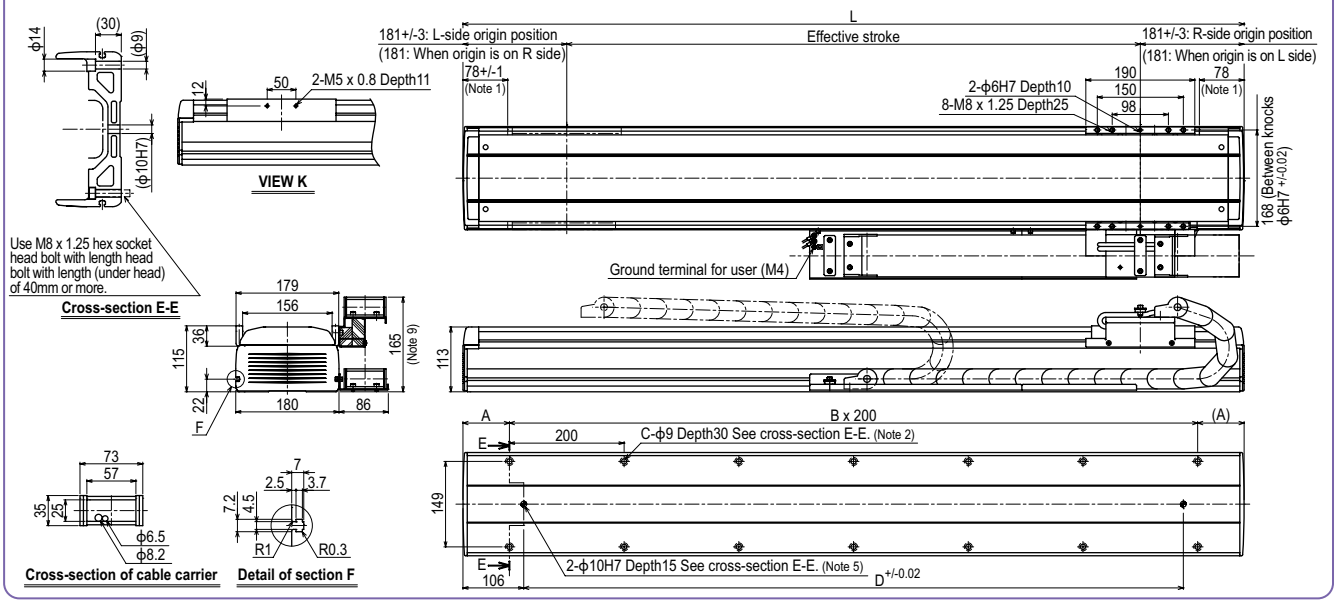
N18: Horizontal installation / Standard Cable carrier specification RH



