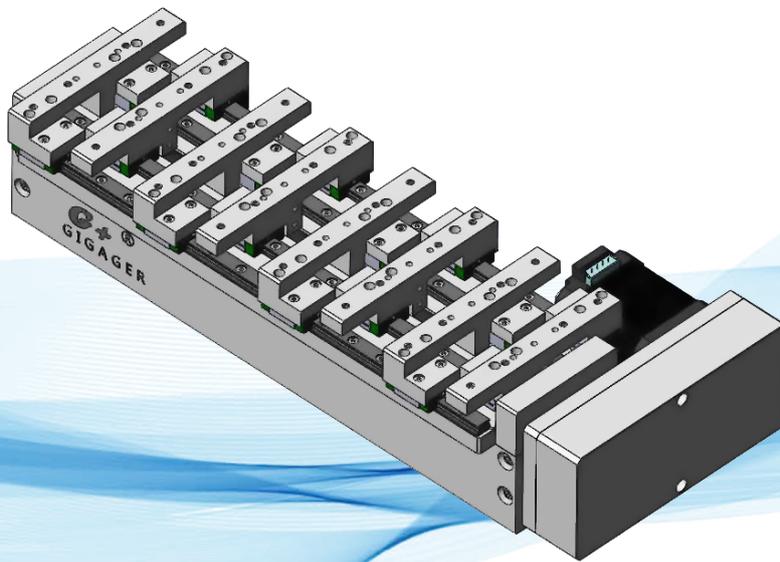




Precision Pitch Changer 2024



High Precision, Light Weight, Small Size
Multi-form linkage of sliders enables batch synchronous operations

G+ precision pitch changer can effectively save time and labor costs in the design and installation of automated production lines. It can be applied to batch operations in semiconductor, electronics, chemical and other industries.

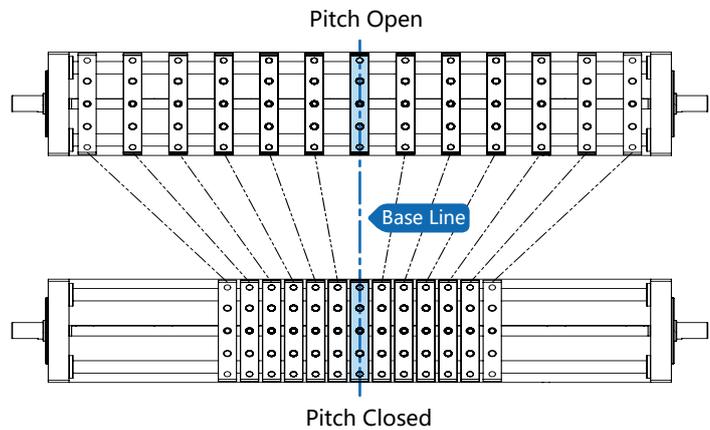
It's an integrated type with simple and compact structure, stable and reliable operation, long service life, convenient and quick installation, multiple driving methods and customizable variable pitch forms.

Pitch Change Form

The pitch change form can be divided into symmetrical linkage, one-way linkage and unequal linkage. Users can customize different linkage forms and change distances according to equipment needs.

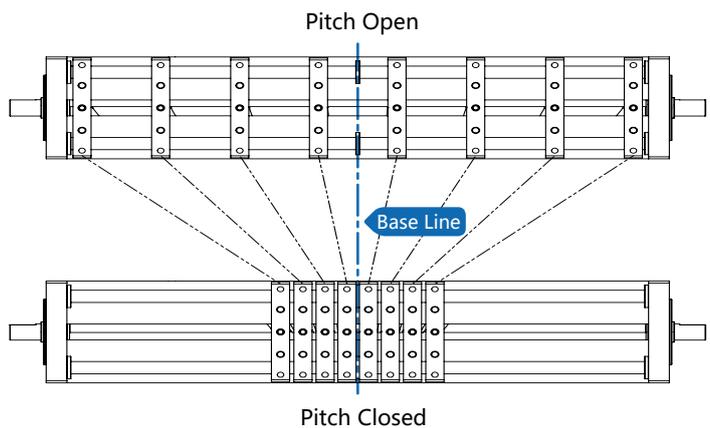
■ Symmetrical linkage diagram 1

When the number of sliders is an odd number, the position of the slider located on the slide base line remains unchanged, and the sliders located on both sides of the slide base line are equidistantly changed.



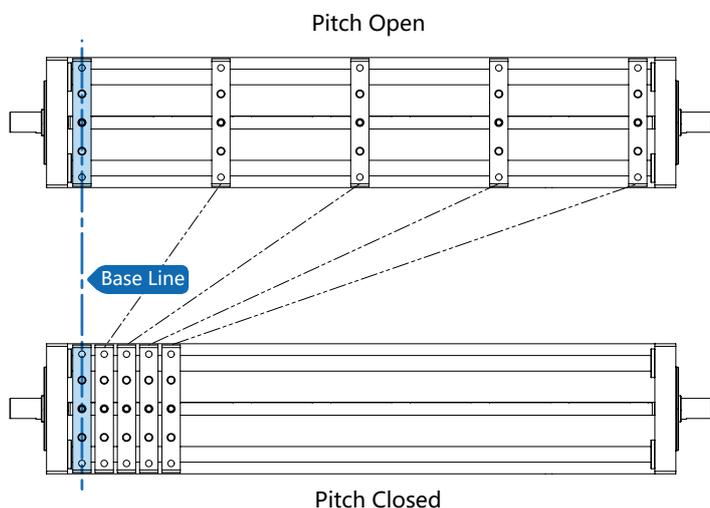
■ Symmetrical linkage diagram 2

When the number of sliders is an even number, the sliders located on both sides of the slide base line are equidistantly changed.



