

Low Profile Single Axis Electric Actuator

Series **LG1H**

High Rigidity Direct Acting Guide

Without coupling

With coupling

Series	Motor type	Guide type	Mounting orientation	Motor/Screw connection	Model	Lead screw lead mm			Page		
						Ground ball screw	Rolled ball screw	Slide screw			
LG1H	Standard motor	High rigidity direct acting guide	Horizontal	Without coupling	LG1□H20	10	20	10	20	20	P.674
				With coupling	LG1□H21	10	20	10	20	20	P.684
	Non-standard motor			With coupling	LG1□H21	10	20	10	20	20	P.694

- Options _____ P.658
- Construction _____ P.714
- Mounting _____ P.716
- Non-standard Motor Mounting _____ P.717
- Deflection Data _____ P.718

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

D-□

E-MY

Part Number Designations

LG1 □ H 21 □ G 2 1 P A - 100 - F □ - X10

Frame material

Nil	Aluminium alloy
T	Stainless steel

Guide type

H	High rigidity direct acting guide
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Series

20	Without coupling
21	With coupling

Controller

Nil	LC1 controller compatible
8	LC8 controller compatible

Motor specification

Nil	Standard motor
R	Mitsubishi Electric Corporation

Motor output

2	100 W
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Power supply voltage

1	100/110 VAC (50/60 Hz) 100/115 VAC (50/60 Hz)
2	200/220 VAC (50/60 Hz) 200/230 VAC (50/60 Hz)
0	Without motor

Stroke (mm)

A	10 mm
C	20 mm

Lead screw lead

A	10 mm
C	20 mm

Lead screw type

P	Ground ball screw
N	Rolled ball screw
S	Slide screw

Cable entry direction

F	Axial
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Switch

Nil	None
W	N.C. (B contact) NPN: 2 pcs.
H	N.C. (B contact) PNP: 2 pcs.

Cable length

2	2 m
3	3 m
4	4 m
5	5 m

X10 Non-standard motor (Note)

The tables above show the definition for each symbol only and cannot be used for actual model selection.

Standard Motor/ Horizontal Mount Without Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
∅15 mm/10 mm lead

Series **LG1□H20**

How to Order

LC1 controller compatible

LG1□H202 1 PA - 300 - F 2

• Power supply voltage	1	100/110 VAC (50/60 Hz)
	2	200/220 VAC (50/60 Hz)
• Frame material	Nil	Aluminum alloy
	T	Stainless steel
• Cable length	2	2 m
	3	3 m
	4	4 m
	5	5 m
• Stroke (mm)	Refer to the standard stroke.	

Specifications

Standard stroke (mm)		100	200	300	400	
Performance	Body mass	Aluminum (kg)	5.3	6.1	6.9	7.7
		Stainless steel (kg)	8.3	9.6	10.8	12.0
	Operating temperature range (°C)	5 to 40 (No condensation)				
	Work load (kg)	30				
	Maximum speed (mm/s)	500				
	Positioning repeatability (mm)	±0.02				
Main parts	Motor	AC servomotor (100 W)				
	Encoder	Incremental system				
	Lead screw	Ground ball screw ∅15 mm, 10 mm lead				
	Guide	High rigidity direct acting guide				
	Motor/Screw connection	Without coupling				
Controller	Model	LC1-1F2HA□-□□ (Refer to page 829 for details.)				

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number.
Applicable strokes: 150, 250, 350
Example) **LG1H2021PA-150-F2-X2**



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

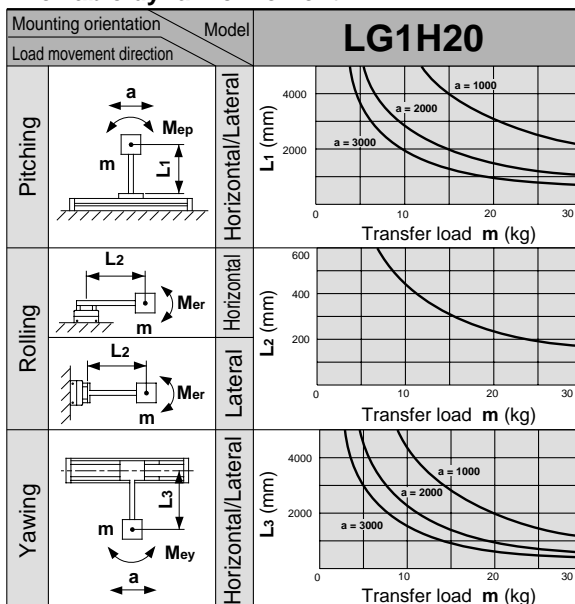
Allowable Moment (N·m)

Allowable static moment

Pitching	71
Rolling	79
Yawing	75

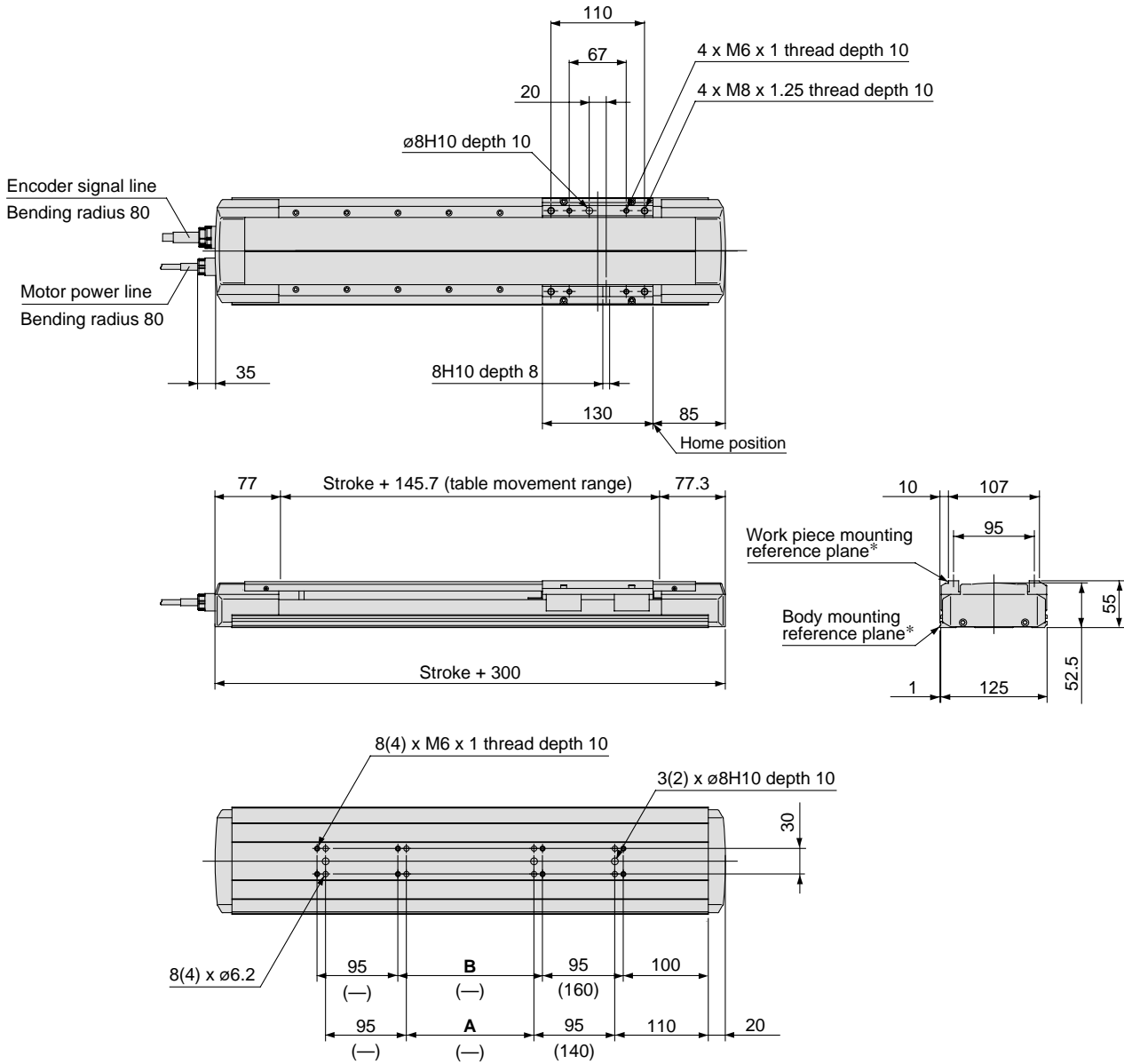
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H202□PA



- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Model	Stroke	A	B
LG1□H202□PA-100-F□*	100	—	—
LG1□H202□PA-200-F□	200	50	70
LG1□H202□PA-300-F□	300	150	170
LG1□H202□PA-400-F□	400	250	270

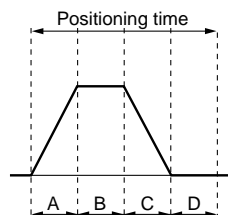
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	200	400
Speed (mm/s)	10	0.5	1.4	10.4	20.4	40.4
	100	0.5	0.6	1.5	2.5	4.5
	250	0.5	0.6	0.9	1.3	2.1
	500	0.5	0.6	0.8	1.0	1.4

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)
Maximum acceleration: 3000 mm/s²

Standard Motor/ Horizontal Mount Without Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
∅15 mm / 20 mm lead

Series **LG1□H20**

How to Order

LC1 controller compatible

LG1 □ **H202** **1** **PC** - **500** - F **2**

• Power supply voltage

1	100/110 VAC (50/60 Hz)
2	200/220 VAC (50/60 Hz)

• Frame material

Nil	Aluminum alloy
T	Stainless steel

• Cable length

2	2 m
3	3 m
4	4 m
5	5 m

• Stroke (mm)

Refer to the standard stroke.

Specifications

Standard stroke (mm)		500	600	700	800	900	1000	
Performance	Body mass	Aluminum (kg)	8.5	9.3	10.1	10.9	11.7	12.5
		Stainless steel (kg)	13.3	14.5	15.8	17.1	18.3	19.6
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed (mm/s) ^{Note)}	1000	1000	930	740	600	500	
Positioning repeatability (mm)		±0.02						
Main parts	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Ground Ball Screw ∅15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
Motor/Screw connection		Without coupling						
Controller	Model	LC1-1F2HC□-□□ (Refer to page 829 for details.)						

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number. Applicable strokes: 450, 550, 650, 750, 850, 950

Example) **LG1H2021PC-550-F2-X2**



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

Note) The speed is limited by the transfer load. Refer to the maximum speeds for each transfer load on the next page.

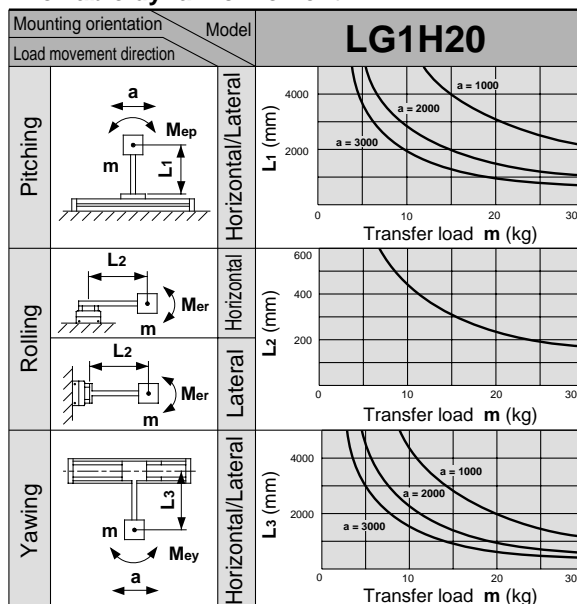
Allowable Moment (N·m)

Allowable static moment

Pitching	71
Rolling	79
Yawing	75

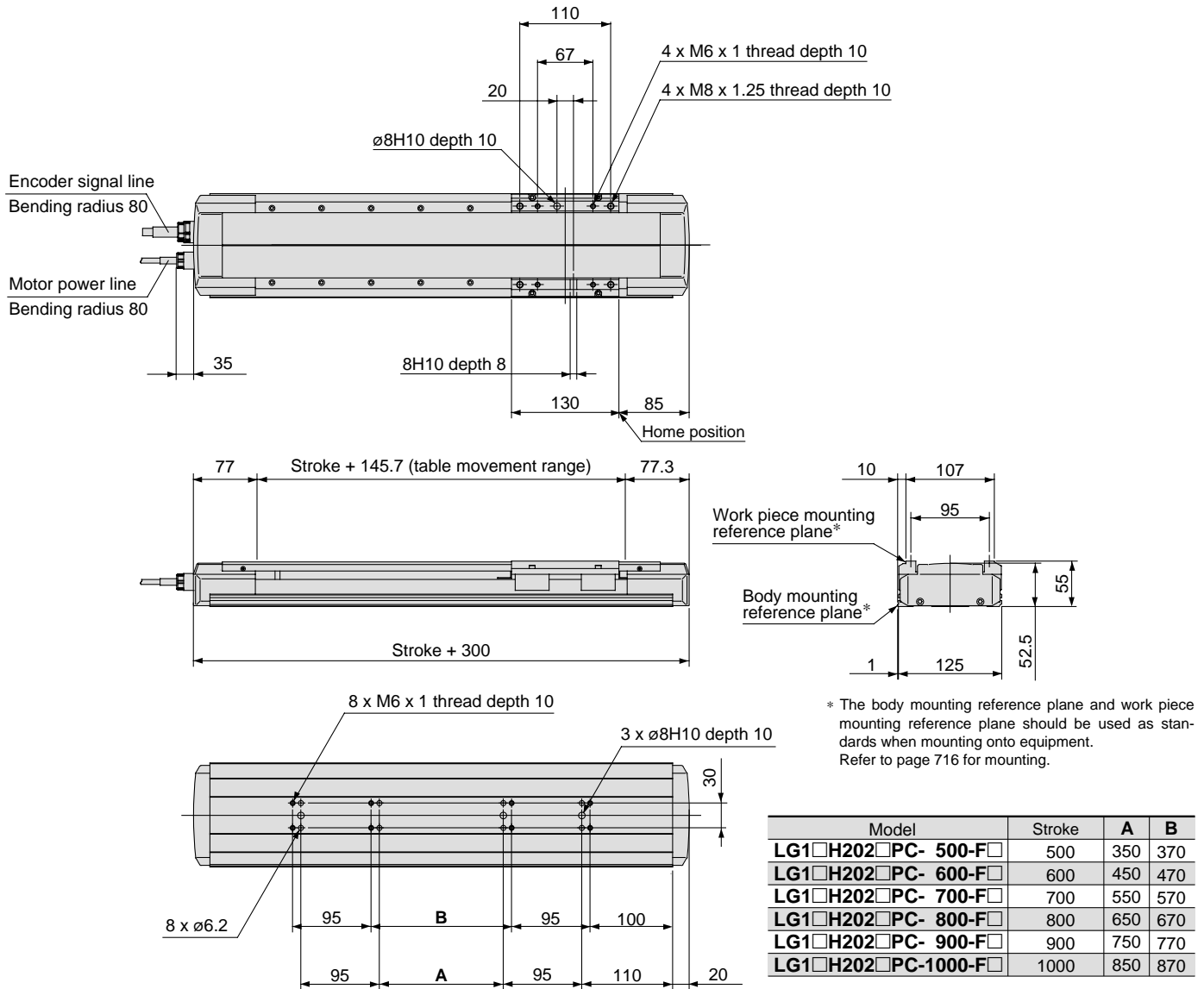
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H202□PC

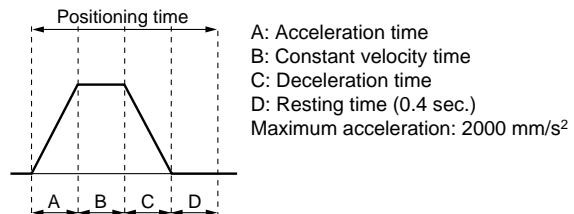


- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.5	1.5	10.5	50.5	100.5
	100	0.5	0.6	1.5	5.5	10.5
	500	0.5	0.6	0.9	1.7	2.7
	1000	0.5	0.6	0.9	1.4	1.9

* Values will vary slightly depending on the operating conditions.



Maximum Speeds for Each Transfer Load

Model	Transfer load (kg)				Note
	15	20	25	30	
LG1□H202□PC-500-F□	1000	700	500	500	Power supply: 100/110 (V)AC ±10% Compatible controller: LC1-1□2HC1-□□
LG1□H202□PC-600-F□	1000	700	500	500	
LG1□H202□PC-700-F□	930	600	500	500	
LG1□H202□PC-800-F□	740	600	500	500	Power supply: 200/220 (V)AC ±10% Compatible controller: LC1-1□2HC2-□□
LG1□H202□PC-900-F□	600	500	500	500	
LG1□H202□PC-1000-F□	500	500	500	500	

* Consult SMC if outside of the above conditions.

Standard Motor/ Horizontal Mount Without Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
∅15 mm/10 mm lead

Series **LG1□H20**

How to Order

LC1 controller compatible

LG1□H202 1 NA - 300 - F 2

• **Frame material**

Nil	Aluminum alloy
T	Stainless steel

• **Power supply voltage**

1	100/110 VAC (50/60 Hz)
2	200/220 VAC (50/60 Hz)

• **Cable length**

2	2 m
3	3 m
4	4 m
5	5 m

• **Stroke (mm)**

Refer to the standard stroke.

Specifications

Standard stroke (mm)		100	200	300	400	
Performance	Body mass	Aluminum (kg)	5.3	6.1	6.9	7.7
		Stainless steel (kg)	8.3	9.6	10.8	12.0
	Operating temperature range (°C)	5 to 40 (No condensation)				
	Work load (kg)	30				
	Maximum speed (mm/s)	500				
	Positioning repeatability (mm)	±0.05				
Main parts	Motor	AC servomotor (100 W)				
	Encoder	Incremental system				
	Lead screw	Rolled ball screw ∅15 mm, 10 mm lead				
	Guide	High rigidity direct acting guide				
	Motor/Screw connection	Without coupling				
Controller	Model	LC1-1F2HA□-□□ (Refer to page 829 for details.)				

