Ordering Method

TGH5 - L5 - 100 - BC - M10B - C4 - 0001

- TGH4 / 5 / 8 / 8S / 12 / 12S — Model
- Stroke: 50-800mm, 50 mm Pitch
- Ball Screw Lead: 5 = 5mm; 10 = 10mm; 20 = 20mm
- Motor Position: BC Motor Exposed; BM Motor Bottom Side; BL Motor Left Side; BR Motor Right Side
- Motor Brand + Power Output: M Mitsubishi 05 - B; P Panasonic 10 100W; Y Yaskawa 20 -; T Delta 40 -. If No Brake,No Description.
- Home Sensor: Outside — C Motor Side; D Opposite Motor Side; SENSOR No Sensor; E SENSOR No Sensor
- Limit Sensor: Outside — 3 1 Pc; 4 2 Pc; SENSOR No Sensor; 5 SENSOR No Sensor
- Customization Order No.

When the stroke is 50mm, the sensor installation has the following restrictions:
Home sensor and limit sensor has to be installed on the different side of body.
Both sides of slider need to install the sensor trigger device.

TGH — General environment, screw type

Type		TGH4	TGH5	TGH8	TGH8S	TGH12	TGH12S
Servo motor output (w)		50/100	100	200	200/400	400	400
Repeatability (mm)		± 0.01	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01
Lead (mm)		2/5/10	5/10/20	5/10/20	5	5/10/20/32	5
Max speed(mm/s)		100/250/500	250/500/1000	250/500/1000	250	250/500/1000/1600	250
Max payload(kg)	Horizontal	25/20/12	30/15/10	50/30/18	50	110/88/40/30	110
	Vertical	8/5/2	10/5/2.5	15/8/3	15	33/22/10/8	33
Standard effective travel (mm)		50–800	50–800	50–1100	25–425	50–1250	50–500

Ordering Method

TMH14 - L5 - 100 - M - M10B - C 4 - 0001

- TMH5S / 6S / 10 / 12 / 13 / 14 / 17 / 22 — Model
- Stroke: 100–1050mm (50mm pitch)
- Ball Screw Lead: 05 5mm; 10 10mm; 20 20mm; 32 32mm
- Motor Position: M Motor built-in; BC Motor Exposed; BM Motor On Lower Side; BL Motor On Left Side; BR Motor On Right Side
- Motor Brand,Power Output: P Panasonic 10 - B; M Mitsubishi 20 200W; Y Yaskawa 40 -; T Delta 75 -. If No Brake,No Description.
- Home Sensor: Outside — A Motor Side; B Opposite Motor Side; C Motor Side; D Opposite Motor Side; No SENSOR; E NO SENSOR
- Limit Sensor: Inside — 1 1pc; 2 2pc; Outside — 3 1pc; 4 2pc; NO SENSOR; 5 No SENSOR
- Special Order No.

Type		TMH5S		TMH6S		TMH10	TMH12	TMH13
Servo motor output (w)		42M (StepMotor)	100	57M (StepMotor)	100	100/200	100/200	200/400
Repeatability (mm)		± 0.01		± 0.01		± 0.01	± 0.01	± 0.01
Lead (mm)		5/10		5/10/20		5/10/20/32	5/10/20/32	5/10/20/32
Max speed(mm/s)		41/83	250/500	41/83/166	250/500/1000	250/500/1000/1600	250/500/1000/1600	250/500/1000/1600
Max payload(kg)	Horizontal	10/5		30/15/10		50/30/18/5	50/30/18/5	70/47/24/13
	Vertical	3/1.5		10/5/2		12/8/3/–	12/8/3/–	17/12/6/–
Standard effective travel (mm)		100–800		100–800		100–1050	100–1050	100–1050

Type		TMH14		TMH17		TMH22
Servo motor output (w)		200	400	400	750	750
Repeatability (mm)		± 0.01		± 0.01		± 0.01
Lead (mm)		5/10/20/32	5/10/20/32	5/10/20/40	5/10/20/40	5/10/25/40
Max speed(mm/s)		250/500/1000/1600	250/500/1000/1600	250/500/1000/2000	250/500/1000/2000	250/500/1250/2000
Max payload(kg)	Horizontal	95/75/35/15	110/88/40/30	120/110/75/22	120/120/83/43	150/150/105/43
	Vertical	27/18/7/–	33/22/10/8	40/30/14/7	50/40/25/12	55/45/20/12
Standard effective travel (mm)		100–1050	100–1050	100–1250	100–1250	100–1500

Ordering Method

TMD14 - L5 - 100 - M - M10B - C 4 - 0001

TMD5S / 6S / 10 / 12 / 14 / 17 / 22 — Model

Stroke: 100–1050mm (50 mm pitch)

Special Order No.

Ball Screw Lead

05	5mm
10	10mm
20	20mm
32	32mm

Motor Position

M	Motor built-in
BC	Motor Exposed
BM	Motor On Lower Side
BL	Motor On Left Side
BR	Motor On Right Side

Motor Brand,Power Output

M	Mitsubishi	10	-	
P	Panasonic	20	200W	B
Y	Yaskawa	40	-	
T	Delta	75	-	

If No Brake No Description.

Home Sensor

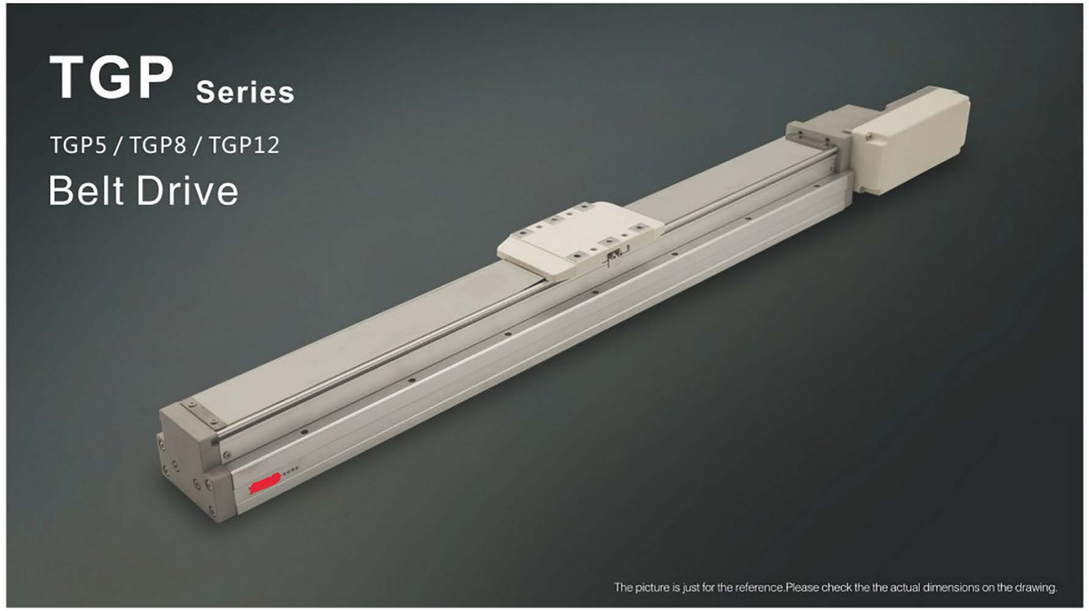
Inside	
A	Motor Side
B	Opposite Motor Side
Outside	
C	Motor Side
D	Opposite Motor Side
NO SENSOR	
E	NO SENSOR