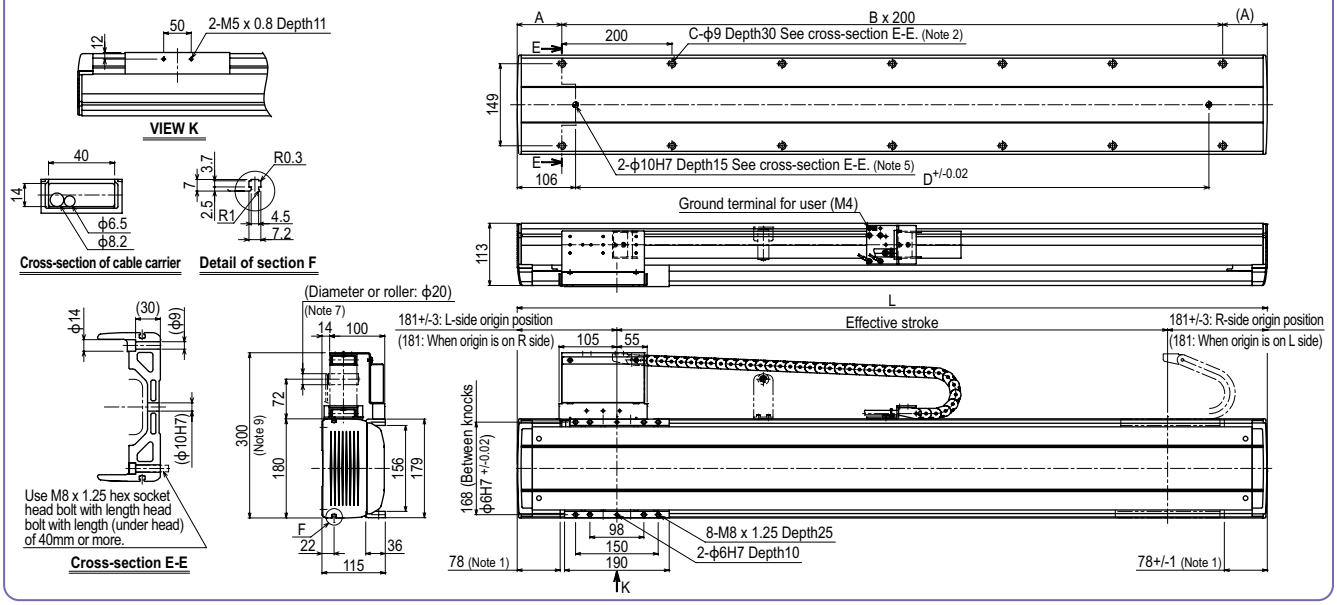
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. When using ϕ9 holes for installation, do not use a washer, spring washer, etc. in the main unit.
Note 3. When shipped from the factory, the horizontal model has the origin on the right side and the wall model has the 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) [Note 8]	27	29	31	33	35	37	39	41	43	45	47	48	50	52	54	56	58	60	62	64	66

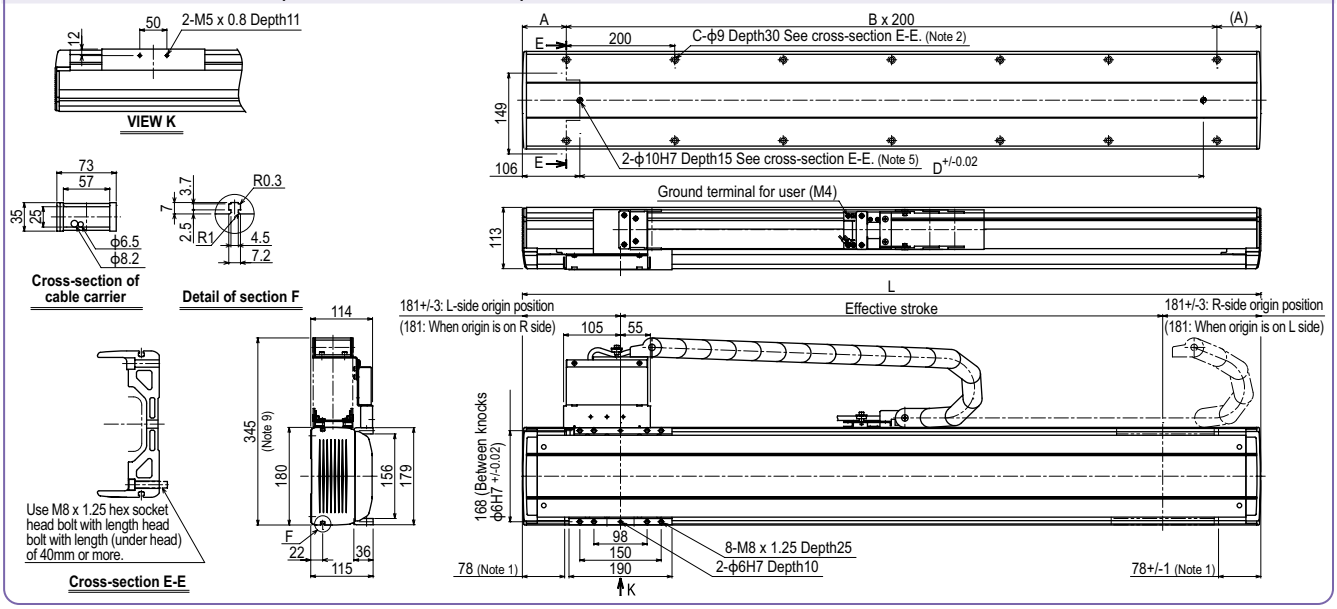
N18: Horizontal installation / Optional Cable carrier specification RH



