

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

- Options _____ P.66
- Construction _____ P.67
- Mounting _____ P.68
- Non-standard Motor Mounting _____ P.69
- Deflection Data _____ P.71

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 type

P	Ground ball screw
N	Rolled ball screw

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

Lead screw lead

F	6mm
H	10mm
L	20mm

Brake

Nil	None
K	With brake

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.

How to Order

LTF6E 1 PF — **Stroke** — **R** **2**

Power supply voltage

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

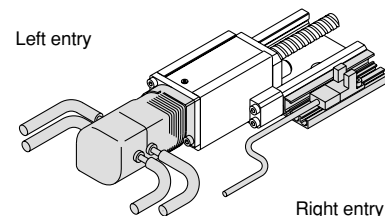
Motor/switch entry direction

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

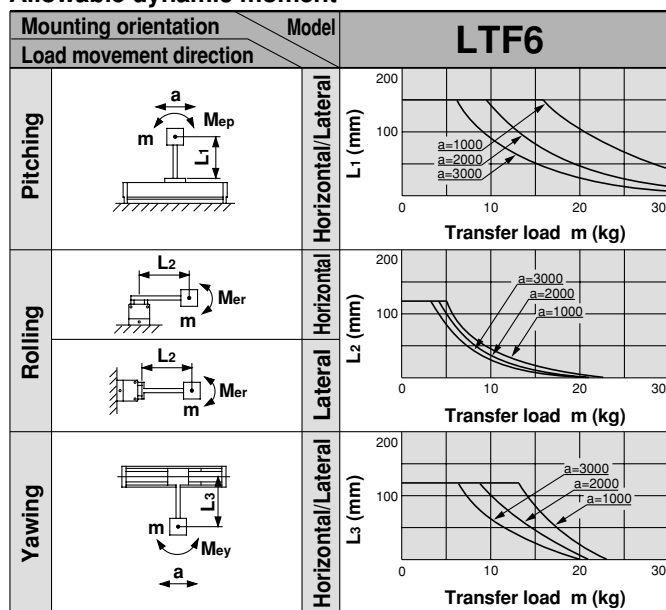


Specifications

		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 ∅10mm, 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

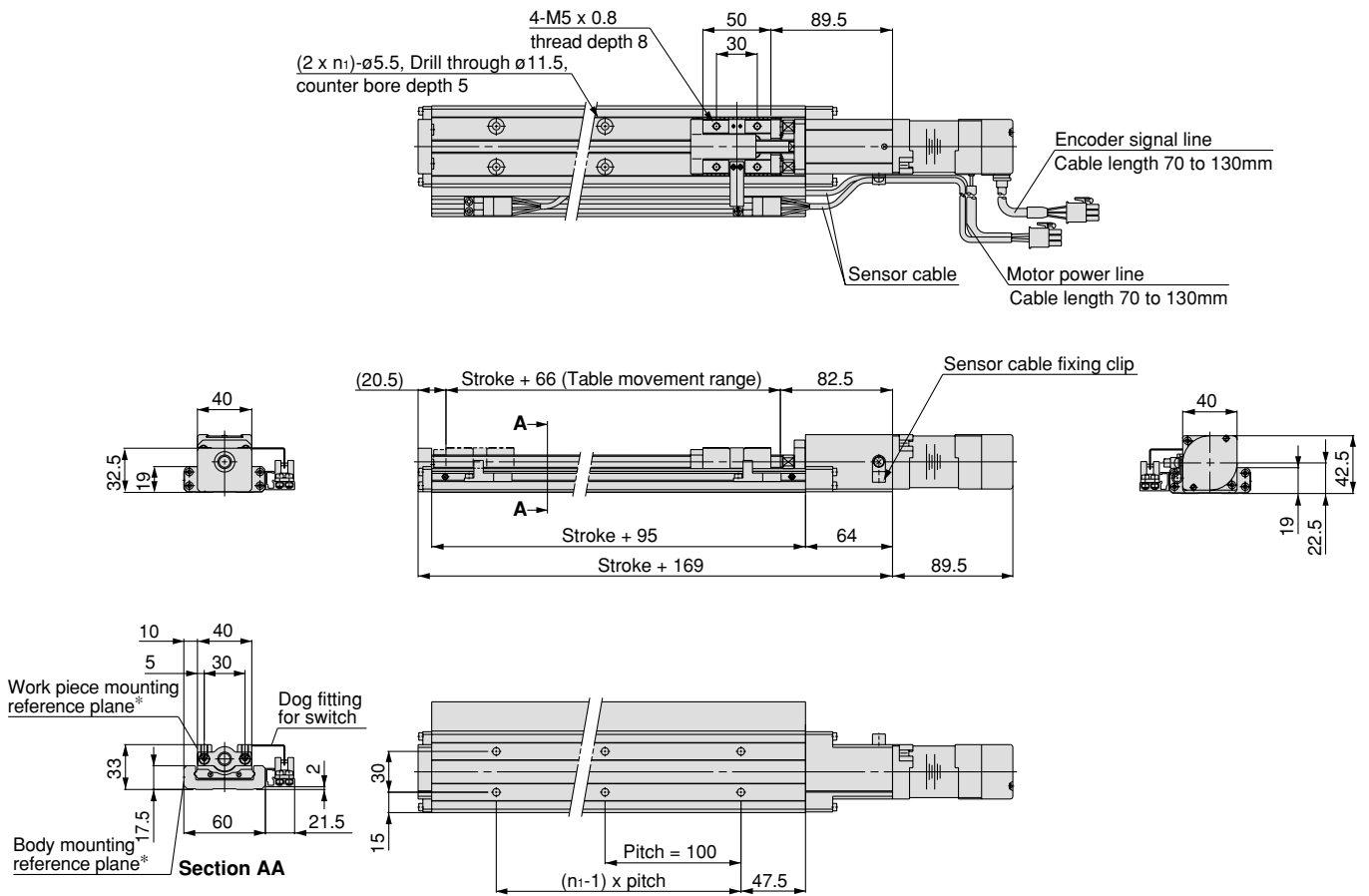


m : Transfer load (kg) Me : Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□PF

Scale: 18%



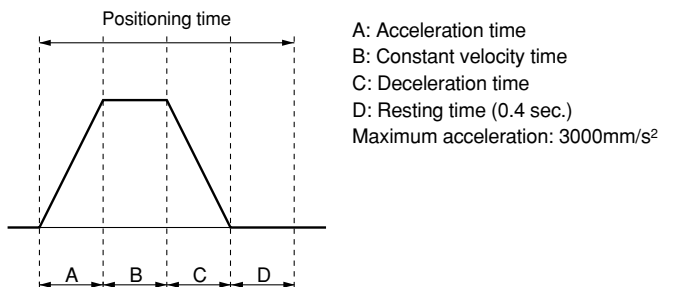
Model	Stroke	n ₁
LTF6E□PF- 100-□□	100	2
LTF6E□PF- 200-□□	200	3
LTF6E□PF- 300-□□	300	4
LTF6E□PF- 400-□□	400	5
LTF6E□PF- 500-□□	500	6
LTF6E□PF- 600-□□	600	7

* 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.)				
		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.



How to Order

LTF6E 1 PH — **Stroke** — **R** **2**

Power supply voltage

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

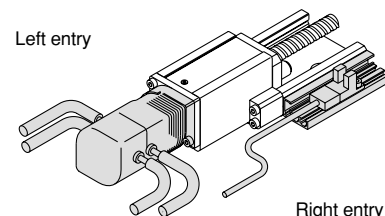
Motor/switch entry direction

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

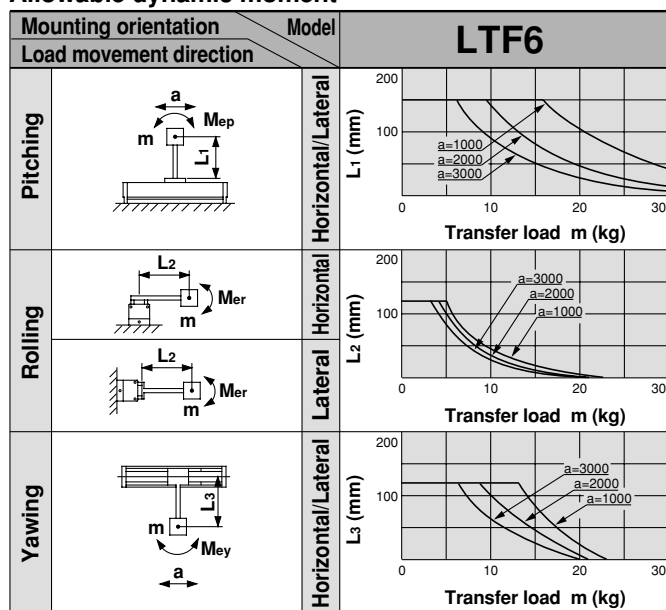


Specifications

		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 ∅10mm, 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

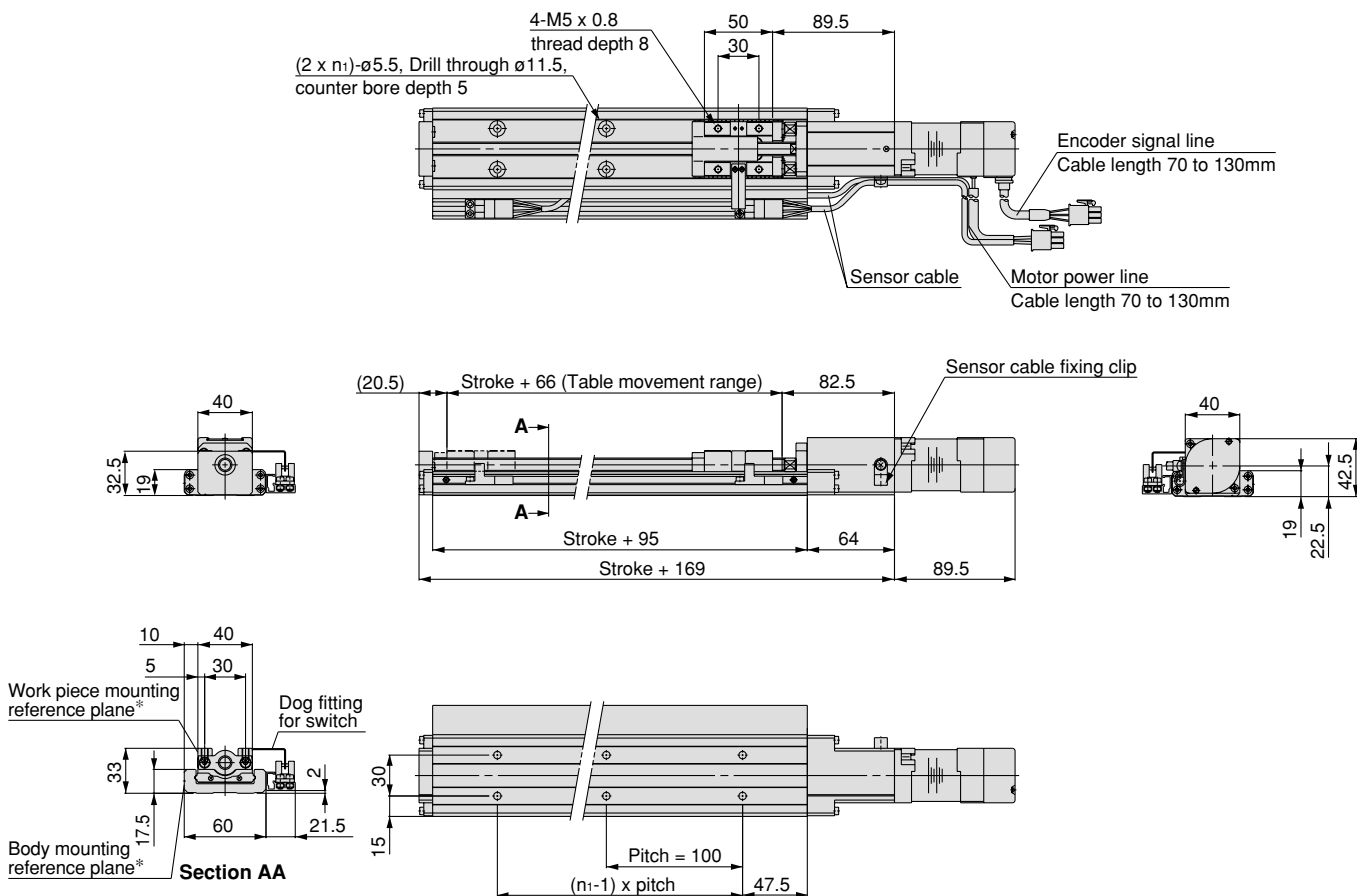


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□PH

Scale: 18%



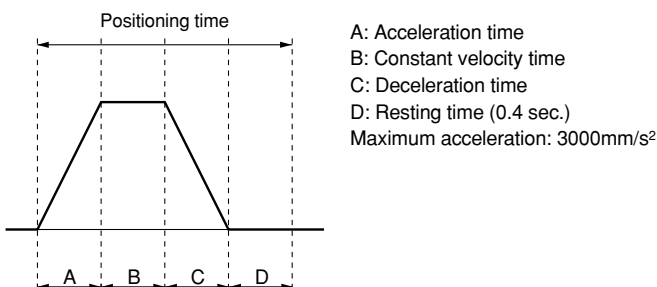
Model	Stroke	n ₁
LTF6E□PH- 100-□□	100	2
LTF6E□PH- 200-□□	200	3
LTF6E□PH- 300-□□	300	4
LTF6E□PH- 400-□□	400	5
LTF6E□PH- 500-□□	500	6
LTF6E□PH- 600-□□	600	7

* 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.)				
		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.



How to Order

LTF6E 1 NF — **Stroke** — **R** **2**

Power supply voltage

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

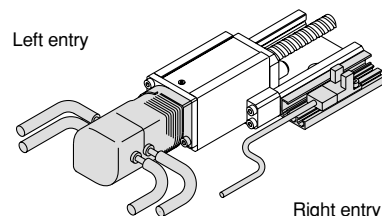
Motor/switch entry direction

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

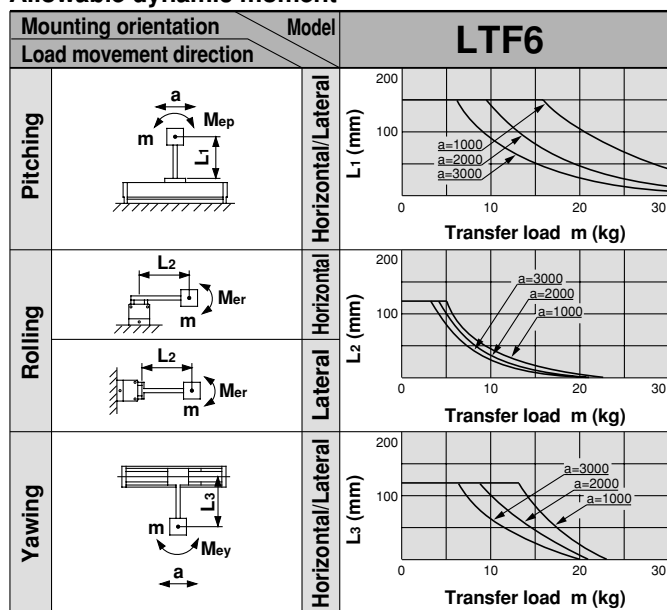


Specifications

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					
	Positioning repeatability	mm	±0.05					
Main parts	Motor	AC servomotor (100W)						
	Encoder	Incremental system						
	Lead screw	Rolled ball screw ∅10mm, 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

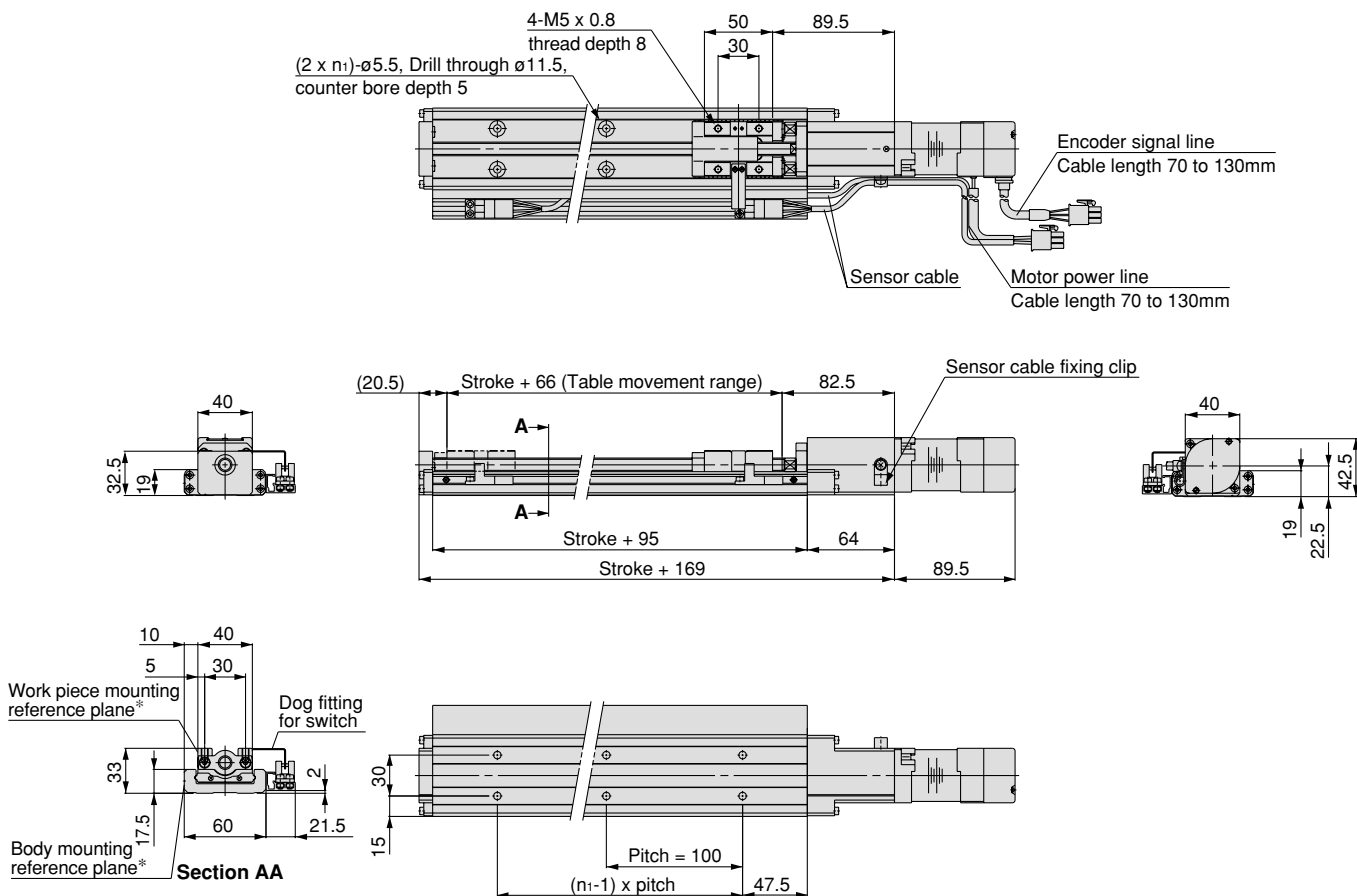


m : Transfer load (kg) Me : Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□NF

Scale: 18%



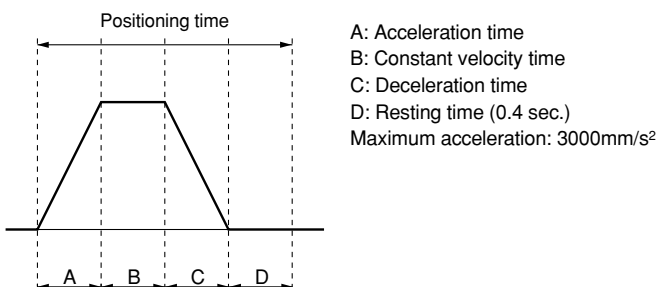
Model	Stroke	n ₁
LTF6E□NF- 100-□□	100	2
LTF6E□NF- 200-□□	200	3
LTF6E□NF- 300-□□	300	4
LTF6E□NF- 400-□□	400	5
LTF6E□NF- 500-□□	500	6
LTF6E□NF- 600-□□	600	7

* 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.



How to Order

LTF6E **1** **NH** — **Stroke** — **R** **2**

Power supply voltage

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

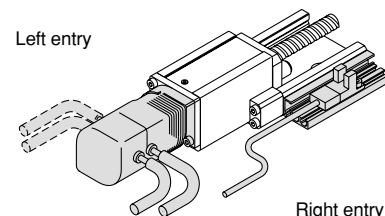
Motor/switch entry direction

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

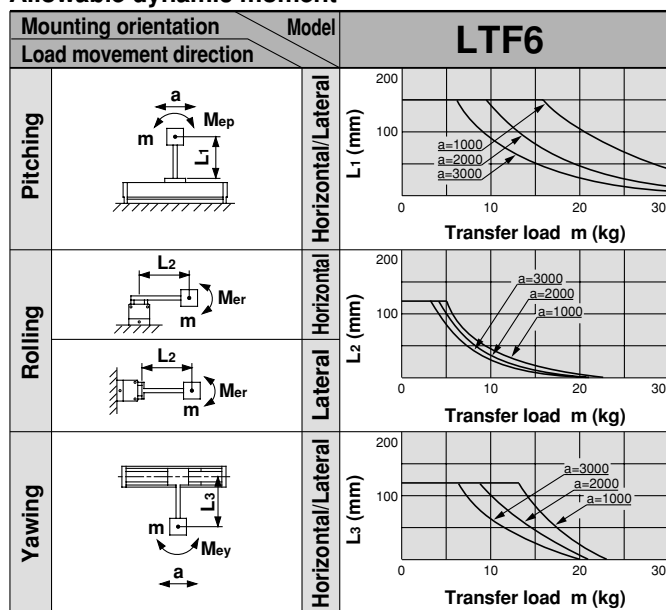


Specifications

		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 ∅10mm, 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

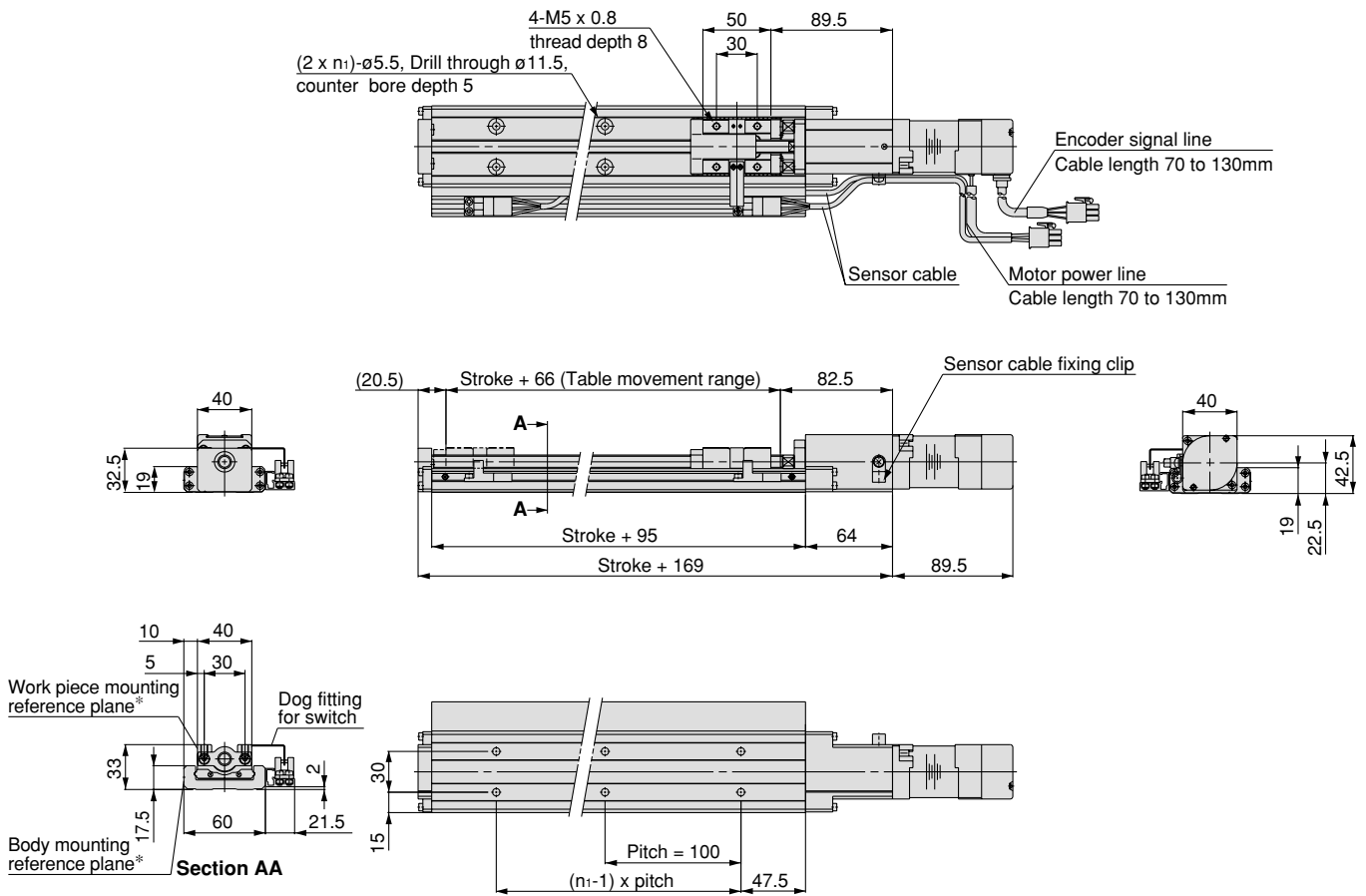


m : Transfer load (kg) Me : Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□NH

Scale: 18%



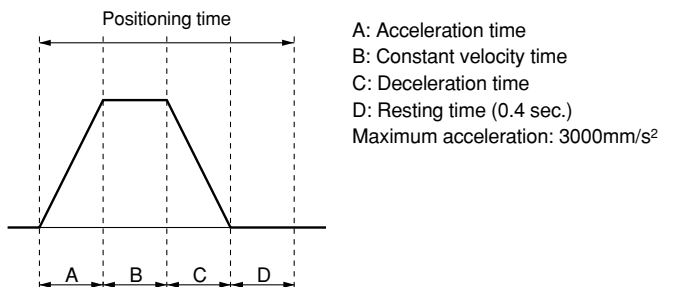
Model	Stroke	n ₁
LTF6E□NH- 100-□□	100	2
LTF6E□NH- 200-□□	200	3
LTF6E□NH- 300-□□	300	4
LTF6E□NH- 400-□□	400	5
LTF6E□NH- 500-□□	500	6
LTF6E□NH- 600-□□	600	7

* 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.)				
		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.