Limit Sensor

Inside	
1	1pc
2	2pc
Outside	
3	1pc
4	2pc
NO SENSOR	
5	NO SENSOR

TMD — Dust free environment/screw type

Type		TMD5S		TMD6S		TMD10	TMD12	TMD14		TMD17		TMD22
Servo motor output(W)		42M (StepMotor)	100	57M (StepMotor)	100	100/200	100/200	200	400	400	750	750
Repeatability (mm)		± 0.01		± 0.01		± 0.01	± 0.01	± 0.01		± 0.01		± 0.01
Lead (mm)		5/10		5/10/20		5/10/20/32	5/10/20/32	5/10/20/32		5/10/20/40		5/10/25/40
Max speed(mm/s)		41/83	250/500	41/83/166	250/500/1000	250/500/1000/1600		250/500/1000/1600		250/500/1000/2000		250/500/1250/2000
Max payload(kg)	Horizontal	10/5		30/15/10		50/30/18/5	50/30/18/5	95/75/35/15	110/88/40/30	120/110/75/22	120/120/83/43	150/150/105/43
	Vertical	3/1.5		10/5/2		12/8/3/–	12/8/3/–	27/18/7/–	33/22/10/8	40/30/14/7	50/40/25/12	55/45/20/12
Standard effective travel (mm)		100–800		100–800		100–1050	100–1050	100–1050	100–1050	100–1250	100–1250	100–1500



Ordering Method

TGP5 - L40 - 100 - L - M10B - C4 - 0001

TGP5 / 8 / 12 — Model

Lead

Stroke: 50–800mm (50 mm Pitch)

Stroke 50 can only install two sets of photoelectric

Customization Order No

Motor Position

L	Motor fold left
LU	Motor left top fold
LD	Motor left bottom fold
R	Motor folded right
RU	Motor right up
RD	Motor right down

Motor Brand、Power Output

M	Mitsubishi	05	-	B
P	Panasonic	10	100W	
Y	Yaskawa	20	-	
T	Delta	40	-	

If No Brake,No Description

Home Sensor

Outside	
C	Motor Side
D	Opposite Motor Side
SENSOR	No Sensor
E	SENSOR No Sensor

When the stroke is 50mm , the sensor installation has the following restrictions :
C4 ;D4 specifications not available
Home sensor and limit sensor has to be installed on the different side of body .
Both sides of slider need to install the sensor trigger device .

Limit Sensor

Outside	
3	1 Pc
4	2 Pc
SENSOR	No Sensor
5	SENSOR No Sensor

TGP — General environment/belt type

Type		TGP5	TGP8	TGP12
Servo motor output(W)		100	200	400
Repeatability (mm)		± 0.1	± 0.1	± 0.1
Lead (mm)		40	40	40
Max speed(mm/s)		2000	2000	2000
Max payload(kg)	Horizontal	5	15	25
	Vertical	–	–	–
Standard effective travel (mm)		50–800	50–1200	50–1250

Ordering Method

TMP14S - L 40 - 100 - L - M40 - C 4 - 0001

- TMP14S — Model: TMP5 / 6 / 10 / 14S 17S /22S
- L — Belt Type: L Rubber Belt
- 40 — Lead
- 100 — Stroke: 100–3050mm (50 mm pitch)
- L — Motor Position: L Motor fold left; LU Motor left top fold; LD Motor left bottom fold; R Motor folded right; RU Motor right up; RD Motor right down
- M40 — Motor Brand.Power Output: P Panasonic 10 –; M Mitsubishi 20 –; Y Yaskawa 40 400W; T Delta 75 –. If No Brake No Description.
- C — Home Sensor: C Outside Motor Side; D Outside Opposite Motor Side; E No SENSOR
- 4 — Limit Sensor: 3 Outside 1pc; 4 Outside 2pc; 5 No SENSOR
- 0001 — Special Order No.

TMP General environment, screw type

Type		TMP5		TMP6		TMP10	TMP14S	TMP17S	TMP22S
Servo motor output (w)		42M (StepMotor)	100	57M (StepMotor)	100	100	400	400	750
Repeatability (mm)		± 0.04		± 0.04		± 0.04	± 0.04	± 0.04	± 0.04
Lead (mm)		32	40	40	40	32	40	40	40
Max speed(mm/s)		267mm/500rpm	2000mm/3000rpm	333mm/500rpm	2000mm/3000rpm	1600	2000	2000	2000
Max payload(kg)	Horizontal	10	3	15	3	10	25	45	85
	Vertical	–	–	–	–	–	–	–	–
Standard effective travel (mm)		100–800	100–800	100–800	100–800	100–2550	100–3050	100–3050	100–3050

