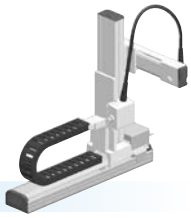
MXYx 3 axes / ZPMH

Pole type | Cable carrier | Z-axis: Clamped table / moving base type (200W) for Pole type



Ordering method

MXYx	- C	- P2	-	-	-	-	-	- RCX340-3	-	-	-	-	-	-	-
Model	Cable	Combi-nation	X-axis stroke 25 to 125cm	Y-axis stroke 15 to 65cm	ZR-axis ZPMHL ZPMHR	Z-axis stroke 15 to 35cm	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery

Specify various controller setting items. RCX340 ▶ P.678

Specification

	X-axis	Y-axis	Z-axis
Axis construction Note 1	F17	F14H-BK	F10H-BK
AC servo motor output (W)	400	200	200
Repeatability Note 2 (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw ϕ20	Ball screw ϕ15	Ball screw ϕ15
Ball screw lead Note 3 (Deceleration ratio) (mm)	20	10	20
Maximum speed Note 4 (mm/sec)	1200	600	1200
Moving range (mm)	250 to 1250	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note. The standard types are ZPMH with higher rigidity as compared with ZPM types which are conventional standard types. When you need the ZPM type, please consult YAMAHA.
Note 1. Use caution that the flame machining (installation holes, tap holes) differs from single-axis robots'.
Note 2. Positioning repeatability in one direction.
Note 3. Leads not listed in the catalog are also available. Contact us for details.
Note 4. When the X-axis stroke is longer than 850mm, 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.

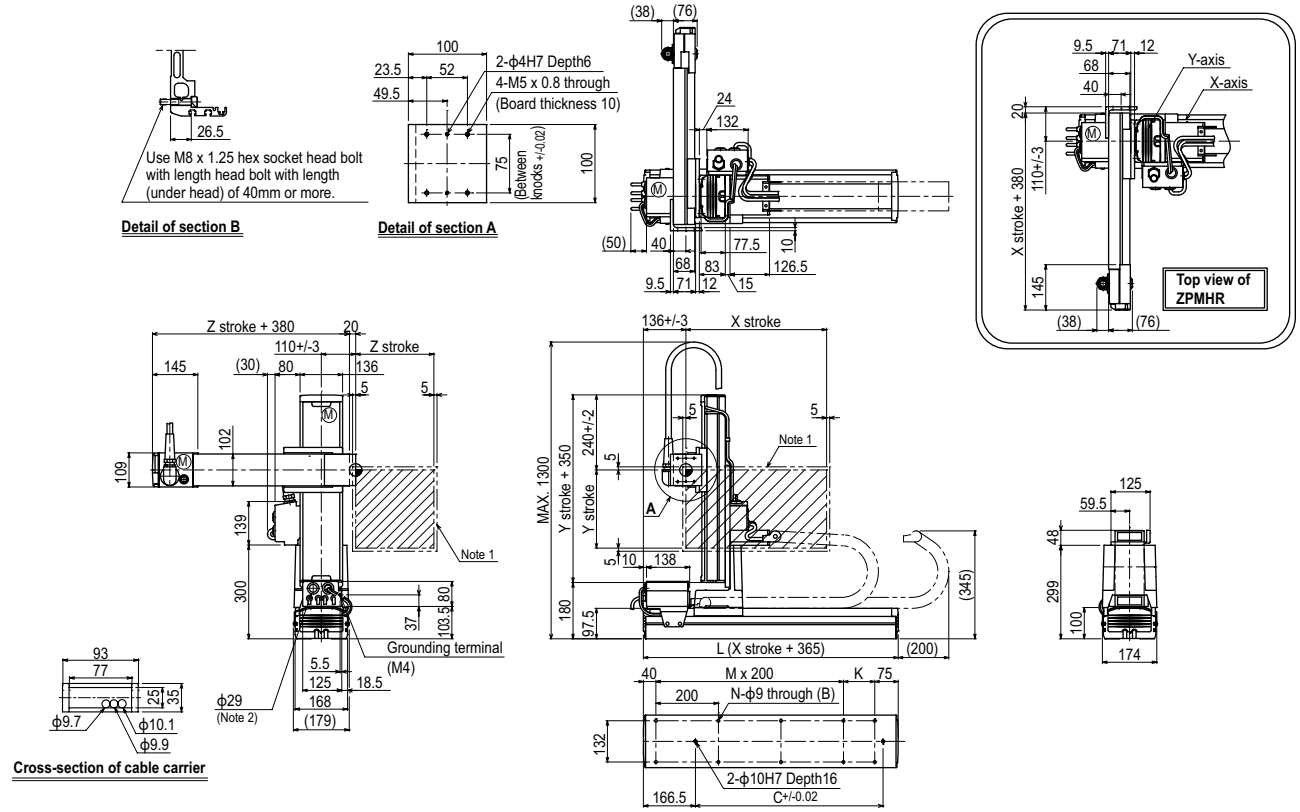
Maximum payload (kg)

	Z stroke (mm)		
Y stroke (mm)	150	250	350
150 to 650	10	9	8

Controller

Controller	Operation method
RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication

MXYx 3 axes / ZPMHL P2



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	650
Z stroke	150	250	350			

Maximum speed for each stroke (mm/sec) Note 3											
X-axis	1200						960	840	720	600	480
Speed setting	–						80%	70%	60%	50%	40%

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
Note 2. User cable extraction port.
Note 3. This figure shows the combination for ZPMHL. For the combination for ZPMHR, see the top view in the figure.
Note 4. When the X-axis stroke is longer than 850mm, 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.

Controller RCX340 ▶ 678