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number. Applicable strokes: 150, 250, 350
Example) **LG1H2021NA-150-F2-X2**



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

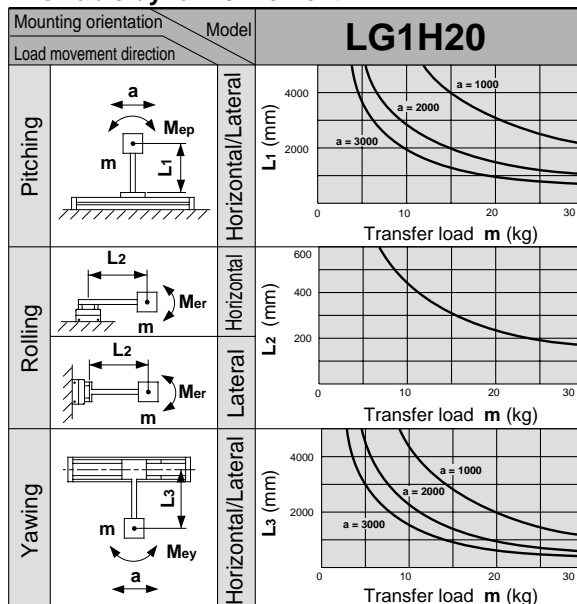
Allowable Moment (N·m)

Allowable static moment

Pitching	71
Rolling	79
Yawing	75

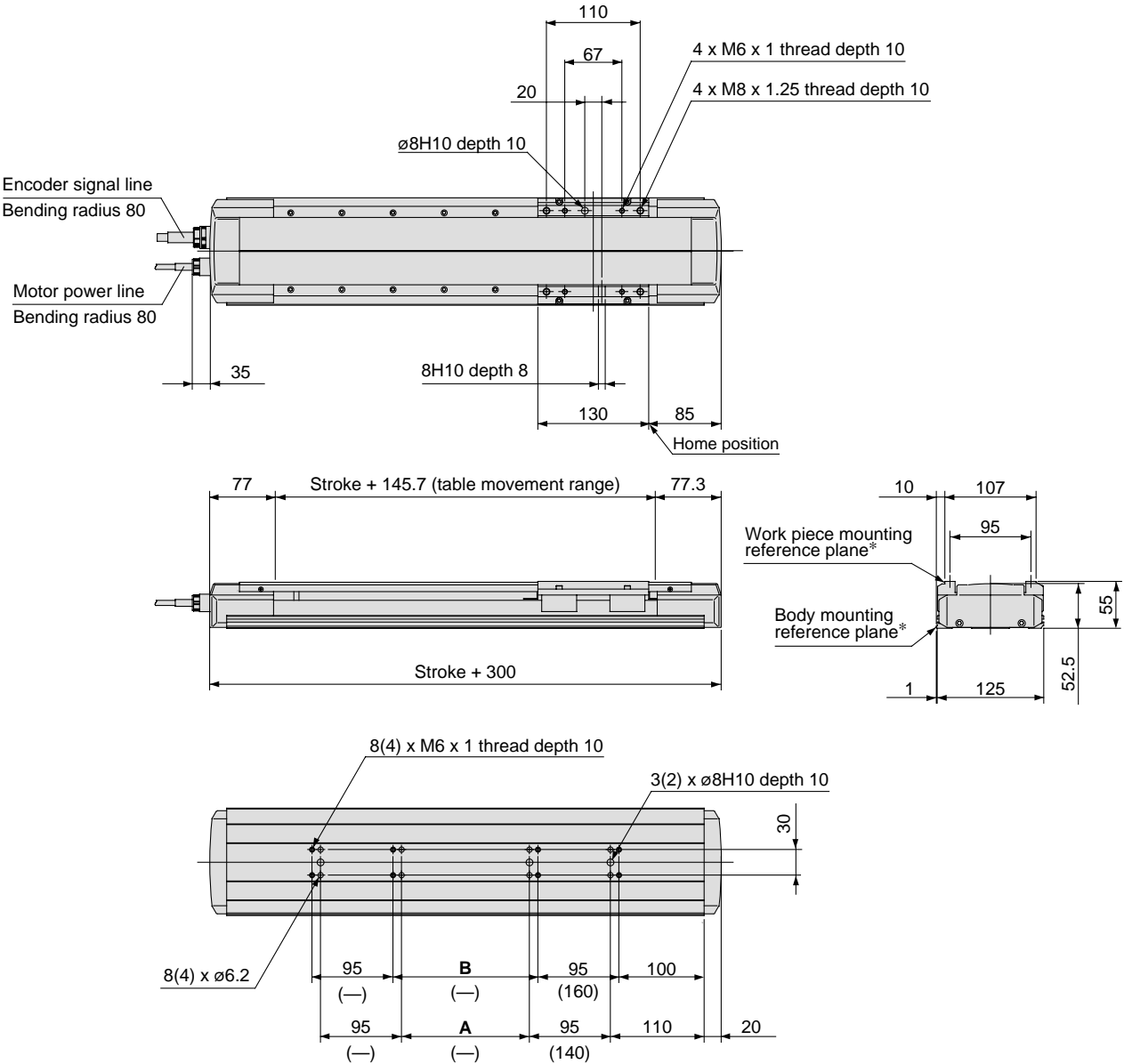
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H202□PA



Model	Stroke	A	B
LG1□H202□NA- 100-F□*	100	—	—
LG1□H202□NA- 200-F□	200	50	70
LG1□H202□NA- 300-F□	300	150	170
LG1□H202□NA- 400-F□	400	250	270

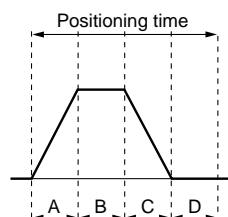
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	200	400
Speed (mm/s)	10	0.5	1.4	10.4	20.4	40.4
	100	0.5	0.6	1.5	2.5	4.5
	250	0.5	0.6	0.9	1.3	2.1
	500	0.5	0.6	0.8	1.0	1.4

* Values will vary slightly depending on the operating conditions.



- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Standard Motor/ Horizontal Mount Without Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
ø15 mm/20 mm lead

Series LG1□H20

How to Order

LC1 controller compatible

LG1□H202 1 NC - 500 - F 2

• Power supply voltage

1	100/110 VAC (50/60 Hz)
2	200/220 VAC (50/60 Hz)

• Frame material

Nil	Aluminum alloy
T	Stainless steel

• Cable length

2	2 m
3	3 m
4	4 m
5	5 m

• Stroke (mm)

Refer to the standard stroke.

Specifications

Standard stroke (mm)		500	600	700	800	900	1000	
Performance	Body mass	Aluminum (kg)	8.5	9.3	10.1	10.9	11.7	12.5
		Stainless steel (kg)	13.3	14.5	15.8	17.1	18.3	19.6
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed (mm/s) ^{Note)}	1000	1000	930	740	600	500	
Positioning repeatability (mm)		±0.05						
Main parts	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Rolled ball screw ø15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
	Motor/Screw connection	Without coupling						
Controller	Model	LC1-1F2HC□-□□ (Refer to page 829 for details.)						

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number.

Applicable strokes: 450, 550, 650, 750, 850, 950

Example) LG1H2021NC-550-F2-X2



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

Note) The speed is limited by the transfer load. Refer to the maximum speeds for each transfer load on the next page.

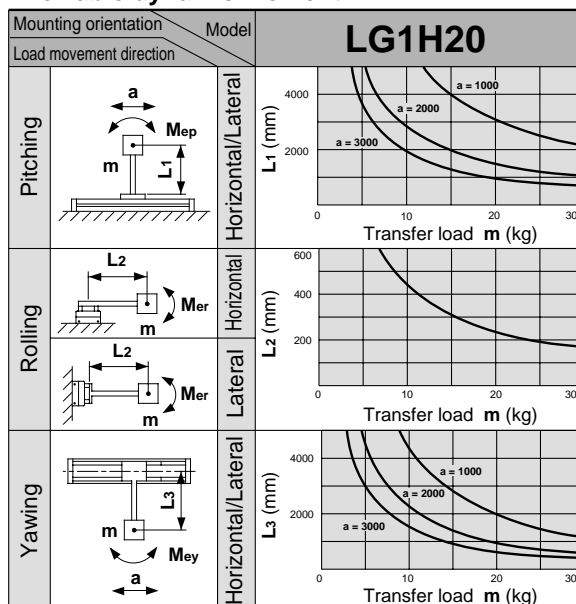
Allowable Moment (N·m)

Allowable static moment

Pitching	71
Rolling	79
Yawing	75

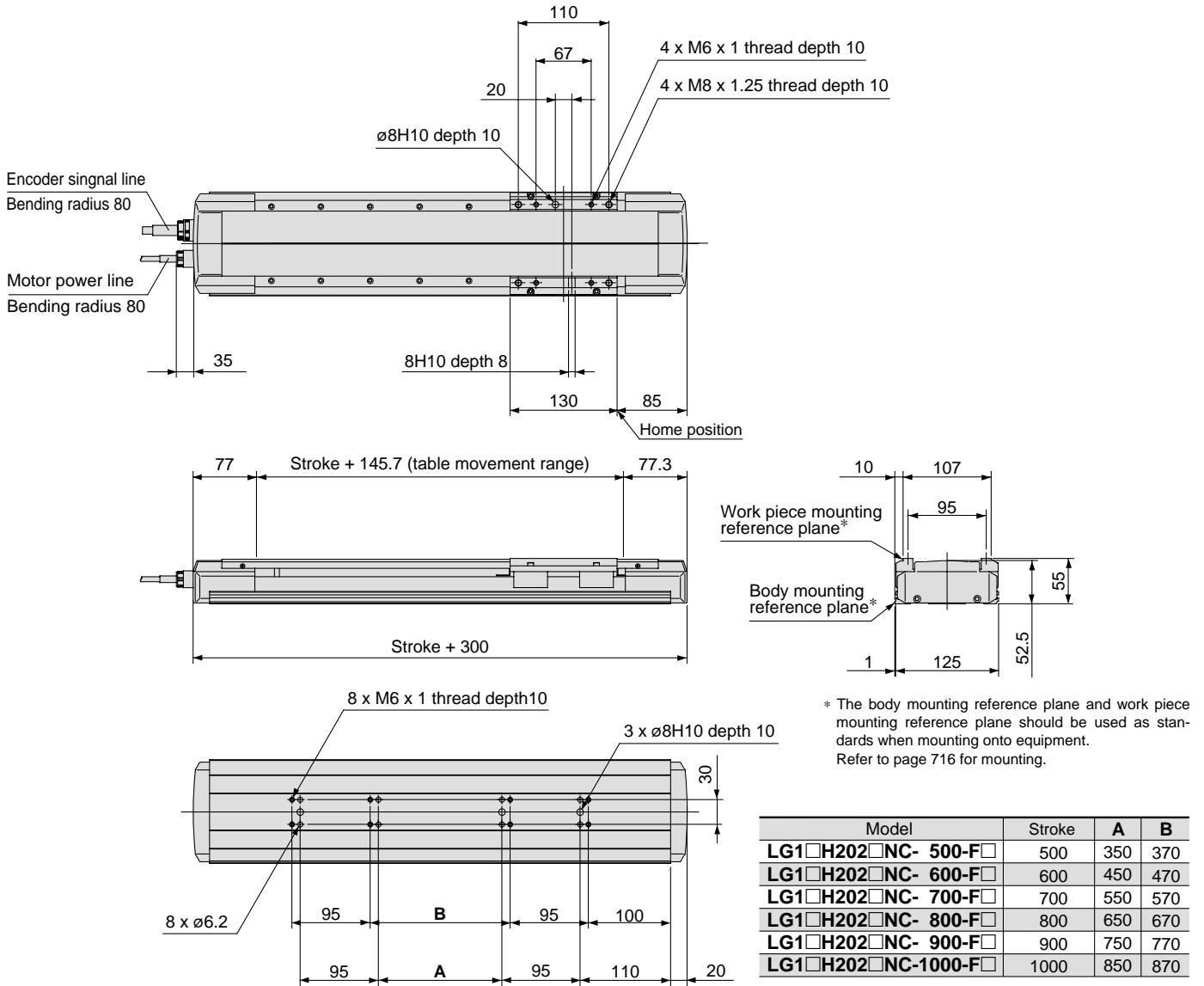
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

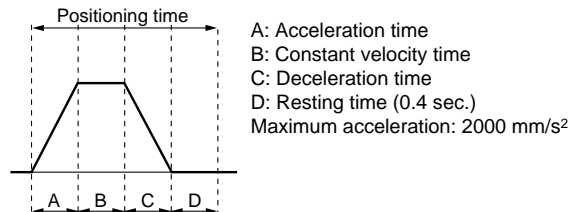
Dimensions/LG1□H202□NC



Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.5	1.5	10.5	50.5	100.5
	100	0.5	0.6	1.5	5.5	10.5
	500	0.5	0.6	0.9	1.7	2.7
	1000	0.5	0.6	0.9	1.4	1.9

* Values will vary slightly depending on the operating conditions.



Maximum Speeds for Each Transfer Load

Model	Transfer load (kg)				Note
	15	20	25	30	
LG1□H202□NC-500-F□	1000	700	500	500	Power supply: 100/110 (V)AC ±10% Compatible controller: LC1-1□2HC1-□□
LG1□H202□NC-600-F□	1000	700	500	500	
LG1□H202□NC-700-F□	930	600	500	500	
LG1□H202□NC-800-F□	740	600	500	500	
LG1□H202□NC-900-F□	600	500	500	500	Power supply: 200/220 (V)AC ±10% Compatible controller: LC1-1□2HC2-□□
LG1□H202□NC-1000-F□	500	500	500	500	

* Consult SMC if outside of the above conditions.

- LJ1
- LG1
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Standard Motor/ Horizontal Mount Without Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Slide Screw
∅20 mm / 20 mm lead

Series **LG1□H20**

How to Order

LC1 controller compatible

LG1 □ **H202** **1** **SC** - **300** - F **2**

• Power supply voltage	1	100/110 VAC (50/60 Hz)
	2	200/220 VAC (50/60 Hz)
• Frame material	Nil	Aluminum alloy
	T	Stainless steel
• Cable length	2	2 m
	3	3 m
	4	4 m
	5	5 m
• Stroke (mm)	Refer to the standard stroke.	

Specifications

Standard stroke (mm)		100	200	300	400	500	600	700	800	900	1000	1200		
Performance	Body mass	Aluminum (kg)		5.8	6.7	7.6	8.5	9.4	10.2	11.1	12.0	12.9	13.8	15.9
		Stainless steel (kg)		9.1	10.5	11.9	13.2	14.6	16.0	17.4	18.8	20.1	21.6	24.9
	Operating temperature range (°C)	5 to 40 (No condensation)												
	Work load (kg)	15												
	Maximum speed (mm/s)	500												
Main parts	Positioning repeatability (mm)	±0.1												
	Motor	AC servomotor (100 W)												
	Encoder	Incremental system												
	Lead screw	Slide screw ∅20 mm, 20 mm lead												
	Guide	High rigidity direct acting guide												
Controller	Motor/Screw connection	Without coupling												
	Model	LC1-1F2MC□-□□ (Refer to page 829 for details.)												

Intermediate strokes

For manufacture of strokes other than the standard strokes above, add "-X2" at the end of the part number.
Applicable strokes: 150, 250, 350, 450, 550, 650, 750, 850, 950, 1050

Example) **LG1H2021SC-150-F2-X2**

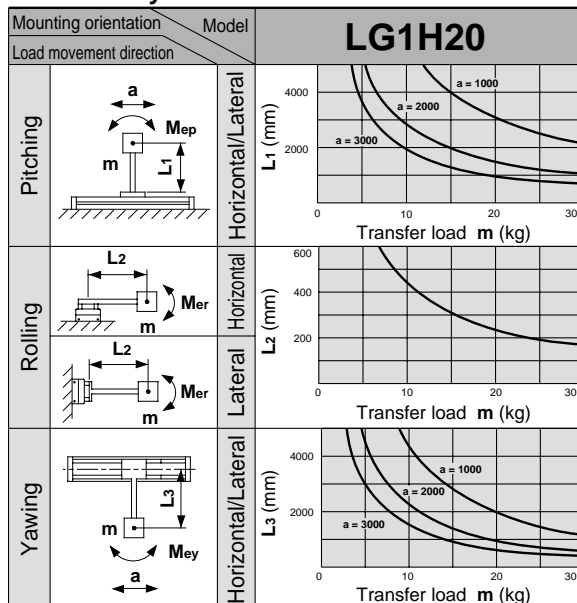
Allowable Moment (N-m)

Allowable static moment

Pitching	71
Rolling	79
Yawing	75

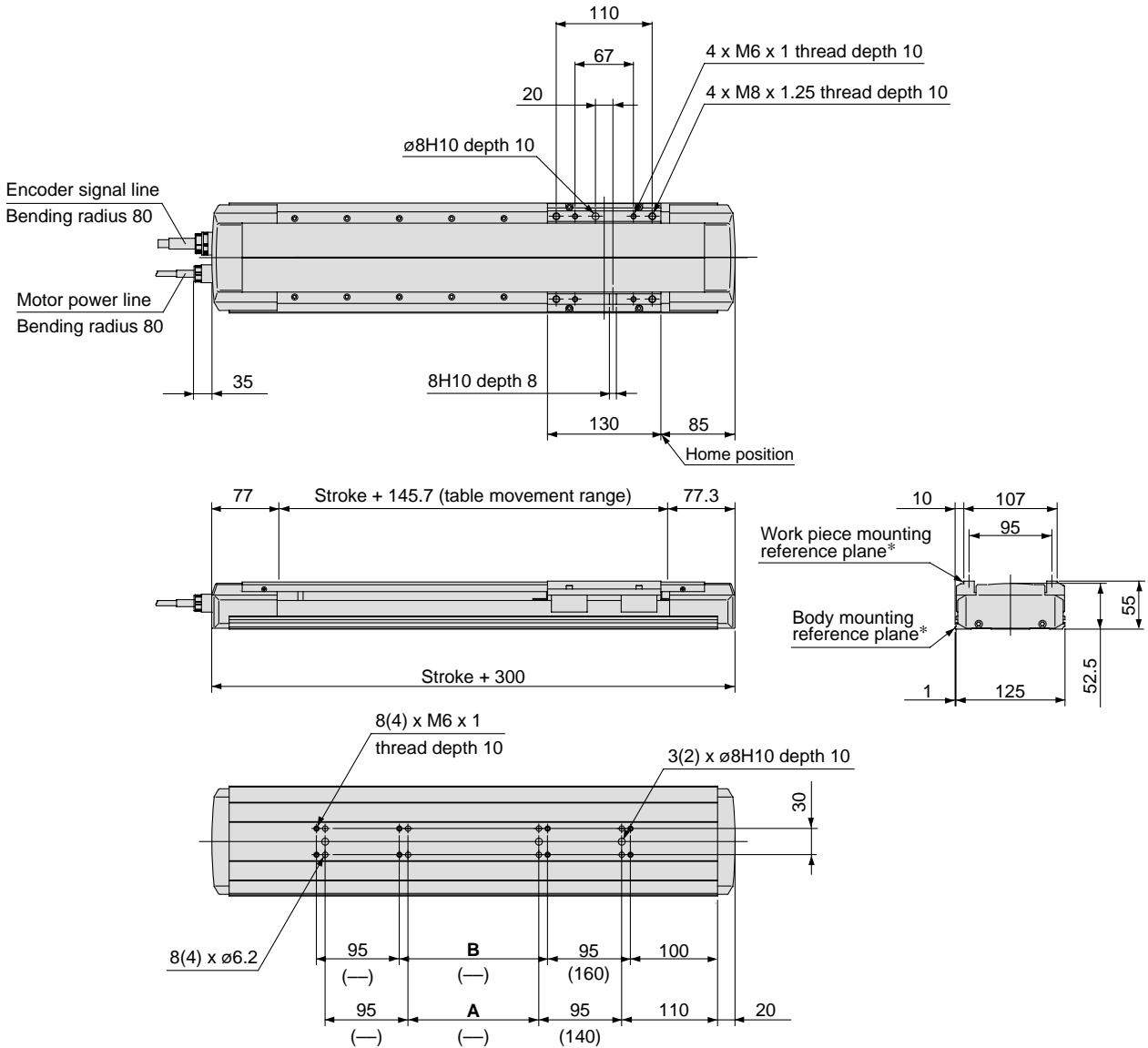
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H202□SC



Model	Stroke	A	B
LG1□H202□SC- 100-F□*	100	—	—
LG1□H202□SC- 200-F□	200	50	70
LG1□H202□SC- 300-F□	300	150	170
LG1□H202□SC- 400-F□	400	250	270
LG1□H202□SC- 500-F□	500	350	370
LG1□H202□SC- 600-F□	600	450	470
LG1□H202□SC- 700-F□	700	550	570
LG1□H202□SC- 800-F□	800	650	670
LG1□H202□SC- 900-F□	900	750	770
LG1□H202□SC-1000-F□	1000	850	870
LG1□H202□SC-1200-F□	1200	1050	1070

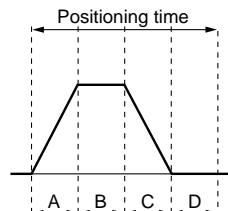
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	600	1200
Speed (mm/s)	10	0.5	1.5	10.5	60.5	120.5
	100	0.5	0.6	1.5	6.5	12.5
	250	0.5	0.6	1.0	3.0	5.4
	500	0.5	0.6	0.9	1.9	3.1

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)
Maximum acceleration: 2000 mm/s²

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

D-□

E-MY

Standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
∅15 mm/10 mm lead

Series **LG1□H21**

How to Order

LC1 controller compatible **LG1□H21 21 PA - 300 - F 2**

LC8 controller compatible **LG1□H218 21 PA - 300 - F 2 - □**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Power supply voltage

Symbol	Power supply voltage	Compatible controller
21	100/110 VAC (50/60 Hz)	LC1, LC8
22*	200/220 VAC (50/60 Hz)	LC1
	200/230 VAC (50/60 Hz)	LC8

* The power supply voltage range differs according to each controller series.