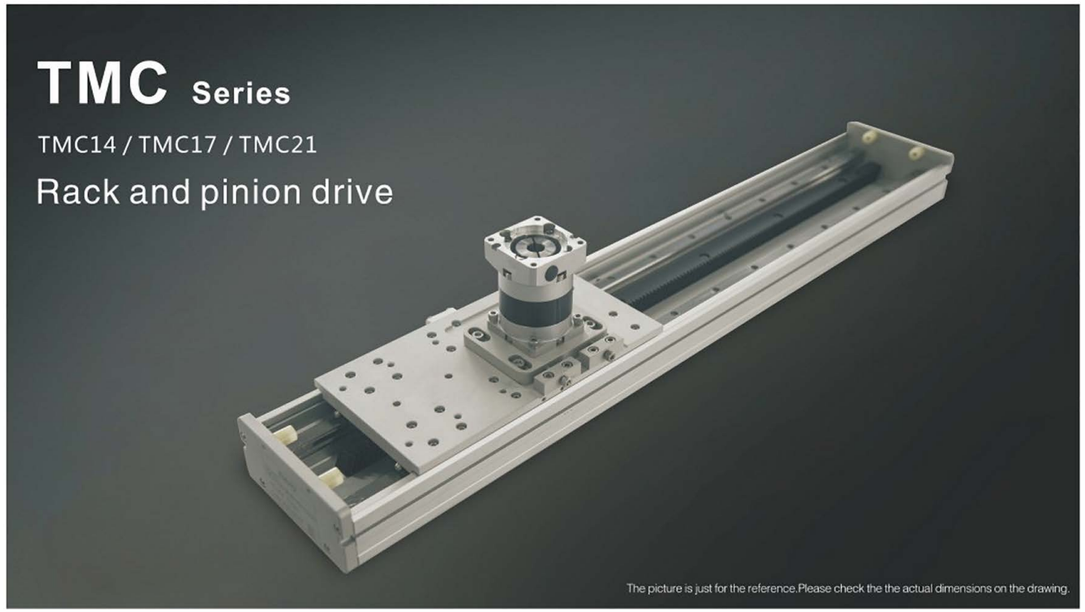
Ordering Method

TMF14 - L 40-100 - L - M40 - C 4 - 0001

- TMF14 — Model: TMF5 / 6 / 10 / 14 / 17 / 22
- L — Belt Type: L Rubber Belt
- 40 — Lead
- 100 — Stroke: 100–3050mm (50 mm pitch)
- L — Motor Position: L Motor Left; LU Motor Upper Left; LD Motor Lower Left; R Motor Right; RU Motor Upper Right; RD Motor Lower Right
- M40 — Motor Brand.Power Output: P Panasonic 10 –; M Mitsubishi 20 200W; Y Yaskawa 40 –; T Delta 75 –
- C — Home Sensor: C Outside Motor Side; D Outside Opposite Motor Side; E No SENSOR
- 4 — Limit Sensor: 3 Outside 1pc; 4 Outside 2pc; 5 No SENSOR
- 0001 — Special Order No.

TMF Dust-free environment type

Type		TMF5		TMF6		TMF10	TMF14	TMF17	TMF22
Servo motor output(W)		42M (StepMotor)	100	47M (StepMotor)	100	100	200	400	750
Repeatability (mm)		± 0.04		± 0.04		± 0.04	± 0.04	± 0.04	± 0.04
Lead (mm)		32	40	40	40	32	40	40	40
Max speed(mm/s)		267mm/500rpm	2000mm/3000rpm	333mm/500rpm	2000mm/3000rpm	1600	2000	2000	2000
Max payload(kg)	Horizontal	10	3	15	3	10	25	45	85
	Vertical	–	–	–	–	–	–	–	–
Standard effective travel (mm)		100–800	100–800	100–800	100–800	100–2550	100–3050	100–3050	100–3050



Ordering Method

TMC14 - X100 - 500 - BW - R60 - M40 B - Y - C4 - 0001

- TMC14 / 17 / 21 — Model
- X — Gear strip form: X Helical teeth
- 100 — Lead
- 500 — Stroke: 500–3000mm (50mm pitch)
- BW — Motor Position: BW Motor Top
- R60 — Reducer model: 60mm
- M40 — Motor Brand, Power Output

P	Panasonic	40	400W
M	Mitsubishi	–	
T	Delta	–	

If No Brake, No Description

- B — Brake: B: With brakes (If there is no brake, it does not indicate)
- Y — Motor: Y: With motor (If there is no motor, it does not indicate)
- C — Origin photoelectric fixed position

Outside	
C	Motor Side
D	Opposite Motor Side
SENSOR	No Sensor
E	SENSOR No Sensor

- 4 — Limit photoelectric quantity

Outside	
3	1 Pc
4	2 Pc
No Sensor	
5	No Sensor

- 0001 — Special Order No.

TMC

Type		TMC14				TMC17				TMC21			
Servo motor output(W)		400				750				750			
Repeatability (mm)		± 0.05				± 0.05				± 0.05			
Speed Reducer		3:1	5:1	7:1	10:1	3:1	5:1	7:1	10:1	3:1	5:1	7:1	10:1
Lead (mm)		100	100	100	100	120	120	120	120	120	120	120	120
Max speed(mm/s)		1666.7	1000	714.2	500	2000	1200	857	600	2000	1200	857	600
Max payload(kg)	Horizontal	55	90	120	150	60	110	180	240	65	140	220	280
	Vertical	15	25	35	45	18	28	40	55	20	35	50	70
Standard effective travel (mm)		500~3000mm/50mm				1000~3000mm/50mm				1000~3000mm/50mm			

Ordering Method

TKK 60 10 P E - 400 E A 2 E - F0 C S0 M

- TKK — TKK Series
- 60 — Size : 50, 60, 86,
- 10 — Ball screw lead:
  - TKK 50 : 2
  - TKK 60 : 5, 10
  - TKK 86 : 10, 20
- P — Accuracy level: P: Precision level, C: General level
- E — E: The ball screw is specially processed; Unmarked: Ball screw standard N
- 400 — Track length (mm)
  - TKK50 : 150, 200, 250, 300
  - TKK60 : 150, 200, 300, 400, 500, 600
  - TKK86 : 340, 440, 540, 640, 740, 940
- E — E: The track is specially processed; Unmarked: track standard N
- A — Carriage Type: A: Standard N; S: Light Load N
- 2 — Number of carriage: 1, 2
- E — E: The carriage is specially processed; Unmarked: Slide base standard N
- F0 — Motor connecting flange: F1–F6; FE: Specially processed
- C — C: Aluminum cover
- S0 — Contains limit switch
  - S0: Only extreme tracks
  - S1: Omron EE-Sx671
  - S2: Omron EE-Sx674
  - S3: Panasonic GX-F12A
  - S4: Panasonic GX-F12A-P
  - Unmarked: none
- M — M: Comes with motor; Unmarked: none