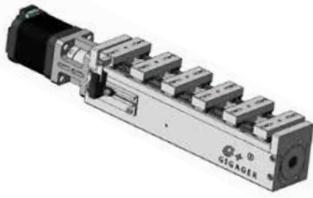
■ One-way linkage diagram (Customized)

The position of the slider located on the slide base line remains unchanged, the sliders located on one side of the slide base line are equidistantly changed.

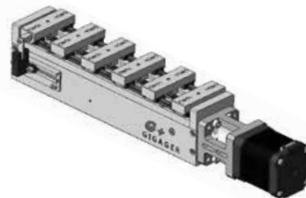


* The above pitch change form can be customized with special specifications for unequal pitch change.

Motor Installation Method



Motor Left-side Direct Connection



Motor Right-side Direct Connection

The default installation method is **motor left-side direct connection**, which is installed on the left side of the G+ logo surface, and the wiring position is consistent with the working surface of the pitch changer.

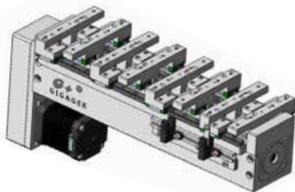
Motor right-side direct connection is the motor be installed on the right side of the G+ logo surface.



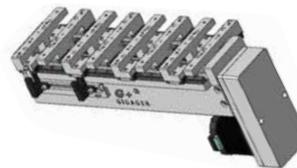
Motor Left Back Folding Connection



Motor Right Back Folding Connection



Motor Left Bottom Folding Connection



Motor Right Bottom Folding Connection

In order to better solve the limitations of installation space, we also provides four installation methods for users to choose.

Users can flexibly choose the above methods according to the equipment installation conditions.

■ Motor Wire Port Direction



**Facing Upward
(Default)**



Facing Downward



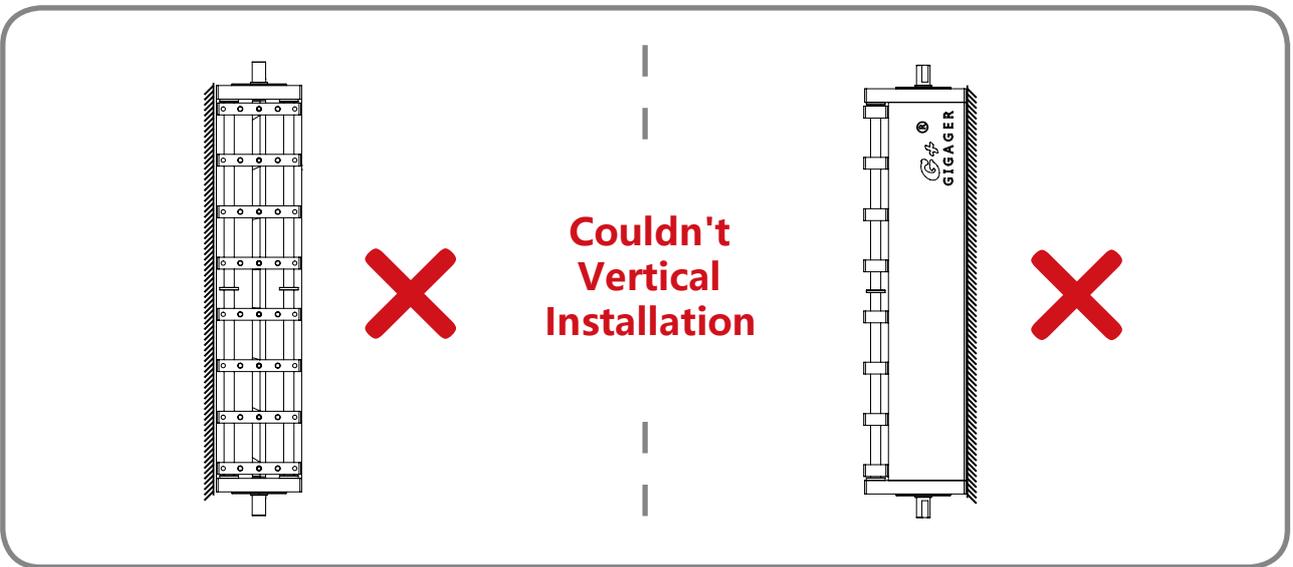
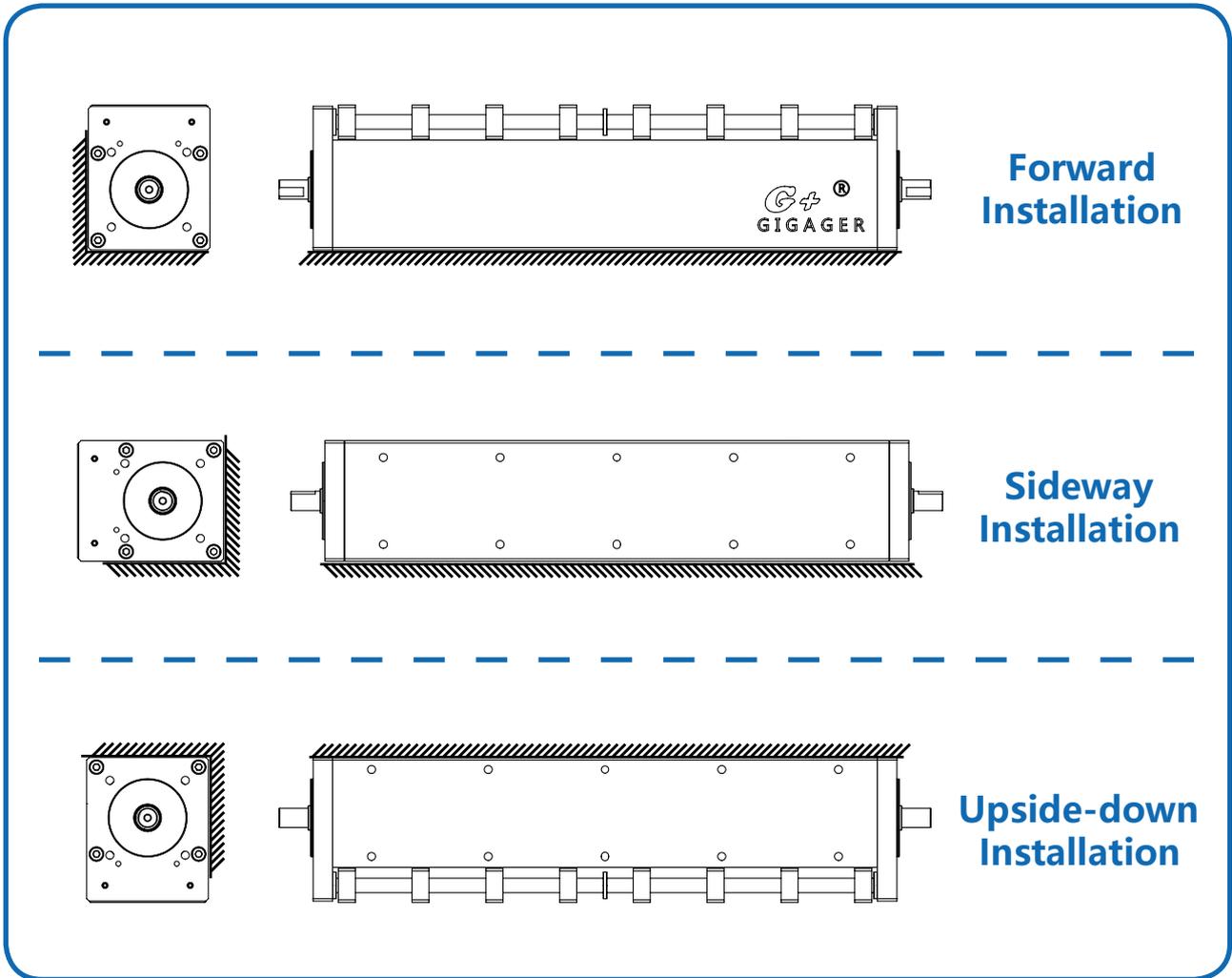
Facing Forward