Stroke (mm)

Refer to the standard stroke.

Cable entry directions

F	Axial
R	Right
L	Left
T	Top
B	Bottom

CE marking

Nil	—
Q	CE marked products

Cable length

2	2 m
3	3 m
4	4 m
5	5 m

Specifications

		Standard stroke (mm)		100	200	300	400
Performance	Body mass	Aluminum (kg)		5.3	6.1	6.9	7.7
		Stainless steel (kg)		8.3	9.6	10.8	12.0
	Operating temperature range (°C)		5 to 40 (No condensation)				
	Work load (kg)		30				
	Maximum speed (mm/s)		500				
Main parts	Motor		AC servomotor (100 W)				
	Encoder		Incremental system				
	Lead screw		Ground ball screw ∅15 mm, 10 mm lead				
	Guide		High rigidity direct acting guide				
	Motor/Screw connection		With coupling				
Controller	Model	LC1	LC1-1D2HA□-□□ (Refer to page 829 for details.)				
		LC8	LC8-B2H□□-□□-□ (Refer to page 853 for details.)				

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number.

Applicable strokes: 150, 250, 350
Example) LG1H2121PA-150-F2-X2
Example) LG1H21821PA-150-F2-X2-Q



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

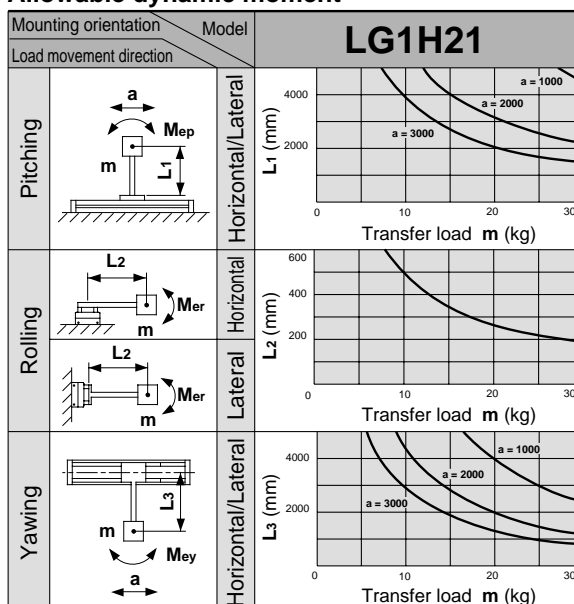
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

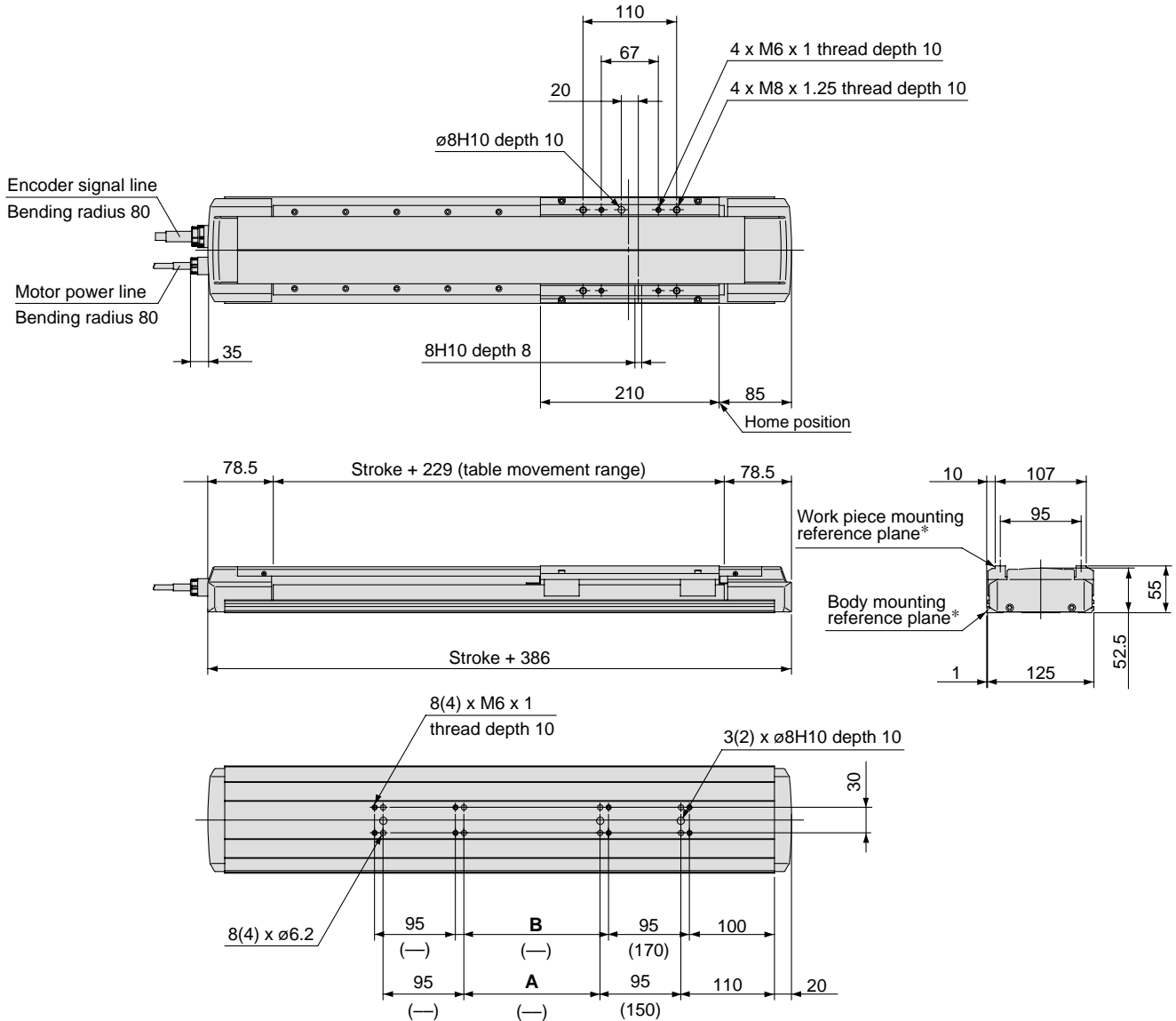
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H212□PA



Model	Stroke	A	B
LG1□H212□PA- 100-F□*	100	—	—
LG1□H212□PA- 200-F□	200	60	80
LG1□H212□PA- 300-F□	300	160	180
LG1□H212□PA- 400-F□	400	260	280

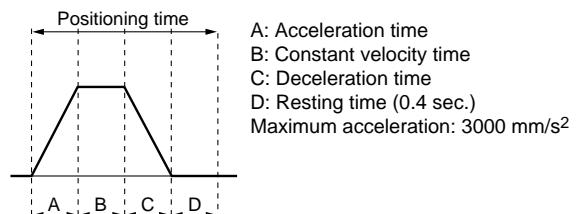
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	200	400
Speed (mm/s)	10	0.5	1.4	10.4	20.4	40.4
	100	0.5	0.6	1.5	2.5	4.5
	250	0.5	0.6	0.9	1.3	2.1
	500	0.5	0.6	0.8	1.0	1.4

* Values will vary slightly depending on the operating conditions.



- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
∅15 mm/20 mm lead

Series **LG1□H21**

How to Order

LC1 controller compatible **LG1** □ **H21** **21** **PC** - **500** - **F** **2**

LC8 controller compatible **LG1** □ **H218** **21** **PC** - **500** - **F** **2** - □

Frame material

Nil	Aluminum alloy
T	Stainless steel

Power supply voltage

Symbol	Power supply voltage	Compatible controller
21	100/110 VAC (50/60 Hz)	LC1, LC8
22*	200/220 VAC (50/60 Hz)	LC1
	200/230 VAC (50/60 Hz)	LC8

* The power supply voltage range differs according to each controller series.

Stroke (mm)

Refer to the standard stroke.

Cable entry directions

F	Axial
R	Right
L	Left
T	Top
B	Bottom

CE marking

Nil	—
Q	CE marked products

Cable length

2	2 m
3	3 m
4	4 m
5	5 m

Specifications

		Standard stroke (mm)						
		500	600	700	800	900	1000	
Performance	Body mass	Aluminum (kg)	8.5	9.3	10.1	10.9	11.7	12.5
		Stainless steel (kg)	13.3	14.5	15.8	17.1	18.3	19.6
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed ^{Note)} (mm/s)	1000	1000	930	740	600	500	
Main parts	Positioning repeatability (mm)	±0.02						
	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Ground ball screw ∅15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
Controller	Motor/Screw connection	With coupling						
	Model	LC1	LC1-1D2HC□-□□ (Refer to page 829 for details.)					
		LC8	LC8-B2H□□-□□-□ (Refer to page 853 for details.)					

Note) The speed is limited by the transfer load. Refer to the maximum speeds for each transfer load on the next page.

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number.

Applicable strokes: 450, 550, 650, 750, 850, 950

Example) **LG1H2121PC-550-F2-X2**

Example) **LG1H21821PC-150-F2-X2-Q**



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

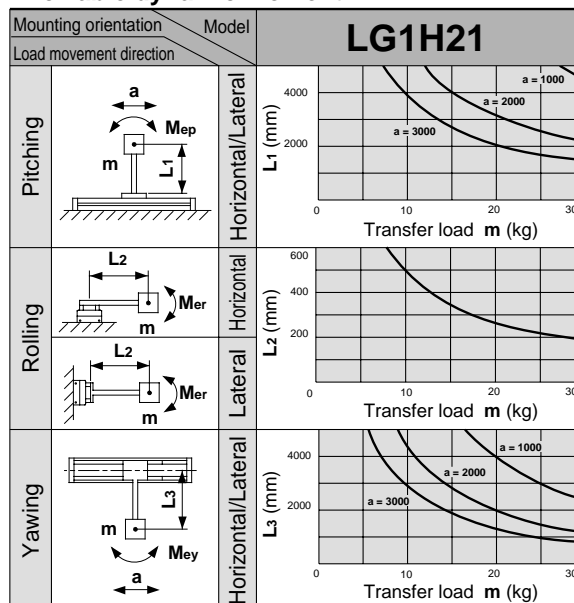
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

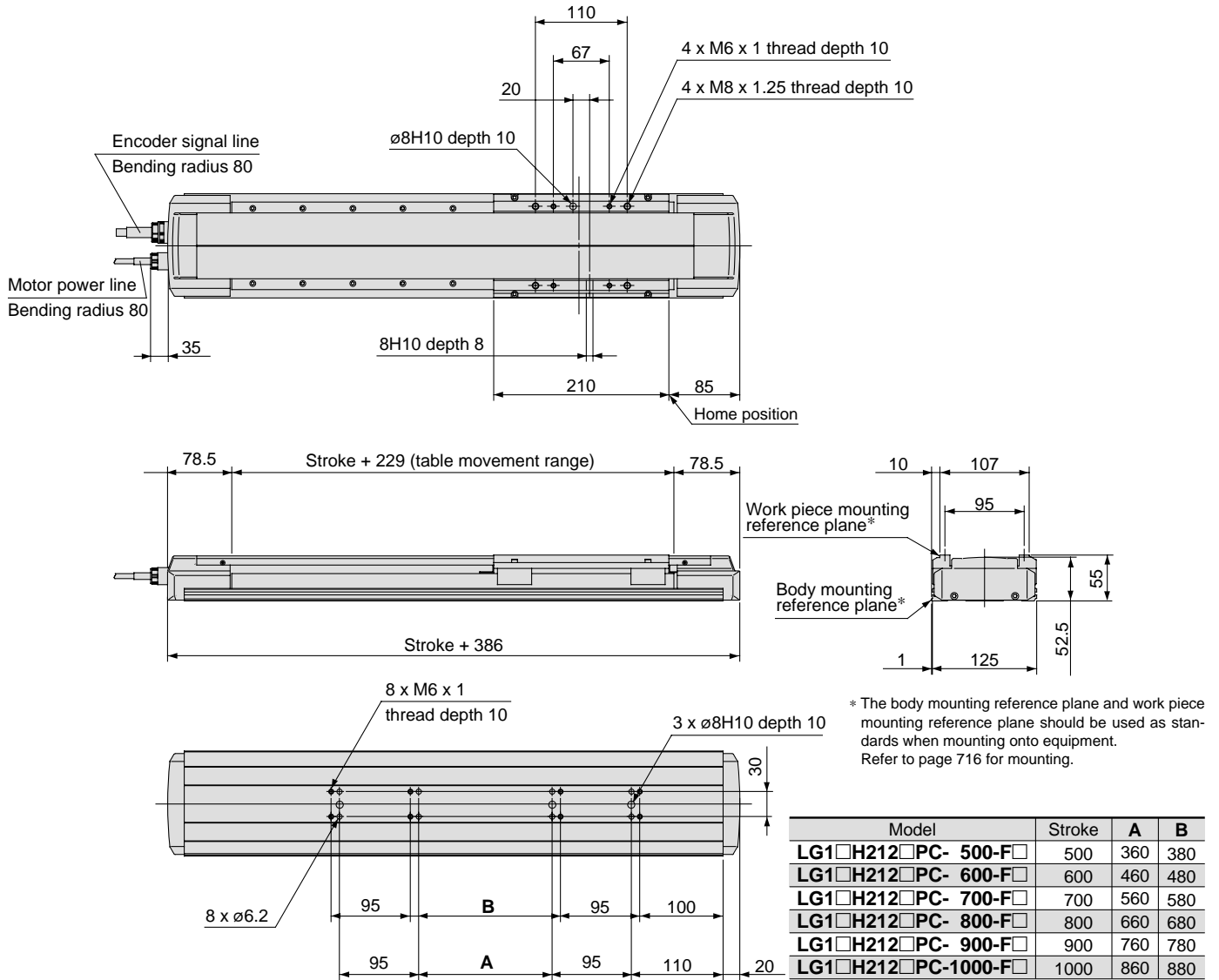
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H212□PC

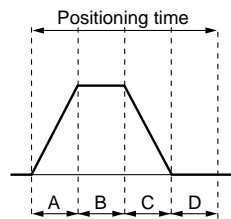


- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.5	1.5	10.5	50.5	100.5
	100	0.5	0.6	1.5	5.5	10.5
	500	0.5	0.6	0.9	1.7	2.7
	1000	0.5	0.6	0.9	1.4	1.9

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)
Maximum acceleration: 2000 mm/s²

Maximum Speeds for Each Transfer Load

Model	Transfer load (kg)				Note
	15	20	25	30	
LG1□H212□PC-500-F□	1000	700	500	500	Power supply: 100/110 (V)AC ±10% Compatible controller: LC1-1□2HC1-□□
LG1□H212□PC-600-F□	1000	700	500	500	
LG1□H212□PC-700-F□	930	600	500	500	
LG1□H212□PC-800-F□	740	600	500	500	Power supply: 200/220 (V)AC ±10% Compatible controller: LC1-1□2HC2-□□
LG1□H212□PC-900-F□	600	500	500	500	
LG1□H212□PC-1000-F□	500	500	500	500	

* Consult SMC if outside of the above conditions.

Standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
∅15 mm/10 mm lead

Series **LG1□H21**

How to Order

LC1 controller compatible **LG1□H21 21 NA - 300 - F 2**

LC8 controller compatible **LG1□H218 21 NA - 300 - F 2 - □**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Power supply voltage

Symbol	Power supply voltage	Compatible controller
21	100/110 VAC (50/60 Hz)	LC1, LC8
22*	200/220 VAC (50/60 Hz)	LC1
	200/230 VAC (50/60 Hz)	LC8

* The power supply voltage range differs according to each controller series.

Stroke (mm)

Refer to the standard stroke.

Cable entry directions

F	Axial
R	Right
L	Left
T	Top
B	Bottom

CE marking

Nil	—
Q	CE marked products

Cable length

2	2 m
3	3 m
4	4 m
5	5 m

Specifications

		Standard stroke (mm)		100	200	300	400
Performance	Body mass	Aluminum (kg)	5.3	6.1	6.9	7.7	
		Stainless steel (kg)	8.3	9.6	10.8	12.0	
	Operating temperature range (°C)	5 to 40 (No condensation)					
	Work load (kg)	30					
	Maximum speed (mm/s)	500					
Main parts	Positioning repeatability (mm)	±0.05					
	Motor	AC servomotor (100 W)					
	Encoder	Incremental system					
	Lead screw	Rolled ball screw ∅15 mm, 10 mm lead					
	Guide	High rigidity direct acting guide					
Controller	Motor/Screw connection	With coupling					
	Model	LC1	LC1-1D2HA□-□□ (Refer to page 829 for details.)				
		LC8	LC8-B2H□□-□□-□ (Refer to page 853 for details.)				