TKK

Type		TKK5002		TKK6005		TKK6010		TKK8610		TKK8620	
Accuracy class		C-level (general level)	P-level (precision level)	C-level (general level)	P-level (precision level)	C-level (general level)	P-level (precision level)	C-level (general level)	P-level (precision level)	C-level (general level)	P-level (precision level)
Screw specifications		802		1205		1210		1610		1620	
Rated load	Dynamic rated load	1813	2136	3377	3744	2107	2410	6429	7144	4175	4645
	Static rated load	2910	3489	5625	6243	3234	3743	11387	12642	6889	7655
Effective stroke		150/200/250/300		150/200/300/400/500/600				340/440/540/640/740/940			

Ordering Method

MKR65 - 2000 - L - M4 - C 4 - NL - 10 - A001

- MKR40 / 65 / 80 / 110 — Model
- Stroke: 100-5500mm, 100 Pitch
- Motor Position:

L	Motor Left	R	Motor Right
LU	Motor Upper Left	RU	Motor Upper Right
LD	Motor Lower Left	RD	Motor Lower Right
LT	Reducer With Motor Left Side	RT	Reducer With Motor Right Side

- Motor fixed size:

M4	servoPC070-M5-Axis14	B
P4	servoPCD70-M4-Axis14	

- Home Sensor:

Outside	
C	Motor Side
D	Opposite Motor Side
No Sensor	
E	No Sensor

- Limit Sensor:

Outside	
3	1 Pc
4	2 Pc
No Sensor	
5	No Sensor

- Grease fitting position:

NL	Carriage Left
NR	Carriage Right

- Reducer ratio:

3	3:1
5	5:1
7	7:1
10	10:1
N	No reducer

- Special Order No.

Regarding the maximum load, speed and stroke, please contact the sales department!

MKR — European standard belt slide

Type		MKR40	MKR65	MKR80	MKR110
Servo motor output(W)		100	400	750	750/1000
Repeatability (mm)		± 0.1	± 0.1	± 0.1	± 0.1
Speed Reducer			1:10	1:10	1:10
Lead (mm)		90	130	200	250
Max speed(mm/s)		4500	650	1000	1250
Max payload(kg)	Horizontal	8	60	100	100
	Vertical		17	24	23
Standard effective travel (mm)		100–2000	100–5500	100–5500	100–5500

Ordering Method

EGA70 - 100 - L - M20 - C 4 - 0001

- EGA70 / 80 / 125 / 160 — Model
- Stroke: 100-4000mm, 100 Pitch
- Motor Position:

L	Motor Left
R	Motor Right

- Motor Brand, Power Output:

Y	Yaskawa	20	200W
T	Delta	40	400W
M	Mitsubishi	75	750W

- Home Sensor:

Outside	
C	Motor Side
E	No Sensor

- Limit Sensor:

Outside	
3	1 Pc
4	2 Pc
No Sensor	
5	No Sensor

- Special Order No.

EGA

Type			EGA70		EGA80		EGA125	EGA160
Servo motor output(W)			200	400	200	400	400	750
Repeatability(mm)			± 0.1		± 0.1		± 0.1	± 0.1
Lead(mm)			78		90		100	125
speed reducer			1:1/3:1/5:1	1:1/3:1/5:1	1:1/3:1/5:1	1:1/3:1/5:1	3:1/5:1/7:1	3:1/5:1/7:1/10:1
Max speed(mm/s)			3900/1300/780	3900/1300/780	4500/1500/900	4500/1500/900	1666/1000/714	2080/1250/890/625
Max payload(kg)	Horizontal	EGA70	3/5/8	5/8/12	EGA80 5/8/12	8/12/15	20/34/40	30/50/70/100
		EGA70L	6/8/12	8/12/15	EGA80L 8/12/15	10/15/18		
	Vertical	EGA70			EGA80			
		EGA70L			EGA80L			
Standard effective travel(mm)			100–1600		100–2000		100–4000	100–4000

Ordering Method

EC50 - L5 - 100 - BC - M10 B - C 4 - 0001

- EC50 / 50L / 50T / 65 / 65L / 65T / 80 / 80T — Model
- L5 — Ball Screw Lead: 5 = 5mm; 10 = 10mm
- 100 — Stroke: 50–500mm
- BC — Motor Position: BC Motor Exposed; BW Motor Top; BM Motor Bottom; BL Motor Left; BR Motor Right
- M10 — Motor Brand, Power Output: P Panasonic, T Delta, M Mitsubishi; 10 = 100W
- B — Brake: B With Brake; No brake no marked
- C — Home Sensor Outside: C Motor Side; D Opposite Motor Side; E NO SENSOR
- 4 — Limit Sensor Outside: 3 = 1pc; 4 = 2pc; 5 = No SENSOR
- 0001 — Special Order No.

EC Electric cylinder

Type		EC50/EC50L/EC50T		EC65/EC65L/EC65T				EC80/EC80T		
Servo motor output(W)		100		400				750		
Repeatability (mm)		± 0.01		± 0.01				± 0.01		
Outer Diameter		12		16				25		
Lead (mm)		5	10	5	10	16	20	5	10	25
Max speed(mm/s)		250	500	250	500	800	1000	250	500	1250
Max payload(kg)	Horizontal	30	15	110	88	48	40	200	180	138
	Vertical	12	5	33	22	10	8	65	55	25
Standard effective travel (mm)		50–500		50–700				50–1200		

Ordering Method

FEC32 - L10 - 100 - BC - FA - A - M10 B - C 4 - 0001

- FEC32 / 40 / 50 / 63 / 80 / 100 — Model
- L10 — Ball Screw Lead: 5 = 5mm; 10 = 10mm
- 100 — Stroke: 50–500mm, 50mm pitch
- BC — Motor Position: BC Motor Exposed; BW Motor Top
- FA — Installation method: LA Front cover installation; LB Side mount; FA Front flange mount; FB Rear flange mount; CA Double earring installation; CB Single earring installation; DA Guide unit installation
- A — Load connection: A External thread; B Internal thread; G Fisheye connector; Y Y-connector
- M10 — Motor Brand, Power Output: M Mitsubishi, P Panasonic, Y Yaskawa, T Delta; 10 = 100W
- B — Brake: B With Brake; No brake no marked
- C — Home Sensor Outside: C Motor Side; D Opposite Motor Side; E NO SENSOR
- 4 — Limit Sensor Outside: 3 = 1pc; 4 = 2pc; 5 = No SENSOR
- 0001 — Special Order No.

