Electric Actuator with Integrated Guide

Series LTF

Series	Motor type	Guide type	Mounting orientation	Model	Lead screw (lead) mm		Page
					Ground ball screw	Rolled ball screw	
LTF	Standard motor	Frame-type linear guide	Horizontal	LTF6	6 10	6 10	P.2
				LTF8	10 20	10 20	P.10
			Vertical	LTF6	6 10	6 10	P.18
				LTF8	10 20	10 20	P.26
	Non-standard motor		Horizontal	LTF6	6 10	6 10	P.34
				LTF8	10 20	10 20	P.42
			Vertical	LTF6	6 10	6 10	P.50
				LTF8	10 20	10 20	P.58

Part Number Designations

LTF 6 G E 1 P F – 100 [ ] – R 2 – X10

Series

6	Series 6
8	Series 8

Motor specification

Nil	Standard motor
G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Motor output

E	100W
F	200W

Power supply voltage

1	100V AC 50/60Hz
2	200V AC 50/60Hz
0	Without motor

Lead screw lead

F	6mm
H	10mm
L	20mm

Lead screw type

P	Ground ball screw
N	Rolled ball screw

Brake

Nil	None
K	With brake

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Switch specification

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

Motor specification

Nil	Standard motor
X10	Non-standard motor

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

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/6mm lead

How to Order

LTF6E 1 PF — Stroke — R 2

Power supply voltage

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

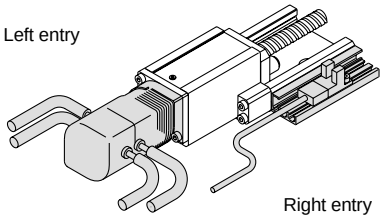
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

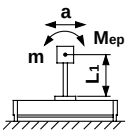
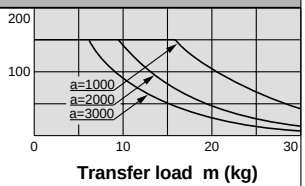
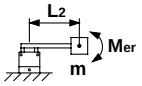
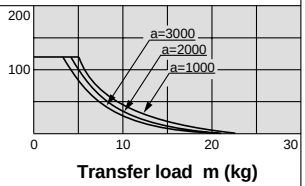
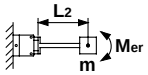
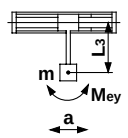
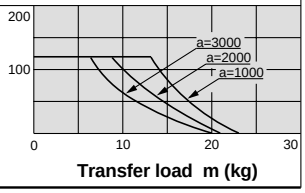


Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.2	2.7	3.2	3.7	4.2	4.7
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	30					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2HF□-□□ (Refer to page 73 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

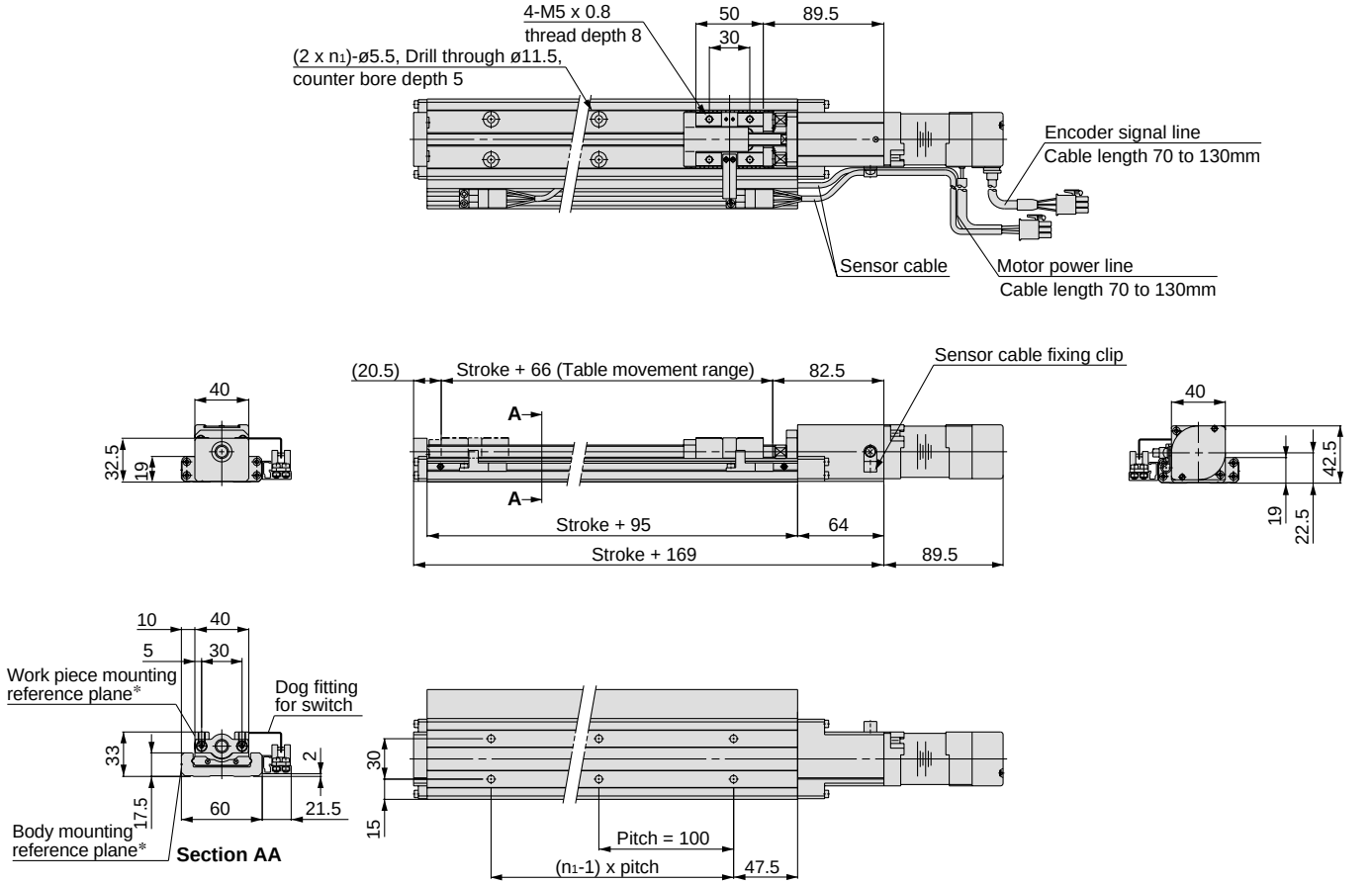
m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6E□PF

Scale: 18%



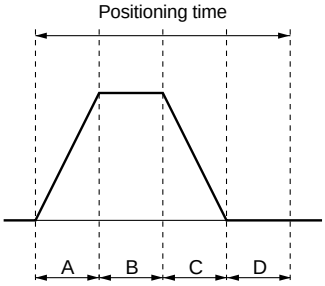
Model	Stroke	n_1
LTF6E□PF- 100-□□	100	2
LTF6E□PF- 200-□□	200	3
LTF6E□PF- 300-□□	300	4
LTF6E□PF- 400-□□	400	5
LTF6E□PF- 500-□□	500	6
LTF6E□PF- 600-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/s²

Series LTF6

Motor Output **100**W

Ground Ball Screw ø**10**mm/**10**mm lead

How to Order

LTF6E **1** **PH** — **Stroke** — **R** **2**

Power supply voltage

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

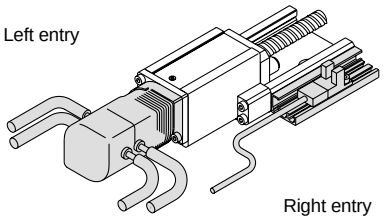
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

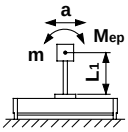
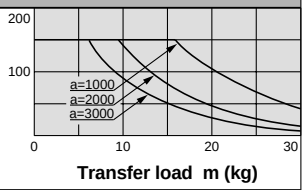
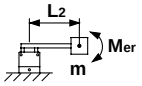
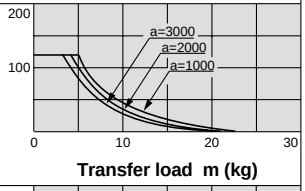
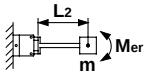
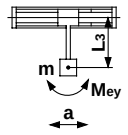
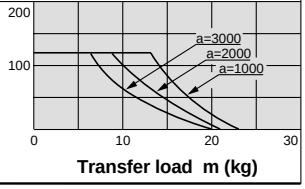


Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.2	2.7	3.2	3.7	4.2	4.7
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	15					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2HH□-□□ (Refer to page 73 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

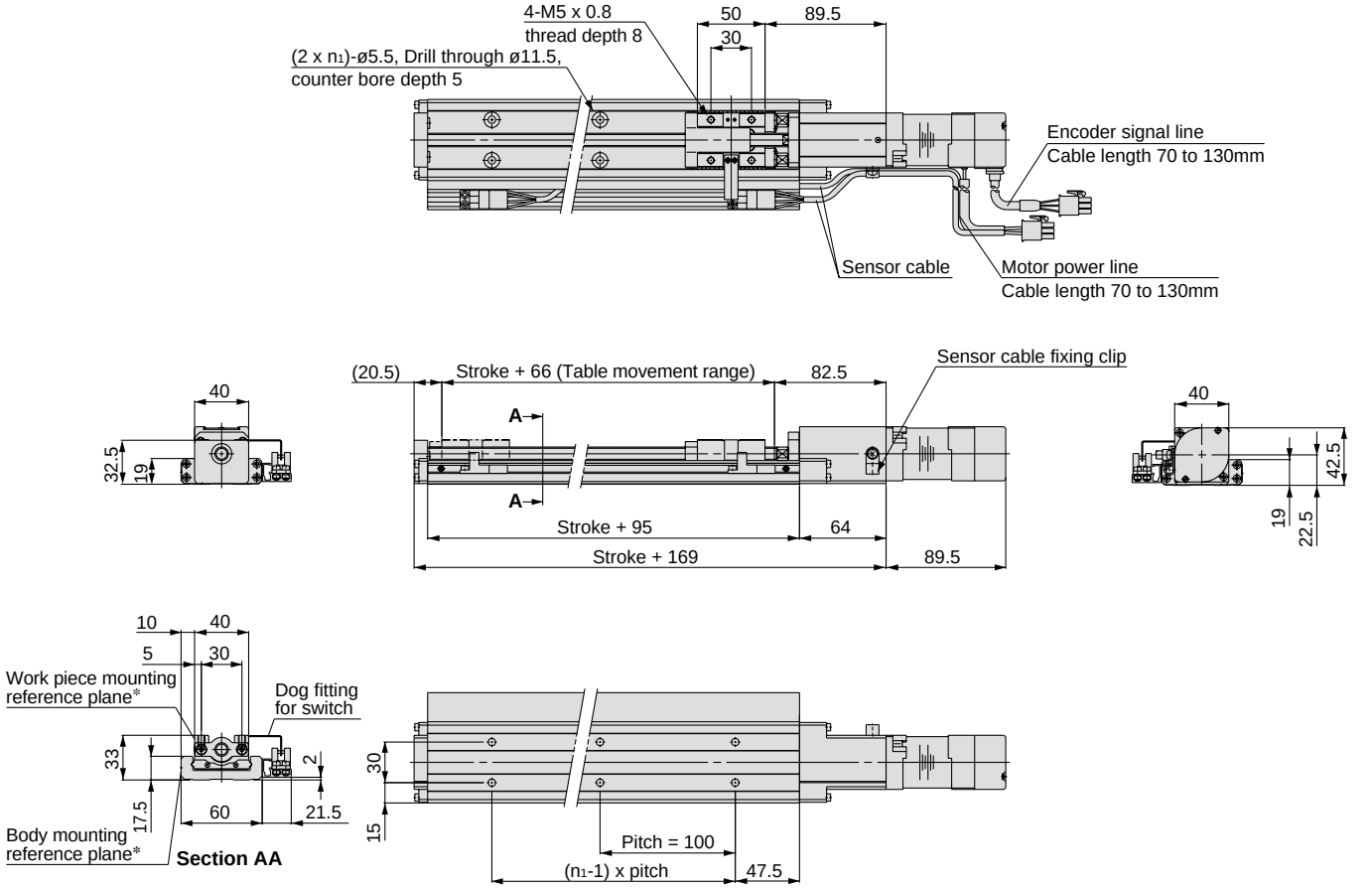
m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6E□PH

Scale: 18%



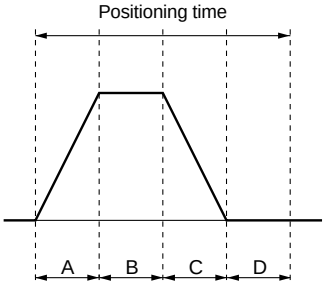
Model	Stroke	n_1
LTF6E□PH- 100-□□	100	2
LTF6E□PH- 200-□□	200	3
LTF6E□PH- 300-□□	300	4
LTF6E□PH- 400-□□	400	5
LTF6E□PH- 500-□□	500	6
LTF6E□PH- 600-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/s²

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/6mm lead

How to Order

LTF6E [1] [NF] — [Stroke] — [R] [2]

Power supply voltage

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

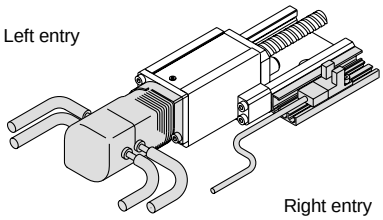
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

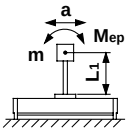
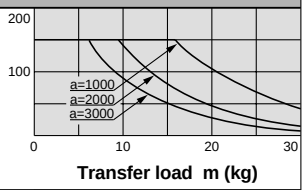
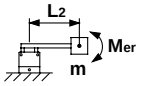
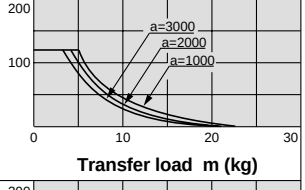
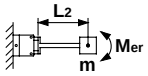
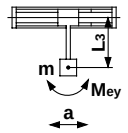
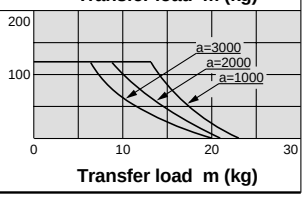


Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.2	2.7	3.2	3.7	4.2	4.7
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	30					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2HF□-□□ (Refer to page 73 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

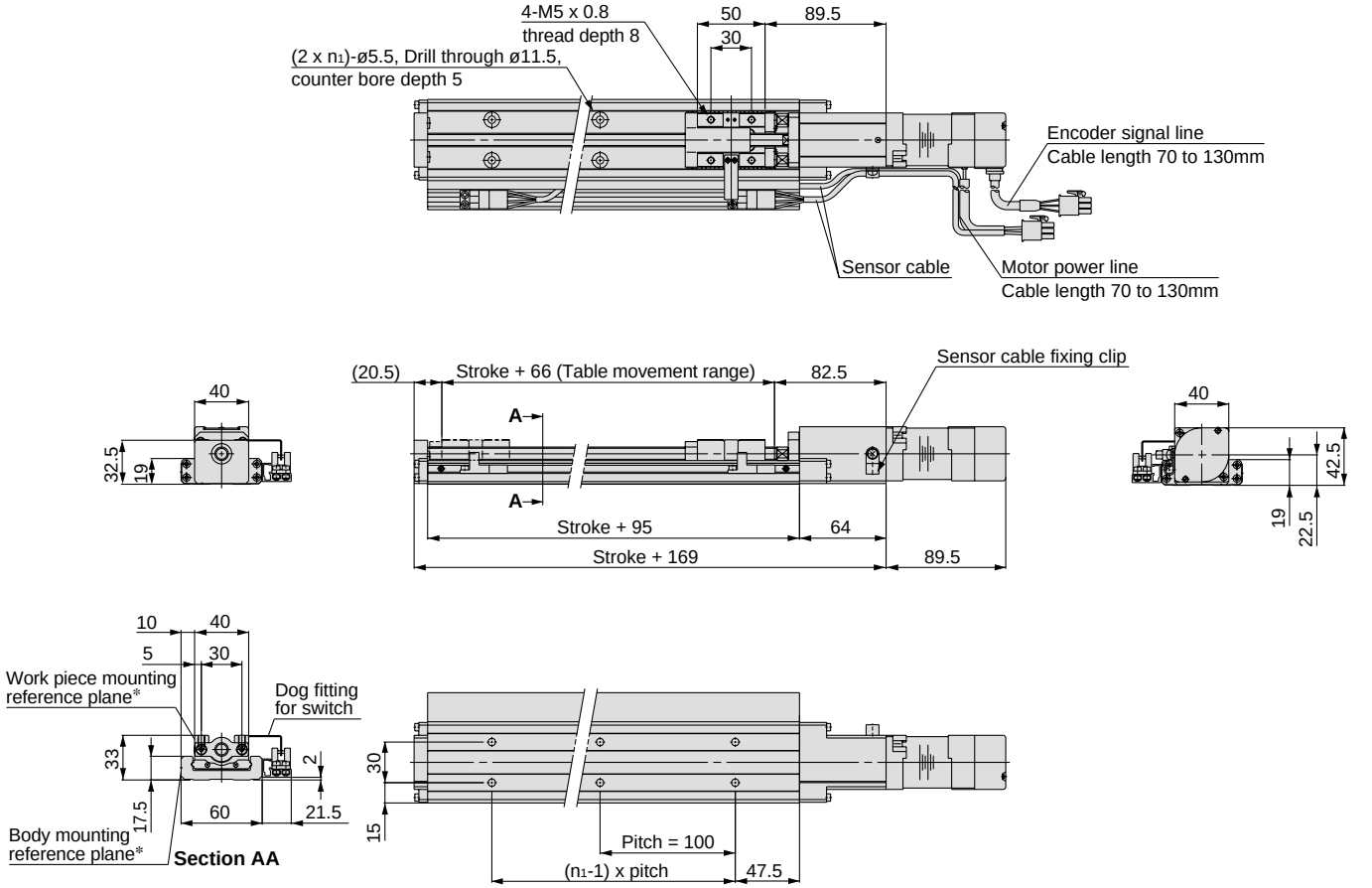
m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6E□NF

Scale: 18%



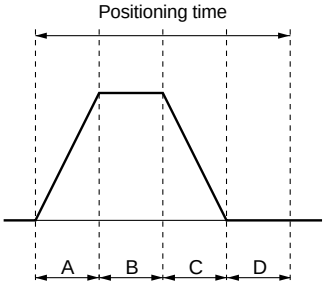
Model	Stroke	n_1
LTF6E□NF- 100-□□	100	2
LTF6E□NF- 200-□□	200	3
LTF6E□NF- 300-□□	300	4
LTF6E□NF- 400-□□	400	5
LTF6E□NF- 500-□□	500	6
LTF6E□NF- 600-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/s²

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/10mm lead

How to Order

LTF6E 1 NH — Stroke — R 2

Power supply voltage

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

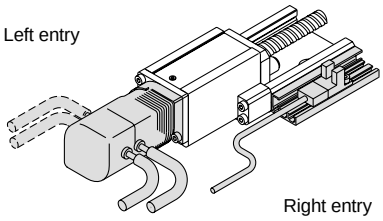
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

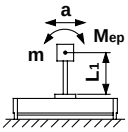
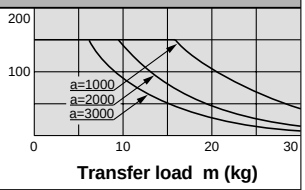
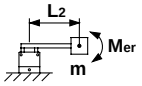
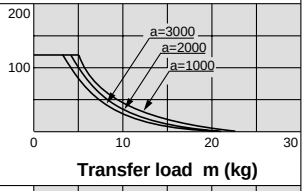
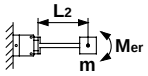
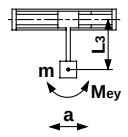
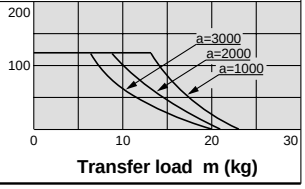


Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.2	2.7	3.2	3.7	4.2	4.7
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	15					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2HH□-□□ (Refer to page 73 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

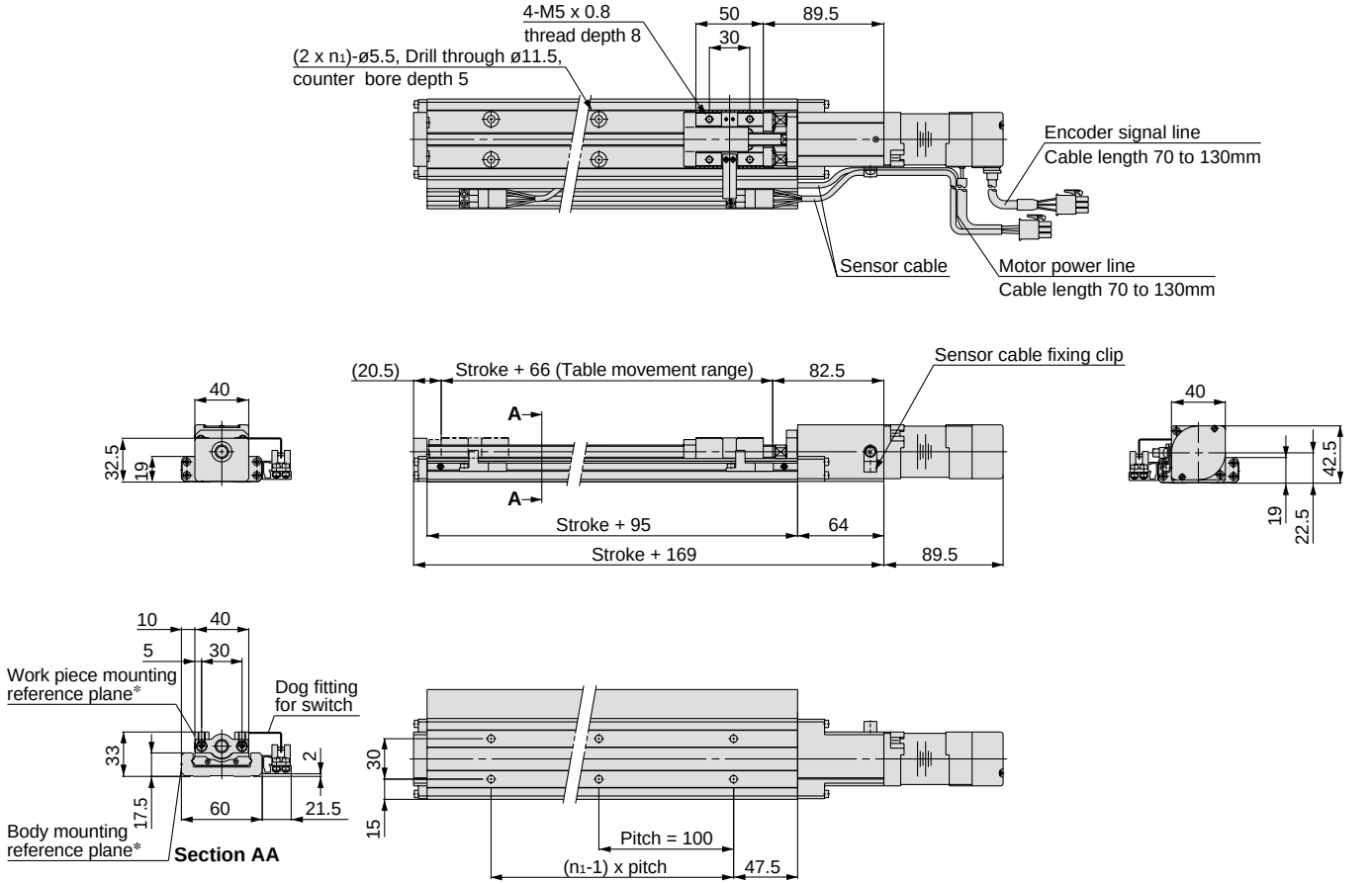
m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6E□NH

Scale: 18%



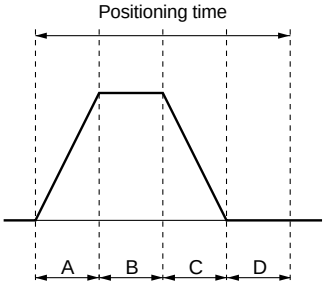
Model	Stroke	n_1
LTF6E□NH- 100-□□	100	2
LTF6E□NH- 200-□□	200	3
LTF6E□NH- 300-□□	300	4
LTF6E□NH- 400-□□	400	5
LTF6E□NH- 500-□□	500	6
LTF6E□NH- 600-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/s²

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/10mm lead

How to Order

LTF8F 1 PH — Stroke — R 2

Power supply voltage

1	100V/110V AC(50/60Hz)
2	200V AC(50/60Hz)

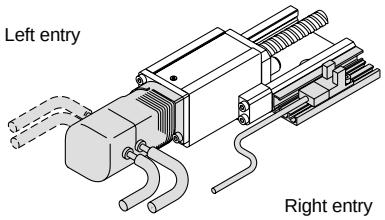
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

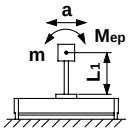
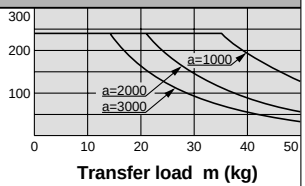
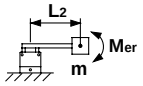
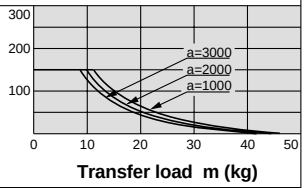
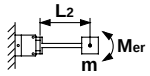
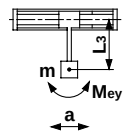
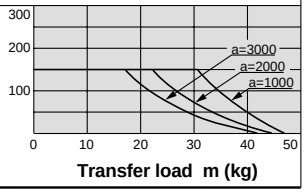


Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	4.6	5.5	6.3	7.1	8.0	8.8	9.6	10.5	11.3	12.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	50									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3HH□-□□ (Refer to page 73 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

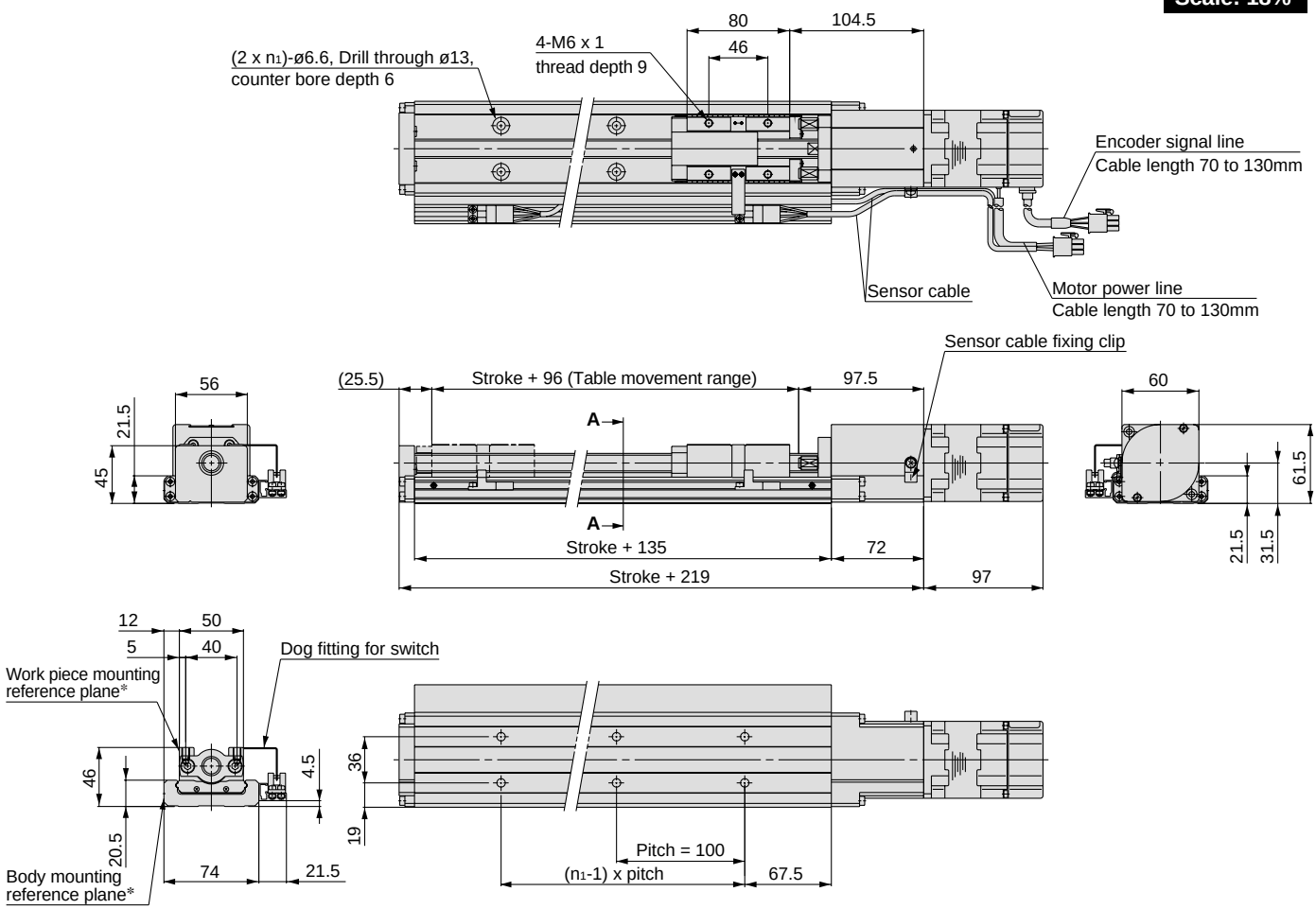
Mounting orientation / Load movement direction		Model	LTF8
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

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

Refer to page 71 for deflection data.