How to Order

LTF8F 1 PH — **Stroke** — **R** **2**

Power supply voltage

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

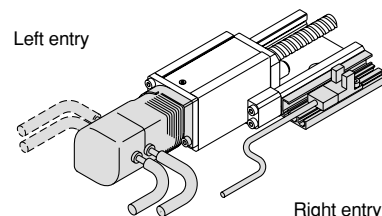
Motor/switch entry direction

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

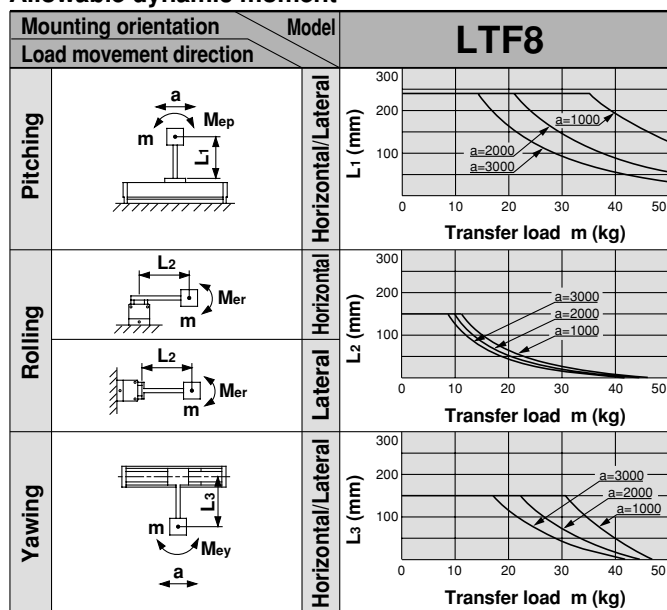


Specifications

		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 ∅15mm, 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

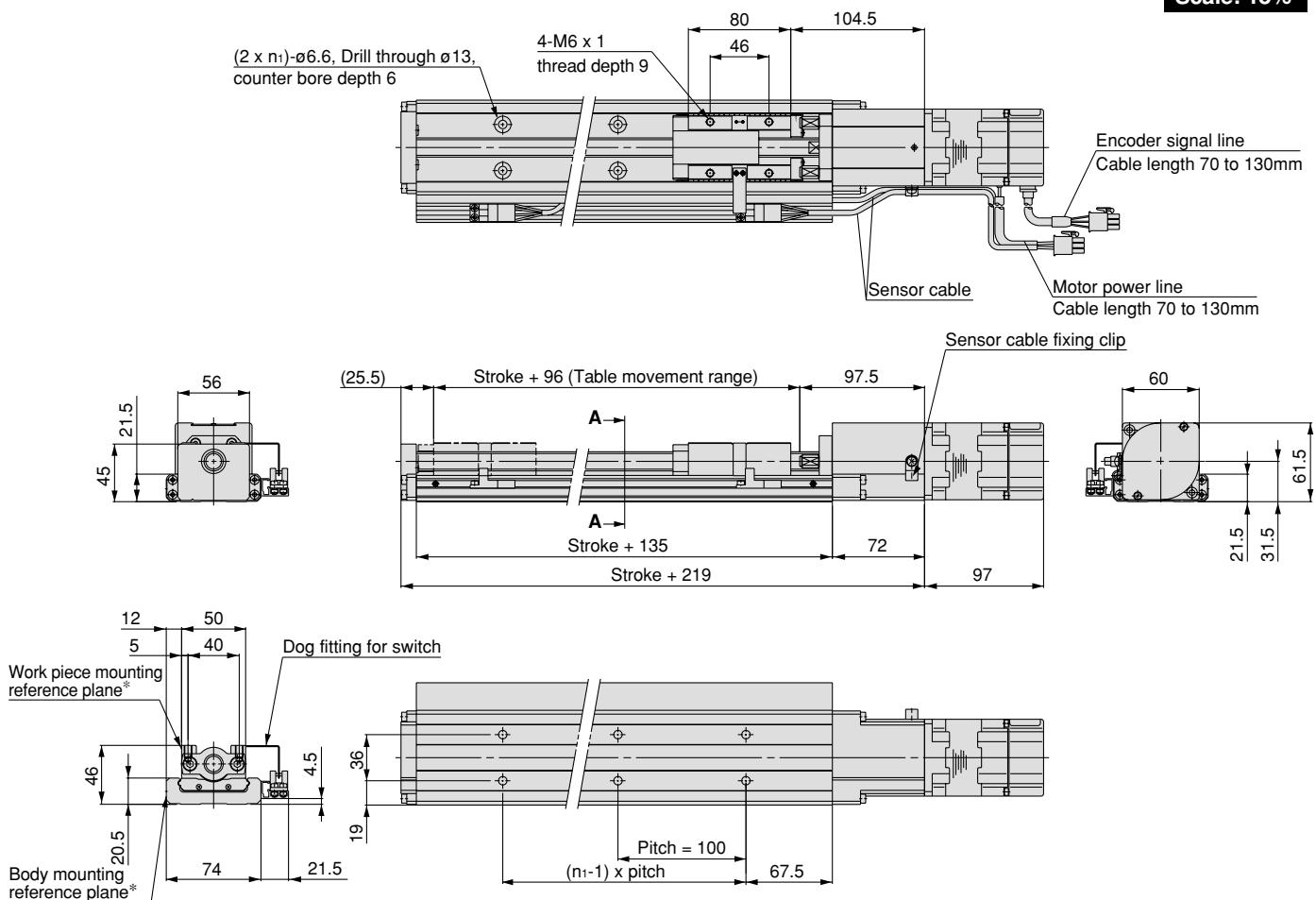


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8F□PH

Scale: 18%



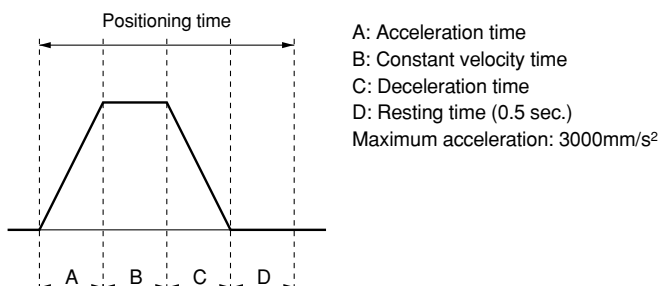
Model	Stroke	n ₁
LTF8F□PH- 100-□□	100	2
LTF8F□PH- 200-□□	200	3
LTF8F□PH- 300-□□	300	4
LTF8F□PH- 400-□□	400	5
LTF8F□PH- 500-□□	500	6
LTF8F□PH- 600-□□	600	7
LTF8F□PH- 700-□□	700	8
LTF8F□PH- 800-□□	800	9
LTF8F□PH- 900-□□	900	10
LTF8F□PH-1000-□□	1000	11

* 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.



How to Order

LTF8F **1** **PL** — **Stroke** — **R** **2**

Power supply voltage

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

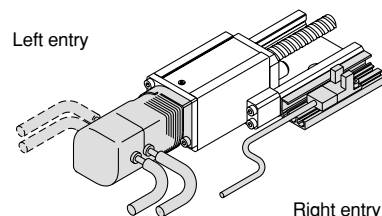
Motor/switch entry direction

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

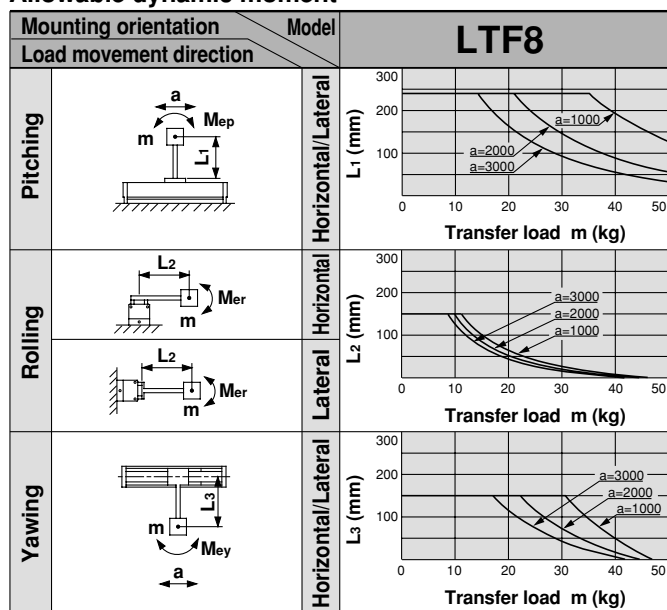


Specifications

		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 ∅15mm, 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

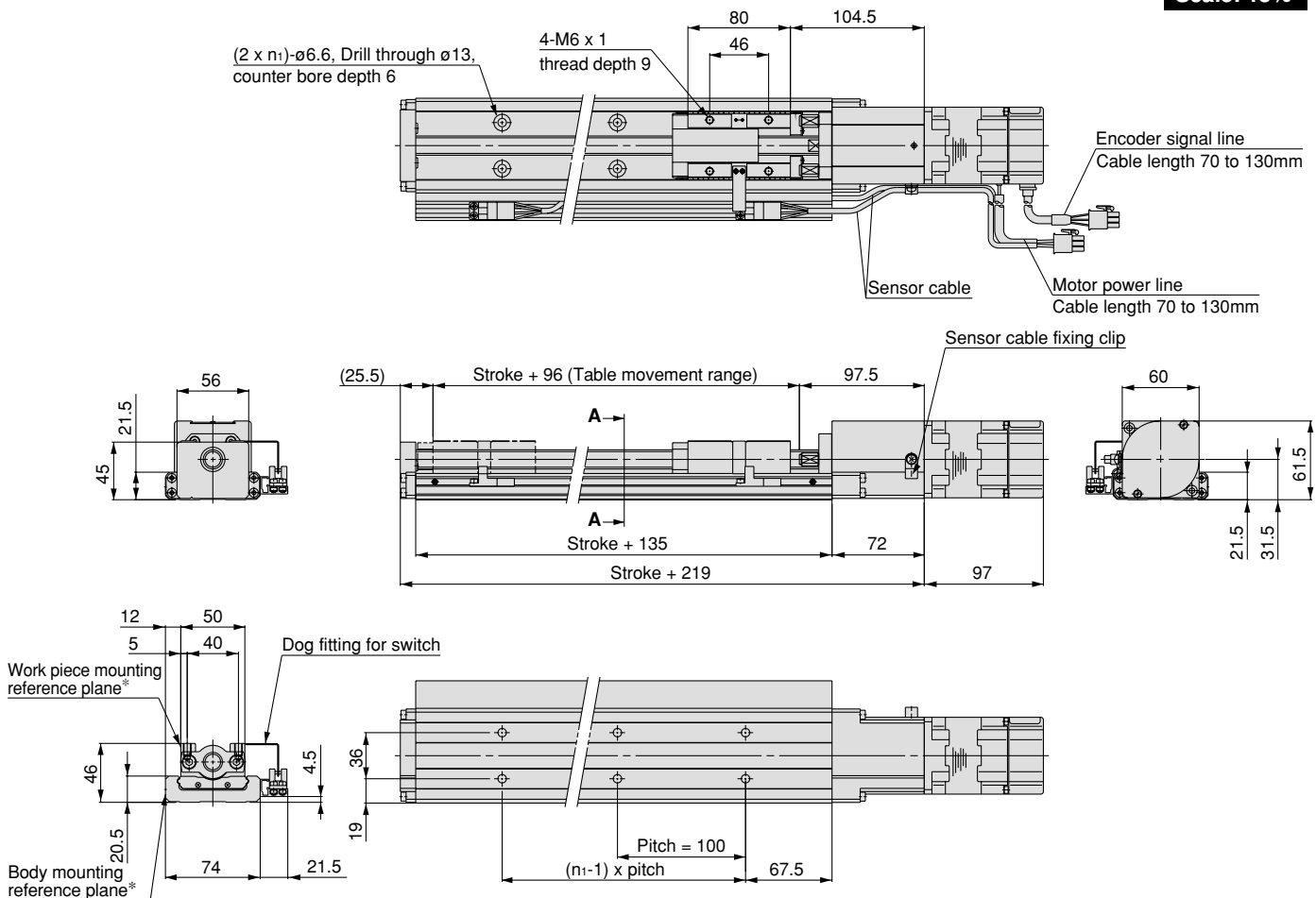


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8□PL

Scale: 18%



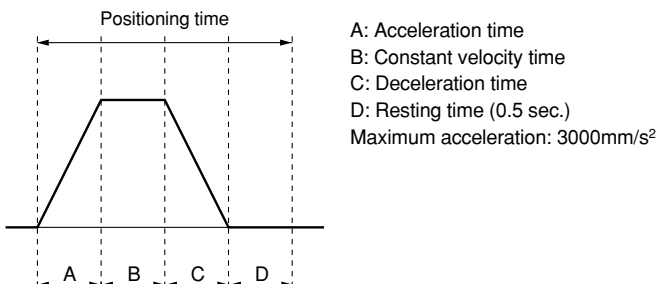
Model	Stroke	n ₁
LTF8□PL- 100-□□	100	2
LTF8□PL- 200-□□	200	3
LTF8□PL- 300-□□	300	4
LTF8□PL- 400-□□	400	5
LTF8□PL- 500-□□	500	6
LTF8□PL- 600-□□	600	7
LTF8□PL- 700-□□	700	8
LTF8□PL- 800-□□	800	9
LTF8□PL- 900-□□	900	10
LTF8□PL-1000-□□	1000	11

* 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.



How to Order

LTF8F **1** **NH** — **Stroke** — **R** **2**

Power supply voltage

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

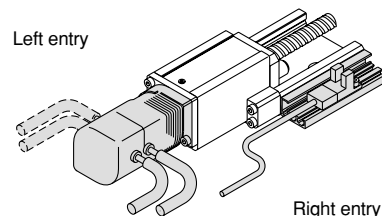
Motor/switch entry direction

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

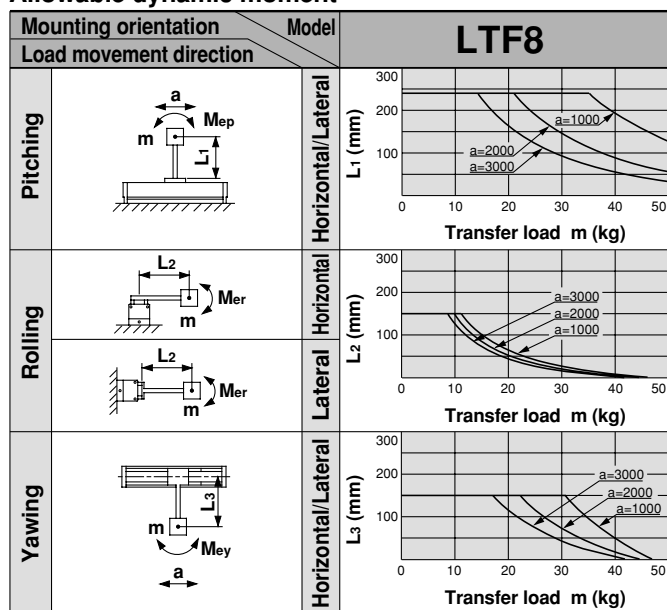


Specifications

		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 ∅15mm, 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

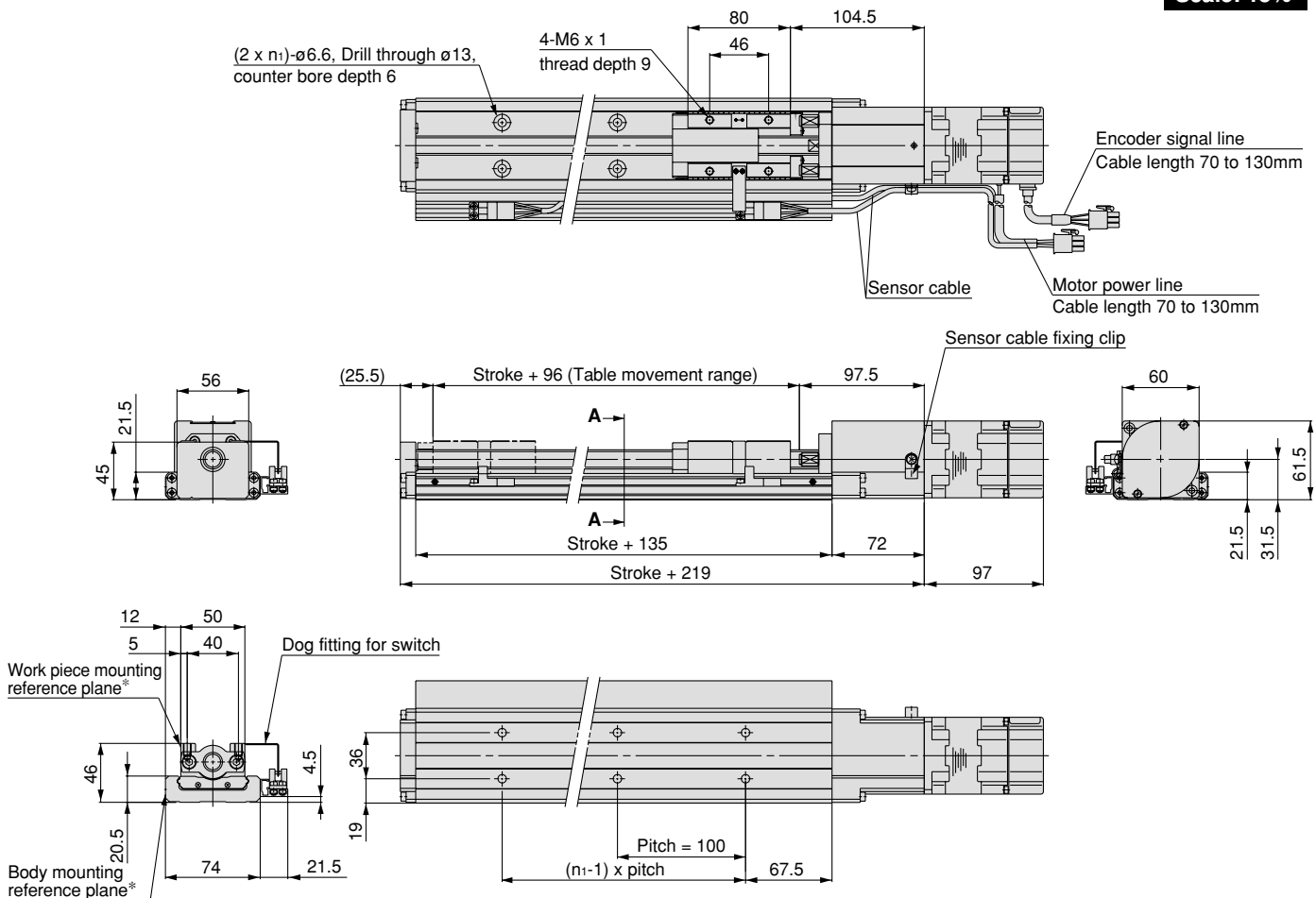


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8F□NH

Scale: 18%



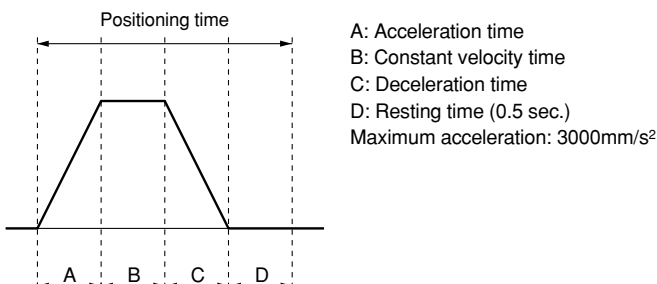
Model	Stroke	n ₁
LTF8F□NH- 100-□□	100	2
LTF8F□NH- 200-□□	200	3
LTF8F□NH- 300-□□	300	4
LTF8F□NH- 400-□□	400	5
LTF8F□NH- 500-□□	500	6
LTF8F□NH- 600-□□	600	7
LTF8F□NH- 700-□□	700	8
LTF8F□NH- 800-□□	800	9
LTF8F□NH- 900-□□	900	10
LTF8F□NH-1000-□□	1000	11

* 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.)				
		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.



How to Order

LTF8F **1** **NL** — **Stroke** — **R** **2**

Power supply voltage

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

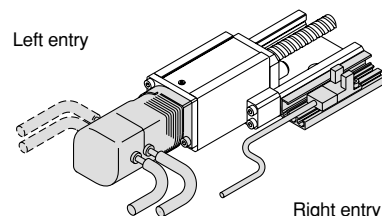
Motor/switch entry direction

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

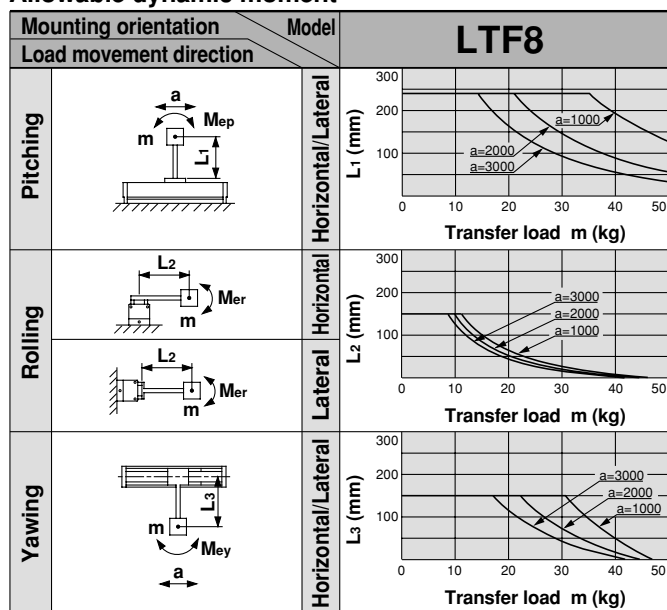


Specifications

		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 ∅15mm, 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

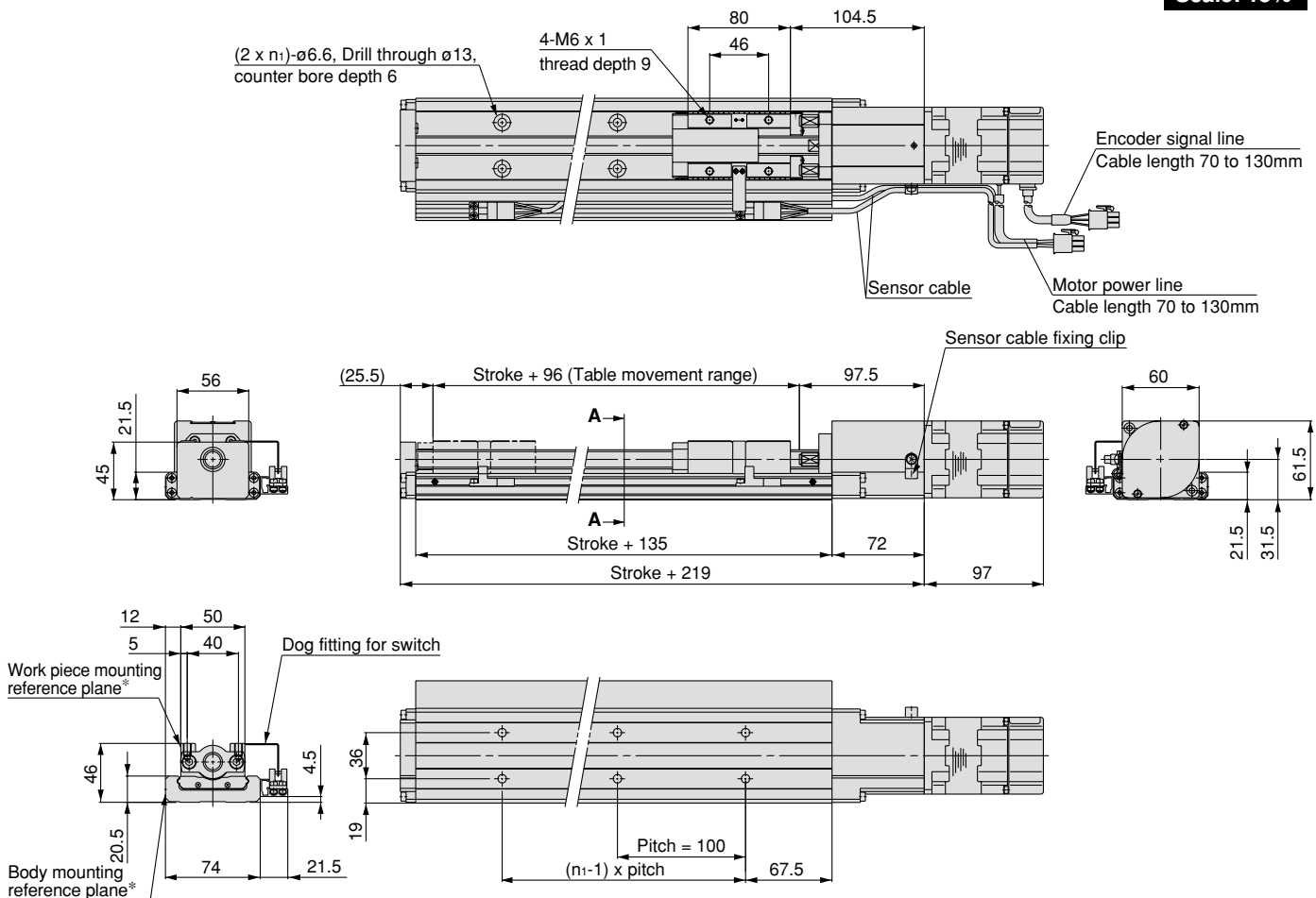


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8□NL

Scale: 18%



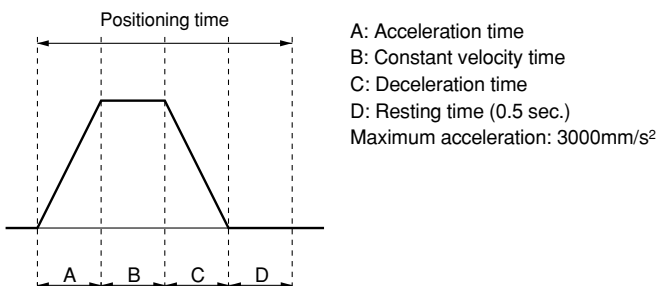
Model	Stroke	n1
LTF8□NL- 100-□□	100	2
LTF8□NL- 200-□□	200	3
LTF8□NL- 300-□□	300	4
LTF8□NL- 400-□□	400	5
LTF8□NL- 500-□□	500	6
LTF8□NL- 600-□□	600	7
LTF8□NL- 700-□□	700	8
LTF8□NL- 800-□□	800	9
LTF8□NL- 900-□□	900	10
LTF8□NL-1000-□□	1000	11

* 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.)				
		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.



