C17

Standard

Robot ordering method

C17 - 20 - BK - 1250 - 3L - SR1-X - 20 - E [Note 1] - R [Note 2] - N - B [Note 1]

- **Model**: C17
- **Lead designation**: 20 : 20mm; 10 : 10mm
- **Brake**: No entry : No brakes; BK : Brakes provided
- **Stroke**: 250 to 1250 (100mm pitch)
- **Cable length**: 3L : 3.5m (Standard); 5L : 5m; 10L : 10m
- **Applicable controller**: SR1-X; RDX (see page 52)
- **Driver**: 05 : 100W or less; 10 : 200W; 20 : 400 to 600W
- **Usable for CE**: No entry : Standard; E : CE specification
- **Regenerative unit**: No entry : Standard; R : RG1
- **Inputs/Outputs selection**: N : NPN; P : PNP; CC : CC-Link; DN : DeviceNet; PB : Profibus; YC : YC-Link [Note 3]
- **Battery**: No entry : None (Incremental specification); B : Battery (Absolute specification)

Note 1 : It will be a customer's choice.
Note 2 : Optional regenerative unit is required for YAMAHA-designated models and when operating a load with a large inertia.
Note 3 : Available only for the slave.

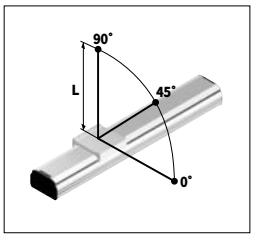
Basic specifications

AC servo motor output (W)		400	
Repeatability (mm) Note 1		+/-0.01	
Deceleration mechanism		Ball screw (Class C7)	
Ball screw lead (mm)		20	10
Maximum speed (mm/sec) Note 2		1000	500
Maximum payload (kg)	Horizontal	80	120
	Vertical	15	35
Rated thrust (N)		312	625
Stroke (mm)		250 to 1250 (100 pitch)	
Cable length (m)		3.5 (Standard) , 5, 10	
Controller	Horizontal	SR1-X-20	
	Vertical	SR1-X-20-R	
Robot driver	Horizontal	RDX-20-RBR1	
	Vertical	RDX-20-RBR2	
Degree of cleanliness		CLASS 10 Note 3	
Intake air (ℓ/min)		30 to 90 Note 4	

Note 1 : Repeatability for single oscillation.
Note 2 : When the stroke exceeds 950mm, although depending on the moving range, the ball screw may resonate (dangerous speed). If such resonance occurs, make an adjustment on the program to reduce the speed, using the maximum speed in the table on the right as a guide.
Note 3 : Per 1cf (0.1μm base), when the suction blower is used.
Note 4 : The necessary intake amount varies depending on the use conditions and environment.

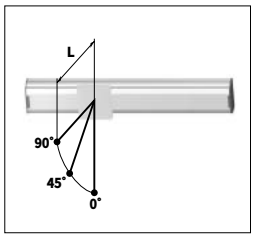
Stroke (mm)	Maximum speed (mm/sec) Lead 20	Maximum speed (mm/sec) Lead 10	Speed setting
950	800	400	80%
1050	700	350	70%
1150	600	300	60%
1250	500	250	50%

Tolerable overhang amount Note



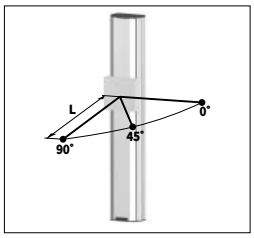
During horizontal use (Unit : mm)

		0 °	45 °	90 °
Lead 20	30kg	775	932	1759
	50kg	474	581	1216
	80kg	308	395	1040
Lead 10	60kg	399	536	1403
	100kg	229	313	1103
	120kg	184	252	959



During wall installation use (Unit : mm)