Dimensions/LTF8F□PH

Scale: 18%



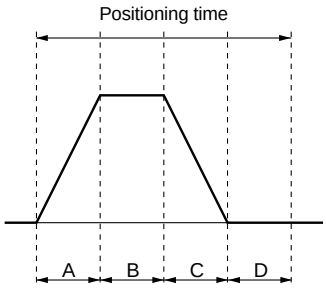
Model	Stroke	n_1
LTF8F□PH- 100-□□	100	2
LTF8F□PH- 200-□□	200	3
LTF8F□PH- 300-□□	300	4
LTF8F□PH- 400-□□	400	5
LTF8F□PH- 500-□□	500	6
LTF8F□PH- 600-□□	600	7
LTF8F□PH- 700-□□	700	8
LTF8F□PH- 800-□□	800	9
LTF8F□PH- 900-□□	900	10
LTF8F□PH-1000-□□	1000	11

∗ The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

∗ Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)
Maximum acceleration: 3000mm/s^2

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/20mm lead

How to Order

LTF8F 1 PL — Stroke — R 2

Power supply voltage

1	100V/110V AC(50/60Hz)
2	200V AC(50/60Hz)

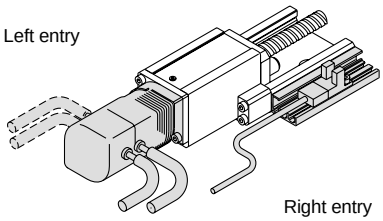
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

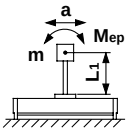
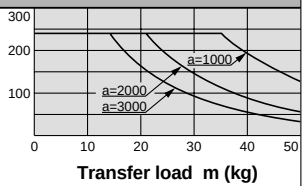
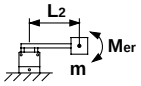
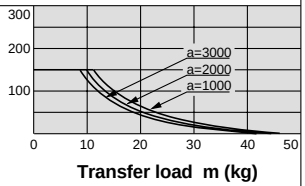
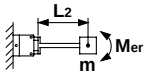
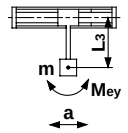
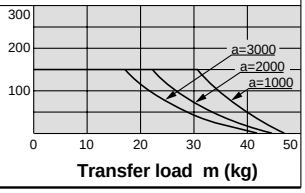


Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	4.6	5.5	6.3	7.1	8.0	8.8	9.6	10.5	11.3	12.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	25									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3HL□-□□ (Refer to page 73 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction			LTF8
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

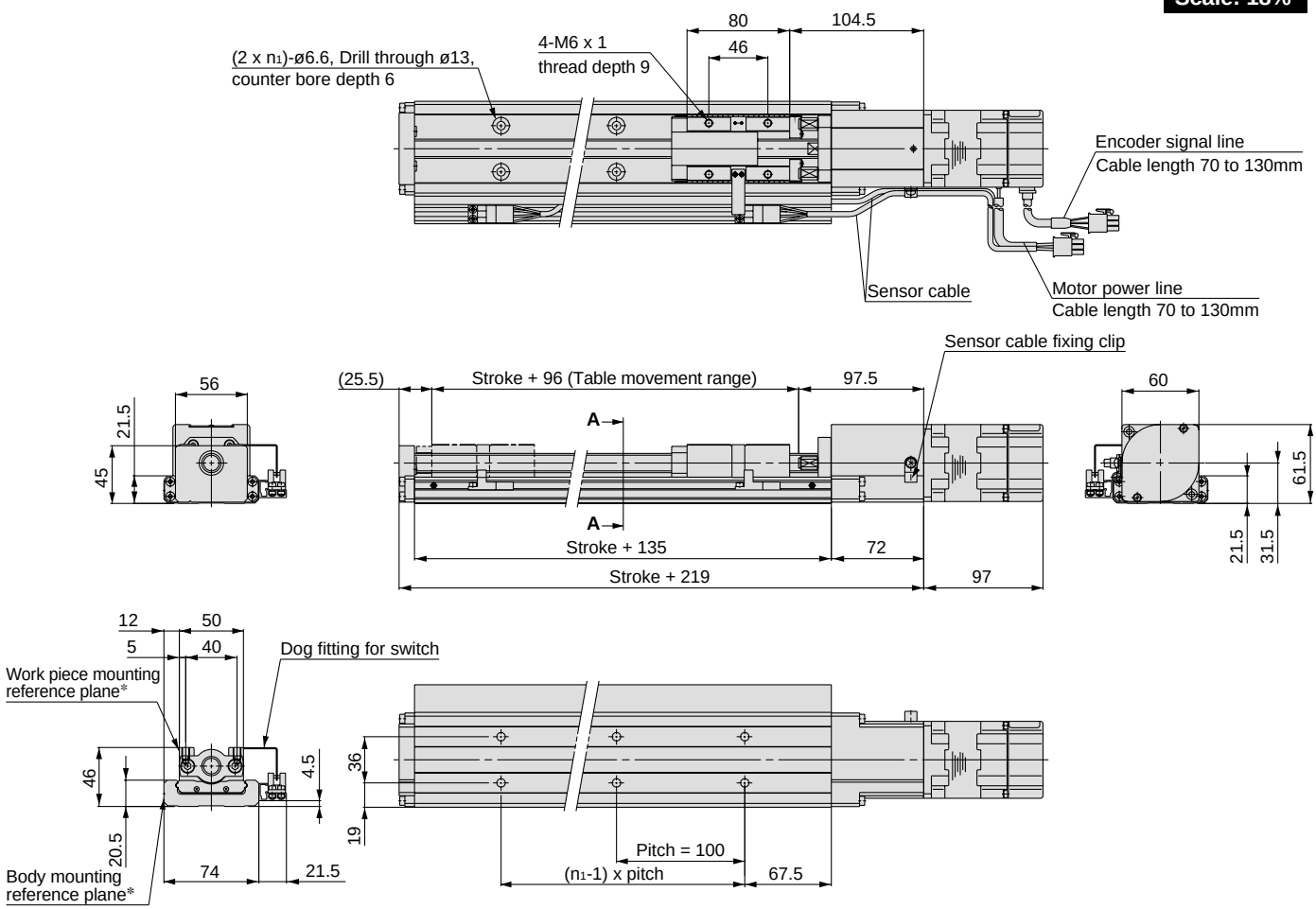
m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF8F□PL

Scale: 18%



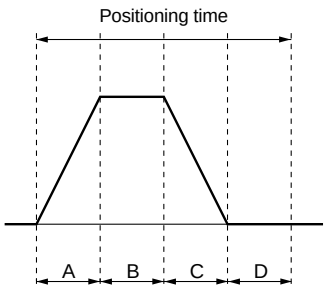
Model	Stroke	n_1
LTF8F□PL- 100-□□	100	2
LTF8F□PL- 200-□□	200	3
LTF8F□PL- 300-□□	300	4
LTF8F□PL- 400-□□	400	5
LTF8F□PL- 500-□□	500	6
LTF8F□PL- 600-□□	600	7
LTF8F□PL- 700-□□	700	8
LTF8F□PL- 800-□□	800	9
LTF8F□PL- 900-□□	900	10
LTF8F□PL-1000-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)
Maximum acceleration: 3000mm/s^2

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/10mm lead

How to Order

LTF8F 1 NH — Stroke — R 2

Power supply voltage

1	100V/110V AC(50/60Hz)
2	200V AC(50/60Hz)

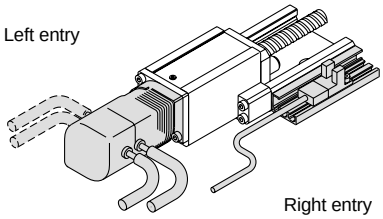
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

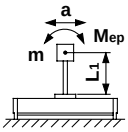
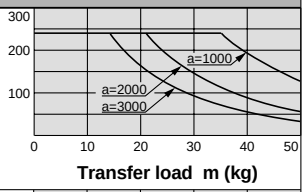
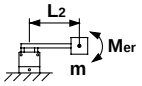
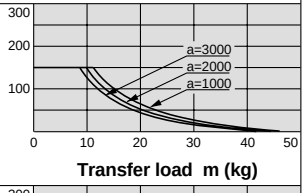
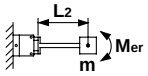
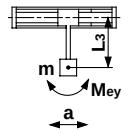
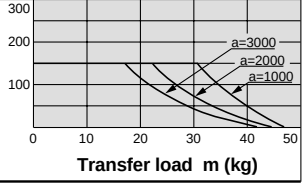


Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	4.6	5.5	6.3	7.1	8.0	8.8	9.6	10.5	11.3	12.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	50									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3HH□-□□ (Refer to page 73 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF8
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

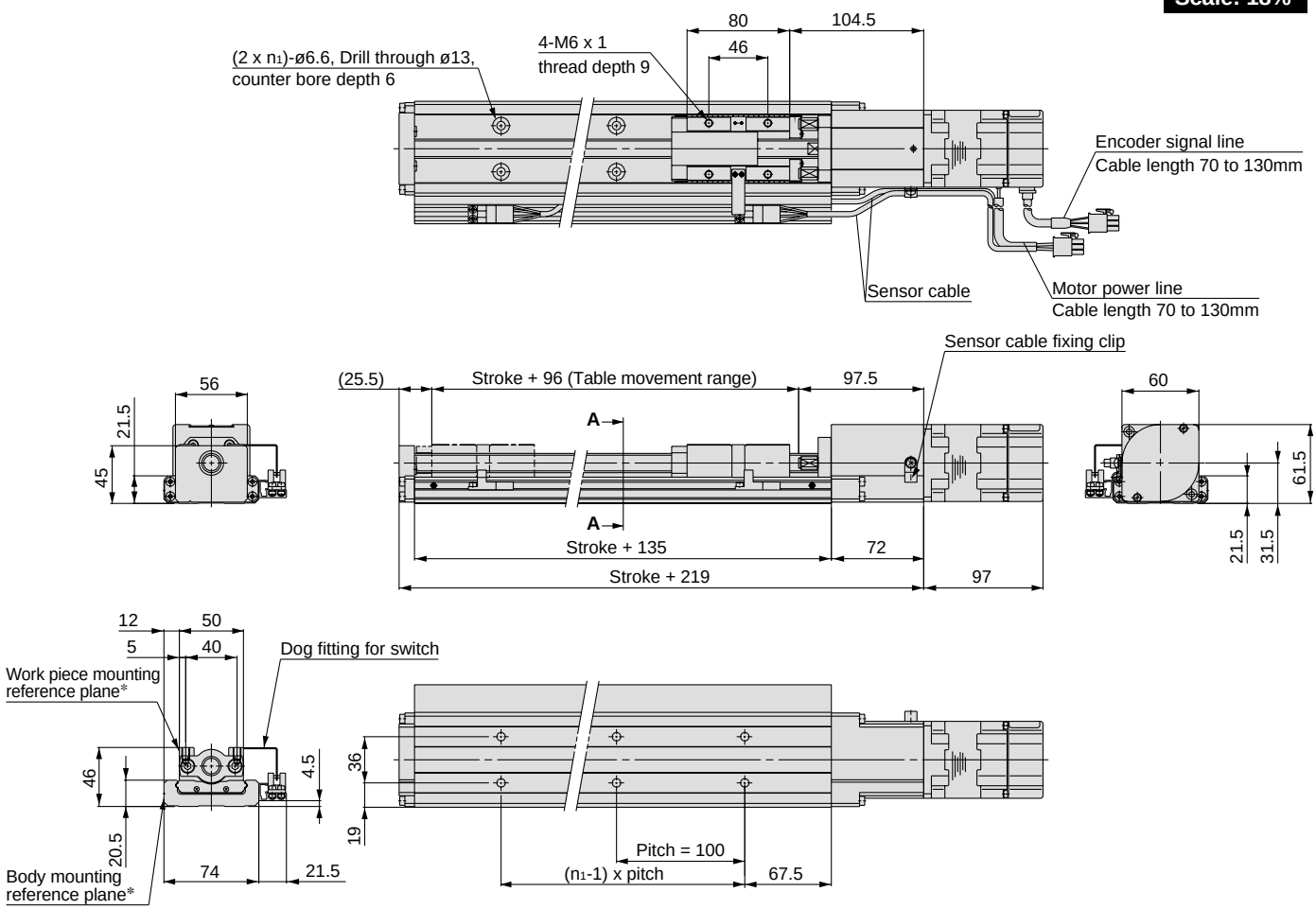
m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF8F□NH

Scale: 18%



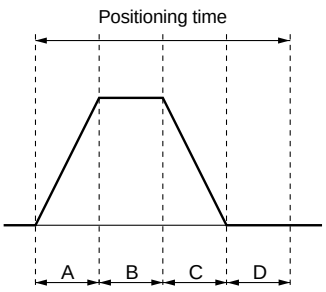
Model	Stroke	n_1
LTF8F□NH- 100-□□	100	2
LTF8F□NH- 200-□□	200	3
LTF8F□NH- 300-□□	300	4
LTF8F□NH- 400-□□	400	5
LTF8F□NH- 500-□□	500	6
LTF8F□NH- 600-□□	600	7
LTF8F□NH- 700-□□	700	8
LTF8F□NH- 800-□□	800	9
LTF8F□NH- 900-□□	900	10
LTF8F□NH-1000-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)
Maximum acceleration: 3000mm/s²

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/20mm lead

How to Order

LTF8F [1] [NL] — [Stroke] — [R] [2]

Power supply voltage

1	100V/110V AC(50/60Hz)
2	200V AC(50/60Hz)

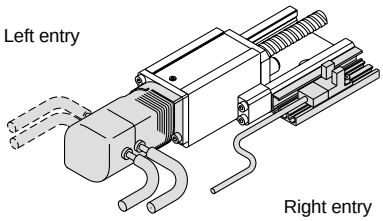
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction

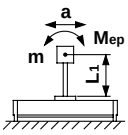
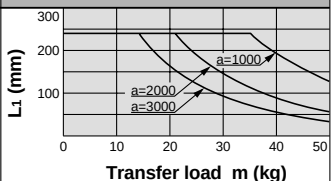
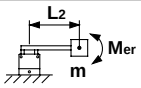
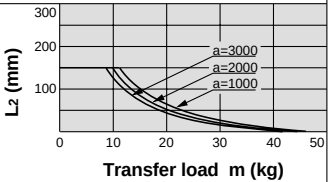
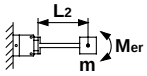
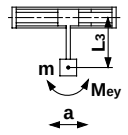
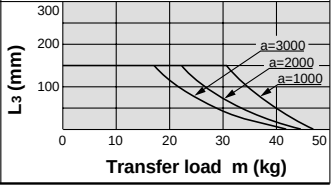


Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	4.6	5.5	6.3	7.1	8.0	8.8	9.6	10.5	11.3	12.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	25									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3HL□-□□ (Refer to page 73 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

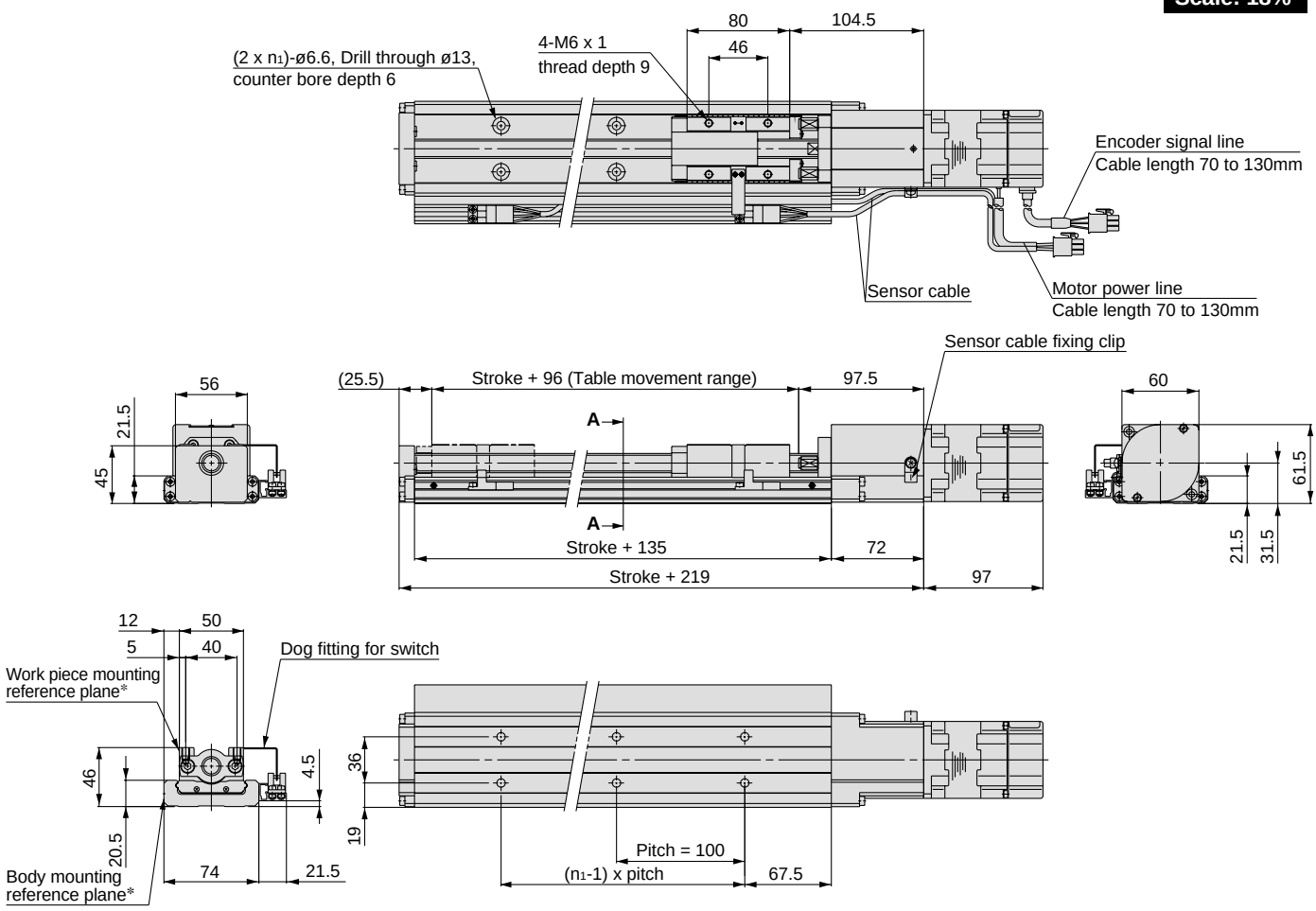
Mounting orientation / Load movement direction	Model	LTF8
Pitching	Horizontal/Lateral	 
Rolling	Horizontal	 
	Lateral	
Yawing	Horizontal/Lateral	 

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

Refer to page 71 for deflection data.

Dimensions/LTF8F□NL

Scale: 18%



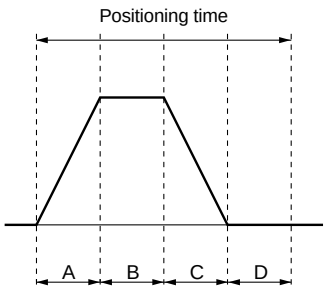
Model	Stroke	n_1
LTF8F□NL- 100-□□	100	2
LTF8F□NL- 200-□□	200	3
LTF8F□NL- 300-□□	300	4
LTF8F□NL- 400-□□	400	5
LTF8F□NL- 500-□□	500	6
LTF8F□NL- 600-□□	600	7
LTF8F□NL- 700-□□	700	8
LTF8F□NL- 800-□□	800	9
LTF8F□NL- 900-□□	900	10
LTF8F□NL-1000-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)
Maximum acceleration: 3000mm/s²

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/6mm lead

How to Order

LTF6E [1] [PF] — [Stroke] [K] — [R] [2]

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

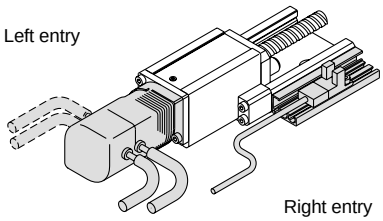
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



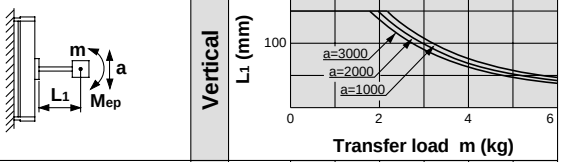
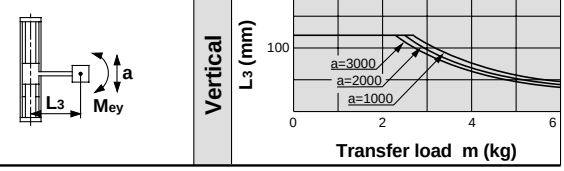
Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.4	2.9	3.4	3.9	4.4	4.9
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	6					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2VF□-□□ (Refer to page 73 for details.)					
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)					

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model: LTF6
Pitching	Vertical	
Rolling	Vertical	

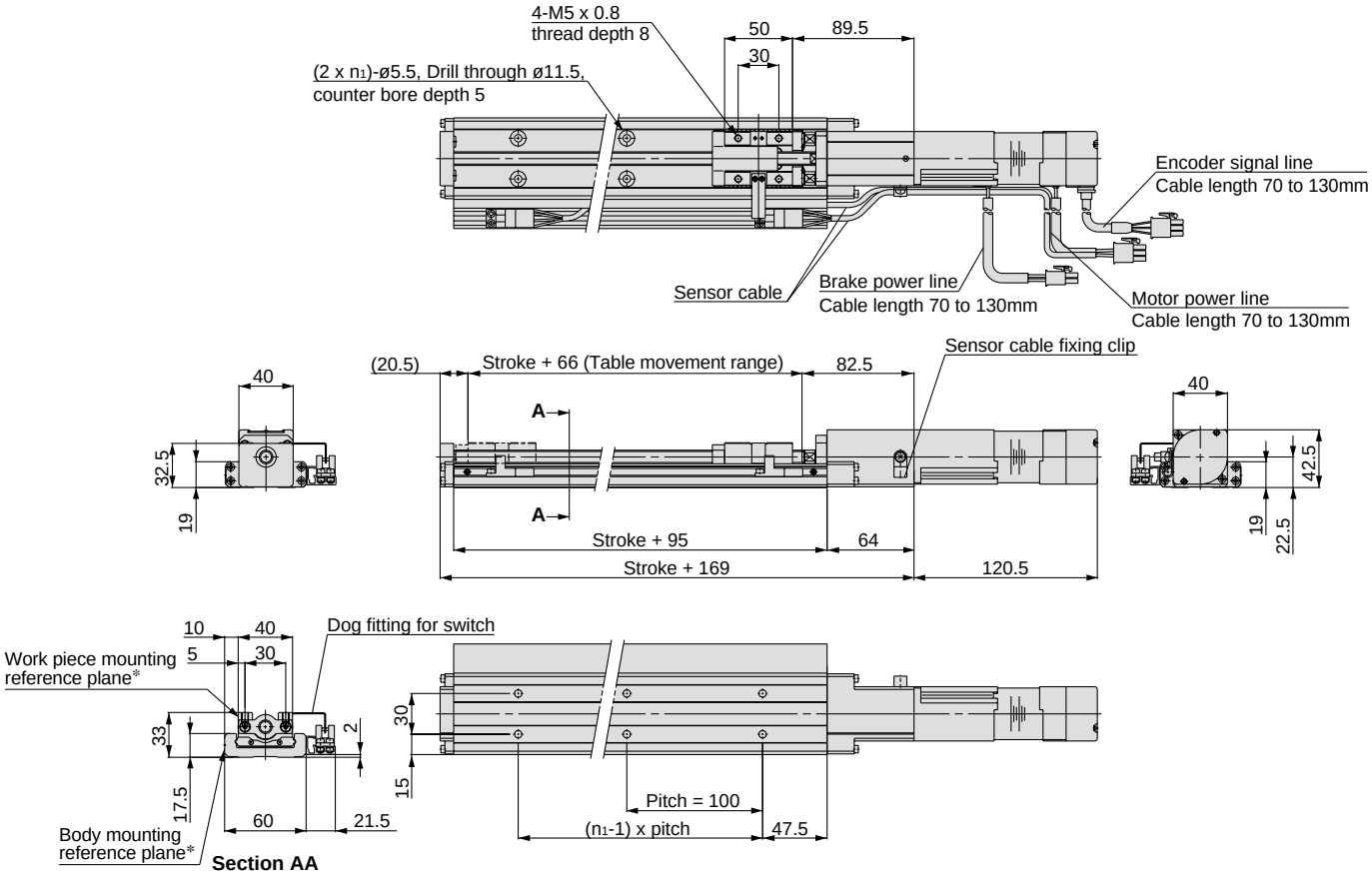
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6E□PF