Standard Motor
Vertical Mount

Series LTF6

Motor Output
100_w

Ground Ball Screw
∅10mm/6mm lead

How to Order

LTF6E **1** **PF** — **Stroke** **K** — **R** **2**

Power supply voltage

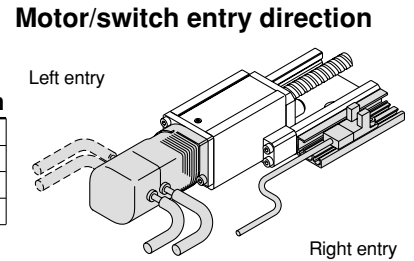
1	100V AC(50/60Hz)
2	200V AC(50/60Hz)

Cable length

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

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



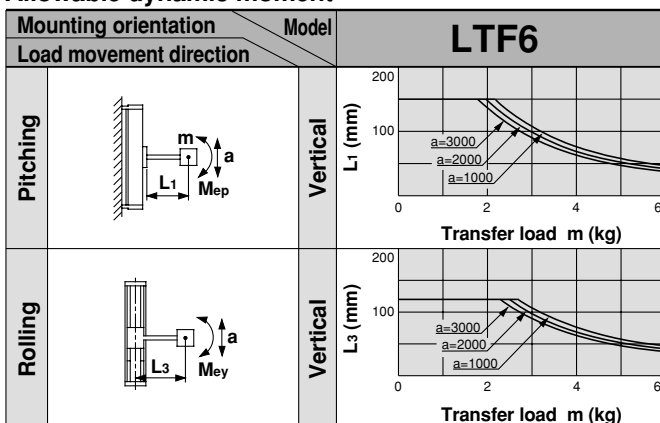
Specifications

		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 ∅10mm, 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

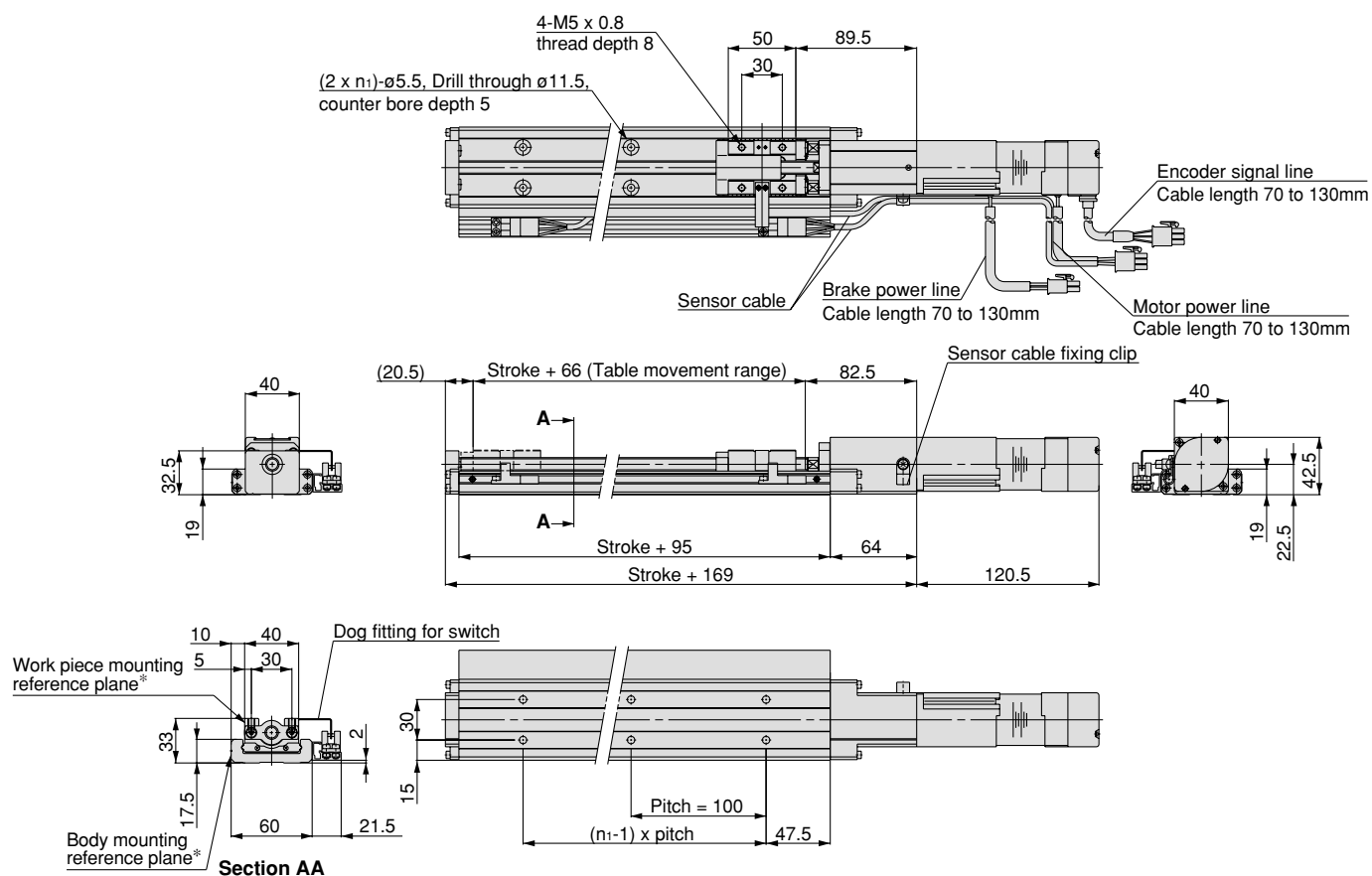


m : Transfer load (kg) Me: Allowable dynamic moment
a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□PF

Scale: 18%



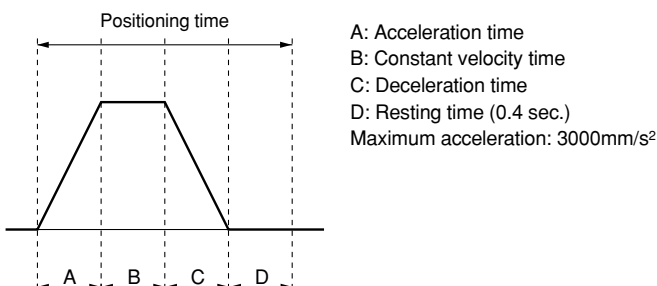
Model	Stroke	n ₁
LTF6E□PF- 100K-□□	100	2
LTF6E□PF- 200K-□□	200	3
LTF6E□PF- 300K-□□	300	4
LTF6E□PF- 400K-□□	400	5
LTF6E□PF- 500K-□□	500	6
LTF6E□PF- 600K-□□	600	7

* 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.



How to Order

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

Power supply voltage

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

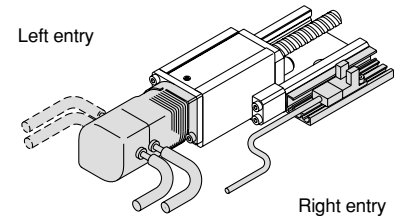
Motor/switch entry direction

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



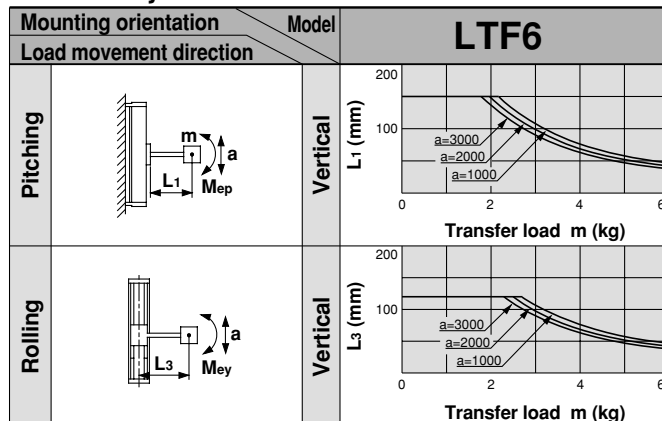
Specifications

		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 ∅10mm, 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

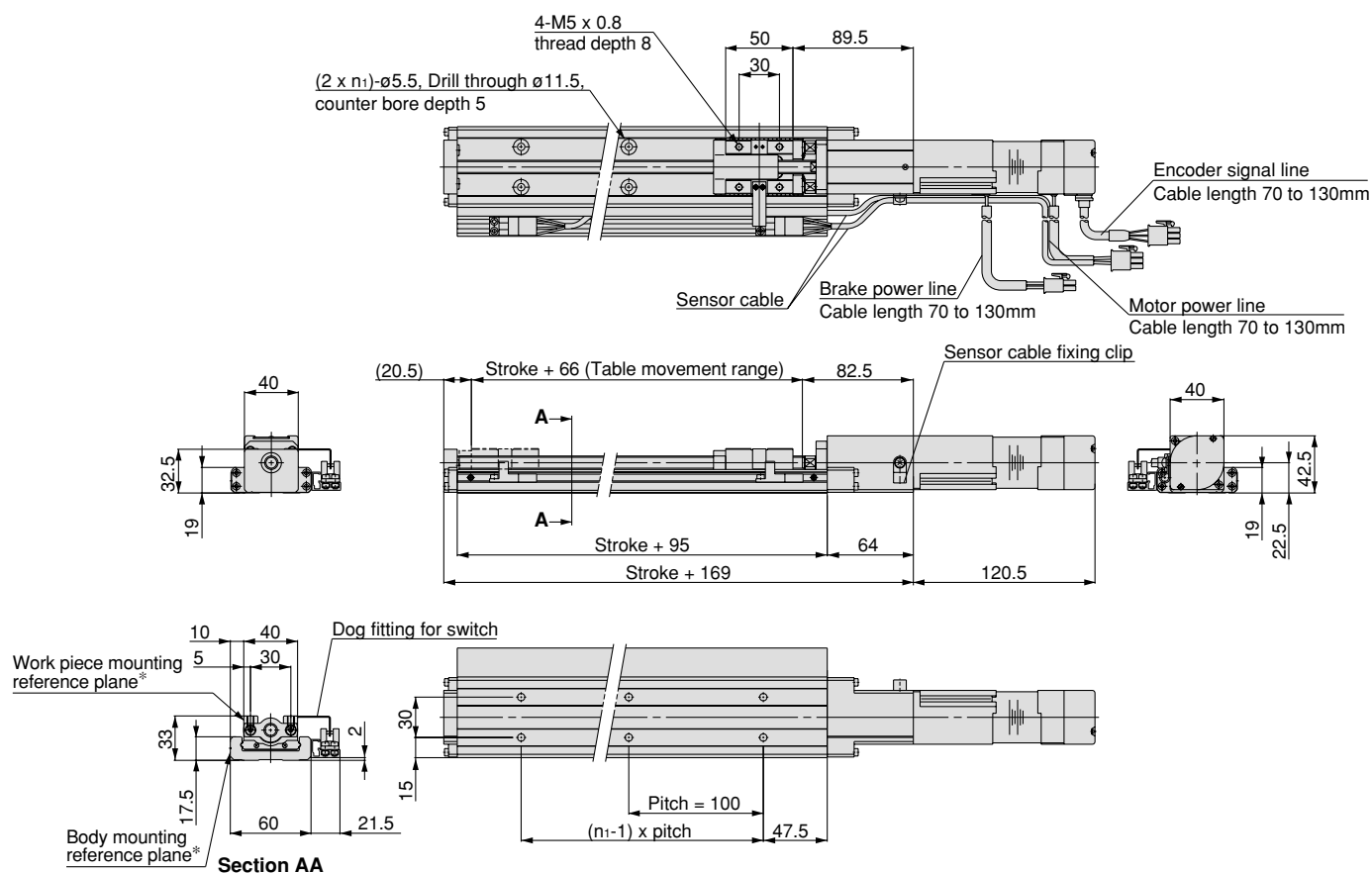


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□PH

Scale: 18%



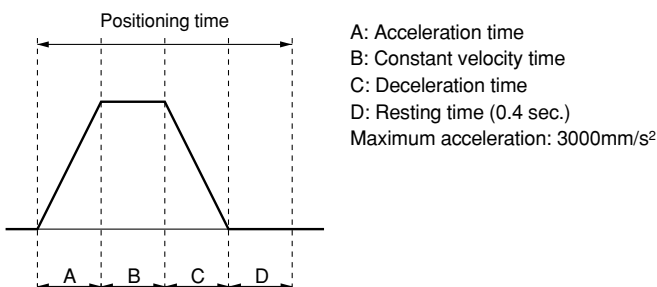
Model	Stroke	n ₁
LTF6E□PH- 100K-□□	100	2
LTF6E□PH- 200K-□□	200	3
LTF6E□PH- 300K-□□	300	4
LTF6E□PH- 400K-□□	400	5
LTF6E□PH- 500K-□□	500	6
LTF6E□PH- 600K-□□	600	7

* 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.)				
		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.



How to Order

LTF6E **1** **NF** — Stroke **K** — **R** **2**

Power supply voltage

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

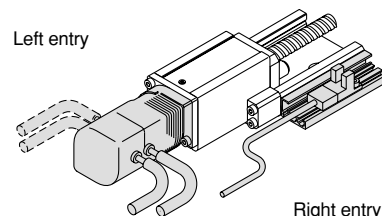
Motor/switch entry direction

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



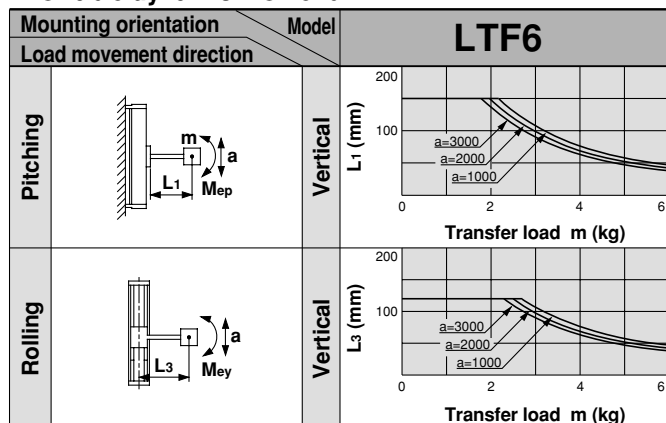
Specifications

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					
	Positioning repeatability	mm	±0.05					
Main parts	Motor	AC servomotor (100W) with brake						
	Encoder	Incremental system						
	Lead screw	Rolled ball screw ∅10mm, 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

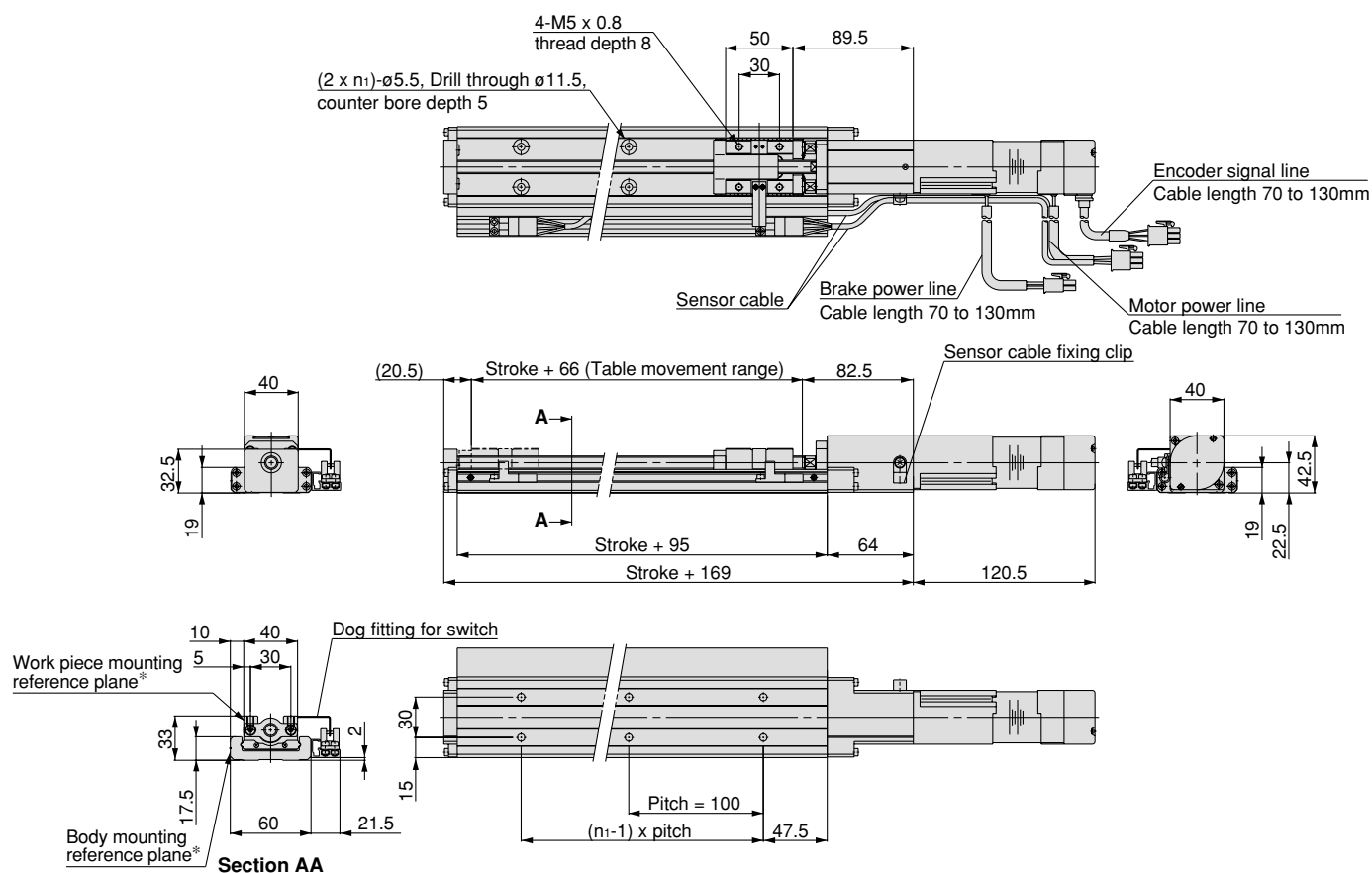


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□NF

Scale: 18%



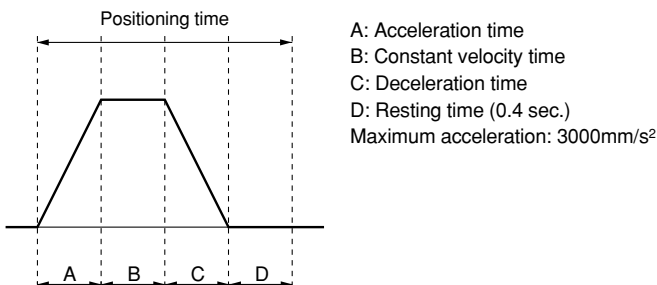
Model	Stroke	n ₁
LTF6E□NF- 100K-□□	100	2
LTF6E□NF- 200K-□□	200	3
LTF6E□NF- 300K-□□	300	4
LTF6E□NF- 400K-□□	400	5
LTF6E□NF- 500K-□□	500	6
LTF6E□NF- 600K-□□	600	7

* 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.)				
		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.



How to Order

LTF6E **1** **NH** — **Stroke** **K** — **R** **2**

Power supply voltage

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

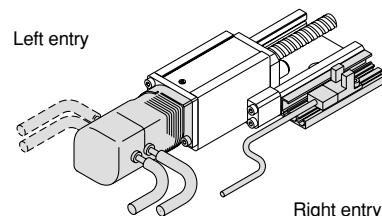
Motor/switch entry direction

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



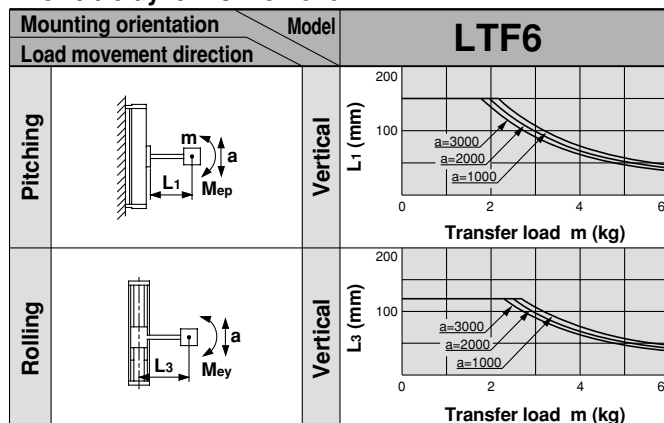
Specifications

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 ∅10mm, 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

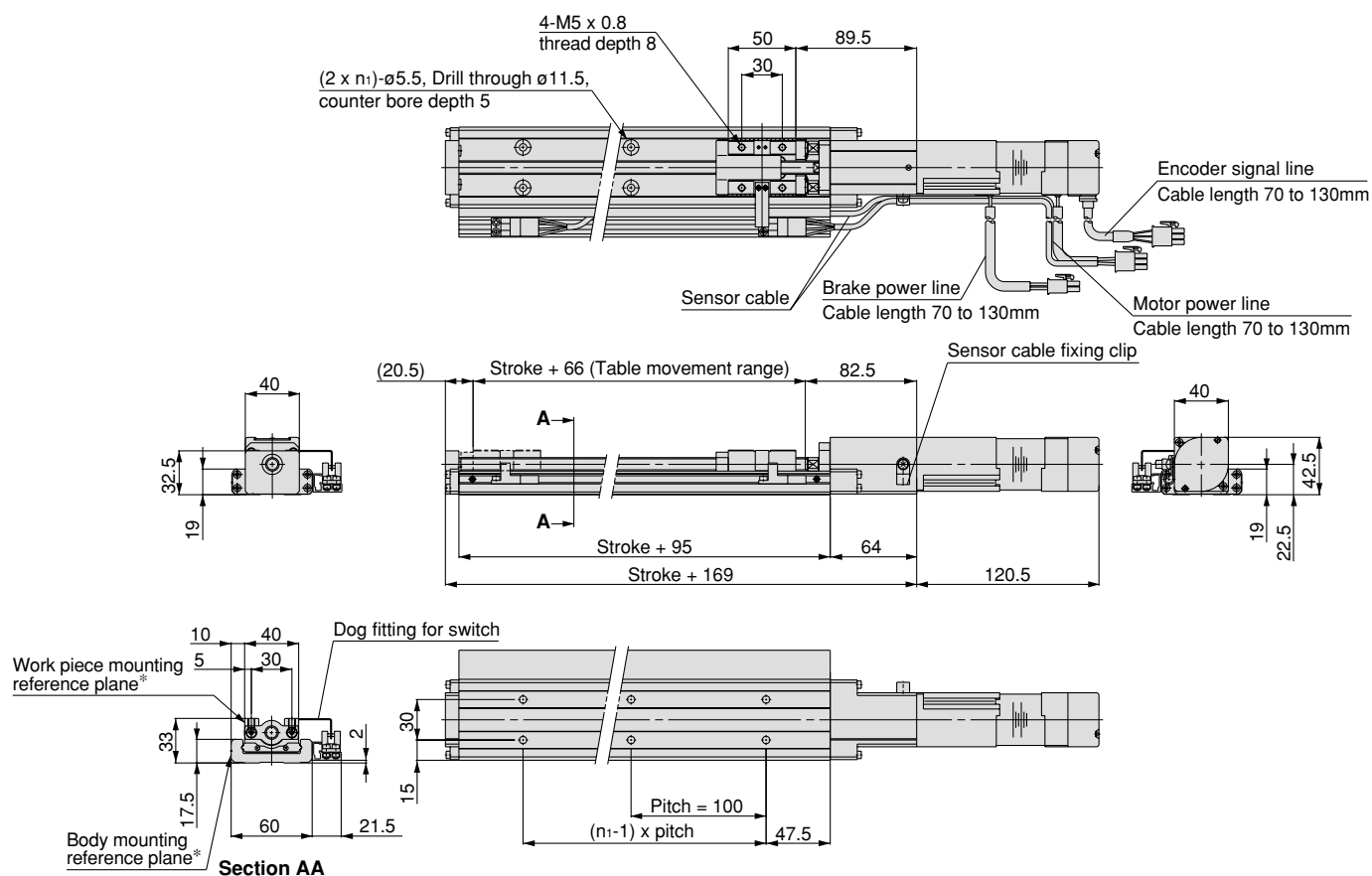


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6E□NH

Scale: 18%



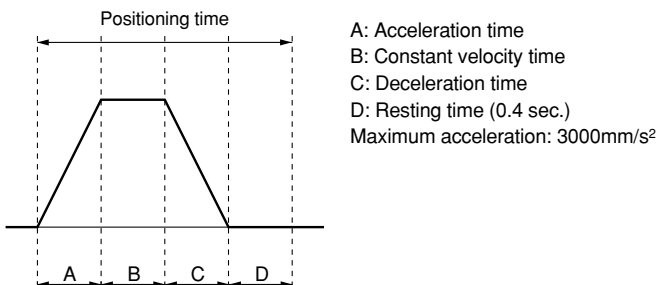
Model	Stroke	n ₁
LTF6E□NH- 100K-□□	100	2
LTF6E□NH- 200K-□□	200	3
LTF6E□NH- 300K-□□	300	4
LTF6E□NH- 400K-□□	400	5
LTF6E□NH- 500K-□□	500	6
LTF6E□NH- 600K-□□	600	7

* 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.)				
		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.



