

# C20

● Origin on the non-motor side is selectable



## Ordering method

<b>C20</b>	<b>Model</b>	<b>Lead</b> Note 1 20: 20mm 10: 10mm	<b>Brake</b> No entry: With no brake BK: With brake	<b>Option</b> Origin position change None: Standard Z: Non-motor side	<b>Stroke</b> 200 to 1250 (50mm pitch)	<b>Cable length</b> Note 2 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	<b>TSX</b>	<b>220</b>	<b>Regenerative unit</b> No entry: None R: With RGT	<b>LCD monitor</b> No entry: None L: With LCD	<b>I/O selection</b> N: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <sup>Note 5</sup>	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)
	<b>SR1-X</b>	<b>20</b>	<b>Usable for CE</b> No entry: Standard E: CE marking	<b>Regenerative unit</b> No entry: None R: With RG1	<b>I/O selection</b> N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)						
	<b>RDV-X</b>	<b>2</b>	<b>20</b>	<b>Regenerative unit</b> RBR1 (Horizontal) RBR2 (Vertical)								

Note 1. Only the model with specifications with brake (vertical specifications) can select a lead of 10mm.  
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.614 for details on robot cable.  
 Note 3. See P.522 for DIN rail mounting bracket.  
 Note 4. Acceleration / deceleration is different depending the Positioner or Controller or Driver.  
 Note 5. Select this selection when using the gateway function. For details, see P.66.

## Basic specifications

AC servo motor output (W)	600
Repeatability <sup>Note 1</sup> (mm)	+/-0.01
Deceleration mechanism	Ball screw φ20
Ball screw lead (mm)	20 10
Maximum speed (mm/sec)	1000 500
Maximum payload (kg)	Horizontal 120 Vertical 25 45
Rated thrust (N)	510 1020
Stroke (mm)	200 to 1250 (50mm pitch)
Overall length (mm)	Horizontal Stroke+441 Vertical Stroke+471
Maximum outside dimension of body cross-section (mm)	W202 × H117
Cable length (m)	Standard: 3.5 / Option: 5, 10
Degree of cleanliness	CLASS 10 <sup>Note 3</sup>
Intake air (Nl/min)	30 to 90 <sup>Note 4</sup>

Note 1. Positioning repeatability in one direction.  
 Note 2. When the stroke is longer than 950mm, 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. Per 1cf (0.1um base), when suction blower is used.  
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

## Allowable overhang<sup>Note</sup>

<b>Horizontal installation (Unit: mm)</b>				<b>Wall installation (Unit: mm)</b>				<b>Vertical installation (Unit: mm)</b>					
	A	B	C		A	B	C		A	C			
Lead 20	50kg	2602	869	1145	Lead 20	50kg	1144	798	2602	Lead 20	15kg	2711	2711
	80kg	2193	528	720		80kg	717	456	2193		20kg	2045	2045
	120kg	1841	339	505		120kg	466	267	1841	Lead 10	20kg	2182	2182
											30kg	1437	1437
											45kg	939	939

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

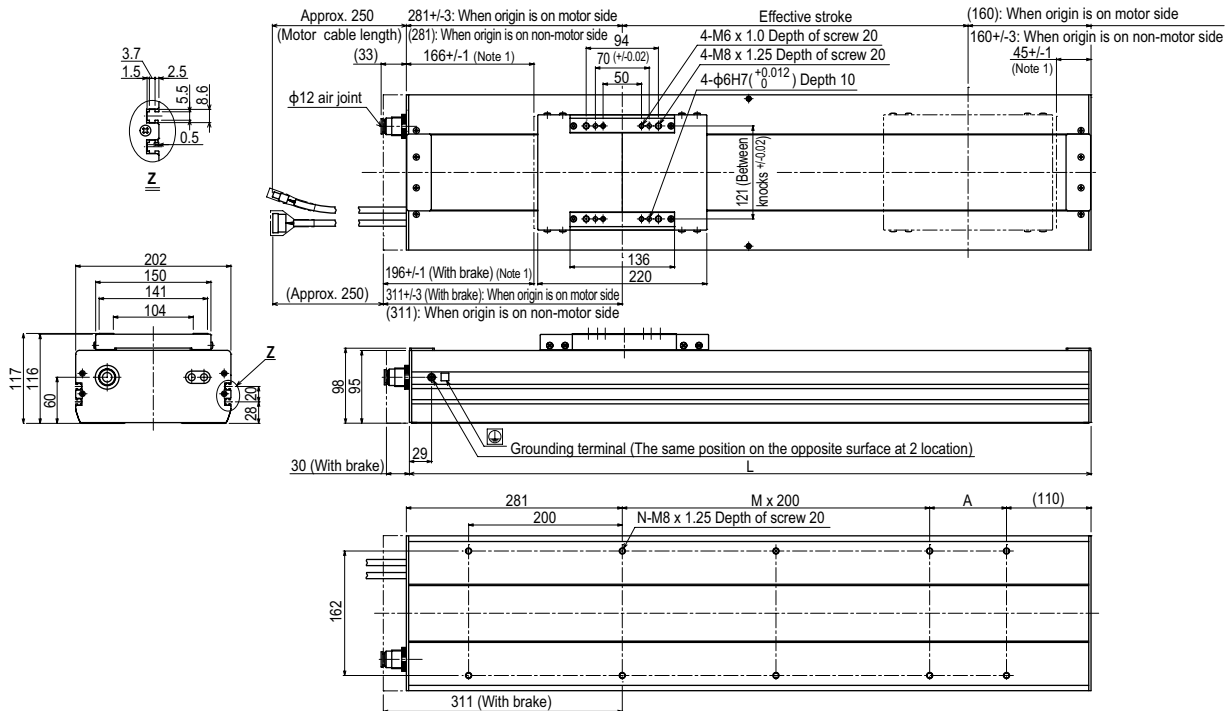
	MY	MP	MR
(Unit: N·m)	1101	1103	968

## Controller

Controller	Operation method
SR1-X20 <sup>Note</sup> RCX320, RCX221/222, RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220 <sup>Note</sup>	I/O point trace / Remote command
RDV-X220-RBR1 (Horizontal) RDV-X220-RBR2 (Vertical)	Pulse train control

Note. [The following arrangements require a regeneration unit.]  
 • Using in the upright position.

## C20



Effective stroke	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	641	691	741	791	841	891	941	991	1041	1091	1141	1191	1241	1291	1341	1391	1441	1491	1541	1591	1641	1691
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18
Weight (kg) <sup>Note 3</sup>	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0
Maximum speed <sup>Note 4</sup> (mm/sec)	Lead 20 1000												Lead 10 500									
Speed setting	-												80% 80% 70% 70% 60% 60% 50%									

Note 1. Stop positions are determined by the mechanical stoppers at both ends.  
 Note 2. Minimum bend radius of motor cable is R50.  
 Note 3. Weight of models with no brake. The weight of brake-attached models is 2.0 kg heavier than the models with no brake shown in the table.

Note 4. When the stroke is longer than 950mm, 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 at the left.

Controller

**SR1-X ▶ 540 TS-X ▶ 514 RDV-X ▶ 528**