Facing Backward

Pitch Changer Installation Method

In order to easy installation, the pitch changer is designed with two installation surfaces, which can be installed forward, sideway and upside-down. Please note it cannot be installed vertically.



GPM46 Model Code

Series	Width	Sliders Qty*	Body length	Pitch Change Form	Motor	Sensor	Motor Installation	Motor Wire Port Direction
GPM	46	6	LL2	Z	M	N2	1	1
		3 Units	LL1: 160mm	Z: Symmetrical	None: Plain Shaft	None: Without	1: Left Side	1: Facing Up
		4 Units	LL2: 220mm	S: One-way	C: Motor Flange	N1: With 1 Units	2: Right Side	2: Facing Down
		5 Units	LL3: 280mm	K: Variable	M: Stepper Motor	N2: With 2 Units	3: Left Back	3: Facing Forward
		6 Units	LL4: Customized		F: Servo Motor		4: Right Back	4: Facing Back
		7 Units					5: Left Bottom	
		8 Units					6: Right Bottom	
		9 Units						
		10 Units						
		11 Units						
		12 Units						

Range of Pitches

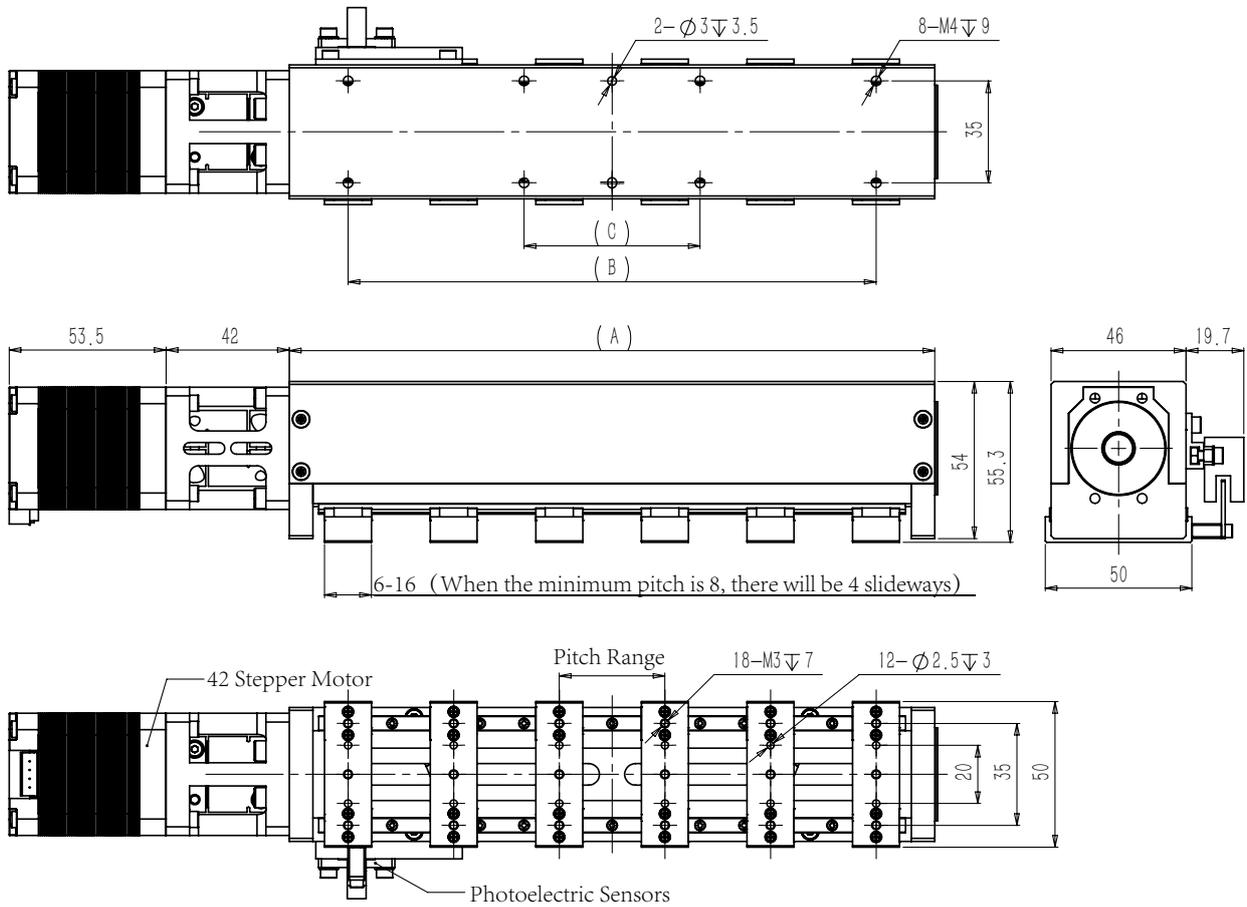
Range of Pitches (mm) Body Length (mm)	Sliders Qty (Customized Allowable)									
	3	4	5	6	7	8	9	10	11	12
LL1	8~63	8~42	8~31	8~25	8~21	8~18	8~15	8~14	-	-
LL2	8~93	8~62	8~46	8~37	8~31	8~26	8~23	8~20	8~18	8~16
LL3	-	-	8~61	8~49	8~41	8~35	8~30	8~27	8~24	8~22