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number.

Applicable strokes: 150, 250, 350

Example) LG1H2121NA-150-F2-X2
Example) LG1H21821NA-150-F2-X2-Q



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

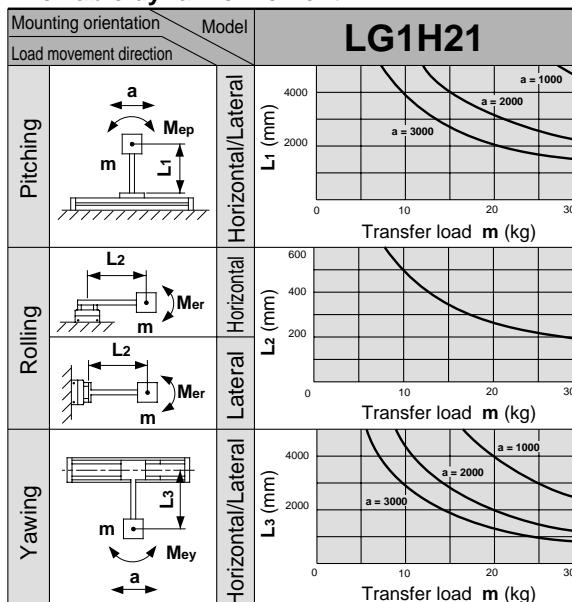
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

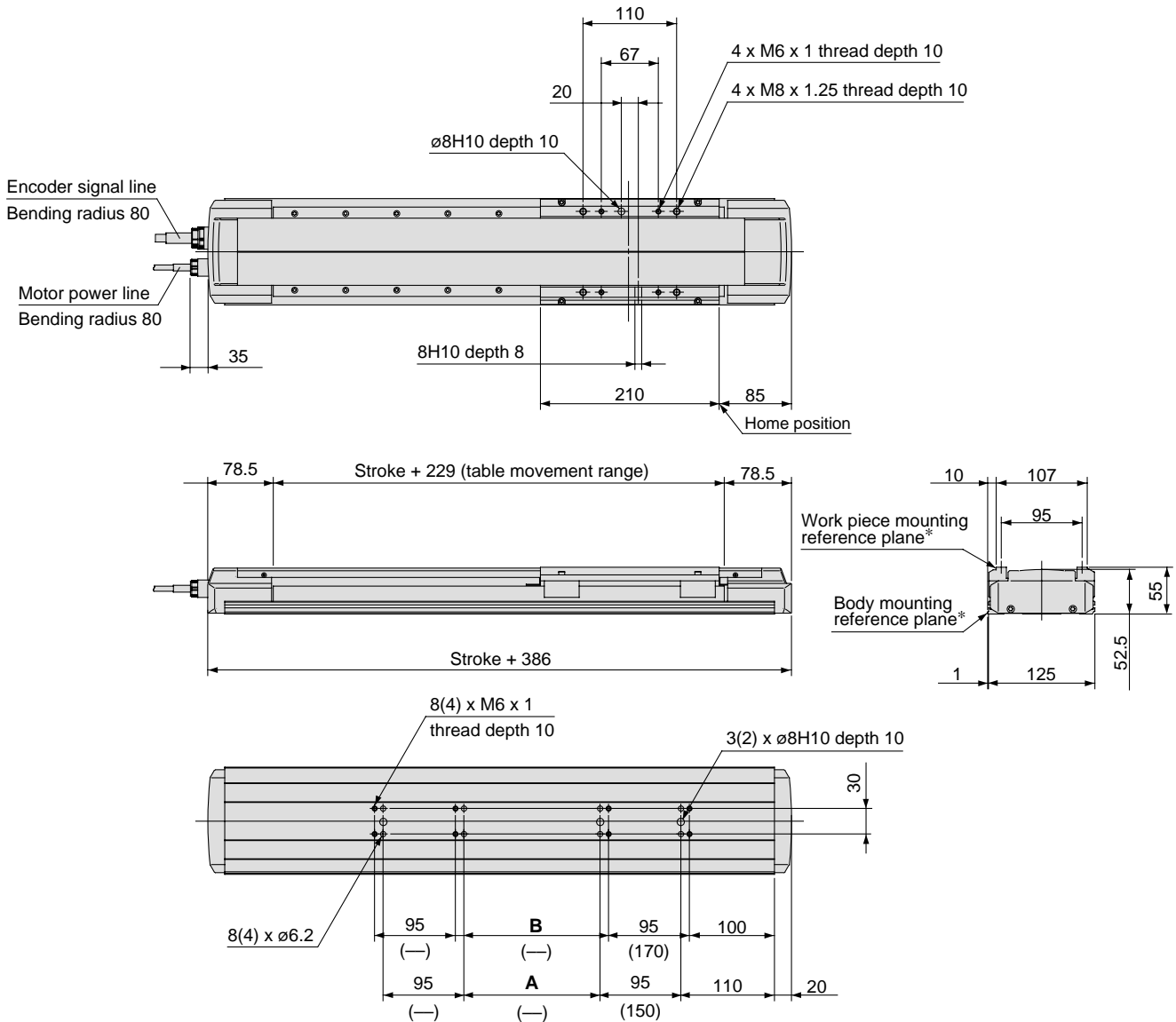
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H212□NA



Model	Stroke	A	B
LG1□H212□NA- 100-F□*	100	—	—
LG1□H212□NA- 200-F□	200	60	80
LG1□H212□NA- 300-F□	300	160	180
LG1□H212□NA- 400-F□	400	260	280

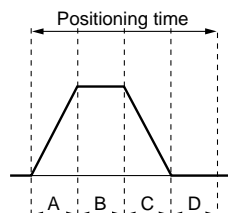
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	200	400
Speed (mm/s)	10	0.5	1.4	10.4	20.4	40.4
	100	0.5	0.6	1.5	2.5	4.5
	250	0.5	0.6	0.9	1.3	2.1
	500	0.5	0.6	0.8	1.0	1.4

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)
Maximum acceleration: 3000 mm/s²

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

D-□

E-MY

Standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
∅15 mm/20 mm lead

Series LG1□H21

How to Order

LC1 controller compatible **LG1** □ **H21** **21** **NC** - **500** - **F** **2**

LC8 controller compatible **LG1** □ **H218** **21** **NC** - **500** - **F** **2** - □

Frame material

Nil	Aluminum alloy
T	Stainless steel

Power supply voltage

Symbol	Power supply voltage	Compatible controller
21	100/110 VAC (50/60 Hz)	LC1, LC8
22*	200/220 VAC (50/60 Hz)	LC1
	200/230 VAC (50/60 Hz)	LC8

* The power supply voltage range differs according to each controller series.

Stroke (mm)

Refer to the standard stroke.

Cable entry directions

F	Axial
R	Right
L	Left
T	Top
B	Bottom

CE marking

Nil	—
Q	CE marked products

Cable length

2	2 m
3	3 m
4	4 m
5	5 m

Specifications

		Standard stroke (mm)		500	600	700	800	900	1000
Performance	Body mass	Aluminum (kg)	8.5	9.3	10.1	10.9	11.7	12.5	
		Stainless steel (kg)	13.3	14.5	15.8	17.1	18.3	19.6	
	Operating temperature range (°C)	5 to 40 (No condensation)							
	Work load (kg)	30							
	Maximum speed (mm/s)	1000	1000	930	740	600	500		
Main parts	Positioning repeatability (mm)	±0.05							
	Motor	AC servomotor (100 W)							
	Encoder	Incremental system							
	Lead screw	Rolled ball screw ∅15 mm, 20 mm lead							
	Guide	High rigidity direct acting guide							
Controller	Motor/Screw connection	With coupling							
	Model	LC1	LC1-1D2HC□-□□ (Refer to page 829 for details.)						
		LC8	LC8-B2H□□-□□-□ (Refer to page 853 for details.)						

Intermediate strokes

For manufacture of strokes other than the standard strokes on the left, add "-X2" at the end of the part number.

Applicable strokes: 150, 250, 350

Example) LG1H2121NC-550-F2-X2

Example) LG1H21821NC-150-F2-X2-Q



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

Note) The speed is limited by the transfer load. Refer to the maximum speeds for each transfer load on the next page.

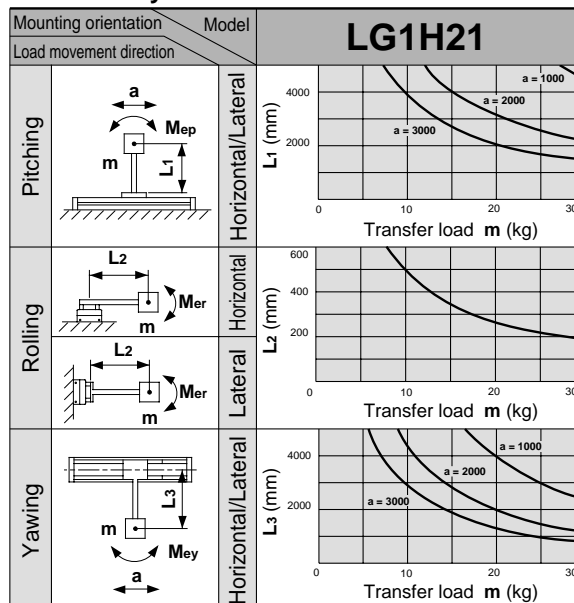
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

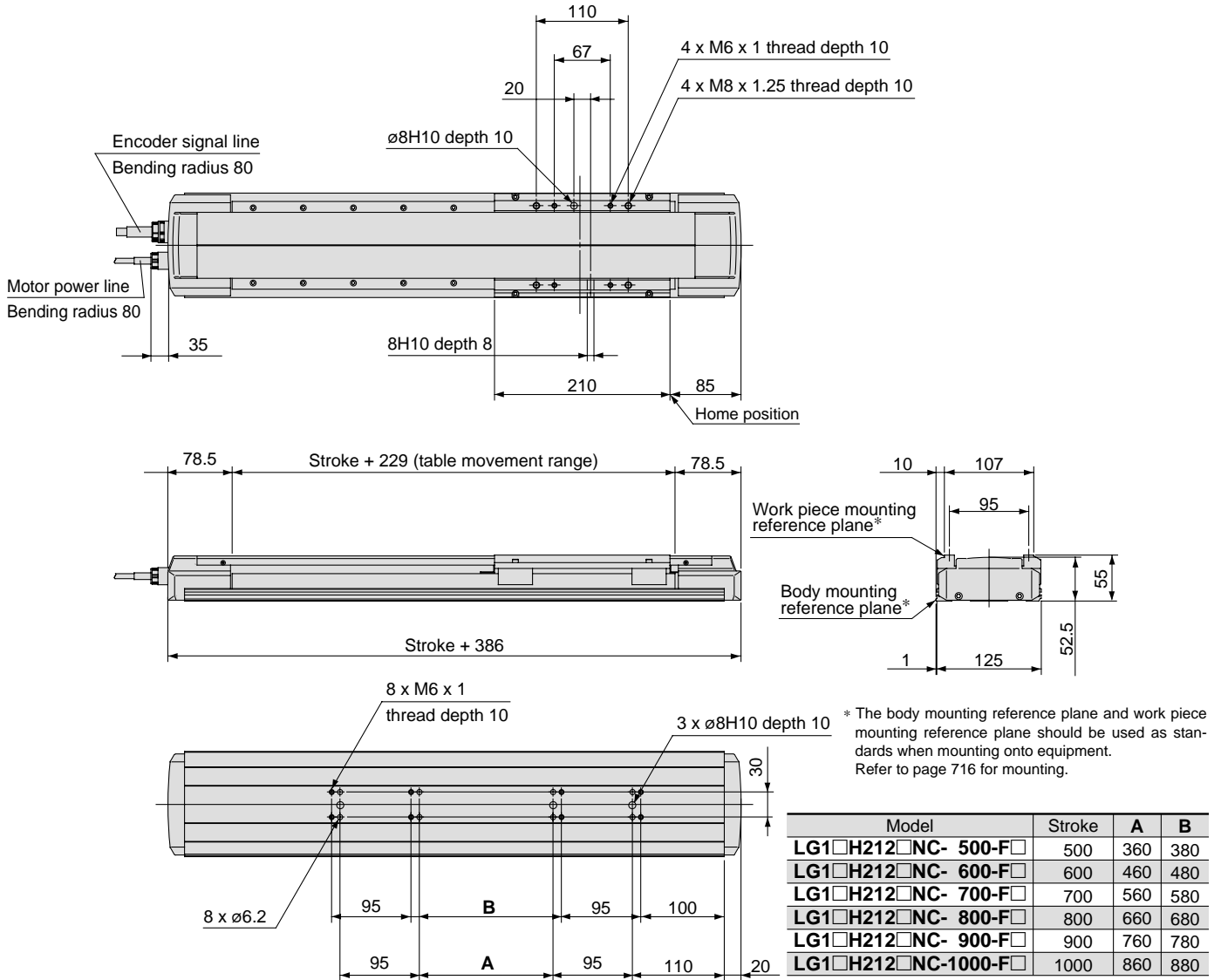
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H212□NC

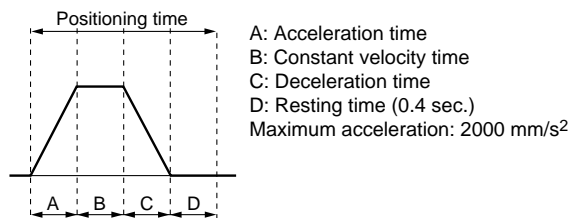


- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.5	1.5	10.5	50.5	100.5
	100	0.5	0.6	1.5	5.5	10.5
	500	0.5	0.6	0.9	1.7	2.7
	1000	0.5	0.6	0.9	1.4	1.9

* Values will vary slightly depending on the operating conditions.



Maximum Speeds for Each Transfer Load

Model	Transfer load (kg)				Note
	15	20	25	30	
LG1□H212□NC-500-F□	1000	700	500	500	Power supply: 100/110 (V)AC ±10% Compatible controller: LC1-1□2HC1-□□
LG1□H212□NC-600-F□	1000	700	500	500	
LG1□H212□NC-700-F□	930	600	500	500	
LG1□H212□NC-800-F□	740	600	500	500	Power supply: 200/220 (V)AC ±10% Compatible controller: LC1-1□2HC2-□□
LG1□H212□NC-900-F□	600	500	500	500	
LG1□H212□NC-1000-F□	500	500	500	500	

* Consult SMC if outside of the above conditions.

Standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Slide Screw
∅20 mm / 20 mm lead

Series **LG1□H21**

How to Order

LC1 controller compatible **LG1□H21 21 SC - 300 - F 2**

LC8 controller compatible **LG1□H218 21 SC - 300 - F 2 - □**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Power supply voltage

Symbol	Power supply voltage	Compatible controller
21	100/110 VAC (50/60 Hz)	LC1, LC8
22*	200/220 VAC (50/60 Hz)	LC1
	200/230 VAC (50/60 Hz)	LC8

* The power supply voltage range differs according to each controller series.

Stroke (mm)

Refer to the standard stroke.

Cable entry directions

F	Axial
R	Right
L	Left
T	Top
B	Bottom

CE marking

Nil	—
Q	CE marked products

Cable length

2	2 m
3	3 m
4	4 m
5	5 m

Specifications

		Standard stroke (mm)											
		100	200	300	400	500	600	700	800	900	1000	1200	
Performance	Body mass	Aluminum (kg)	5.8	6.7	7.6	8.5	9.4	10.2	11.1	12.0	12.9	13.8	15.9
		Stainless steel (kg)	9.1	10.5	11.9	13.2	14.6	16.0	17.4	18.8	20.1	21.6	24.9
	Operating temperature range (°C)	5 to 40 (No condensation)											
	Work load (kg)	15											
	Maximum speed (mm/s)	500											
Main parts	Positioning repeatability (mm)	±0.1											
	Motor	AC servomotor (100 W)											
	Encoder	Incremental system											
	Lead screw	Slide screw ∅20 mm, 20 mm lead											
	Guide	High rigidity direct acting guide											
Controller	Motor/Screw connection	With coupling											
	Model	LC1	LC1-1D2MC□-□□ (Refer to page 829 for details.)										
		LC8	LC8-B2H□□-□□-□ (Refer to page 853 for details.)										

Intermediate strokes

For manufacture of strokes other than the standard strokes above, add "-X2" at the end of the part number.