How to Order

LTF8F **1** **PH** — **Stroke** **K** — **R** **2**

Power supply voltage

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

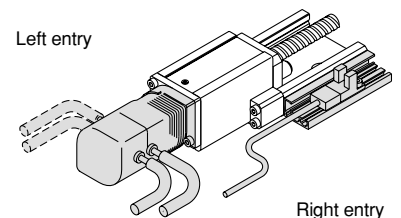
Motor/switch entry direction

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



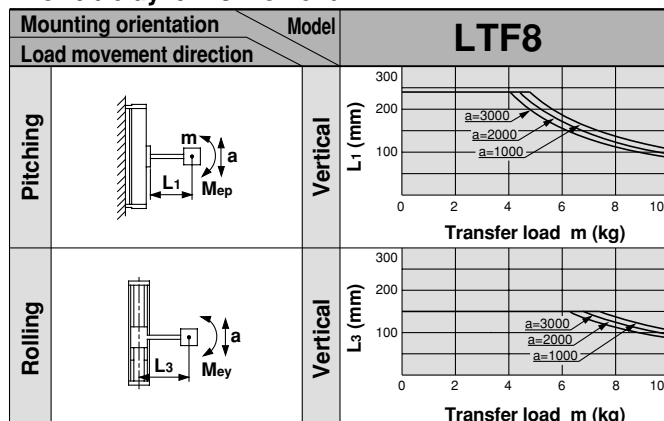
Specifications

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 ∅15mm, 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

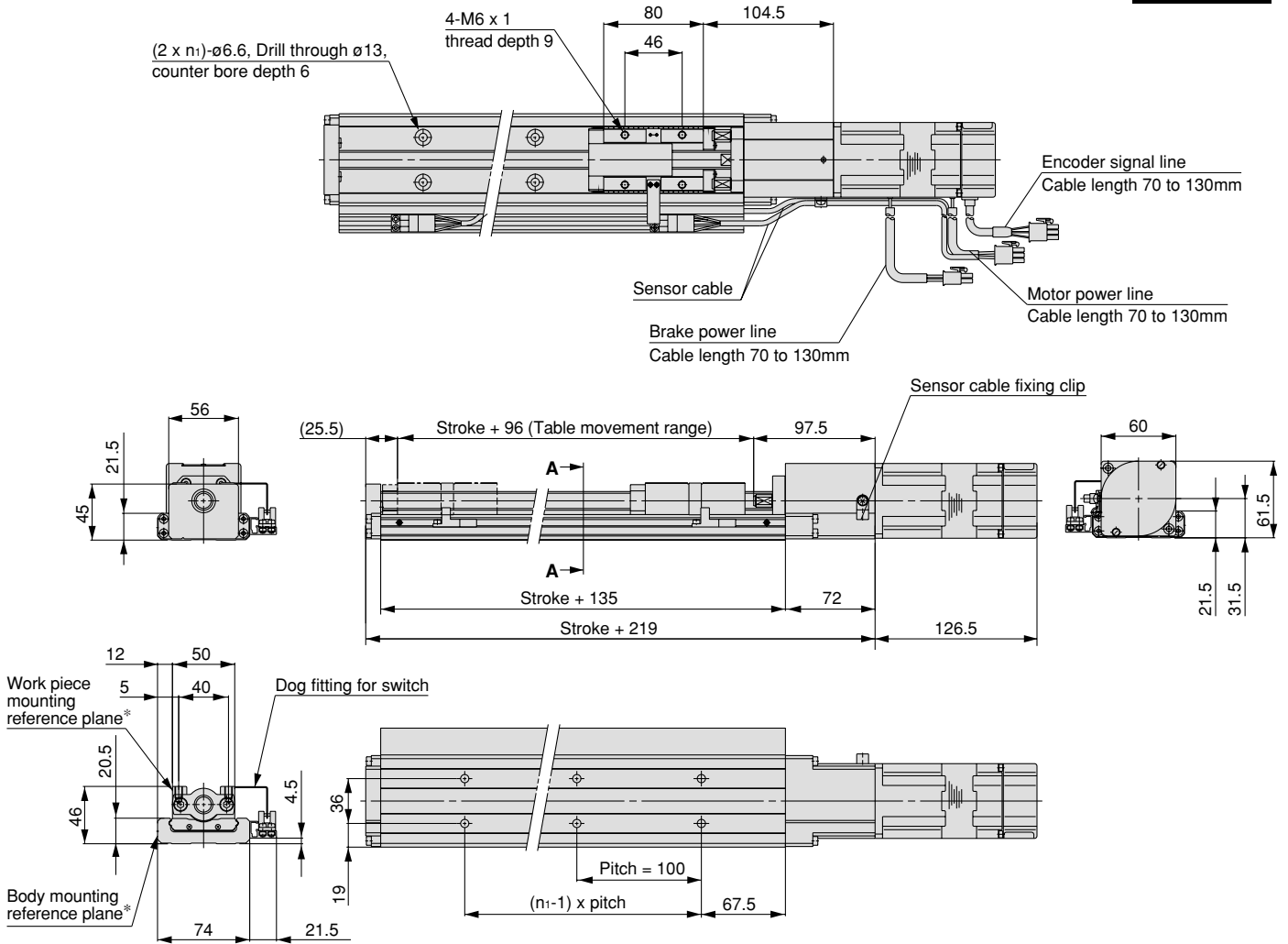


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8F□PH

Scale: 18%



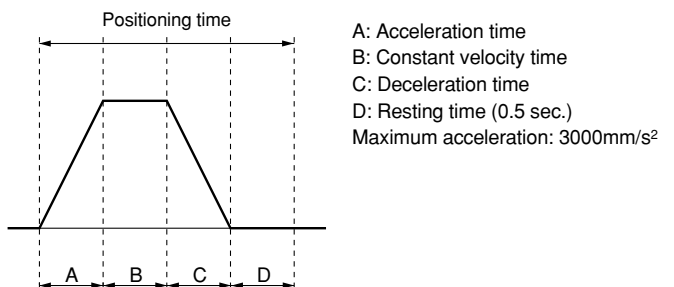
Model	Stroke	n ₁
LTF8F□PH- 100K-□□	100	2
LTF8F□PH- 200K-□□	200	3
LTF8F□PH- 300K-□□	300	4
LTF8F□PH- 400K-□□	400	5
LTF8F□PH- 500K-□□	500	6
LTF8F□PH- 600K-□□	600	7
LTF8F□PH- 700K-□□	700	8
LTF8F□PH- 800K-□□	800	9
LTF8F□PH- 900K-□□	900	10
LTF8F□PH-1000K-□□	1000	11

* 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.)				
		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.



How to Order

LTF8F **1** **PL** — **Stroke** **K** — **R** **2**

Power supply voltage

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

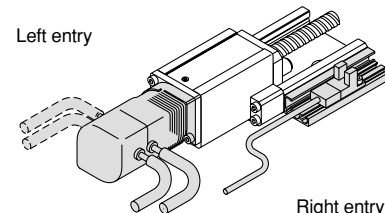
Motor/switch entry direction

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



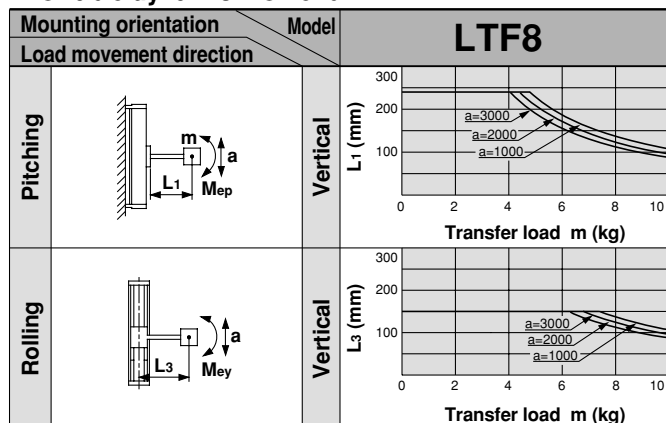
Specifications

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 ∅15mm, 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

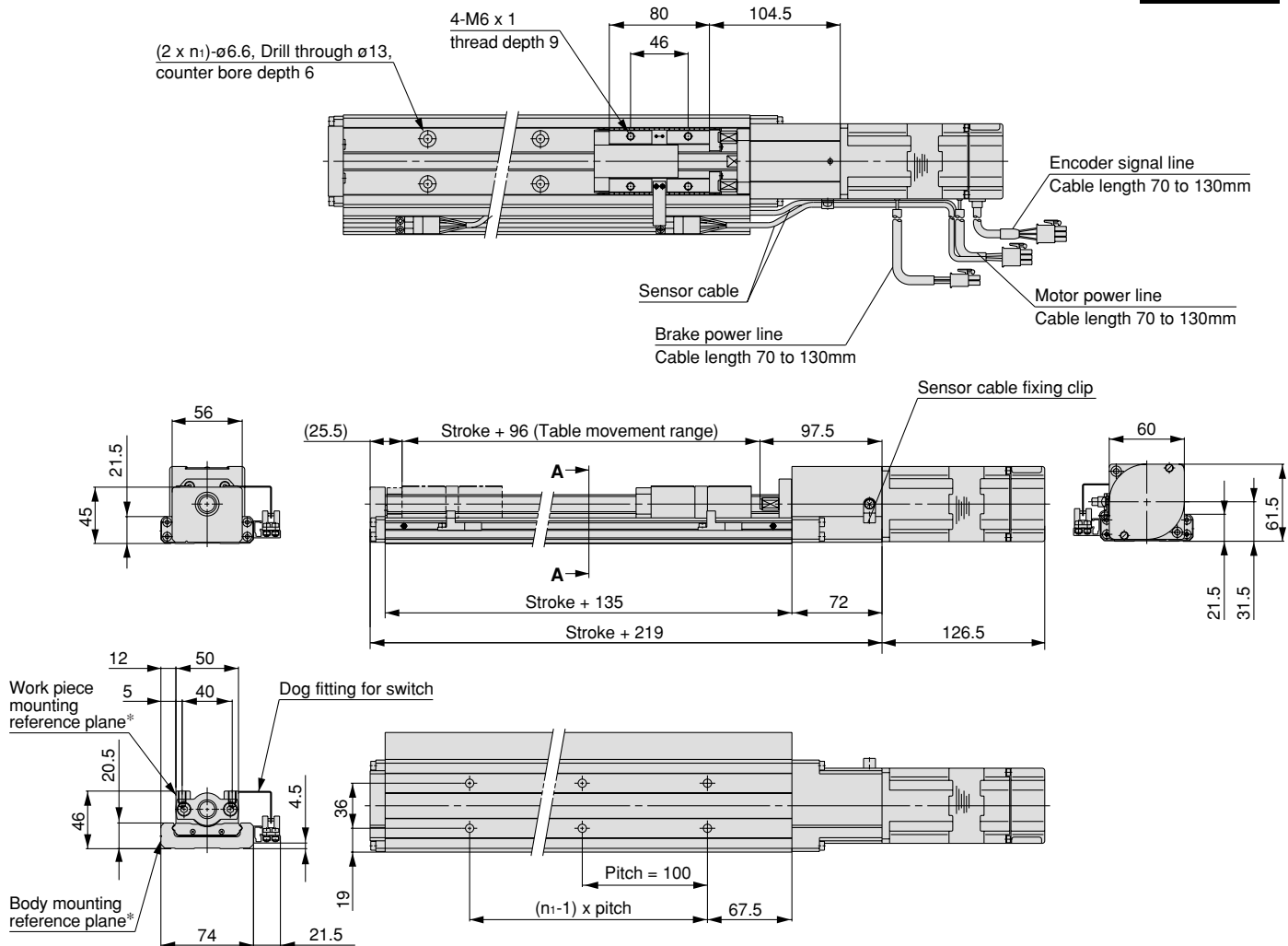


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8F□PL

Scale: 18%



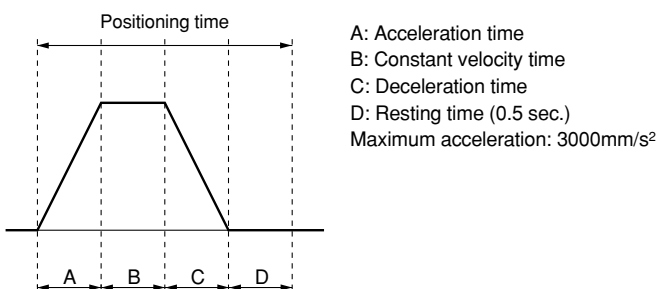
Model	Stroke	n ₁
LTF8F□PL- 100K-□□	100	2
LTF8F□PL- 200K-□□	200	3
LTF8F□PL- 300K-□□	300	4
LTF8F□PL- 400K-□□	400	5
LTF8F□PL- 500K-□□	500	6
LTF8F□PL- 600K-□□	600	7
LTF8F□PL- 700K-□□	700	8
LTF8F□PL- 800K-□□	800	9
LTF8F□PL- 900K-□□	900	10
LTF8F□PL-1000K-□□	1000	11

* 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.)				
		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.



How to Order

LTF8F **1** **NH** — **Stroke** **K** — **R** **2**

Power supply voltage

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

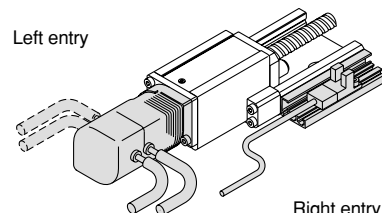
Motor/switch entry direction

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



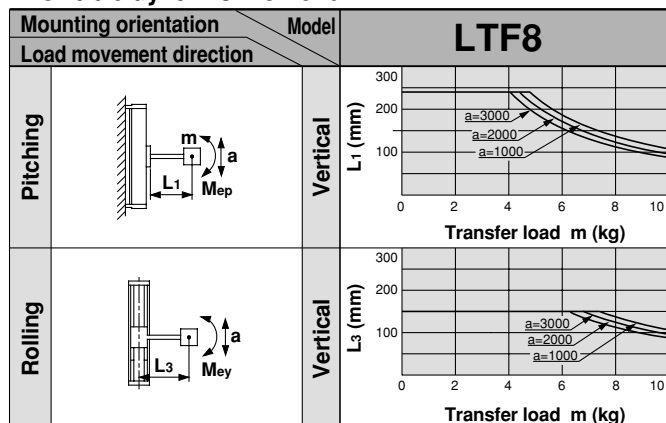
Specifications

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 ∅15mm, 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

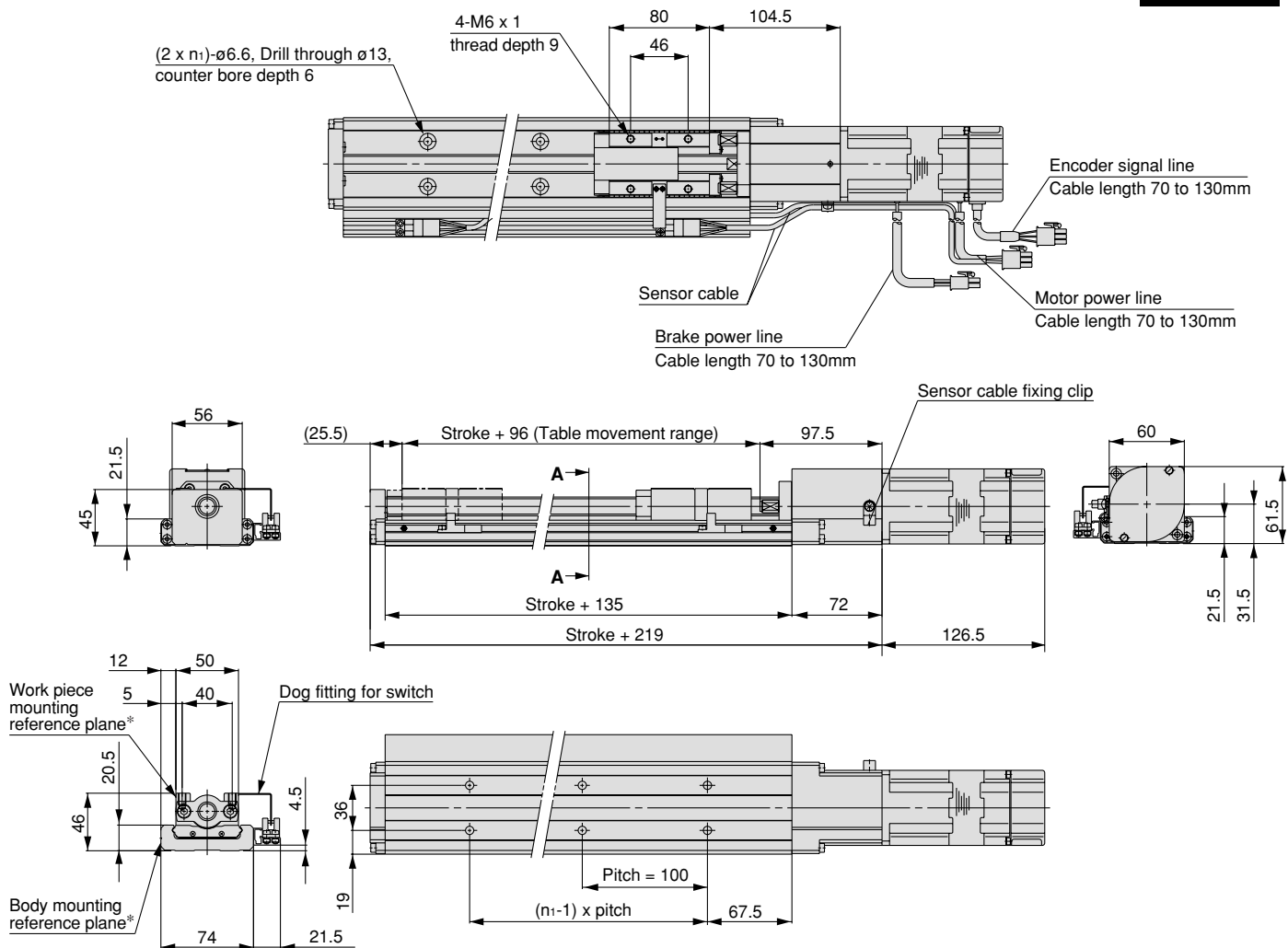


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8F□NH

Scale: 18%



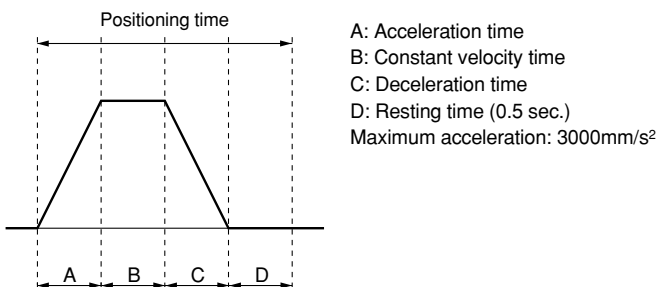
Model	Stroke	n ₁
LTF8F□NH- 100K-□□	100	2
LTF8F□NH- 200K-□□	200	3
LTF8F□NH- 300K-□□	300	4
LTF8F□NH- 400K-□□	400	5
LTF8F□NH- 500K-□□	500	6
LTF8F□NH- 600K-□□	600	7
LTF8F□NH- 700K-□□	700	8
LTF8F□NH- 800K-□□	800	9
LTF8F□NH- 900K-□□	900	10
LTF8F□NH-1000K-□□	1000	11

* 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.)				
		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.



How to Order

LTF8F **1** **NL** — **Stroke** **K** — **R** **2**

Power supply voltage

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

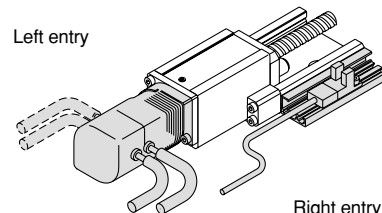
Motor/switch entry direction

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



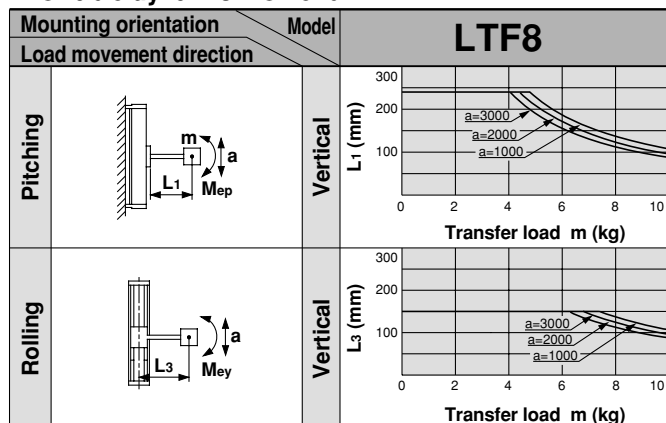
Specifications

		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 ∅15mm, 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

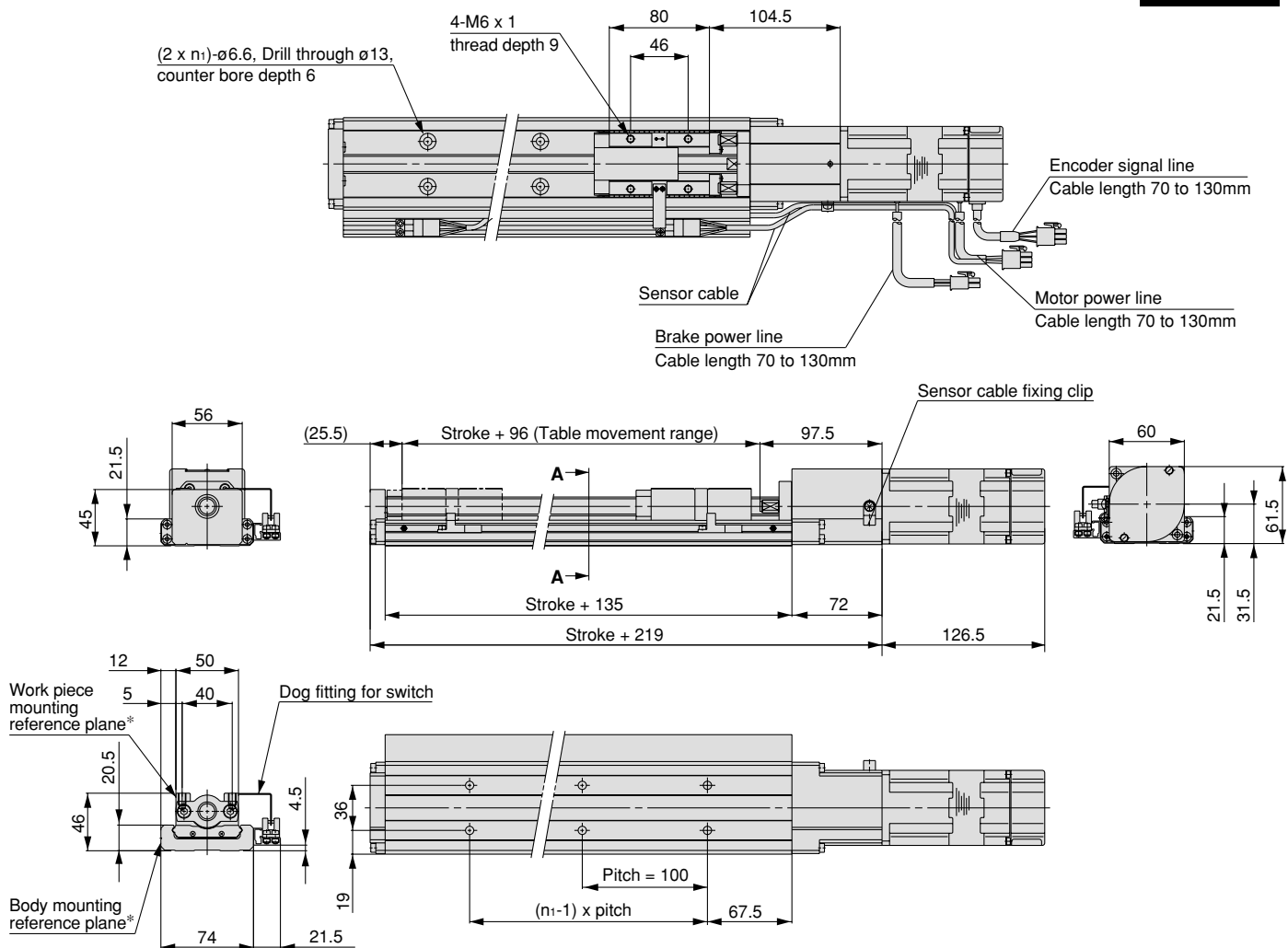


m : Transfer load (kg) Me: Allowable dynamic moment
 a : Work piece acceleration (mm/s²) L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF8F□NL

Scale: 18%



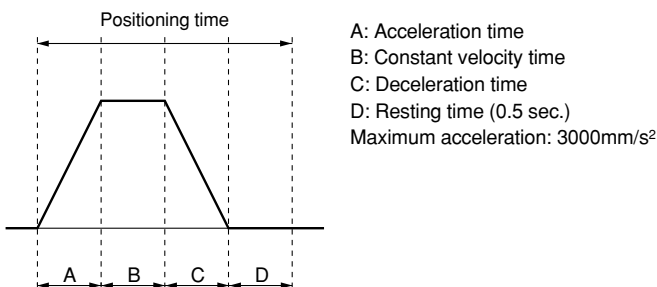
Model	Stroke	n ₁
LTF8F□NL- 100K-□□	100	2
LTF8F□NL- 200K-□□	200	3
LTF8F□NL- 300K-□□	300	4
LTF8F□NL- 400K-□□	400	5
LTF8F□NL- 500K-□□	500	6
LTF8F□NL- 600K-□□	600	7
LTF8F□NL- 700K-□□	700	8
LTF8F□NL- 800K-□□	800	9
LTF8F□NL- 900K-□□	900	10
LTF8F□NL-1000K-□□	1000	11

* 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.)				
		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.