Parameter

	Model No *			
	GPM46- □ LL1	GPM46- □ LL2	GPM46- □ LL3	GPM46- □ LL4
Sliders Qty	Depends on load and workpiece clamping			LL4 is a customized specification. The dimensions and parameters are subject to the checked drawing
Pitch Range	Related to body length and sliders qty			
Repeatability	mm	±0.015		
Positioning Accuracy	mm	±0.02		
Motor	Suitable for 42 stepper motor /100W servo motor			
Input Torque	N.m	According to motor's torque		
Pitch Frequency	cpm	≤ 120		
Operating Temperature	5~45°C			

* The default standard specifications of pitch change form is symmetrical linkage.
If you need one-way linkage or special specifications, welcome to visit www.gigager.net to contact us for more information

■ GPM46



Item Type	Screw Hole Installation Dimensions (mm)			Payload (g)		
	Size A	Size B	Size C	Self-Weight (With a stepper motor and 6 units of sliders)	Total Load	Single Slider Load
LL1	160	120	-	About 2000	≤ 2000	≤ 200
LL2	220	180	60	About 2500	≤ 2000	≤ 200
LL3	280	240	80	About 3000	≤ 2500	≤ 200
LL4	The customized size shall be subject to the checked drawings.					

GPM56 Model Code

Series	Width	Sliders Qty*	Body length	Pitch Change Form	Motor	Sensor	Motor Installation	Motor Wire Port Direction
GPM	56	6	LL3	Z	M	N2	3	1
		3 Units	LL1: 180mm	Z: Symmetrical	None: Plain Shaft	None: Without	1: Left Side	1: Facing Up
		4 Units	LL2: 240mm	S: One-way	C: Motor Flange	N1: With 1 Units	2: Right Side	2: Facing Down
		5 Units	LL3: 300mm	K: Variable	M: Stepper Motor	N2: With 2 Units	3: Left Back	3: Facing Forward
		6 Units	LL4: 360mm		F: Servo Motor		4: Right Back	4: Facing Back
		7 Units	LL5: Customized				5: Left Bottom	
		8 Units					6: Right Bottom	
		9 Units						
		10 Units						
		11 Units						
		12 Units						

