



Articulated robots
YA

Linear conveyor modules
LCM100

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XX-X

SCARA robots
YK-X

Pick & place robots
YP-X

Ordering method

C17						TSX	220					
Model	Lead	Brake	Option	Stroke	Cable length <small>Note 1</small>	Positioner <small>Note 2</small>	Driver: Power supply voltage / Power capacity 220: 200V/400 to 600W	Regenerative unit No entry: None R: With RGT	LCD monitor No entry: None L: With LCD	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 3}	Battery B: With battery (Absolute) N: None (Incremental)	
	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)	TS-X						
						SR1-X	20	Usable for CE No entry: Standard E: CE marking	Regenerative unit No entry: None R: With RG1	I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS	Battery B: With battery (Absolute) N: None (Incremental)	
						RDV-X	2	Power supply voltage 2: AC200V	20		Regenerative unit RB1 (Horizontal) RB2 (Vertical)	

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.594 for details on robot cable.
 Note 2. See P.498 for DIN rail mounting bracket.
 Note 3. Select this selection when using the gateway function. For details, see P.60.

Basic specifications

AC servo motor output (W)	400
Repeatability ^{Note 1} (mm)	+/-0.01
Deceleration mechanism	Ball screw (Class C7)
Ball screw lead (mm)	20 10
Maximum speed (mm/sec)	1000 600
Maximum payload (kg)	Horizontal 80 120 Vertical 15 35
Rated thrust (N)	339 678
Stroke (mm)	200 to 1250 (50mm pitch)
Overall length (mm)	Horizontal Stroke+395 Vertical Stroke+425
Maximum outside dimension of body cross-section (mm)	W168 x H114
Cable length (m)	Standard: 3.5 / OP: 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 (0.1um 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	A	C			
Lead 20	30kg 2660	50kg 1911	80kg 1541	30kg 1017	50kg 583	80kg 338	5kg 3000	10kg 2443	15kg 1633	25kg 1013	35kg 707
Lead 10	60kg 2443	100kg 2000	120kg 1841	60kg 525	100kg 271	120kg 207	30kg 3000	15kg 1728	25kg 1013	35kg 707	

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

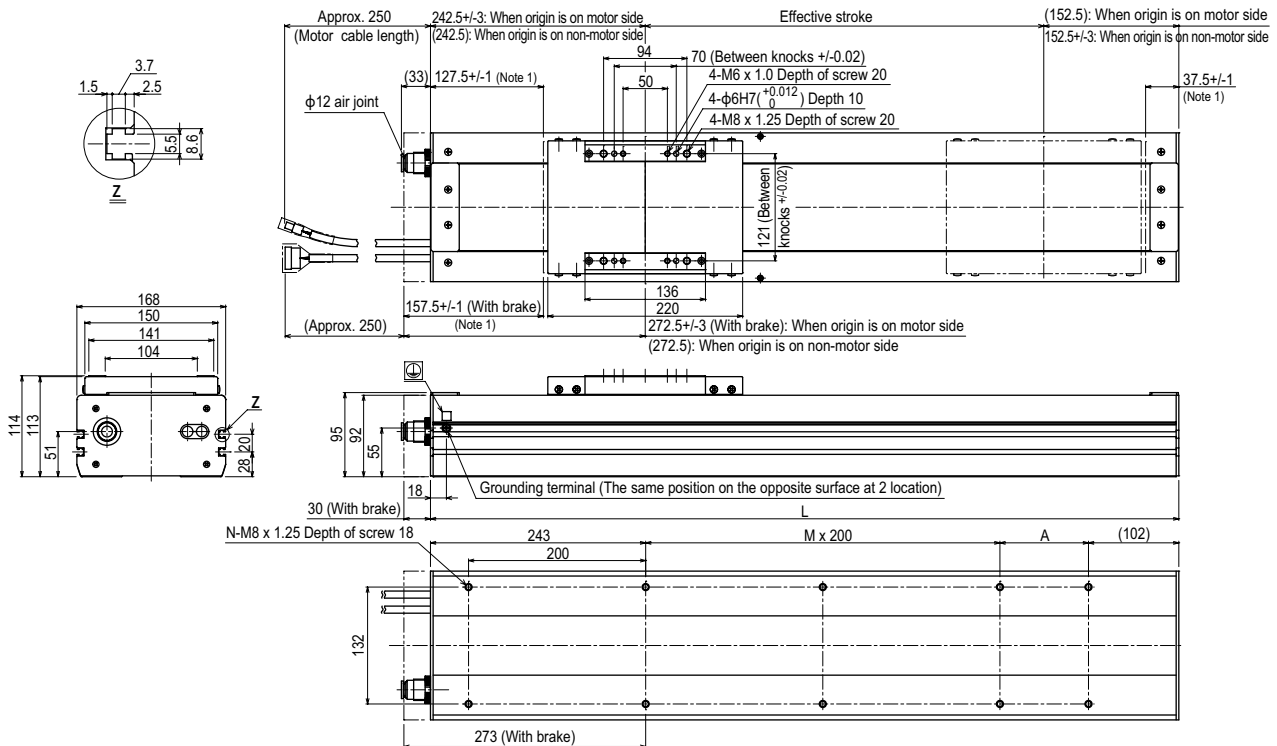
(Unit: N·m)		
MY	MP	MR
1032	1034	908

Controller

Controller	Operation method
SR1-X20 ^{Note}	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX221/222	Operation using RS-232C communication
RCX240/340	Operation using RS-232C communication
TS-X220 ^{Note}	I/O point trace / Remote command
RDV-X220-RBR1	Pulse train control (Horizontal)
RDV-X220-RBR2	Pulse train control (Vertical)

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

C17



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	595	645	695	745	795	845	895	945	995	1045	1095	1145	1195	1245	1295	1345	1395	1445	1495	1545	1595	1645
A	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
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}	15.0	16.0	17.0	17.9	18.9	19.8	20.8	21.7	22.7	23.6	24.6	25.5	26.5	27.4	28.4	29.3	30.3	31.2	32.2	33.1	34.1	35.0
Maximum speed ^{Note 4}																						
Lead 20	1000																					
Lead 10	500																					
Speed setting	-																					

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 1.5 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.