Scale: 18%



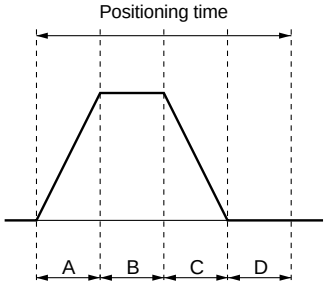
Model	Stroke	n_1
LTF6E□PF- 100K-□□	100	2
LTF6E□PF- 200K-□□	200	3
LTF6E□PF- 300K-□□	300	4
LTF6E□PF- 400K-□□	400	5
LTF6E□PF- 500K-□□	500	6
LTF6E□PF- 600K-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/s²

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/10mm lead

How to Order

LTF6E 1 PH — Stroke K — R 2

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

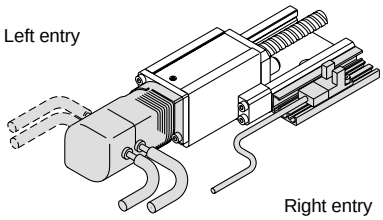
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



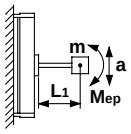
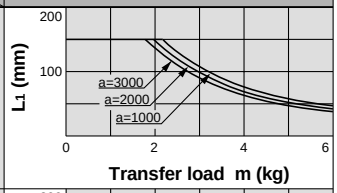
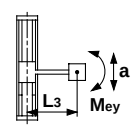
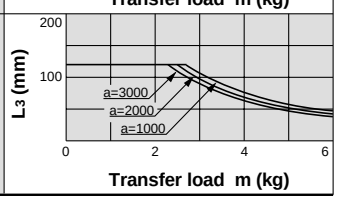
Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.4	2.9	3.4	3.9	4.4	4.9
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	3					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2VH□-□□ (Refer to page 73 for details.)					
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)					

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

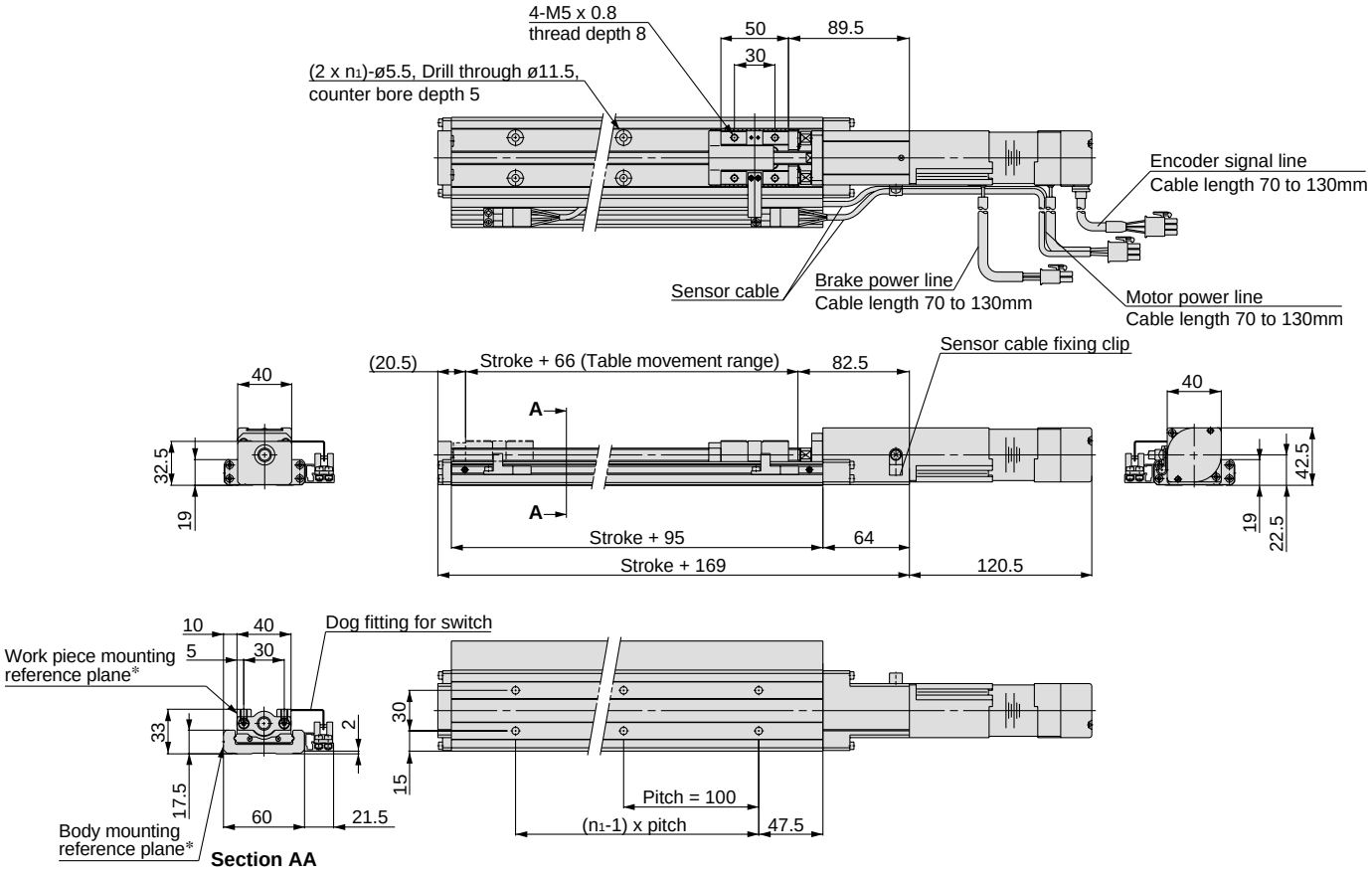
Mounting orientation / Load movement direction		Model	LTF6
Pitching		Vertical	
Rolling		Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF6E□PH

Scale: 18%



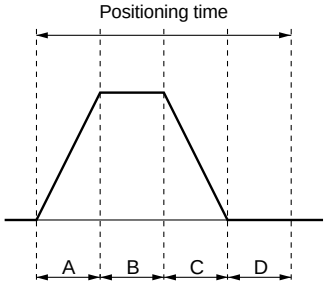
Model	Stroke	n_1
LTF6E□PH- 100K-□□	100	2
LTF6E□PH- 200K-□□	200	3
LTF6E□PH- 300K-□□	300	4
LTF6E□PH- 400K-□□	400	5
LTF6E□PH- 500K-□□	500	6
LTF6E□PH- 600K-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/s²

Series LTF6

Motor Output **100**W

Rolled Ball Screw ø**10**mm/**6**mm lead

How to Order

LTF6E 1 NF — Stroke K — R 2

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

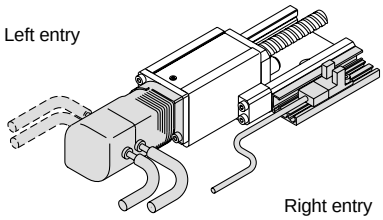
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



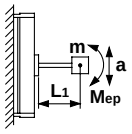
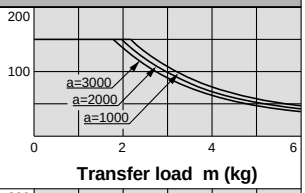
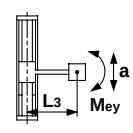
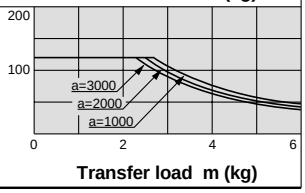
Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.4	2.9	3.4	3.9	4.4	4.9
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	6					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2VF□-□□ (Refer to page 73 for details.)					
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)					

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

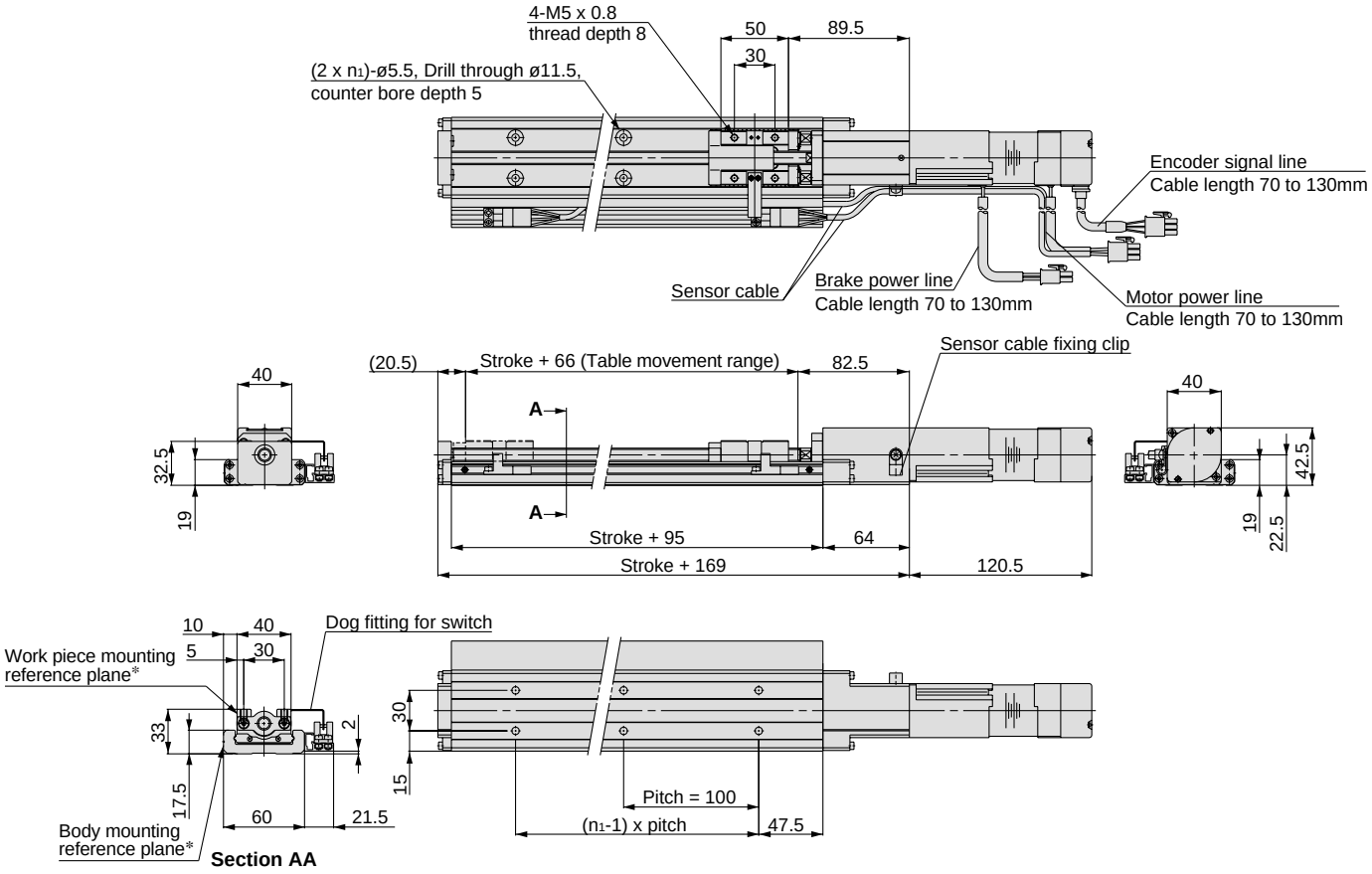
Mounting orientation / Load movement direction			Model: LTF6
Pitching		Vertical	
Rolling		Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF6E□NF

Scale: 18%



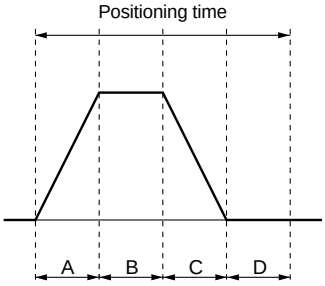
Model	Stroke	n_1
LTF6E□NF- 100K-□□	100	2
LTF6E□NF- 200K-□□	200	3
LTF6E□NF- 300K-□□	300	4
LTF6E□NF- 400K-□□	400	5
LTF6E□NF- 500K-□□	500	6
LTF6E□NF- 600K-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/s²

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/10mm lead

How to Order

LTF6E 1 NH — Stroke K — R 2

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

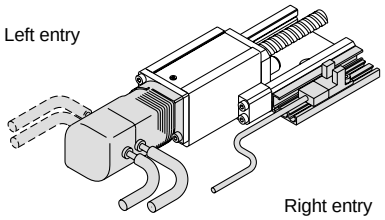
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



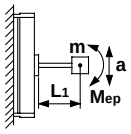
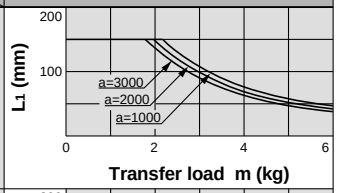
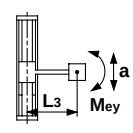
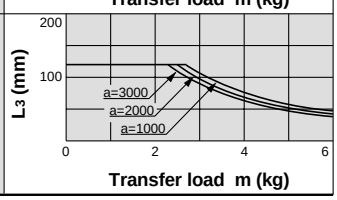
Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight	kg	2.4	2.9	3.4	3.9	4.4	4.9
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	3					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
Controller	Model		LC1-1H2VH□-□□ (Refer to page 73 for details.)					
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)					

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

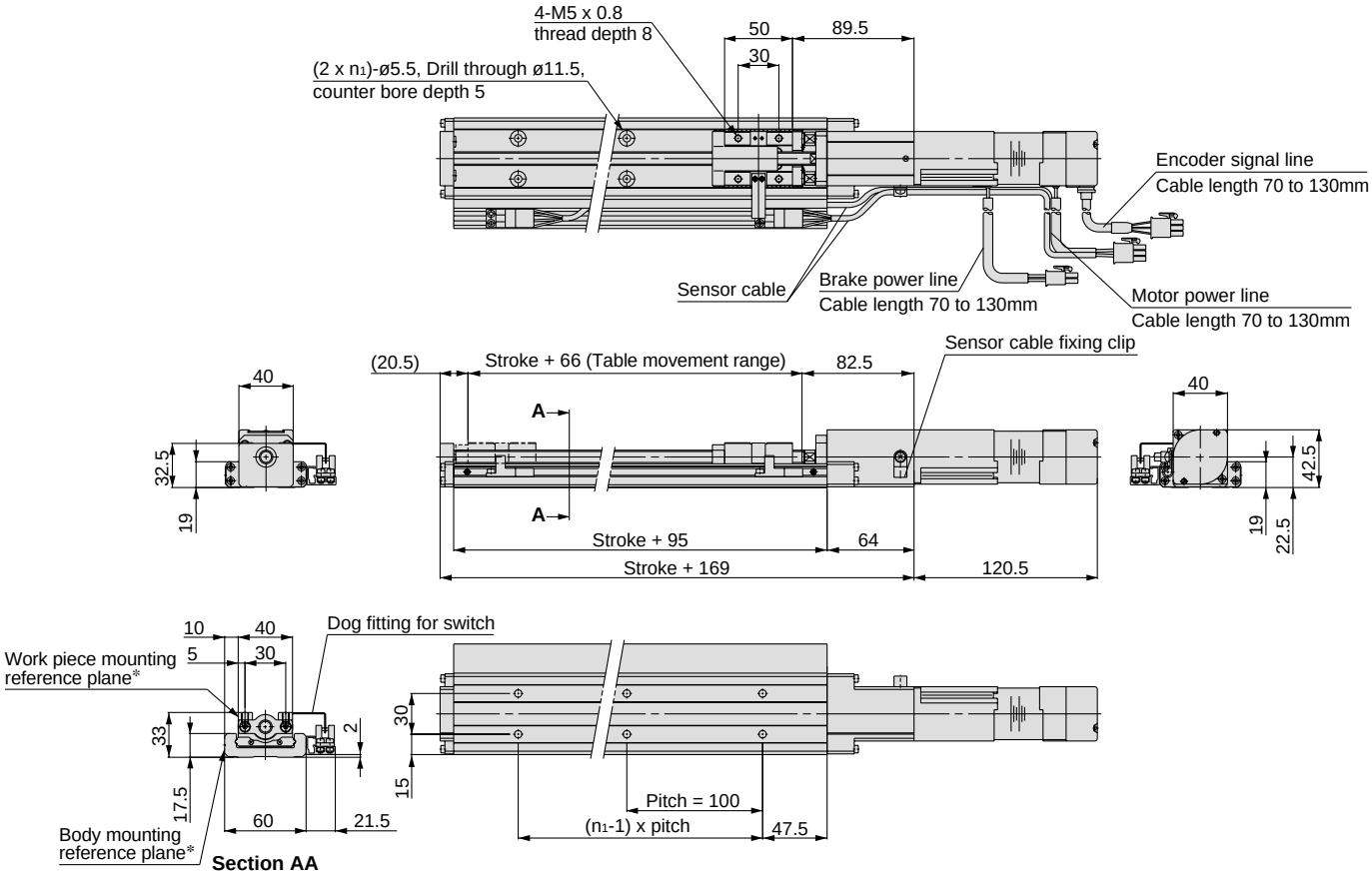
Mounting orientation / Load movement direction		Model	LTF6
Pitching		Vertical	
Rolling		Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF6E□NH

Scale: 18%



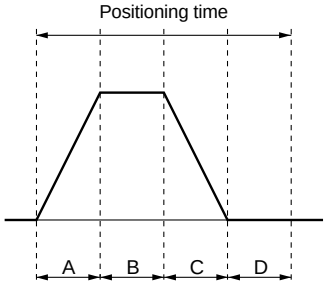
Model	Stroke	n_1
LTF6E□NH- 100K-□□	100	2
LTF6E□NH- 200K-□□	200	3
LTF6E□NH- 300K-□□	300	4
LTF6E□NH- 400K-□□	400	5
LTF6E□NH- 500K-□□	500	6
LTF6E□NH- 600K-□□	600	7

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/s²

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/10mm lead

How to Order

LTF8F [1] [PH] — [Stroke] [K] — [R] [2]

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

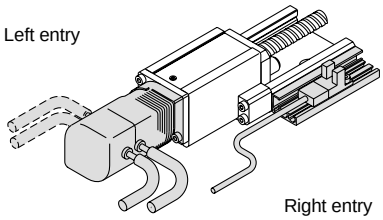
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



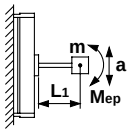
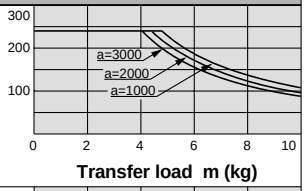
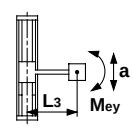
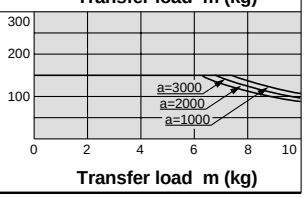
Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	5.0	5.9	6.7	7.5	8.4	9.2	10.0	10.9	11.7	12.5
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	10									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3VF□-□□ (Refer to page 73 for details.)									
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)									

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

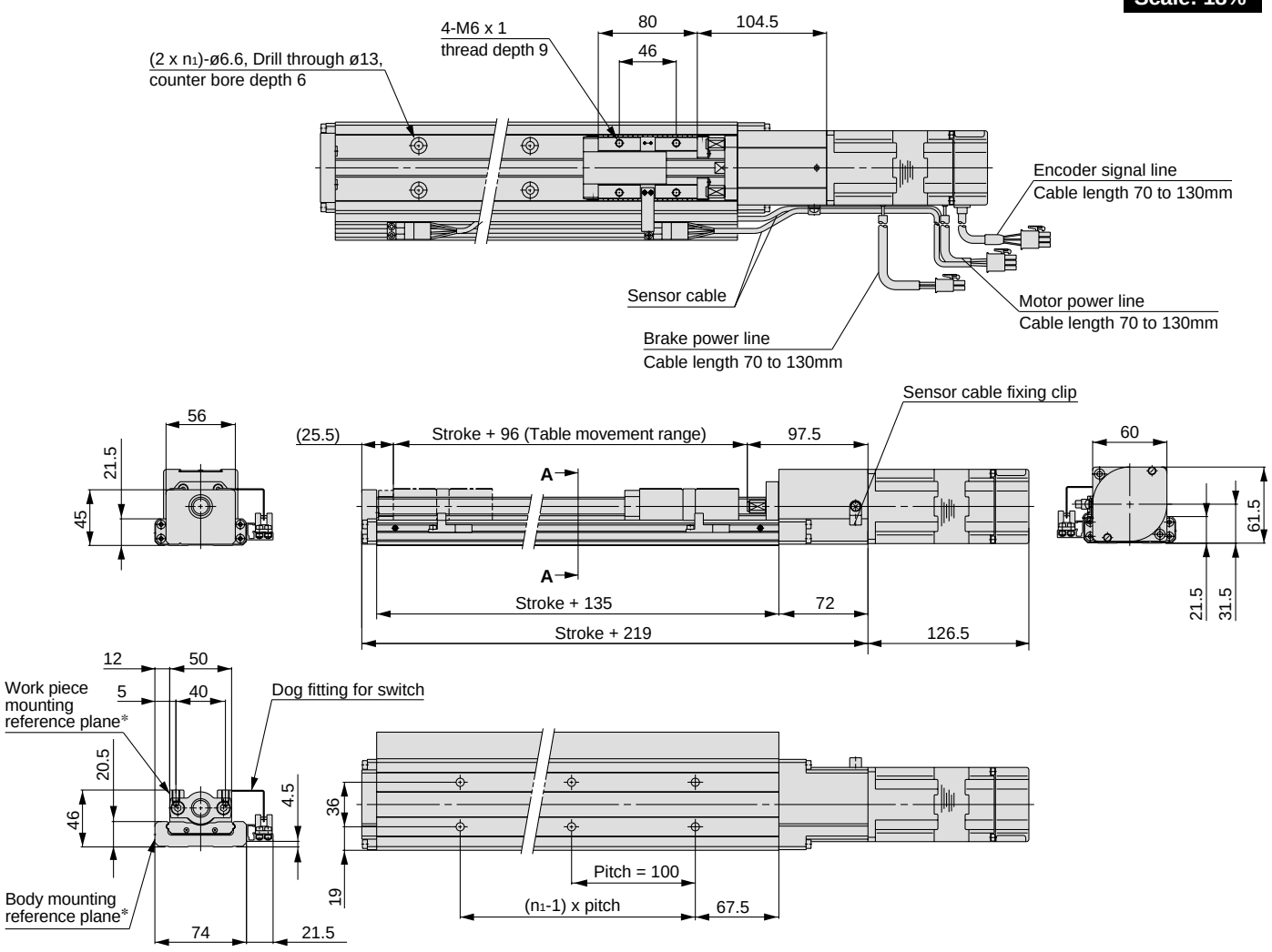
Mounting orientation / Load movement direction			LTF8
Pitching		Vertical	
Rolling		Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF8F□PH

Scale: 18%



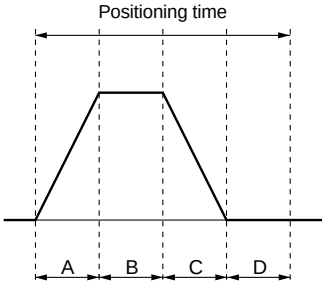
Model	Stroke	n_1
LTF8F□PH- 100K-□□	100	2
LTF8F□PH- 200K-□□	200	3
LTF8F□PH- 300K-□□	300	4
LTF8F□PH- 400K-□□	400	5
LTF8F□PH- 500K-□□	500	6
LTF8F□PH- 600K-□□	600	7
LTF8F□PH- 700K-□□	700	8
LTF8F□PH- 800K-□□	800	9
LTF8F□PH- 900K-□□	900	10
LTF8F□PH-1000K-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)
Maximum acceleration: 3000mm/s²

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/20mm lead

How to Order

LTF8F [1] [PL] — [Stroke] [K] — [R] [2]

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

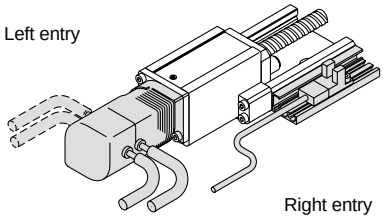
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



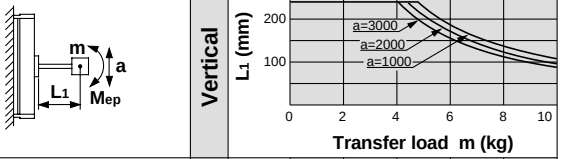
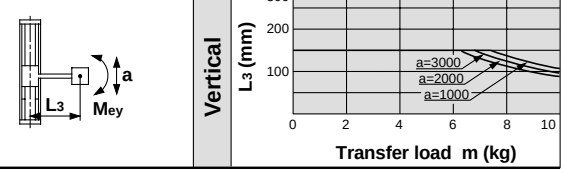
Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	5.0	5.9	6.7	7.5	8.4	9.2	10.0	10.9	11.7	12.5
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	5									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3VL□-□□ (Refer to page 73 for details.)									
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)									

