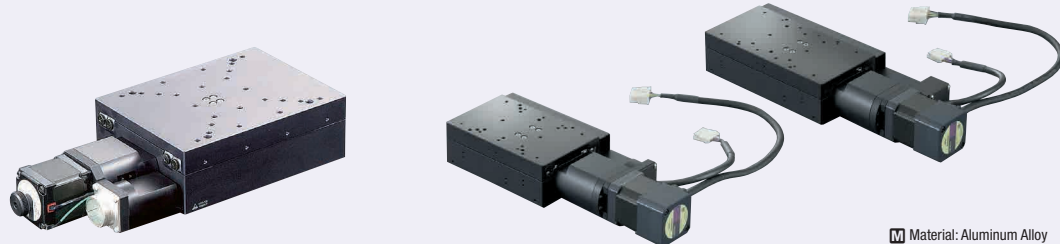


■ **Features:** X-Axis Stage excellent in lightweight, compactness and accuracy.

☉ For CAD data, see the MISUMI website.

■ X-Axis Motor: C (Standard)

■ X-Axis Motor: QA (α-Step)

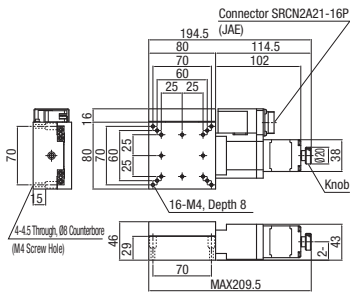


M Material: Aluminum Alloy
S Surface Treatment: Black Anodize
A Accessory: SCB4-20 (4 pcs.)

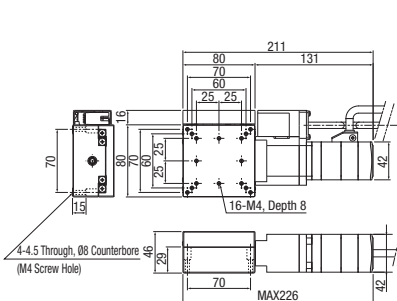
☉ For Controllers, Handset Terminals, see P. 1-1735-93-P. 1-1735-94

☉ The sensor cover position shown on the photo is L (Standard).

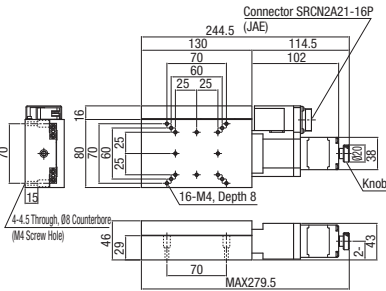
XMPG830-L-C-N



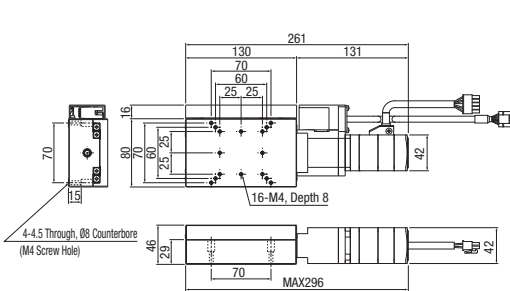
XMPG830-L-QA-N



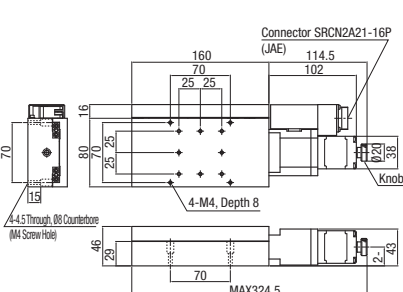
XMPG870-L-C-N



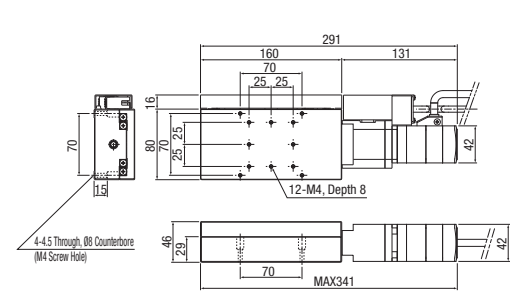
XMPG870-L-QA-N



XMPG8100-L-C-N



XMPG8100-L-QA-N



☉ See the CAD data for detailed dimensions. ☉ The sensor cover position shown on the photo is L (Standard).

Part Number	Sensor Cover Position	Motor	Cable	Mechanical Standards			Accuracy Standards *1						
				Stage Surface (mm)	Travel Distance (mm)	Weight (kg)	Unidirectional Positioning Accuracy (for a single axis)	Moment Rigidity (N*cm)			Pitching	Yawing	
XMPG	830	L (Standard) R (Reversed)	C (Standard) QA (α-Step)	N (Cable not included (separately sold)) 2A (2m, α-Step) 5A (5m, α-Step) 2R (Robot Cable 2m, α-Step) 5R (Robot Cable 5m, α-Step)	80X80	30	1.4	5μm	0.07	0.06	0.02	25"	15"
	870				80X130	70	1.8		0.01	0.014	0.01		
	8100				80X160	100	2.1	10μm	0.005	0.011	0.008	25"	20"

*1. The above accuracy standards of Unidirectional Positioning Accuracy and Moment Rigidity are for a single axis.



