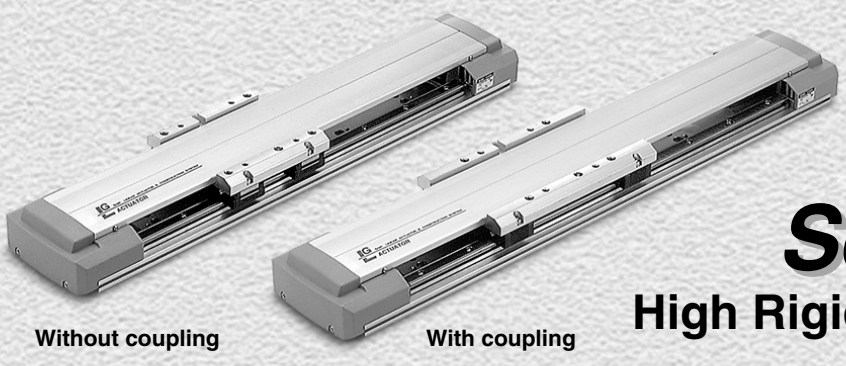


Without coupling

With coupling

Low Profile Single Axis Electric Actuator

Series LG1H

High Rigidity Direct Acting Guide

Series	Motor type	Guide type	Mounting orientation	Motor/Screw connection	Model	Lead screw lead mm: Ground ball screw	Lead screw lead mm: Rolled ball screw	Lead screw lead mm: Slide screw	Page
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

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

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

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

Lead screw type

P	Ground ball screw
N	Rolled ball screw
S	Slide screw

Lead screw lead

A	10 mm
C	20 mm

Stroke (mm)

Cable entry direction

F	Axial

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

Non-standard motor Note)

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

Series LG1□H20

Motor Output 100 W | High Rigidity Direct Acting Guide | Ground Ball Screw ø15 mm/10 mm lead

How to Order

LC1 controller compatible

LG1□H202□PA–300–F2

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)

Stroke (mm)
Refer to the standard stroke.

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			
	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		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

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

Symbol	Specifications
X8	Dust seal specification

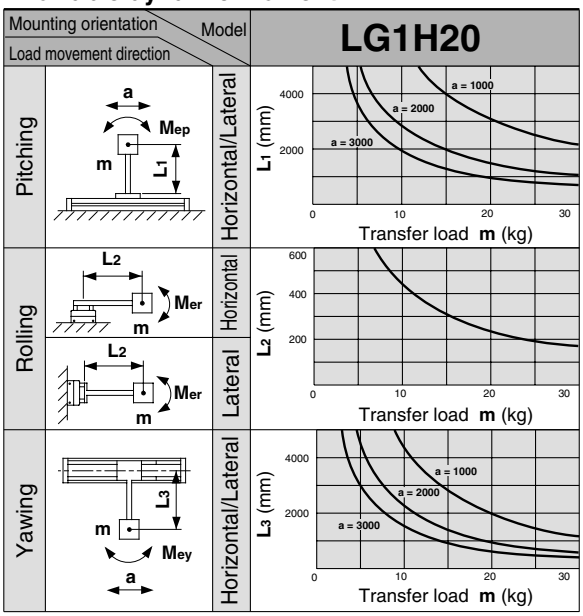
Allowable Moment (N·m)

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)

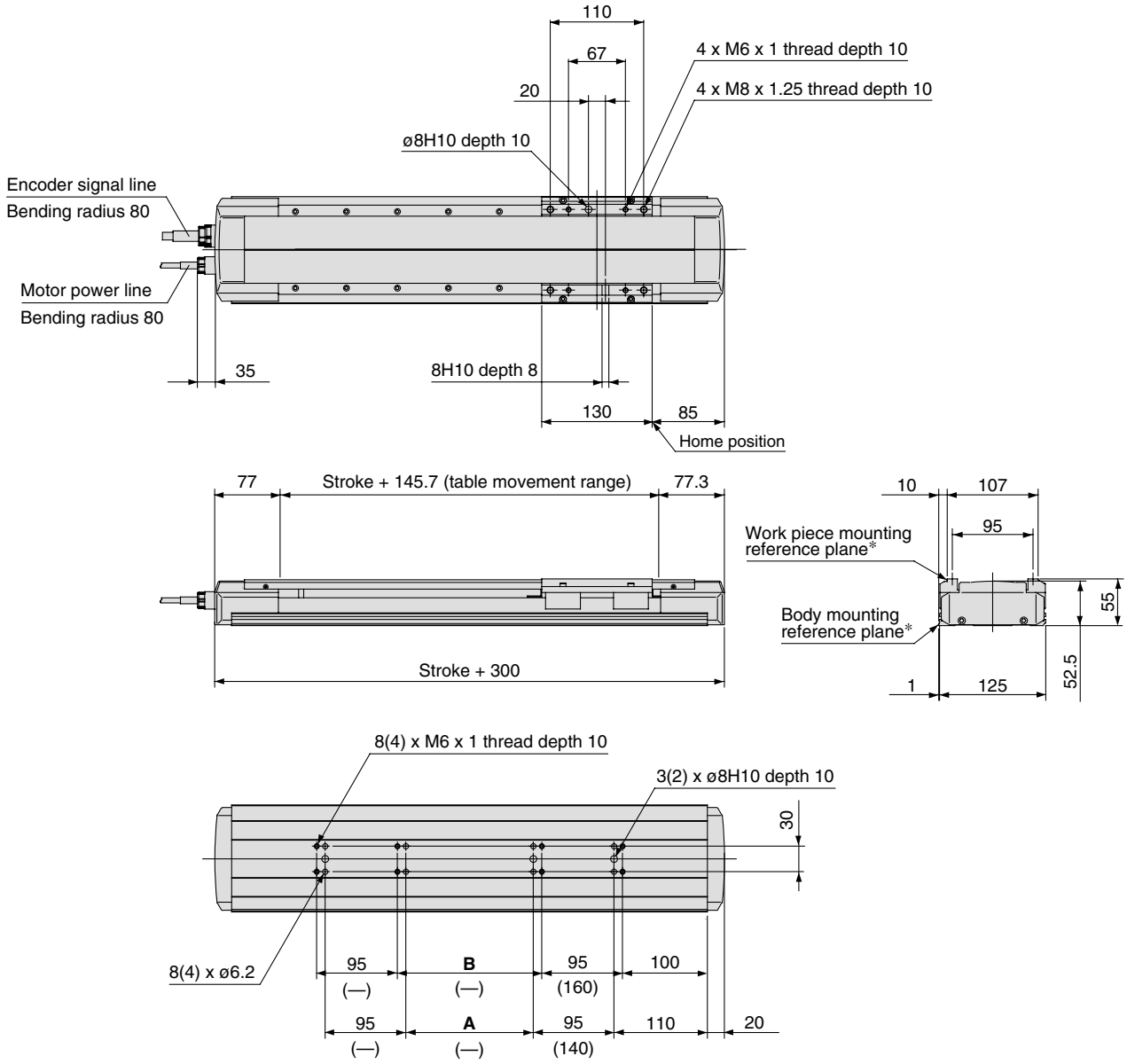
Allowable dynamic moment



Refer to page 718 for deflection data.

SMC

Dimensions/LG1□H202□PA



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

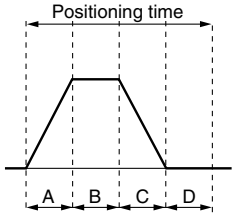
* Dimenstions inside ( ) are for a 100 mm stroke.

* 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

Standard Motor/ Horizontal Mount Without Coupling

Series LG1□H20

Motor Output 100 W | High Rigidity Direct Acting Guide | Ground Ball Screw ø15 mm/20 mm lead

How to Order

LC1 controller compatible LG1□H202[1][PC]–[500]–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)

Stroke (mm)
Refer to the standard stroke.

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) 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 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.)					

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

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

Symbol	Specifications
X8	Dust seal specification

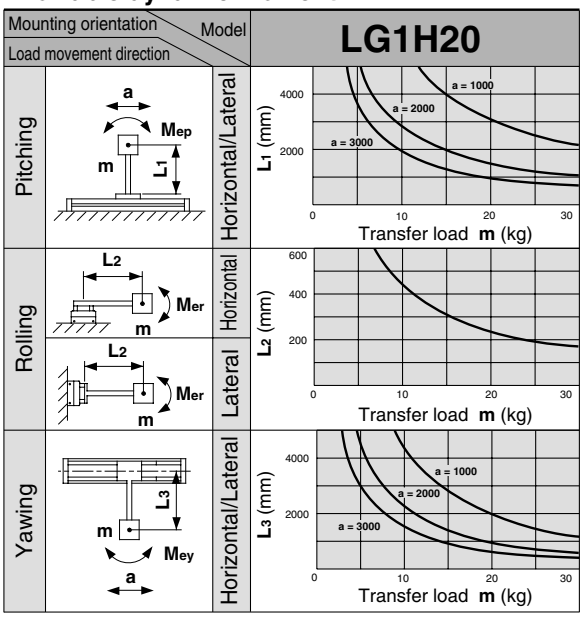
Allowable Moment (N·m)

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)

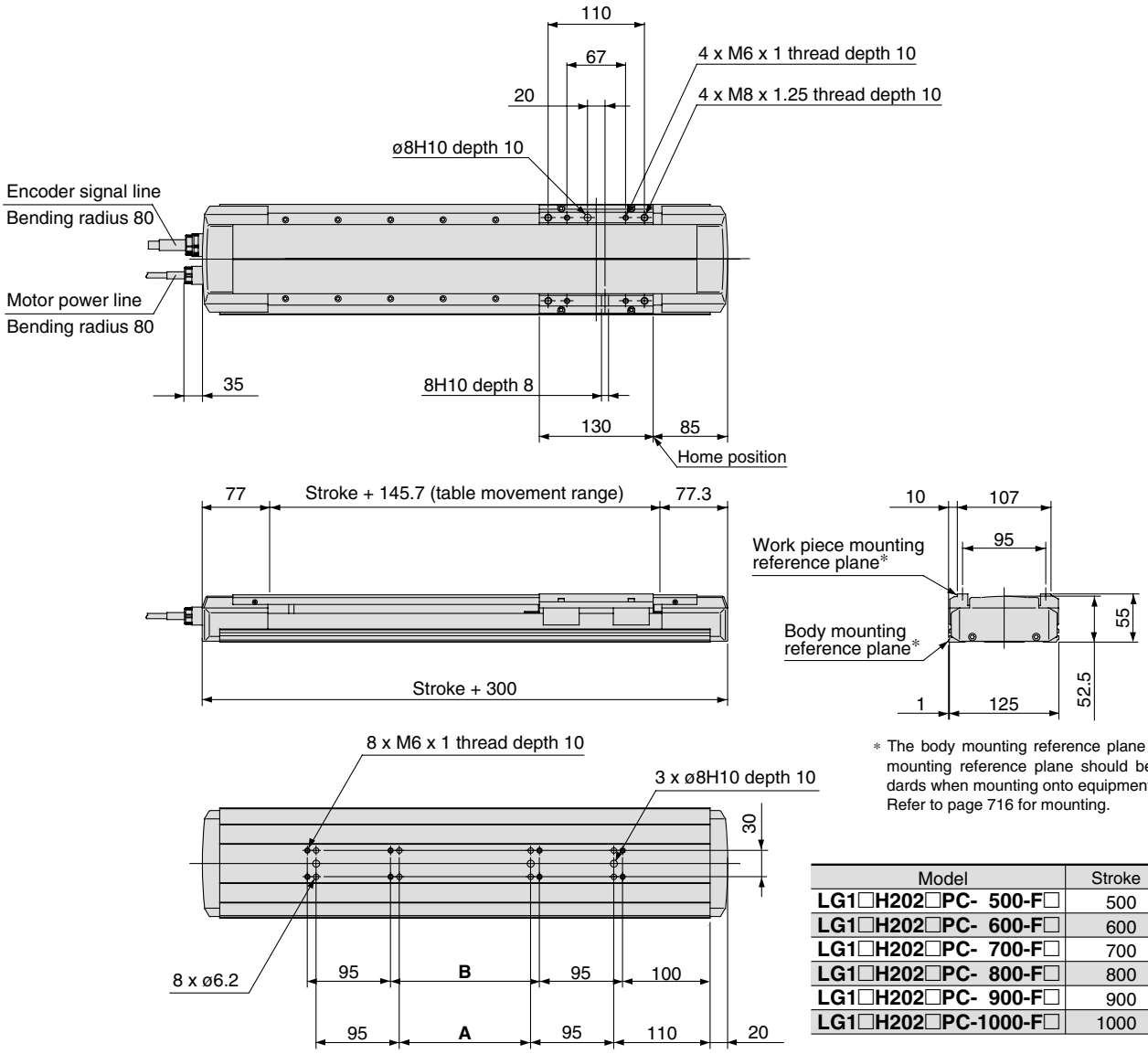
Allowable dynamic moment



Refer to page 718 for deflection data.

SMC

Dimensions/LG1□H202□PC



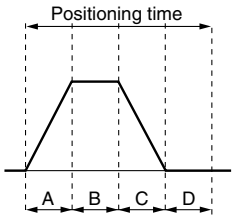
* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment.
Refer to page 716 for mounting.

Model	Stroke	A	B
LG1□H202□PC- 500-F□	500	350	370
LG1□H202□PC- 600-F□	600	450	470
LG1□H202□PC- 700-F□	700	550	570
LG1□H202□PC- 800-F□	800	650	670
LG1□H202□PC- 900-F□	900	750	770
LG1□H202□PC-1000-F□	1000	850	870

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/s^2

Maximum Speeds for Each Transfer Load

Unit (mm/s)

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

Series LG1□H20

Motor Output 100 W | High Rigidity Direct Acting Guide | Rolled Ball Screw ø15 mm/10 mm lead

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)

Stroke (mm)
Refer to the standard stroke.