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

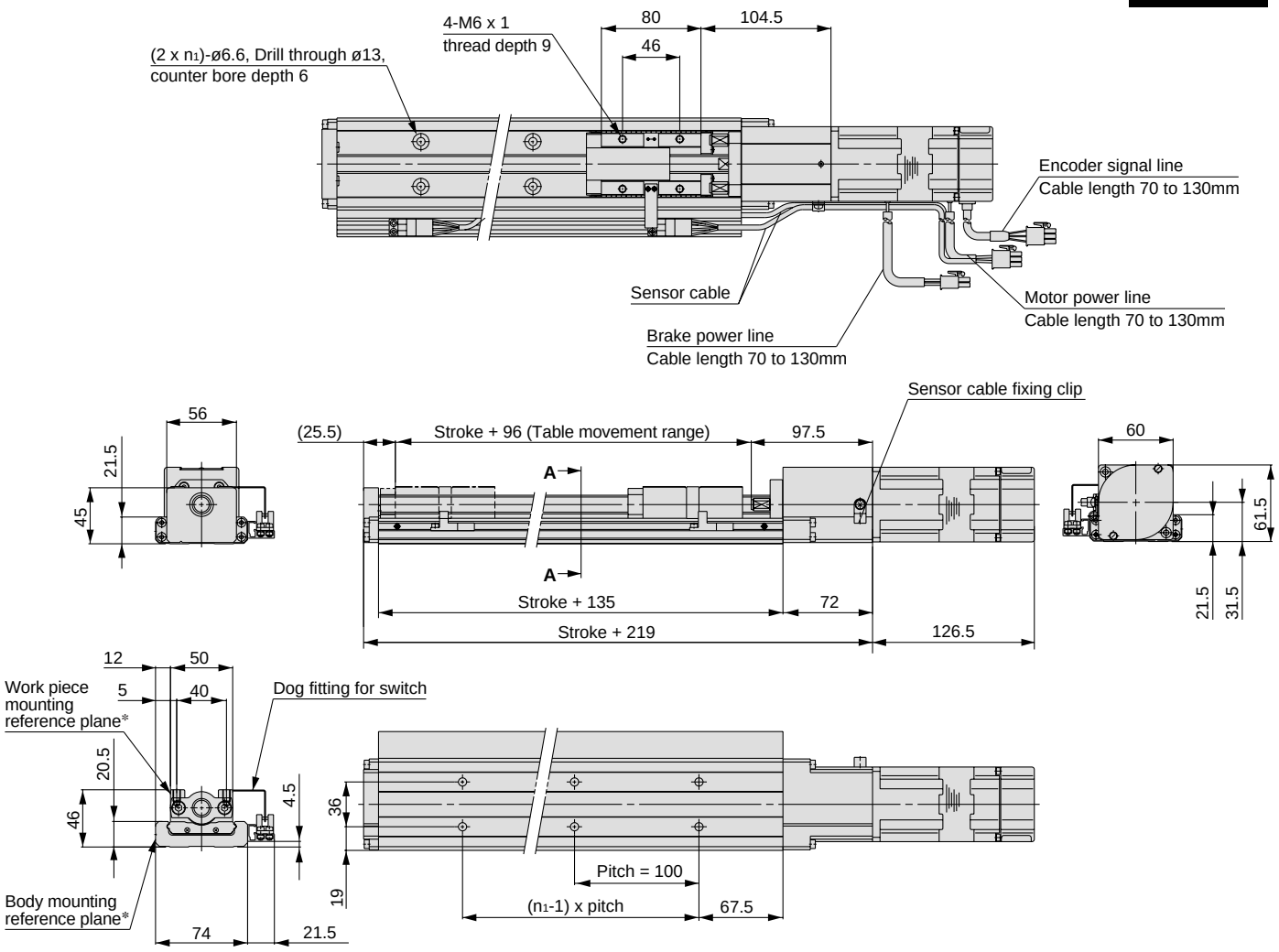
Mounting orientation / Load movement direction	Model	LTF8
Pitching	Vertical	
Rolling	Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF8F□PL

Scale: 18%



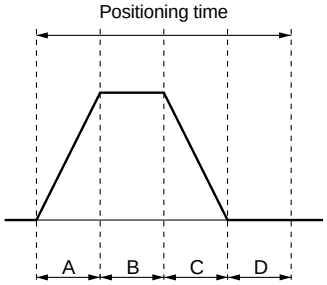
Model	Stroke	n_1
LTF8F□PL- 100K-□□	100	2
LTF8F□PL- 200K-□□	200	3
LTF8F□PL- 300K-□□	300	4
LTF8F□PL- 400K-□□	400	5
LTF8F□PL- 500K-□□	500	6
LTF8F□PL- 600K-□□	600	7
LTF8F□PL- 700K-□□	700	8
LTF8F□PL- 800K-□□	800	9
LTF8F□PL- 900K-□□	900	10
LTF8F□PL-1000K-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)
Maximum acceleration: 3000mm/s²

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/10mm lead

How to Order

LTF8F [1] [NH] — [Stroke] [K] — [R] [2]

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

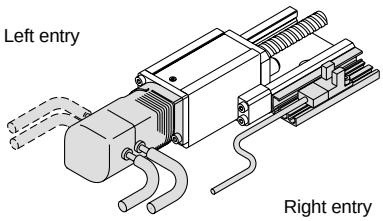
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



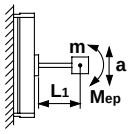
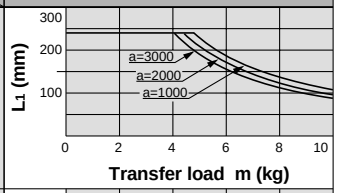
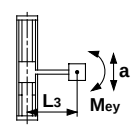
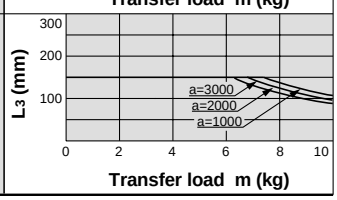
Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	5.0	5.9	6.7	7.5	8.4	9.2	10.0	10.9	11.7	12.5
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	10									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3VH□-□□ (Refer to page 73 for details.)									
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)									

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

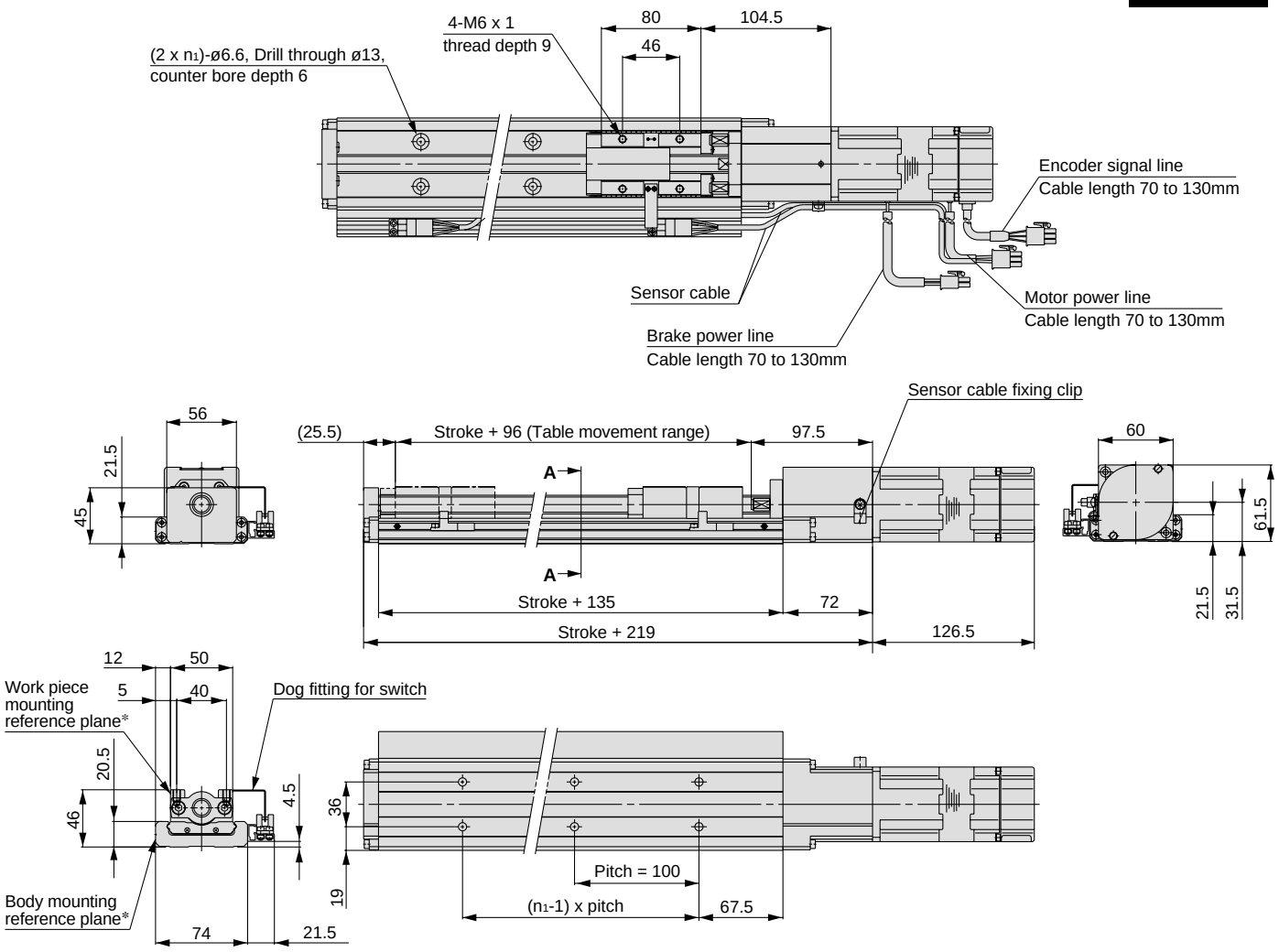
Mounting orientation / Load movement direction		Model	LTF8
Pitching		Vertical	
Rolling		Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF8F□NH

Scale: 18%



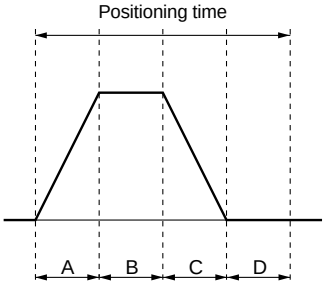
Model	Stroke	n_1
LTF8F□NH- 100K-□□	100	2
LTF8F□NH- 200K-□□	200	3
LTF8F□NH- 300K-□□	300	4
LTF8F□NH- 400K-□□	400	5
LTF8F□NH- 500K-□□	500	6
LTF8F□NH- 600K-□□	600	7
LTF8F□NH- 700K-□□	700	8
LTF8F□NH- 800K-□□	800	9
LTF8F□NH- 900K-□□	900	10
LTF8F□NH-1000K-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

* Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)
Maximum acceleration: 3000mm/s²

How to Order

LTF8F [1] [NL] — [Stroke] K — [R] [2]

Power supply voltage

1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

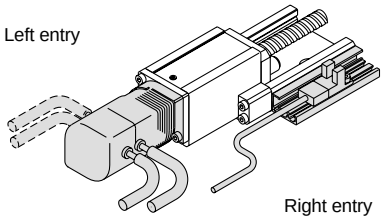
Motor/switch entry direction

R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Cable length

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

Motor/switch entry direction



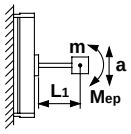
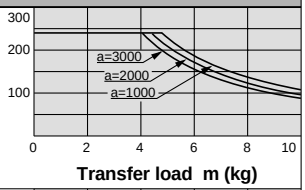
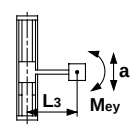
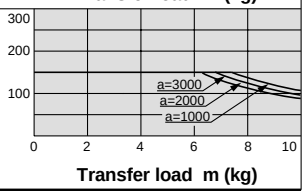
Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight	kg	5.0	5.9	6.7	7.5	8.4	9.2	10.0	10.9	11.7	12.5
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	5									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
Controller	Model		LC1-1H3VL□-□□ (Refer to page 73 for details.)									
Regenerative absorption unit	Model		LC7R-K1□A□□ (Refer to page 86 for details.)									

Note) Be sure to use a regenerative absorption unit with this product.

Allowable Moment (N·m)

Allowable dynamic moment

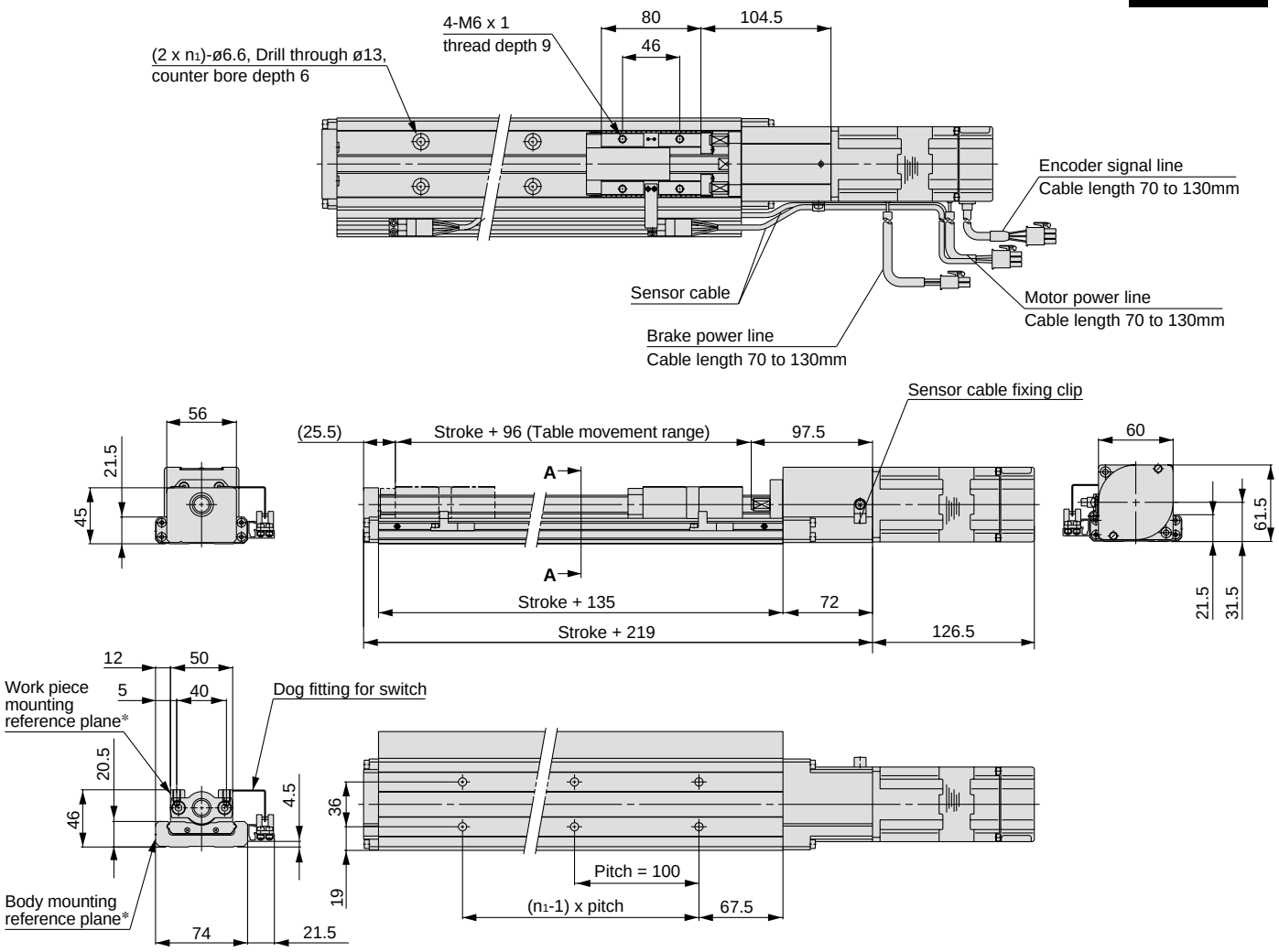
Mounting orientation / Load movement direction			LTF8
Pitching		Vertical	
Rolling		Vertical	

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

Refer to page 71 for deflection data.

Dimensions/LTF8F□NL

Scale: 18%



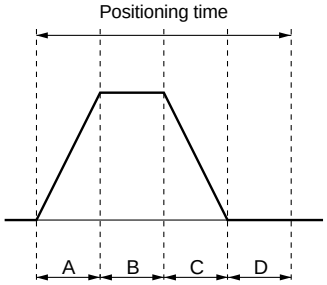
Model	Stroke	n_1
LTF8F□NL- 100K-□□	100	2
LTF8F□NL- 200K-□□	200	3
LTF8F□NL- 300K-□□	300	4
LTF8F□NL- 400K-□□	400	5
LTF8F□NL- 500K-□□	500	6
LTF8F□NL- 600K-□□	600	7
LTF8F□NL- 700K-□□	700	8
LTF8F□NL- 800K-□□	800	9
LTF8F□NL- 900K-□□	900	10
LTF8F□NL-1000K-□□	1000	11

* The body mounting reference plane and work piece mounting reference plane should be used as standards when mounting onto equipment. Refer to pages starting with 68 for mounting.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)
Maximum acceleration: 3000mm/s²

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/6mm lead

How to Order

LTF6 [G] [E] [1] [PF] — [Stroke] — [ ] [ ] — [X10]

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

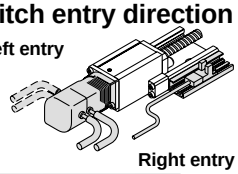
Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

Dog fittings for switch are attached to all types except type "Nil".

Motor/switch entry direction

Left entry



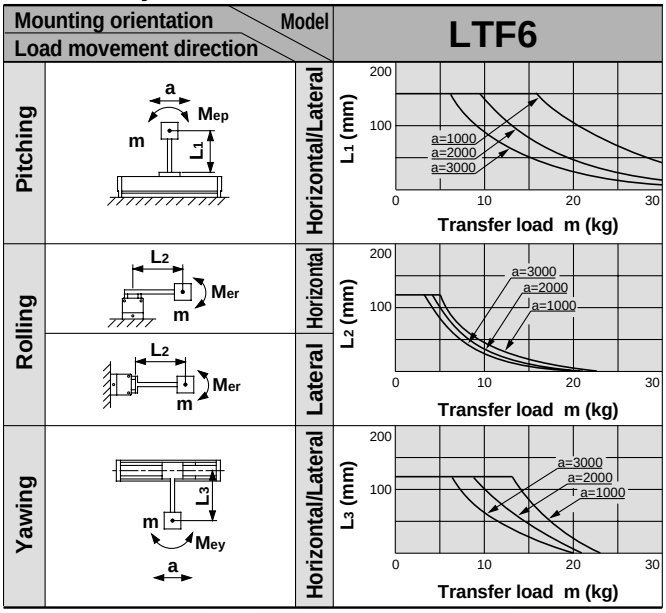
Right entry

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	30					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment



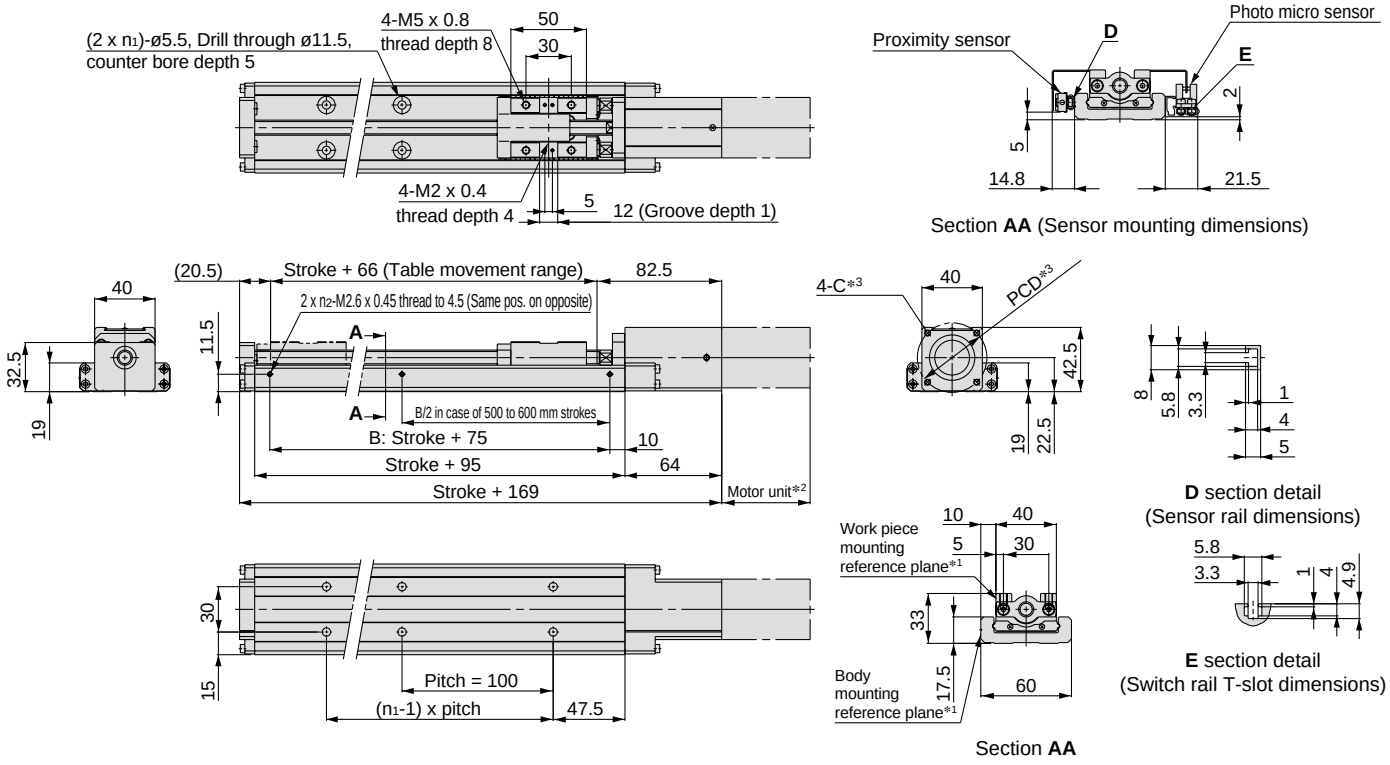
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6□E□PF(X10)

Scale: 20%



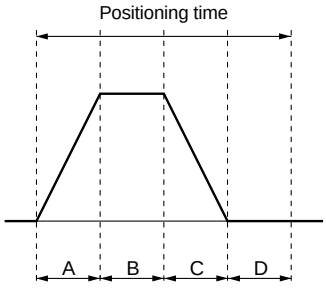
Model	Stroke	n_1	n_2
LTF6□E□PF- 100-□□-X10	100	2	1
LTF6□E□PF- 200-□□-X10	200	3	1
LTF6□E□PF- 300-□□-X10	300	4	1
LTF6□E□PF- 400-□□-X10	400	5	1
LTF6□E□PF- 500-□□-X10	500	6	2
LTF6□E□PF- 600-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1A	MSD011P1E	103
		200/230	MSM012P1A	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13	MR-C10A1	86.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12	SGDE-01BP	94.5
		200/230	SGME-01AF12	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/10mm lead

How to Order

LTF6 [G] [E] [1] [PH] — [Stroke] — [ ] [ ] — [X10]

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

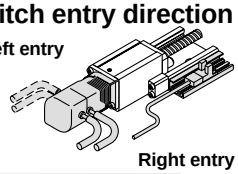
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

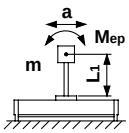
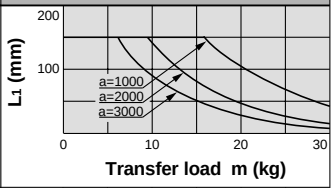
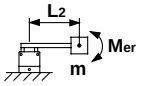
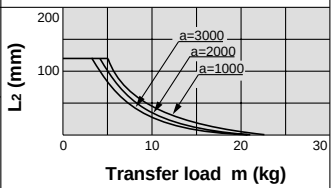
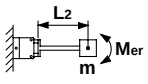
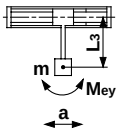
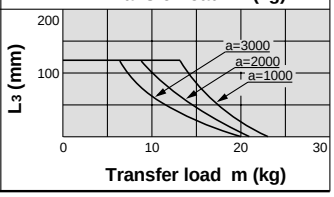
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	**100**	**200**	**300**	**400**	**500**	**600**
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	15					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

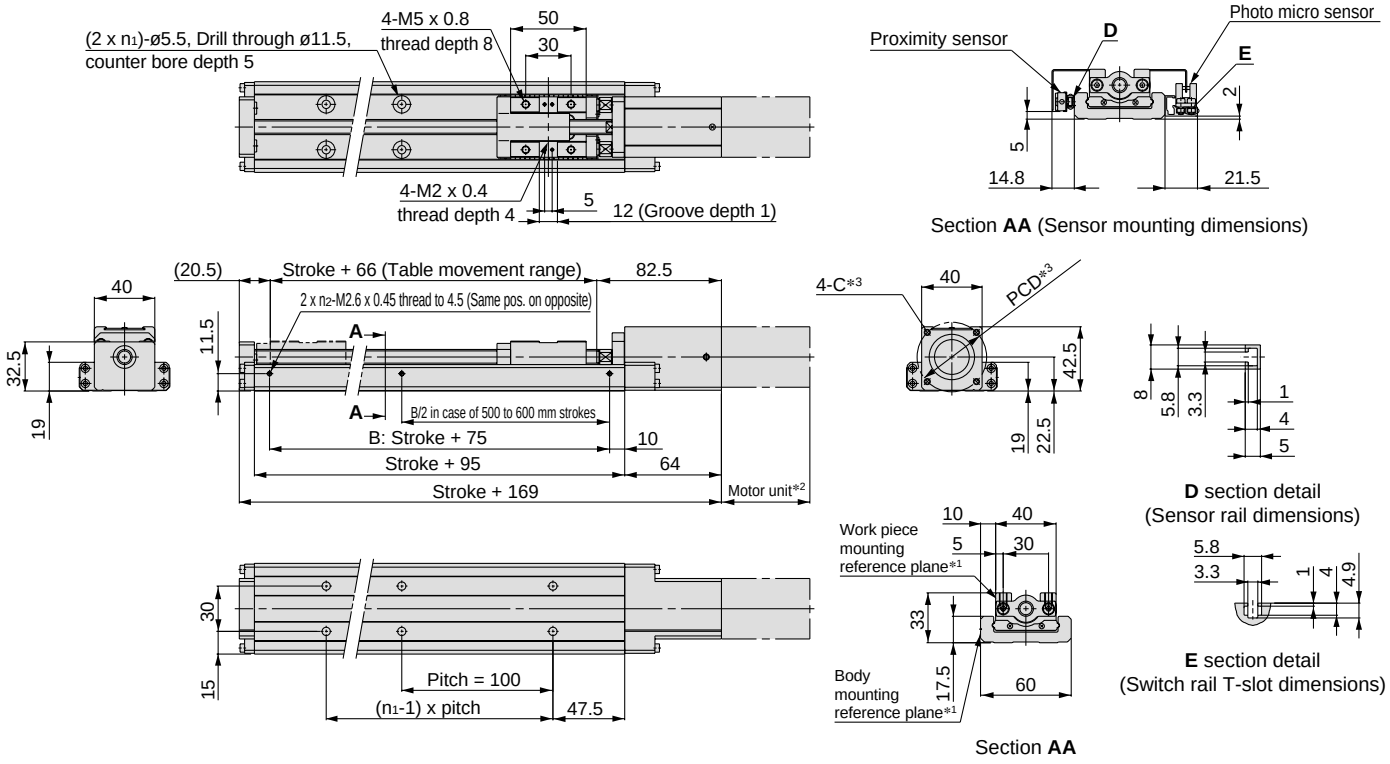
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6□E□PH(X10)

Scale: 20%



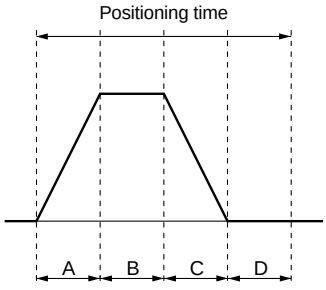
Model	Stroke	n_1	n_2
LTF6□E□PH- 100-□□-X10	100	2	1
LTF6□E□PH- 200-□□-X10	200	3	1
LTF6□E□PH- 300-□□-X10	300	4	1
LTF6□E□PH- 400-□□-X10	400	5	1
LTF6□E□PH- 500-□□-X10	500	6	2
LTF6□E□PH- 600-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1A	MSD011P1E	103
		200/230	MSM012P1A	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13	MR-C10A1	86.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12	SGDE-01BP	94.5
		200/230	SGME-01AF12	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/6mm lead