Note: BC installation method can only choose LA, LB, FA, DA.

FEC Electric cylinder

Type	FEC32		FEC40		FEC50	FEC63			FEC80		FEC100
Motor output (w)	100		400		400	750			1000		1000
Repeatability (mm)	± 0.01		± 0.01		± 0.01	± 0.01			± 0.01		± 0.01
Outer diameter	12		16		20	25			32		40
lead(mm)	5	10	5	10	10	5	10	25	5	10	10
Max speed(mm/s)	250	500	250	500	500	250	500	1250	250	500	500
Standard effective travel (mm)	50–500		50–700		50–1200	50–1250			50–1500		50–1600

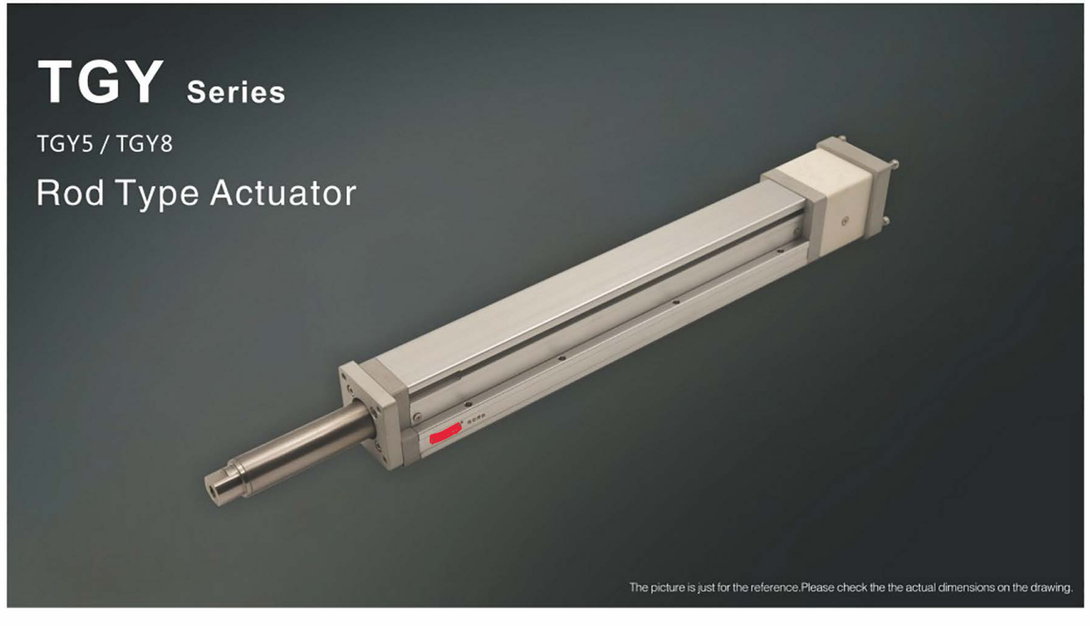
Ordering Method

TEY25 - L5 - 30 - BC - 42M - C 4 - 0001

- TEY25 / 25L — Model
- L5 — Ball Screw Lead: 5 = 5mm; 10 = 10mm
- 30 — Stroke: 30–400mm
- BC — Motor Position: BC Motor Exposed; BW Motor Up; BL Motor Left; BR Motor Right
- 42M — Motor brand and model: Leadshine 42M
- C — Home Sensor, Outside: C Motor Side; D Opposite Motor Side; E NO SENSOR
- 4 — Limit Sensor, Outside: 3 1pc; 4 2pc; 5 No SENSOR
- 0001 — Special Order No.

TEY Electric cylinder

Type		TEY25	
Servo motor output(W)		42M (Stepmotor)	
Repeatability (mm)		± 0.02	
Outer Diameter		12	
Lead (mm)		5	10
Max speed(mm/s)		250	500
Max payload(kg)	Horizontal	50	18
	Vertical	16	8
Standard effective travel (mm)		30/40/150/200/250/300/350/400	



Ordering Method

TGY25 - L10 - 100 - BC - M10B - C 4 - 0001

- TGY5 / 8 — Model
- L10 — Ball Screw Lead: 5 = 5mm; 10 = 10mm; 20 = 20mm
- 100 — Stroke: 50–600mm, 50mm pitch
- BC — Motor Position: BC Motor Exposed; BM Motor Bottom; BL Motor Left; BR Motor Right
- M10B — Motor brand and model: M Mitsubishi 05 – B; P Panasonic 10 100W; Y Yaskawa 20 –; T Delta 40 –
- C — Home Sensor, Outside: C Motor Side; D Opposite Motor Side; E NO SENSOR
- 4 — Limit Sensor, Outside: 3 1pc; 4 2pc; 5 No SENSOR
- 0001 — Special Order No.

When selecting linearity 50, the following restrictions apply
1. C4 ,D4 specifications cannot be selected
2. The origin and limit should be placed on different sides
3. Induction sheets should be installed on the left and right sides of the slider

TGY Electric cylinder

Type		TGY5			TGY8		
Servo motor output(W)		100			200		
Repeatability (mm)		± 0.01			± 0.01		
Outer Diameter		12			16		
Lead (mm)		5	10	20	5	10	20
Max speed(mm/s)		250	500	1000	250	500	1000
Max payload(kg)	Horizontal	30	15	10	50	30	18
	Vertical	10	5	2.5	15	8	3
Standard effective travel (mm)		50–600			50–800		