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			
	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		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

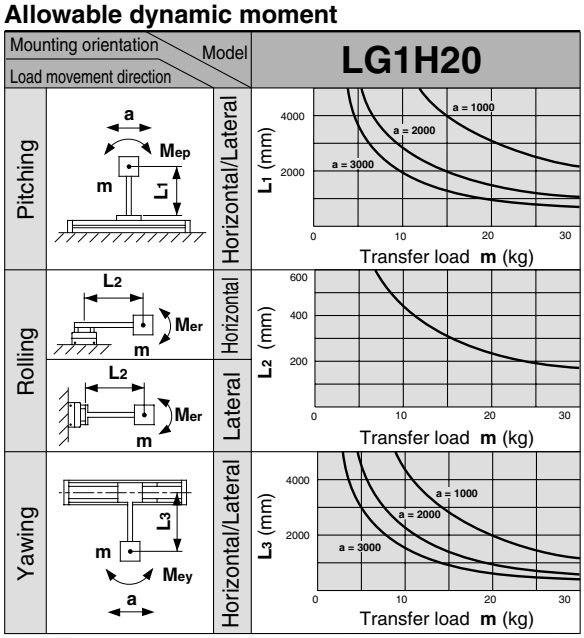
Allowable Moment (N·m)

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)

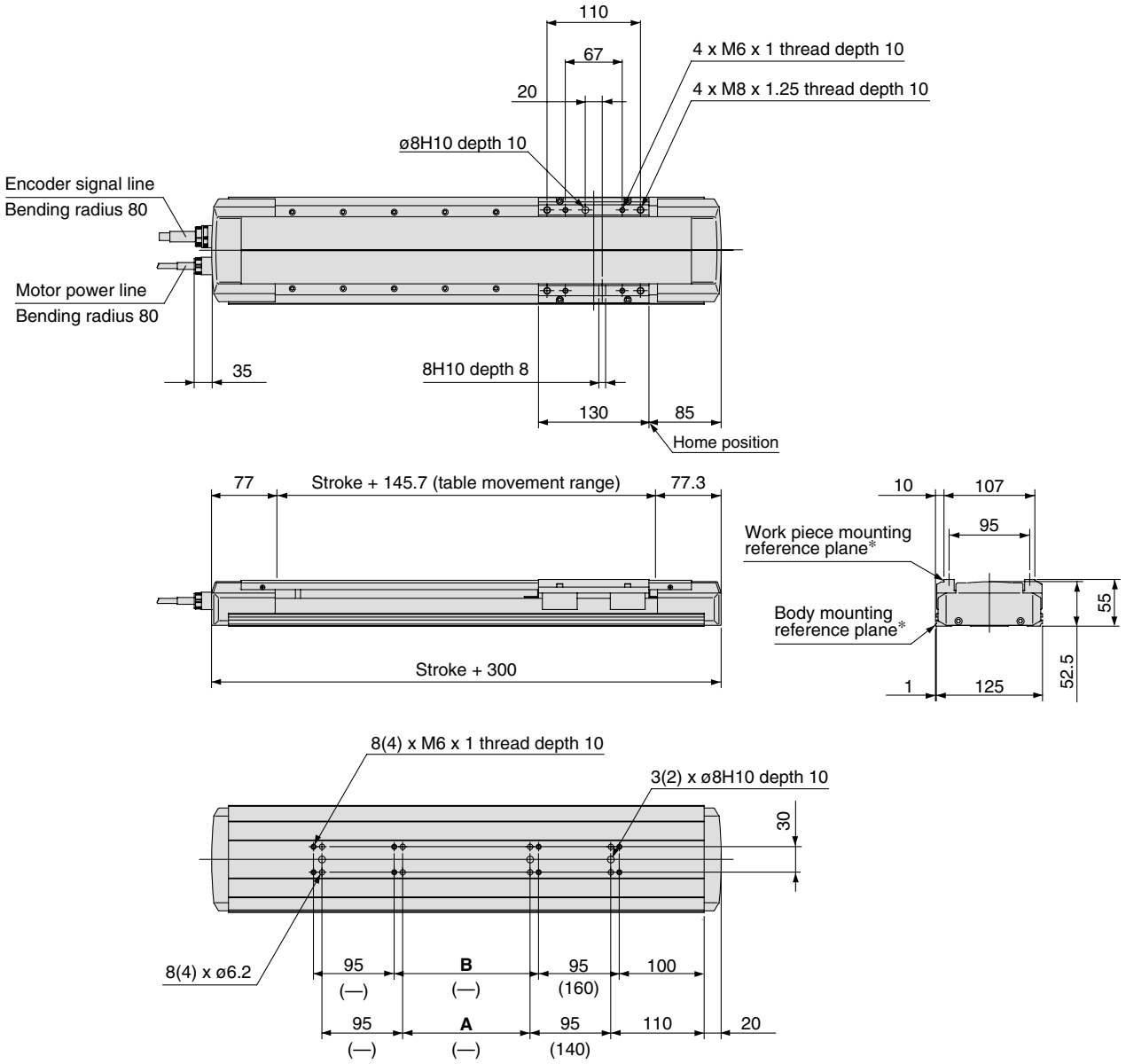
Allowable dynamic moment



Refer to page 718 for deflection data.

SMC

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

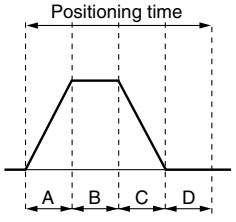
∗ Dimenstions inside ( ) are for a 100 mm stroke.

∗ 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

Standard Motor/ Horizontal Mount Without Coupling

Series LG1□H20

Motor Output 100 W | High Rigidity Direct Acting Guide | Rolled Ball Screw ø15 mm/20 mm lead

How to Order

LC1 controller compatible

LG1□H202□NC–500–F□

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)

Stroke (mm)
Refer to the standard stroke.

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) 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.)					

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) **LG1H2021NC-550-F2-X2**

Made to Order

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

Symbol	Specifications
X8	Dust seal specification

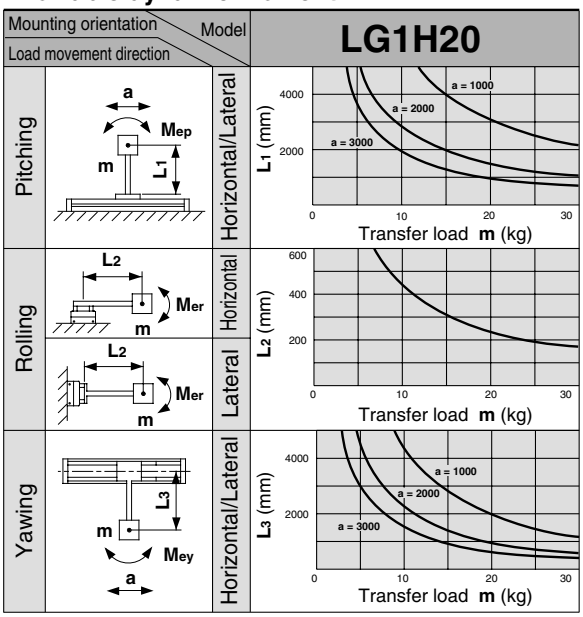
Allowable Moment (N·m)

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)

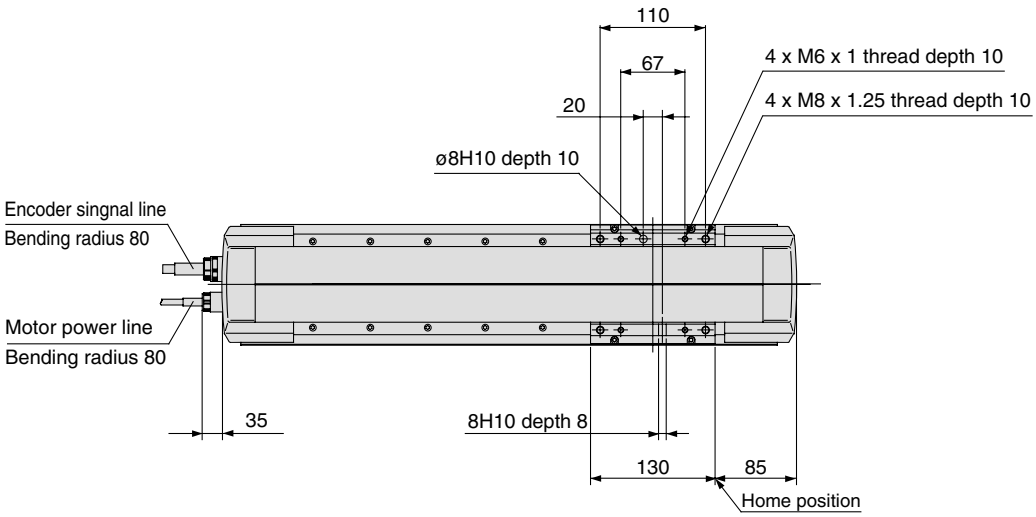
Allowable dynamic moment

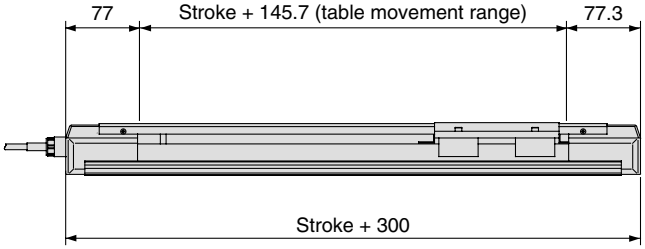


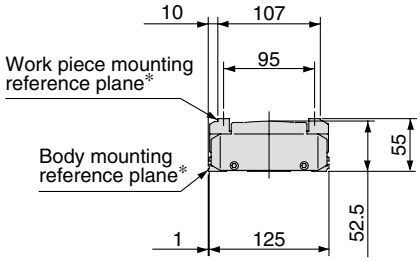
Refer to page 718 for deflection data.

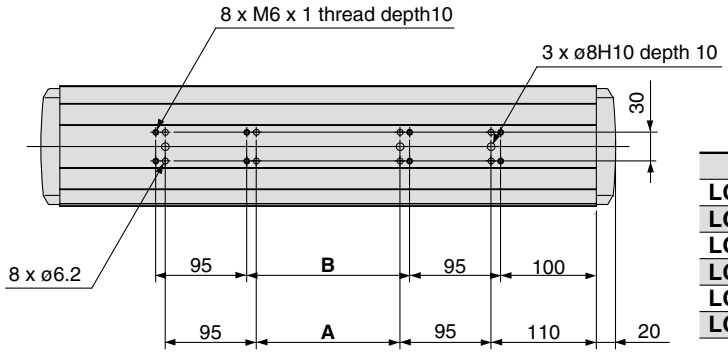
SMC

Dimensions/LG1□H202□NC









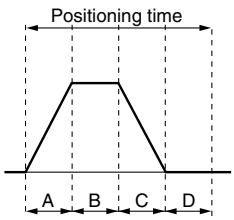
* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment.
Refer to page 716 for mounting.

Model	Stroke	A	B
LG1□H202□NC- 500-F□	500	350	370
LG1□H202□NC- 600-F□	600	450	470
LG1□H202□NC- 700-F□	700	550	570
LG1□H202□NC- 800-F□	800	650	670
LG1□H202□NC- 900-F□	900	750	770
LG1□H202□NC-1000-F□	1000	850	870

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

Unit (mm/s)

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	Power supply: 200/220 (V)AC ±10% Compatible controller: LC1-1□2HC2-□□
LG1□H202□NC-900-F□	600	500	500	500	
LG1□H202□NC-1000-F□	500	500	500	500	

* Consult SMC if outside of the above conditions.

Standard Motor/ Horizontal Mount Without Coupling

Series LG1□H20

Motor Output 100 W | High Rigidity Direct Acting Guide | Slide Screw ø20 mm/20 mm lead

How to Order

LC1 controller compatible

LG1 □ H202 1 SC – 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)

Stroke (mm)
Refer to the standard stroke.