N18: Wall installation / Standard Cable carrier specification RW



N18: Wall installation / Optional Cable carrier specification RW



N18D

Double carriage

Ordering method

N18D - 20 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Model	Lead designation	Installation direction	Cable carrier specification	Option	Stroke	Cable length	Controller Note 1
N18D	20	H: Horizontal installation W: Wall installation	S: Standard Cable carrier M: Optional Cable carrier	Grease type None: Standard GC: Clean	250 to 2250 (100mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) Note 3	RCX320 RCX222HP SR1-X (2 units) Note 2 TS-X (2 units) Note 2 RDV-X (2 units) Note 2

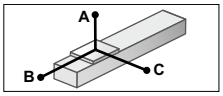
Note 1. To find controller selection options, see the ordering method on each controller page.
Note 2. 2 units are required when using SR1-X, TS-X or RDV-X.
Note 3. If a flexible cable is needed for the SR1-X, TS-X, or RDV-X, then select 3K/5K/10K. On the RCX320/RCX222HP, the standard cable is a flexible cable, so enter 3L/5L/10L when ordering.

Specifications

AC servo motor output (W)	400
Repeatability Note 1 (mm)	+/-0.01
Deceleration mechanism	Ball screw ϕ20
Ball screw lead (mm)	20
Maximum speed Note 2 (mm/sec)	1200
Maximum payload (kg)	80
Rated thrust (N)	339
Stroke (mm)	250 to 2250 (100 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 Note 3
Resolution (Pulse/rotation)	16384

Note 1. Positioning repeatability in one direction.
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 Note



Horizontal installation (Unit: mm)

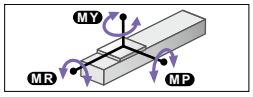
		A	B	C
Lead 20	30kg	3045	1629	1902
	50kg	2602	961	1150
	80kg	2193	586	716

Wall installation (Unit: mm)

		A	B	C
Lead 20	30kg	1928	1553	3045
	50kg	1157	885	2602
	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



(Unit: N·m)

MY	MP	MR
1161	1163	1021

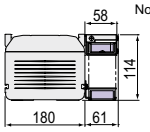
Controller

Controller	Operation method
RCX320-R RCX222HP-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
SR1-X20-R Note	
TS-X220-R Note	I/O point trace / Remote command
RDV-X20-RBR1 Note	Pulse train control

Note. 2 units are required when using SR1-X, TS-X or RDV-X.