How to Order

LTF6 [G] [E] [1] [NF] — [Stroke] — [ ] [ ] — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

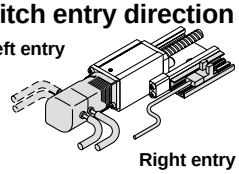
Power supply voltage

1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction



Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

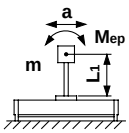
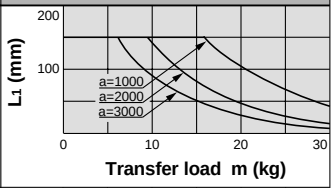
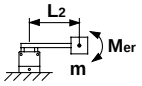
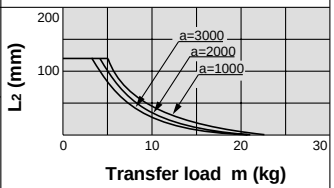
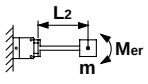
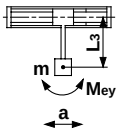
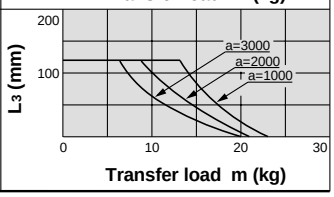
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	30					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

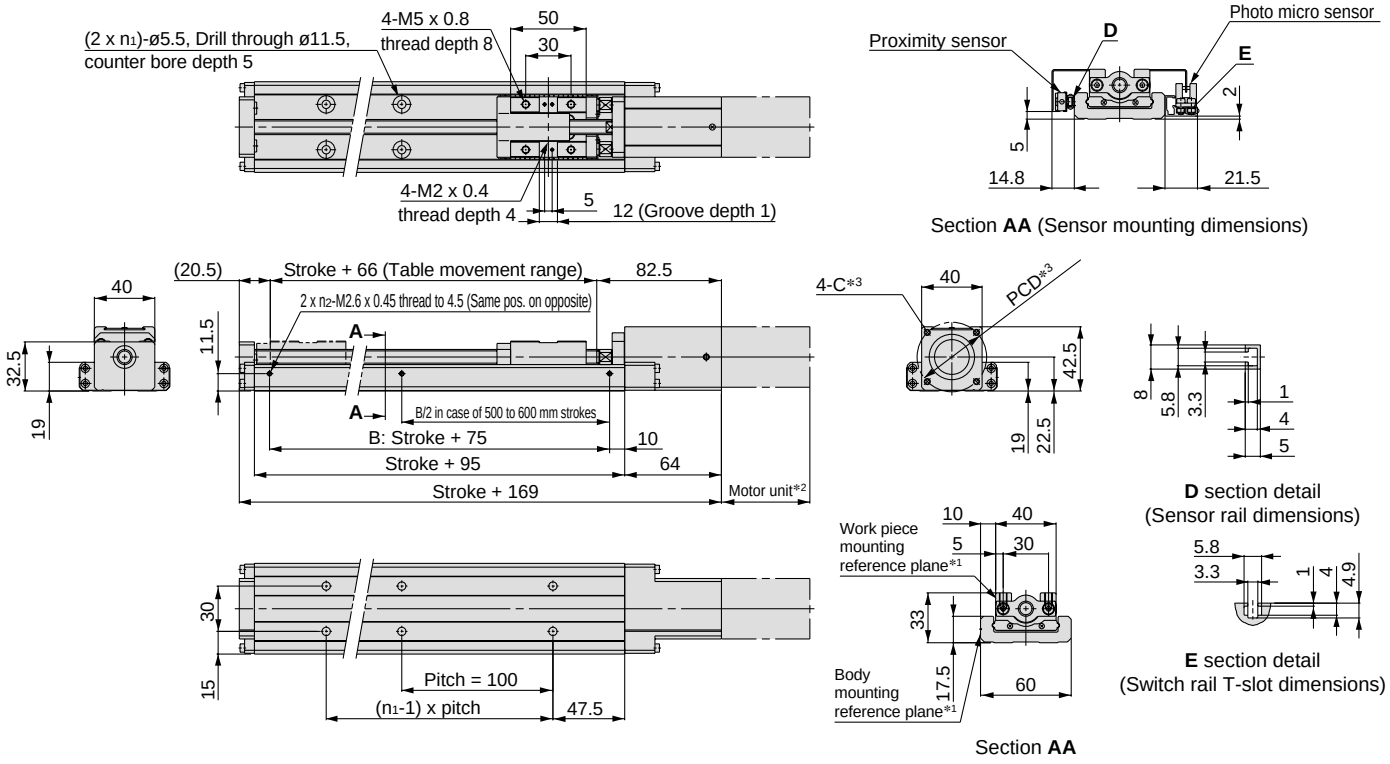
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6□E□NF(X10)

Scale: 20%



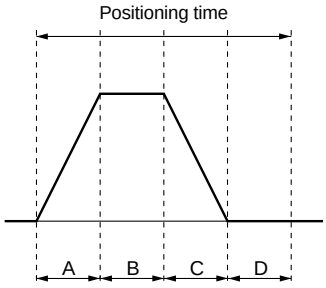
Model	Stroke	n_1	n_2
LTF6□E□NF- 100-□□-X10	100	2	1
LTF6□E□NF- 200-□□-X10	200	3	1
LTF6□E□NF- 300-□□-X10	300	4	1
LTF6□E□NF- 400-□□-X10	400	5	1
LTF6□E□NF- 500-□□-X10	500	6	2
LTF6□E□NF- 600-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1A	MSD011P1E	103
		200/230	MSM012P1A	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13	MR-C10A1	86.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12	SGDE-01BP	94.5
		200/230	SGME-01AF12	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/10mm lead

How to Order

LTF6 [G] [E] [1] [NH] — [Stroke] — [ ] [ ] — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

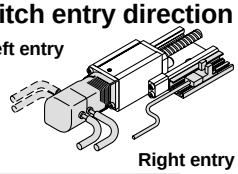
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

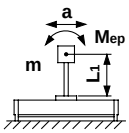
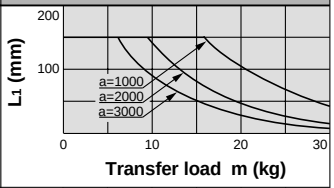
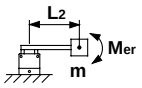
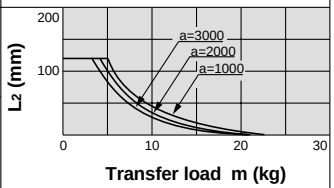
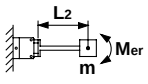
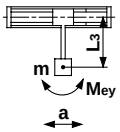
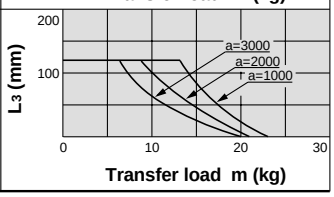
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	15					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W)					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction		Model	LTF6
Pitching		Horizontal/Lateral	
Rolling		Horizontal	
		Lateral	
Yawing		Horizontal/Lateral	

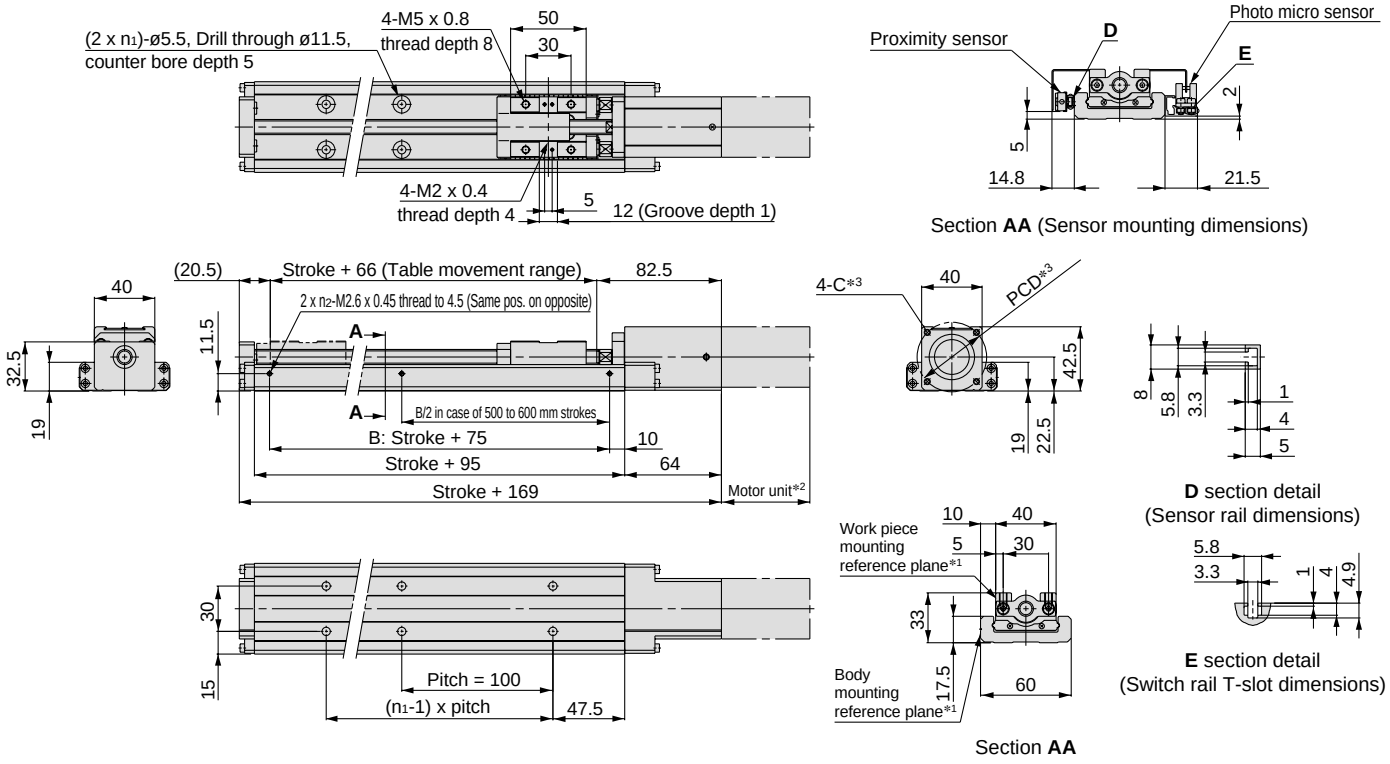
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF6□E□NH(X10)

Scale: 20%



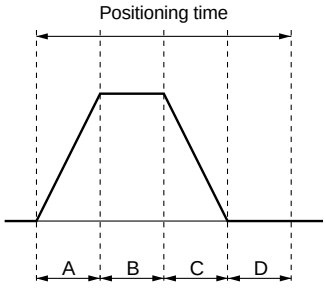
Model	Stroke	n_1	n_2
LTF6□E□NH- 100-□□-X10	100	2	1
LTF6□E□NH- 200-□□-X10	200	3	1
LTF6□E□NH- 300-□□-X10	300	4	1
LTF6□E□NH- 400-□□-X10	400	5	1
LTF6□E□NH- 500-□□-X10	500	6	2
LTF6□E□NH- 600-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1A	MSD011P1E	103
		200/230	MSM012P1A	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13	MR-C10A1	86.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12	SGDE-01BP	94.5
		200/230	SGME-01AF12	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/10mm lead

How to Order

LTF8 [G] F [1] [PH] — [Stroke] — [ ] [ ] — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

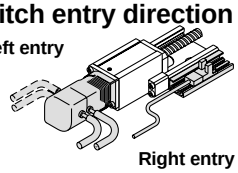
Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

Dog fittings for switch are attached to all types except type "Nil".

Motor/switch entry direction

Left entry



Right entry

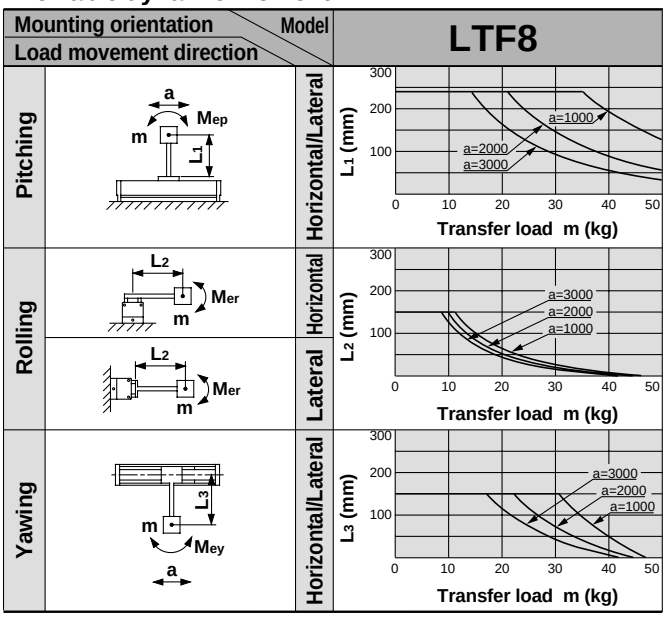
Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	50									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction \ Model: LTF8



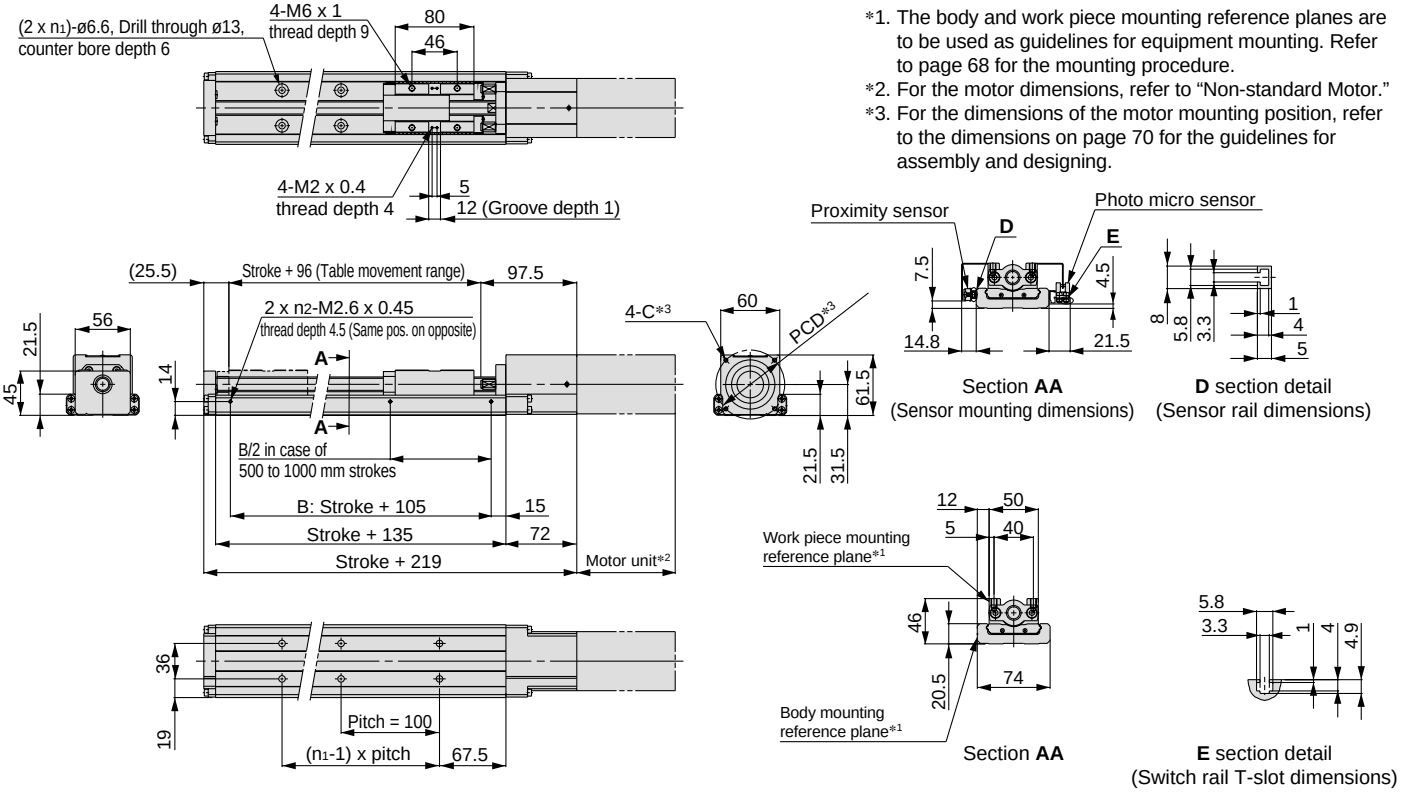
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF8□F□PH(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

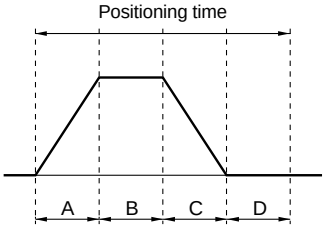
Model	Stroke	n_1	n_2
LTF8□F□PH- 100-□□-X10	100	2	1
LTF8□F□PH- 200-□□-X10	200	3	1
LTF8□F□PH- 300-□□-X10	300	4	1
LTF8□F□PH- 400-□□-X10	400	5	1
LTF8□F□PH- 500-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□PH- 600-□□-X10	600	7	2
LTF8□F□PH- 700-□□-X10	700	8	2
LTF8□F□PH- 800-□□-X10	800	9	2
LTF8□F□PH- 900-□□-X10	900	10	2
LTF8□F□PH-1000-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

∗ Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)*
Maximum acceleration: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1A	MSD021P1E	95
		200/230	MSM022P1A	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23	MR-C20A1	89
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12	SGDE-02BP	96.5
		200/230	SGME-02AF12	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/20mm lead

How to Order

LTF8 [G] F [1] [PL] — Stroke — [ ] [ ] — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

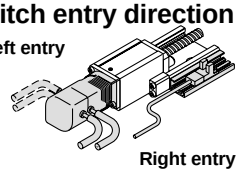
Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

Dog fittings for switch are attached to all types except type "Nil".

Motor/switch entry direction

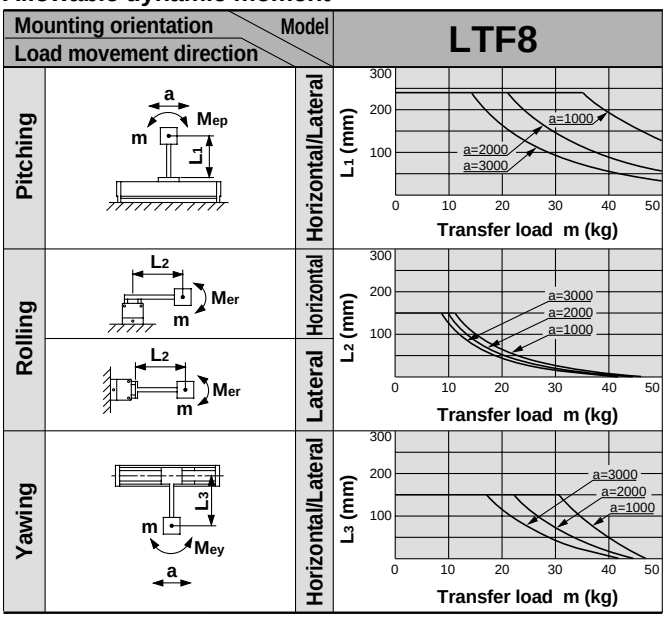


Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	25									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

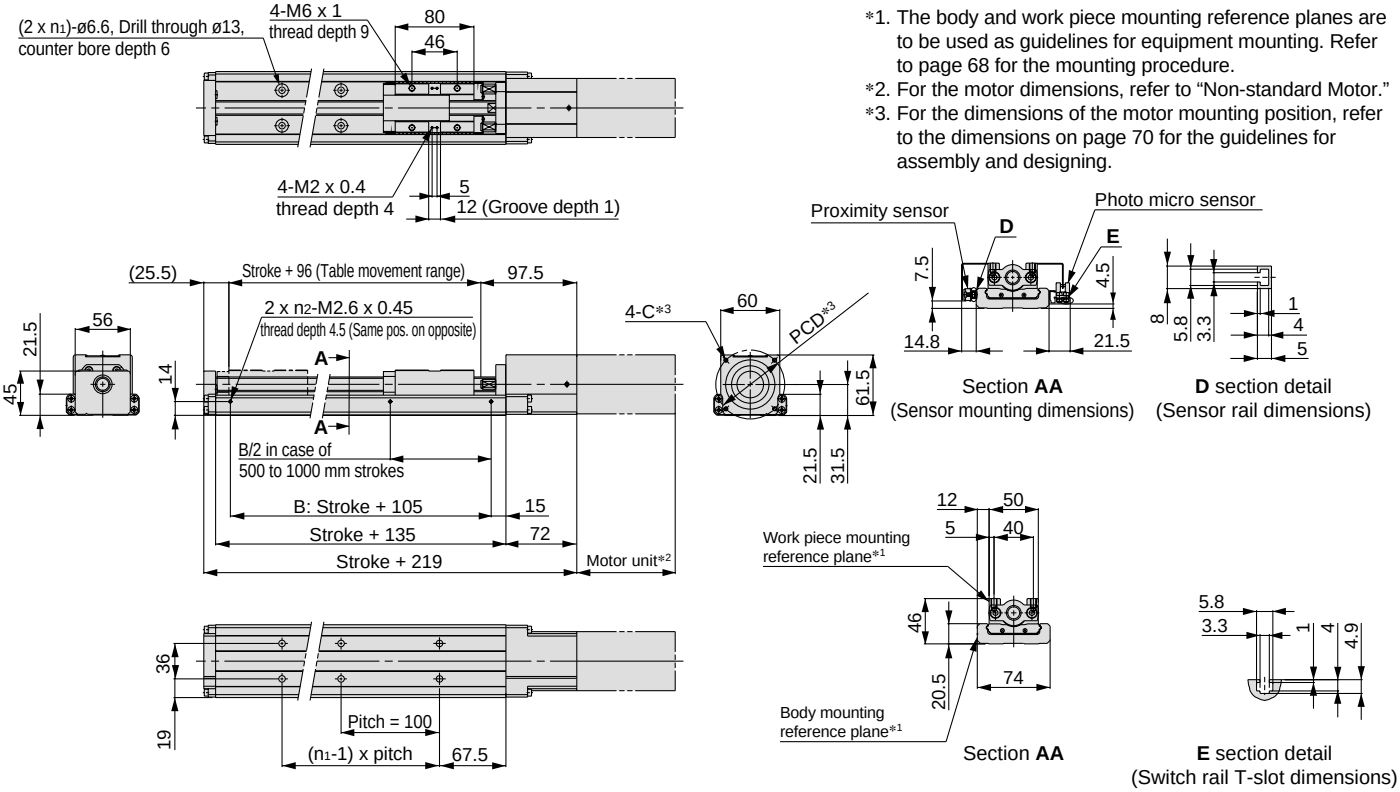


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8□F□PL(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

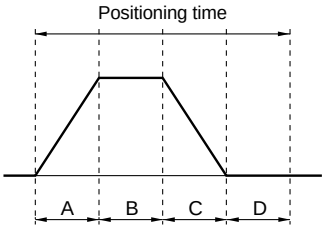
Model	Stroke	n_1	n_2
LTF8□F□PL- 100-□□-X10	100	2	1
LTF8□F□PL- 200-□□-X10	200	3	1
LTF8□F□PL- 300-□□-X10	300	4	1
LTF8□F□PL- 400-□□-X10	400	5	1
LTF8□F□PL- 500-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□PL- 600-□□-X10	600	7	2
LTF8□F□PL- 700-□□-X10	700	8	2
LTF8□F□PL- 800-□□-X10	800	9	2
LTF8□F□PL- 900-□□-X10	900	10	2
LTF8□F□PL-1000-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)*
Maximum acceleration: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1A	MSD021P1E	95
		200/230	MSM022P1A	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23	MR-C20A1	89
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12	SGDE-02BP	96.5
		200/230	SGME-02AF12	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/10mm lead

How to Order

LTF8 [G] F [1] [NH] — Stroke — [ ] [ ] — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

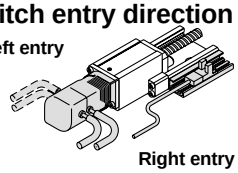
Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

Dog fittings for switch are attached to all types except type "Nil".