Range of Pitches

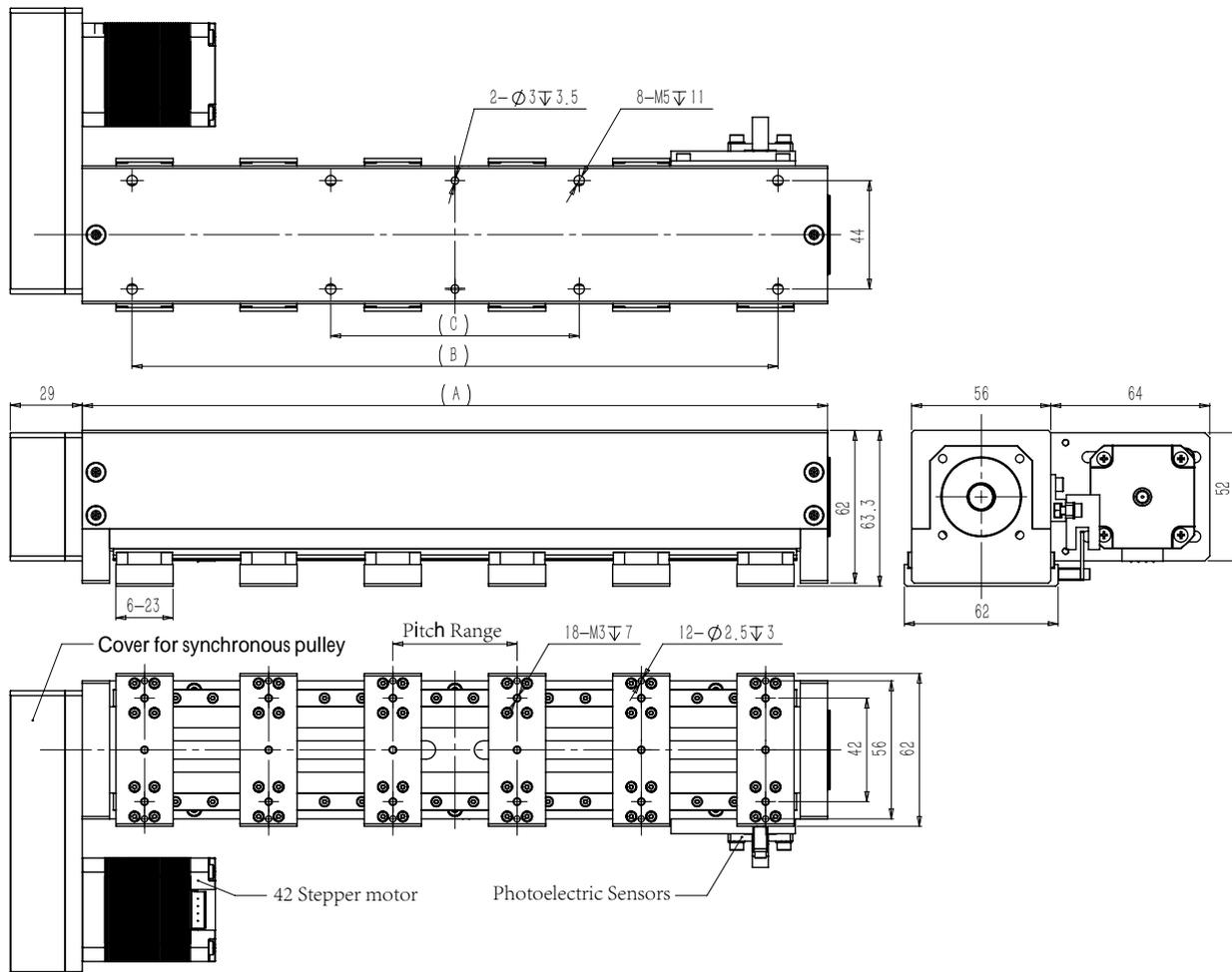
Range of Pitches (mm) Body Length (mm)	Sliders Qty (Customized Allowable)									
	3	4	5	6	7	8	9	10	11	12
LL1	23~65	23~44	23~33	23~26	-	-	-	-	-	-
LL2	23~96	23~64	23~48	23~38	23~32	23~27	23~24	-	-	-
LL3	23~126	23~84	23~63	23~50	23~42	23~36	23~31	23~28	23~25	-
LL4	-	-	23~78	23~62	23~52	23~44	23~39	23~34	23~31	23~28

Parameter

	Model No *				
	GPM56- □ LL1	GPM56- □ LL2	GPM56- □ LL3	GPM56- □ LL4	GPM56- □ LL5
Sliders Qty	Depends on load and workpiece clamping				LL5 is a customized specification. The dimensions and parameters are subject to the checked drawing
Pitch Range	Related to body length and sliders qty				
Repeatability mm	±0.015				
Positioning Accuracy mm	±0.02				
Motor	Suitable for 42 stepper motor /100W servo motor				
Input Torque N.m	According to motor's torque				
Pitch Frequency cpm	≤ 120				
Operating temperature	5~45°C				

* The default standard specifications of pitch change form is symmetrical linkage.
If you need one-way linkage or special specifications, welcome to visit www.gigager.net to contact us for more information

GPM56



Item	Screw Hole Installation Dimensions(mm)			Payload (g)		
	Size A	Size B	Size C	Self-Weight (With a stepper motor and 6 units of sliders)	Total Load	Single Slider Load
LL1	180	140	-	About 3000	≤ 4000	≤ 400
LL2	240	200	80	About 3500	≤ 4000	≤ 400
LL3	300	260	100	About 4000	≤ 5000	≤ 400
LL4	360	320	120	About 4500	≤ 5000	≤ 400
LL5	The customized size shall be subject to the checked drawings.					

GPM74 Model Code

Series	Width	Sliders Qty*	Body length	Pitch Change Form	Motor	Sensor	Motor Installation	Motor Wire Port Direction
GPM	74	8	LL2	Z	M	N2	3	1
		3 Units	LL1: 180mm	Z: Symmetrical	None: Plain Shaft	None: Without	1: Left Side	1: Facing Up
		4 Units	LL2: 240mm	S: One-way	C: Motor Flange	N1: With 1 Units	2: Right Side	2: Facing Down
		5 Units	LL3: 300mm	K: Variable	M: Stepper Motor	N2: With 2 Units	3: Left Back	3: Facing Forward
		6 Units	LL4: 360mm		F: Servo Motor		4: Right Back	4: Facing Back
		7 Units	LL5: Customized				5: Left Bottom	
		8 Units					6: Right Bottom	
		9 Units						
		10 Units						
		11 Units						
		12 Units						