Non-standard Motor

Horizontal Mount

Series LTF6

Motor Output
100W

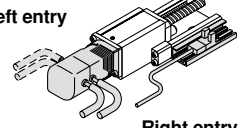
Ground Ball Screw
∅10mm/6mm lead

How to Order

LTF6 **G E 1 PF** — Stroke — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

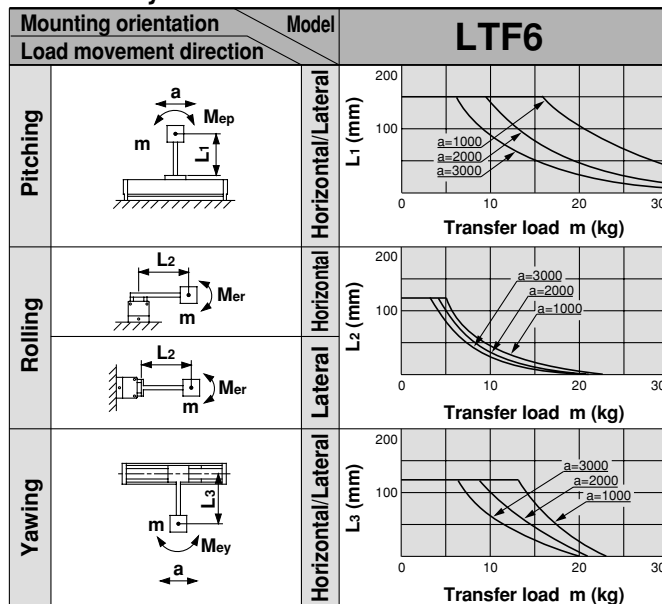
Specifications

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

		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						
	Positioning repeatability	mm	±0.02						
Main parts	Motor	AC servomotor (100W)							
	Encoder	Incremental system							
	Lead screw	Ground ball screw ∅10mm, 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

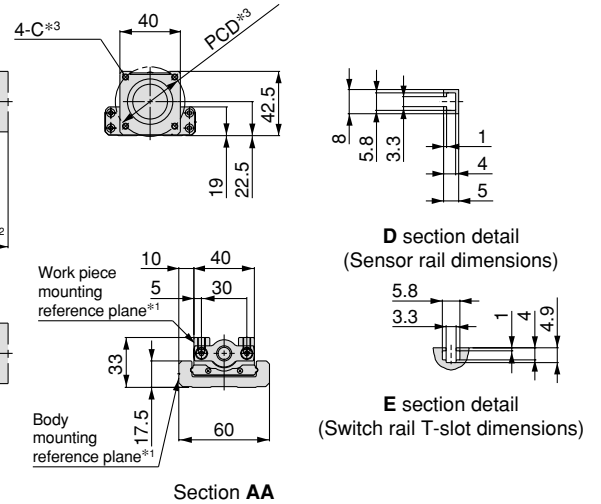
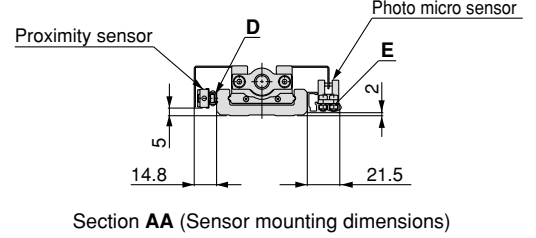
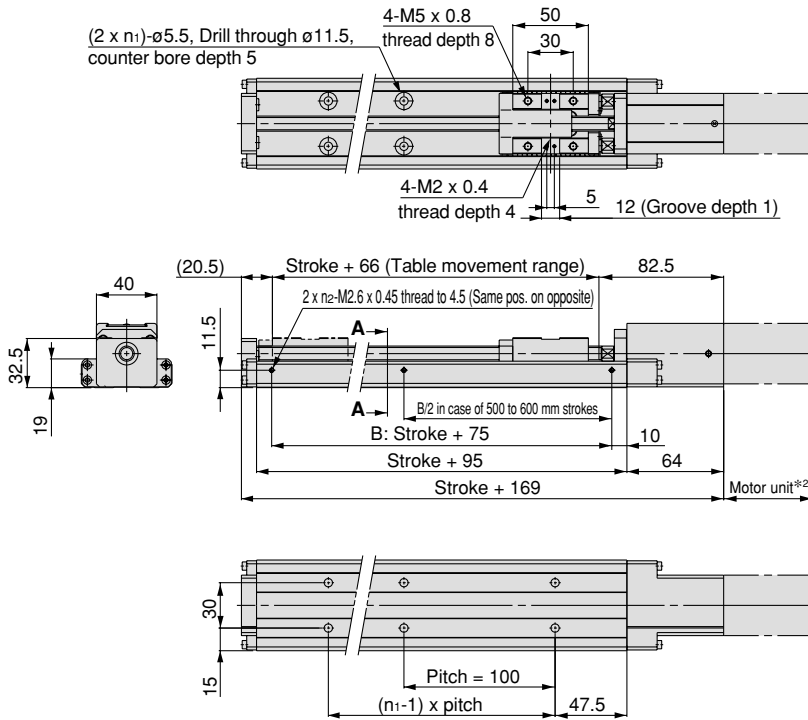


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6□E□PF(X10)

Scale: 20%



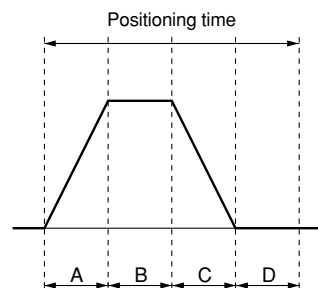
Model	Stroke	n1	n2
LTF6□E□PF- 100-□□-X10	100	2	1
LTF6□E□PF- 200-□□-X10	200	3	1
LTF6□E□PF- 300-□□-X10	300	4	1
LTF6□E□PF- 400-□□-X10	400	5	1
LTF6□E□PF- 500-□□-X10	500	6	2
LTF6□E□PF- 600-□□-X10	600	7	2

- *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.)				
		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	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	

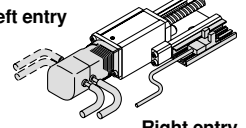
- * Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
- * For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver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

How to Order

LTF6 **G** **E** **1** **PH** — Stroke — — — **X10**

Motor/switch entry direction

Left entry



Right entry

• **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

• **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.

• **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

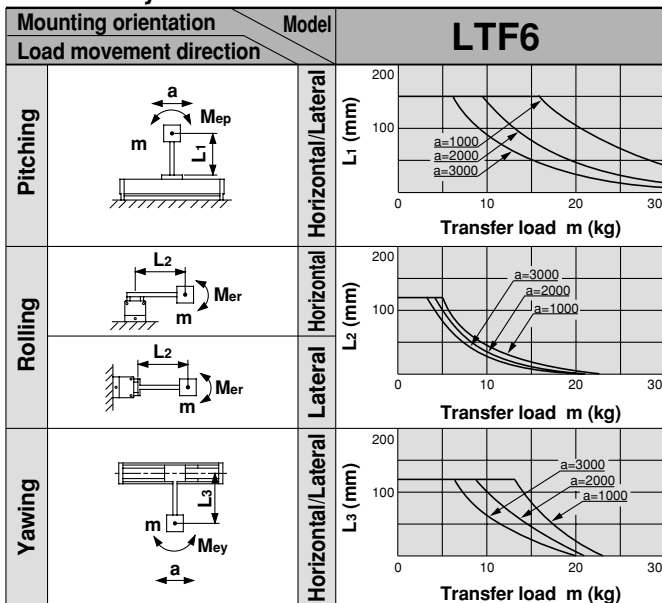
Dog fittings for switch are attached to all types except type "Nil".

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 ∅10mm, 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

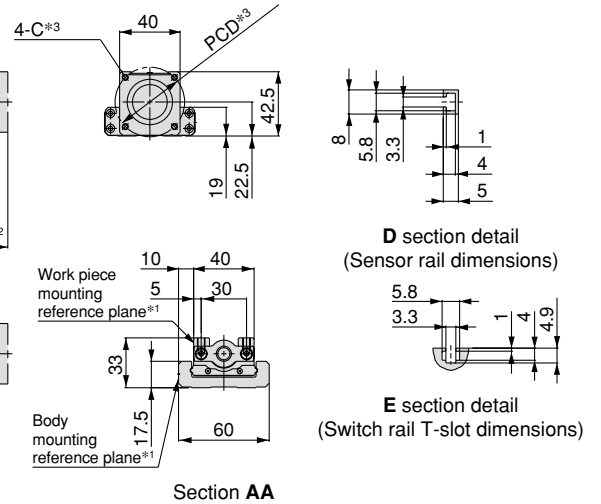
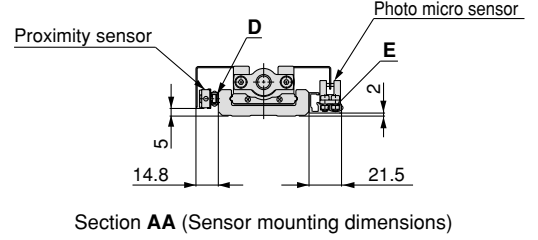
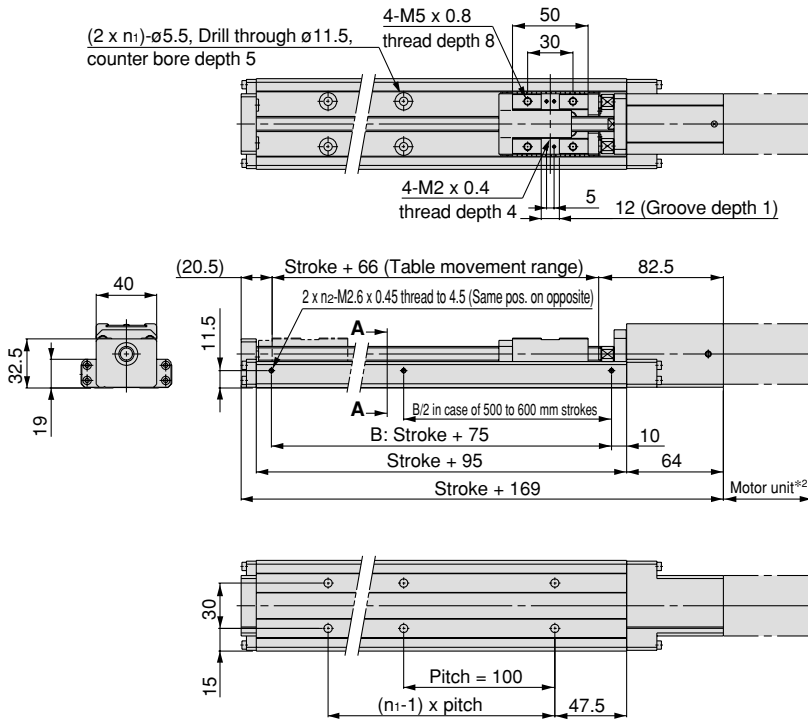


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6□E□PH(X10)

Scale: 20%



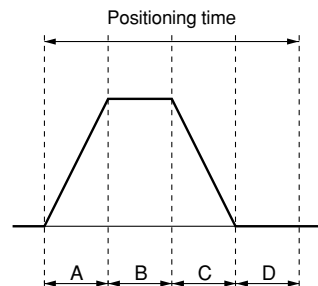
Model	Stroke	n1	n2
LTF6□E□PH- 100-□□-X10	100	2	1
LTF6□E□PH- 200-□□-X10	200	3	1
LTF6□E□PH- 300-□□-X10	300	4	1
LTF6□E□PH- 400-□□-X10	400	5	1
LTF6□E□PH- 500-□□-X10	500	6	2
LTF6□E□PH- 600-□□-X10	600	7	2

- *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/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	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	

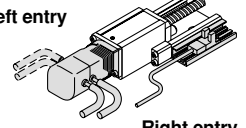
- * Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
- * For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver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

How to Order

LTF6 **G** **E** **1** **NF** — Stroke — **X10**

Motor/switch entry direction

Left entry



Right entry

• **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

• **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.

• **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

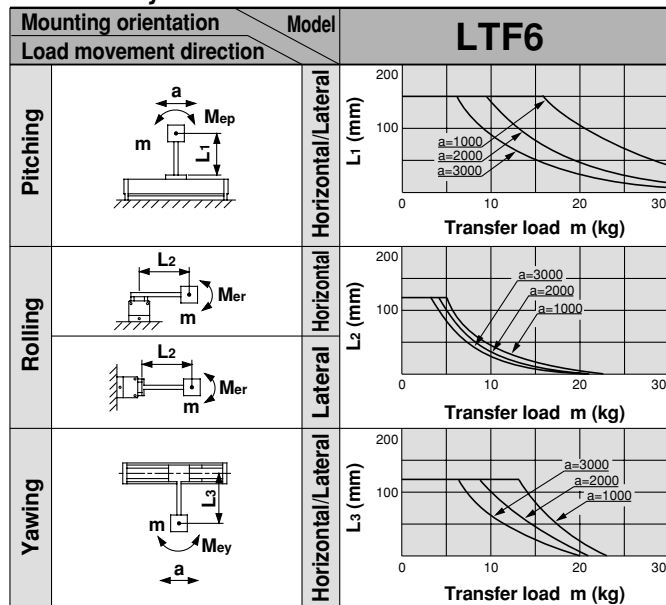
Specifications

		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						
	Positioning repeatability	mm	±0.05						
Main parts	Motor	AC servomotor (100W)							
	Encoder	Incremental system							
	Lead screw	Rolled ball screw ∅10mm, 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.)							

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

Allowable Moment (N·m)

Allowable dynamic moment

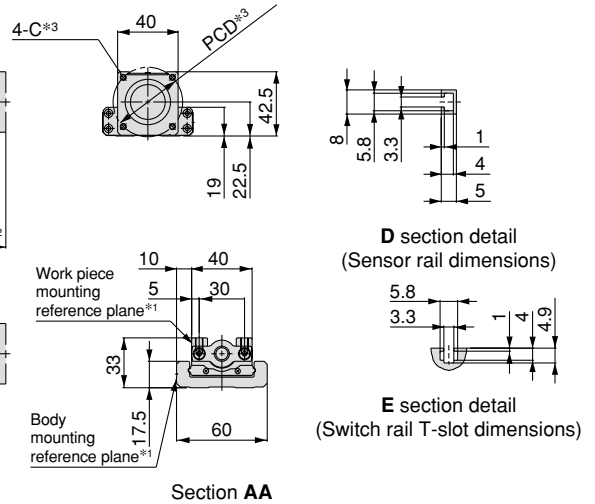
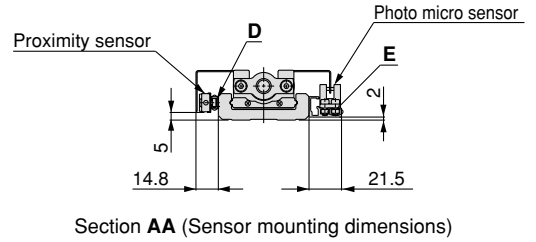
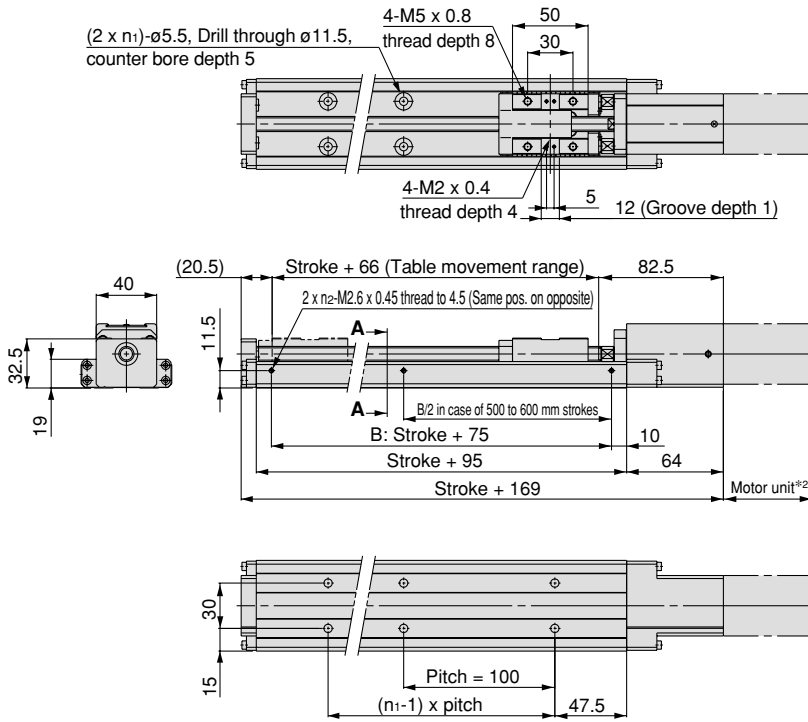


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6□E□NF(X10)

Scale: 20%



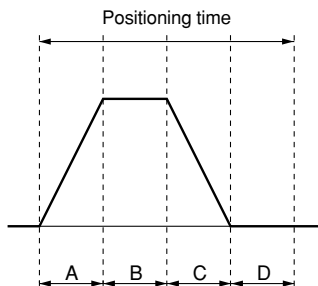
Model	Stroke	n ₁	n ₂
LTF6□E□NF- 100-□□-X10	100	2	1
LTF6□E□NF- 200-□□-X10	200	3	1
LTF6□E□NF- 300-□□-X10	300	4	1
LTF6□E□NF- 400-□□-X10	400	5	1
LTF6□E□NF- 500-□□-X10	500	6	2
LTF6□E□NF- 600-□□-X10	600	7	2

- *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.)				
		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	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.

Non-standard Motor

Horizontal Mount

Series LTF6

Motor Output
100W

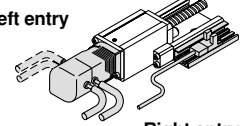
Rolled Ball Screw
∅10mm/10mm lead

How to Order

LTF6 **G** **E** **1** **NH** — Stroke — — — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

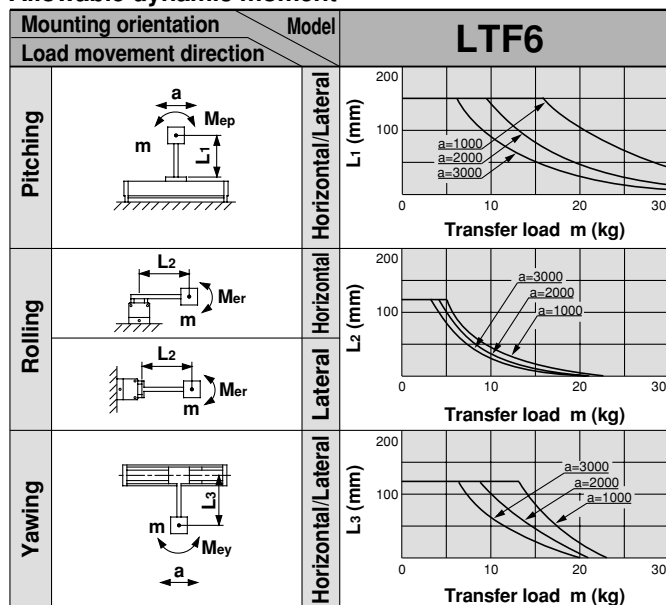
Specifications

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

		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 ∅10mm, 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

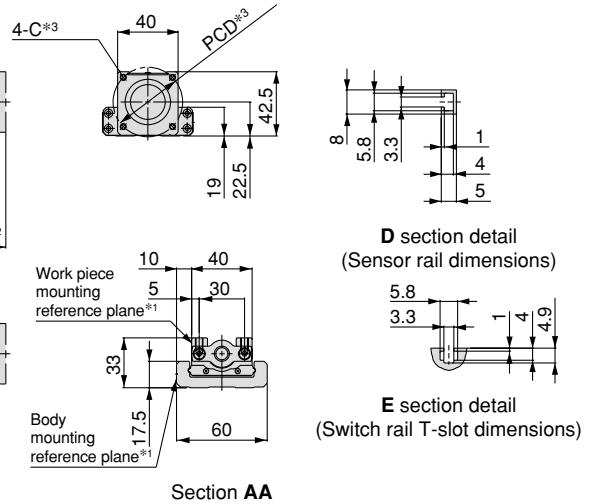
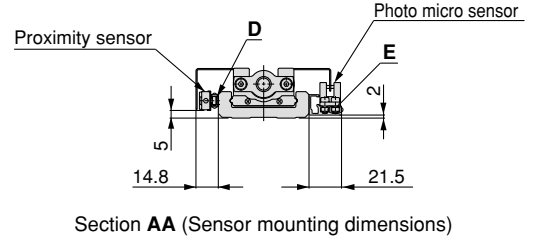
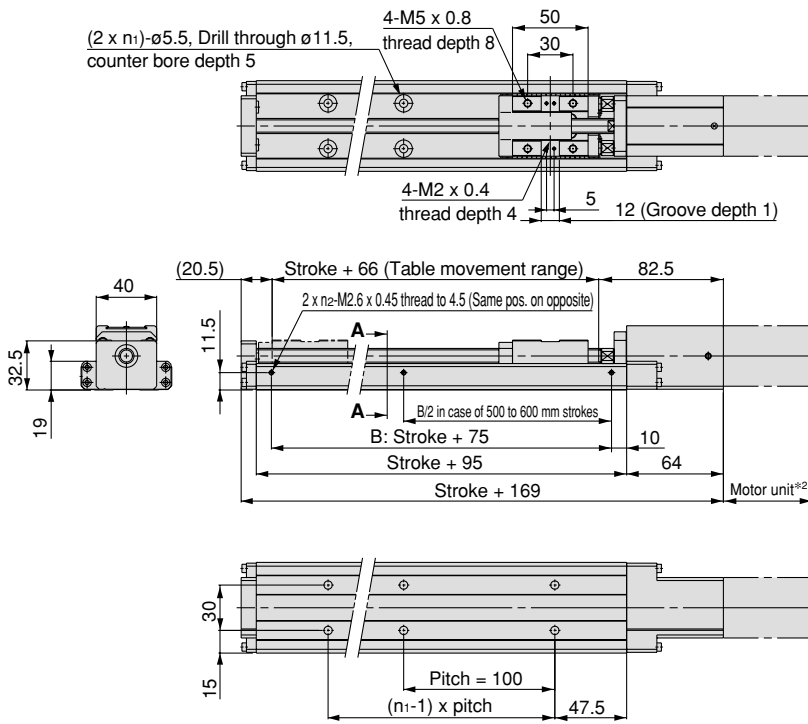


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me: Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

Refer to page 71 for deflection data.

Dimensions/LTF6□E□NH(X10)

Scale: 20%



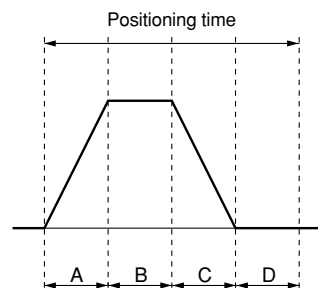
Model	Stroke	n1	n2
LTF6□E□NH- 100-□□-X10	100	2	1
LTF6□E□NH- 200-□□-X10	200	3	1
LTF6□E□NH- 300-□□-X10	300	4	1
LTF6□E□NH- 400-□□-X10	400	5	1
LTF6□E□NH- 500-□□-X10	500	6	2
LTF6□E□NH- 600-□□-X10	600	7	2

- *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/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	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.

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

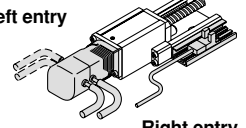
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

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.