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										
	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		Without coupling										
Controller	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**

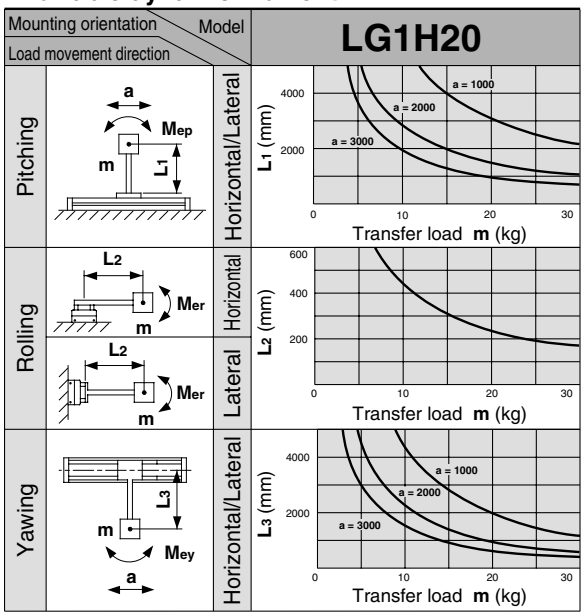
Allowable Moment (N·m)

Allowable static moment

Pitching	71
Rolling	79
Yawing	75

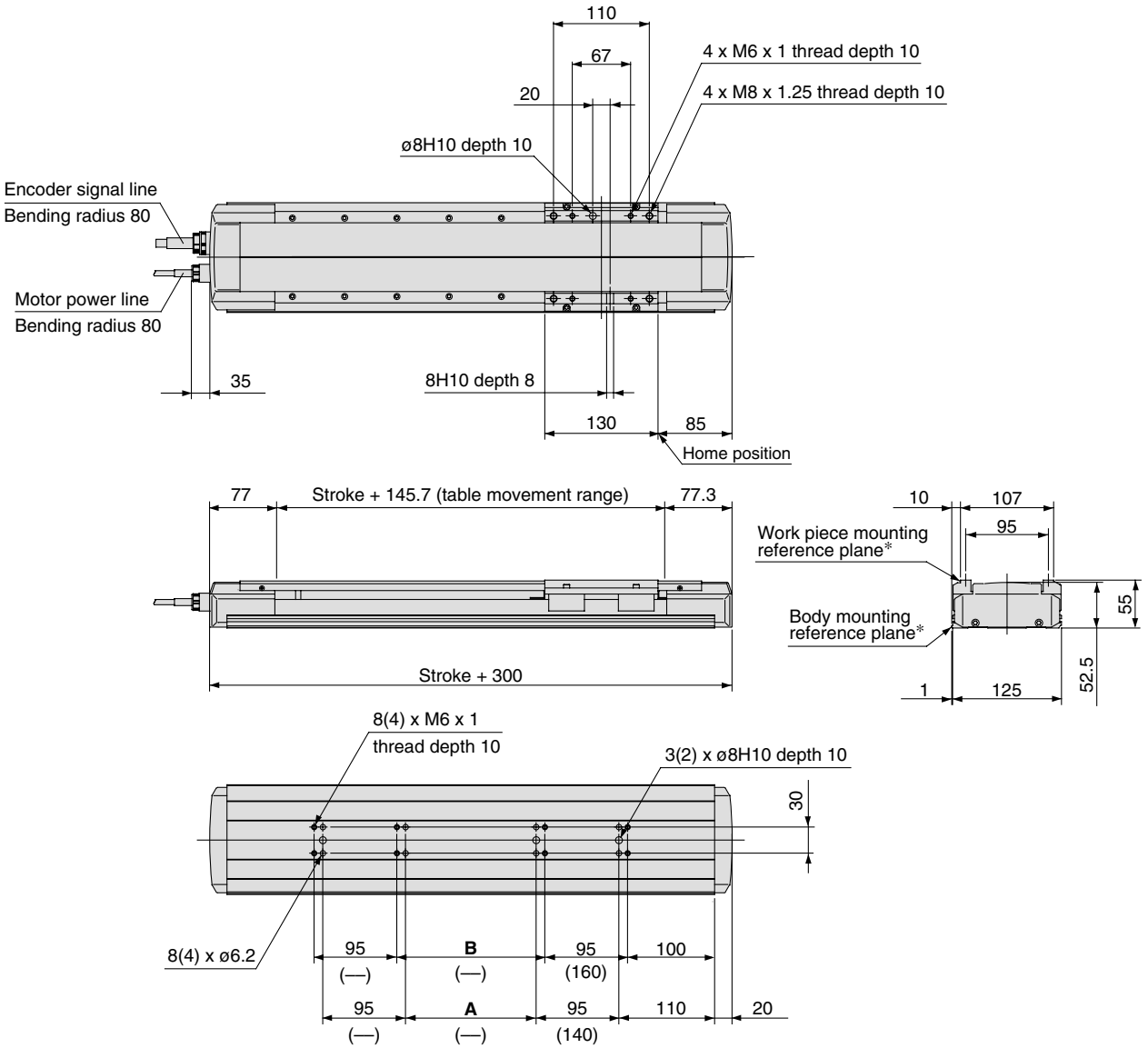
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

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

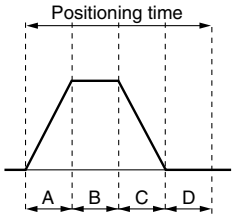
∗ Dimenstions inside ( ) are for a 100 mm stroke.

∗ 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	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/s^2

Standard Motor/ Horizontal Mount With Coupling

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Ground Ball Screw ø15 mm/10 mm lead

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			
	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			
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

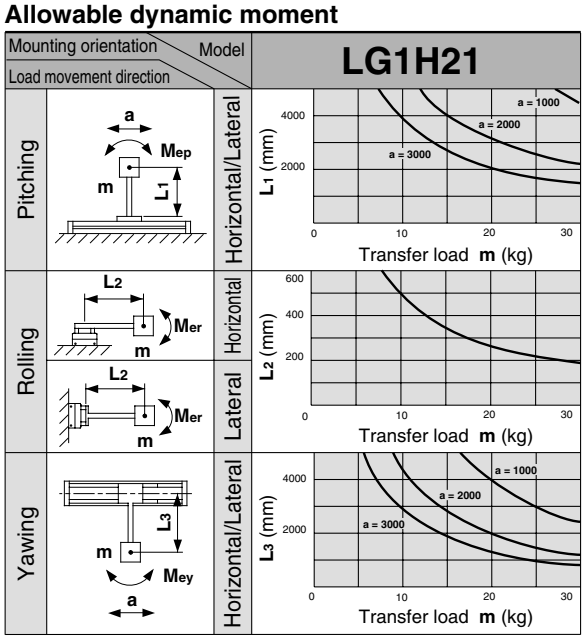
Allowable Moment (N·m)

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)

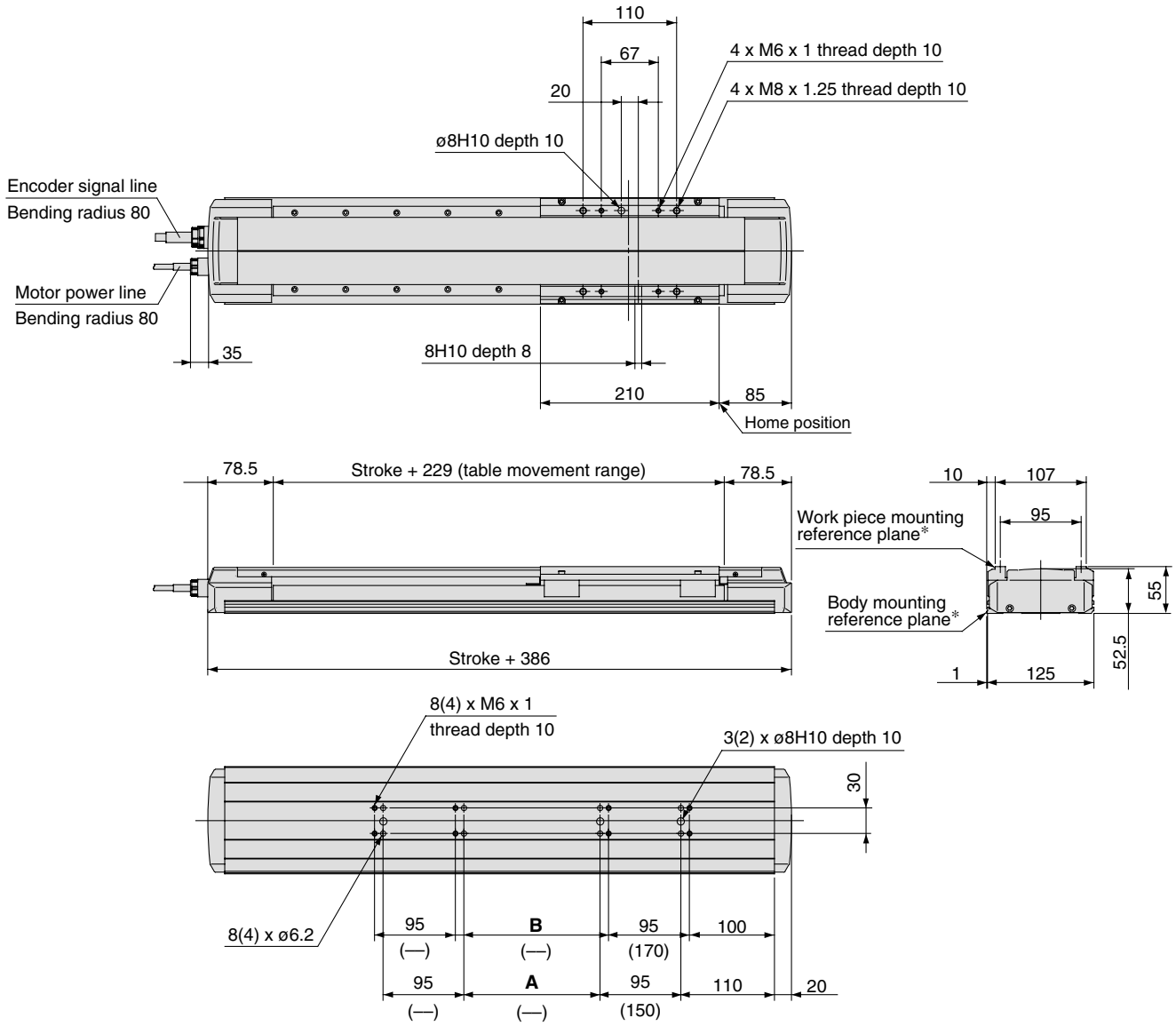
Allowable dynamic moment



Refer to page 718 for deflection data.

SMC

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

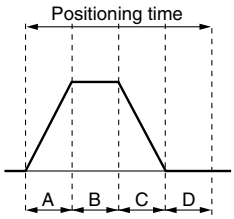
* Dimenstions inside ( ) are for a 100 mm stroke.

* 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/s^2

Standard Motor/ Horizontal Mount With Coupling

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Ground Ball Screw ø15 mm/20 mm lead

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
	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					
Controller	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

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

Symbol	Specifications
X8	Dust seal specification

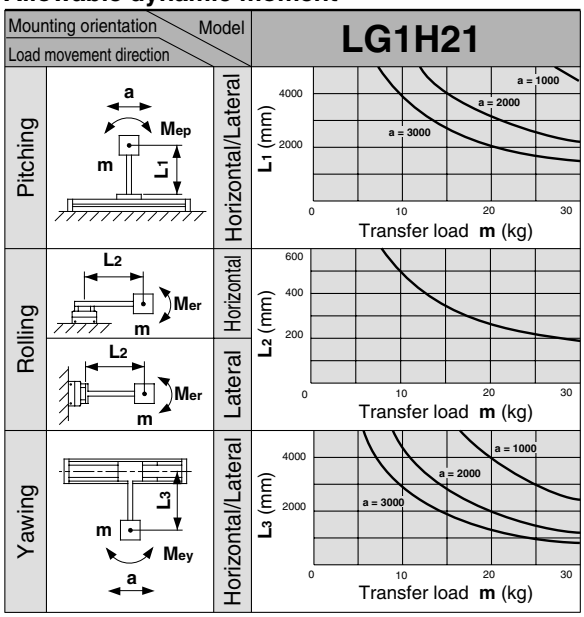
Allowable Moment (N·m)

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)

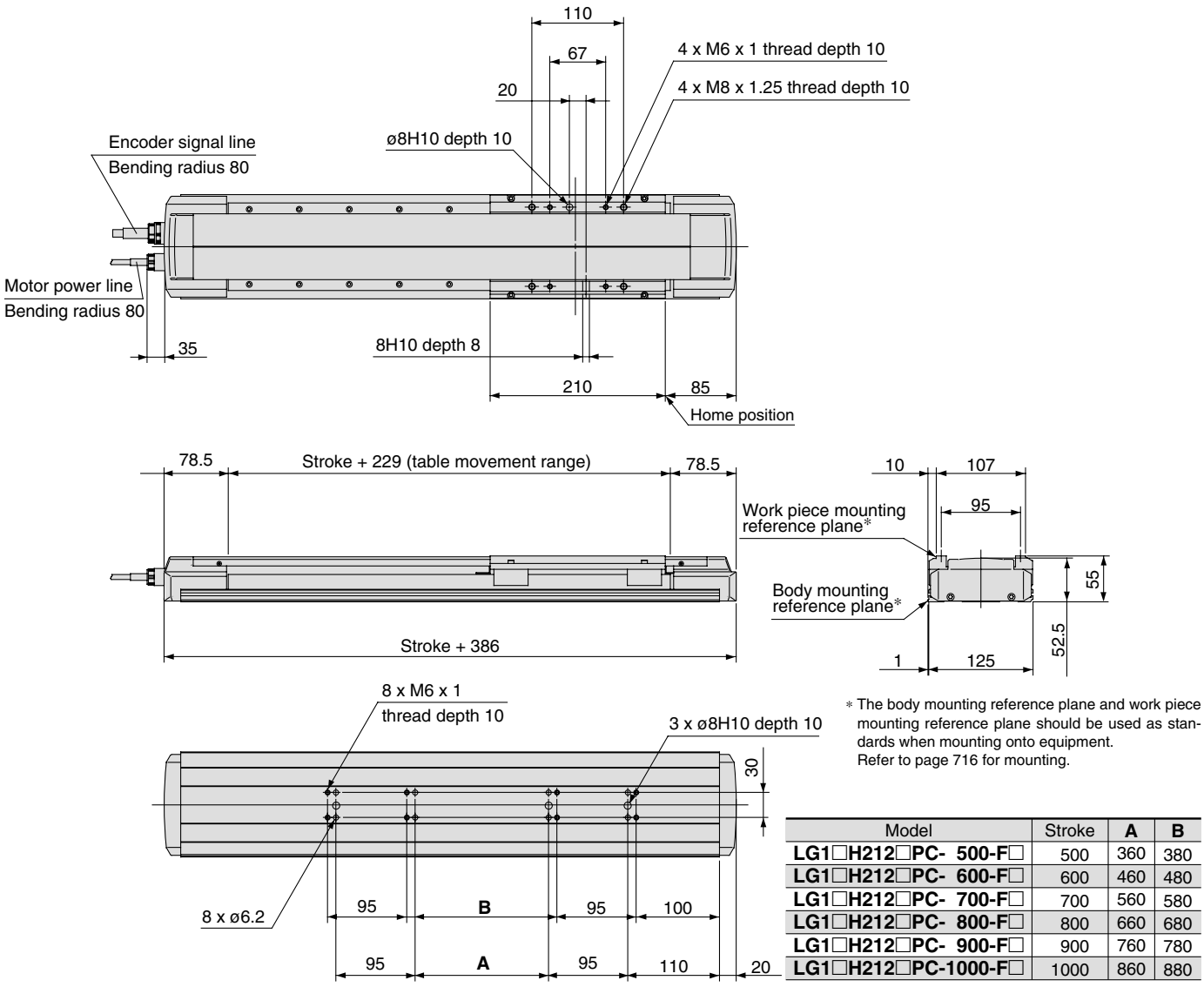
Allowable dynamic moment



Refer to page 718 for deflection data.