Range of Pitches

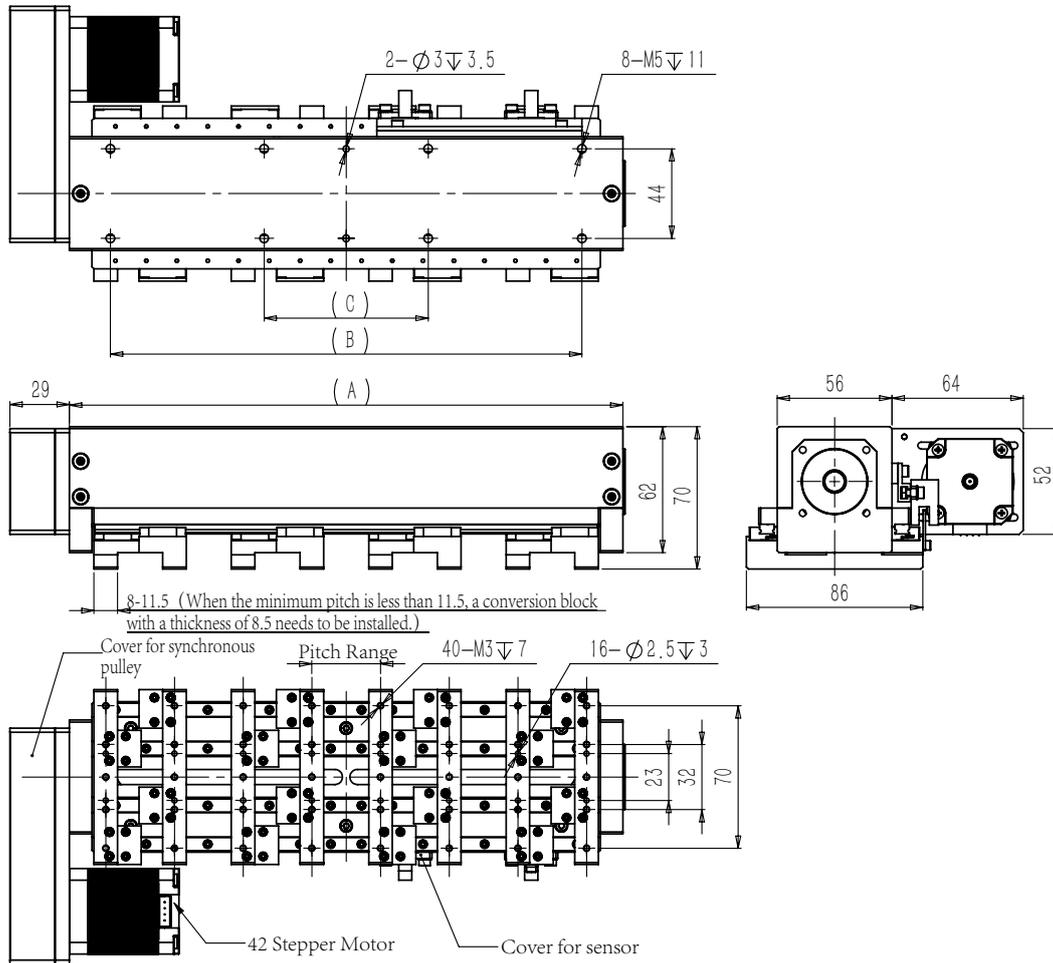
Range of Pitches (mm) Body Length (mm)	Sliders Qty (Customized Allowable)									
	3	4	5	6	7	8	9	10	11	12
LL1	12~61	12~48	12~30	12~29	12~20	12~20	12~15	-	-	-
LL2	12~91	12~68	12~45	12~41	12~30	12~29	12~22	12~22	12~18	12~18
LL3	12~121	12~88	12~60	12~53	12~40	12~38	12~30	12~29	12~24	12~24
LL4	-	-	-	12~65	12~50	12~46	12~37	12~36	12~30	12~28

Parameter

	Model No *				
	GPM74- □ LL1	GPM74- □ LL2	GPM74- □ LL3	GPM74- □ LL4	GPM74- □ LL5
Sliders Qty	Depends on load and workpiece clamping				LL5 is a customized specification. The dimensions and parameters are subject to the checked drawing
Pitch Range	Related to body length and sliders qty				
Repeatability mm	±0.015				
Positioning Accuracy mm	±0.02				
Motor	Suitable for 42 stepper motor /100W servo motor				
Input Torque N.m	According to motor's torque				
Pitch Frequency cpm	≤ 120				
Operating temperature	5~45°C				

* The default standard specifications of pitch change form is symmetrical linkage.
If you need one-way linkage or special specifications, welcome to visit www.gigager.net to contact us for more information

■ GPM74



Item	Screw Hole Installation Dimensions(mm)			Payload (g)		
	Size A	Size B	Size C	Self-Weight (With a stepper motor and 6 units of sliders)	Total Load	Single Slider Load
LL1	180	140	-	About 3000	≤ 3000	≤ 300
LL2	240	200	80	About 3500	≤ 3000	≤ 300
LL3	300	260	100	About 4000	≤ 4000	≤ 300
LL4	360	320	120	About 4500	≤ 4000	≤ 300
LL5	The customized size shall be subject to the checked drawings.					

GPM76 Model Code

Series	Width	Sliders Qty*	Body length	Pitch Change Form	Motor	Sensor	Motor Installation	Motor Wire Port Direction
GPM	76	6	LL3	Z	M	N2	3	1
		3 Units	LL1: 200mm	Z: Symmetrical	None: Plain Shaft	None: Without	1: Left Side	1: Facing Up
		4 Units	LL2: 240mm	S: One-way	C: Motor Flange	N1: With 1 Units	2: Right Side	2: Facing Down
		5 Units	LL3: 320mm	K: Variable	M: Stepper Motor	N2: With 2 Units	3: Left Back	3: Facing Forward
		6 Units	LL4: 400mm		F: Servo Motor		4: Right Back	4: Facing Back
		7 Units	LL5: 480mm				5: Left Bottom	
		8 Units	LL6: Customized				6: Right Bottom	
		9 Units						
		10 Units						
		11 Units						
		12 Units						

