

N15



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

Ordering method

N15-20						SR1-X	20		R			
Model	Lead designation	Cable carrier entry location ^{Note 1}	Cable carrier specification	Option	Stroke	Cable length ^{Note 2}	Controller	Driver	Usable for CE	Regenerative unit	I/O selection	Battery
		RH: Horizontal, right LH: Horizontal, left RV: Wall, right LW: Wall, left	S: Standard Cable carrier M: Optional Cable carrier	Origin position change Wall Grease type None: Standard GC: Clean	500 to 2000 (100mm pitch)	3L: 3.5m (Standard) 5L: 5m 10L: 10m 3K/5K/10K ^{Note 2}	SR1-X TS-X ^{Note 3} RDX ^{Note 3}	20: 400 to 600W	No entry: Standard E: CE marking	R: RG1 (SR1-X)	N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus YC: YC-Link ^{Note 4}	No entry: None (Incremental specification) B: Battery (Absolute specification)

Note 1. To find information on cable carrier extraction directions see P. 063.
Note 2. The robot cable is standard cable, but can be changed to bend-resistant cable. (not supported on RDX). See P. 423 for details on robot cable.
Note 3. To find TS-X, RDX selection options, see the ordering method listed on each controller's page (TS-X: P.355, RDX: P.365). Note 4. Available only for the slave.

Specifications

AC servo motor output (W)	400
Repeatability ^{Note 1} (mm)	+/-0.01
Deceleration mechanism	Ball screw $\phi 15$ (Class C7)
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 x H120
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 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)	Wall installation (Unit: mm)			
	A	B	C	
Lead 20	10kg	3048	2322	1259
	30kg	1489	841	500
	50kg	1278	544	344

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-X-20-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220-R	I/O point trace
RDX-20-RBR1	Pulse train control

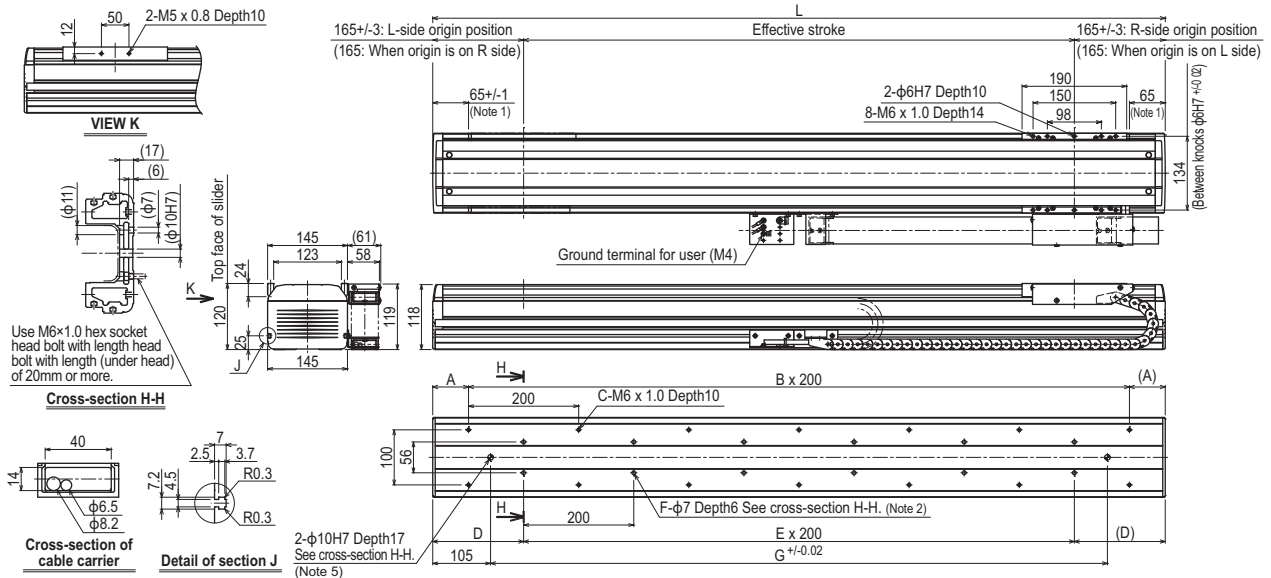
Cable carrier for users

S type Standard cable carrier

M type Optional cable carrier

Note. Cannot pass more than 3 urethane hoses ($\phi 6 \times 4$).
Space for optional cable for users

N15: Horizontal installation / Standard Cable carrier specification **RH**



Note 1. Distance from both ends to the mechanical stopper.
Note 2. When using $\phi 7$ 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 $\phi 6 \times 4$ urethane air hoses.
Note 5. When using a $\phi 10H7$ 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 brake-attached models is 1 kg heavier than the models with no brake shown in the table.

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