SMC

Dimensions/LG1□H212□PC



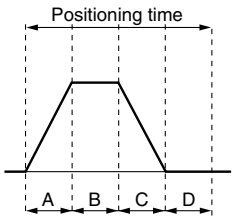
* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment.
Refer to page 716 for mounting.

Model	Stroke	A	B
LG1□H212□PC- 500-F□	500	360	380
LG1□H212□PC- 600-F□	600	460	480
LG1□H212□PC- 700-F□	700	560	580
LG1□H212□PC- 800-F□	800	660	680
LG1□H212□PC- 900-F□	900	760	780
LG1□H212□PC-1000-F□	1000	860	880

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/s^2

Maximum Speeds for Each Transfer Load

Unit (mm/s)

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

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Rolled Ball Screw ø15 mm/10 mm lead

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

Made to Order

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

Symbol	Specifications
X8	Dust seal specification

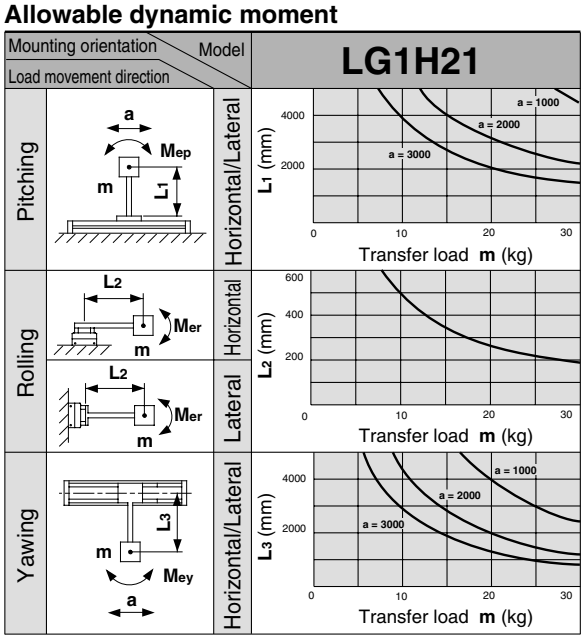
Allowable Moment (N·m)

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)

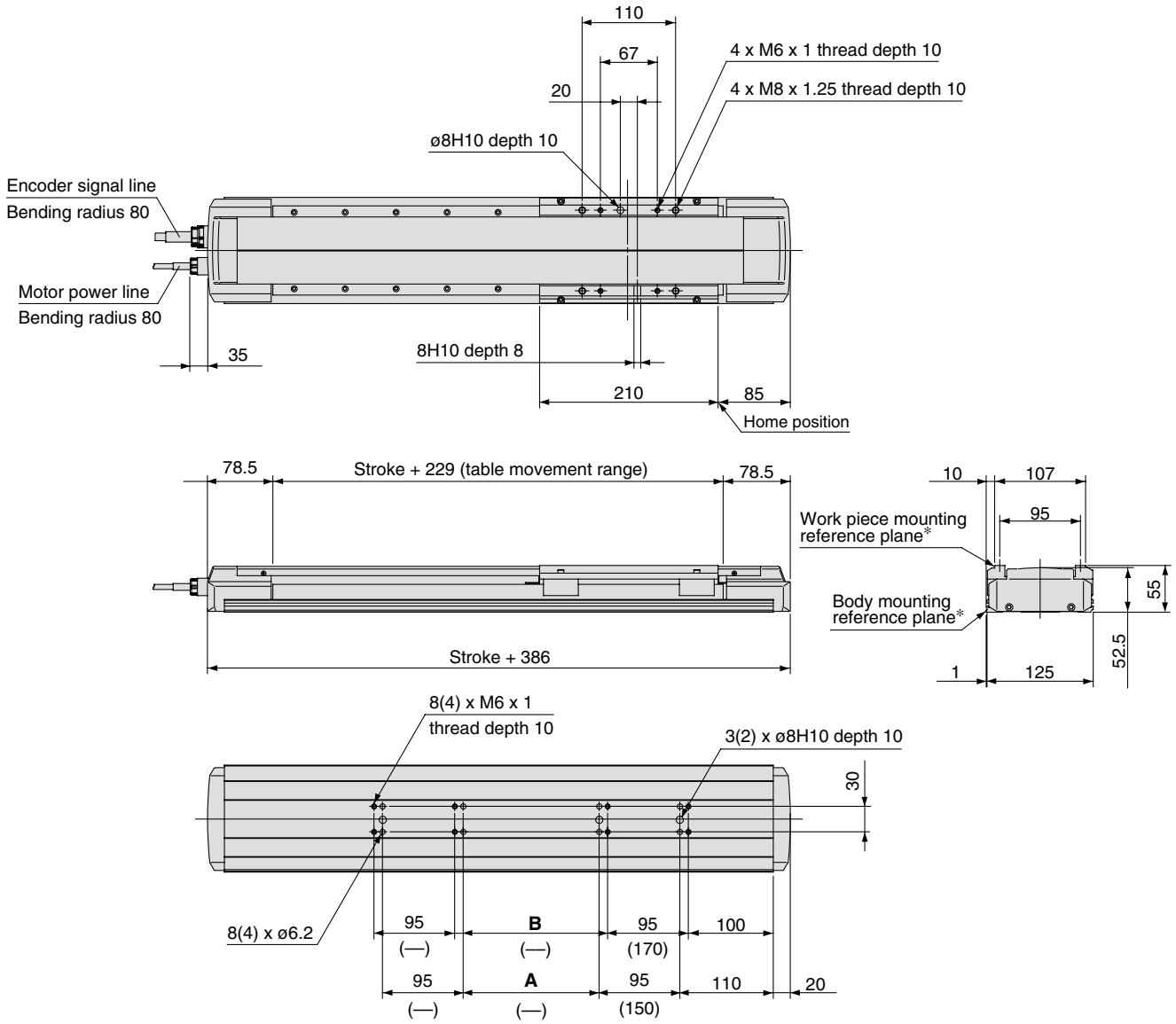
Allowable dynamic moment



Refer to page 718 for deflection data.

SMC

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

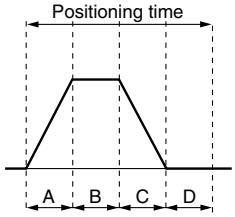
* Dimenstions inside ( ) are for a 100 mm stroke.

* 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/s^2

Standard Motor/ Horizontal Mount With Coupling

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Rolled Ball Screw ø15 mm/20 mm lead

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
	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					
Controller	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: 150, 250, 350

Example) **LG1H2121NC-550-F2-X2**
Example) **LG1H21821NC-150-F2-X2-Q**

Made to Order

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

Symbol	Specifications
X8	Dust seal specification

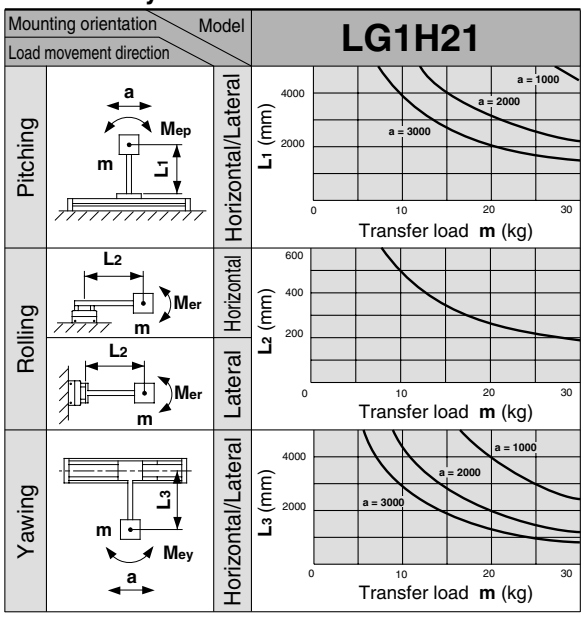
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

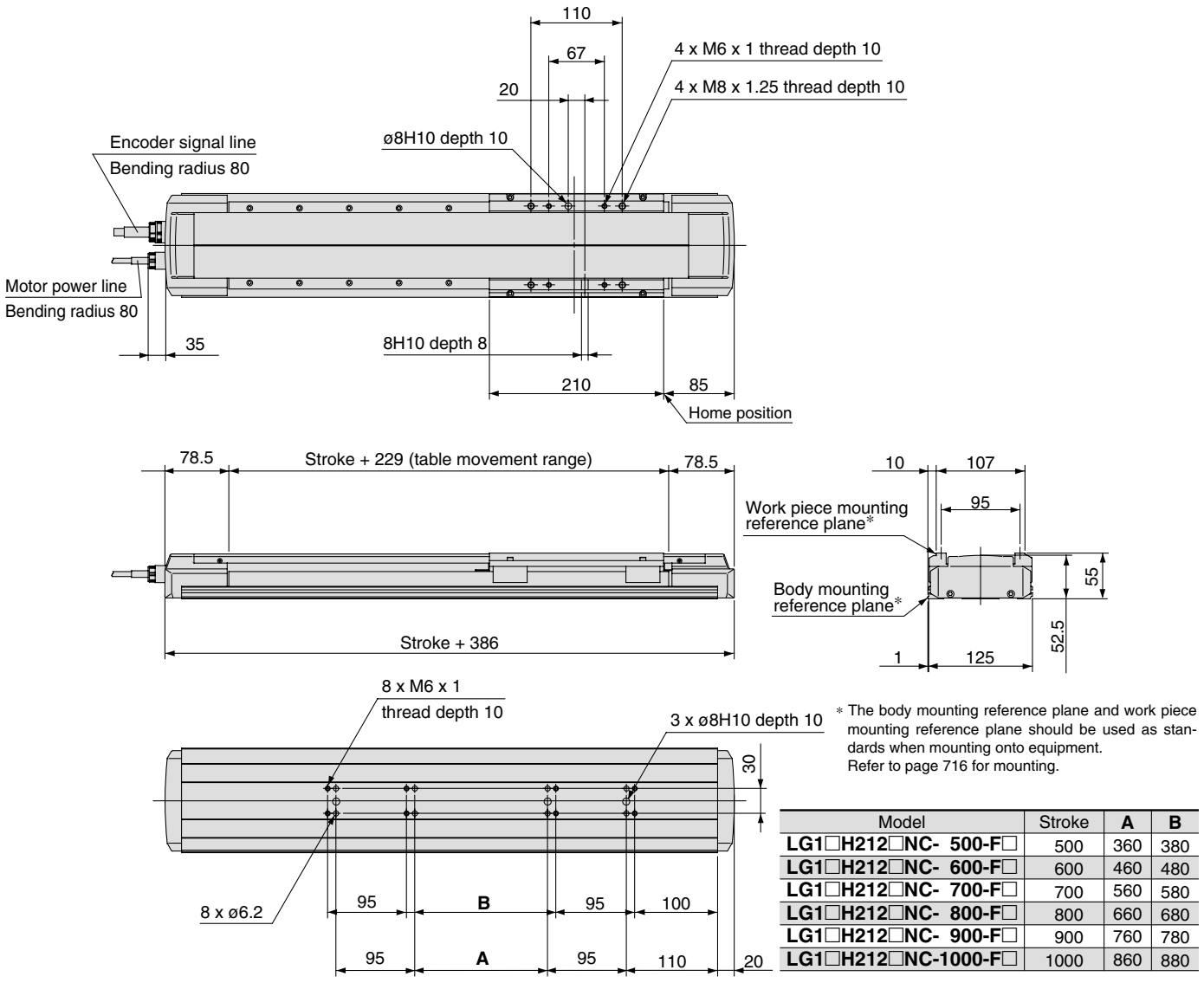
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H212□NC



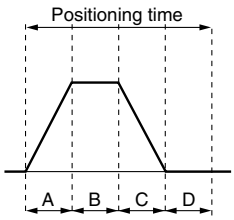
* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment.
Refer to page 716 for mounting.