Applicable strokes: 150, 250, 350, 450, 550, 650, 750, 850, 950, 1050
Example) **LG1H2121SC-150-F2-X2**
Example) **LG1H21821SC-150-F2-X2-Q**

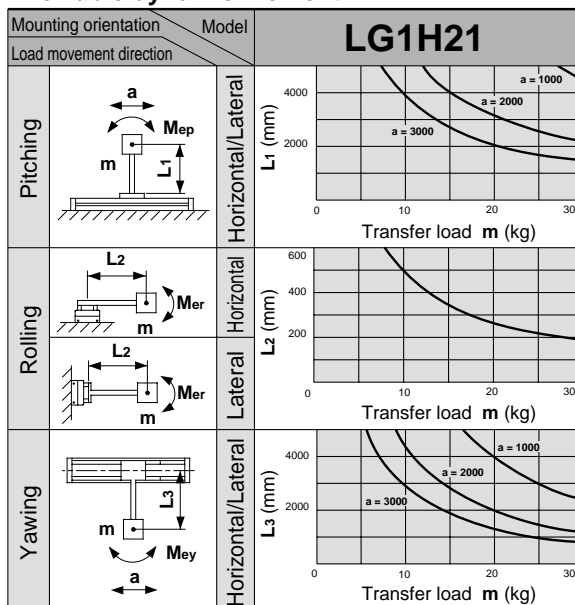
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

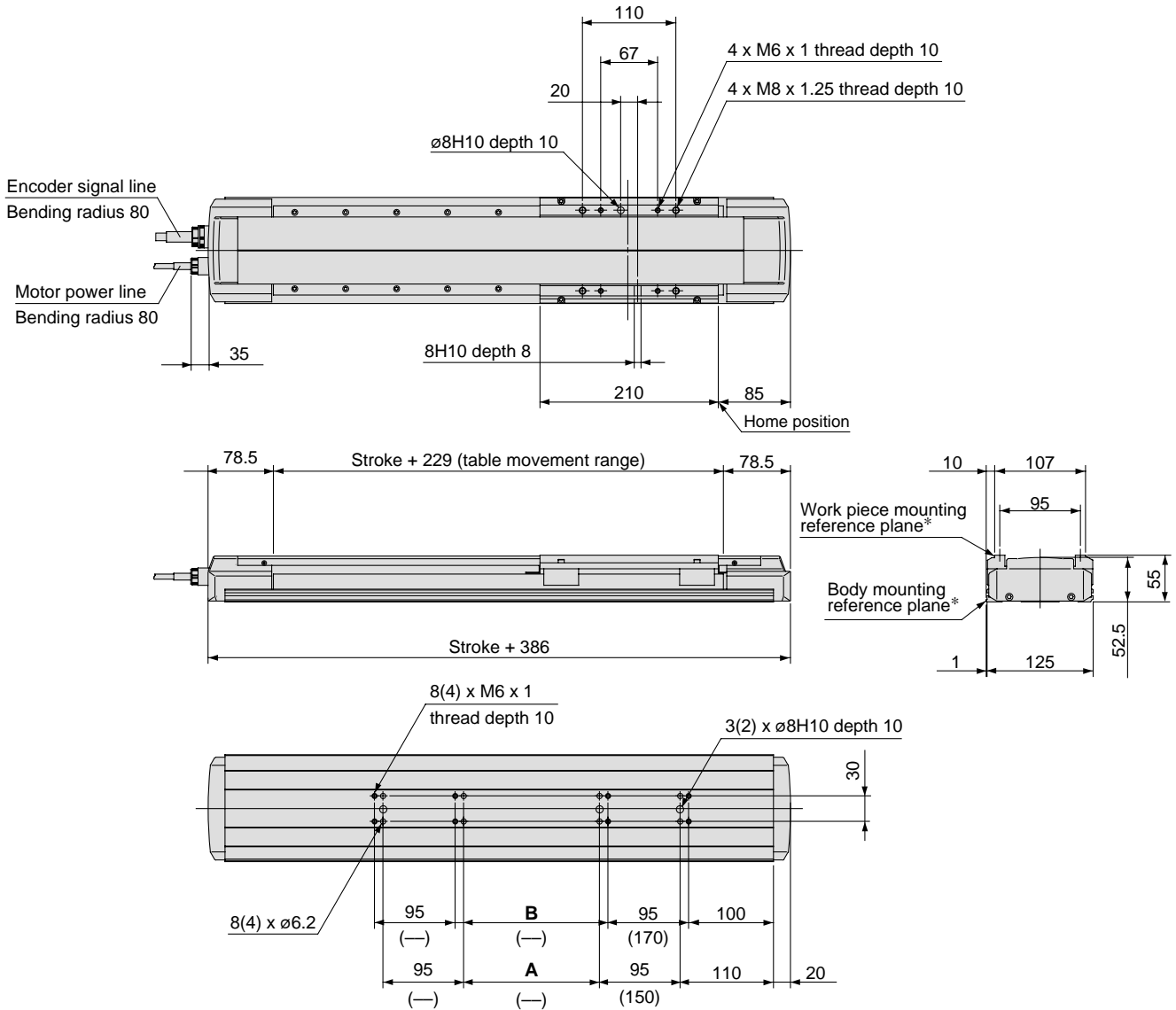
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H212□SC



Model	Stroke	A	B
LG1□H212□SC- 100-F□*	100	—	—
LG1□H212□SC- 200-F□	200	60	80
LG1□H212□SC- 300-F□	300	160	180
LG1□H212□SC- 400-F□	400	260	280
LG1□H212□SC- 500-F□	500	360	380
LG1□H212□SC- 600-F□	600	460	480
LG1□H212□SC- 700-F□	700	560	580
LG1□H212□SC- 800-F□	800	660	680
LG1□H212□SC- 900-F□	900	760	780
LG1□H212□SC-1000-F□	1000	860	880
LG1□H212□SC-1200-F□	1200	1060	1080

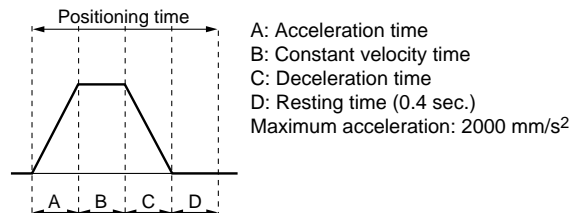
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	600	1200
Speed (mm/s)	10	0.5	1.5	10.5	60.5	120.5
	100	0.5	0.6	1.5	6.5	12.5
	250	0.5	0.6	1.0	3.0	5.4
	500	0.5	0.6	0.9	1.9	3.1

* Values will vary slightly depending on the operating conditions.



- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
∅15 mm/10 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **PA** - **300** - F **W** - X10

Frame material

Nil	Aluminum alloy
T	Stainless steel

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation	HC-PQ13	100 W	MR-C10A1	100/115 VAC
R22				MR-C10A	200/230 VAC
R20				—	—

* Motor/driver is included for R21 and R22.
Refer to page 717 for motor mounting dimensions.
Cable for joining motor and driver is optional.
Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

Stroke (mm)
Refer to the standard stroke.

Switch

Nil	None
W	N.C. (B contact) NPN: 2 pcs.

Specifications

		Standard stroke (mm)		100	200	300	400
Performance	Body mass	Aluminum (without motor) (kg)	5.2	6.0	6.8	7.6	
		Stainless steel (without motor) (kg)	8.4	9.7	10.9	12.2	
	Operating temperature range (°C)	5 to 40 (No condensation)					
	Work load (kg)	30					
	Maximum speed (mm/s)	500					
	Positioning repeatability (mm)	±0.02					
Main parts	Motor	AC servomotor (100 W)					
	Encoder	Incremental system					
	Lead screw	Ground ball screw ∅15 mm, 10 mm lead					
	Guide	High rigidity direct acting guide					
	Motor/Screw connection	With coupling					
Switch	Model	Photo micro sensor EE-SX674 (Refer to page 1084 for details.)					

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

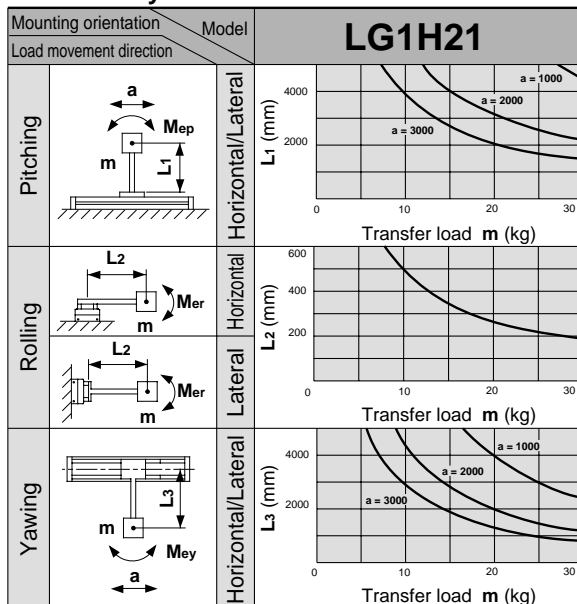
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
∅15 mm/10 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **PA** - **300** - F **H** - X10 - **Q**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Switch

Nil	None
H	N.C. (B contact) PNP: 2 pcs.
W	N.C. (B contact) NPN: 2 pcs.

CE marking

Stroke (mm)

For details, refer to page 696.

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation*2	HC-PQ13	100 W	MR-C10A1-UE	100/115 VAC
R22				MR-C10A-UE	200/230 VAC
R29				—	—
R20*1		—	—	—	—
RK21		HC-KFS13	100 W	MR-J2S-10A1	100/115 VAC
RK22				MR-J2S-10A	200/230 VAC
RK29				—	—
RK20*1		—	—	—	—
RP21		HF-KP13	100 W	MR-J3-10A1	100/115 VAC
RP22				MR-J3-10A	200/230 VAC
RP29				—	—
RP20*1				—	—

*1 Without motor/driver. Refer to page 717 for motor mounting dimensions.

*2 Can be supplied including motor/driver for non-standard motors by Mitsubishi Electric Corporation. Cable for joining motor and driver is optional. Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

*3 For with RP (motor symbol) motors, the motor will not be mounted, but packed in the same container as the main body.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6 □

LZ □

LC3F2

X □

D- □

E-MY

Series LG1□H21

Specifications

Standard stroke (mm)		100	200	300	400	
Performance	Body mass	Aluminum (without motor) (kg)	5.2	6.0	6.8	7.6
		Stainless steel (without motor) (kg)	8.4	9.7	10.9	12.2
	Operating temperature range (°C)	5 to 40 (No condensation)				
	Work load (kg)	30				
	Maximum speed (mm/s)	500				
	Positioning repeatability (mm)	±0.02				
Main parts	Motor	AC servomotor (100 W)				
	Encoder	Incremental system				
	Lead screw	Ground ball screw ø15 mm, 10 mm lead				
	Guide	High rigidity direct acting guide				
	Motor/Screw connection	With coupling				
Switch	Model	Photo micro sensor EE-SX674P, EE-SX674 (Refer to page 1084 for details.)				

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.

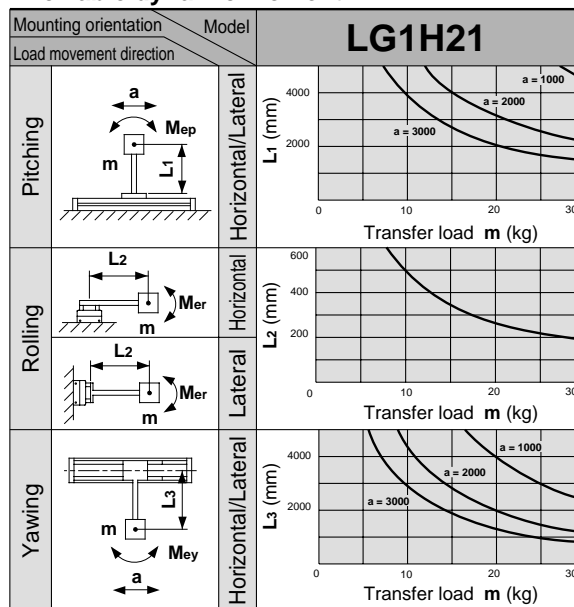
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

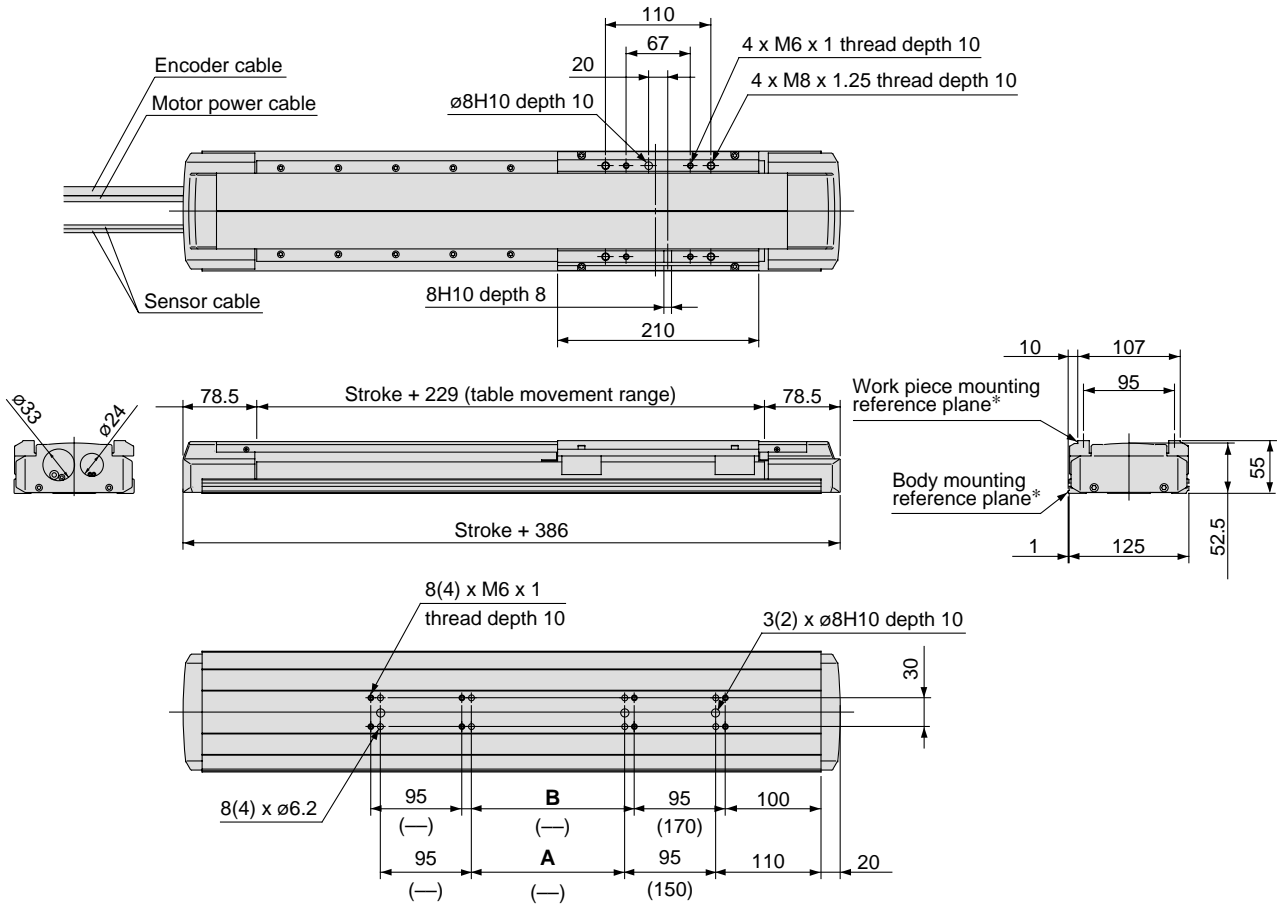
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□PA(X10)



Model	Stroke	A	B
LG1□H21□2□PA- 100-F□-X10*	100	—	—
LG1□H21□2□PA- 200-F□-X10	200	60	80
LG1□H21□2□PA- 300-F□-X10	300	160	180
LG1□H21□2□PA- 400-F□-X10	400	260	280

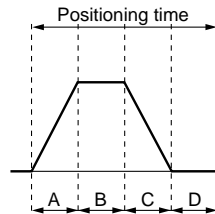
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	200	400
Speed (mm/s)	10	0.5	1.4	10.4	20.4	40.4
	100	0.5	0.6	1.5	2.5	4.5
	250	0.5	0.6	0.9	1.3	2.1
	500	0.5	0.6	0.8	1.0	1.4

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)*
Maximum acceleration: 3000 mm/s²

* The value is a guide when SMC's series LC1 controller is used and may vary depending on the driver capacity.

- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Ground Ball Screw
ø15 mm / 20 mm lead

Series **LG1□H21**

How to Order

LG1 □ **H21** **R21** **PC** - **500** - F **W** - X10

Frame material

Nil	Aluminum alloy
T	Stainless steel

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation	HC-PQ13	100 W	MR-C10A1	100/115 VAC
R22				MR-C10A	200/230 VAC
R20				—	—

* Motor/driver is included for R21 and R22.
Refer to page 717 for motor mounting dimensions.
Cable for joining motor and driver is optional.
Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

Stroke (mm)
Refer to the standard stroke.

Switch

Nil	None
W	N.C. (B contact) NPN 2: pcs.

Specifications

		Standard stroke (mm)	500	600	700	800	900	1000
Performance	Body mass	Aluminum (without motor) (kg)	8.4	9.2	10.0	10.8	11.6	12.4
		Stainless steel (without motor) (kg)	13.4	14.7	15.9	17.2	18.4	19.7
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed ^{Note)} (mm/s)	1000	1000	930	740	600	500	
Positioning repeatability (mm)		±0.02						
Main parts	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Ground ball screw ø15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
	Motor/Screw connection	With coupling						
Switch	Model	Photo micro sensor EE-SX674 (Refer to page 1084 for details.)						

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

Note) When the work load exceeds 15kg, the speed may be limited. Contact SMC in this case.

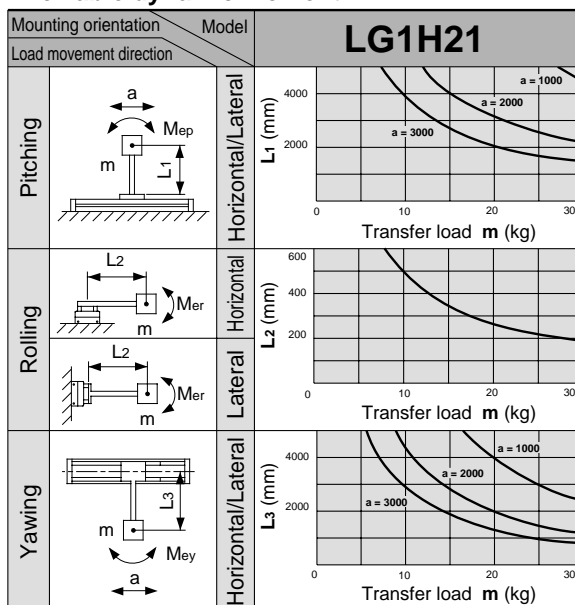
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100_w

High Rigidity
Direct Acting
Guide

Ground Ball Screw
ø15 mm / 20 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **PC** - **500** - F **H** - X10 - **Q**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Switch

Nil	None
H	N.C. (B contact) PNP: 2 pcs.
W	N.C. (B contact) NPN: 2 pcs.

CE marking

Stroke (mm)

For details, refer to page 700.

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation*2	HC-PQ13	100 W	MR-C10A1-UE	100/115 VAC
R22				MR-C10A-UE	200/230 VAC
R29				—	—
R20*1		—	—	—	—
RK21		HC-KFS13	100 W	MR-J2S-10A1	100/115 VAC
RK22				MR-J2S-10A	200/230 VAC
RK29				—	—
RK20*1		—	—	—	—
RP21		HF-KP13	100 W	MR-J3-10A1	100/115 VAC
RP22				MR-J3-10A	200/230 VAC
RP29				—	—
RP20*1				—	—

*1 Without motor/driver. Refer to page 717 for motor mounting dimensions.

*2 Can be supplied including motor/driver for non-standard motors by Mitsubishi Electric Corporation. Cable for joining motor and driver is optional. Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

*3 For with RP (motor symbol) motors, the motor will not be mounted, but packed in the same container as the main body.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6 □

LZ □

LC3F2

X □

D- □

E-MY

Series LG1□H21

Specifications

Standard stroke (mm)		500	600	700	800	900	1000	
Performance	Body mass	Aluminum (without motor) (kg)	8.4	9.2	10.0	10.8	11.6	12.4
		Stainless steel (without motor) (kg)	13.4	14.7	15.9	17.2	18.4	19.7
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed ^{Note)} (mm/s)	1000	1000	930	740	600	500	
Positioning repeatability (mm)		±0.02						
Main parts	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Ground ball screw ø15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
	Motor/Screw connection	With coupling						
Switch	Model	Photo micro sensor EE-SX674P, EE-SX674 (Refer to page 1084 for details.)						