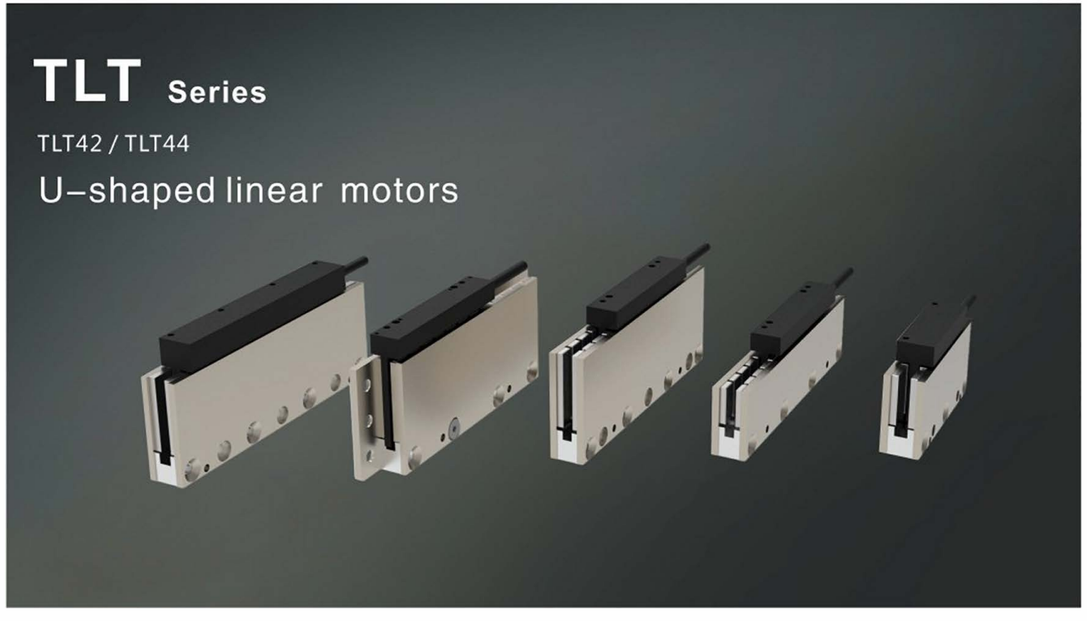
Ordering Method

TMZ - 14S - C1 - 460 - MT10 - T1 - C4 - 1

Linear motor module	Base width	Motor type	Stoke	Encoder type	Driver type	Motor type	Number of moving motor coils
	12S:120mm 14S:140mm 17S:170mm 21S:210mm 23S:235mm 27S:270mm	C1:Carriage M=160mm C2:Carriage M=220mm C1L:Carriage M=200mm C2L:Carriage M=370mm	Unit: mm	MT05:TIAYO 0.5um magnetic encoder MT 10:TIAYO 1um magnetic encoder MS05:3X MOTION 0.5um magnetic encoder MS10:3X MOTION 1um magnetic encoder GR10:RENI SHAW 1un optical encoder GR05:RENISHAW 0.5un optical encoder GL10:LAMOTION 1un optical encoder GL05:LAMOTION 0.5un optical encoder	T:TIAYO G:Googoltech P:Panasonic SC:Servotronix CD series SL:Servotronix LD series Suffix 1:pulse Suffix 2:Bus	C1: Rulersensor C4:Panasonic	1:One 2:Two 3:Three 4:Four 5:Five

Linear motor TMZ

Performance parameter	Unit	TMZ12S			TMZ14S		TMZ17S		TMZ21S		TMZ23S		TMZ27S	
Machine Base Width	mm	120			140		170		210		235		270	
Reading head type	–	G(Grating)/M(magnetic grid)												
Resolution ratio	μm	0.5/1												
Repetitive positioning accuracy	μm	±1/±3												
Moving parts specifications	–	C0	C1	C2	C1	C2	C1	C2	C1L	C2L	C1L	C2L	C1L	C2L
Continuous thrust	N	64	128	191	170	246	222	333	600	1200	708	1416	904	1808
Peak thrust	N	191	383	574	510	737	667	1000	1800	3600	1770	3540	2712	5424
Travel interval	mm	64			64		64		96		96		96	



Ordering Method

Coil unit selection example

TLT - 42 - 06 - 05

U type linear motor	Magnetic plate width	Motor code	Power cord length
	42 : 14.8mm 44 : 16.2mm	03 : 3 winding 06 : 6 winding	05 : 0.5m 1 : 1m

Magnetic plate selection example

TLT - 42 - TL99

U type linear motor	Magnetic plate width	Magnetic plate length
	42 : 14.8mm 44 : 16.2mm	66/99/264 72/120

U–shaped linear motors

Performance parameter	Unit	TLT42		TLT44	
		TLT42–03	TLT42–06	TLT44–03	TLT 44-06
Continuous thrust	N	10	20	20	40
Peak thrust	N	37	72	45	120
Continuous current	A	0.9	1.8	1.6	1.8
Peak current	A	3.2	6.2	3.6	6.2
Force constant	N/Arms	11.5	11.4	12.4	22.9
Motor constant	N/SqRt(W)	9	4.2	15	8.4
Coil maximum temperature	℃	120	120	120	120
EMF constant	V/(m/s)	9	9.3	10	18.7
Phase resistance	Ohm	9.2	4.6	4.6	2.3
Phase inductance	mH	0.8	0.4	0.4	0.2
Magnet pitch(N–N)	mm	16.5	16.5	24	24
Weight of coil unit	g	30	62	50	105

Coil unit selection example

TLC	50	-	C1	-	H	-	3
Iron core linear motor	Magnetic plate width		Motor code		Power Cord Height		Power Cord Height
	40/50/64 60 90 80/102/126		C0/C1/C2/C1-H/C2-H L06/L09/L12/15 C3L/C4L C1L/C2L		unit : mm None:34mm H:51mm		05 : 0.5m 3 : 3m 5 : 5m

Magnetic plate selection example

TLC	50	-	TL192
Iron core linear motor	Magnetic plate width		Magnetic plate length
	40/50/64 60 90 80/102/126		TL192/TL256/TL320 TL144/TL192/TL288 TL180/TL240/TL300 TL192L/TL288L/TL384L

Noted:The non-standard length of the magnetic plate can be customized according to the customer's actual effective stroke

Iron core linear motor

Performance parameter	Unit	TLC40			TLC50		TLC50-H		TLC64		TLC64-H		TLC80	
		TLC40-C0	TLC40-C1	TLC40-C2	TLC50-C1	TLC50-C2	TLC50-C1-H	TLC50-C2-H	TLC64-C1	TLC64-C2	TLC64-C1-H	TLC64-C2-H	TLC80-C1	TLC80-C2
Continuous thrust	N	64	128	192	168	252	300	452	228	342	384	576	276	414
Peak thrust	N	192	383.4	575	420	630	750	1130	570	855	960	1440	690	1035
Continuous current	A	3	3	3	4	4	4	4	4	4	4	4	4	4
Peak current	A	9	9	9	10	10	10	10	10	10	10	10	10	10
Force constant	N/Arms	21	42.6	63.9	42	63	75	113	57	85.5	96	144	69	103.5
Motor constant	N/SqRt(W)	4.8	9.5	11.6	14.2	17.4	19	23.2	16.5	20.3	21.5	26.3	18.2	22.3
Coil maximum temperature	℃	120	120	120	120	120	120	120	120	120	120	120	120	120
Back EMF constant	V/(m/s)	17.4	34.8	52.2	34.3	51.4	61.2	91.9	46.5	69.8	78.4	117.6	56.3	84.5
Phase Resistance	Ohm	1.2	2.4	3.6	2.1	3.1	3.9	5.2	2.1	3.15	4.1	6.1	2.4	3.6
Phase inductance	mH	5.3	10.6	15.9	13.7	20.6	64	85	15.9	23.9	74.7	112	19	28.5
Magnet pitch(N-N)	mm	32	32	32	32	32	32	32	32	32	32	32	32	32
Magnetic attraction	KN	0.9	1.4	2	1.5	2.3	2.3	3.5	2.1	3.2	3.2	4.8	2.5	3.8
Weight of coil unit	Kg	0.7	1.2	1.7	1.8	2.6	3.1	4.7	2.1	3.2	3.6	5.4	2.5	3.7