Model	Stroke	A	B
LG1□H212□NC- 500-F□	500	360	380
LG1□H212□NC- 600-F□	600	460	480
LG1□H212□NC- 700-F□	700	560	580
LG1□H212□NC- 800-F□	800	660	680
LG1□H212□NC- 900-F□	900	760	780
LG1□H212□NC-1000-F□	1000	860	880

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/s^2

Maximum Speeds for Each Transfer Load

Unit (mm/s)

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

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Slide Screw ø20 mm/20 mm lead

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										
	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										
Controller	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**

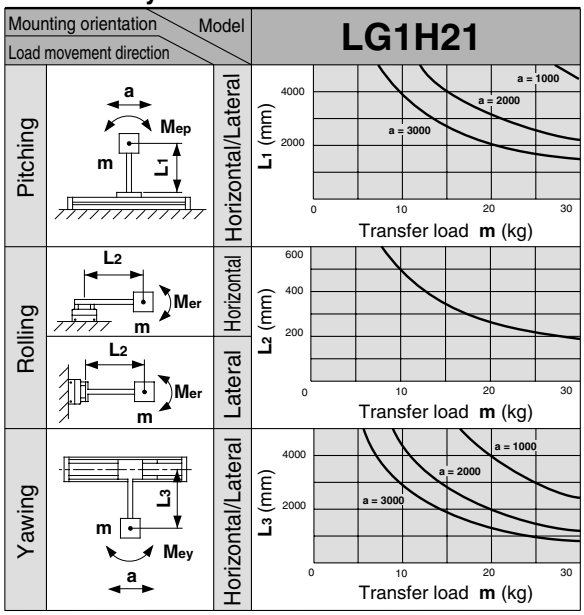
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

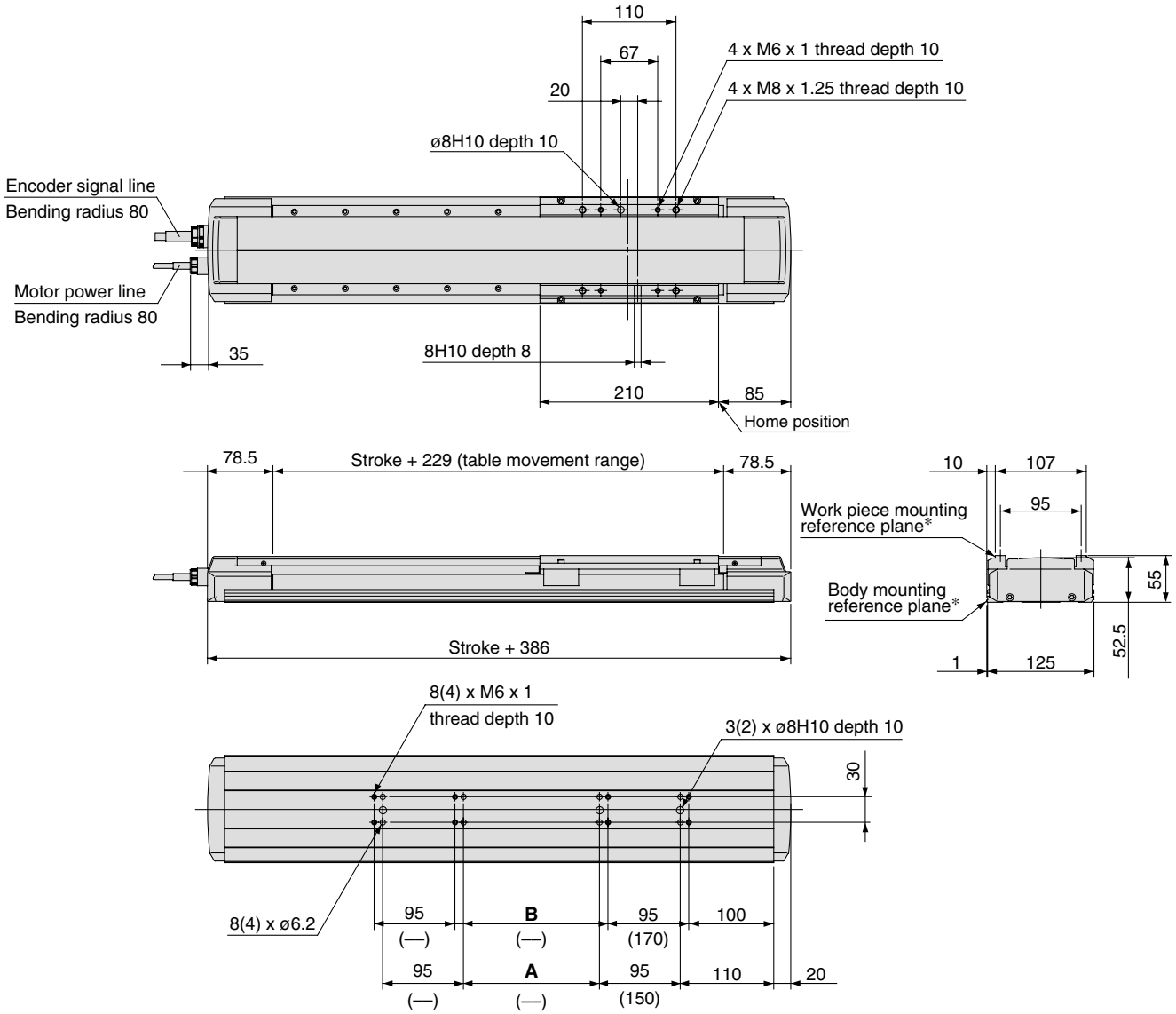
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

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

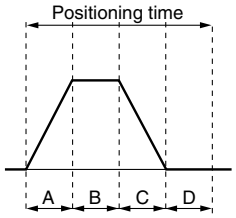
* Dimenstions inside ( ) are for a 100 mm stroke.

* 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	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/s^2

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output 100 W | High Rigidity Direct Acting Guide | Ground Ball Screw ø15 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 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

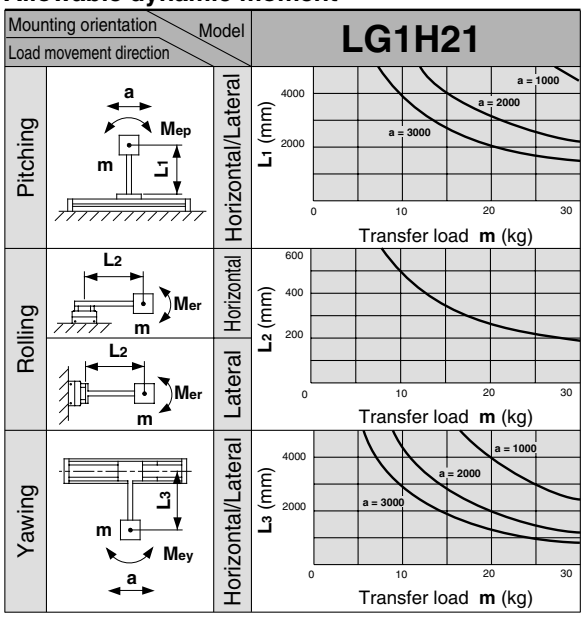
Allowable Moment (N·m)

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.

SMC

Non-standard Motor/ Horizontal Mount With Coupling

Motor Output 100 W | High Rigidity Direct Acting Guide | Ground Ball Screw ø15 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

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

Symbol	Specifications
X8	Dust seal specification

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.

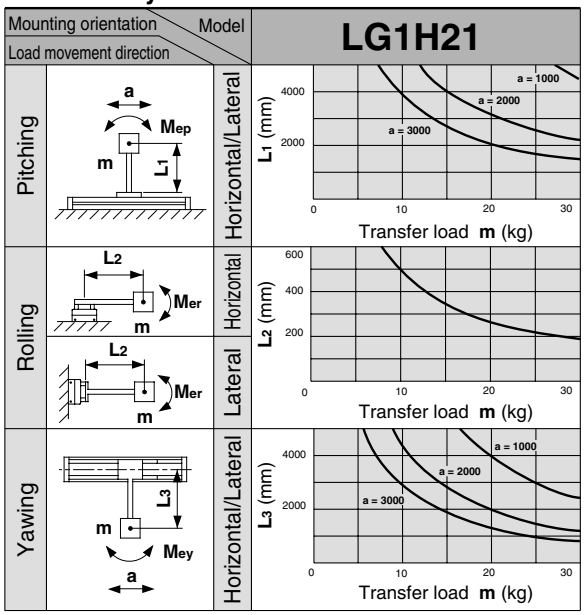
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

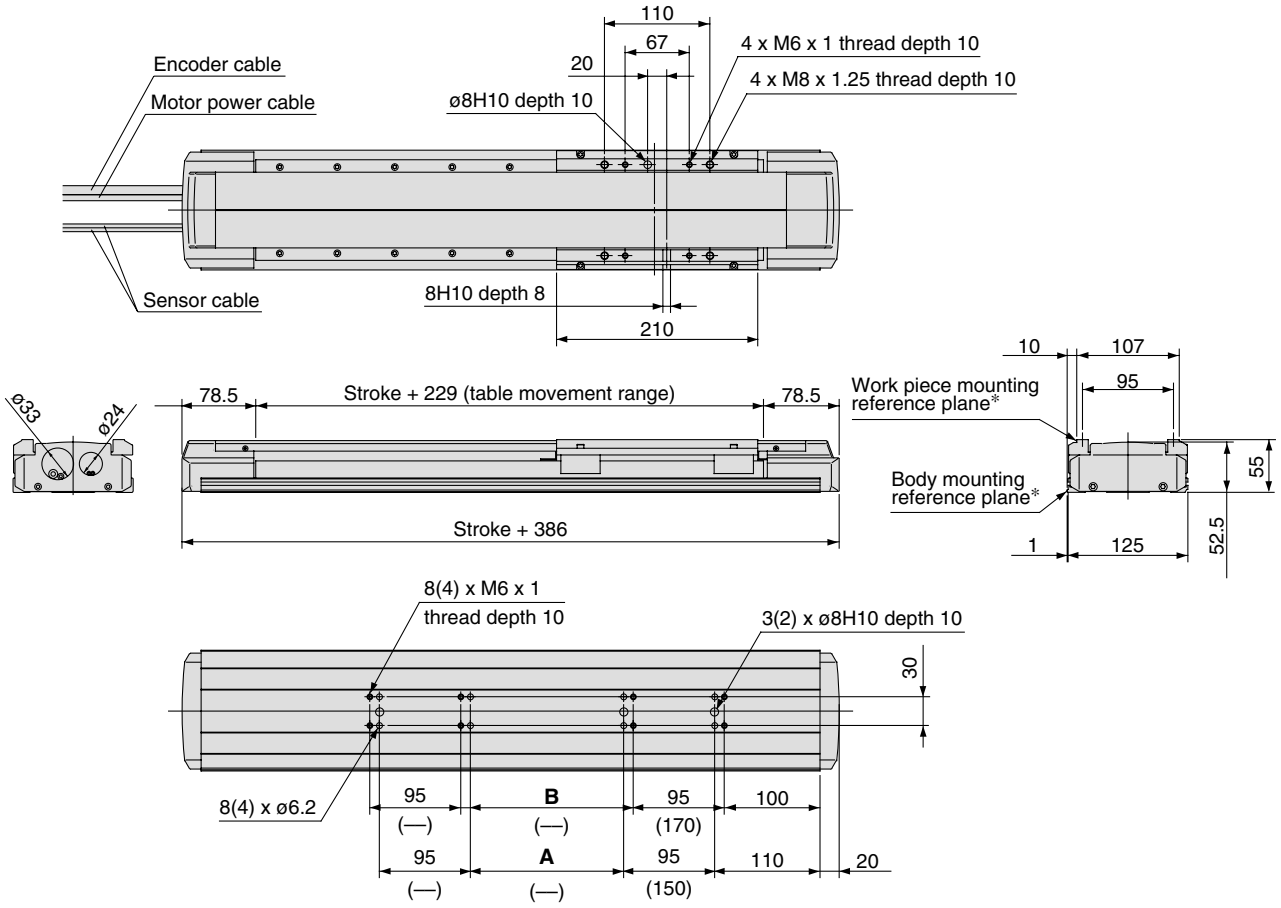
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

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

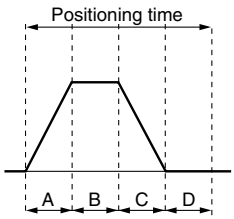
* Dimensions inside ( ) are for a 100 mm stroke.

* 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/s^2

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

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.)					

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

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

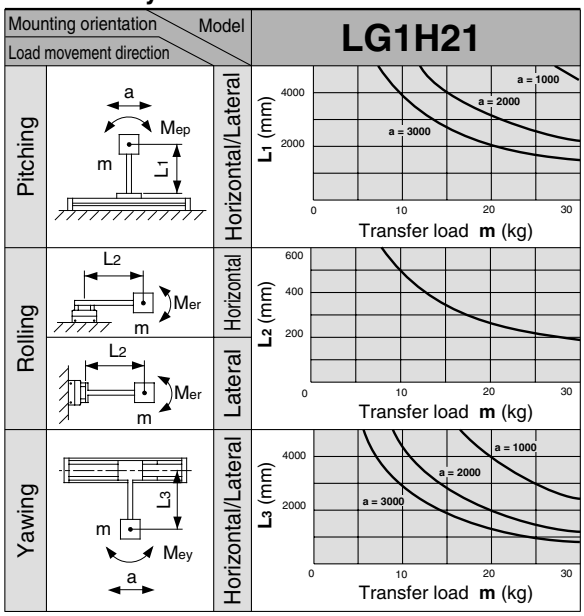
Allowable Moment (N·m)

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.

SMC

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

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

Symbol	Specifications
X8	Dust seal specification

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.)					