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.

Note) When the work load exceeds 15kg, the speed may be limited. Contact SMC in this case.

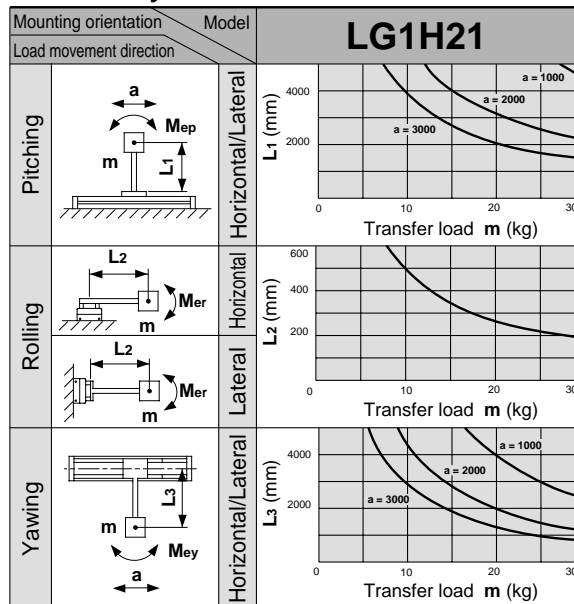
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

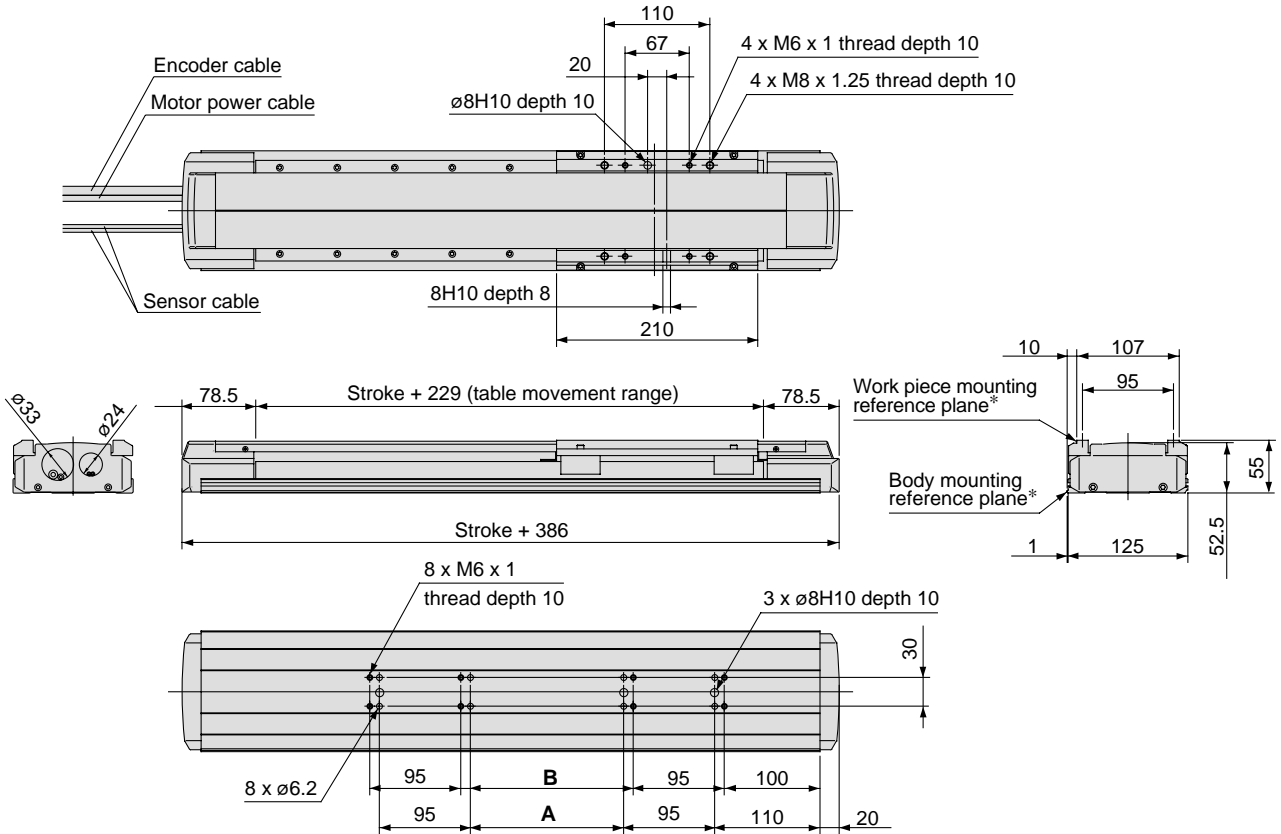
Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/Horizontal Mount Specification With Coupling **Series LG1□H21**

Dimensions/LG1□H21□2□PC(X10)



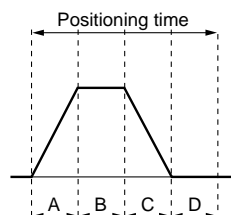
Model	Stroke	A	B
LG1□H21□2□PC- 500-F□-X10	500	360	380
LG1□H21□2□PC- 600-F□-X10	600	460	480
LG1□H21□2□PC- 700-F□-X10	700	560	580
LG1□H21□2□PC- 800-F□-X10	800	660	680
LG1□H21□2□PC- 900-F□-X10	900	760	780
LG1□H21□2□PC-1000-F□-X10	1000	860	880

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.5	1.5	10.5	50.5	100.5
	100	0.5	0.6	1.5	5.5	10.5
	500	0.5	0.6	0.9	1.7	2.7
	1000	0.5	0.6	0.9	1.4	1.9

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)*
Maximum acceleration: 2000 mm/s²

* The value is a guide when SMC's series LC1 controller is used and may vary depending on the driver capacity.

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

D-□

E-MY

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
ø15 mm/10 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **NA** - **300** - F **W** - X10

Frame material

Nil	Aluminum alloy
T	Stainless steel

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation	HC-PQ13	100 W	MR-C10A1	100/115 VAC
R22				MR-C10A	200/230 VAC
R20				—	—

* Motor/driver is included for R21 and R22.
Refer to page 717 for motor mounting dimensions.
Cable for joining motor and driver is optional.
Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

Stroke (mm)
Refer to the standard stroke.

Switch

Nil	None
W	N.C. (B contact) NPN: 2 pcs.

Specifications

		Standard stroke (mm)				
		100	200	300	400	
Performance	Body mass	Aluminum (without motor) (kg)	5.2	6.0	6.8	7.6
		Stainless steel (without motor) (kg)	8.4	9.7	10.9	12.2
	Operating temperature range (°C)	5 to 40 (No condensation)				
	Work load (kg)	30				
	Maximum speed (mm/s)	500				
	Positioning repeatability (mm)	±0.05				
Main parts	Motor	AC servomotor (100 W)				
	Encoder	Incremental system				
	Lead screw	Rolled ball screw ø15 mm, 10 mm lead				
	Guide	High rigidity direct acting guide				
	Motor/Screw connection	With coupling				
Switch	Model	Photo micro sensor EE-SX674 (Refer to page 1084 for details.)				

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

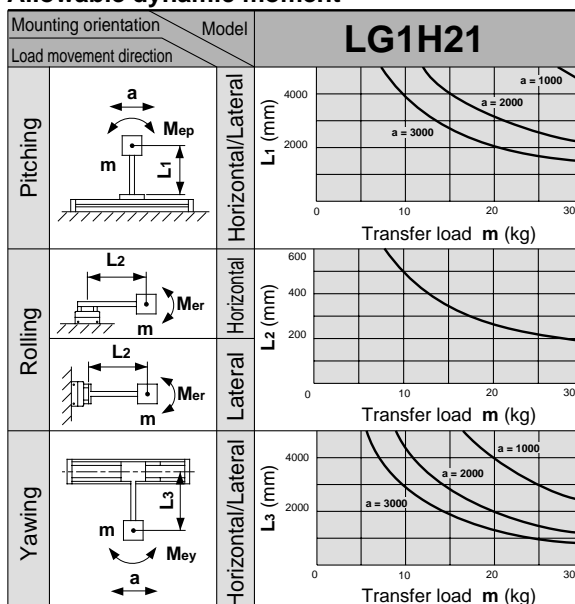
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100_w

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
ø15 mm/10 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **NA** - **300** - F **H** - X10 - **Q**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Switch

Nil	None
H	N.C. (B contact) PNP: 2 pcs.
W	N.C. (B contact) NPN: 2 pcs.

CE marking

Stroke (mm)

For details, refer to page 704.

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage	
R21	Mitsubishi Electric Corporation*2	HC-PQ13	100 W	MR-C10A1-UE	100/115 VAC	
R22				MR-C10A-UE	200/230 VAC	
R29				—	—	
R20*1		—	—	—	—	—
RK21		HC-KFS13	100 W	MR-J2S-10A1	100/115 VAC	
RK22				MR-J2S-10A	200/230 VAC	
RK29				—	—	
RK20*1		—	—	—	—	—
RP21		HF-KP13	100 W	MR-J3-10A1	100/115 VAC	
RP22				MR-J3-10A	200/230 VAC	
RP29				—	—	
RP20*1				—	—	

*1 Without motor/driver. Refer to page 717 for motor mounting dimensions.

*2 Can be supplied including motor/driver for non-standard motors by Mitsubishi Electric Corporation. Cable for joining motor and driver is optional. Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

*3 For with RP (motor symbol) motors, the motor will not be mounted, but packed in the same container as the main body.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6 □

LZ □

LC3F2

X □

D- □

E-MY

Series LG1□H21

Specifications

Standard stroke (mm)		100	200	300	400	
Performance	Body mass	Aluminum (without motor) (kg)	5.2	6.0	6.8	7.6
		Stainless steel (without motor) (kg)	8.4	9.7	10.9	12.2
	Operating temperature range (°C)	5 to 40 (No condensation)				
	Work load (kg)	30				
	Maximum speed (mm/s)	500				
	Positioning repeatability (mm)	±0.05				
Main parts	Motor	AC servomotor (100 W)				
	Encoder	Incremental system				
	Lead screw	Rolled ball screw ø15 mm, 10 mm lead				
	Guide	High rigidity direct acting guide				
	Motor/Screw connection	With coupling				
Switch	Model	Photo micro sensor EE-SX674P, EE-SX674 (Refer to page 1084 for details.)				

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.

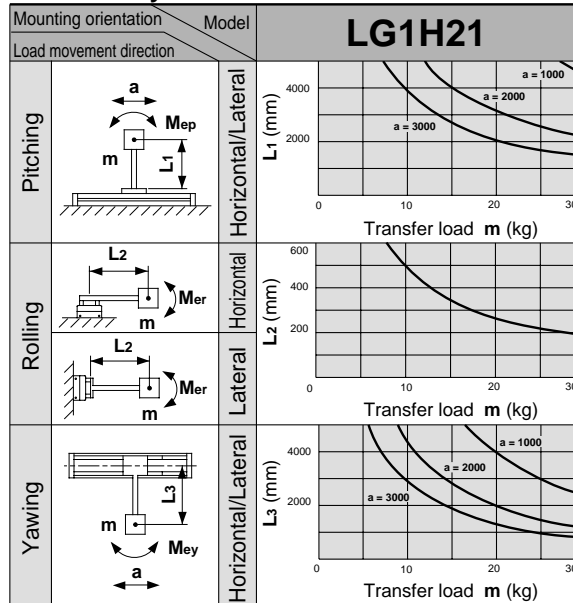
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
 a : Work piece acceleration (mm/s²)
 M_e : Dynamic moment
 L : Overhang to work piece center of gravity (mm)

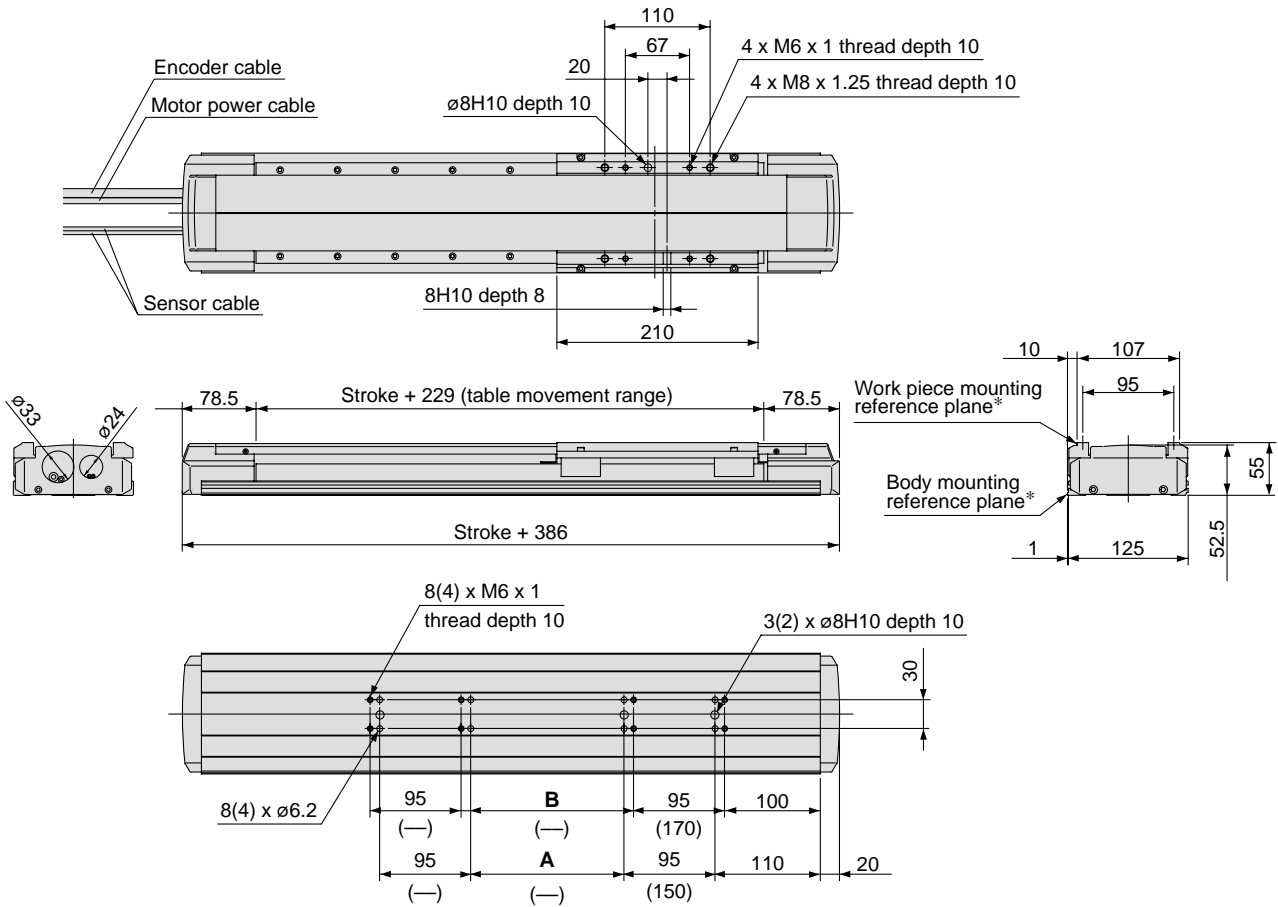
Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/Horizontal Mount Specification With Coupling **Series LG1□H21**

Dimensions/LG1□H21□2□NA(X10)



Model	Stroke	A	B
LG1□H21□2□NA- 100-F□-X10*	100	—	—
LG1□H21□2□NA- 200-F□-X10	200	60	80
LG1□H21□2□NA- 300-F□-X10	300	160	180
LG1□H21□2□NA- 400-F□-X10	400	260	280

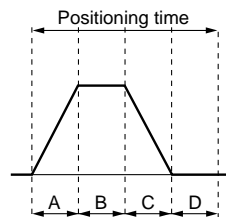
* Dimensions inside () are for a 100 mm stroke.

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	200	400
Speed (mm/s)	10	0.5	1.4	10.4	20.4	40.4
	100	0.5	0.6	1.5	2.5	4.5
	250	0.5	0.6	0.9	1.3	2.1
	500	0.5	0.6	0.8	1.0	1.4

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)*
Maximum acceleration: 3000 mm/s²

* The value is a guide when SMC's series LC1 controller is used and may vary depending on the driver capacity.

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

D-□

E-MY

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
ø15 mm/20 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **NC** - **500** - F **W** - X10

Frame material

Nil	Aluminum alloy
T	Stainless steel

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation	HC-PQ13	100W	MR-C10A1	100/115 VAC
R22				MR-C10A	200/230 VAC
R20				—	—

* Motor/driver is included for R21 and R22.
Refer to page 717 for motor mounting dimensions.
Cable for joining motor and driver is optional.
Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

Stroke (mm)
Refer to the standard stroke.

Switch

Nil	None
W	N.C. (B contact) NPN: 2 pcs.

Specifications

		Standard stroke (mm)	500	600	700	800	900	1000
Performance	Body mass	Aluminum (without motor) (kg)	8.4	9.2	10.0	10.8	11.6	12.4
		Stainless steel (without motor) (kg)	13.4	14.7	15.9	17.2	18.4	19.7
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed (mm/s)	1000	1000	930	740	600	500	
	Positioning repeatability (mm)	±0.05						
Main parts	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Rolled ball screw ø15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
	Motor/Screw connection	With coupling						
Switch	Model	Photo micro sensor EE-SX674 (Refer to page 1084 for details.)						

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

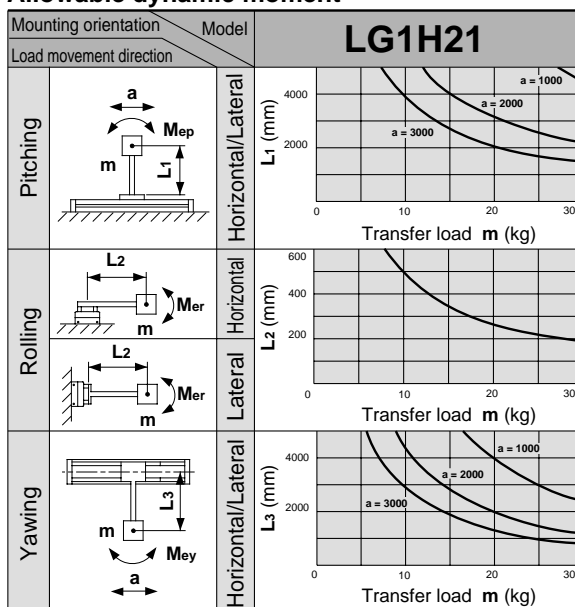
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100_w

High Rigidity
Direct Acting
Guide

Rolled Ball Screw
ø15 mm/20 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **NC** - **500** - F **H** - X10 - **Q**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Switch

Nil	None
H	N.C. (B contact) PNP: 2 pcs.
W	N.C. (B contact) NPN: 2 pcs.