Performance parameter	Unit	TLC60				TLC80-L		TLC102-L		TLC126-L		TLC90	
		TLC60-L06	TLC60-L09	TLC60-L12	TLC60-L15	TLC80-C1L	TLC80-C2L	TLC102-C1L	TLC102-C2L	TLC126-C1L	TLC126-C2L	TLC90-C3L	TLC90-C4L
Continuous thrust	N	220	330	440	550	600	1201	690	1369	912	1808	898	1193
Peak thrust	N	440	660	880	1100	1801	3602	2071	4106	2735	5423	2543	3375
Continuous current	A	4.7	7.1	9.5	11.8	5.8	11.5	5.8	11.5	5.8	11.5	5.3	5.3
Peak current	A	11	16.5	22	27.5	17.4	34.5	17.4	34.5	17.4	34.5	15	15
Force constant	N/Arms	46.5	46.5	46.5	46.5	103.5	103.5	119	119	157.2	157.2	169.5	225
Motor constant	N/SqRt(W)	380	570	760	950	17.3	24.5	14.1	20	21.2	30.1	18.3	24.4
Coil maximum temperature	℃	120	120	120	120	120	120	120	120	120	120	120	120
Back EMF constant	V/(m/s)	38	38	38	38	53.7	53.5	52.2	52	80.1	79.9	80	112
Phase Resistance	Ohm	1.8	1.21	0.9	0.72	4	2	4.6	2.3	2.8	1.4	2.9	3.9
Phase inductance	mH	13.5	9.1	6.8	5.4	65	32.5	81.2	40.6	95.6	47.8	34.8	46.4
Magnet pitch(N-N)	mm	24	24	24	24	48	48	48	48	48	48	30	30
Magnetic attraction	KN	0.9	1.3	1.7	2.1	2.8	5.6	3.3	6.6	4.1	8.2	5	6.7
Weight of coil unit	Kg	1.5	1.9	2.5	3	5.4	9.9	6.5	12.5	7.9	15.1	5.7	7.6

DDL-TLU Series

TLU30 / TLU40 / TLU50

Coreless(U-TYPE)linear motor

- Zero cogging force
- High precision and motion smoothness
- Fast dynamic response
- High acceleration
- Maximum sustained force
- Maximum peak force

Patented product | CE certification | Reliable quality | High cost –performance | Short Lead time

Ordering Method

Coil unit selection example

TLU 50 1 - S - N - 3

TLU	50	1	S	N	3
U type linear motor	Magnet track length	Motor code	Winding connection types	Hall module	Power cord length
	30 : 35.5mm 40 : 39mm 50 : 50mm	1/2/3/4 1/2/3/4/5/6 1/2/3/4/5/6	S:Series connection P :Parallel connection	N:No Hall module H:With Hall module	05 : 0.5m 3 : 3m 5 : 5m

Magnetic plate selection example

TLU 300 - TL120

TLU	300	TL120
U type linear motor	Magnetic plate width	Magnetic plate length
	300 400 500	120/180/240/300 120/180/240/300 168/252/420

Coreless linear motor DDL-TLU

Performance parameter	Unit	TLU30							TLU40										TLU50									
		TLU301	TLU302		TLU303		TLU304		TLU401	TLU402		TLU403		TLU404		TLU405		TLU406		TLU501	TLU502		TLU503		TLU504		TLU505		TLU506	
		Series	Series	Parallel	Series	Parallel	Series	Parallel	Series	Series	Parallel	Series	Parallel	Series	Parallel	Series	Parallel	Series	Parallel	Series	Series	Parallel	Series	Parallel	Series	Parallel	Series	Parallel	Series	Parallel
Continuous thrust	N	36	72		108		144		56	112		168		223		278		336		111	221		331		442		552		662	
Peak thrust	N	144	289		433		578		316	633		949		1261		1573		1898		663	1326		1988		2649		3311		3972	
Continuous current	A	2.3	2.3	4.6	2.3	4.6	2.3	4.6	2.3	2.3	4.6	2.3	4.6	2.3	4.6	2.3	4.6	2.3	4.6	2.5	2.5	5	2.5	5	2.5	5	2.5	5	2.5	5
Peak current	A	9.2	9.2	18.4	9.2	18.4	9.2	18.4	13	13	26	13	26	13	26	13	26	13	26	15	15	30	15	30	15	30	15	30	15	30
Force constant	Kf	15.7	31.4	15.7	47.1	23.6	62.8	31.4	24.3	48.7	24.4	73	36.5	97	48.5	121	60.5	146	73	44.2	88.4	44.2	132.5	66.3	176.6	88.3	220.7	110	264.8	132
Motor constant	Km	5.9	8.8		11		12.8		8.6	12.3		15		17.4		19.4		21.3		13.3	19		23.5		27.2		30.5		33.4	
Magnet pitch	mm	60	60		60		60		60	60		60		60		60		60		84	84		84		84		84		84	

- No cogging force
- High precision and motion smoothness
- Fast dynamic response
- High acceleration
- Maximum continuous force662N
- Maximum peak force3972N

DDL-TLH Series

TLH16 / TLH28

Linear Motor Hollow Cylinder

- zero cogging
- Simplified structure and small installation space required
- High precision and high speed, with minimal operational fluctuations
- Maximum continuous force 83N
- Maximum peak force 233N

Patented product | CE certification | Reliable quality | High cost –performance | Short Lead time