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

Intermediate strokes

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

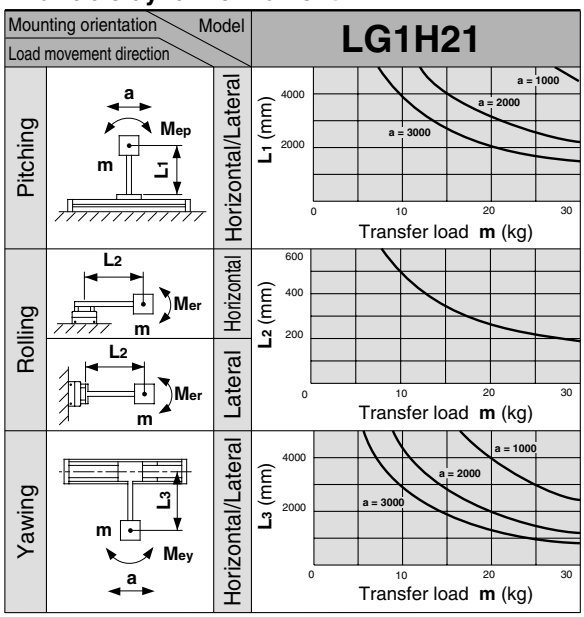
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

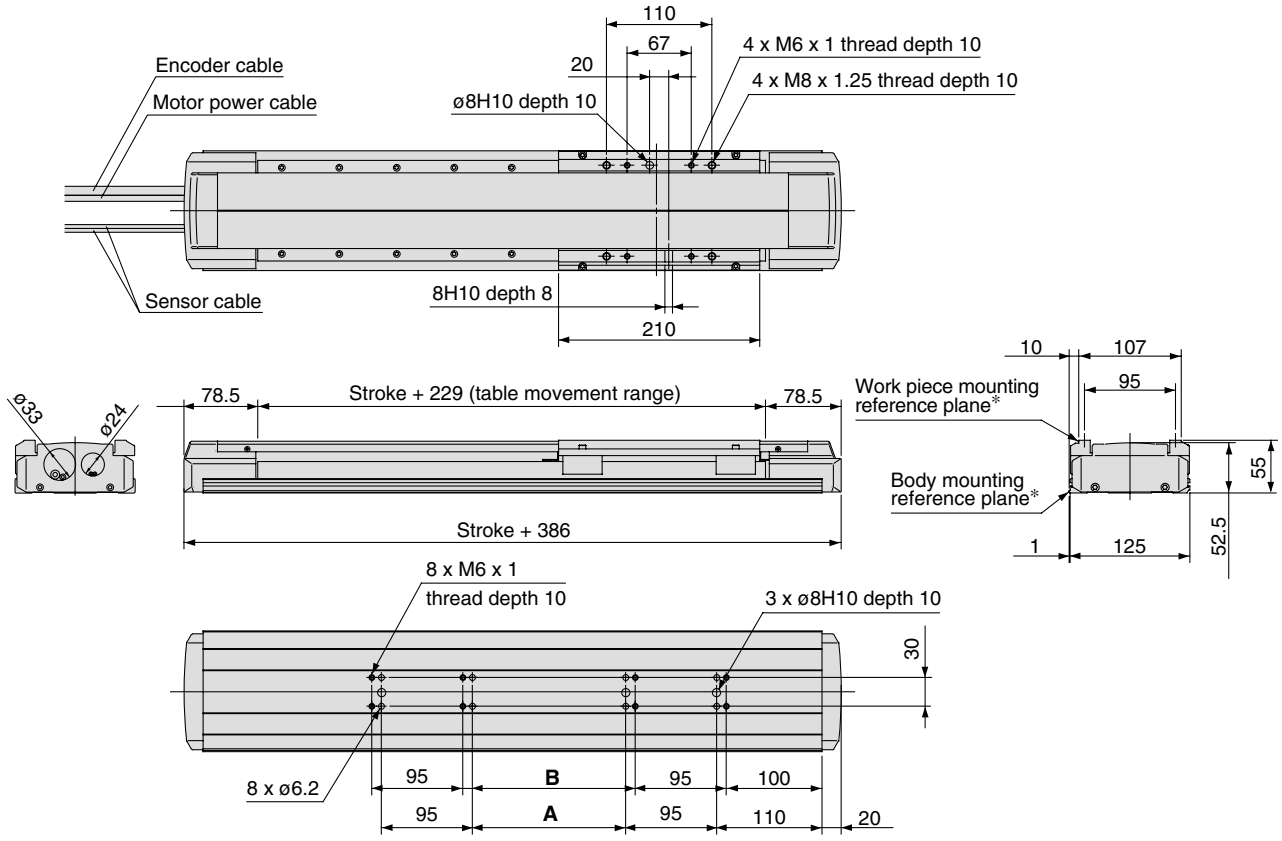
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□PC(X10)



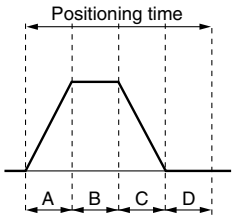
Model	Stroke	A	B
LG1□H21□2□PC- 500-F□-X10	500	360	380
LG1□H21□2□PC- 600-F□-X10	600	460	480
LG1□H21□2□PC- 700-F□-X10	700	560	580
LG1□H21□2□PC- 800-F□-X10	800	660	680
LG1□H21□2□PC- 900-F□-X10	900	760	780
LG1□H21□2□PC-1000-F□-X10	1000	860	880

* 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/s^2

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

Non-standard Motor/ Horizontal Mount With Coupling

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Rolled Ball Screw ø15 mm/10 mm lead

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

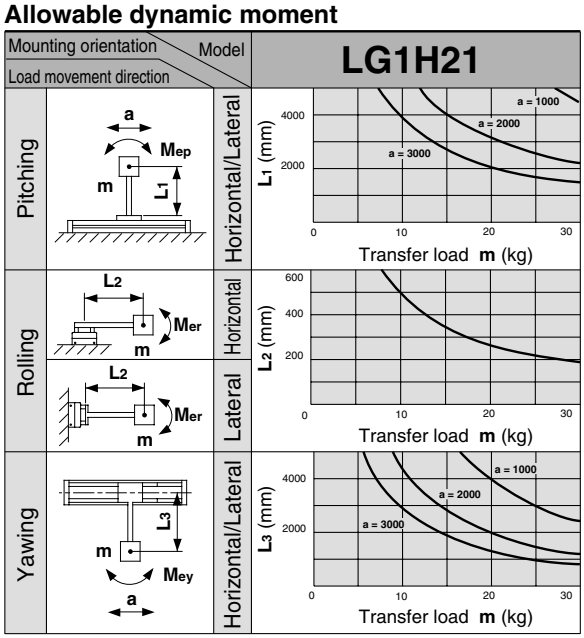
Allowable Moment (N·m)

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.

SMC

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

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

Symbol	Specifications
X8	Dust seal specification

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.

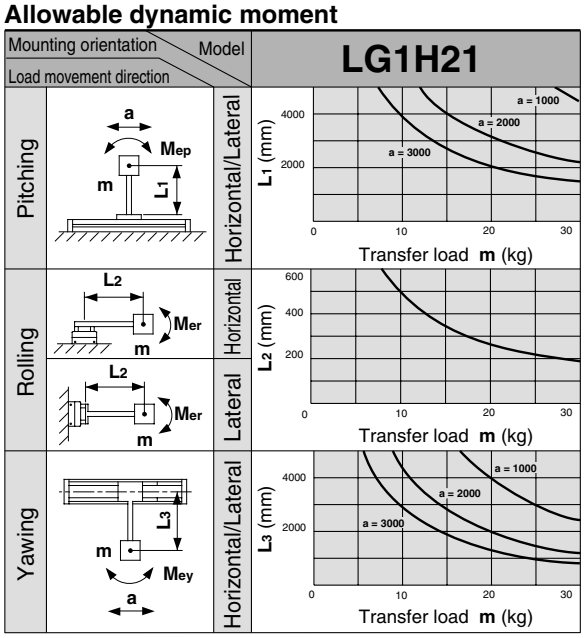
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

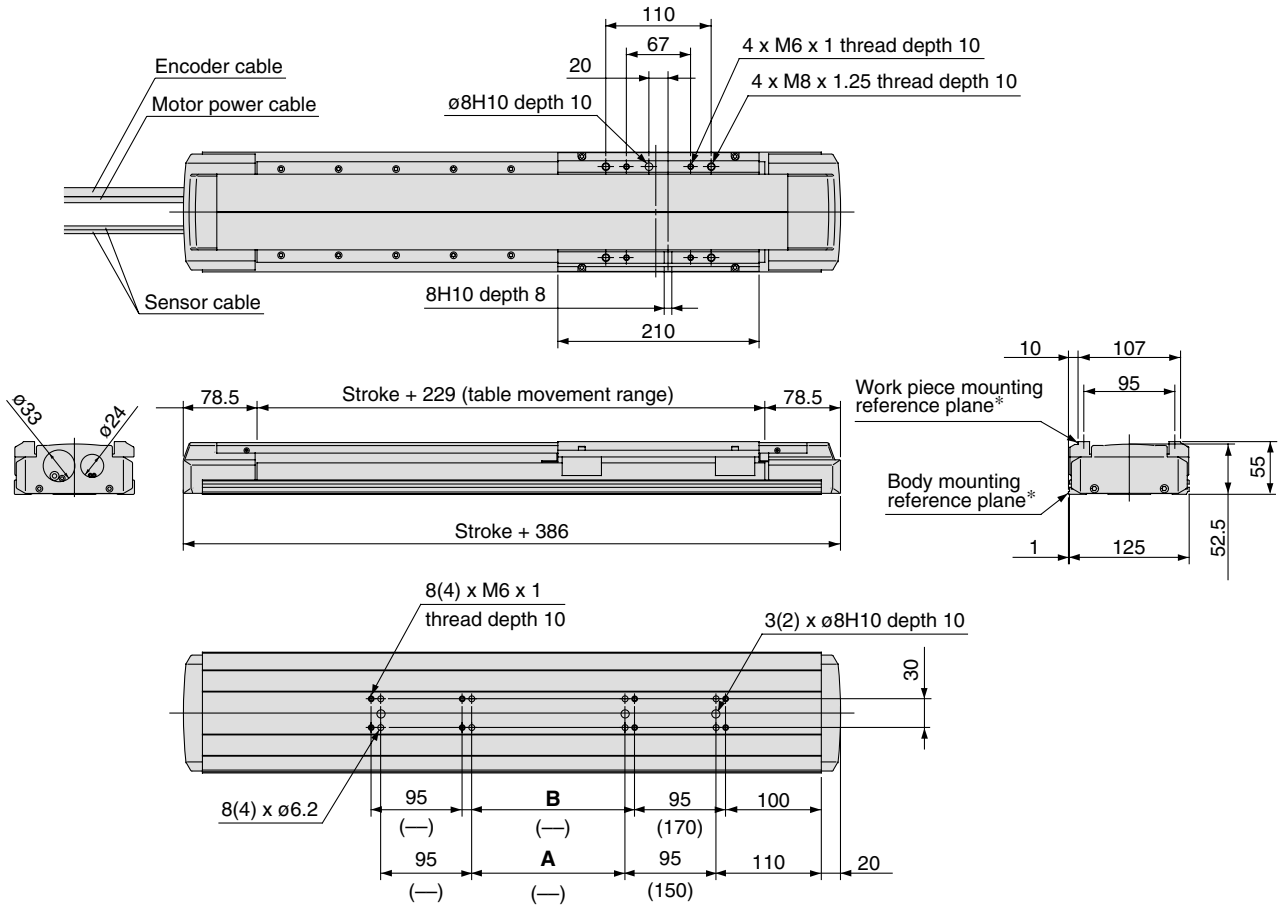
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□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

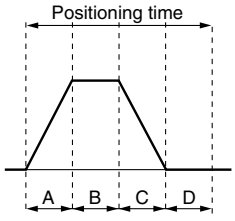
* Dimensions inside ( ) are for a 100 mm stroke.

* 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.)				
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/s^2

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

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

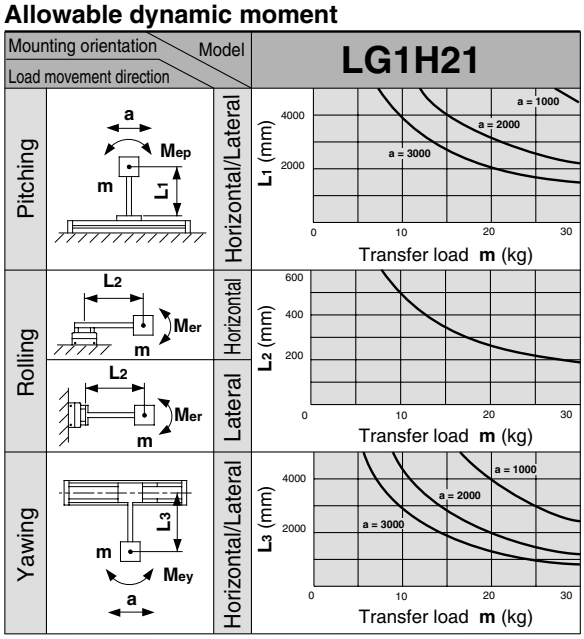
Allowable Moment (N·m)

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.

SMC

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.

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

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

Symbol	Specifications
X8	Dust seal specification

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.

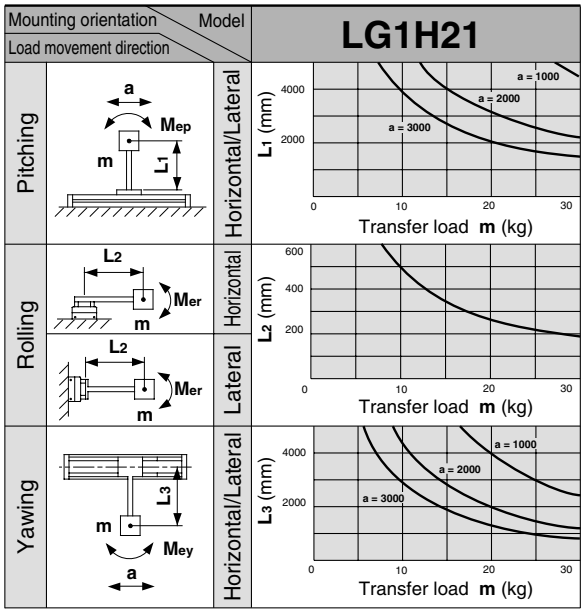
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

