

Ordering method

MXYx - C - M1 - 125 - 55 - ZFL20 - 35 - 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

M1, M3 25 to 125 15 to 55 ZFL20, ZFL10 15 to 35 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 : ZFL20	Z-axis : ZFL10
Motor output	400W	200W	200W	
Repeatability ^{Note 1}	+/-0.01mm	+/-0.01mm	+/-0.01mm	
Drive system	Ball screw (Class C7)	Ball screw (Class C7)	Ball screw (Class C7)	
Ball screw lead (Deceleration ratio)	20mm	20mm	20mm	10mm
Maximum speed ^{Note 2}	1200mm/sec	1200mm/sec	1200mm/sec	600mm/sec
Moving range	250 to 1250mm	150 to 550mm	150 to 350mm	
Robot cable length	Standard : 3.5m Option : 5m, 10m			
Controller	RCX142-R			

Maximum load capacity

	Z stroke			
	ZFL10		ZFL20	
Y stroke	150mm	250mm	350mm	150 to 350mm
150 to 550mm	12kg	11kg	10kg	8kg

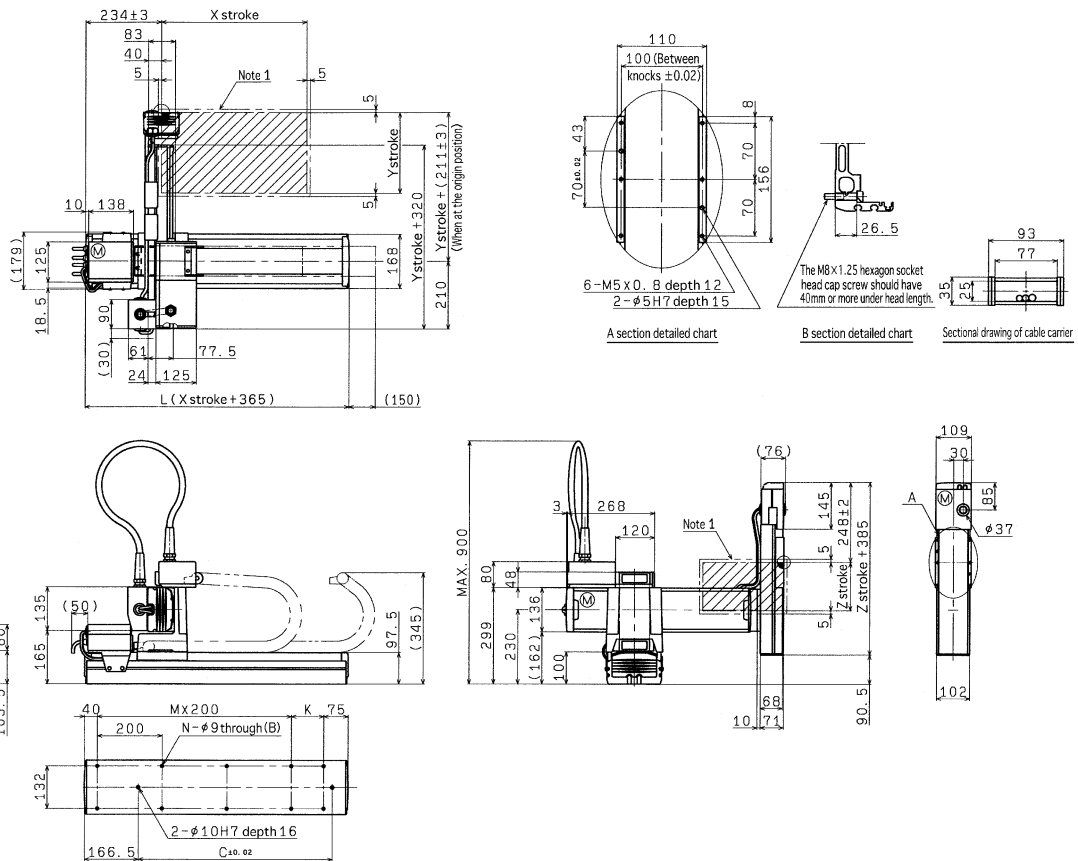
Note : The standard types are ZFL with higher rigidity as compared with ZF types which are conventional standard types. When you need the ZF type, please consult YAMAHA Motor Co., Ltd.

Note 1 : Repeatability for single oscillation.

Note 2 : When the X-axis stroke exceeds 850mm (750mm for Y-axis), 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%

M1



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615
K	100	200	100	200	100	200	100	200	100	200	100
C	240	420	600	600	780	780	960	960	1140	1140	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	150	250	350	450	550

Z stroke	150	250	350

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.