Ordering Method

Coil unit ordering method

TLH 28 - L9 - 3

TLH	28	L9	3
Cylindrical linear motor	Magnetic shaft diameter	Motor code	Power cord length
	16 : 16mm 28 : 28mm	L9 : 60mm L12 : 79mm L15 : 97mm L18 : 116mm L21 : 134mm	3 : 3m 4 : 4m 5 : 5m

Magnetic plate ordering method

TLH 28 - TLxxx

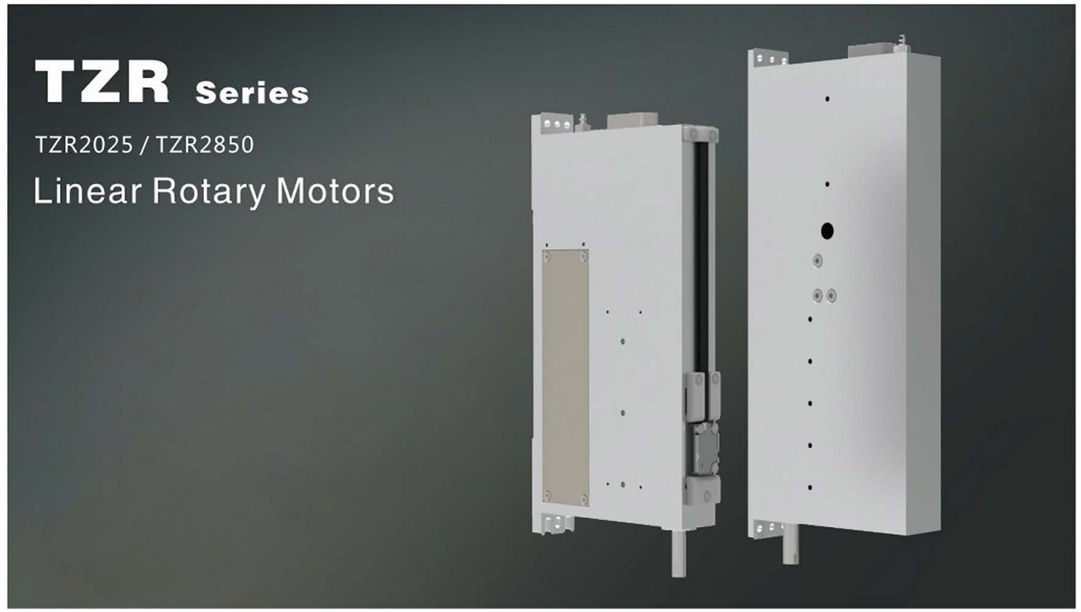
TLH	28	TLxxx
Cylindrical linear motor	Magnetic shaft diameter	Magnetic shaft length
	16 : 16mm 28 : 28mm	N*13mm-3mm N*18.3mm-2.8mm

The length of the motor's magnetic shaft needs to be customized according to the customer's effective stroke.
1.TLH16 Magnetic shaft length=N*13mm-3mm (N refer to the number of magnetic poles)
2.TLH28 Magnetic shaft length=N*18.3mm-2.8mm (N refer to the number of magnetic poles)

Cylindrical linear motor DDL-TLH

Performance parameter	Unit	TLH16				TLH28				
Magnetic axis diameter	mm	16				28				
Motor code	-	L9	L12	L15	L18	L9	L12	L15	L18	L21
Continuous thrust	N	11	14	18	21	36	47	59	71	83
Peak thrust	N	32	42	53	63	100	133	166	199	233
Continuous current	A	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6
Peak current:	A	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Force constant	Kf	7.02	9.3	11.7	14.0	22.2	29.5	36.9	44.3	51.7
Motor constant	Km	3.6	4.1	4.6	5.0	6.5	7.5	8.4	9.2	10.0
Magnet pitch	mm	26	26	26	26	36.6	36.6	36.6	36.6	36.6

- Zero cogging effect
- Simplified structure, small installation space required
- High precision and high speed, with small operating fluctuations
- Maximum continuous force 83N
- Maximum peak force 233N



Ordering Method

TZR	20	25	M	10
linear rotation	Motor thickness	[illegible]	[illegible]	[illegible]
	20mm 28mm	25mm 50mm	M:magnetic encoder G:optical encoder	10:1um resolution 05:0.5um resolution

TZR series linear rotary motors have the following features:

1.Positional accuracy of mounting XY: ± 1 μ m, corner accuracy Z: ± 0.001° ; Precise fit, high speed continuous motion

2.Force control stability accuracy: ± 1.0g (0.01 N), soft landing function

3.Hollow with customization Z-axis, reserved air pipe interface， plug and play Vacuum Suction

4.Can perform both linear and rotational movements simultaneously, also able to independently perform linear or rotational movements

Scope of application:

Suitable for SMT, plug-in machines, bonding machines, semiconductor, photovoltaic panels and optical device lamination, 3C product assembly and testing and other automated equipment.

linear rotary motors

TZR2025

Linear motor parameters			Rotating motor parameters		
Parameter	Numerical value	Unit	Parameter	Numerical value	Unit
Effective stroke	25	mm	Rated torque	10	mNm
Resolution	0.5	um	Instantaneous torque	43.8	mNm
Continuous thrust	8	N	Encoder	4096	线
Peak thrust	15	N	Rated current	1.3	Arms
Continuous current	1.2	A	Instantaneous current	3.3	Arms
Peak current	2.5	A	Torque constant	13.2	mNm/A
Force constant	5.4	N/A	Voltage	24-48	V
Resistance	13.5	Ohm	Line resistance	23.8	Ohm
Inductance	2.5	mH	Line inductance	2	mH
Voltage	24--48	V	Rated rotating speed	3000	rpm

TZR2850

Linear motor parameters			Rotating motor parameters		
Parameter	Numerical value	Unit	Parameter	Numerical value	Unit
Effective stroke	50	mm	Rated torque	95	mNm
Resolution	0.5	um	Instantaneous torque	285	mNm
Continuous thrust	22	N	Encoder	2048	线
Peak thrust	66	N	Rated current	4	Arms
Continuous current	1.5	A	Instantaneous current	11.2	Arms
Peak current	4.5	A	Torque constant	26	mNm/A
Force constant	14.7	N/A	Voltage	24-48	V
Resistance	9.8	Ohm	Line resistance	0.9	Ohm
Inductance	0.8	mH	Line inductance	0.2	mH
Voltage	24-48	V	Rated rotating speed	4000	rpm