Ordering Example
Part Number - **Sensor** - **Motor** - **Cable**
 XMPG830 - L - C - N
 XMPG8100 - R - QA - N

Motor/Cable Application Table

Motor	Cable
C	N
QA	2A,5A,2R,5R



Days to Ship

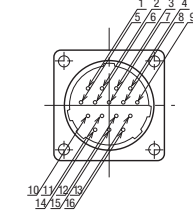
Configure Online

■ Common Specifications

No.	830	870	8100
Feed Screw	Ball Screw Ø8, Lead 1		
Guide	Cross Roller Guide		
Resolution	Full	1μm	
	Half	0.5μm	
Max. Speed	10mm/sec		
Positioning repeatability	Within ±0.3μm		
Load Capacity	196N		
Lost Motion	1μm or less		
Backlash	0.5μm or less		
Parallelism	30μm or less		
Motion Parallelism	10μm or less	15μm or less	

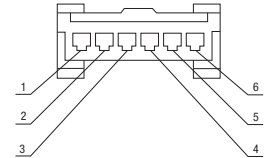
■ Connector Pin Configuration

C: Standard



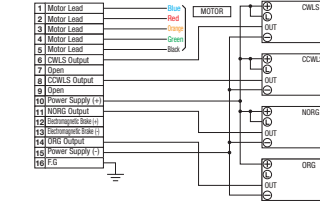
QA: α-Steps

Connector Part Number 172211-6

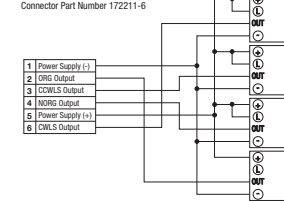


■ Connecting Diagram

C: Standard



QA: α-Steps

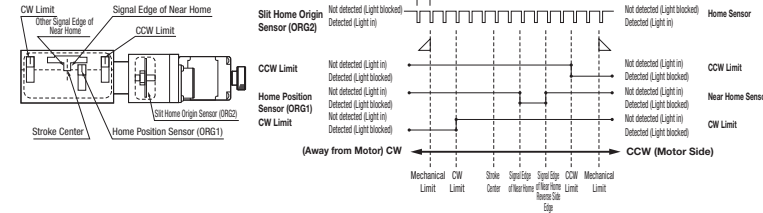


* The terminals 12 and 13 are open for a motor without Electromagnetic Brake.

■ Electrical Specifications

Part Number	XMPG830	XMPG870	XMPG8100	XMPG830-L-QA	XMPG870-L-QA	XMPG8100-L-QA
Motor	5-Phase Stepping Motor 0.75A/Phase (Oriental Motor Co., Ltd.)			α-Step Motor (Oriental Motor Co., Ltd.)		
Part Number	C7214-9015-1 (38mm)			ARM46AC1 (42mm)		
Step Angle	0.36°			0.36° (When 1000P/R is set)		
Driver Part Number	-			ARD-A		
Connector	SRCN2A21-16P (Japan Aviation Electronics Industry, Ltd.)			172211-6 (Tyco Electronics Japan G.K.)		
Applicable Receptacle Connector	SRCN2A21-16A (Japan Aviation Electronics Industry, Ltd.)			171822-6 (Tyco Electronics Japan G.K.)		
Contact Part Number	-			170430-1 (Tyco Electronics Japan G.K.)		
Applicable Receptacle Contact	-			170205-1 (Tyco Electronics Japan G.K.)		
Sensor	-			Provided		
Limit Sensor	-			Provided		
Slit Home Origin Sensor	-			Provided		
Home Sensor	-			Photomicro Sensor EE-SX673 (Omron Corporation)		
Part Number	-			DCS-24V ±10%		
Power Supply Voltage	-			140mA or less (35mA per Sensor)		
Current Consumption	-			NPN Open Collector Output DCS-24V, 100mA or less		
Control Output	-			Residual Voltage 0.8V or less (when load current is 100mA)		
Output Logic	-			Residual Voltage 0.4V or less (when load current is 40mA)		

■ Timing Chart



(Unit: mm) CW Direction ← → CCW Direction

Reference Position	Mechanical Limit	CW Limit	Stroke Center	Signal Edge of Near Home	Slit Home Origin Sensor (ORG2)	Home Position Sensor (ORG1)	CCW Limit	Mechanical Limit
XMPG830	-	23	7	0	6	9	-	-
Stroke Center	-	16	0	7	13	16	-	-
XMPG870	-	63	27	0	6	9	-	-
Stroke Center	-	36	0	27	33	36	-	-
XMPG8100	-	93	42	0	6	9	-	-
Stroke Center	-	51	0	42	48	51	-	-

☉ Homing Routine Above: When DS102/DS112 Series controller is used and when the Homing Routine Type 1 is executed.
 ☉ Home mentioned here means the arbitrary point temporarily set up to be retained until the slit of the shading disc is detected by the Home Sensor after the stroke goes through the signal edge of near home.
 ☉ The coordinates shown are design values. There may be approx. ±0.5mm misalignment on the physical dimensions.
 ☉ For details about Homing, see P. 1-1735-97