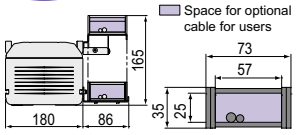
Cable carrier for users

S type Standard cable carrier

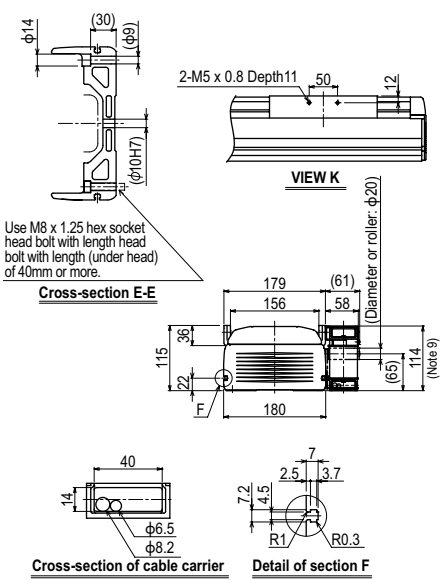


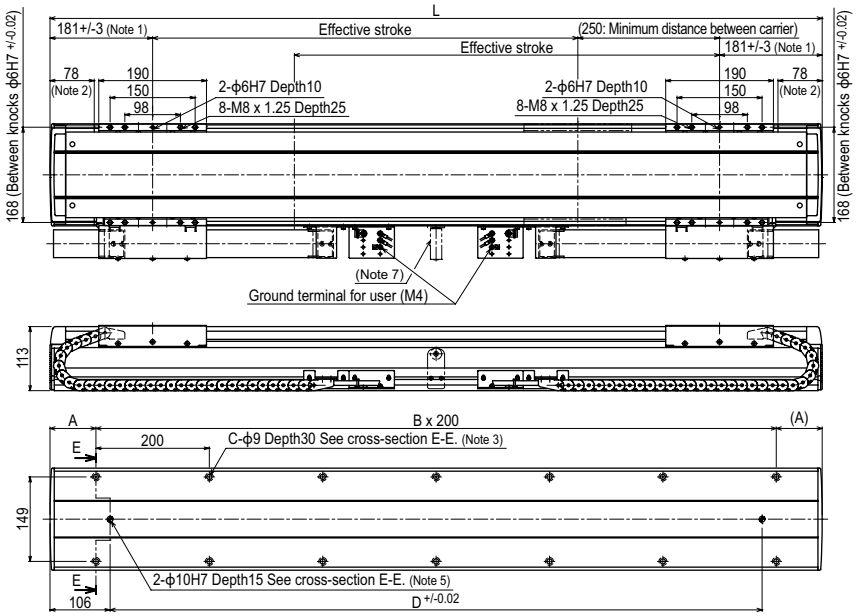
Note. Cannot pass more than 3 urethane hoses (ϕ6 x 4).