Motor/switch entry direction

Left entry



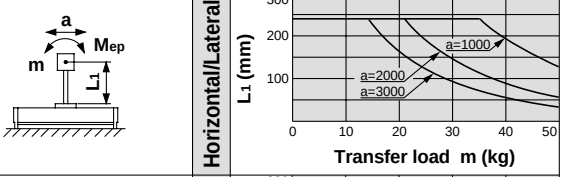
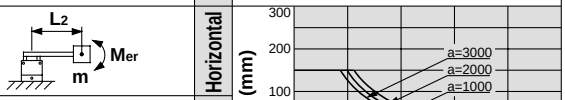
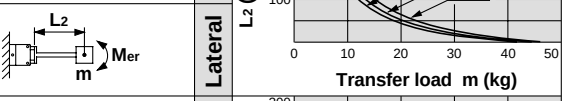
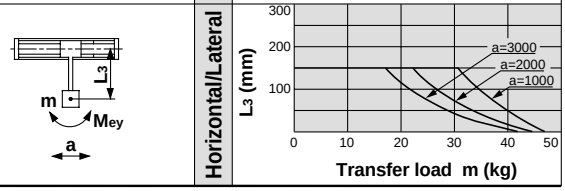
Right entry

Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	50									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction	Model	LTF8
Pitching	Horizontal/Lateral	
Rolling	Horizontal	
Rolling	Lateral	
Yawing	Horizontal/Lateral	

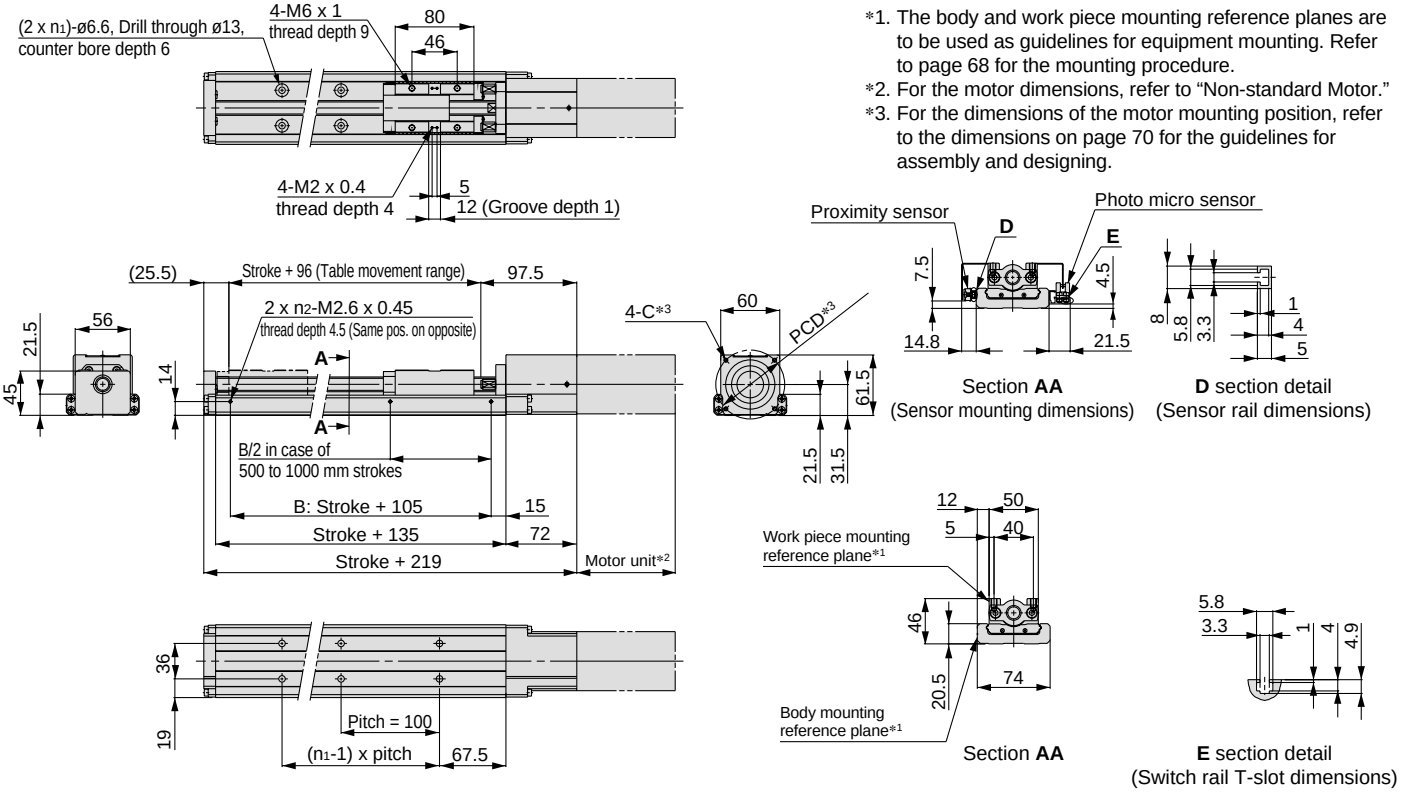
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF8□F□NH(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

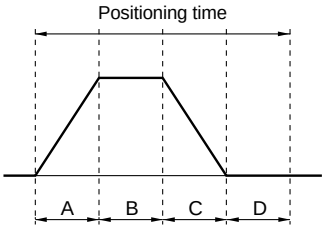
Model	Stroke	n_1	n_2
LTF8□F□NH- 100-□□-X10	100	2	1
LTF8□F□NH- 200-□□-X10	200	3	1
LTF8□F□NH- 300-□□-X10	300	4	1
LTF8□F□NH- 400-□□-X10	400	5	1
LTF8□F□NH- 500-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□NH- 600-□□-X10	600	7	2
LTF8□F□NH- 700-□□-X10	700	8	2
LTF8□F□NH- 800-□□-X10	800	9	2
LTF8□F□NH- 900-□□-X10	900	10	2
LTF8□F□NH-1000-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

∗ Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)*
Maximum acceleration: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1A	MSD021P1E	95
		200/230	MSM022P1A	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23	MR-C20A1	89
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12	SGDE-02BP	96.5
		200/230	SGME-02AF12	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/20mm lead

How to Order

LTF8 [G] F [1] [NL] — [Stroke] — [ ] [ ] — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

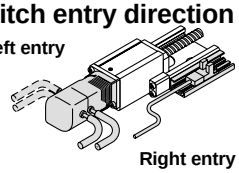
Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

Dog fittings for switch are attached to all types except type "Nil".

Motor/switch entry direction

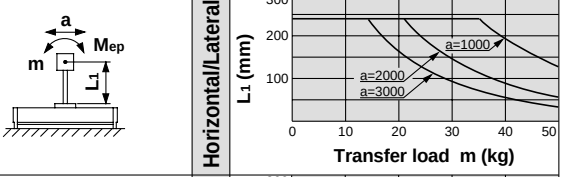
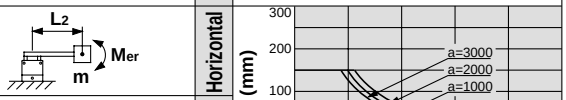
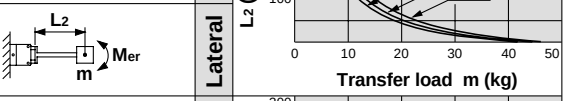
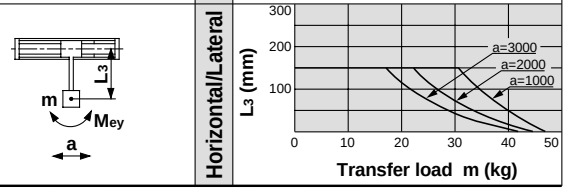


Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	25									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W)									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction	Model	LTF8
Pitching	Horizontal/Lateral	
Rolling	Horizontal	
	Lateral	
Yawing	Horizontal/Lateral	

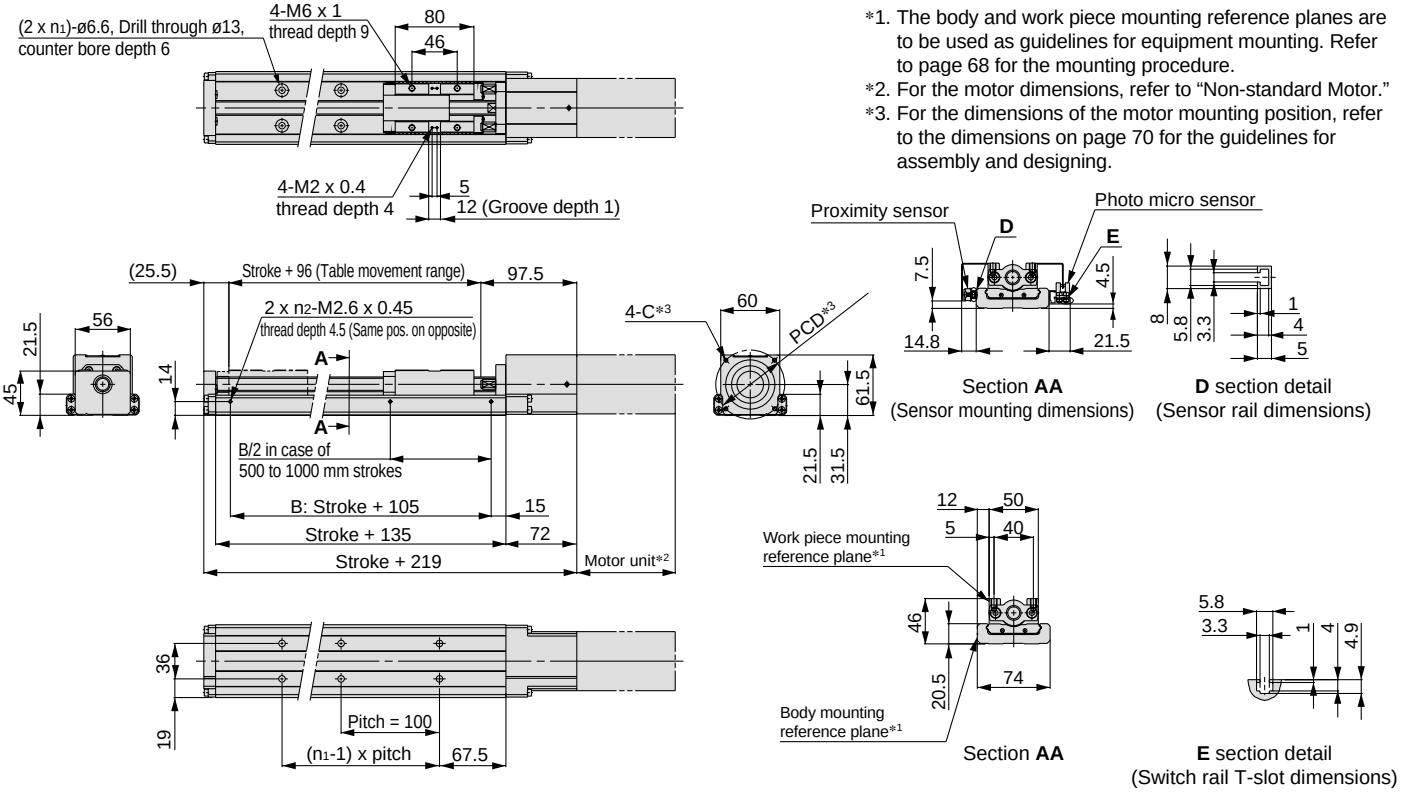
m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

SMC

Dimensions/LTF8□F□NL(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

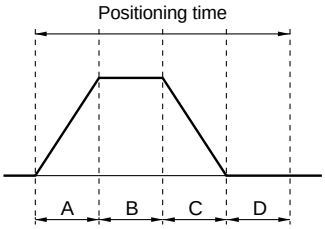
Model	Stroke	n_1	n_2
LTF8□F□NL- 100-□□-X10	100	2	1
LTF8□F□NL- 200-□□-X10	200	3	1
LTF8□F□NL- 300-□□-X10	300	4	1
LTF8□F□NL- 400-□□-X10	400	5	1
LTF8□F□NL- 500-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□NL- 600-□□-X10	600	7	2
LTF8□F□NL- 700-□□-X10	700	8	2
LTF8□F□NL- 800-□□-X10	800	9	2
LTF8□F□NL- 900-□□-X10	900	10	2
LTF8□F□NL-1000-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)*
Maximum acceleration: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1A	MSD021P1E	95
		200/230	MSM022P1A	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23	MR-C20A1	89
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12	SGDE-02BP	96.5
		200/230	SGME-02AF12	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/6mm lead

How to Order

LTF6 G E 1 PF — Stroke K — ☐ ☐ — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

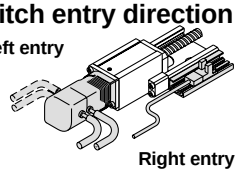
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

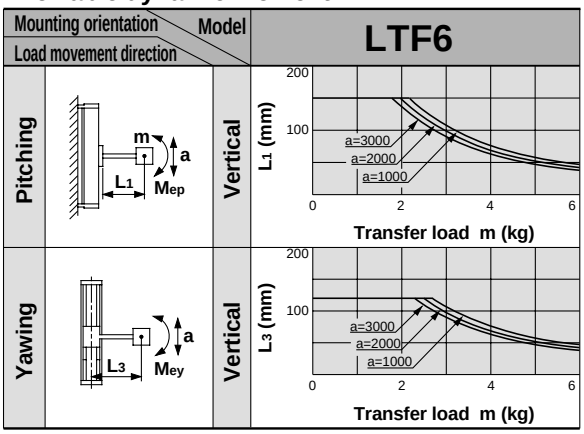
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	6					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					
Regenerative absorption unit			Refer to the selection guide below.					

Allowable Moment (N·m)

Allowable dynamic moment



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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

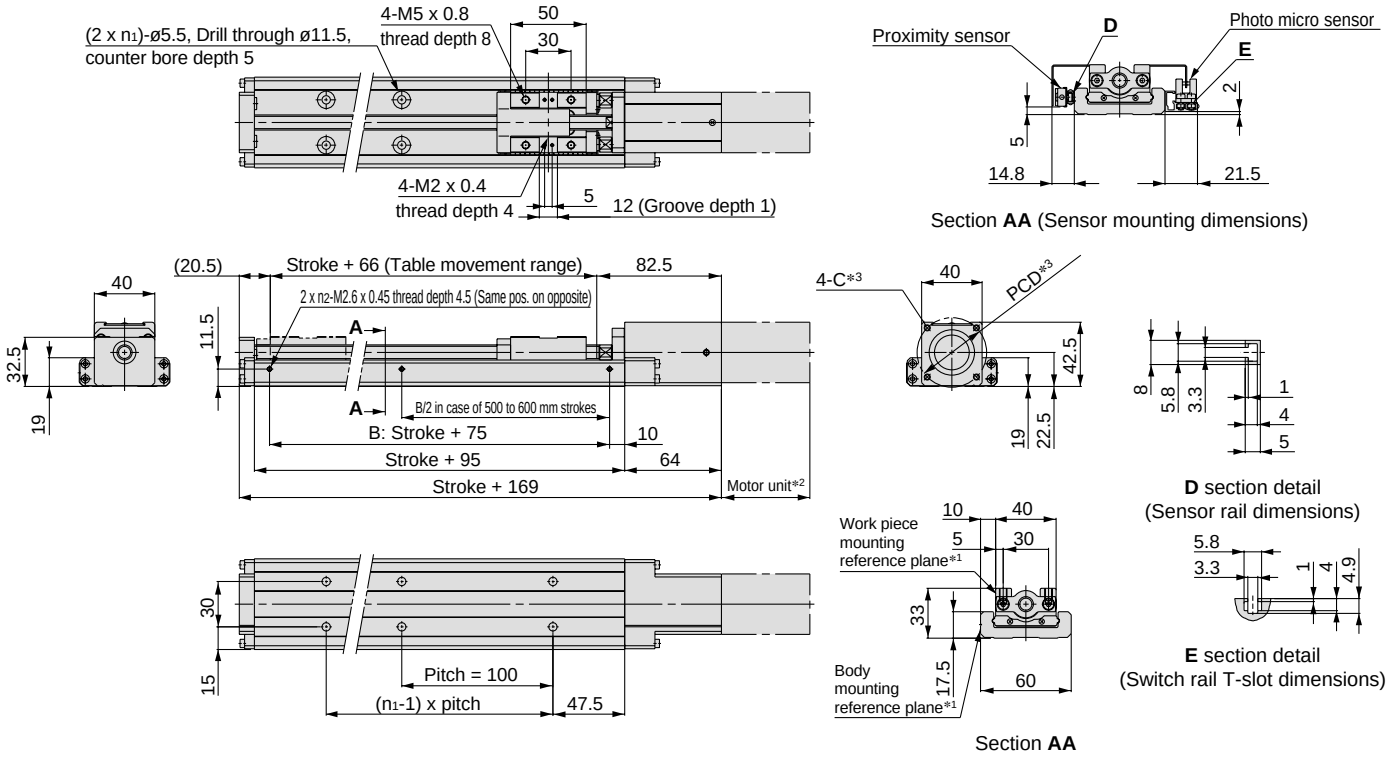
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□PF(X10)

Scale: 20%



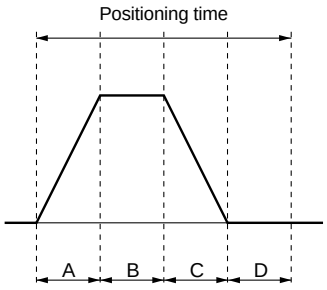
Model	Stroke	n_1	n_2
LTF6□E□PF- 100K-□□-X10	100	2	1
LTF6□E□PF- 200K-□□-X10	200	3	1
LTF6□E□PF- 300K-□□-X10	300	4	1
LTF6□E□PF- 400K-□□-X10	400	5	1
LTF6□E□PF- 500K-□□-X10	500	6	2
LTF6□E□PF- 600K-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1B	MSD011P1E	135
		200/230	MSM012P1B	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13B	MR-C10A1	114.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12B	SGDE-01BP	135
		200/230	SGME-01AF12B	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Ground Ball Screw ø10mm/10mm lead

How to Order

LTF6 [G] [E] [1] [PH] — [Stroke] [K] — [ ] [ ] — [X10]

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

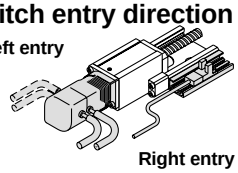
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

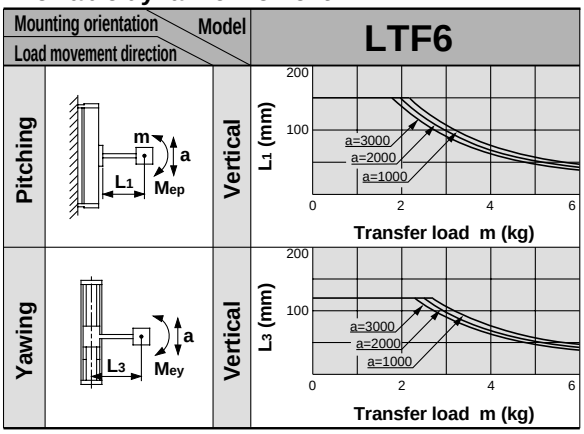
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	3					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.02					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Ground ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					
Regenerative absorption unit			Refer to the selection guide below.					

Allowable Moment (N·m)

Allowable dynamic moment



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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

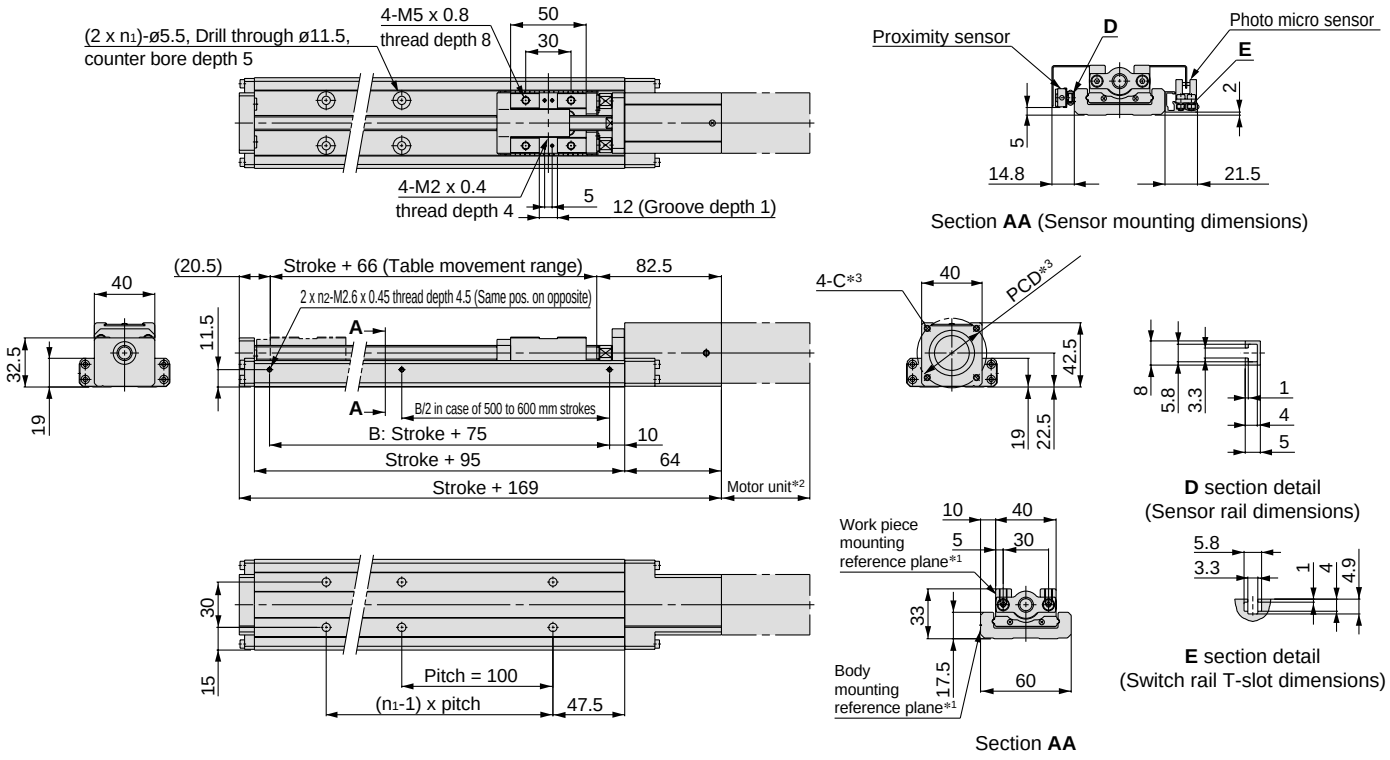
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□PH(X10)

Scale: 20%



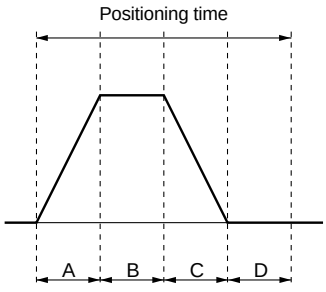
Model	Stroke	n_1	n_2
LTF6□E□PH- 100K-□□-X10	100	2	1
LTF6□E□PH- 200K-□□-X10	200	3	1
LTF6□E□PH- 300K-□□-X10	300	4	1
LTF6□E□PH- 400K-□□-X10	400	5	1
LTF6□E□PH- 500K-□□-X10	500	6	2
LTF6□E□PH- 600K-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1B	MSD011P1E	135
		200/230	MSM012P1B	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13B	MR-C10A1	114.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12B	SGDE-01BP	135
		200/230	SGME-01AF12B	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/6mm lead

How to Order

LTF6 G E 1 NF — Stroke K — □ □ — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

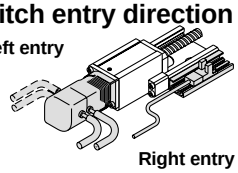
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

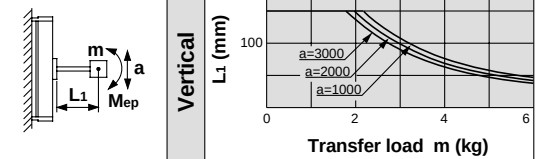
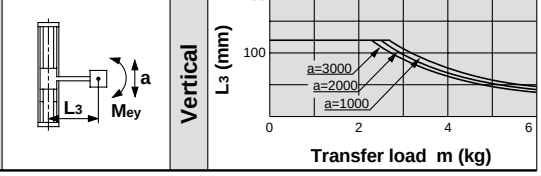
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	6					
	Rated thrust	N	300					
	Maximum speed	mm/s	300					230
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 6mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					
Regenerative absorption unit			Refer to the selection guide below.					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction	Model	LTF6
Pitching	Vertical	
Yawing	Vertical	

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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

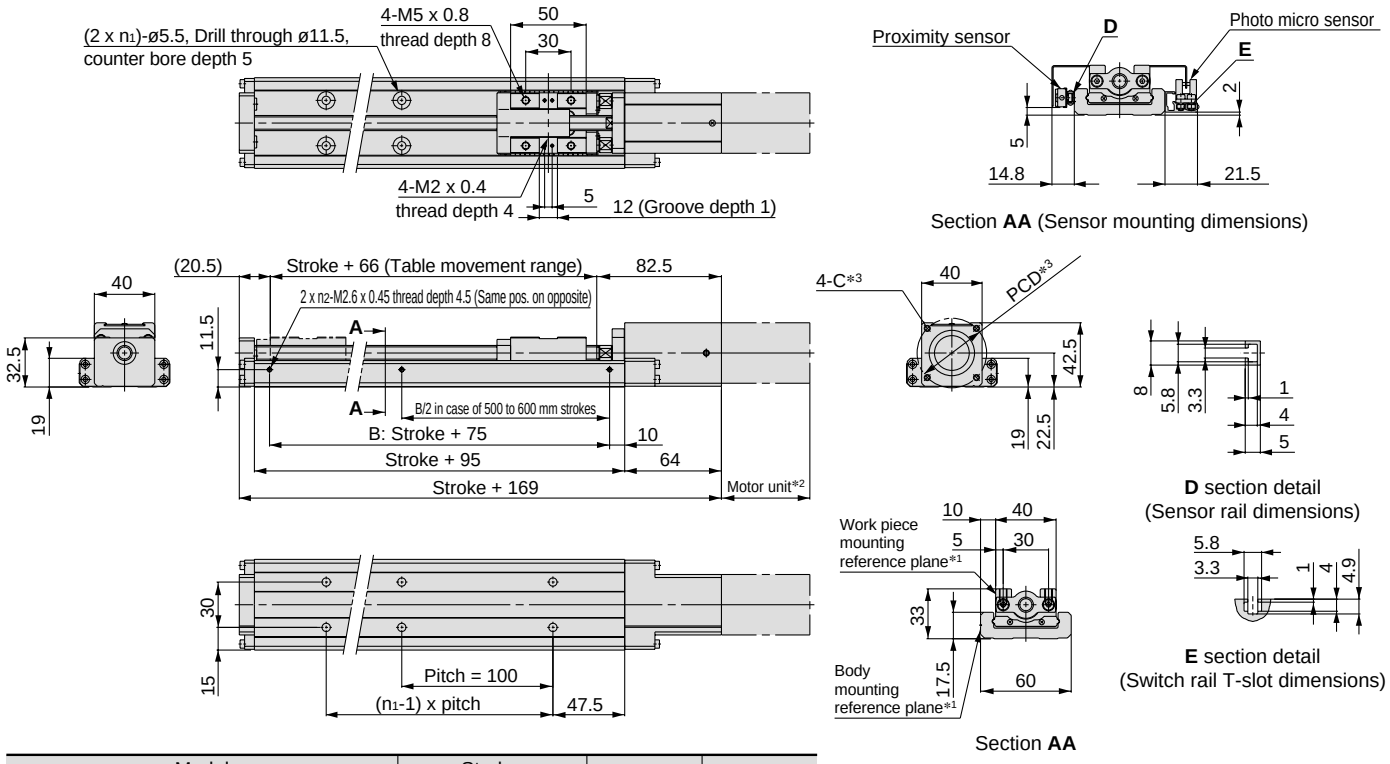
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□NF(X10)

Scale: 20%



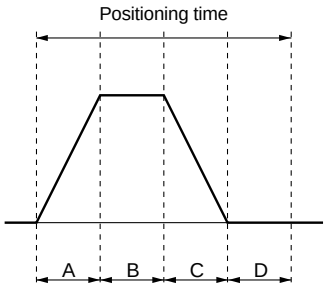
Model	Stroke	n_1	n_2
LTF6□E□NF- 100K-□□-X10	100	2	1
LTF6□E□NF- 200K-□□-X10	200	3	1
LTF6□E□NF- 300K-□□-X10	300	4	1
LTF6□E□NF- 400K-□□-X10	400	5	1
LTF6□E□NF- 500K-□□-X10	500	6	2
LTF6□E□NF- 600K-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	150	0.5	0.6	1.2	2.5	4.5
	300	0.5	0.6	0.9	1.6	2.6

* 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: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1B	MSD011P1E	135
		200/230	MSM012P1B	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13B	MR-C10A1	114.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12B	SGDE-01BP	135
		200/230	SGME-01AF12B	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF6

Motor Output 100W

Rolled Ball Screw ø10mm/10mm lead

How to Order

LTF6 G E 1 NH — Stroke K — □ □ — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

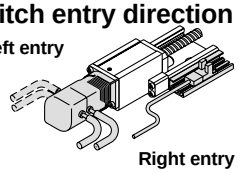
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

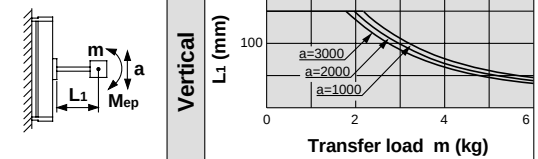
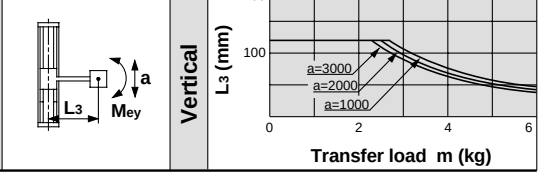
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600
Performance	Body weight (without motor)	kg	1.7	2.1	2.6	3.1	3.6	4.1
	Operating temperature range	°C	5 to 40 (with no condensation)					
	Work load	kg	3					
	Rated thrust	N	180					
	Maximum speed	mm/s	500					390
	Positioning repeatability	mm	±0.05					
Main parts	Motor		AC servomotor (100W) with brake					
	Encoder		Incremental system					
	Lead screw		Rolled ball screw ø10mm, 10mm lead					
	Guide		Frame-type linear guide					
	Motor/Screw connection		With coupling					
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)					
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)					
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)					
Regenerative absorption unit			Refer to the selection guide below.					

