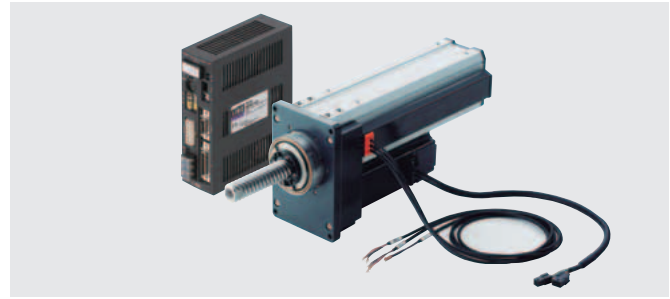


High Power Motorized Cylinders EZ limo PWA II Series

For details on this product please refer to our website, contact technical support or your nearest Oriental Motor sales office.
www.orientalmotor.com

RoHS

With the use of gears and a ball screw, along with the folded motor configuration, the **PWA II** Series cylinders achieve a compact size and provides high thrust force. With the **α STEP** motor used as the motor for the cylinder, this cylinder offers a full range for convenient functions such as teaching, area output and absolute mode.

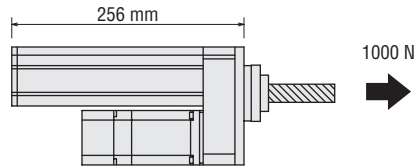


Features

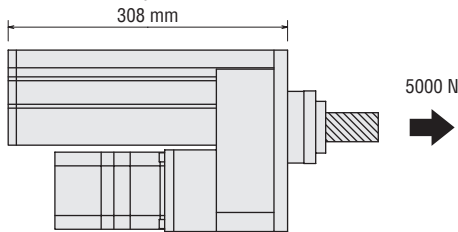
Achieving a Compact Size and High Thrust Force

The **PWA II** Series cylinders provide high thrust force. The maximum thrust forces of the **PWA6** and **PWA8** are 1000 N (600 N in push-motion operation) and 5000 N (3500 N in push-motion operation), respectively.

The **PWA6** is 256 mm in total length, with 1000 N.

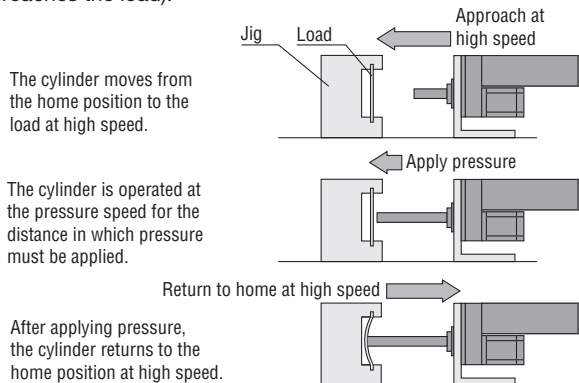


The **PWA8** is 308 mm in total length, with 5000 N.



Short Cycle Operation Can Be Achieved by Linked-Motion Operations

The time required for an operating cycle can be reduced by linking the pressure speed and the approach speed (when the rod approaches the load).



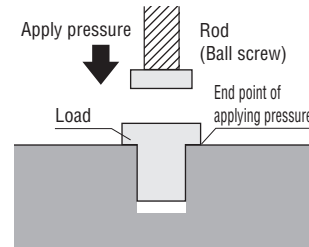
High Accuracy and Positioning

With the **α STEP** motor and the ball screw mechanism, a highly accurate pressurized positioning can be performed. The repetitive positioning accuracy is ± 0.02 mm.

A Wide Range of Operating Patterns

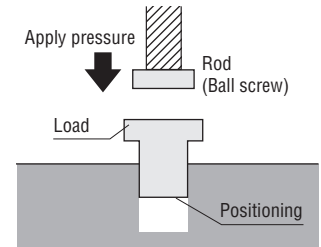
Push-Motion Operation

In this operation, the cylinder can keep the rod pushed against a load, etc.



Pressurized Positioning Operation

In this operation, the cylinder can perform high-accuracy positioning while applying pressure to the rod.