Range of Pitches

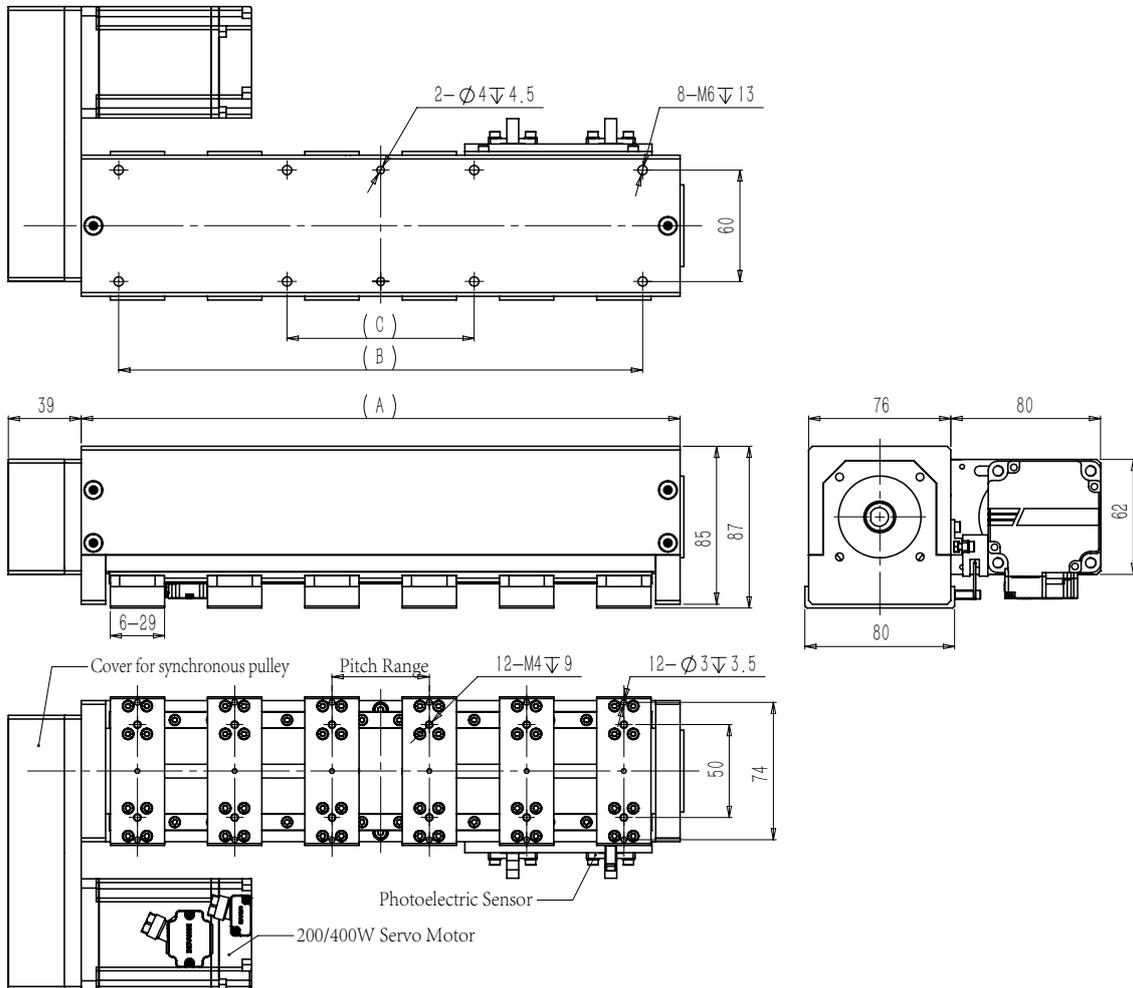
Range of Pitches (mm) / Body Length (mm)	Sliders Qty (Customized Allowable)									
	3	4	5	6	7	8	9	10	11	12
LL1	29~71	29~47	29~35	-	-	-	-	-	-	-
LL2	29~91	29~60	29~45	29~36	-	-	-	-	-	-
LL3	29~131	29~87	29~65	29~52	29~43	29~37	29~32	-	-	-
LL4	29~171	29~114	29~85	29~68	29~57	29~48	29~43	29~38	29~34	29~31
LL5	-	29~140	29~105	29~84	29~70	29~60	29~52	29~47	29~42	29~38

Parameter

	Model No *					
	GPM76- □ LL1	GPM76- □ LL2	GPM76- □ LL3	GPM76- □ LL4	GPM76- □ LL5	GPM76- □ LL6
Sliders Qty	Depends on load and workpiece clamping					
Pitch Range	Related to body length and sliders qty					
Repeatability mm	±0.015					
Positioning Accuracy mm	±0.02					
Motor	Suitable for 57 stepper motor /200W servo motor /400W servo motor					
Input Torque N.m	According to motor's torque					
Pitch Frequency cpm	≤ 100					
Operating Temperature	5~45°C					

* The default standard specifications of pitch change form is symmetrical linkage.
If you need one-way linkage or special specifications, welcome to visit www.gigager.net to contact us for more information

■ GPM76



Item	Screw Hole Installation Dimensions (mm)			Payload (g)		
	Size A	Size B	Size C	Self-Weight (With a stepper motor and 6 units of sliders)	Total Load	Single Slider Load
LL1	200	160	-	About 5500	≤ 5000	≤ 700
LL2	240	200	80	About 6500	≤ 5000	≤ 700
LL3	320	280	100	About 7500	≤ 7000	≤ 700
LL4	400	360	120	About 8500	≤ 8000	≤ 700
LL5	480	440	150	About 9500	≤ 8000	≤ 700
LL6	The customized size shall be subject to the checked drawings.					