Motor/switch entry direction

Left entry



Right entry

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

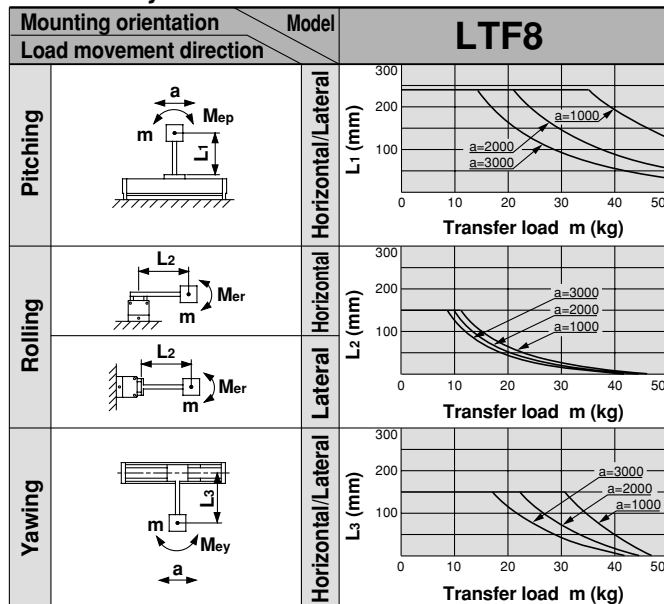
Specifications

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

		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 ∅15mm, 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

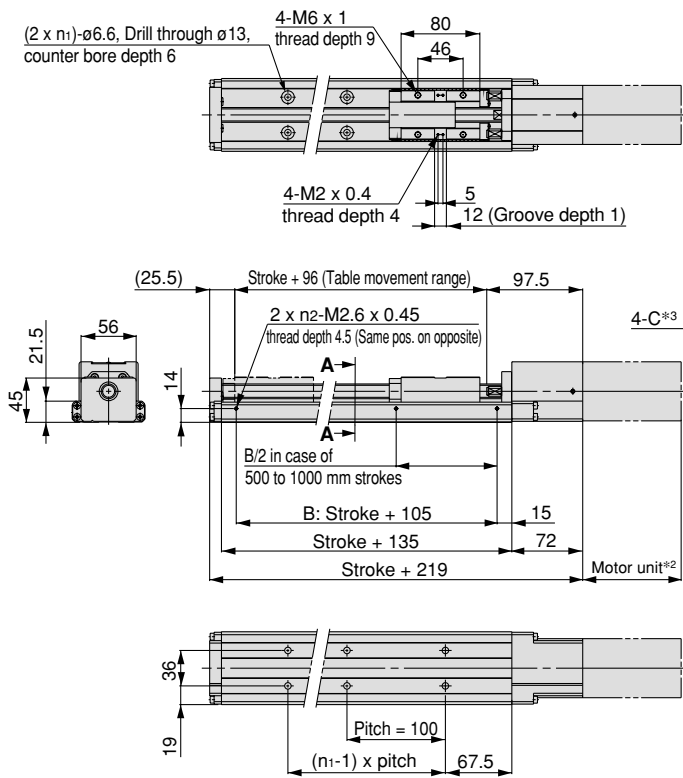


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

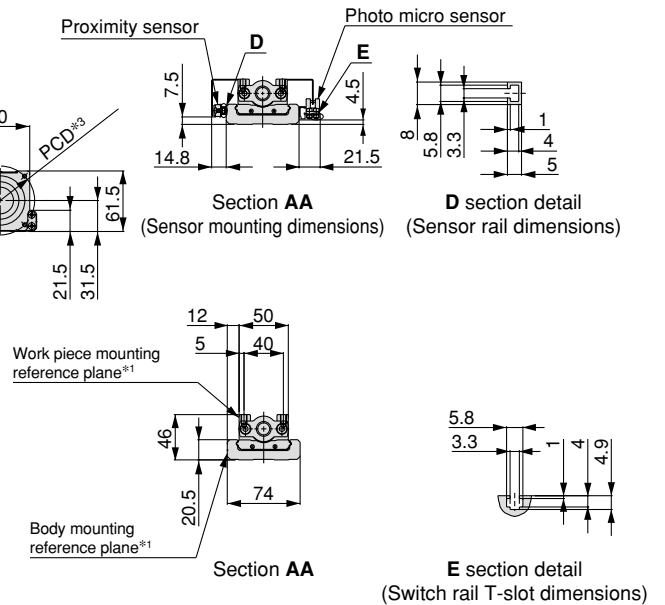
Refer to page 71 for deflection data.

Dimensions/LTF8□F□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.



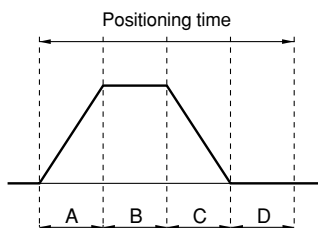
Model	Stroke	n ₁	n ₂
LTF8□F□PH- 100-□□-X10	100	2	1
LTF8□F□PH- 200-□□-X10	200	3	1
LTF8□F□PH- 300-□□-X10	300	4	1
LTF8□F□PH- 400-□□-X10	400	5	1
LTF8□F□PH- 500-□□-X10	500	6	2

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.)				
		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.

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

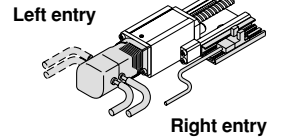
Power supply voltage

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

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.

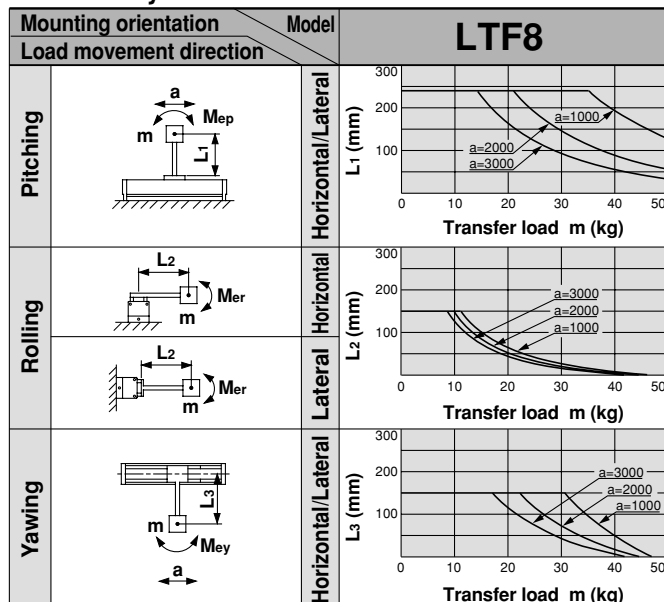
Dog fittings for switch are attached to all types except type "Nil".

Specifications

		Standard stroke	mm	100	200	300	400	500	600	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 ∅15mm, 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

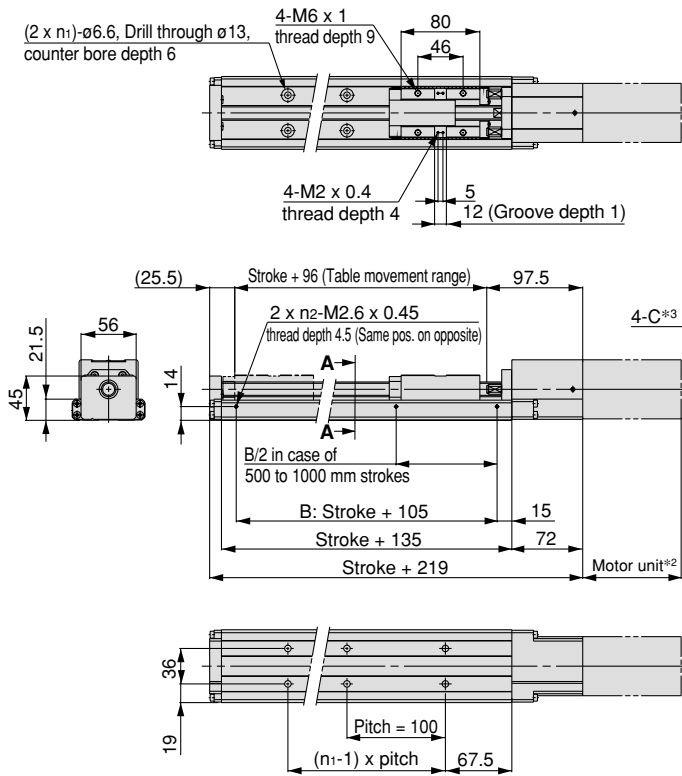


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

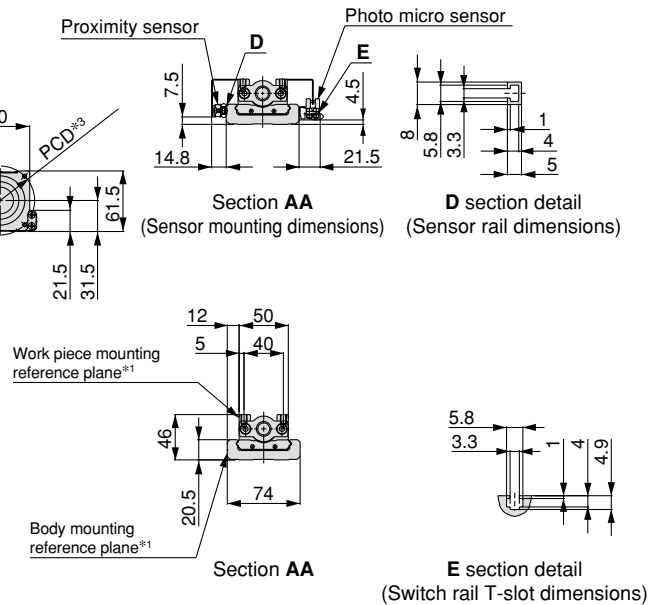
Refer to page 71 for deflection data.

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.



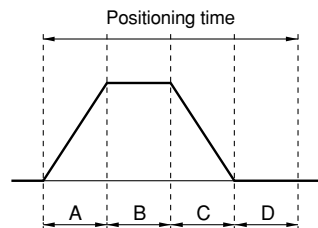
Model	Stroke	n ₁	n ₂
LTF8□F□PL- 100-□□-X10	100	2	1
LTF8□F□PL- 200-□□-X10	200	3	1
LTF8□F□PL- 300-□□-X10	300	4	1
LTF8□F□PL- 400-□□-X10	400	5	1
LTF8□F□PL- 500-□□-X10	500	6	2

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.

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

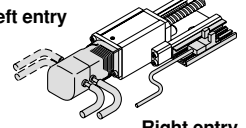
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

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.

Motor/switch entry direction

Left entry



Right entry

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

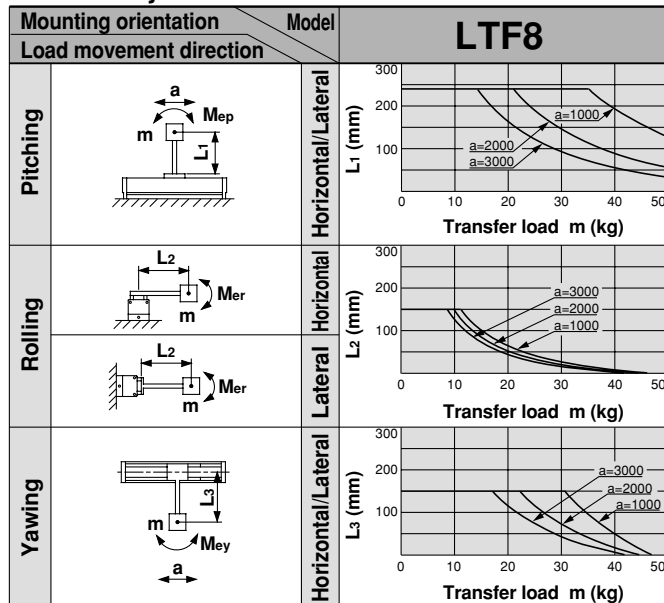
Specifications

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

		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 ∅15mm, 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

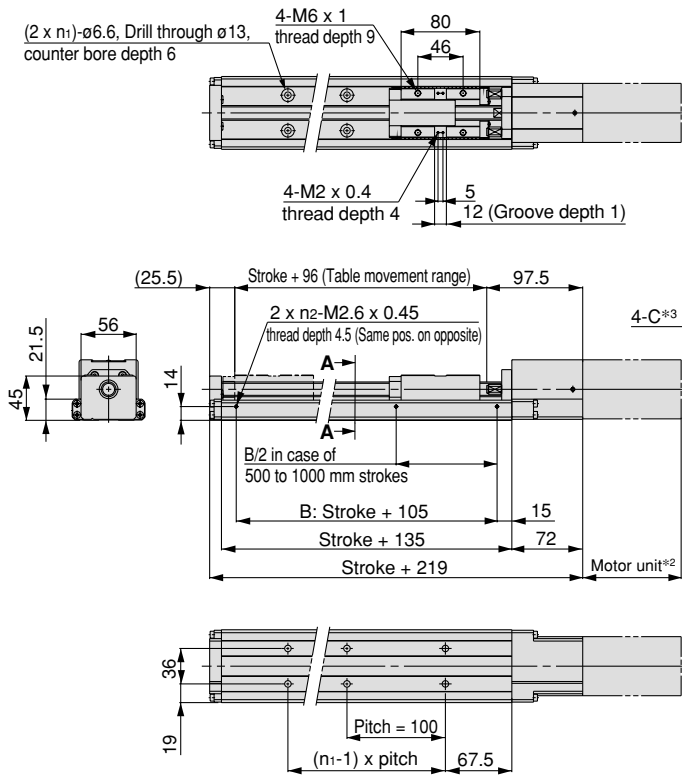


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

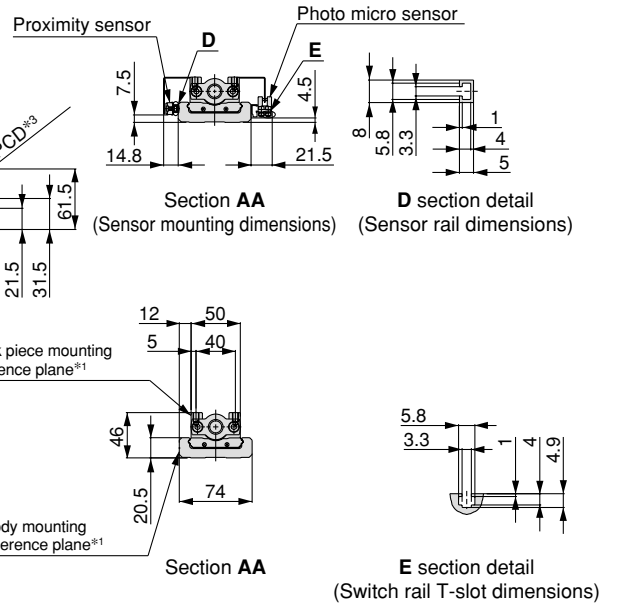
Refer to page 71 for deflection data.

Dimensions/LTF8□F□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.



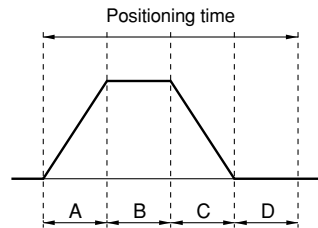
Model	Stroke	n ₁	n ₂
LTF8□F□NH- 100-□□-X10	100	2	1
LTF8□F□NH- 200-□□-X10	200	3	1
LTF8□F□NH- 300-□□-X10	300	4	1
LTF8□F□NH- 400-□□-X10	400	5	1
LTF8□F□NH- 500-□□-X10	500	6	2

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.)				
		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.

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

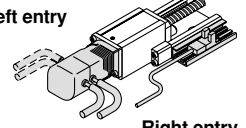
1	100/115V AC (50/60Hz)
2	200/230V AC (50/60Hz)
0	Without motor

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.

Motor/switch entry direction

Left entry



Right entry

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

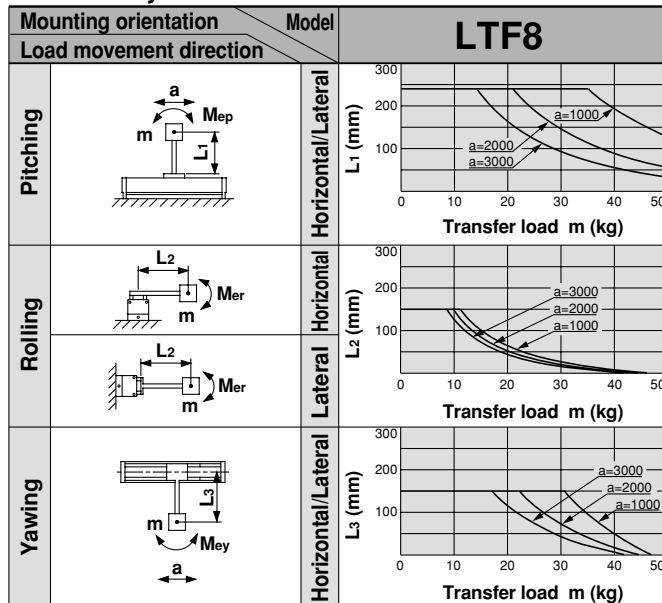
Specifications

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

		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 ∅15mm, 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

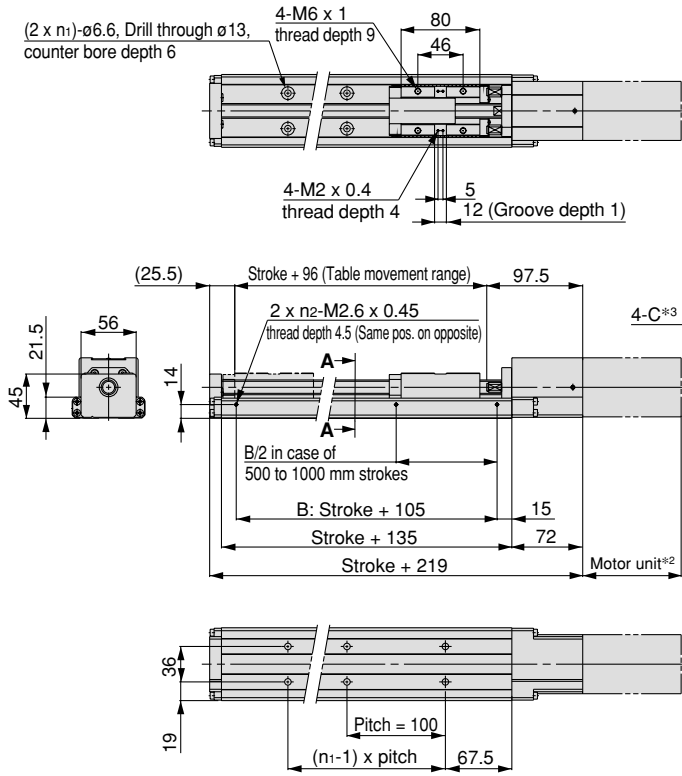


m : Transfer load (kg)
a : Work piece acceleration (mm/s²)
Me : Allowable dynamic moment
L : Overhang to work piece center of gravity (mm)

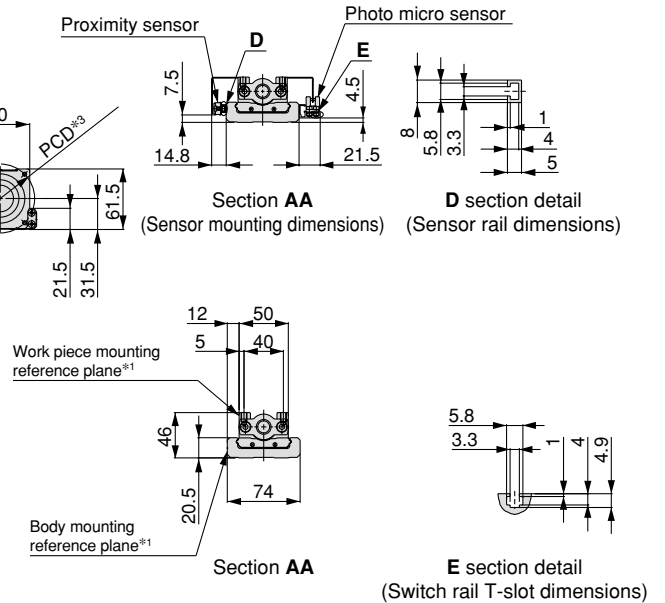
Refer to page 71 for deflection data.

Dimensions/LTF8□F□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.



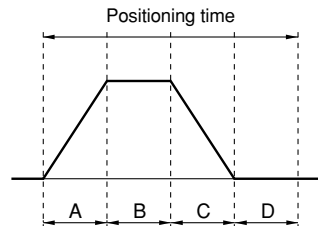
Model	Stroke	n ₁	n ₂
LTF8□F□NL- 100-□□-X10	100	2	1
LTF8□F□NL- 200-□□-X10	200	3	1
LTF8□F□NL- 300-□□-X10	300	4	1
LTF8□F□NL- 400-□□-X10	400	5	1
LTF8□F□NL- 500-□□-X10	500	6	2

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.)				
		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.

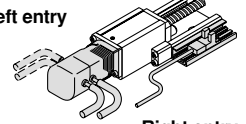
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

How to Order

LTF6 **G E 1 PF** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

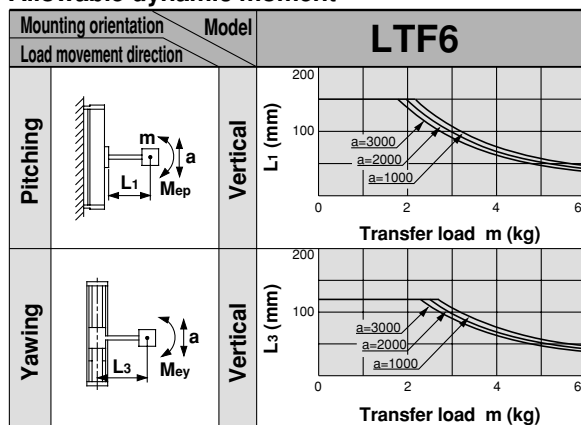
Dog fittings for switch are attached to all types except type "Nil".

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						
	Positioning repeatability	mm	±0.02						
Main parts	Motor	AC servomotor (100W) with brake							
	Encoder	Incremental system							
	Lead screw	Ground ball screw ∅10mm, 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) M_e : 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

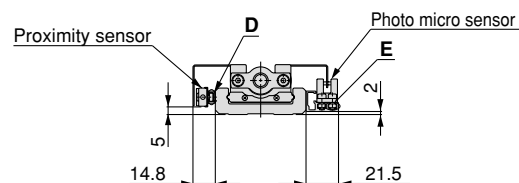
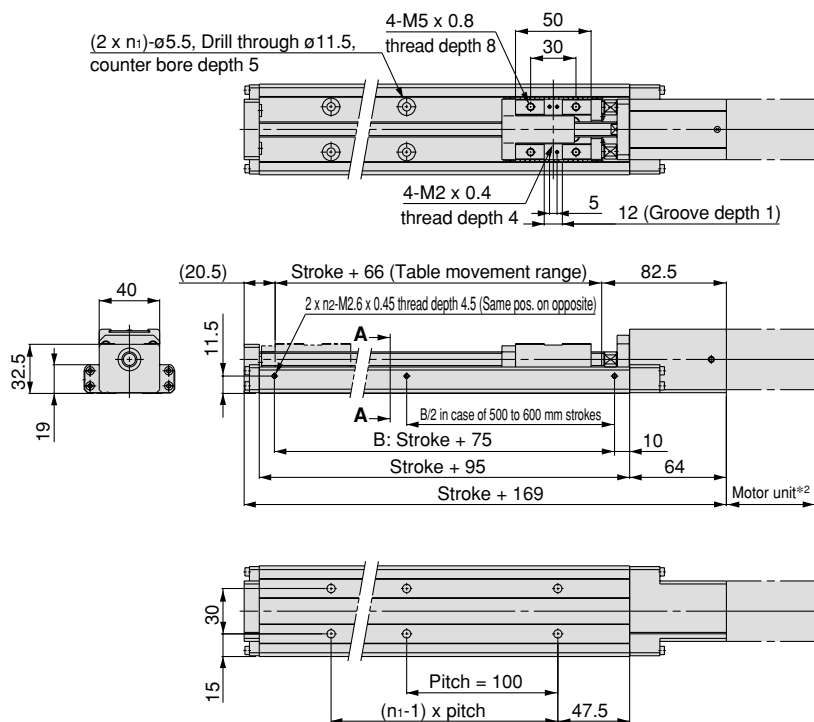
+ Driver capacitor energy consumption (A)

+ Regenerative resistor energy consumption (B)

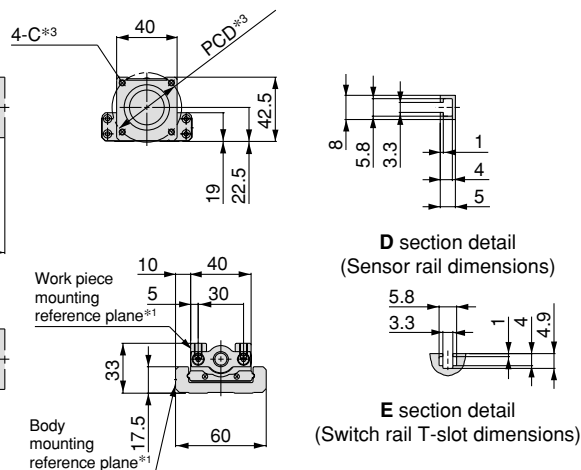
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□PF(X10)

Scale: 20%



Section AA (Sensor mounting dimensions)



Section AA

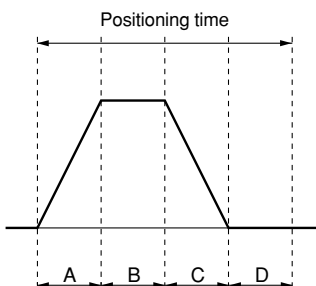
Model	Stroke	n ₁	n ₂
LTF6□E□PF-100K-□□-X10	100	2	1
LTF6□E□PF-200K-□□-X10	200	3	1
LTF6□E□PF-300K-□□-X10	300	4	1
LTF6□E□PF-400K-□□-X10	400	5	1
LTF6□E□PF-500K-□□-X10	500	6	2
LTF6□E□PF-600K-□□-X10	600	7	2

- *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.)				
		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.

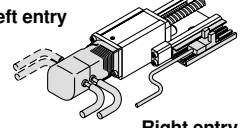
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

How to Order

LTF6 **G** **E** **1** **PH** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

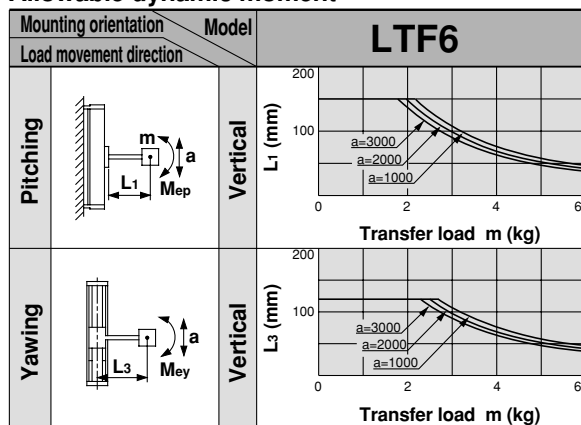
Dog fittings for switch are attached to all types except type "Nil".