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction	Model	LTF6
Pitching	Vertical	
Yawing	Vertical	

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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

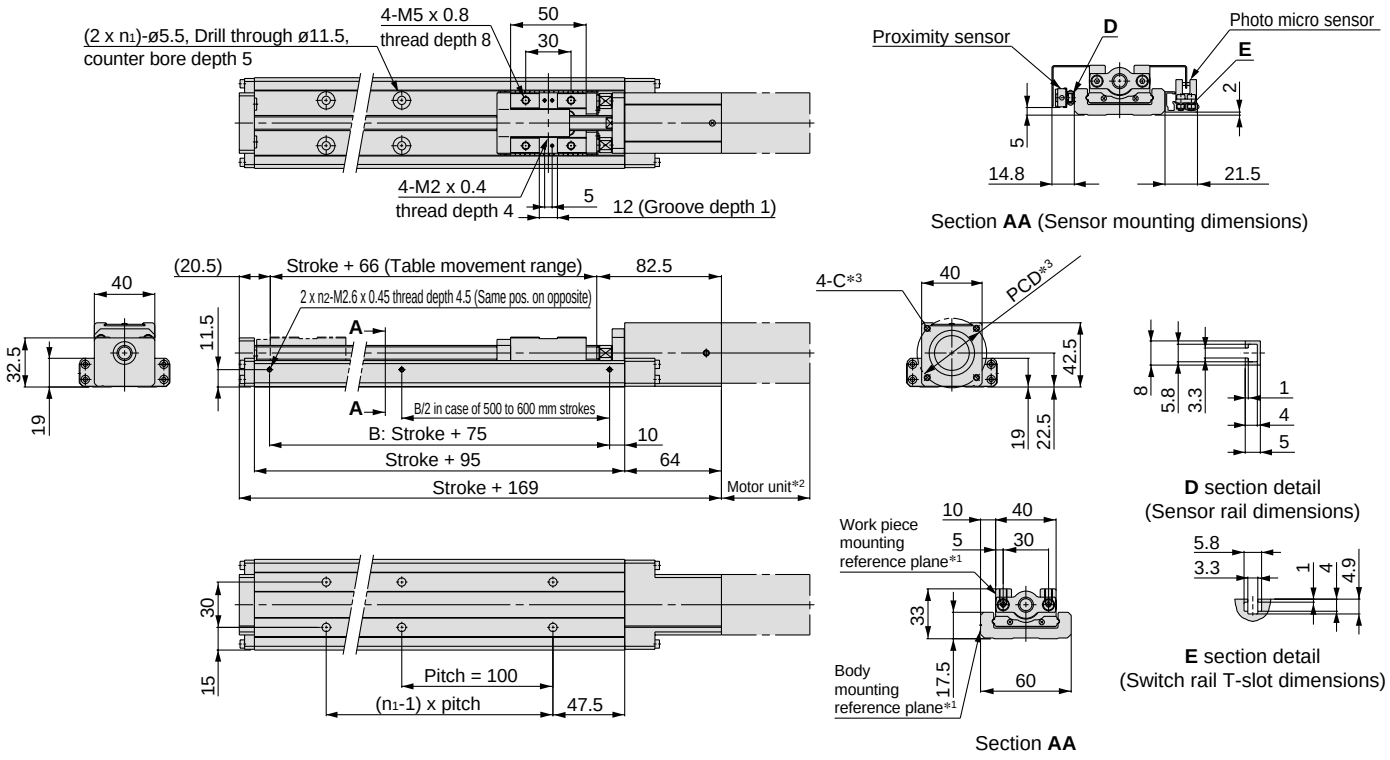
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□NH(X10)

Scale: 20%



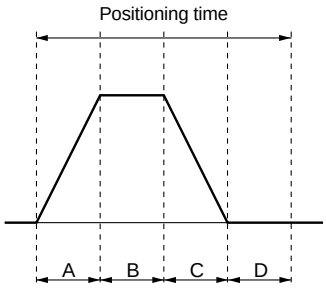
Model	Stroke	n_1	n_2
LTF6□E□NH- 100K-□□-X10	100	2	1
LTF6□E□NH- 200K-□□-X10	200	3	1
LTF6□E□NH- 300K-□□-X10	300	4	1
LTF6□E□NH- 400K-□□-X10	400	5	1
LTF6□E□NH- 500K-□□-X10	500	6	2
LTF6□E□NH- 600K-□□-X10	600	7	2

*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 69 for the guidelines for assembly and designing.

Positioning Time Guide

Positioning distance (mm)		Positioning time (sec.)				
		1	10	100	300	600
Speed (mm/s)	10	0.5	1.5	10.5	30.5	60.5
	100	0.5	0.6	1.5	3.5	6.5
	250	0.5	0.6	0.9	1.7	2.9
	500	0.5	0.6	0.8	1.2	1.8

* 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: 3000mm/s²

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

Non-standard Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	100	100/115	MSM011P1B	MSD011P1E	135
		200/230	MSM012P1B	MSD013P1E	
Mitsubishi Electric Corporation	100	100/115	HC-PQ13B	MR-C10A1	114.5
		200/230		MR-C10A	
Yasukawa Electric Corporation	100	100/115	SGME-01BF12B	SGDE-01BP	135
		200/230	SGME-01AF12B	SGDE-01AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/10mm lead

How to Order

LTF8 [G] F [1] [PH] — [Stroke] [K] — [ ] [ ] — [X10]

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

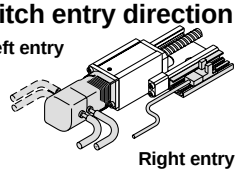
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

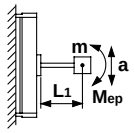
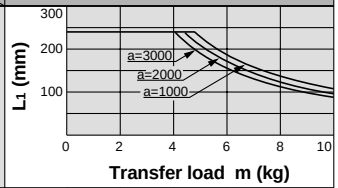
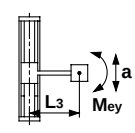
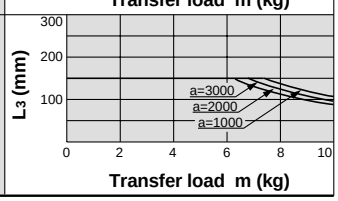
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	10									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									
Regenerative absorption unit			Refer to the selection guide below.									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction			Model: LTF8
Pitching		Vertical	
Yawing		Vertical	

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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

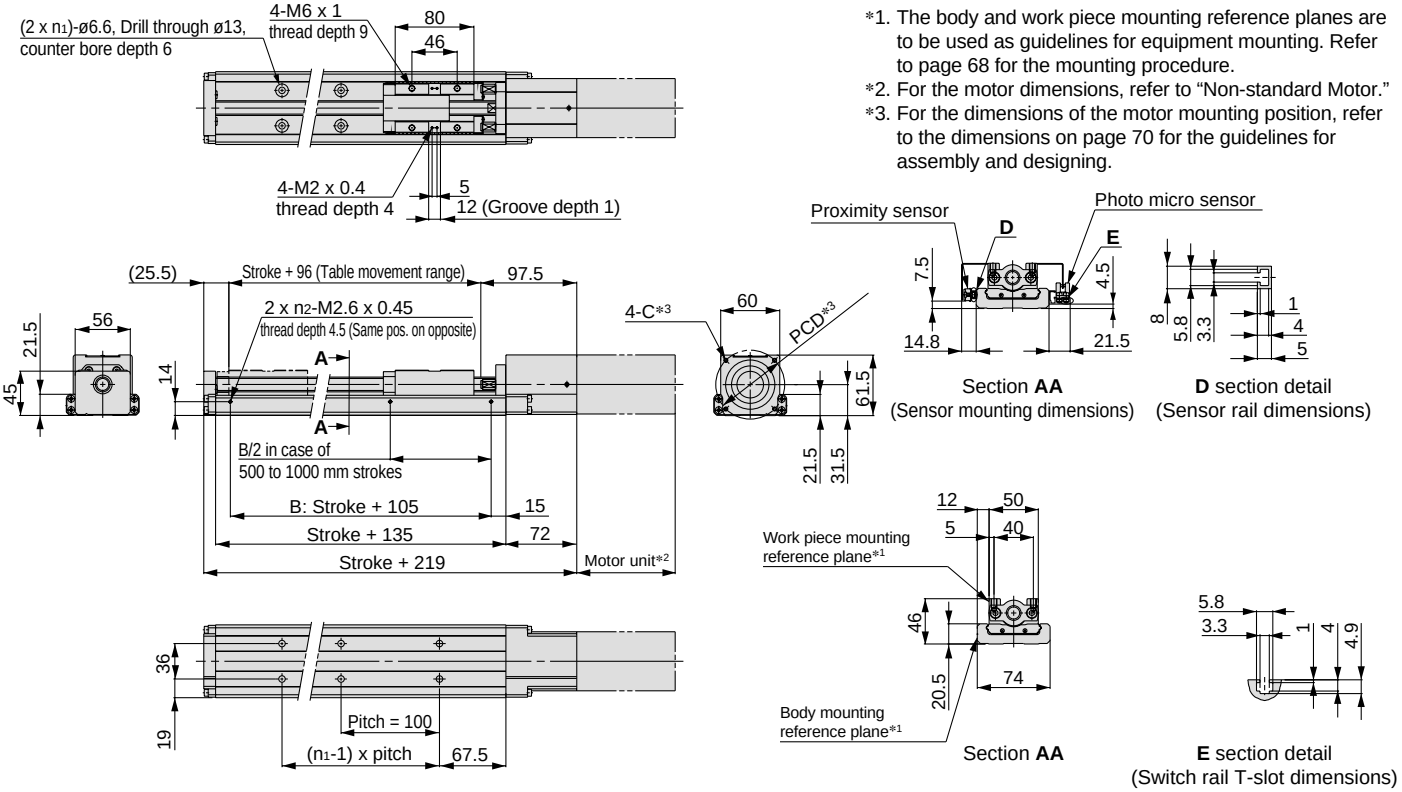
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF8□F□PH(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

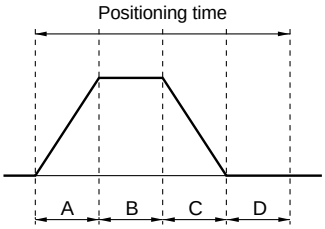
Model	Stroke	n_1	n_2
LTF8□F□PH- 100K-□□-X10	100	2	1
LTF8□F□PH- 200K-□□-X10	200	3	1
LTF8□F□PH- 300K-□□-X10	300	4	1
LTF8□F□PH- 400K-□□-X10	400	5	1
LTF8□F□PH- 500K-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□PH- 600K-□□-X10	600	7	2
LTF8□F□PH- 700K-□□-X10	700	8	2
LTF8□F□PH- 800K-□□-X10	800	9	2
LTF8□F□PH- 900K-□□-X10	900	10	2
LTF8□F□PH-1000K-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

∗ Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)*
Maximum acceleration: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1B	MSD021P1E	128
		200/230	MSM022P1B	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23B	MR-C20A1	121
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12B	SGDE-02BP	136
		200/230	SGME-02AF12B	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Ground Ball Screw ø15mm/20mm lead

How to Order

LTF8 G F 1 PL — Stroke K — □ □ — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

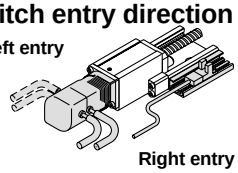
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

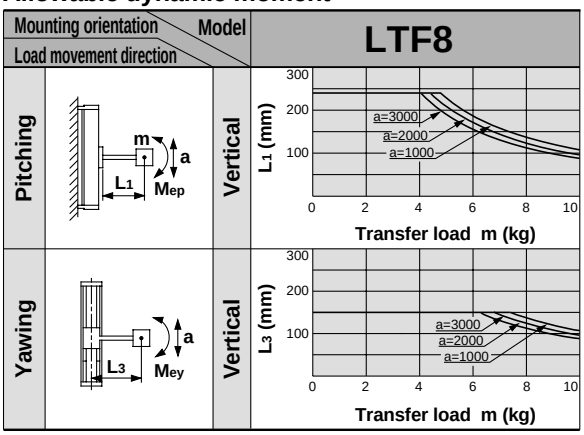
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	5									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.02									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Ground ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									
Regenerative absorption unit			Refer to the selection guide below.									

Allowable Moment (N·m)

Allowable dynamic moment



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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

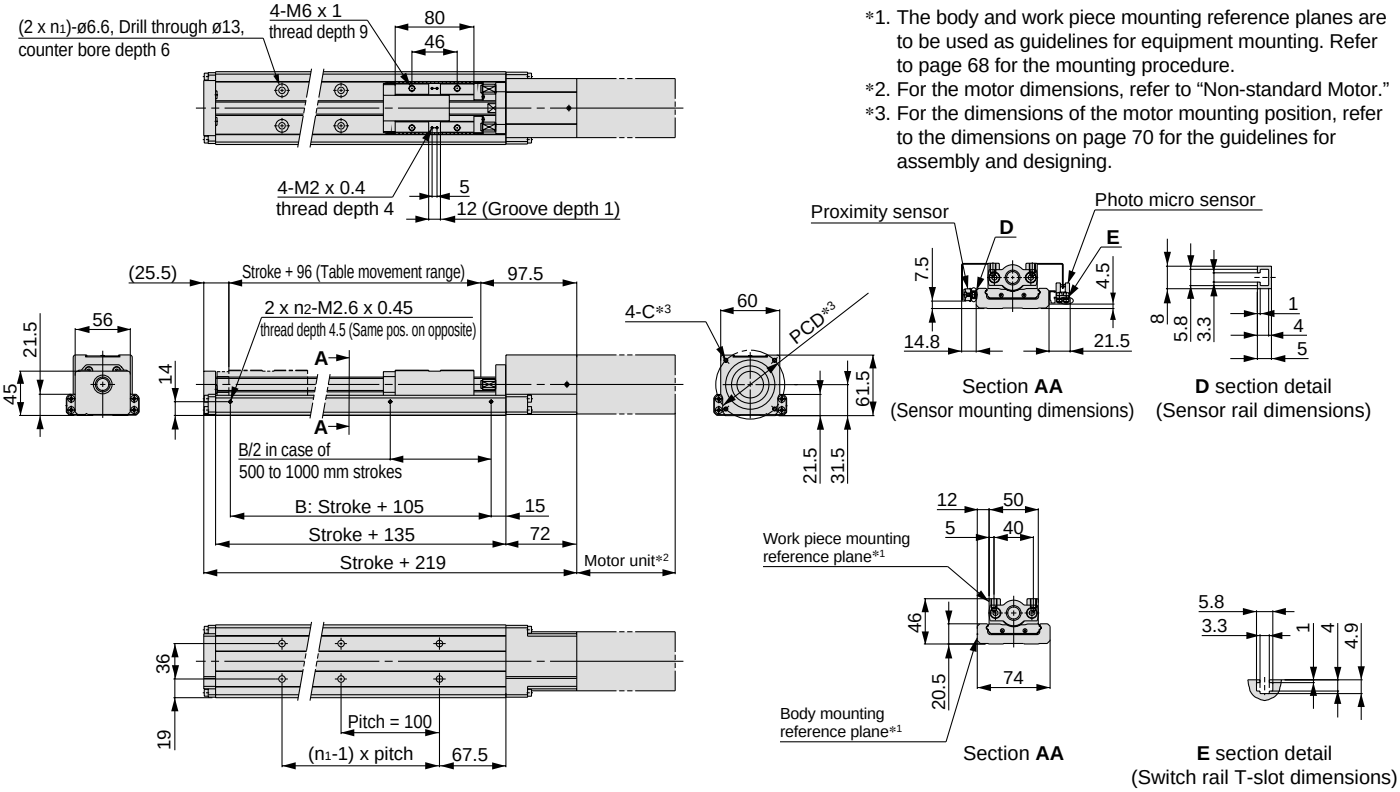
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF8□F□PL(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

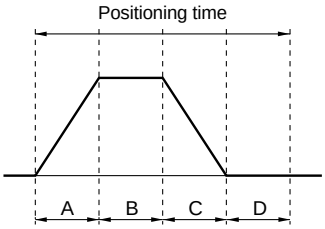
Model	Stroke	n_1	n_2
LTF8□F□PL- 100K-□□-X10	100	2	1
LTF8□F□PL- 200K-□□-X10	200	3	1
LTF8□F□PL- 300K-□□-X10	300	4	1
LTF8□F□PL- 400K-□□-X10	400	5	1
LTF8□F□PL- 500K-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□PL- 600K-□□-X10	600	7	2
LTF8□F□PL- 700K-□□-X10	700	8	2
LTF8□F□PL- 800K-□□-X10	800	9	2
LTF8□F□PL- 900K-□□-X10	900	10	2
LTF8□F□PL-1000K-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)*
Maximum acceleration: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1B	MSD021P1E	128
		200/230	MSM022P1B	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23B	MR-C20A1	121
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12B	SGDE-02BP	136
		200/230	SGME-02AF12B	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/10mm lead

How to Order

LTF8 G F 1 NH — Stroke K — □ □ — X10

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

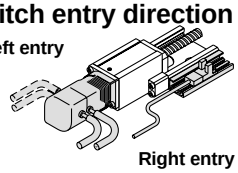
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

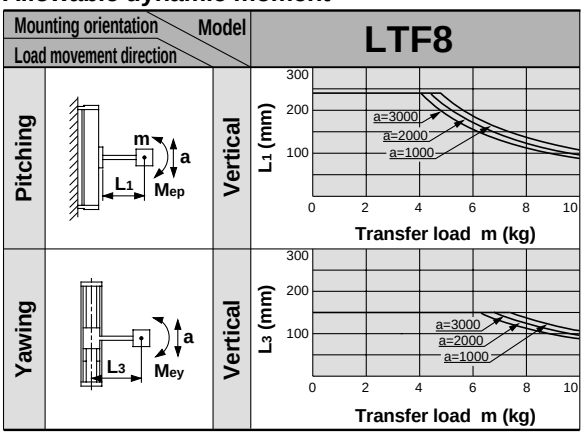
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	10									
	Rated thrust	N	360									
	Maximum speed	mm/s	500						440	350	290	240
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 10mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									
Regenerative absorption unit			Refer to the selection guide below.									

Allowable Moment (N·m)

Allowable dynamic moment



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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

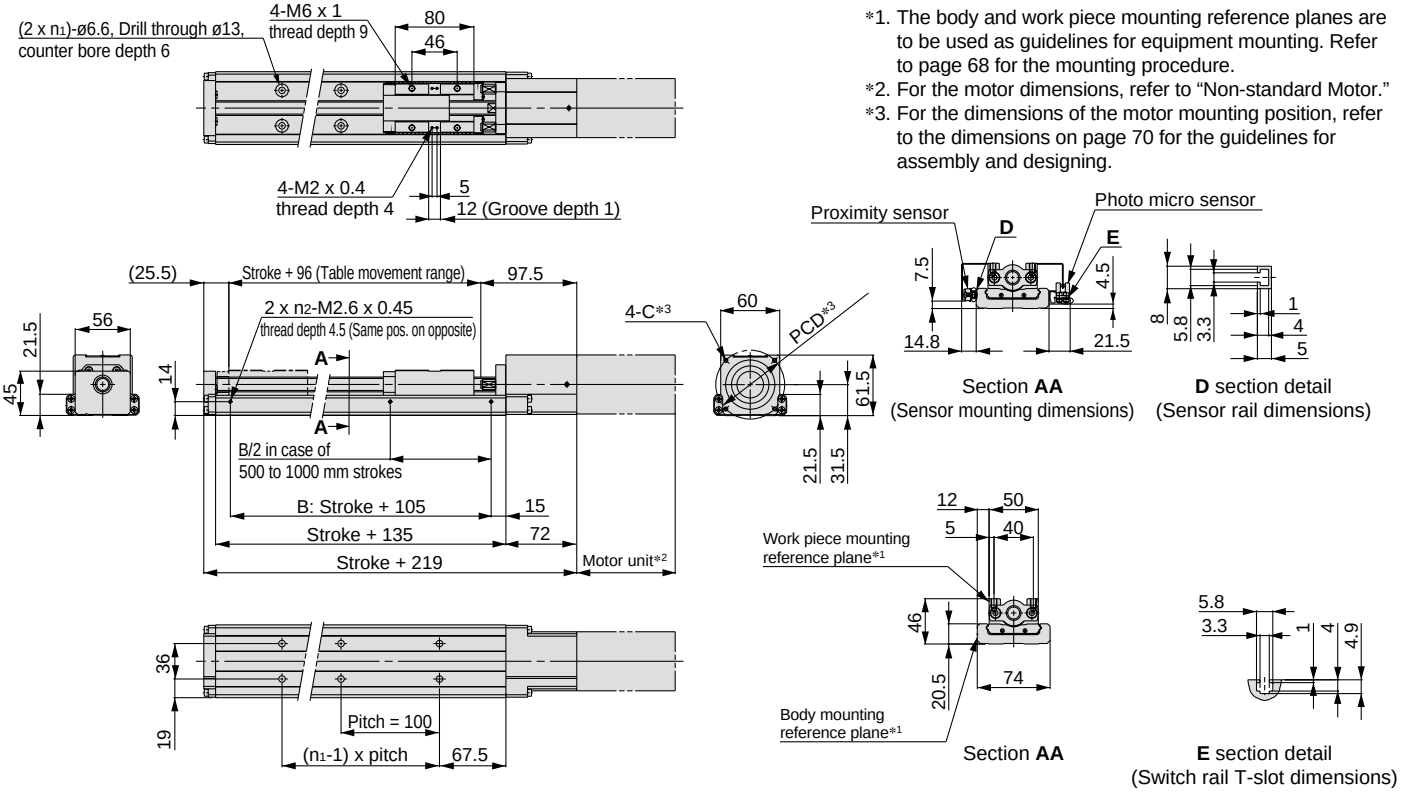
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF8□F□NH(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

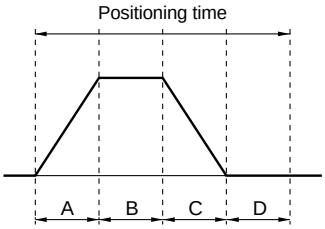
Model	Stroke	n_1	n_2
LTF8□F□NH- 100K-□□-X10	100	2	1
LTF8□F□NH- 200K-□□-X10	200	3	1
LTF8□F□NH- 300K-□□-X10	300	4	1
LTF8□F□NH- 400K-□□-X10	400	5	1
LTF8□F□NH- 500K-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□NH- 600K-□□-X10	600	7	2
LTF8□F□NH- 700K-□□-X10	700	8	2
LTF8□F□NH- 800K-□□-X10	800	9	2
LTF8□F□NH- 900K-□□-X10	900	10	2
LTF8□F□NH-1000K-□□-X10	1000	11	2

Positioning Time Guide

		Positioning time (sec.)				
Positioning distance (mm)		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	250	0.6	0.7	1.0	2.6	4.6
	500	0.6	0.7	0.9	1.7	2.7

∗ Values will vary slightly depending on the operating conditions.



A: Acceleration time
B: Constant velocity time
C: Deceleration time
D: Resting time (0.5 sec.)*
Maximum acceleration: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1B	MSD021P1E	128
		200/230	MSM022P1B	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23B	MR-C20A1	121
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12B	SGDE-02BP	136
		200/230	SGME-02AF12B	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF8

Motor Output 200W

Rolled Ball Screw ø15mm/20mm lead

How to Order

LTF8 **G** **F** **1** **NL** — **Stroke** **K** — □ □ — **X10**

Motor specification

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Power supply voltage

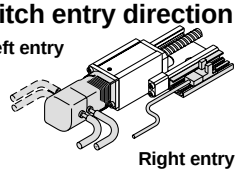
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

Motor/switch entry direction

Nil	Without motor, switch and switch rail
R	Motor straight, motor cable, switch and switch rail located on the right
L	Motor straight, motor cable, switch and switch rail located on the left

Motor/switch entry direction

Left entry



Right entry

Switch specifications

Nil	Without switch and switch rail
1	Photo micro sensor 1 pc., Photo micro sensor rail 1 pc.
2	Photo micro sensor 2 pcs., Photo micro sensor rail 1 pc.
3	Photo micro sensor 3 pcs., Photo micro sensor rail 1 pc.
4	Proximity switch (A contact) 1 pc., Proximity switch rail 1 pc.
5	Proximity switch (A contact) 2 pcs., Proximity switch rail 1 pc.
6	Proximity switch (B contact) 2 pcs., Proximity switch rail 1 pc.
7	Proximity switch (A contact) 1 pc., (B contact) 2 pcs., Proximity switch rail 1 pc.
A	Photo micro sensor rail 1 pc.
B	Proximity switch rail 1 pc.

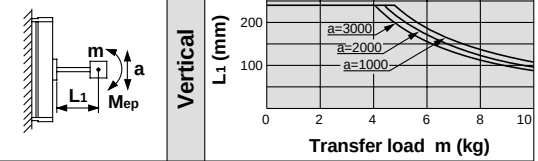
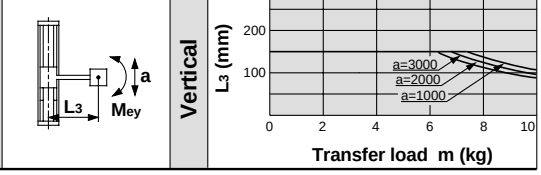
Dog fittings for switch are attached to all types except type "Nil".

