C20

Origin on the non-motor side is selectable

Ordering method

C20 – Model – Lead [Note 1] – Brake – Option – Stroke – Cable length [Note 2]

Lead [Note 1]	Brake	Option	Stroke	Cable length [Note 2]
20: 20mm 10: 10mm	No entry: With no brake BK: With brake	Origin position change None: Standard Z: Non-motor side	200 to 1250 (50mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

TSX – **220** – Regenerative unit – LCD monitor – I/O selection – Battery

Positioner [Note 3]	Driver: Power-supply voltage / Power capacity [Note 4]	Regenerative unit	LCD monitor	I/O selection	Battery
TS-X	220: 200V/400 to 600V	No entry: None 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 5]	B: With battery (Absolute) N: None (Incremental)

SR1-X – **20** – Usable for CE – Regenerative unit – I/O selection – Battery

Controller	Driver: Power capacity [Note 4]	Usable for CE	Regenerative unit	I/O selection	Battery
	20: 400 to 600W	No entry: Standard E: CE marking	No entry: None 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** – Regenerative unit

Driver	Power-supply voltage	Driver: Power capacity [Note 4]	Regenerative unit
	2: AC200V	20: 400W or less	RBR1 (Horizontal) RBR2 (Vertical)

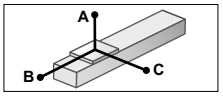
Note 1. Only the model with specifications with brake (vertical specifications) can select a lead of 10mm.
Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.
Note 3. See P.600 for DIN rail mounting bracket.
Note 4. Acceleration / deceleration is different depending the Positioner or Controller or Driver.
Note 5. Select this selection when using the gateway function.

Basic specifications

AC servo motor output (W)		600	
Repeatability [Note 1] (mm)		+/-0.01	
Deceleration mechanism		Ball screw ϕ20	
Ball screw lead (mm)		20	10
Maximum speed [Note 2] (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 [Note 3]	
Intake air (Nℓ/min)		30 to 90 [Note 4]	

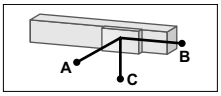
Note 1. Positioning repeatability in one direction.
Note 2. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
Note 3. Per 1cf (0.1μm base), when suction blower is used.
Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang [Note]



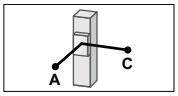
Horizontal installation (Unit: mm)

		A	B	C
Lead 20	50kg	2602	869	1145
	80kg	2193	528	720
	120kg	1841	339	505



Wall installation (Unit: mm)

		A	B	C
Lead 20	50kg	1144	798	2602
	80kg	717	456	2193
	120kg	466	267	1841

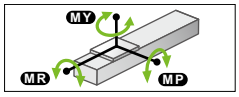


Vertical installation (Unit: mm)

		A	C
Lead 20	15kg	2711	2711
	20kg	2045	2045
	25kg	1647	1647
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



(Unit: N·m)

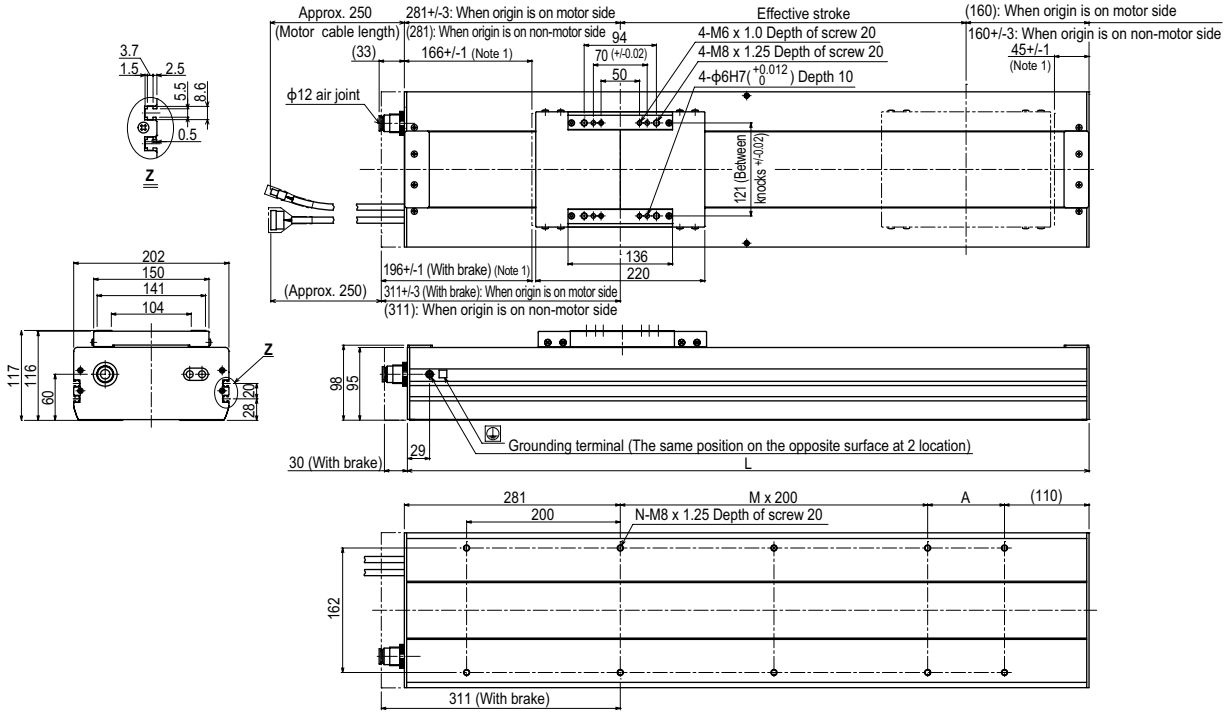
MY	MP	MR
1101	1103	968

Controller

Controller	Operation method
SR1-X20 [Note] RCX320, RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220 [Note]	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) [Note 3]	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 [Note 4] (mm/sec) Lead 20	1000															800	800	700	700	600	600	500
Maximum speed [Note 4] (mm/sec) Lead 10	500															400	400	350	350	300	300	250
Maximum speed [Note 4] (mm/sec) 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 ▸ 618 TS-X ▸ 592 RDV-X ▸ 606