GPM92 Model Code

Series	Width	Sliders Qty*	Body length	Pitch Change Form	Motor	Sensor	Motor Installation	Motor Wire Port Direction
GPM	92	8	LL4	Z	M	N2	3	1
		3 Units	LL1: 200mm	Z: Symmetrical	None: Plain Shaft	None: Without	1: Left Side	1: Facing Up
		4 Units	LL2: 240mm	S: One-way	C: Motor Flange	N1: With 1 Units	2: Right Side	2: Facing Down
		5 Units	LL3: 320mm	K: Variable	M: Stepper Motor	N2: With 2 Units	3: Left Back	3: Facing Forward
		6 Units	LL4: 400mm		F: Servo Motor		4: Right Back	4: Facing Back
		7 Units	LL5: 480mm				5: Left Bottom	
		8 Units	LL6: Customized				6: Right Bottom	
		9 Units						
		10 Units						
		11 Units						
		12 Units						

Range of Pitches

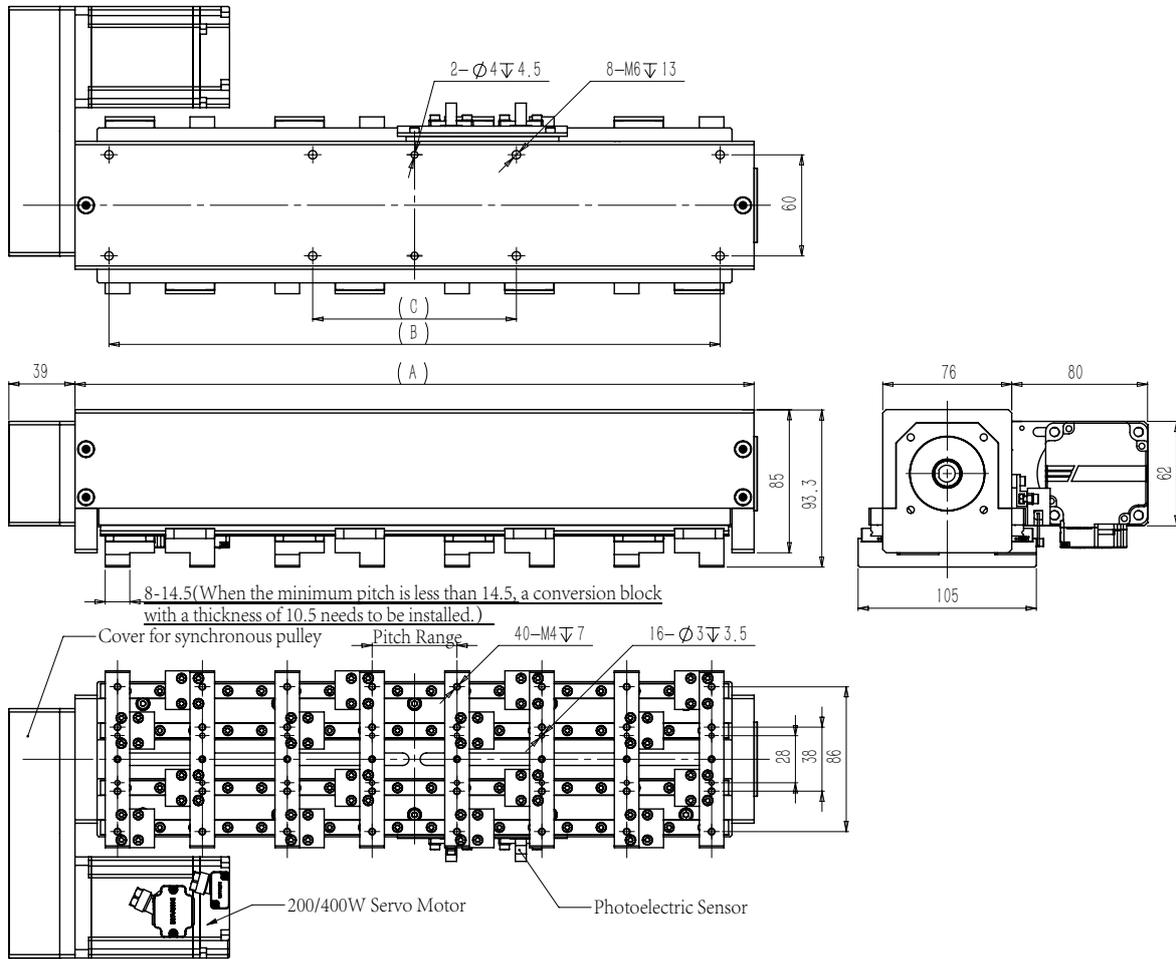
Range of Pitches (mm) Body Length (mm)	Sliders Qty (Customized Allowable)									
	3	4	5	6	7	8	9	10	11	12
LL1	15~64	15~52	15~32	15~31	15~21	15~22	-	-	-	-
LL2	15~84	15~66	15~42	15~37	15~28	15~28	15~21	15~22	-	-
LL3	15~124	15~92	15~82	15~55	15~41	15~39	15~31	15~30	15~24	-
LL4	15~164	15~119	15~82	15~71	15~54	15~51	15~41	15~39	15~32	15~32
LL5	-	-	15~102	15~87	15~68	15~62	15~51	15~48	15~40	15~39

Parameter

	Model No *					
	GPM92- □ LL1	GPM92- □ LL2	GPM92- □ LL3	GPM92- □ LL4	GPM92- □ LL5	GPM92- □ LL6
Sliders Qty	Depends on load and workpiece clamping					
Pitch Range	Related to body length and sliders qty					
Repeatability mm	±0.015					
Positioning Accuracy mm	±0.02					
Motor	Suitable for 57 stepper motor /200W servo motor /400W servo motor					
Input Torque N.m	According to motor's torque					
Pitch Frequency cpm	≤ 100					
Operating Temperature	5~45°C					

* The default standard specifications of pitch change form is symmetrical linkage.
If you need one-way linkage or special specifications, welcome to visit www.gigager.net to contact us for more information

■ GPM92



Item	Screw Hole Installation Dimensions (mm)			Payload (g)		
	Size A	Size B	Size C	Self-Weight (With a stepper motor and 6 units of sliders)	Total Load	Single Slider Load
LL1	200	160	-	About 5500	≤ 5000	≤ 500
LL2	240	200	80	About 6500	≤ 5000	≤ 500
LL3	320	280	100	About 7500	≤ 6000	≤ 500
LL4	400	360	120	About 9000	≤ 7000	≤ 500
LL5	480	440	150	About 10000	≤ 7000	≤ 500
LL6	The customized size shall be subject to the checked drawings.					