

C20

Origin at non-motor side

Ordering method

C20						SR1-X	20				
Model	Lead	Brake	Option	Stroke	Cable length <small>Note 1</small>	Controller	Driver	Usable for CE	Regenerative unit <small>Note 3</small>	Input/Output selection	Battery
	20: 20mm 10: 10mm	No entry: With no brake BK: With brake	Origin position change None: Standard Z: Non-motor side	250 to 1250 100mm pitch	3L: 3.5m (Standard) 5L: 5m 10L: 10m	SR1-X TS-X <small>Note 2</small> RDX <small>Note 2</small>	20: 400 to 600W	No entry: Standard E: CE marking	No entry: None R: RGI (SR1-X)	N: NPN P: PNP CC: CC-Link DN: DeviceNet PB: Profibus YC: YC-Link <small>Note 4</small>	No entry: None (Incremental specification) B: With battery (Absolute specification)

Note 1. The robot cable is a standard cable and may be changed to a flex-resistant type (except RDX). See P.423 for more information on robot cables.
 Note 2. 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 3. When using the SR1-X, the regenerative unit RGI is required when using in perpendicular specifications and the maximum speed exceeds 1000mm/sec. When using RDX, a regeneration unit RBR is required regardless of installation conditions.
 Note 4. Available only for the slave.

Basic specifications

AC servo motor output (W)	600	
Repeatability <small>Note 1</small> (mm)	+/-0.01	
Deceleration mechanism	Ball screw (Class C7)	
Ball screw lead (mm)	20	10
Maximum speed <small>Note 2</small> (mm/sec)	1000	500
Maximum payload (kg)	Horizontal	120
	Vertical	-
Rated thrust (N)	Horizontal	25
	Vertical	45
Stroke (mm)	250 to 1250 (100mm pitch)	
Overall length (mm)	Horizontal	Stroke+441
	Vertical	Stroke+471
Maximum outside dimension of body cross-section (mm)	W202 x H117	
Cable length (m)	Standard: 3.5 / Option: 5, 10	
Degree of cleanliness	CLASS 10 <small>Note 3</small>	
Intake air (Nl/min)	30 to 90 <small>Note 4</small>	

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

Horizontal installation (Unit: mm)		Wall installation (Unit: mm)			Vertical installation (Unit: mm)			
	A	B	C		A	B	C	
Lead 20	50kg	2602	869	1145	50kg	1144	798	2602
	80kg	2193	528	720	80kg	717	456	2193
	120kg	1841	339	505	120kg	466	267	1841

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

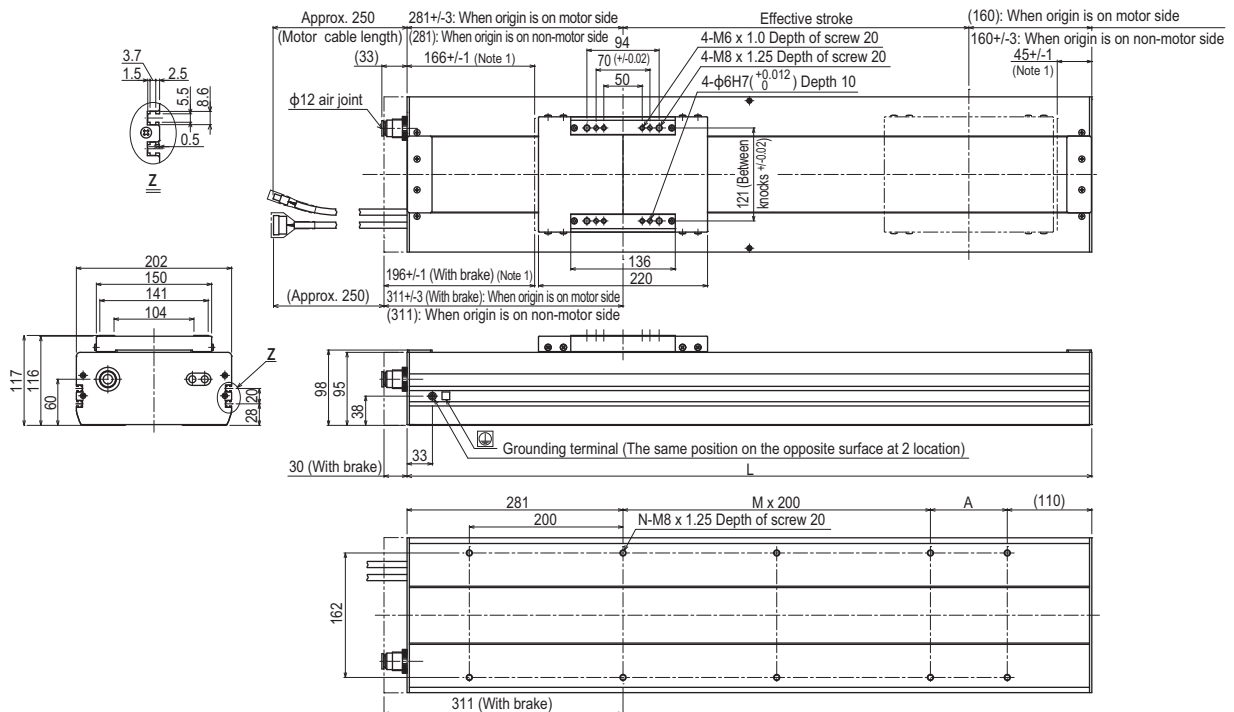
Static loading moment (Unit: N-m)		
MY	MP	MR
1101	1103	968

Controller

Controller	Operation method
SR1-X-20 <small>Note</small>	Programming / I/O point trace / Remote command / Operation using RS-232C communication
TS-X220 <small>Note</small>	I/O point trace
RDX-20-RBR1	Pulse train control (Horizontal)
RDX-20-RBR2	Pulse train control (Vertical)

Note. Regenerative unit is required when used vertically and moving at maximum speeds exceeding 1000mm/sec.

C20



Effective stroke	Stroke (mm)											
	250	350	450	550	650	750	850	950	1050	1150	1250	
L	691	791	891	991	1091	1191	1291	1391	1491	1591	1691	
A	100	200	100	200	100	200	100	200	100	200	100	
M	1	1	2	2	3	3	4	4	5	5	6	
N	8	8	10	10	12	12	14	14	16	16	18	
Weight (kg) <small>Note 3</small>	26.0	28.0	30.0	32.0	34.0	36.0	38.0	40.0	42.0	44.0	46.0	
	26.0	28.0	30.0	32.0	34.0	36.0	38.0	40.0	42.0	44.0	46.0	
Maximum speed <small>Note 4</small> (mm/sec)	Lead 20	1000					800	700	600	500		
	Lead 10	500					400	350	300	250		
Speed setting	-					80%	70%	60%	50%			

Note 1. Distance from both ends to the mechanical stopper.
 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.

APPLICATION
 TRANSERO
 Compact single-axis robots
 FLIP-X
 Single-axis robots
 PHASER
 Linear motor single-axis robots
 XY-X
 Cartesian robots
 YK-XG
 SCARA robots
 YP-X
 Pick & place robots
 CLEAN
 CONTROLLER INFORMATION
 Single-axis
 Cartesian
 SCARA