CE marking

Stroke (mm)

For details, refer to page 708.

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation*2	HC-PQ13	100 W	MR-C10A1-UE	100/115 VAC
R22				MR-C10A-UE	200/230 VAC
R29				—	—
R20*1		—	—	—	—
RK21		HC-KFS13	100 W	MR-J2S-10A1	100/115 VAC
RK22				MR-J2S-10A	200/230 VAC
RK29				—	—
RK20*1		—	—	—	—
RP21		HF-KP13	100 W	MR-J3-10A1	100/115 VAC
RP22				MR-J3-10A	200/230 VAC
RP29	—			—	
RP20*1	—			—	

*1 Without motor/driver. Refer to page 717 for motor mounting dimensions.

*2 Can be supplied including motor/driver for non-standard motors by Mitsubishi Electric Corporation. Cable for joining motor and driver is optional. Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

*3 For with RP (motor symbol) motors, the motor will not be mounted, but packed in the same container as the main body.



Made to order specifications
(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6 □

LZ □

LC3F2

X □

D- □

E-MY

Series LG1□H21

Specifications

Standard stroke (mm)		500	600	700	800	900	1000	
Performance	Body mass	Aluminum (without motor) (kg)	8.4	9.2	10.0	10.8	11.6	12.4
		Stainless steel (without motor) (kg)	13.4	14.7	15.9	17.2	18.4	19.7
	Operating temperature range (°C)	5 to 40 (No condensation)						
	Work load (kg)	30						
	Maximum speed (mm/s)	1000	1000	930	740	600	500	
Positioning repeatability (mm)		±0.05						
Main parts	Motor	AC servomotor (100 W)						
	Encoder	Incremental system						
	Lead screw	Rolled ball screw ø15 mm, 20 mm lead						
	Guide	High rigidity direct acting guide						
	Motor/Screw connection	With coupling						
Switch	Model	Photo micro sensor EE-SX674P, EE-SX674 (Refer to page 1084 for details.)						

Intermediate strokes

Strokes other than the standard strokes on the left are available by special order. Consult SMC.

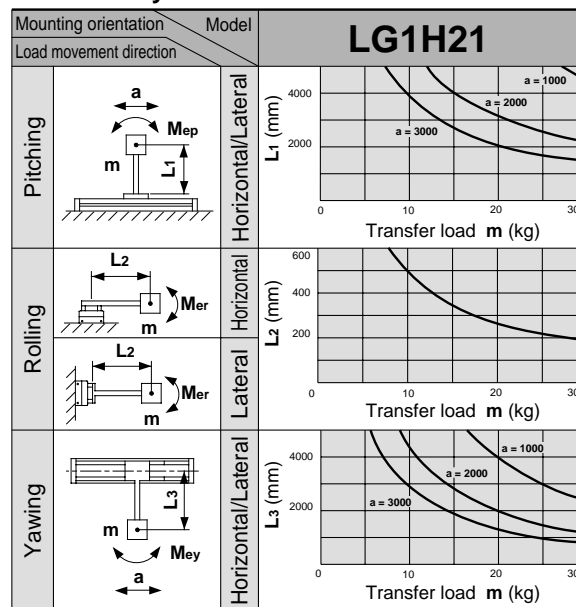
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

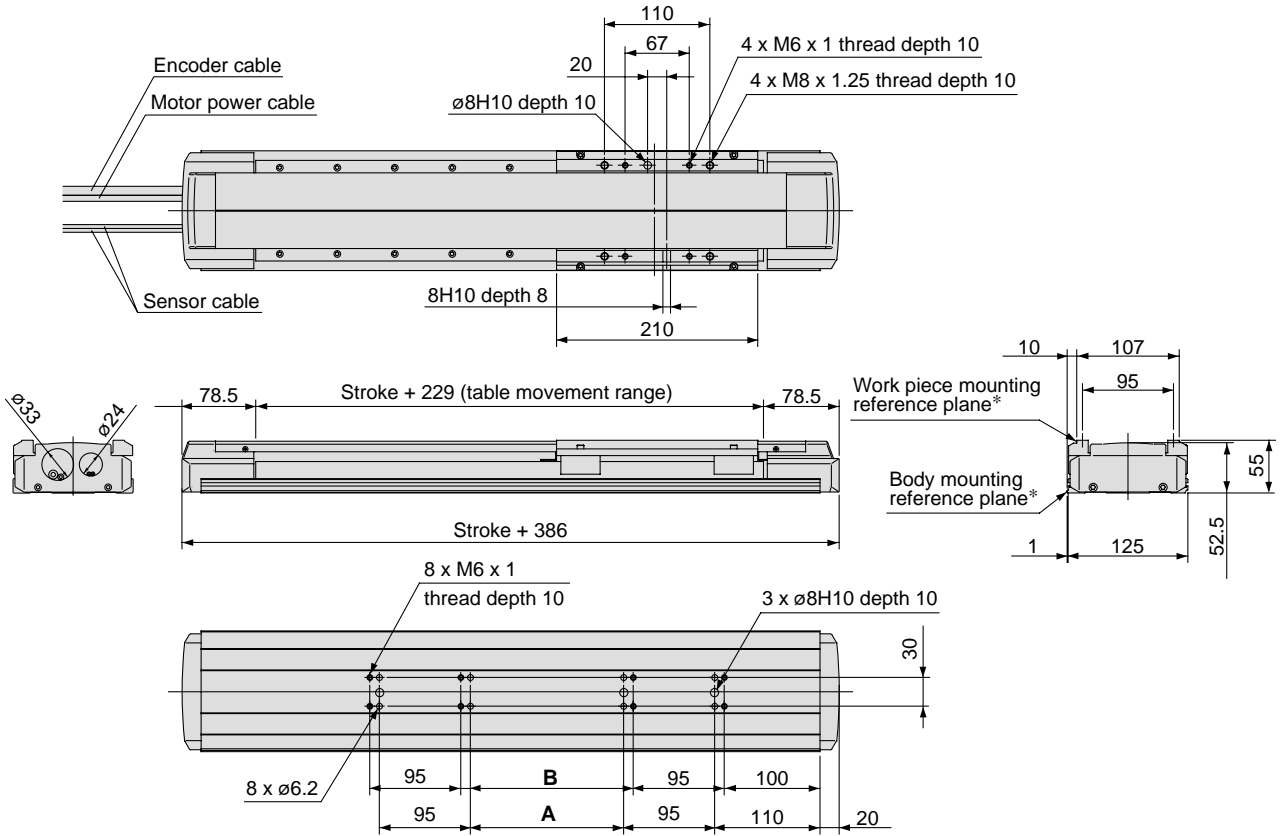
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□NC(X10)



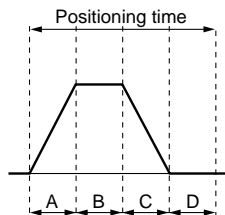
Model	Stroke	A	B
LG1□H21□2□NC- 500-F□-X10	500	360	380
LG1□H21□2□NC- 600-F□-X10	600	460	480
LG1□H21□2□NC- 700-F□-X10	700	560	580
LG1□H21□2□NC- 800-F□-X10	800	660	680
LG1□H21□2□NC- 900-F□-X10	900	760	780
LG1□H21□2□NC-1000-F□-X10	1000	860	880

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to page 716 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	500	1000
Speed (mm/s)	10	0.5	1.5	10.5	50.5	100.5
	100	0.5	0.6	1.5	5.5	10.5
	500	0.5	0.6	0.9	1.7	2.7
	1000	0.5	0.6	0.9	1.4	1.9

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)*
Maximum acceleration: 2000 mm/s²

* The value is a guide when SMC's series LC1 controller is used and may vary depending on the driver capacity.

- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Slide Screw
∅20 mm / 20 mm lead

Series **LG1** **H21**

How to Order

LG1 **H21** **R21** **SC** - **500** - F **W** - X10

Frame material

Nil	Aluminum alloy
T	Stainless steel

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation	HC-PQ13	100 W	MR-C10A1	100/115 VAC
R22				MR-C10A	200/230 VAC
R20				—	—

* Motor/driver is included for R21 and R22.
Refer to page 717 for motor mounting dimensions.
Cable for joining motor and driver is optional.
Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

Stroke (mm)
Refer to the standard stroke.

Switch

Nil	None
W	N.C. (B contact) NPN: 2 pcs.

Specifications

		Standard stroke (mm)											
		100	200	300	400	500	600	700	800	900	1000	1200	
Performance	Body mass	Aluminum (without motor) (kg)	5.8	6.7	7.5	8.4	9.3	10.2	11.1	11.9	12.8	13.7	15.9
		Stainless steel (without motor) (kg)	9.3	10.7	12.0	13.5	14.8	16.2	17.5	19.0	20.3	21.7	25.2
	Operating temperature range (°C)	5 to 40 (No condensation)											
	Work load (kg)	15											
	Maximum speed (mm/s)	500											
Main parts	Positioning repeatability (mm)	±0.1											
	Motor	AC servomotor (100 W)											
	Encoder	Incremental system											
	Lead screw	Slide screw ∅20 mm, 20 mm lead											
	Guide	High rigidity direct acting guide											
	Motor/Screw connection	With coupling											
Switch	Model	Photo micro sensor EE-SX674 (Refer to page 1084 for details.)											

Intermediate strokes

Strokes other than the standard strokes above are available by special order. Consult SMC.



Made to order specifications

(For details, refer to page 999)

Symbol	Specifications
X8	Dust seal specification

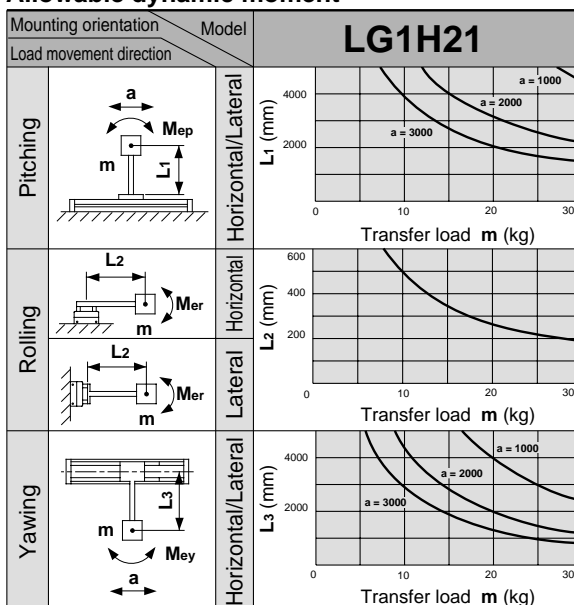
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output
100 W

High Rigidity
Direct Acting
Guide

Slide Screw
Ø20 mm / 20 mm lead

Series **LG1** □ **H21**

How to Order

LG1 □ **H21** **R21** **SC** - **300** - F **H** - X10 - **Q**

Frame material

Nil	Aluminum alloy
T	Stainless steel

Switch

Nil	None
H	N.C. (B contact) PNP: 2 pcs.
W	N.C. (B contact) NPN: 2 pcs.

CE marking

Stroke (mm)

For details, refer to page 712.

Motor specification

Symbol	Motor manufacturer	Motor model	Motor output	Compatible driver model	Power supply voltage
R21	Mitsubishi Electric Corporation*2	HC-PQ13	100 W	MR-C10A1-UE	100/115 VAC
R22				MR-C10A-UE	200/230 VAC
R29				—	—
R20*1		—	—	—	—
RK21		HC-KFS13	100 W	MR-J2S-10A1	100/115 VAC
RK22				MR-J2S-10A	200/230 VAC
RK29				—	—
RK20*1		—	—	—	—
RP21		HF-KP13	100 W	MR-J3-10A1	100/115 VAC
RP22				MR-J3-10A	200/230 VAC
RP29				—	—
RP20*1				—	—

*1 Without motor/driver. Refer to page 717 for motor mounting dimensions.

*2 Can be supplied including motor/driver for non-standard motors by Mitsubishi Electric Corporation. Cable for joining motor and driver is optional. Refer to page 659 for part nos.

Please contact individual motor manufacturers regarding motor/driver specifications or other details.

*3 For with RP (motor symbol) motors, the motor will not be mounted, but packed in the same container as the main body.

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6 □

LZ □

LC3F2

X □

D- □

E-MY

Series LG1□H21

Specifications

Standard stroke (mm)		100	200	300	400	500	600	700	800	900	1000	1200	
Performance	Body mass	Aluminum (without motor) (kg)	5.8	6.7	7.5	8.4	9.3	10.2	11.1	11.9	12.8	13.7	15.9
		Stainless steel (without motor) (kg)	9.3	10.7	12.0	13.5	14.8	16.2	17.5	19.0	20.3	21.7	25.2
	Operating temperature range (°C)	5 to 40 (No condensation)											
	Work load (kg)	15											
	Maximum speed (mm/s)	500											
Positioning repeatability (mm)	±0.1												
Main parts	Motor	AC servomotor (100 W)											
	Encoder	Incremental system											
	Lead screw	Slide screw ø20 mm, 20 mm lead											
	Guide	High rigidity direct acting guide											
	Motor/Screw connection	With coupling											
Switch	Model	Photo micro sensor EE-SX674P, EE-SX674 (Refer to page 1084 for details.)											

Intermediate strokes

Strokes other than the standard strokes above are available by special order. Consult SMC.

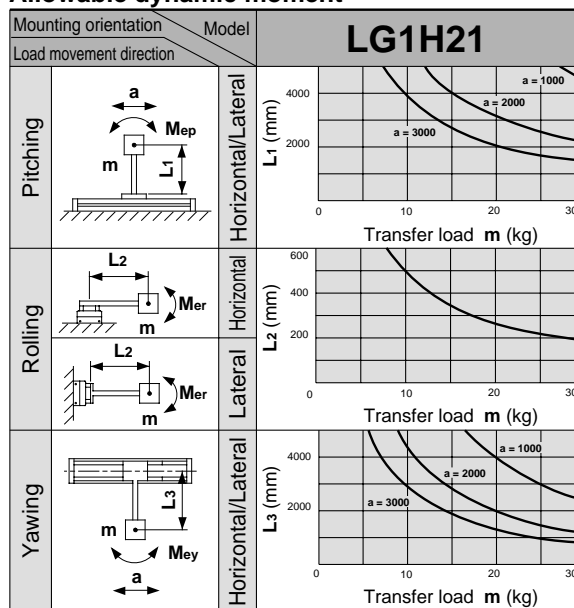
Allowable Moment (N-m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

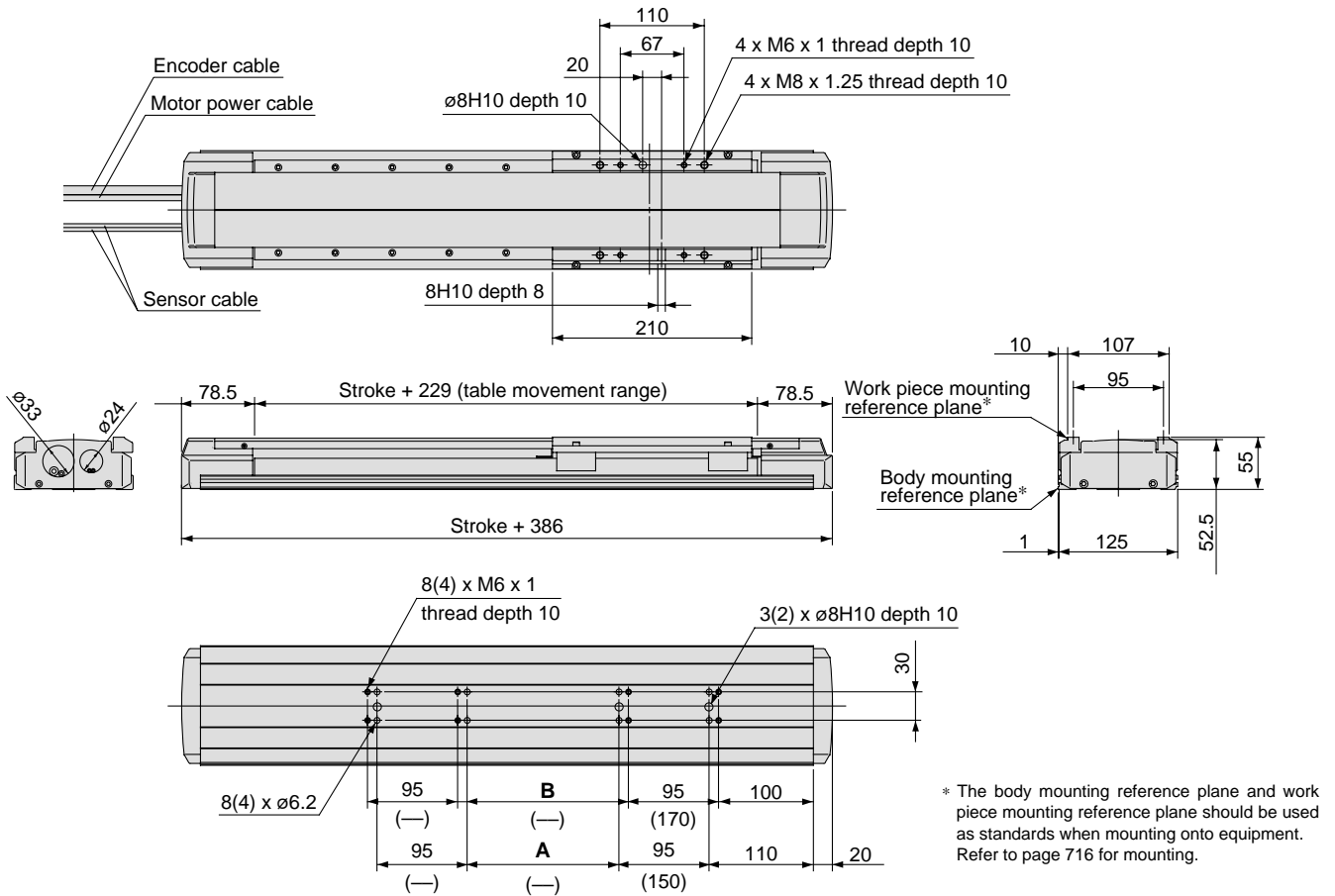
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□SC(X10)



Model	Stroke	A	B
LG1□H21□2□SC- 100-F□-X10*	100	—	—
LG1□H21□2□SC- 200-F□-X10	200	60	80
LG1□H21□2□SC- 300-F□-X10	300	160	180
LG1□H21□2□SC- 400-F□-X10	400	260	280
LG1□H21□2□SC- 500-F□-X10	500	360	380
LG1□H21□2□SC- 600-F□-X10	600	460	480

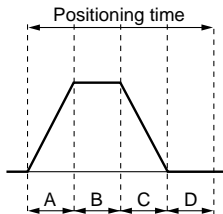
* Dimensions inside () are for a 100 mm stroke.