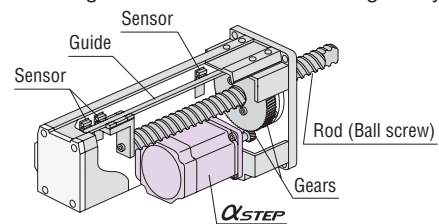


Built-In Home/Limit Sensors

The built-in home/limit sensors in the cylinder save the customer the trouble of having to install sensors.

Built-In Guide Mechanism in Cylinder

The built-in guide mechanism in the cylinder eliminates the need to provide an external guide mechanism before using the cylinder.

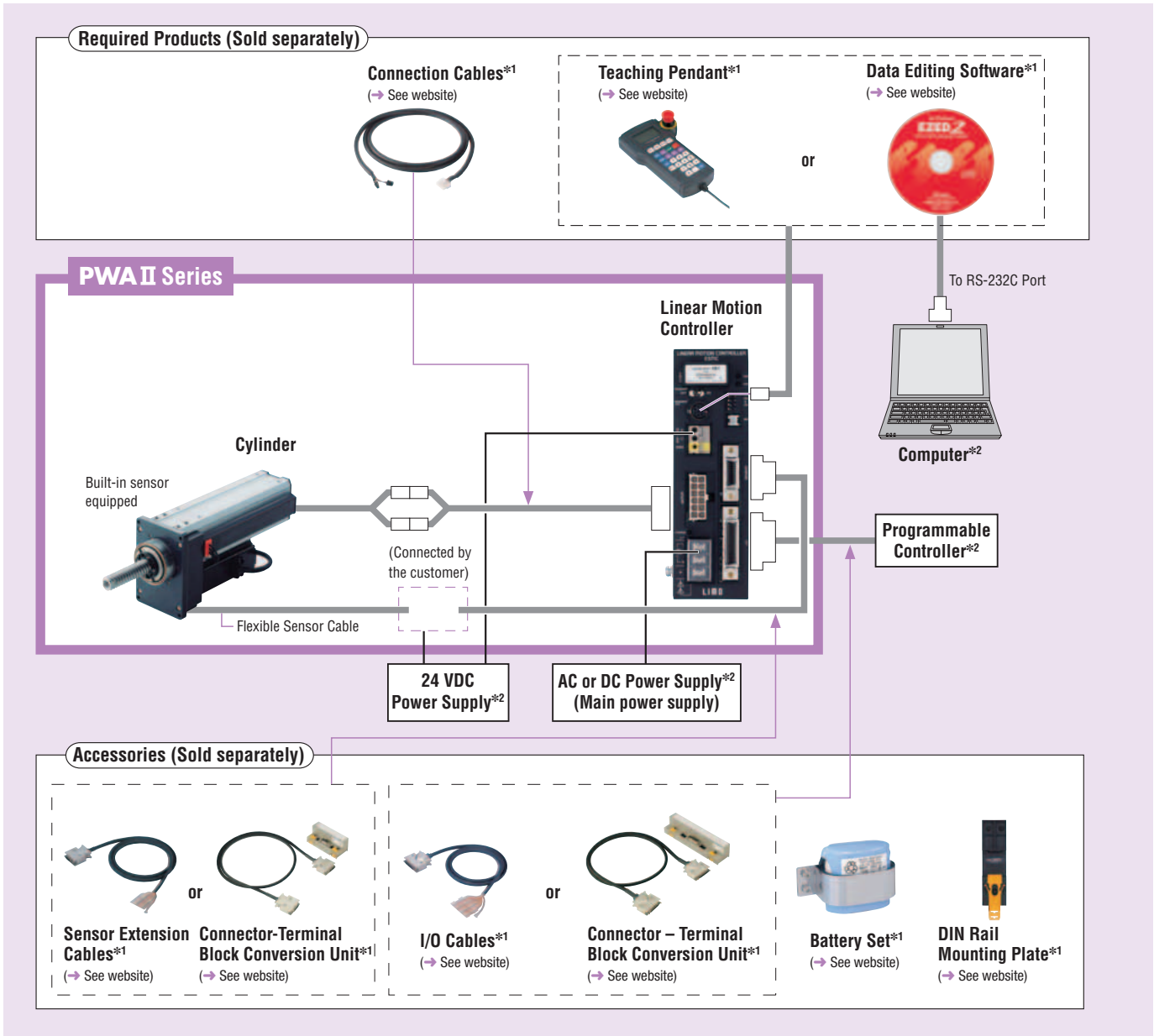


Note

When a moment load is applied in a direction other than that in which the rod moves straight, provide an external guide mechanism.

