





## **ROLL GUIDER PGM-15**



#### Outline

PGM-15 is the small roll guider developed for the purpose of having the user who has PG-50, 80, 100, 110 and 800 of the conventional model used transpose to G series, without changing the present installation state greatly.

It applies to a web width of 600 mm or less, and is the optimal as the web meandering correction device of a packaging machine or a hygiene products machine.

#### **Feature**

- The maintenance-free brushless DC motor was adopted.
- The ball screw type micro actuator is built in and it can be made to circle in a roll frame powerfully without rattle.
- The revolution torque of a roll frame will be 3 or more times compared with the thing of the conventional gear type.
- The roll frame is low backlash (1/10 or less of the conventional machine), and since it is supported three points in a pivot axis and two cam followers, it is high rigidity roll frame.
- A roller height becomes lower 28 mm than the conventional machine, and since the minimum span of upper winding is 175 mm (it is 220 mm conventionally), a compacter layout is possible.
- Wiring work is easy in order to connect with a PEM type controller or a PSM type sensor only by a connector.



# G-Series

### Technical data

		Short	Туре		Long Type						
Power Source		DC24V ± 20% (It supplies from a CAN bus.)									
Consumption Current		0.5A (Power Supply Voltage DC 24V)									
Application	Roll Length (mm)	150 ~ 650 200 ~ 650									
	Roll Diameter (mm)	φ 46 、 φ 78									
	Roll Span (mm)	150	175	200	225	250	275	300	400		
	Stroke of Correction (mm) % 1	±18	±19	±22	±25	±16	±18	±20	±27		
	Correction Speed (mm/sec)	17	18	21	24	13	14	15	21		
	Web Tension (N) % 2	230 (W	eb Width:	250mm)		280 (Web Width:450mm)					
	Web Speed (m/min)	max300									
Roll Material		· Aluminum roll (Alumite treatment No / Yes)     · Rubber roll (NBR White )     · CFRP (Rubber cork winding No / Yes) In addition, please ask about special specification.									
Installation Environment		Temperature : 0 $\sim$ 40 $^{\circ}$ C , Humidity : 80%Rh or less (No condensation)									
Mass (A roll frame is excluded.)		3.6kg									
Connection	Controller	PEM-200、PEM-3000									
Device	Sensor	PSM type sensor									
Connection Method		It connects with a CAN bus by a cable with a connector. (Attached cable length: 0.5m)  ** An exclusive cable and a branch connector are required to connect with a CAN bus.  These can be prepared at our company. (Option)  The connection method should look at the catalog of a PEM type controller.									
Others		< About the localization method of a roll frame > · A center position is set up by proximity switch. The stroke end position sets it with an electronic counter type. (It sets up by a controller.) It moves to a center automatically at the time of power source supplying. (Standards) · The proximity switch for a stroke end detection can be added as an option.									

<sup>\*\*</sup> 1 It is the value calculated from the swing angle of the roll frame. (Short type :  $\pm$  7°, Long type :  $\pm$  4°)

 $<sup>\</sup>ensuremath{\%}\xspace 2$  Tension is proportional to web width.

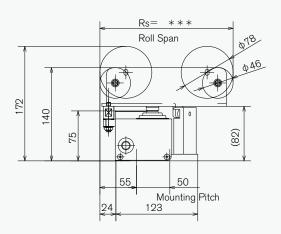


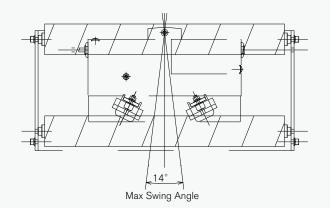
#### **Outline Drawing**

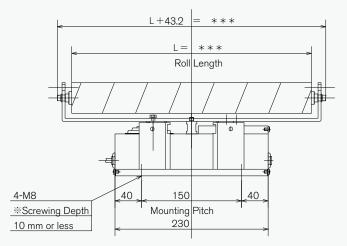
#### Short Type

Application of Roll-Frame

		Roll Length L (mm)								
		150	200	250	300	360	480	550	650	
Span Rs (mm)	150									
	175									
	200									
	225									



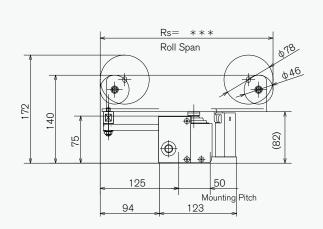


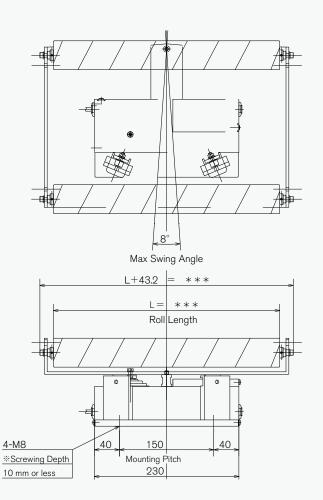


#### Long Type

Application of Roll-Frame

Application of Roll Frame										
		Roll Length L (mm)								
		200	250	300	360	480	550	650		
Span Rs (mm)	250									
	275									
	300									
	400									









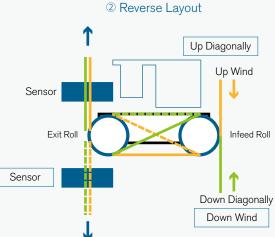


#### Pass Line

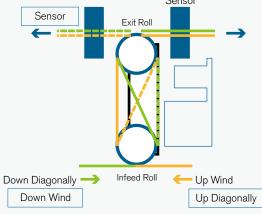
A sensor can be attached in any direction of the upper and lower sides of an exit roll. (However, not less than 175 mm of a roll span ) In addition, when the roll span is less than 175 mm, a sensor is attached only above an exit roll.

In the case of the web pass line of a surrounding frame, the sensor is the position of a surrounding frame.

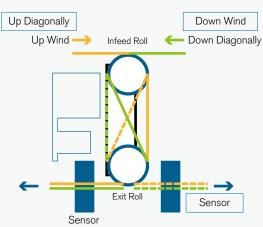
# Down Wind Down Diagonally Sensor Sensor Exit Roll Up Diagonally Up Diagonally



## ③ Vertical Layout



#### Vertical Layout



# MITSUHASHI CORPORATION

## Lending "hands" to replace human hands.

https://www.mitsuhashi-corp.co.jp/en/

#### 株式会社 三橋製作所

#### MITSUHASHI CORPORATION

☐ Head Office/ Factory 1 Sekizan-cho Yamanouchi Ukyo-ku Kyoto 615-0082 Japan

TEL:+81-75-316-3300

FAX:+81-75-313-7595

☐ Tokyo Office/
Overseas Sales Division

Yoshikuni Komagata Bldg. 9F 2-4-11 Komagata

Taitoh-ku Tokyo 111-0043 Japan

TEL:+81-3-3847-9751 FAX:+81-3-3847-9753

☐ Kyushu Office

Room 3 Bldg. D Office Parea Naka II 1-5-3 Naka

Onojo City Fukuoka 816-0906 Japan

TEL:+81-92-476-3800 FAX:+81-92-476-3801