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						
	Positioning repeatability	mm	±0.02						
Main parts	Motor	AC servomotor (100W) with brake							
	Encoder	Incremental system							
	Lead screw	Ground ball screw ∅10mm, 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

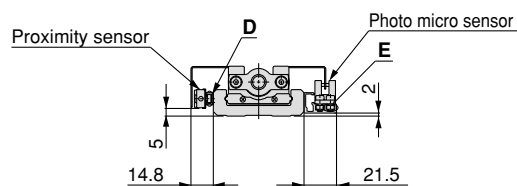
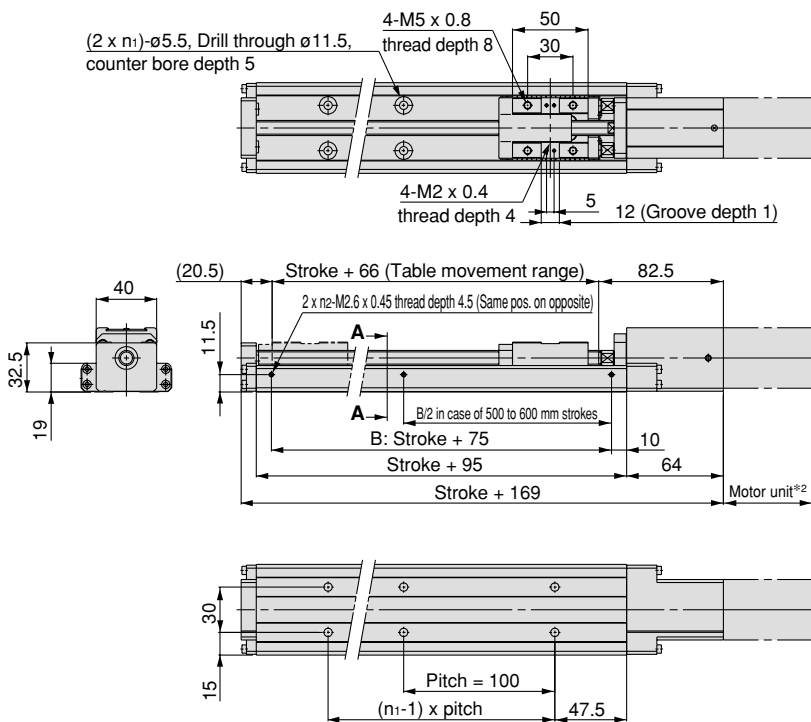
+ Driver capacitor energy consumption (A)

+ Regenerative resistor energy consumption (B)

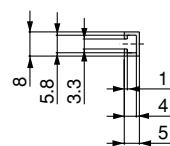
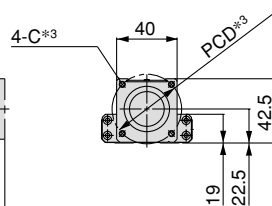
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□PH(X10)

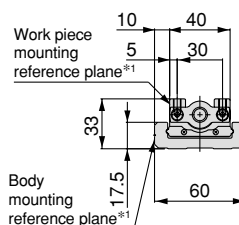
Scale: 20%



Section AA (Sensor mounting dimensions)



D section detail (Sensor rail dimensions)



E section detail (Switch rail T-slot dimensions)

Section AA

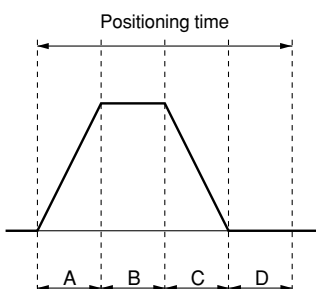
Model	Stroke	n ₁	n ₂
LTF6□E□PH-100K-□□-X10	100	2	1
LTF6□E□PH-200K-□□-X10	200	3	1
LTF6□E□PH-300K-□□-X10	300	4	1
LTF6□E□PH-400K-□□-X10	400	5	1
LTF6□E□PH-500K-□□-X10	500	6	2
LTF6□E□PH-600K-□□-X10	600	7	2

- *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.

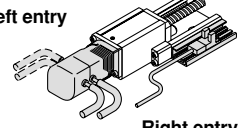
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

How to Order

LTF6 **G** **E** **1** **NF** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

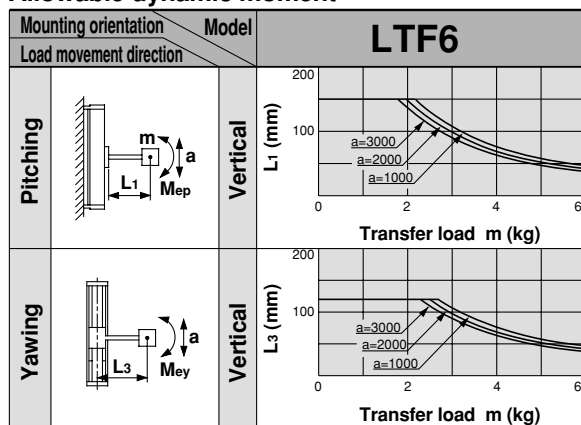
Dog fittings for switch are attached to all types except type "Nil".

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						
	Positioning repeatability	mm	±0.05						
Main parts	Motor	AC servomotor (100W) with brake							
	Encoder	Incremental system							
	Lead screw	Rolled ball screw ∅10mm, 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) M_e : 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

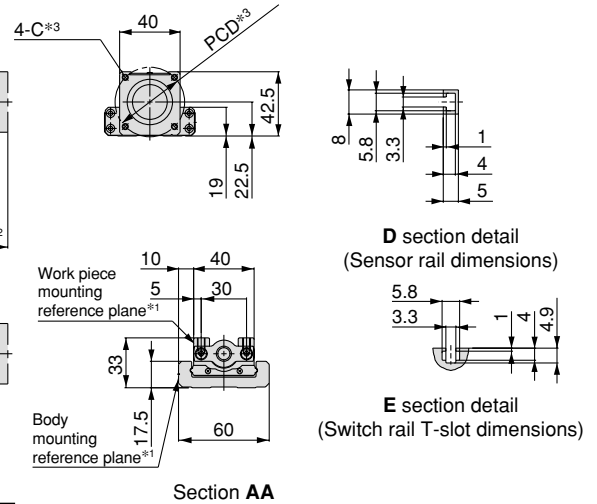
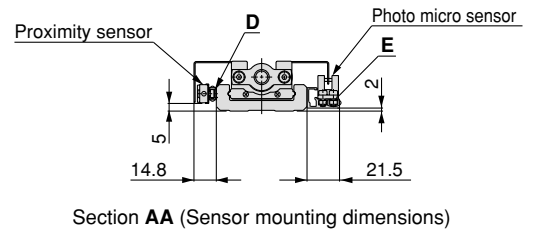
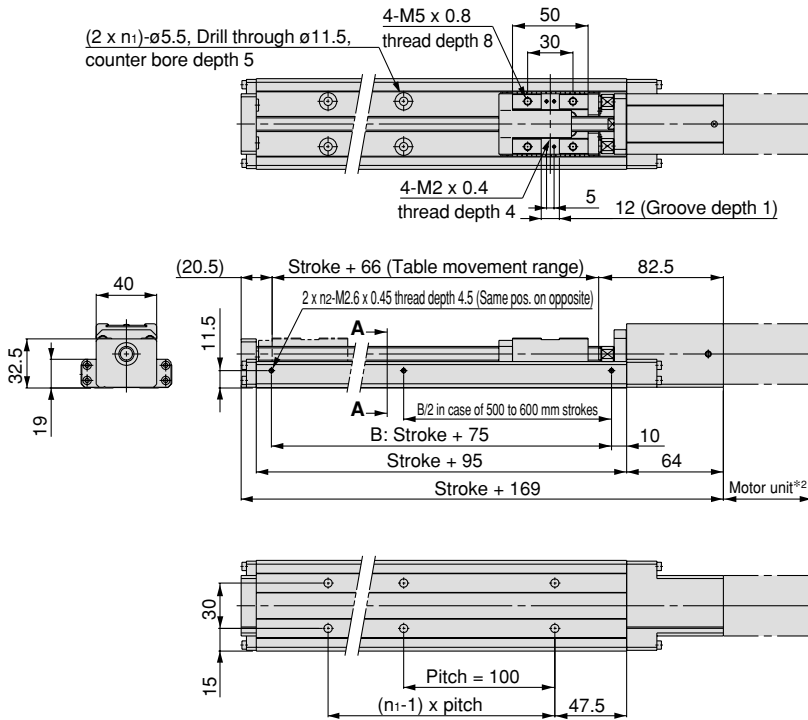
+ Driver capacitor energy consumption (A)

+ 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□NF(X10)

Scale: 20%



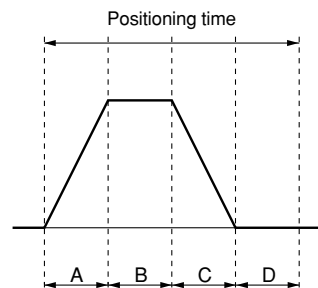
Model	Stroke	n1	n2
LTF6□E□NF- 100K-□□-X10	100	2	1
LTF6□E□NF- 200K-□□-X10	200	3	1
LTF6□E□NF- 300K-□□-X10	300	4	1
LTF6□E□NF- 400K-□□-X10	400	5	1
LTF6□E□NF- 500K-□□-X10	500	6	2
LTF6□E□NF- 600K-□□-X10	600	7	2

- *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	

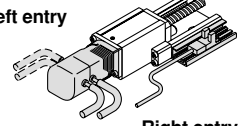
- * Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.
- * For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver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

How to Order

LTF6 **G E 1 NH** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

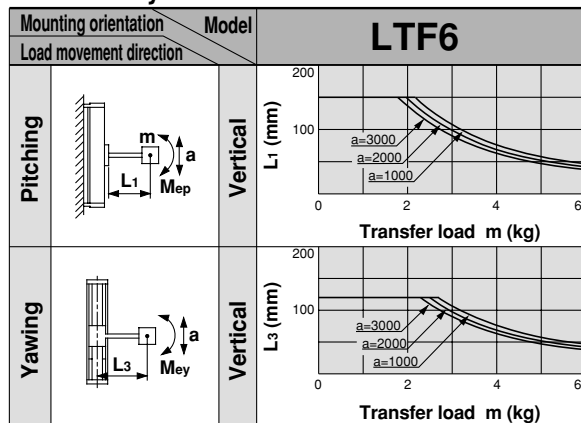
Dog fittings for switch are attached to all types except type "Nil".

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						
	Positioning repeatability	mm	±0.05						
Main parts	Motor	AC servomotor (100W) with brake							
	Encoder	Incremental system							
	Lead screw	Rolled ball screw ∅10mm, 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

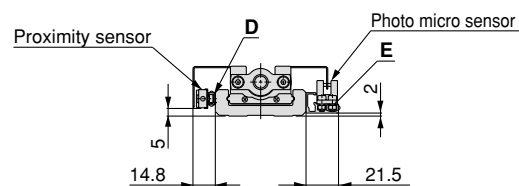
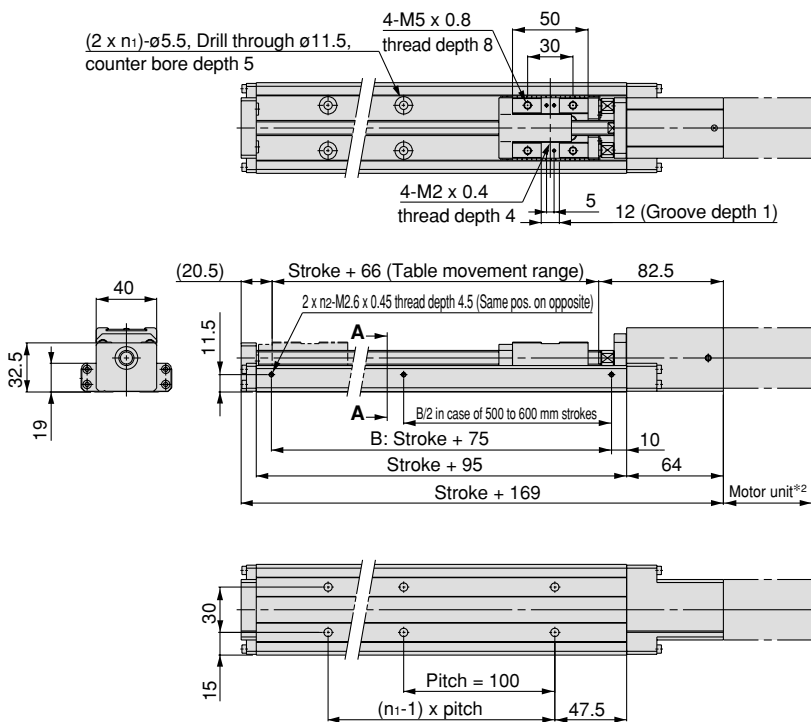
+ Driver capacitor energy consumption (A)

+ Regenerative resistor energy consumption (B)

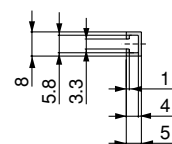
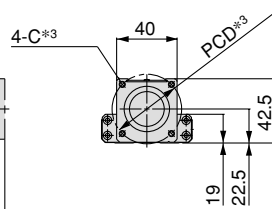
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF6□E□NH(X10)

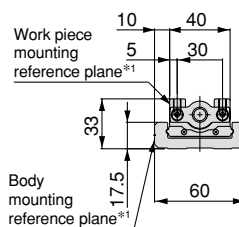
Scale: 20%



Section AA (Sensor mounting dimensions)



D section detail (Sensor rail dimensions)



E section detail (Switch rail T-slot dimensions)

Section AA

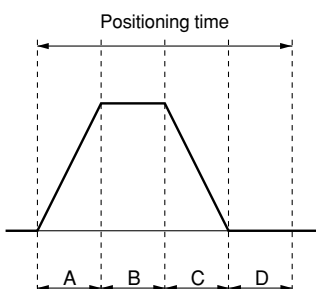
Model	Stroke	n ₁	n ₂
LTF6□E□NH- 100K-□□-X10	100	2	1
LTF6□E□NH- 200K-□□-X10	200	3	1
LTF6□E□NH- 300K-□□-X10	300	4	1
LTF6□E□NH- 400K-□□-X10	400	5	1
LTF6□E□NH- 500K-□□-X10	500	6	2
LTF6□E□NH- 600K-□□-X10	600	7	2

- *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 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.

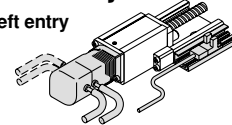
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

How to Order

LTF8 **G** **F** **1** **PH** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

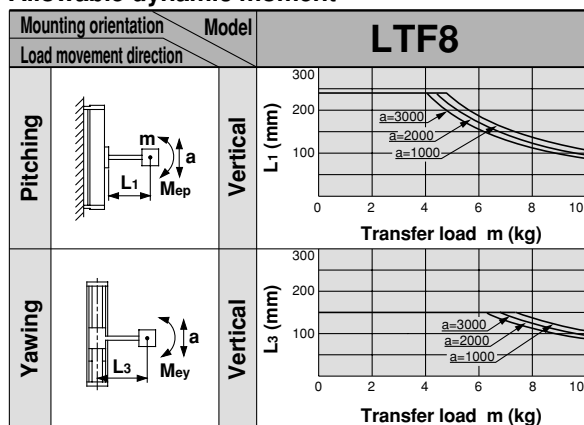
Dog fittings for switch are attached to all types except type "Nil".

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 ∅15mm, 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

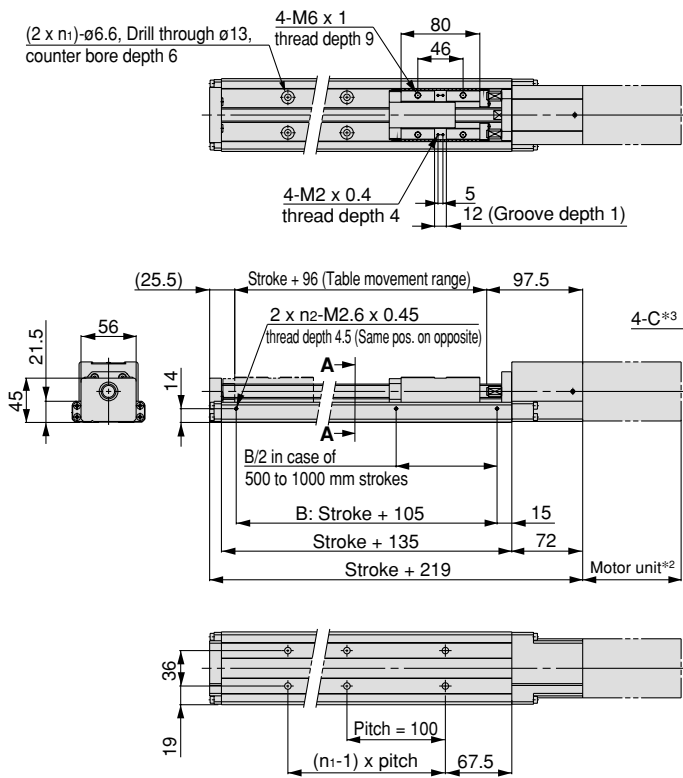
Depending on operating conditions, a regenerative absorption unit or regenerative resistor may be required for a non-standard motor with vertical mount specification. How to determine regenerative energy is shown below.

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

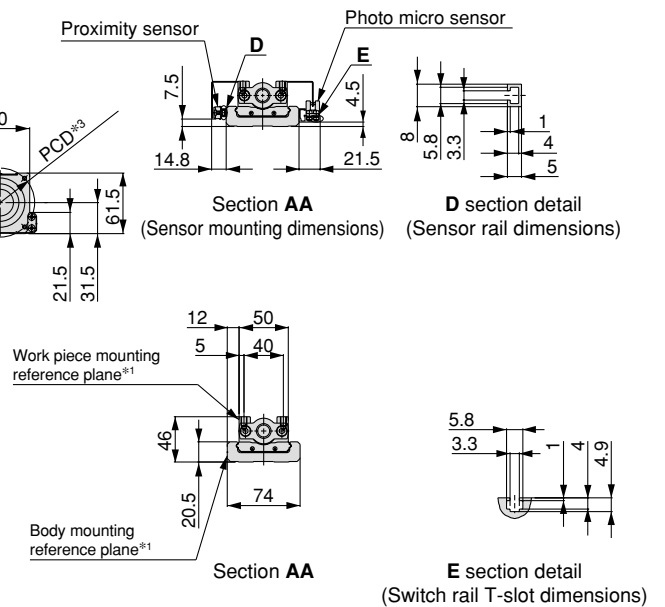
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/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.



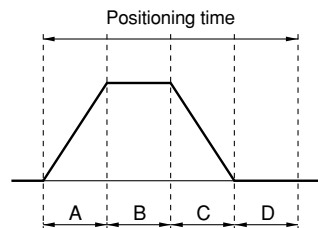
Model	Stroke	n ₁	n ₂
LTF8□F□PH- 100K-□□-X10	100	2	1
LTF8□F□PH- 200K-□□-X10	200	3	1
LTF8□F□PH- 300K-□□-X10	300	4	1
LTF8□F□PH- 400K-□□-X10	400	5	1
LTF8□F□PH- 500K-□□-X10	500	6	2

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.)				
		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	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-02BF-12B	SGDE-02BP	136
		200/230	SGME-02AF-12B	SGDE-02AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.

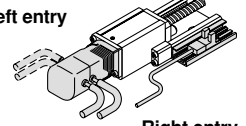
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

How to Order

LTF8 **G** **F** **1** **PL** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

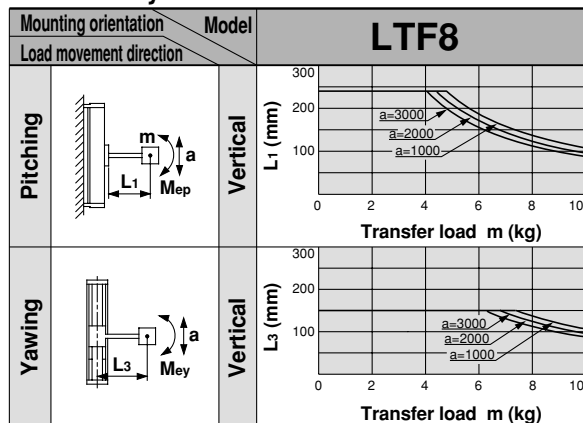
Dot fittings for switch are attached to all types except type "Nil".

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 ∅15mm, 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

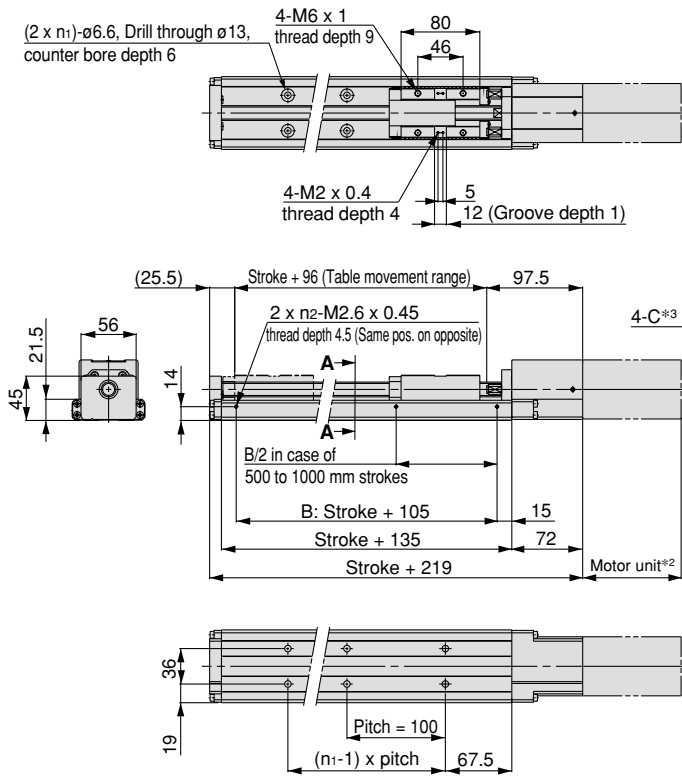
+ Driver capacitor energy consumption (A)

+ Regenerative resistor energy consumption (B)

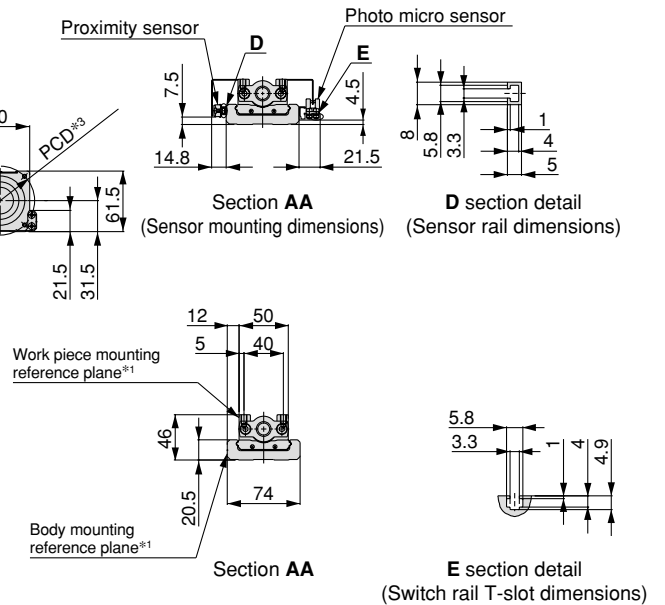
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

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.



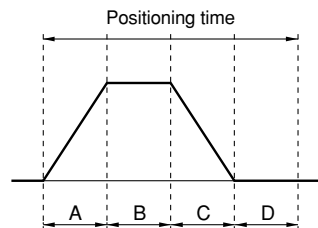
Model	Stroke	n ₁	n ₂
LTF8□F□PL- 100K-□□-X10	100	2	1
LTF8□F□PL- 200K-□□-X10	200	3	1
LTF8□F□PL- 300K-□□-X10	300	4	1
LTF8□F□PL- 400K-□□-X10	400	5	1
LTF8□F□PL- 500K-□□-X10	500	6	2

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.)				
		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	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-02BF-12B	SGDE-02BP	136
		200/230	SGME-02AF-12B	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 Vertical Mount

Series LTF8

Motor Output
200W

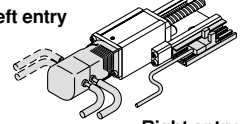
Rolled Ball Screw
∅15mm/10mm lead

How to Order

LTF8 **G** **F** **1** **NH** — Stroke **K** — **X10**

Motor/switch entry direction

Left entry



Right entry

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

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.

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

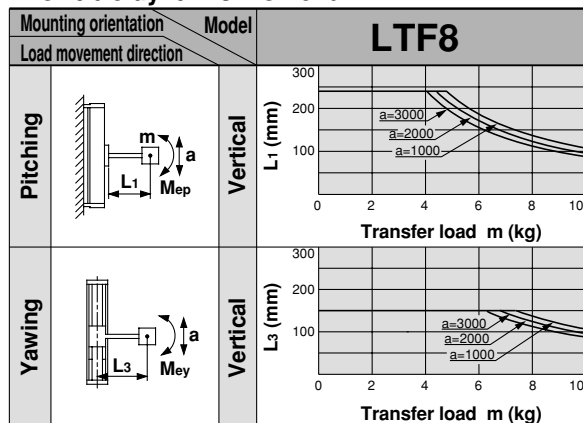
Dog fittings for switch are attached to all types except type "Nil".