System Configuration

Controller Mode



Example of System Configuration

PWAII Series	Sold Separately		+	Sold Separately	
	Connection Cable (2 m)	Teaching Pendant		I/O Cable (1 m)	Sensor Extension cable (2 m)
PWA6H010R-A	CC020ES-2	EZT1		CC36D1-1	CC20D2-1

● The system configuration shown above is an example. Other combinations are available.

*1 For accessory details on these products please either refer to our website, contact technical support or your nearest Oriental Motor sales office. www.orientalmotor.com

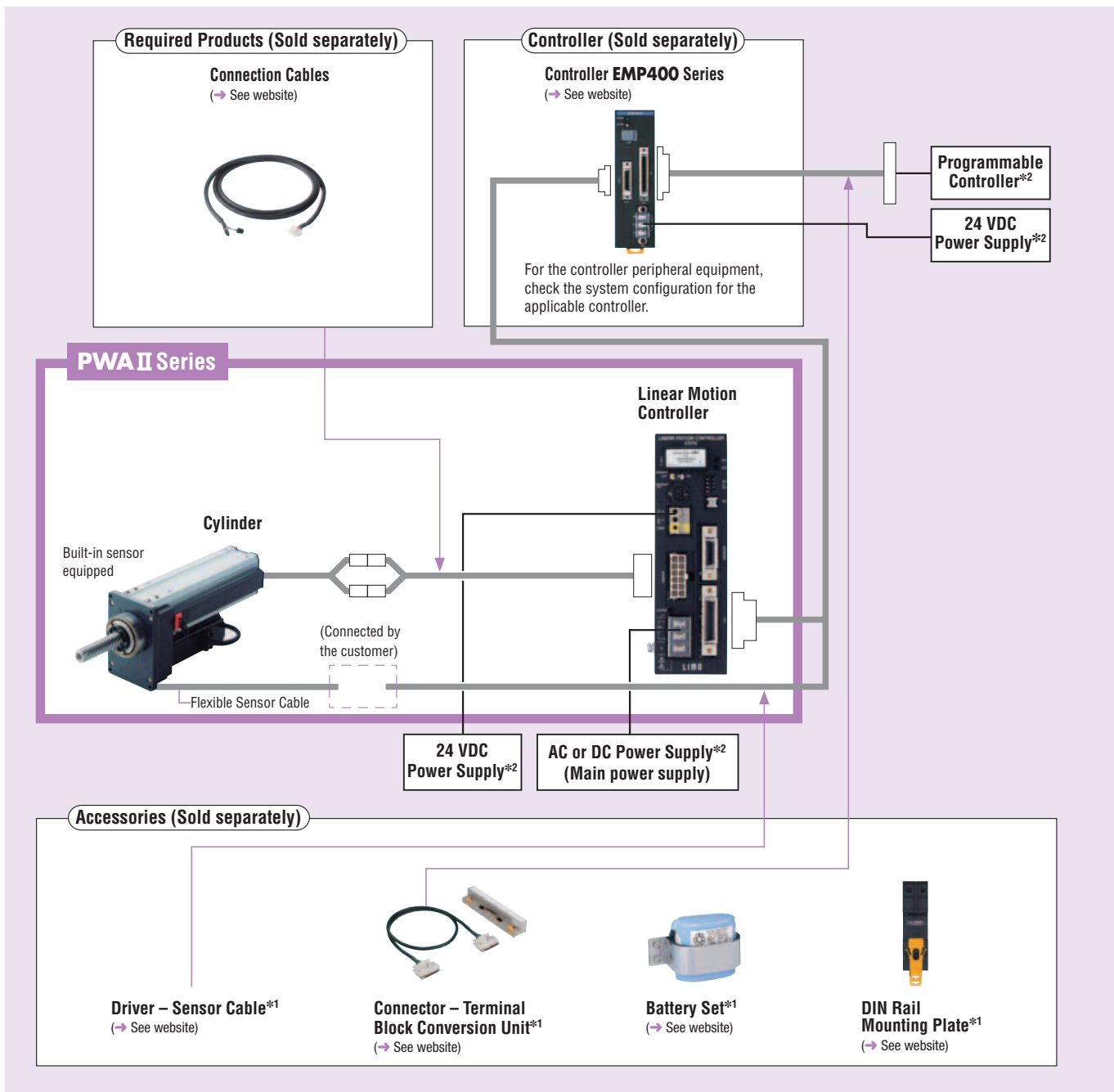
*2 Not supplied

● Driver Mode

Below is an example of a single-axis system configuration with the **EMP400** Series controller.

When performing a return to home operation using the linear motion controller, refer to the system configuration on page E-81.

A teaching pendant or data editing software is required to change the parameters (I/O logic, speed filter, etc.) of the linear motion controller.



● Example of System Configuration

PWAII Series	Sold Separately		Sold Separately		
	Connection Cable (2 m)		Controller	Driver – Sensor Cable (0.5 m)	Connector – Terminal Block Conversion Unit (1 m)
PWA6H010R-A	CC020ES-2	+	EMP401-1	CC005EZ6-EMPD	CC50T1

● The system configuration shown above is an example. Other combinations are available.

*1 For accessory details on these products please either refer to our website, contact technical support or your nearest Oriental Motor sales office. www.orientalmotor.com

*2 Not supplied

Product Number Code

PWA 6 H 010 M R - A

① ② ③ ④ ⑤ ⑥ ⑦

① Series	PWA: PWA II Series
② Cylinder Size	6 : Width 87 mm 8 : Width 130 mm
③ Lead	H : 5 mm J : 1.6 mm