M type Optional cable carrier



N18D: Horizontal installation / Standard Cable carrier specification

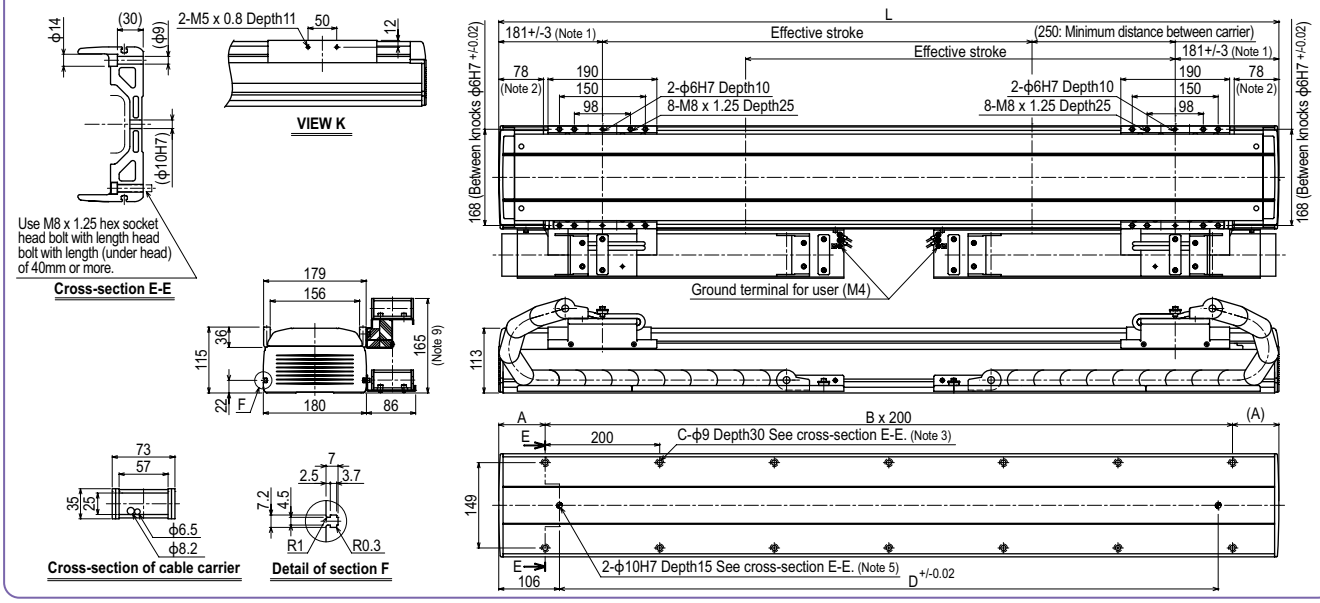




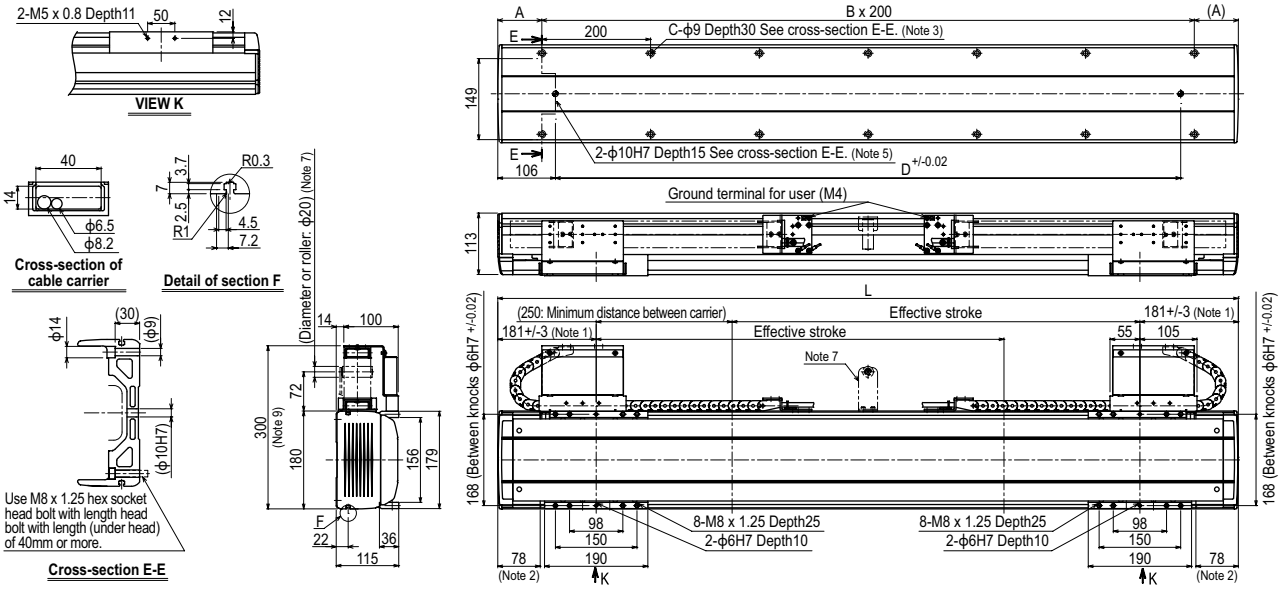
Note 1. Position of table carriage when searched to the origin.
Note 2. Stop positions are determined by the mechanical stoppers at both ends.
Note 3. When using ϕ9 holes for installation, do not use a washer, spring washer, etc. in the main unit.
Note 4. If the model is a standard cable carrier specification, 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 2,050 stroke, a roller to prevent the cable carrier from hanging is provided.
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	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250
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) Note 8	35	37	39	41	43	45	47	48	50	52	54	56	58	60	62	64	66	68	70	72	74

N18D: Horizontal installation / Optional Cable carrier specification



N18D: Wall installation / Standard Cable carrier specification



N18D: Wall installation / Optional Cable carrier specification