Model	Stroke	A	B
LG1□H21□2□SC- 700-F□-X10	700	560	580
LG1□H21□2□SC- 800-F□-X10	800	660	680
LG1□H21□2□SC- 900-F□-X10	900	760	780
LG1□H21□2□SC-1000-F□-X10	1000	860	880
LG1□H21□2□SC-1200-F□-X10	1200	1060	1080

Positioning Time Guide

		Positioning time (sec.)				
		1	10	100	600	1200
Speed (mm/s)	10	0.5	1.5	10.5	60.5	120.5
	100	0.5	0.6	1.5	6.5	12.5
	250	0.5	0.6	1.0	3.0	5.4
	500	0.5	0.6	0.9	1.9	3.1

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)*
Maximum acceleration: 2000 mm/s²

* The value is a guide when SMC's series LC1 controller is used and may vary depending on the driver capacity.

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

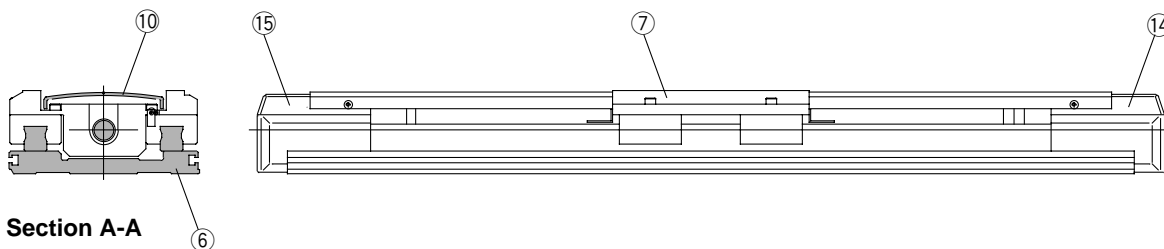
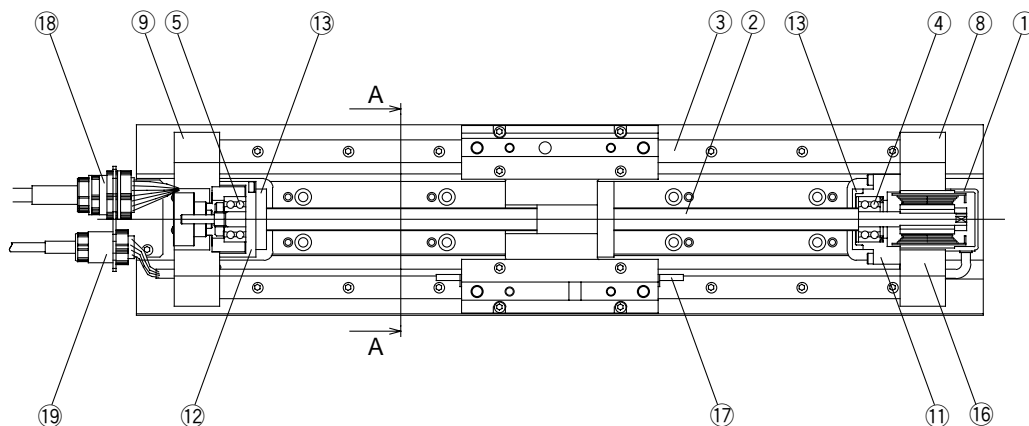
D-□

E-MY

Series **LG1H** Construction

Construction/ Without Coupling

LG1H20



Parts list

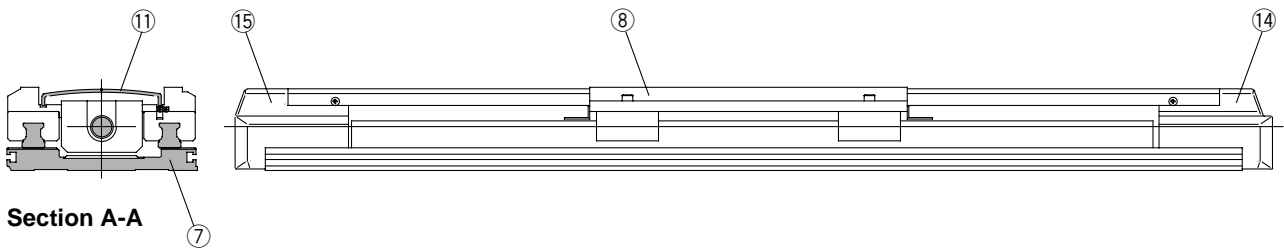
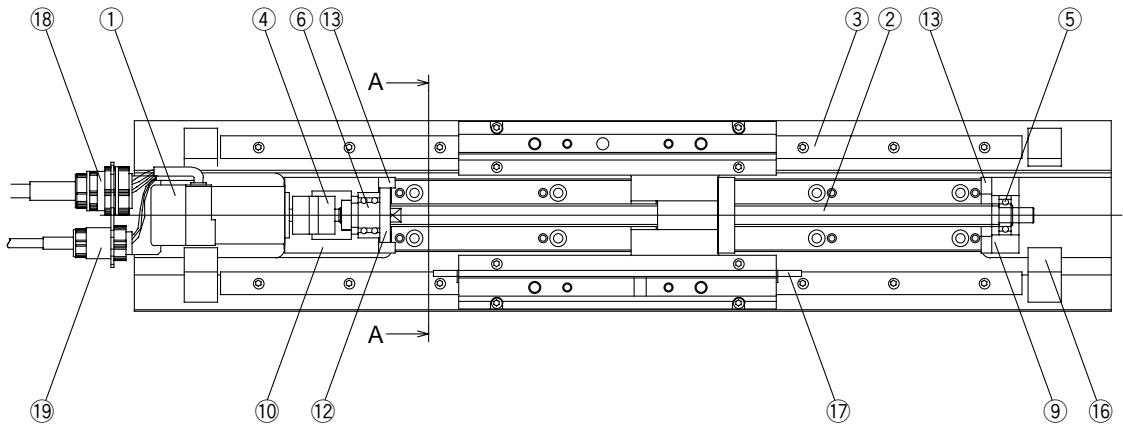
No.	Description	Material	Note
1	AC servomotor	—	100 W
2	Lead screw	—	Ball screw/Slide screw
3	High rigidity direct acting guide	—	
4	Bearing R	—	
5	Bearing F	—	
6	Body	Aluminum alloy/Stainless steel	
7	Table	Aluminum alloy	
8	Housing A	Aluminum alloy	
9	Housing B	Aluminum alloy	
10	Top cover	Aluminum alloy	

No.	Description	Material	Note
11	Head cover	Aluminum alloy	
12	Encoder cover	Aluminum alloy	
13	Bumper	IIR	
14	End cover A	PC	
15	End cover B	PC	
16	Photo micro sensor	—	
17	Sensor plate	—	
18	Connector A	—	
19	Connector B	—	

Construction/ With Coupling

LG1H21

- LJ1
- LG1**
- LTF
- LC1
- LC7
- LC8
- LXF
- LXP
- LXS
- LC6□
- LZ□
- LC3F2
- X□
- D-□
- E-MY



Parts list

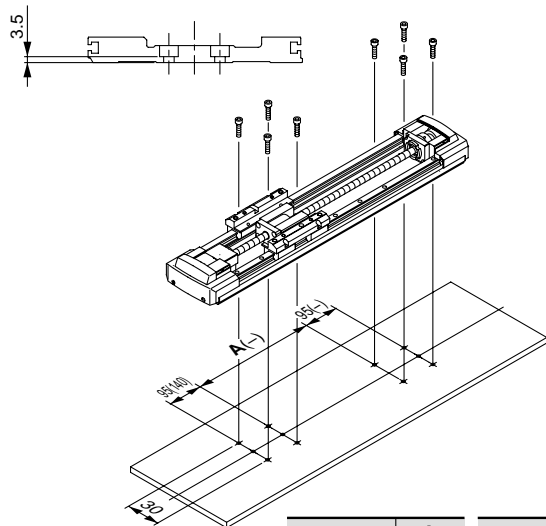
No.	Description	Material	Note
1	AC servomotor	—	100 W
2	Lead screw	—	Ball screw/Slide screw
3	High rigidity direct acting guide	—	
4	Coupling	—	
5	Bearing R	—	
6	Bearing F	—	
7	Body	Aluminum alloy/Stainless steel	
8	Table	Aluminum alloy	
9	Housing A	Aluminum alloy	
10	Housing B	Aluminum alloy	

No.	Description	Material	Note
11	Top cover	Aluminum alloy	
12	Bearing retainer	Aluminum alloy	
13	Bumper	IIR	
14	End cover A	PC	
15	End cover B	PC	
16	Photo micro sensor	—	
17	Sensor plate	—	
18	Connector A	—	
19	Connector B	—	

Series LG1H Mounting

Top Mount

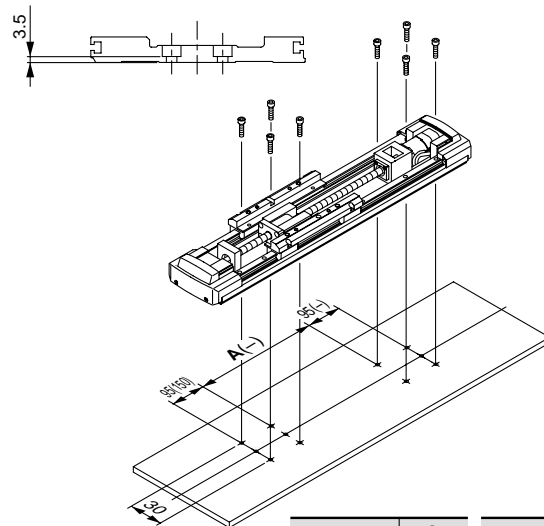
LG1H20/ Without coupling



Stroke	A	Stroke	A
100	—	700	550
200	50	800	650
300	150	900	750
400	250	1000	850
500	350	1200	1050
600	450		

Dimensions inside () are for a 100 mm stroke.

LG1H21/ With coupling

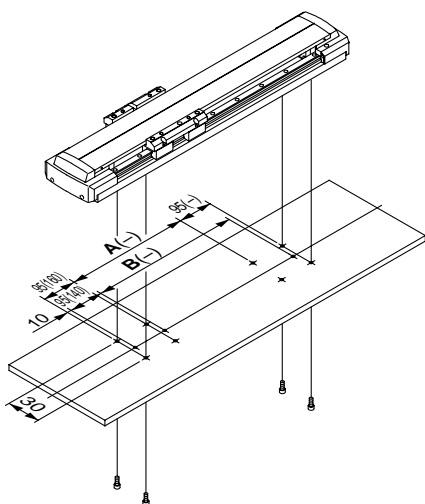


Stroke	A	Stroke	A
100	—	700	560
200	60	800	660
300	160	900	760
400	260	1000	860
500	360	1200	1060
600	460		

Dimensions inside () are for a 100 mm stroke.

Bottom Mount

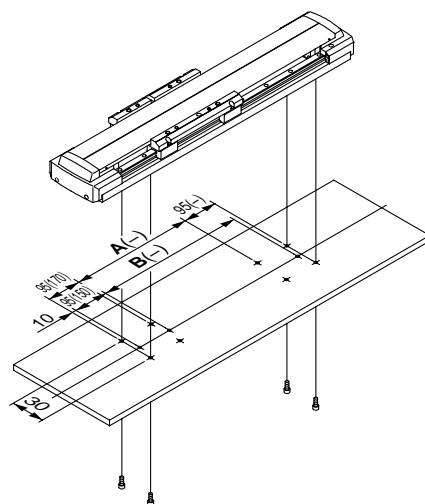
LG1H20/ Without coupling



Stroke	A	B	Stroke	A	B
100	—	—	700	570	645
200	70	145	800	670	745
300	170	245	900	770	845
400	270	345	1000	870	945
500	370	445	1200	1070	1145
600	470	545			

Dimensions inside () are for a 100 mm stroke.

LG1H21/ With coupling



Stroke	A	B	Stroke	A	B
100	—	—	700	580	655
200	80	155	800	680	755
300	180	255	900	780	855
400	280	355	1000	880	955
500	380	455	1200	1080	1155
600	480	555			

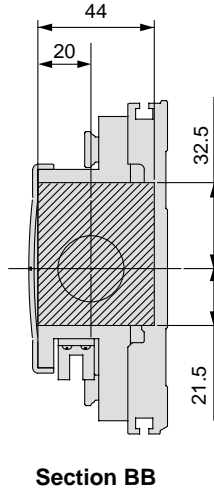
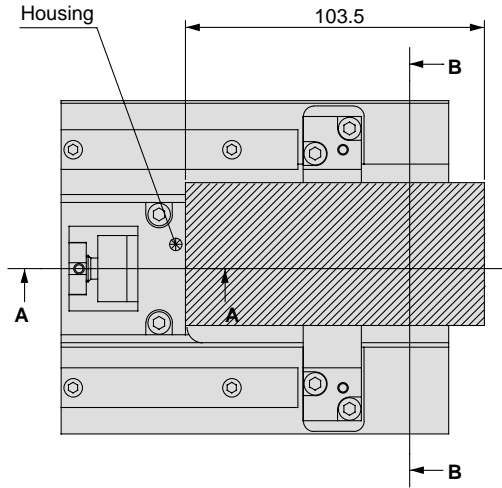
Dimensions inside () are for a 100 mm stroke.

Series **LG1H**

Non-standard Motor Mounting Dimensions

Non-standard Motor Mounting Dimensions/ With Coupling

LG1H21

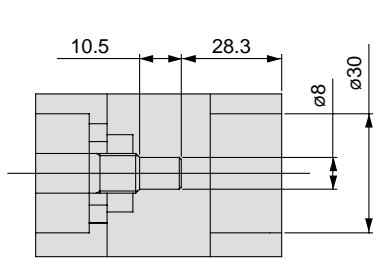


Motor mounting area dimensions

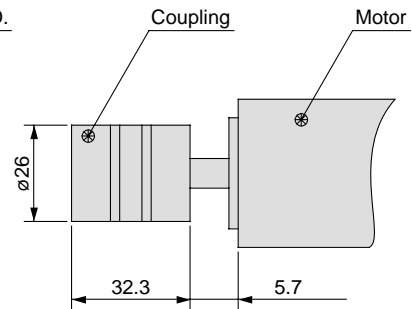
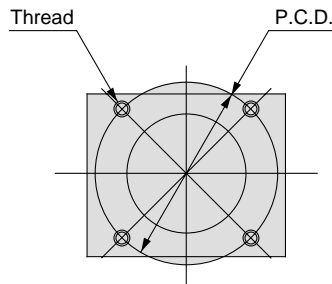
Manufacturer	Mitsubishi Electric Corporation
Thread size	M4 x 0.7
Effective thread length (mm)	8
Quantity	2
P.C.D.	46

Motor mounting area

* When mounting a coupling on the motor, mount it within the dimensional range shown on the left.



Section AA (Housing interior)



Coupling mounting dimensions

LJ1

LG1

LTF

LC1

LC7

LC8

LXF

LXP

LXS

LC6□

LZ□

LC3F2

X□

D-□

E-MY

Series LG1H

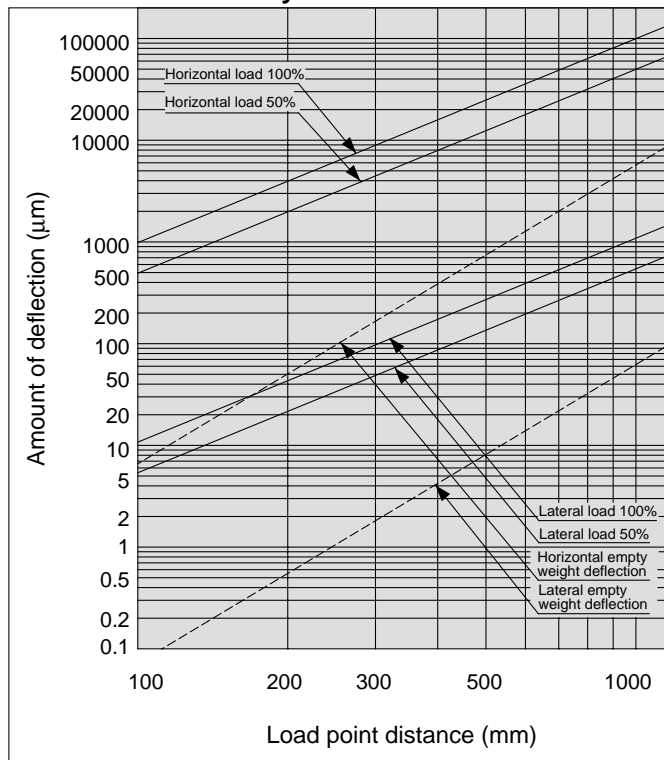
Deflection Data

Deflection Data

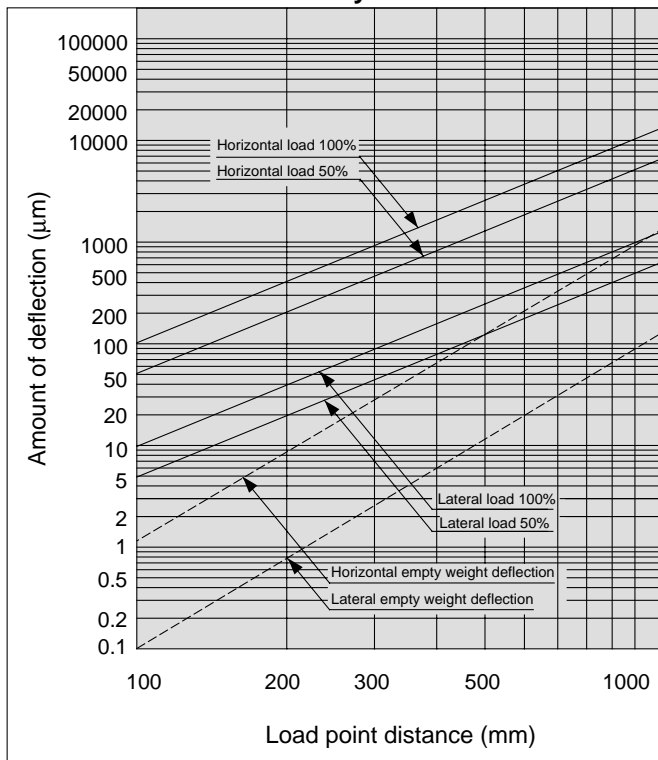
* Calculated values based on the body's sectional secondary moment.

The load and the amount of deflection at load point W are shown in the graphs below.

LG1H/ Aluminum body



LG1TH/ Stainless steel body



With single end support and table moved to the end of the stroke