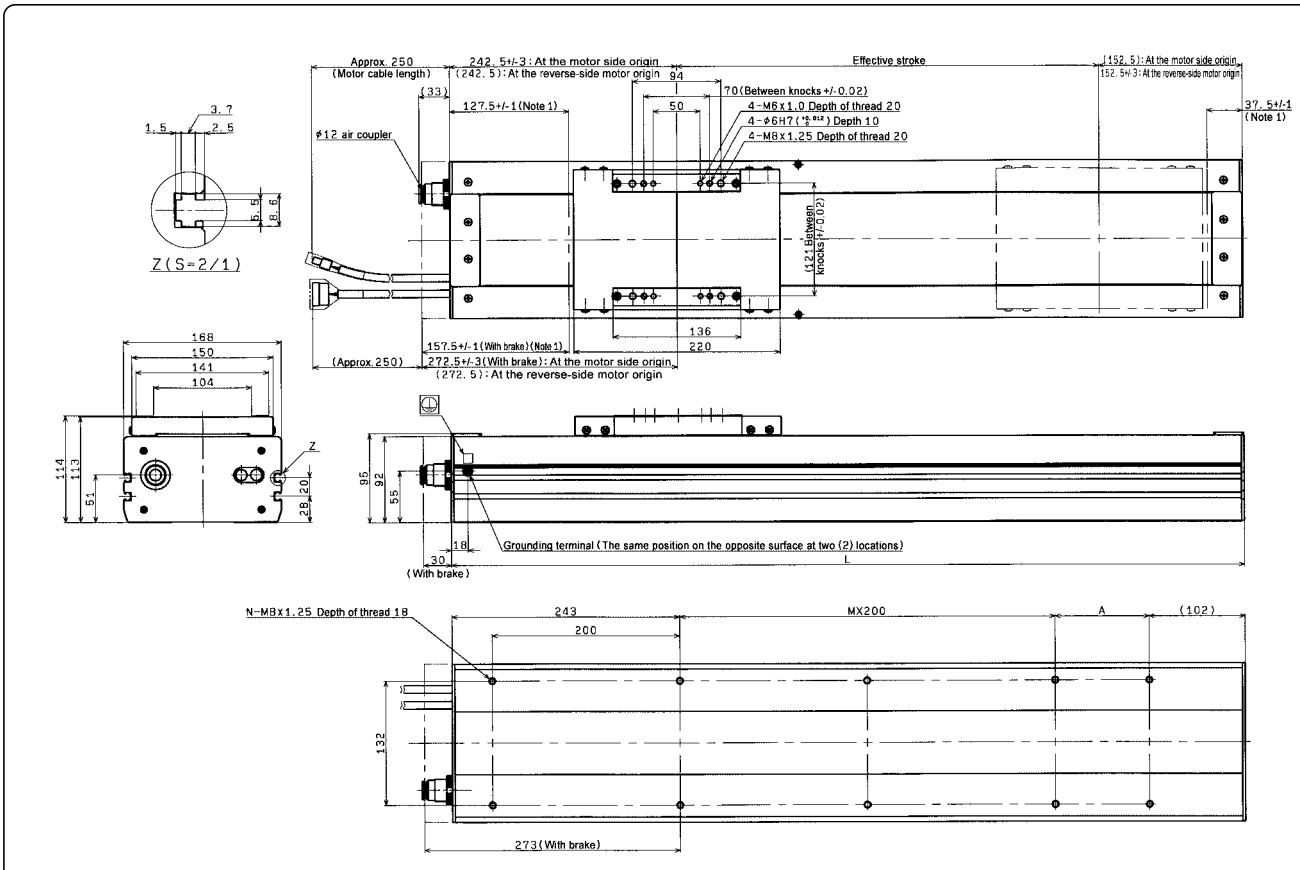
		0 °	45 °	90 °
Lead 20	30kg	1098	566	564
	50kg	735	339	328
	80kg	586	218	197
Lead 10	60kg	1325	490	395
	100kg	962	266	202
	120kg	800	202	152



During vertical use (Unit : mm)

		0 °	45 °	90 °
Lead 20	5kg	2367	1674	2367
	10kg	1214	858	1214
	15kg	820	580	820
Lead 10	15kg	1624	1148	1624
	25kg	962	680	962
	35kg	676	478	676

Note : Distance from center of slider top to center of gravity of object being transported.



Effective stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	645	745	845	945	1045	1145	1245	1345	1445	1545	1645
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) (Note 4)	16.0	17.9	19.8	21.7	23.6	25.5	27.4	29.3	31.2	33.1	35.0

Note 1 : Length from both ends to mechanical stopper position.
Note 2 : For basic functions, please refer to the brochure or contact YAMAHA Motor Co., Ltd.
Note 3 : The minimum bend radius of the motor cable is R50.
Note 4 : This is the weight of the model without a brake. The weight of the model equipped with a brake is 1.5kg heavier than this value.