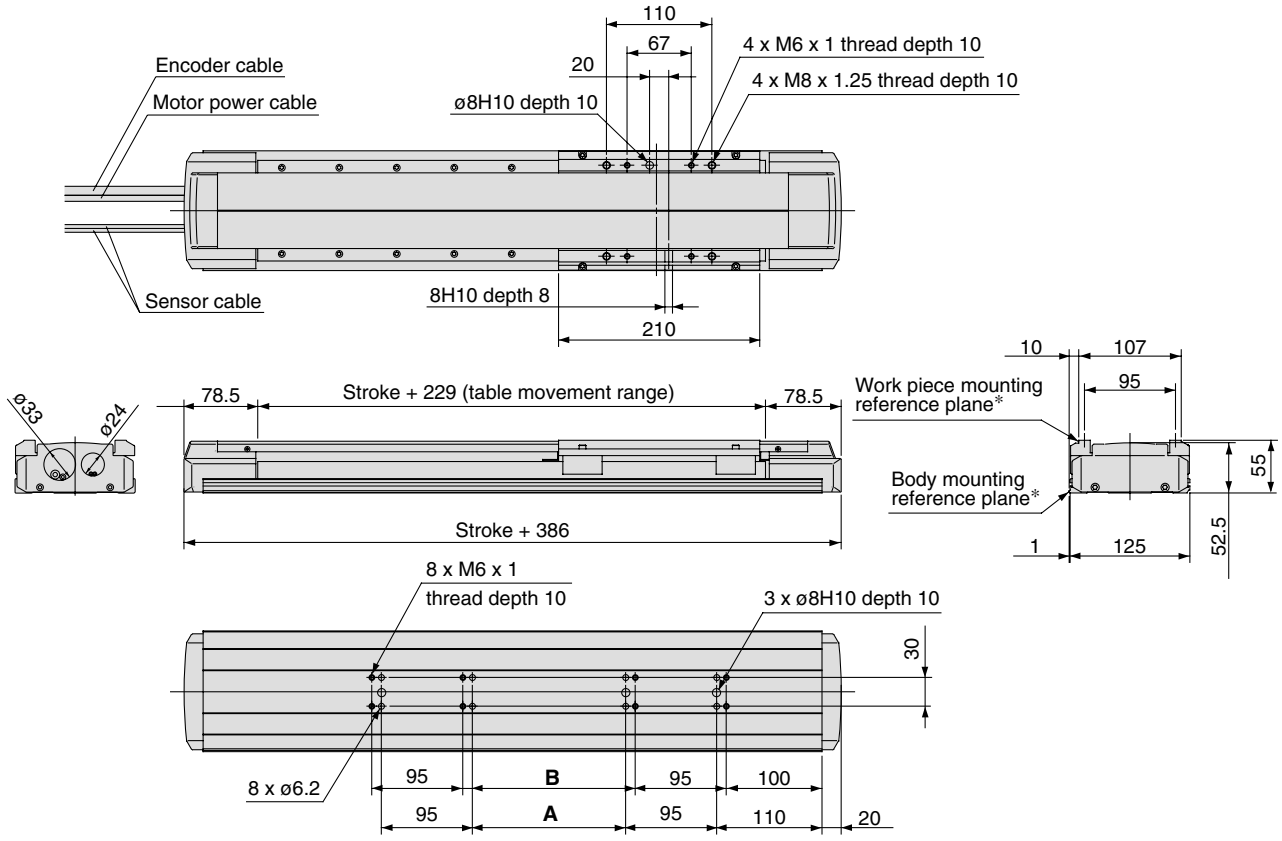
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□NC(X10)



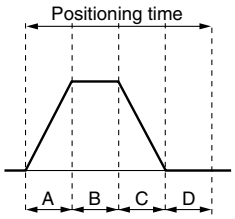
Model	Stroke	A	B
LG1□H21□2□NC- 500-F□-X10	500	360	380
LG1□H21□2□NC- 600-F□-X10	600	460	480
LG1□H21□2□NC- 700-F□-X10	700	560	580
LG1□H21□2□NC- 800-F□-X10	800	660	680
LG1□H21□2□NC- 900-F□-X10	900	760	780
LG1□H21□2□NC-1000-F□-X10	1000	860	880

* 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.)				
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/s^2

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

Non-standard Motor/ Horizontal Mount With Coupling

Series LG1□H21

Motor Output 100 W | High Rigidity Direct Acting Guide | Slide Screw ø20 mm/20 mm lead

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										
	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-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

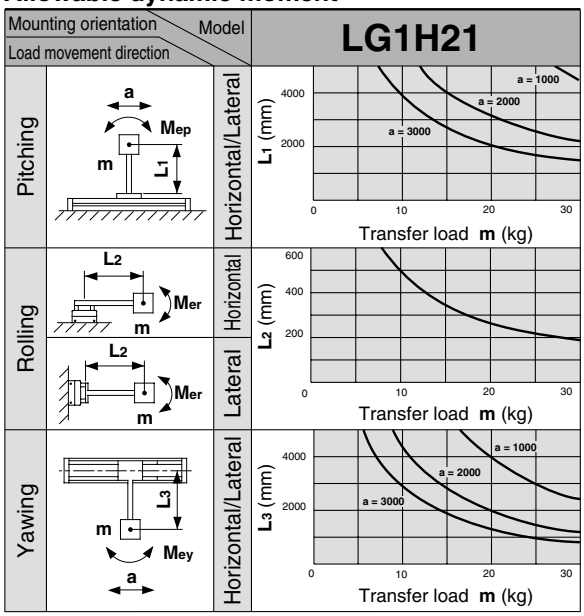
Allowable Moment (N·m)

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.

SMC

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.

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.

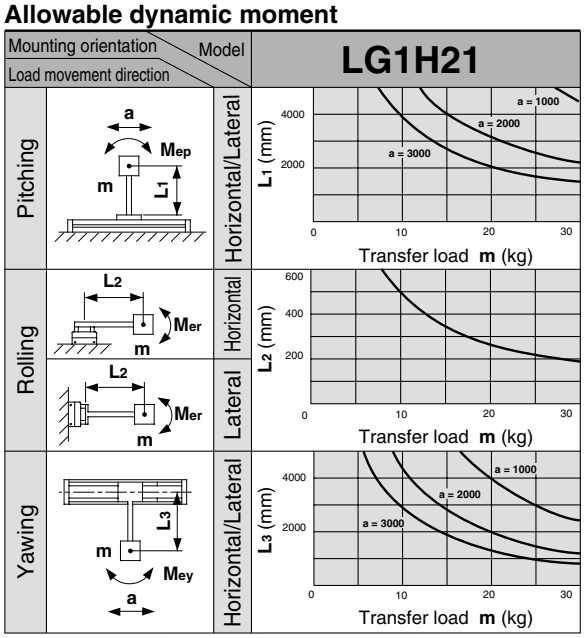
Allowable Moment (N·m)

Allowable static moment

Pitching	142
Rolling	79
Yawing	150

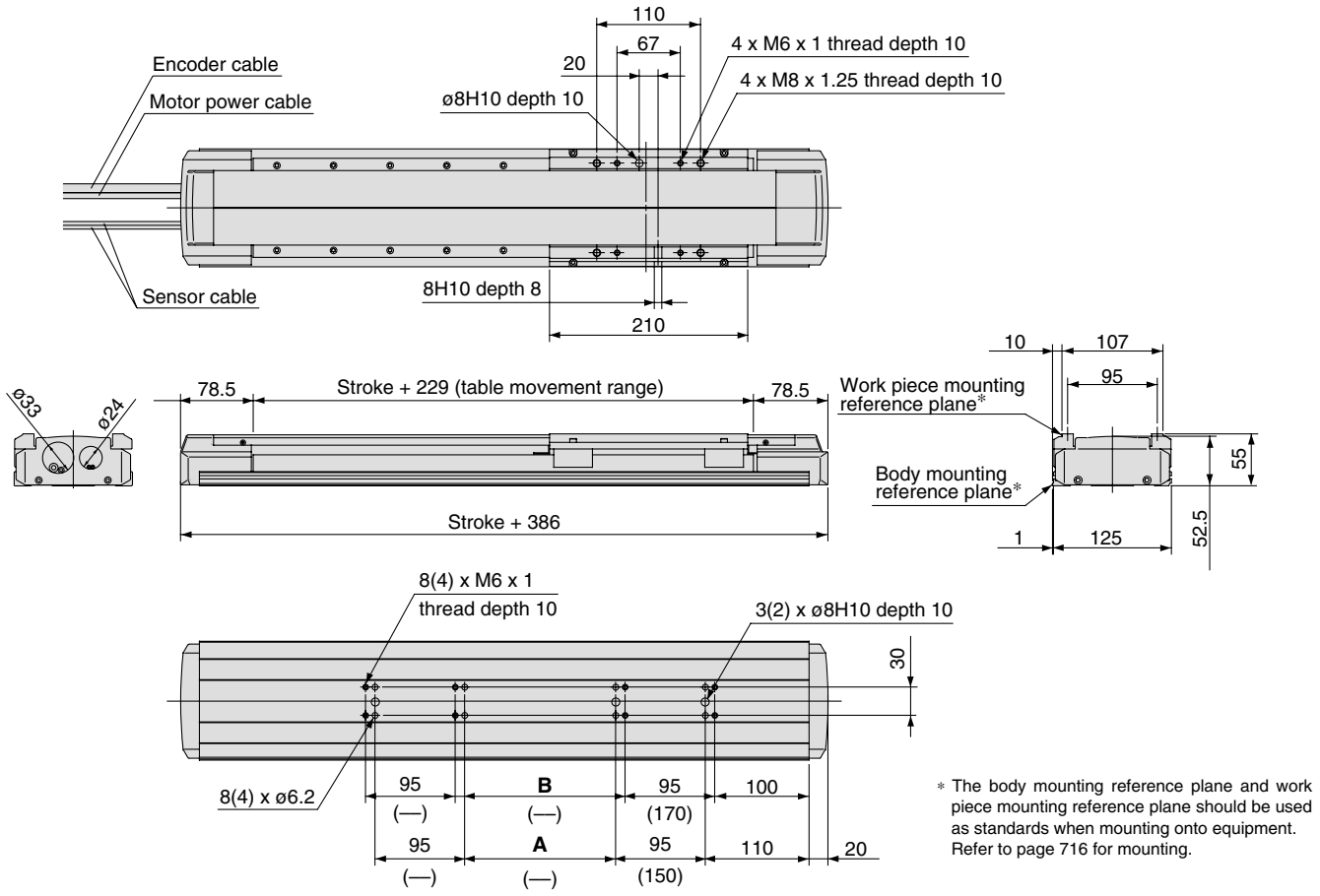
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Dynamic moment
L : Overhang to work piece center of gravity (mm)

Allowable dynamic moment



Refer to page 718 for deflection data.

Dimensions/LG1□H21□2□SC(X10)



* 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.

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

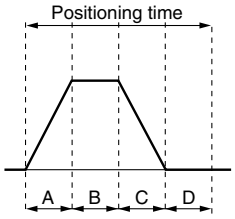
Model	Stroke	A	B
LG1□H21□2□SC- 700-F□-X10	700	560	580
LG1□H21□2□SC- 800-F□-X10	800	660	680
LG1□H21□2□SC- 900-F□-X10	900	760	780
LG1□H21□2□SC-1000-F□-X10	1000	860	880
LG1□H21□2□SC-1200-F□-X10	1200	1060	1080

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

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		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.



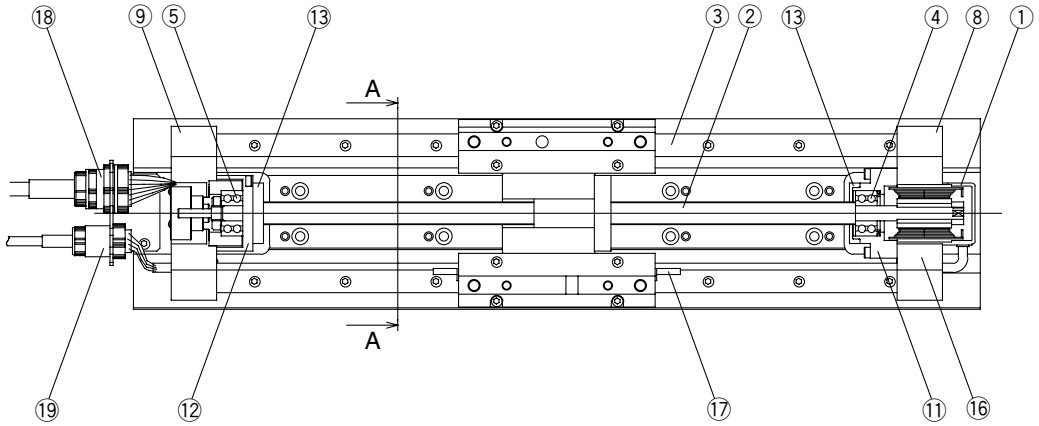
A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.4 sec.)*
Maximum acceleration: 2000 mm/s^2

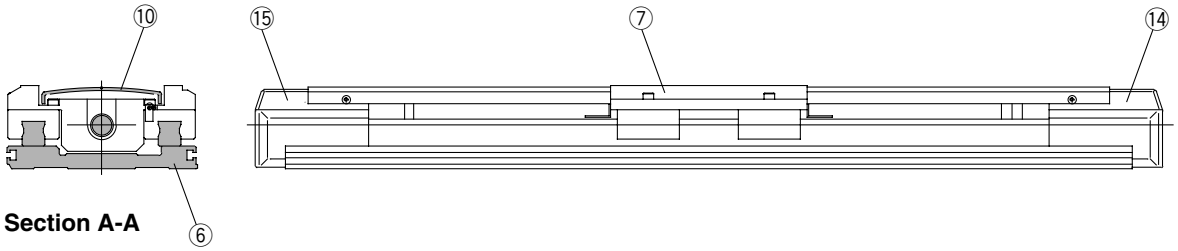
* The value is a guide when SMC's series LC1 controller is used and may vary depending on the driver capacity.