Specifications

	Standard stroke	mm	100	200	300	400	500	600	700	800	900	1000
Performance	Body weight (without motor)	kg	3.4	4.3	5.1	6.0	6.8	7.7	8.5	9.4	10.2	11.1
	Operating temperature range	°C	5 to 40 (with no condensation)									
	Work load	kg	5									
	Rated thrust	N	180									
	Maximum speed	mm/s	1000						890	710	580	480
	Positioning repeatability	mm	±0.05									
Main parts	Motor		AC servomotor (200W) with brake									
	Encoder		Incremental system									
	Lead screw		Rolled ball screw ø15mm, 20mm lead									
	Guide		Frame-type linear guide									
	Motor/Screw connection		With coupling									
Switch	Model		Photo micro sensor EE-SX674 (Refer to page 93 for details.)									
			Proximity switch GXL-N12FT (A contact) (Refer to page 92 for details.)									
			Proximity switch GXL-N12FTB (B contact) (Refer to page 92 for details.)									
Regenerative absorption unit			Refer to the selection guide below.									

Allowable Moment (N·m)

Allowable dynamic moment

Mounting orientation / Load movement direction	Model	LTF8
Pitching	Vertical	
Yawing	Vertical	

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

Refer to page 71 for deflection data.

Regenerative Absorption Unit Selection Guide

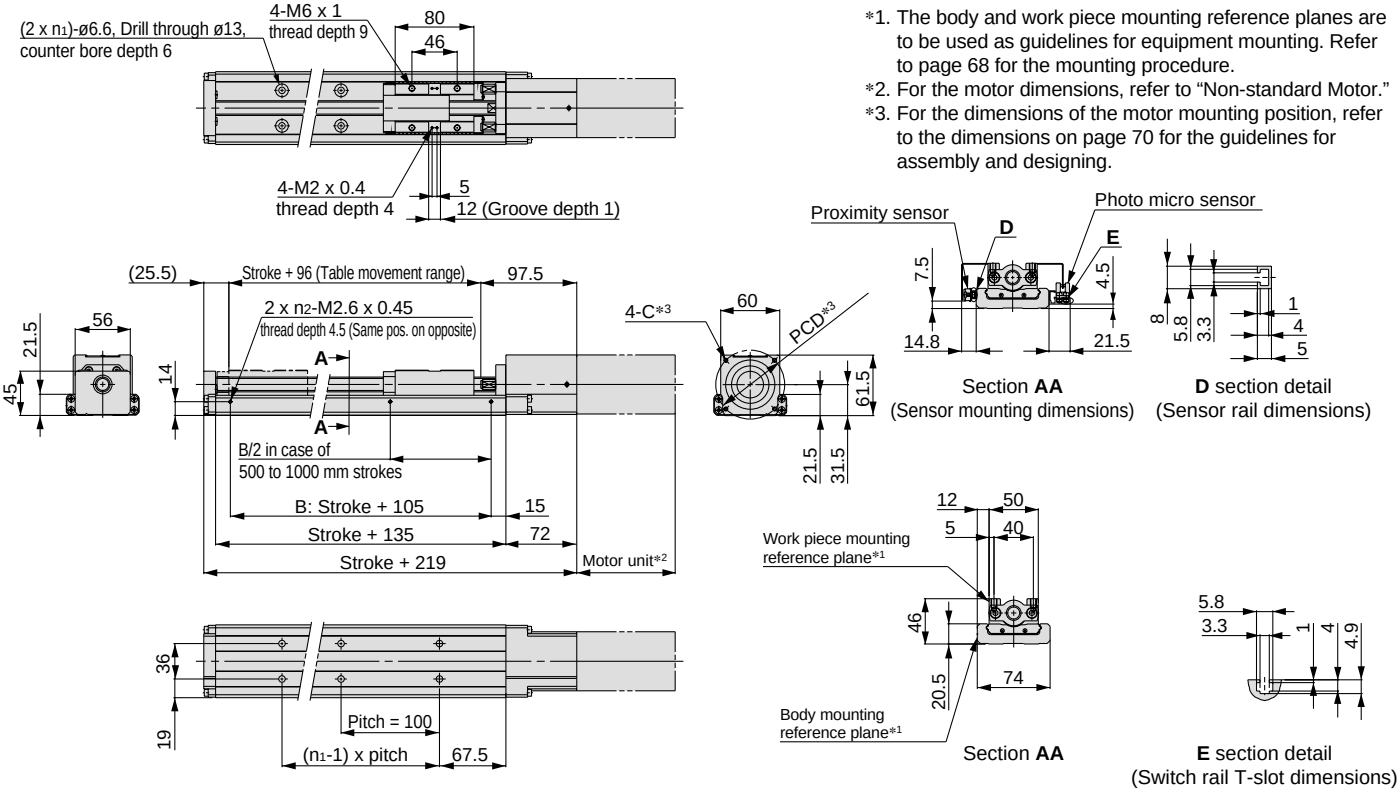
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

Regenerative energy = Motor coil energy consumption
+ Driver capacitor energy consumption (A)
+ Regenerative resistor energy consumption (B)

(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF8□F□NL(X10)

Scale: 13%



*1. The body and work piece mounting reference planes are to be used as guidelines for equipment mounting. Refer to page 68 for the mounting procedure.
*2. For the motor dimensions, refer to "Non-standard Motor."
*3. For the dimensions of the motor mounting position, refer to the dimensions on page 70 for the guidelines for assembly and designing.

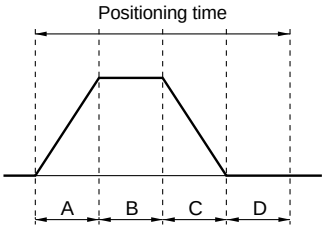
Model	Stroke	n_1	n_2
LTF8□F□NL- 100K-□□-X10	100	2	1
LTF8□F□NL- 200K-□□-X10	200	3	1
LTF8□F□NL- 300K-□□-X10	300	4	1
LTF8□F□NL- 400K-□□-X10	400	5	1
LTF8□F□NL- 500K-□□-X10	500	6	2

Model	Stroke	n_1	n_2
LTF8□F□NL- 600K-□□-X10	600	7	2
LTF8□F□NL- 700K-□□-X10	700	8	2
LTF8□F□NL- 800K-□□-X10	800	9	2
LTF8□F□NL- 900K-□□-X10	900	10	2
LTF8□F□NL-1000K-□□-X10	1000	11	2

Positioning Time Guide

Positioning distance (mm)		Positioning time (sec.)				
		1	10	100	500	1000
Speed (mm/s)	10	0.6	1.6	10.6	50.6	100.6
	100	0.6	0.7	1.6	5.6	10.6
	500	0.6	0.7	0.9	1.7	2.7
	1000	0.6	0.7	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 (0.5 sec.)*
Maximum acceleration: 3000mm/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 Motors: The following motors will be mounted when a motor mounted type is specified.

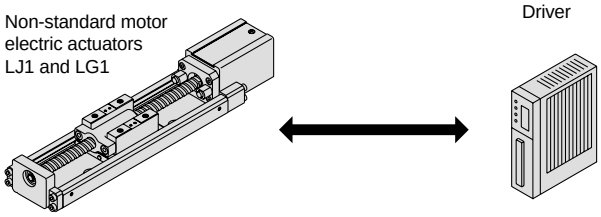
	Motor output (W)	Power supply voltage (V AC)	Motor model	Compatible driver model	Motor dimension (mm)
Matsushita Electric Industrial Co., Ltd.	200	100/115	MSM021P1B	MSD021P1E	128
		200/230	MSM022P1B	MSD023P1E	
Mitsubishi Electric Corporation	200	100/115	HC-PQ23B	MR-C20A1	121
		200/230		MR-C20A	
Yasukawa Electric Corporation	200	100/115	SGME-02BF12B	SGDE-02BP	136
		200/230	SGME-02AF12B	SGDE-02AP	

∗ Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
∗ For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Non-standard Motor Cables

These are cables for connecting non-standard motors and drivers.
Cable lengths other than those shown below should be arranged by the customer.

Non-standard motor electric actuators LJ1 and LG1



How to order

LJ1 – 1 – G 05 B

Compatible model

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Brake

Nil	Without brake
B	With brake

Cable length

05	5m

Applicable cables
LTF (non-standard motor)

Model	Manufacturer part no.
LJ1-1-G05∗1	MFMCA0050AEB (for motor) MFECA0050EAB (for encoder)
LJ1-1-G05B	MFMCA0050AEB (for motor) MFECA0050EAB (for encoder) MFMCB0050CET (for brake)
LJ1-1-R05	(for motor)∗2 MR-JCCBL5M-L (for encoder)
LJ1-1-Y05∗3	DP9320081-2 (for motor) DP9320089-2 (for encoder)
LJ1-1-Y05B	DP9320083-2 (for motor/brake) DP9320089-2 (for encoder)

∗1 When the Matsushita Electric Industrial Co., Ltd. motor driver is selected, in addition to the cable, a power connector (MOLEX 5569 – 10R) and an interface connector (Sumitomo/3-M Limited 10126-3000VE) are also required.

∗2 No cable is provided for the Mitsubishi Electric Corporation motor and brake. An electric cable with a sectional area of 0.75 mm^2 (600 V vinyl cable) must be procured by the customer.

∗3 When the Yasukawa Electric Corporation motor driver is selected, a digital operator and PC are required for selecting the various parameters.

Please refer to the technical literature of each manufacturer for further details.

Non-standard Motor Driver
Regenerative Absorption Unit/Regenerative Resistor

This is a regenerative absorption unit and regenerative resistor for a non-standard motor. Make a selection providing an allowance beyond the calculated capacity.

How to order

LJ1 – 7 – G

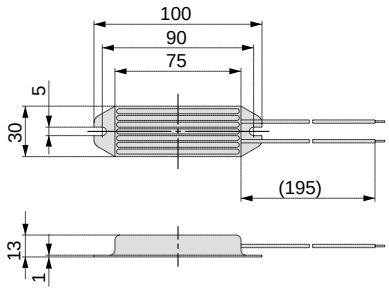
Compatible model

G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

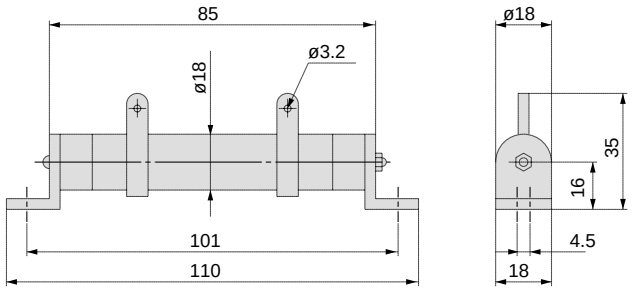
Applicable types
LTF (non-standard motor)

Model	Manufacturer part no.
LJ1-7-G	DVO P0820
LJ1-7-R	MR-RB013
LJ1-7-Y	JUSP-RG08

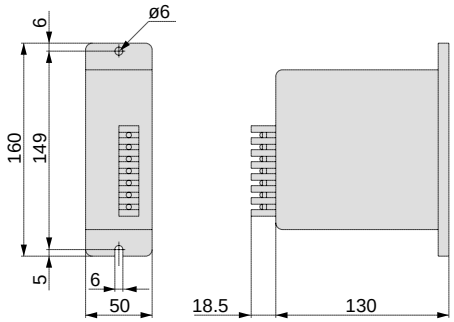
LJ1-7-G/Matsushita Electric Industrial Co., Ltd.



LJ1-7-R/Mitsubishi Electric Corporation

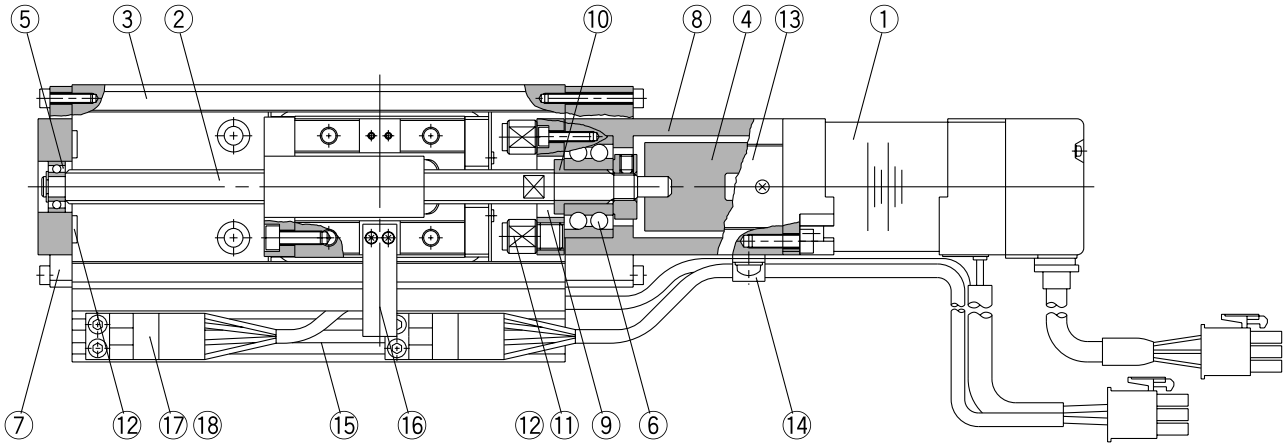


LJ1-7-Y/Yasukawa Electric Corporation



Construction

LTF6/LTF8



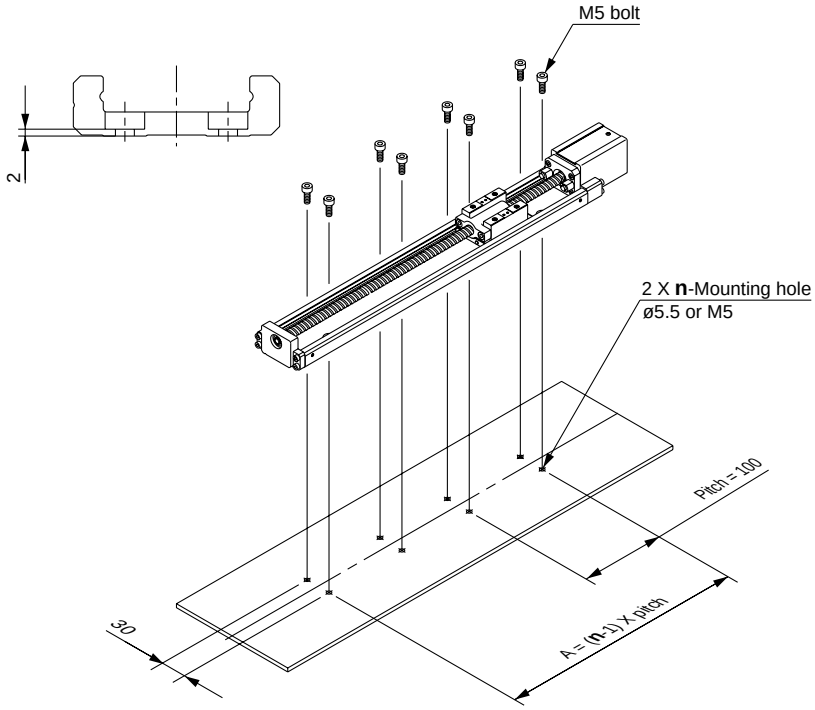
Parts list

No.	Description	Material	Note
1	**AC servomotor**	—	100W/200W
2	**Lead screw**	—	Ball screw
3	**Frame-type linear guide**	—	
4	**Coupling**	—	
5	**Bearing R**	—	
6	**Bearing F**	—	
7	**Housing A**	Aluminum alloy	
8	**Housing B**	Aluminum alloy	
9	**Bearing retainer**	Carbon steel	

No.	Description	Material	Note
10	**Spacer**	Stainless steel	
11	**Bumper bolt**	Alloy steel	
12	**Bumper**	Resin	
13	**Housing plate**	Mild steel	
14	**Cable clip**	Resin	
15	**Photo micro sensor rail**	Aluminum alloy	
16	**Dog fitting for switch**	Mild steel	Chromate
17	**Photo micro sensor**		
18	**Connector cable for sensor**		

Top Mount

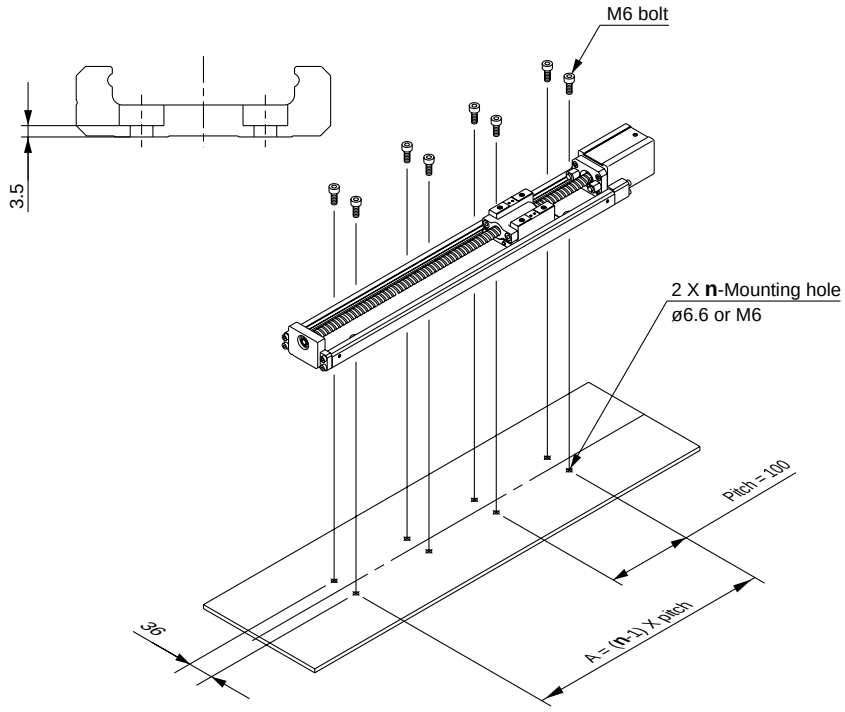
LTF6



Mounting hole quantity

Stroke	n	Quantity
100	2	4
200	3	6
300	4	8
400	5	10
500	6	12
600	7	14

LTF8

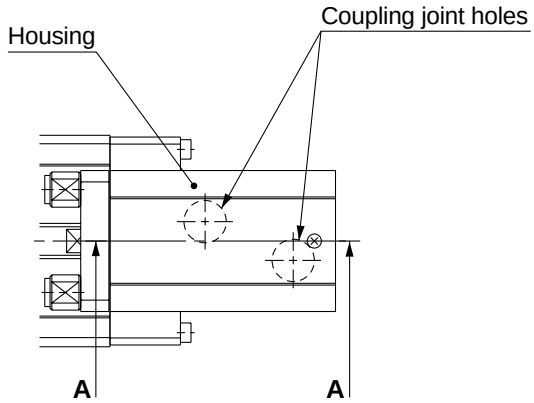


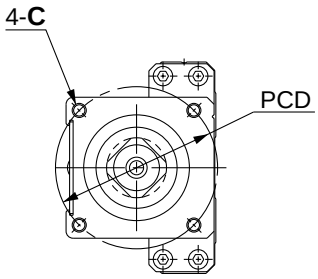
Mounting hole quantity

Stroke	n	Quantity	Stroke	n	Quantity
100	2	4	600	7	14
200	3	6	700	8	16
300	4	8	800	9	18
400	5	10	900	10	20
500	6	12	1000	11	22

Non-standard Motor Mounting Dimensions

LTF6

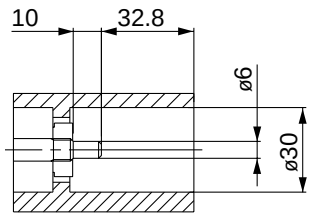




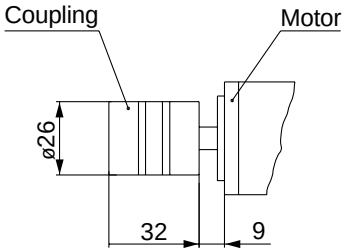
Motor mounting area dimensions

Manufacturer	Mitsubishi Electric Corporation Yasukawa Electric Corporation	Matsushita Electric Industrial Co., Ltd.
C (Thread size)	M4 x 0.7	M3 x 0.5
Effective thread length (mm)	8	6
Quantity	2	4
P.C.D.	46	45

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



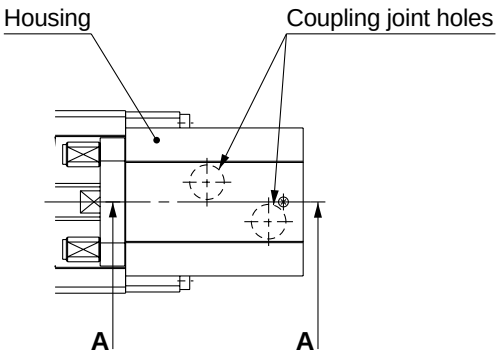
Section AA (Housing interior)

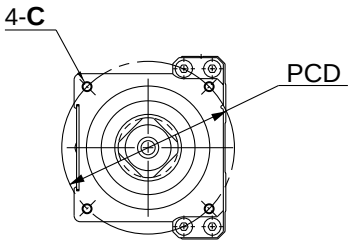


Coupling mounting dimensions*

Non-standard Motor Mounting Dimensions

LTF8

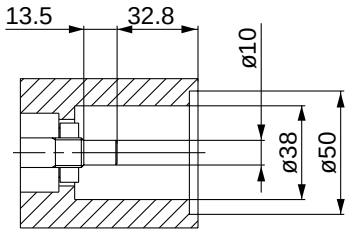




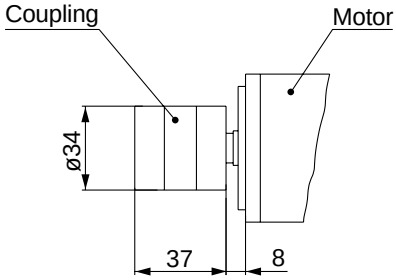
Motor mounting area dimensions

Manufacturer	Mitsubishi Electric Corporation Yasukawa Electric Corporation	Matsushita Electric Industrial Co., Ltd.
C (Thread size)	M5 x 0.8	M4 x 0.7
Effective thread length (mm)	10	8
Quantity	4	4
P.C.D.	70	75

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



Section AA (Housing interior)



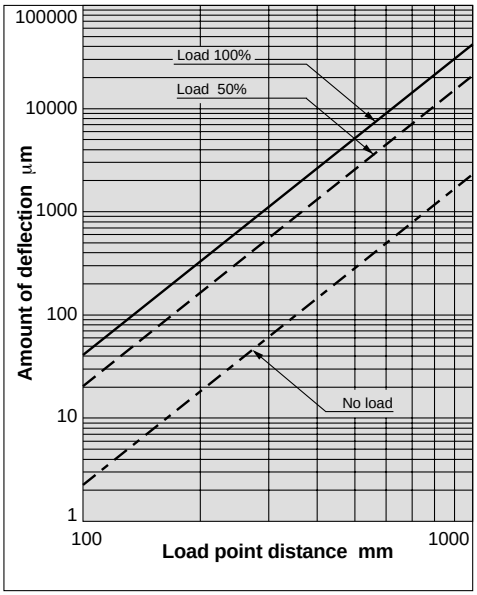
Coupling mounting dimensions*

Deflection Data

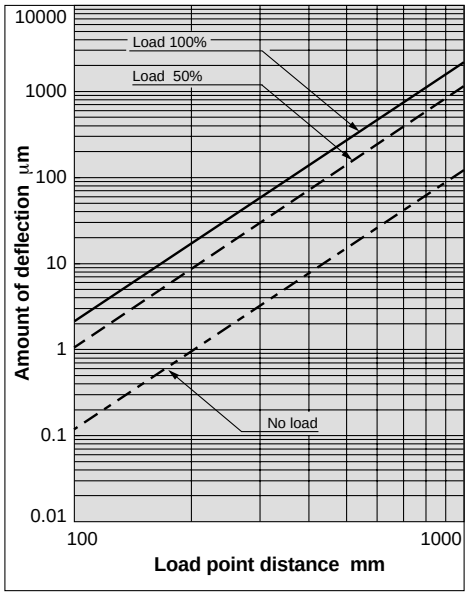
The load and the amount of deflection at load point W are shown in the graphs below for each series.

LTF6

Horizontal

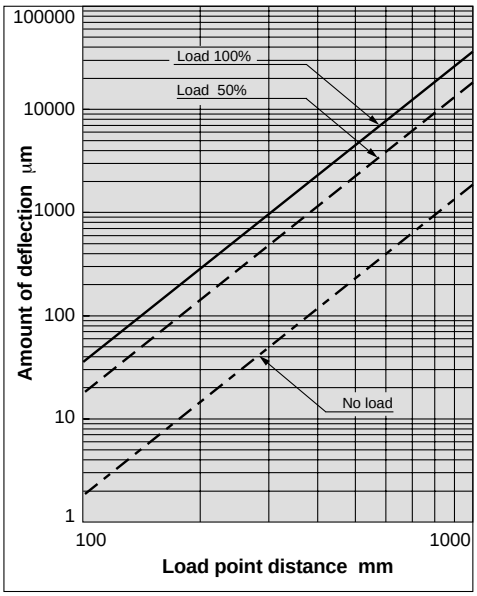


Lateral

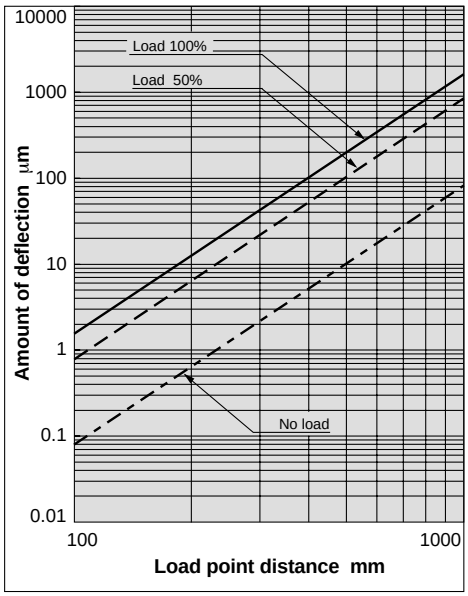


LTF8

Horizontal



Lateral



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

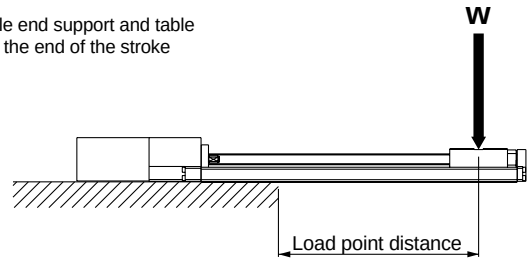


Figure 1. Horizontal

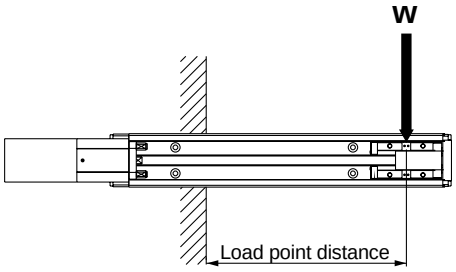


Figure 2. Lateral