④ Stroke	010 (100 mm)
⑤ Electromagnetic Brake	Blank: Without Electromagnetic Brake M : With Electromagnetic Brake
⑥ Motor Offset	R : Motor Offset Mount Type
⑦ Power Supply Voltage	A : Single-Phase 100-115 VAC C : Single-Phase 200-230 VAC

Specifications of Cylinder (RoHS)

Drive Method	Ball Screw + Gear	Repetitive Positioning Accuracy [mm]	±0.02	Resolution [mm]	PWA6 : 0.01 / PWA8 : 0.001	Stroke [mm]	100	
Model	Lead [mm]	Positioning Operation		Push Operation		Maximum Holding Force [N]		
		Maximum Thrust Force [N]	Speed Range [mm/s]	Push Force [N]	Speed Range [mm/s]	Power ON	Power OFF	Electromagnetic Brake
PWA6H010R -□	5	1000	~50	~600	~6	1000	50	-
		200	~200					
PWA6H010MR -□		1000	~50					1000
		200	~200					
PWA8J010R -□	1.6	5000	~9	~3500	~6	5000	250	-
		1000	~70					
PWA8J010MR -□		5000	~9					3500
		1000	~70					

● Enter the power supply voltage **A** or **C** in the box (□) within the model name.

Cylinder/Controller Combinations

Model names for cylinder and linear motion controller combinations are shown below.

Electromagnetic Brake	Model	Cylinder Model	Controller Model
Not equipped	PWA6H010R-A	PWAM6H010RA	ESMC-A2
	PWA6H010R-C	PWAM6H010RC	ESMC-C2
	PWA8J010R-A	PWAM8J010RA	ESMC-A2
	PWA8J010R-C	PWAM8J010RC	ESMC-C2
Equipped	PWA6H010MR-A	PWAM6H010MRA	ESMC-A2
	PWA6H010MR-C	PWAM6H010MRC	ESMC-C2
	PWA8J010MR-A	PWAM8J010MRA	ESMC-A2
	PWA8J010MR-C	PWAM8J010MRC	ESMC-C2

For details (specifications, characteristics, dimensions and others) on these products please refer either to our website, contact technical support or your nearest Oriental Motor sales office.
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