Construction

Construction/ Without Coupling

LG1H20





Section A-A

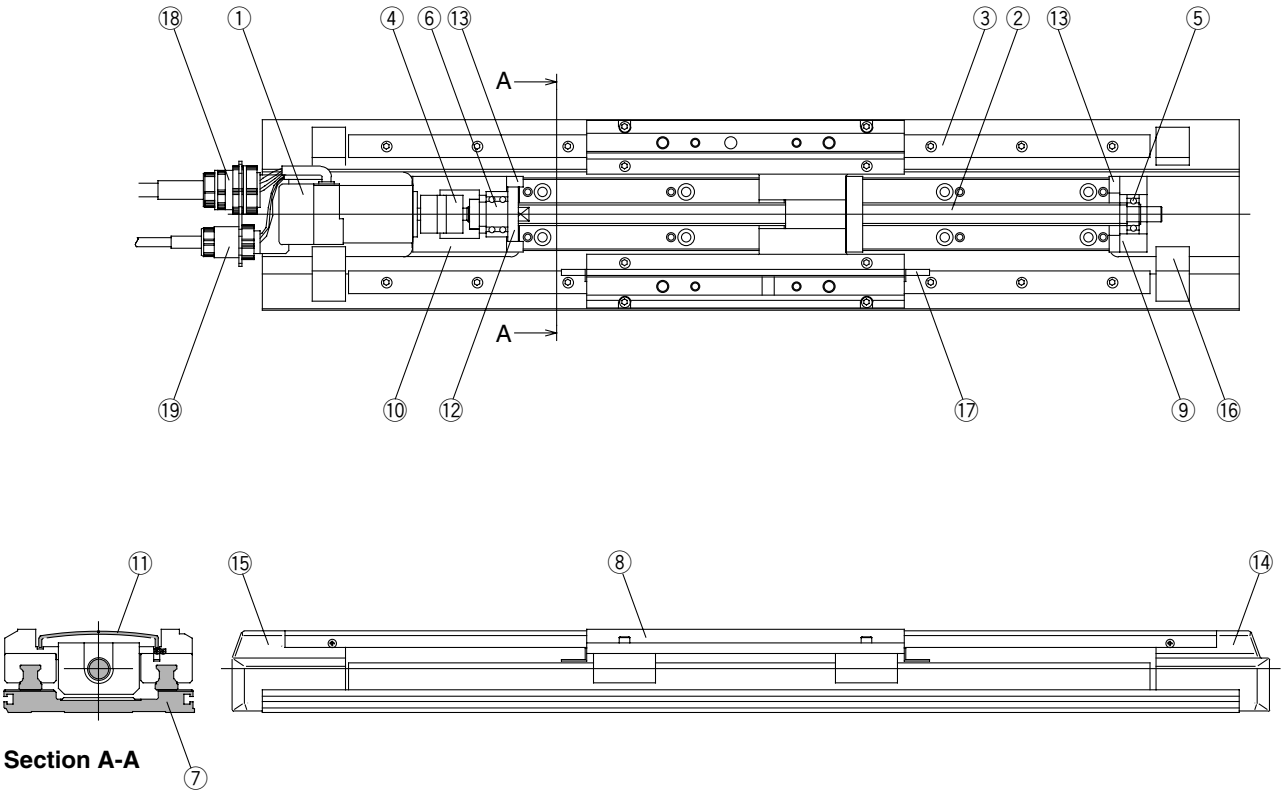
Parts list

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



Parts list

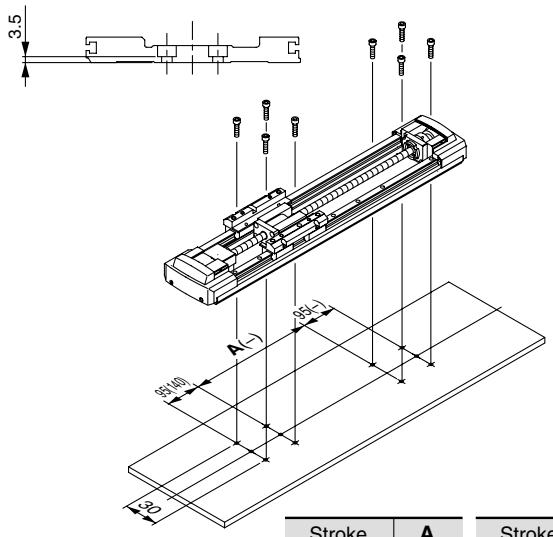
No.	Description	Material	Note
1	**AC servomotor**	—	100 W
2	**Lead screw**	—	Ball screw/Slide screw
3	**High rigidity direct acting guide**	—	
4	**Coupling**	—	
5	**Bearing R**	—	
6	**Bearing F**	—	
7	**Body**	Aluminum alloy/Stainless steel	
8	**Table**	Aluminum alloy	
9	**Housing A**	Aluminum alloy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

Mounting

Top Mount

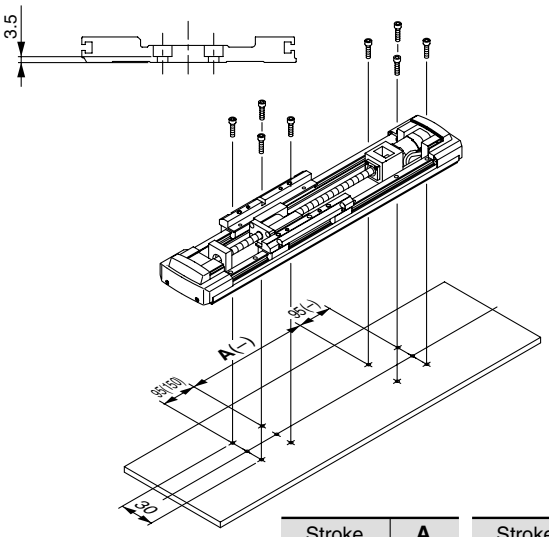
LG1H20/ Without coupling



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

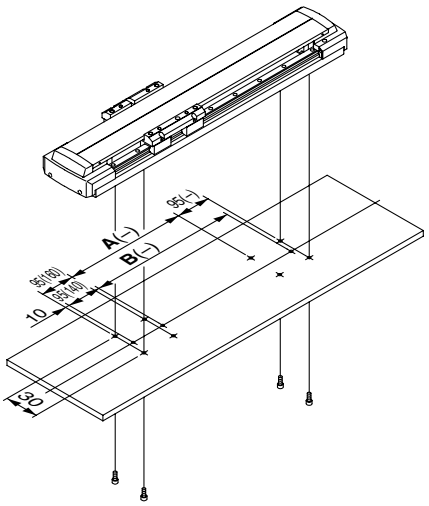


Stroke	A	Stroke	A
100	—	700	560
200	60	800	660
300	160	900	760
400	260	1000	860
500	360	1200	1060
600	460		

Dimensions inside ( ) are for a 100 mm stroke.

Bottom Mount

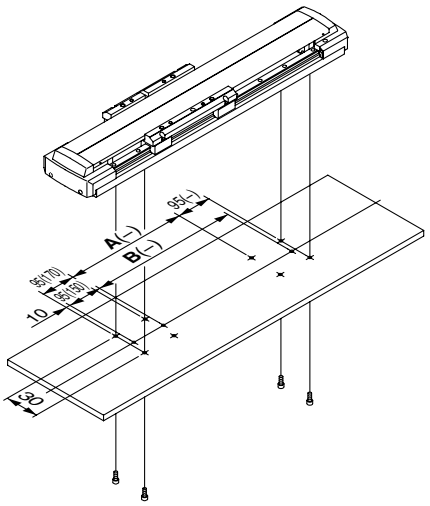
LG1H20/ Without coupling



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



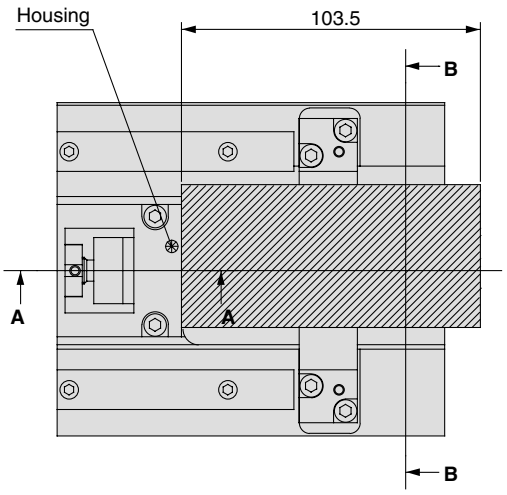
Stroke	A	B	Stroke	A	B
100	—	—	700	580	655
200	80	155	800	680	755
300	180	255	900	780	855
400	280	355	1000	880	955
500	380	455	1200	1080	1155
600	480	555			

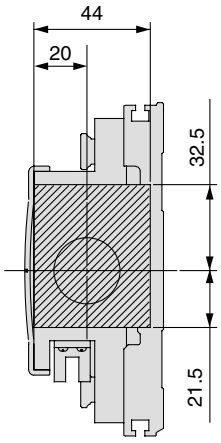
Dimensions inside ( ) are for a 100 mm stroke.

Non-standard Motor Mounting Dimensions

Non-standard Motor Mounting Dimensions/ With Coupling

LG1H21





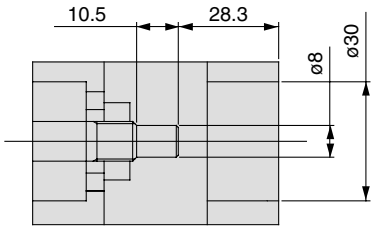
Section BB

Motor mounting area dimensions

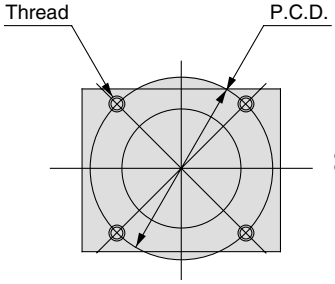
Manufacturer	Mitsubishi Electric Corporation
Thread size	M4 x 0.7
Effective thread length (mm)	8
Quantity	2
P.C.D.	46

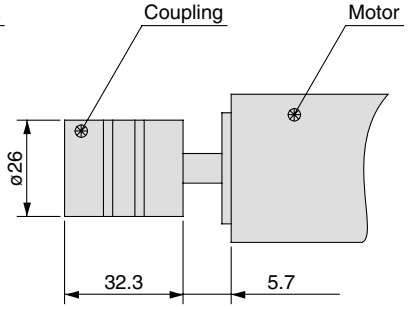
Motor mounting area

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



Section AA (Housing interior)





Coupling mounting dimensions

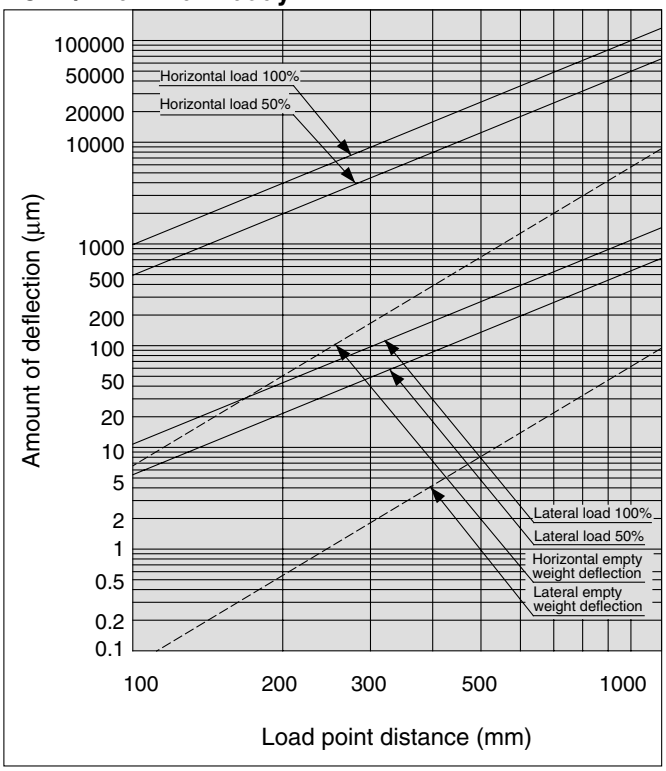
Series *LG1H*
Deflection Data

Deflection Data

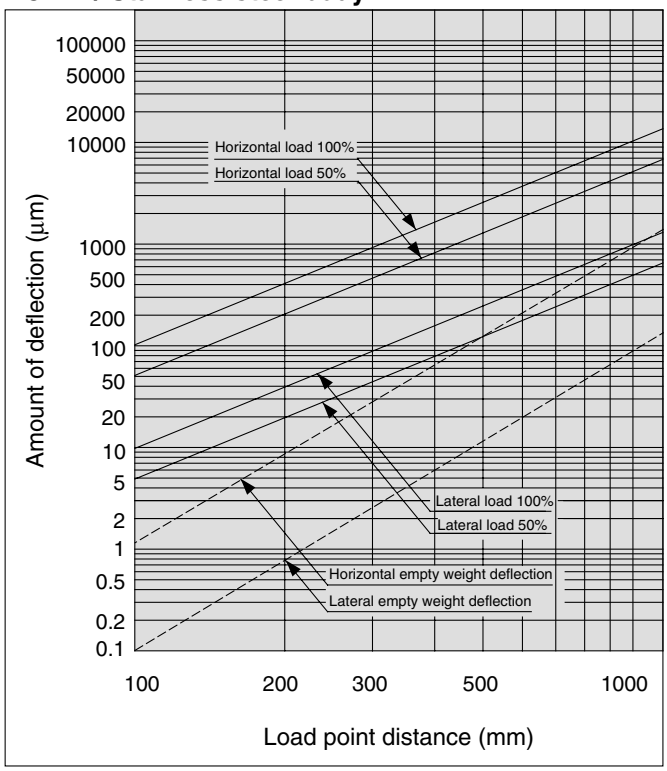
∗ Calculated values based on the body's sectional secondary moment.

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

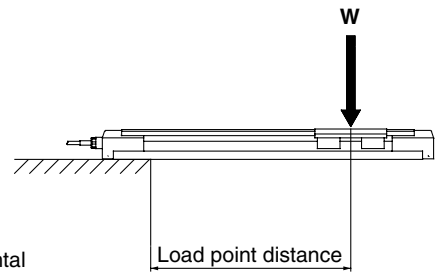
LG1H/ Aluminum body



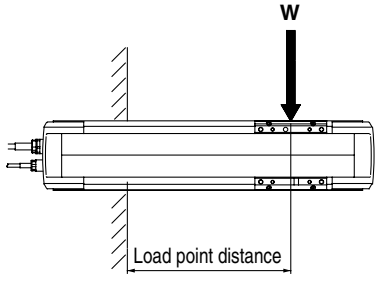
LG1TH/ Stainless steel body



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



Horizontal



Lateral