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 ∅15mm, 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

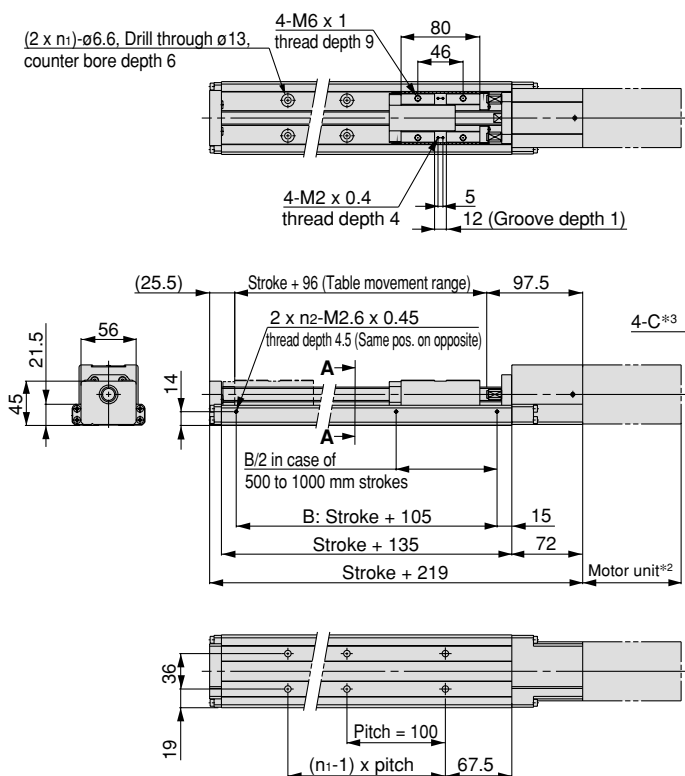
+ Driver capacitor energy consumption (A)

+ Regenerative resistor energy consumption (B)

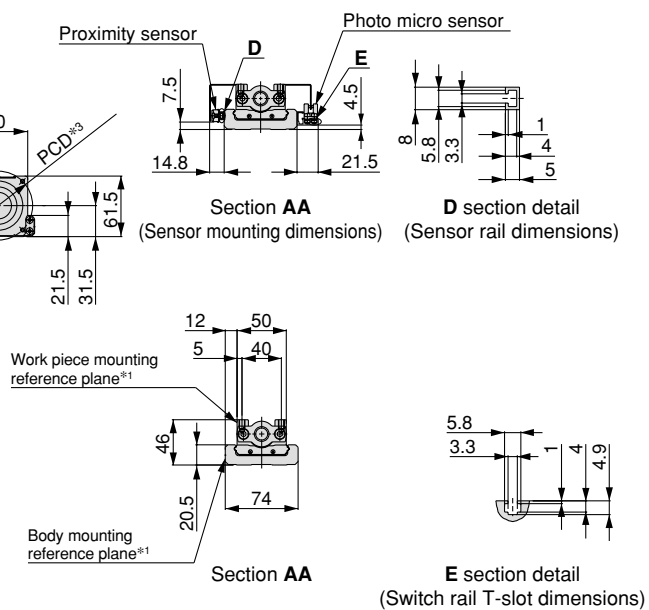
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/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.



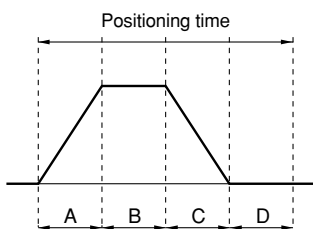
Model	Stroke	n ₁	n ₂
LTF8□F□NH- 100K-□□-X10	100	2	1
LTF8□F□NH- 200K-□□-X10	200	3	1
LTF8□F□NH- 300K-□□-X10	300	4	1
LTF8□F□NH- 400K-□□-X10	400	5	1
LTF8□F□NH- 500K-□□-X10	500	6	2

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/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	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-02BF-12B	SGDE-02BP	136
		200/230	SGME-02AF-12B	SGDE-02AP	

* Refer to pages starting with 89 for driver dimensions, etc. Furthermore, for detailed specifications, etc., contact each motor manufacturer.

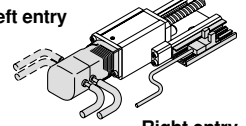
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

How to Order

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

Motor/switch entry direction

Left entry



Right entry

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

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.

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

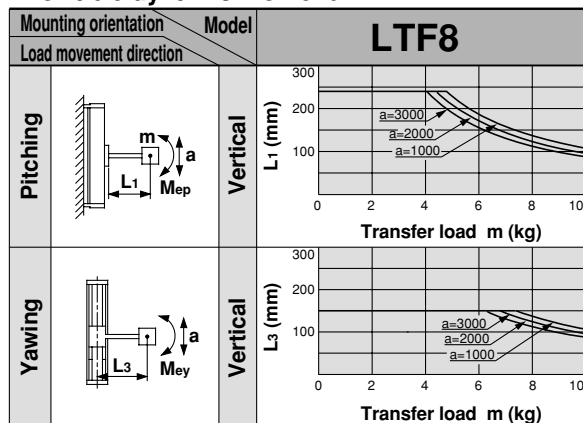
Dog fittings for switch are attached to all types except type "Nil".

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 ∅15mm, 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

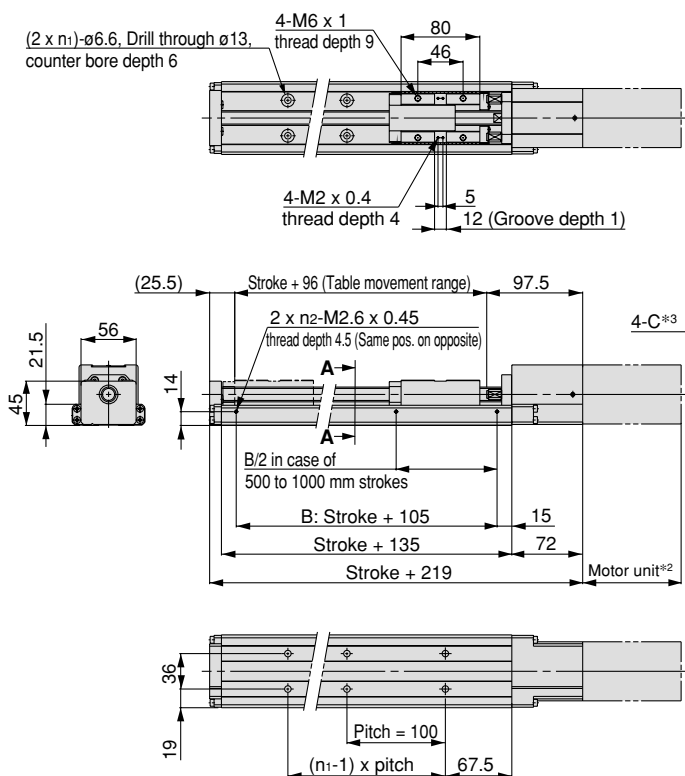
+ Driver capacitor energy consumption (A)

+ Regenerative resistor energy consumption (B)

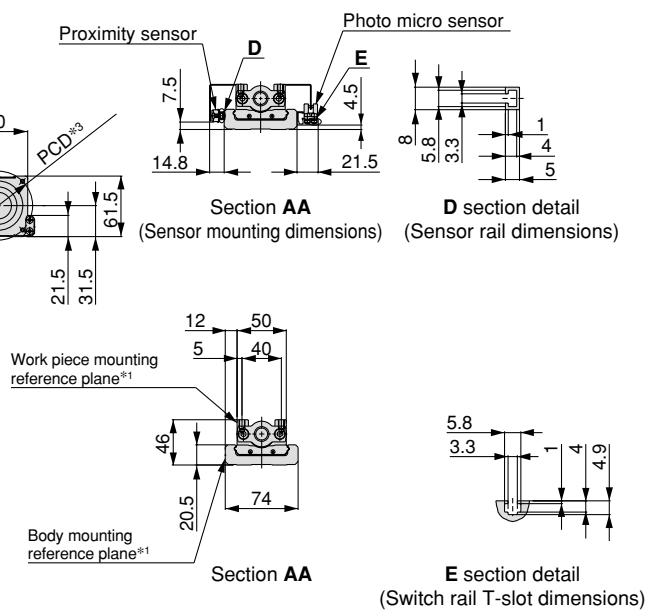
(A) and (B) vary depending on each motor and driver. Use of a regenerative absorption unit or regenerative resistor is recommended under any conditions when a vertical specification is used. Contact SMC for questions regarding selections.

Dimensions/LTF8□F□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.



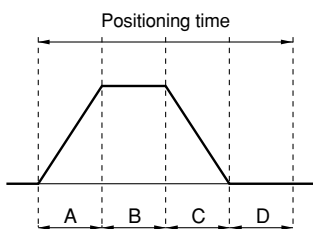
Model	Stroke	n ₁	n ₂
LTF8□F□NL- 100K-□□-X10	100	2	1
LTF8□F□NL- 200K-□□-X10	200	3	1
LTF8□F□NL- 300K-□□-X10	300	4	1
LTF8□F□NL- 400K-□□-X10	400	5	1
LTF8□F□NL- 500K-□□-X10	500	6	2

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 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	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.

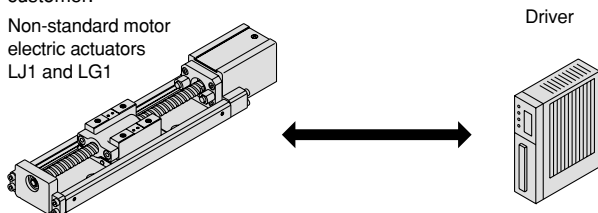
* For a non-standard motor specification when the motor is mounted before shipping, the driver is included but the cable that connects the motor and driver is optional. Refer to page 66 for part numbers.

Series LTF Options

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 mm² (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

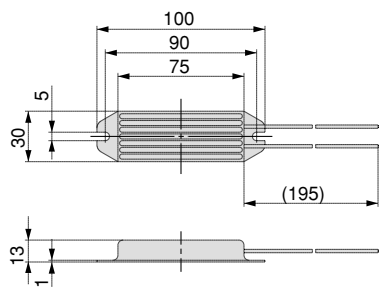
G	Matsushita Electric Industrial Co., Ltd.
R	Mitsubishi Electric Corporation
Y	Yasukawa Electric Corporation

Applicable types

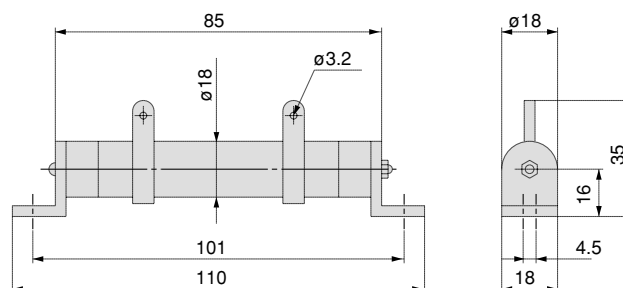
LTF (non-standard motor)

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

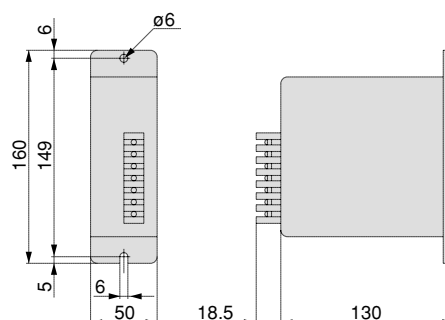
LJ1-7-G/Matsushita Electric Industrial Co., Ltd.



LJ1-7-R/Mitsubishi Electric Corporation



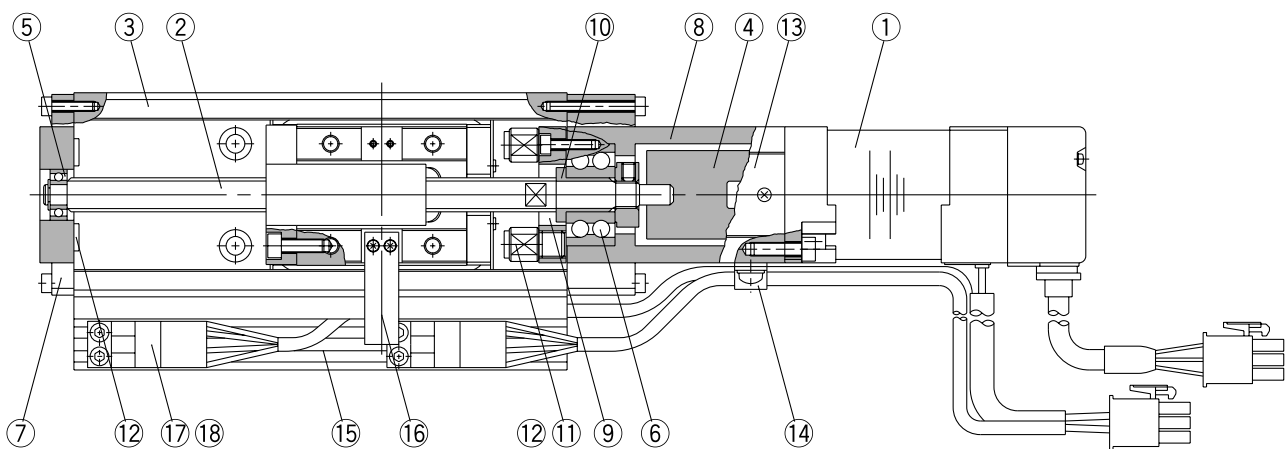
LJ1-7-Y/Yasukawa Electric Corporation



Series LTF Construction

Construction

LTF6/LTF8



Parts list

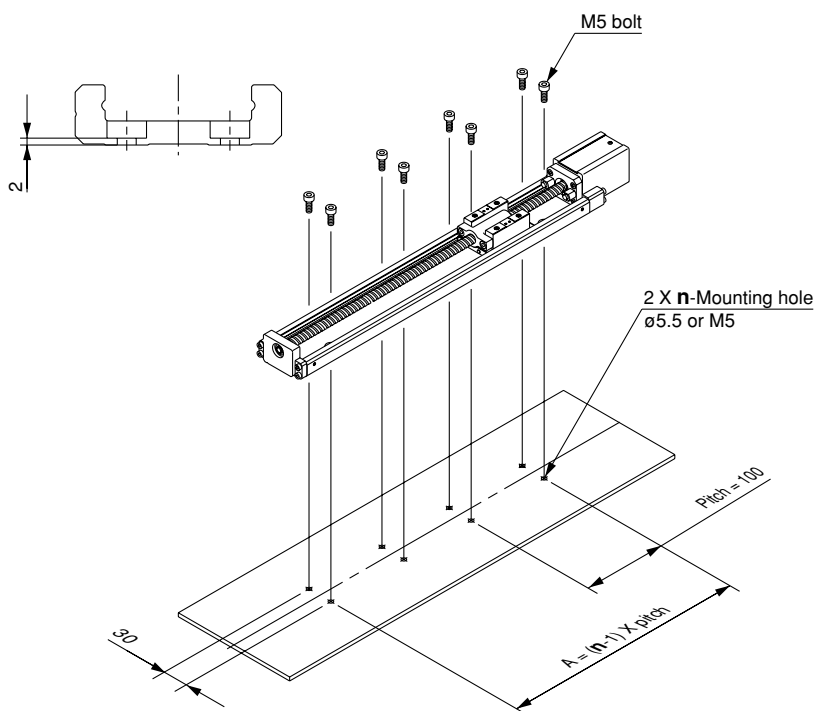
No.	Description	Material	Note
1	AC servomotor	—	100W/200W
2	Lead screw	—	Ball screw
3	Frame-type linear guide	—	
4	Coupling	—	
5	Bearing R	—	
6	Bearing F	—	
7	Housing A	Aluminum alloy	
8	Housing B	Aluminum alloy	
9	Bearing retainer	Carbon steel	

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		

Series LTF Mounting

Top Mount

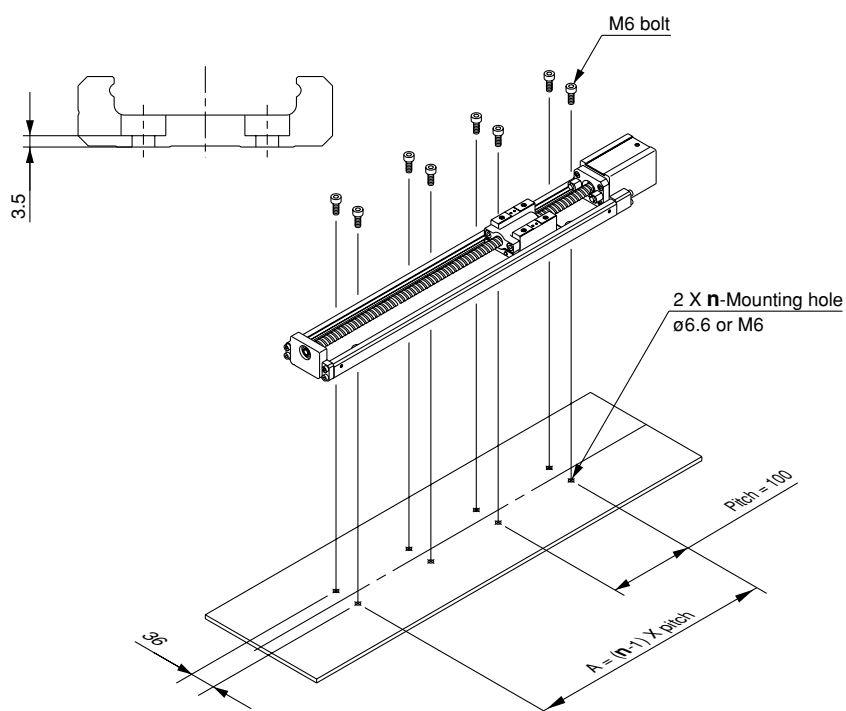
LTF6



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



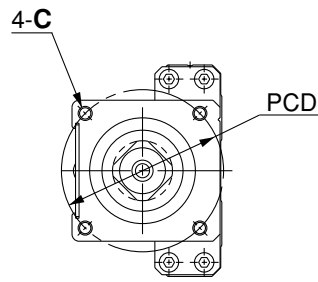
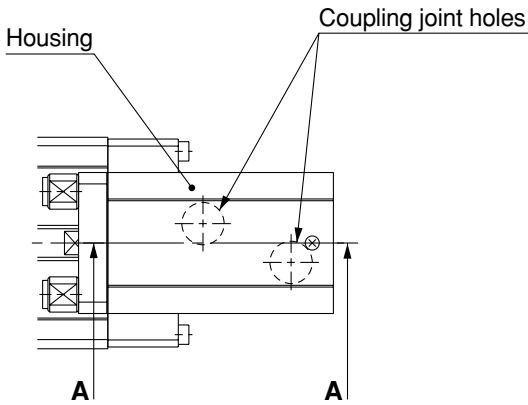
Mounting hole quantity

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

Series LTF Non-standard Motor Mounting Dimensions

Non-standard Motor Mounting Dimensions

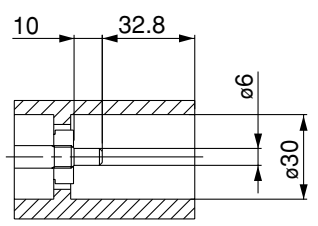
LTF6



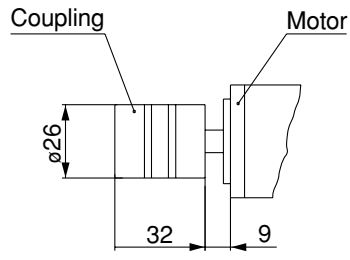
Motor mounting area dimensions

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)

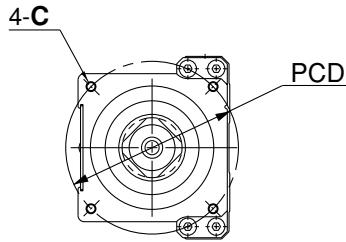
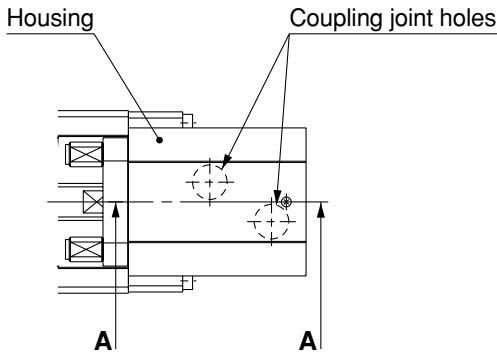


Coupling mounting dimensions*

Series LTF Non-standard Motor Mounting Dimensions

Non-standard Motor Mounting Dimensions

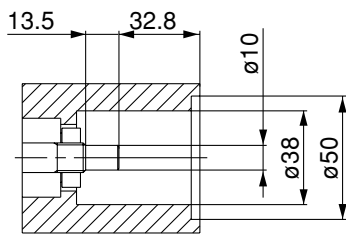
LTF8



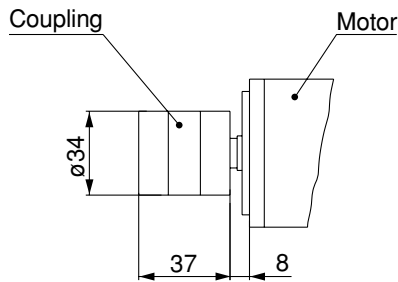
Motor mounting area dimensions

Manufacturer	Mitsubishi 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*

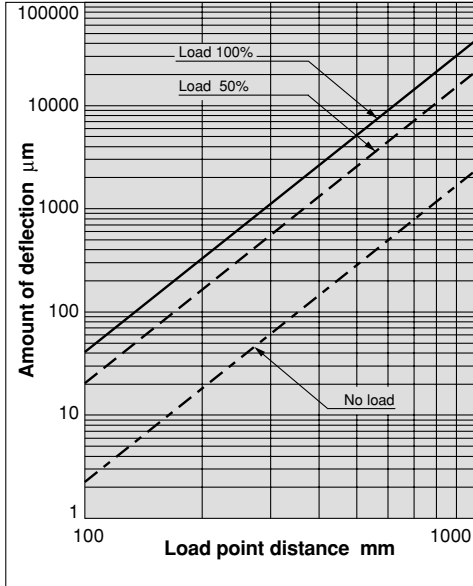
Series LTF Deflection Data

Deflection Data

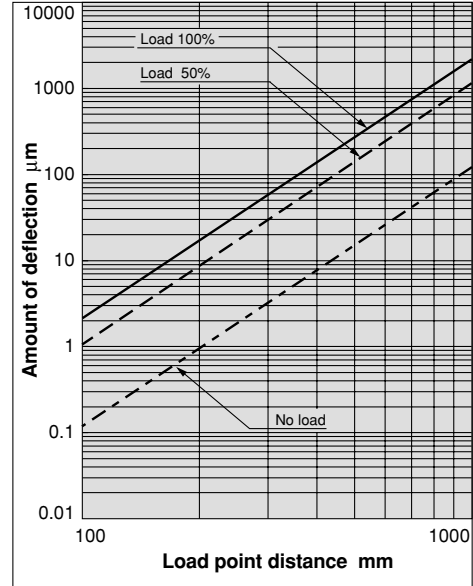
The load and the amount of deflection at load point W are shown in the graphs below for each series.

LTF6

Horizontal

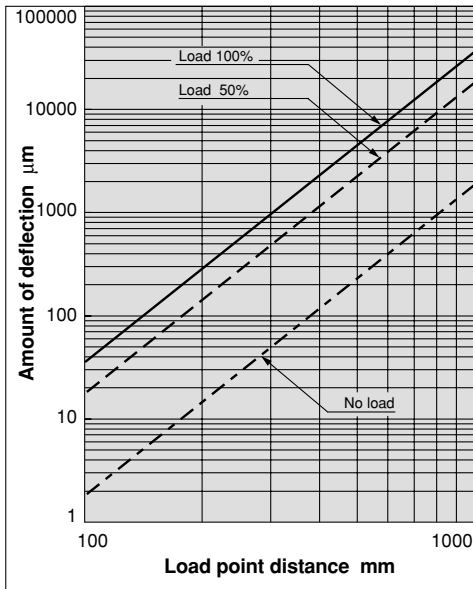


Lateral

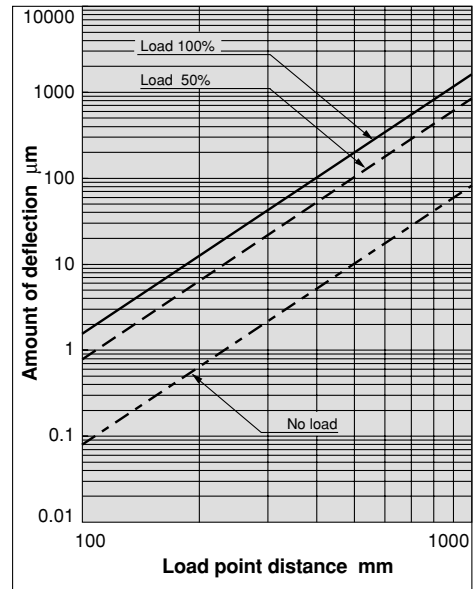


LTF8

Horizontal



Lateral



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

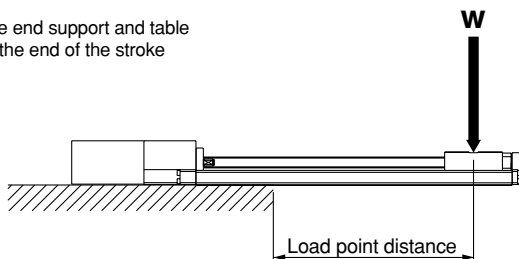


Figure 1. Horizontal

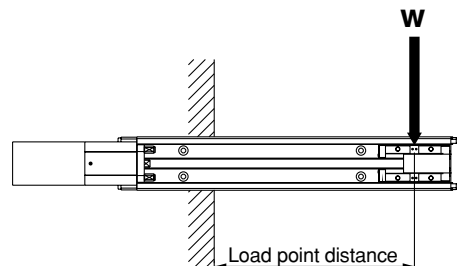


Figure 2. Lateral