

Arm type

Cable carrier

HXYx

4axes/ZRL

Ordering method

HXYx - C - A1 - 125 - 65 - ZRL - 55 - 3L - RCX142 - E - R - P1 - CC - S

Model - Cable - Combination - X-axis stroke - Y-axis stroke - ZR-axis - Z-axis stroke - Cable length - Controller - Usable for CE - Regenerative unit - Option I/O - Network - Battery

A1 to A4 25 to 125 25 to 65 25 to 55 3L, 5L, 10L

Note : For the details of the controller, please refer to the catalog of Yamaha Controllers.

Specification

	X-axis	Y-axis	Z-axis	R-axis
Motor output	600W	400W	200W	200W
Repeatability ^{Note 1}	+/-0.01mm	+/-0.01mm	+/-0.01mm	+/-0.0083°
Drive system	Ball screw (Class C7)	Ball screw (Class C7)	Ball screw (Class C7)	Harmonic gear
Ball screw lead (Deceleration ratio)	20mm	20mm	10mm	(1/50)
Maximum speed ^{Note 2}	1200mm/sec	1200mm/sec	600mm/sec	360°/sec
Moving range	250 to 1250mm	250 to 650mm	250 to 550mm	360°
Robot cable length	Standard : 3.5m Option : 5m, 10m			
Controller	RCX142-R			

Maximum load capacity

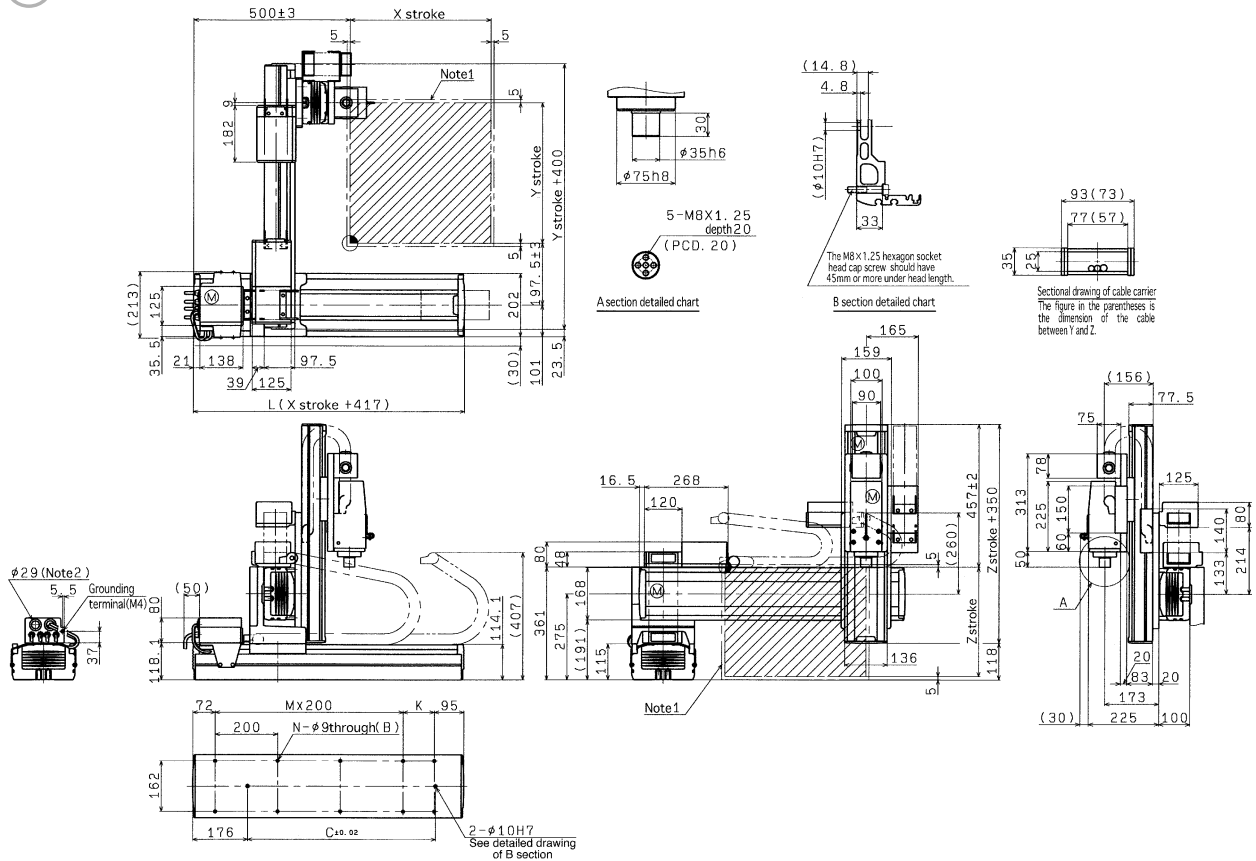
Y stroke	Z stroke			
	250mm	350mm	450mm	550mm
250mm	12kg	12kg	12kg	12kg
350mm	12kg	12kg	12kg	12kg
450mm	12kg	12kg	12kg	11kg
550mm	10kg	9kg	8kg	7kg
650mm	10kg	9kg	8kg	7kg

Note 1 : Repeatability for single oscillation.

Note 2 : When the X-axis stroke exceeds 850mm, resonance of a ball screw may occur depending on the operation range (dangerous speed). In such case, make an adjustment to reduce the speed using the corresponding parameter or program and referring to the table below for the maximum speed as a guide.

Axis	X-axis				
Stroke (mm)	850	950	1050	1150	1250
Maximum speed (mm/sec)	960	840	720	600	480
Speed setting	80%	70%	60%	50%	40%

A1



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960	960	1140	1320	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18

Y stroke	250	350	450	550	650

Z stroke	250	350	450	550

Note 1 : The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

Note 2 : The port is used when taking out the user cable.