



无磁轨直线电机  
MTF-LM

# 无磁轨直线电机及其模组 产品手册

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ALM Intelligent Technology (Suzhou) Co., Limited

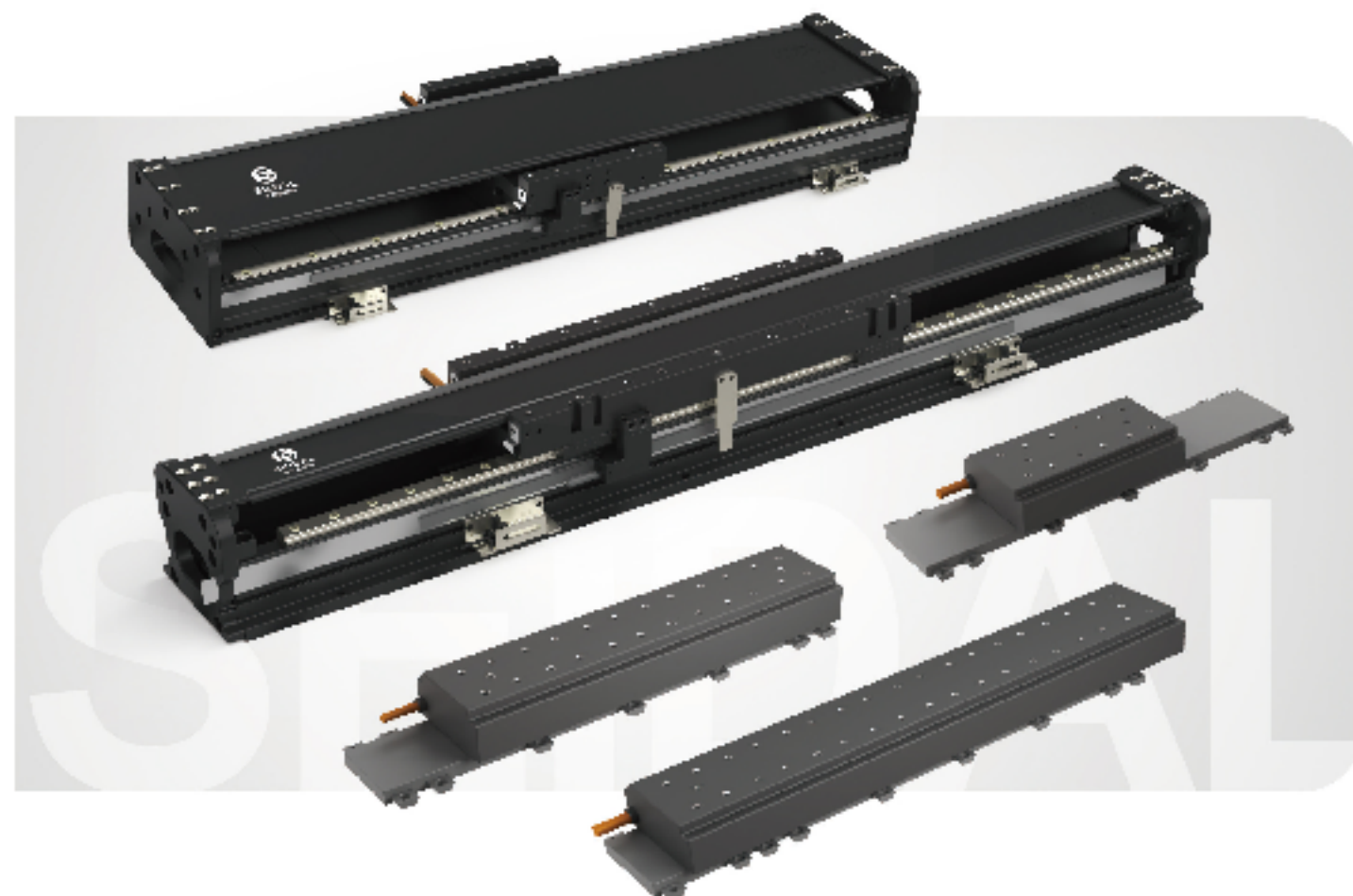
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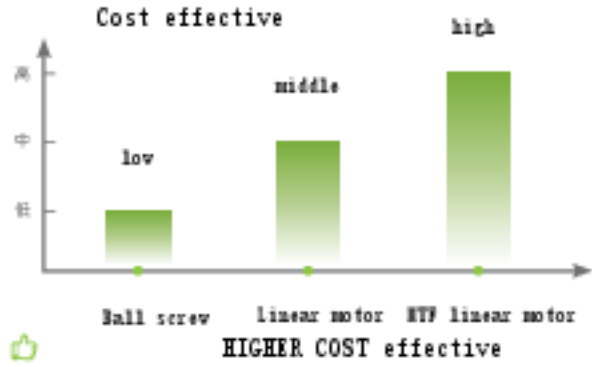
MTF3 MAGNETIC-TRACK-FREE LINEAR  
MOTORS AND ITS MODULES DATASHEET



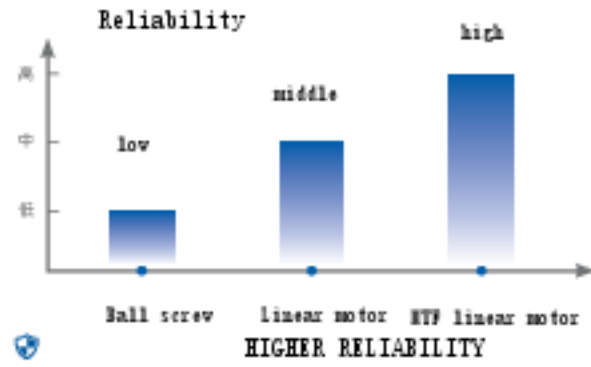
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Version 6.0

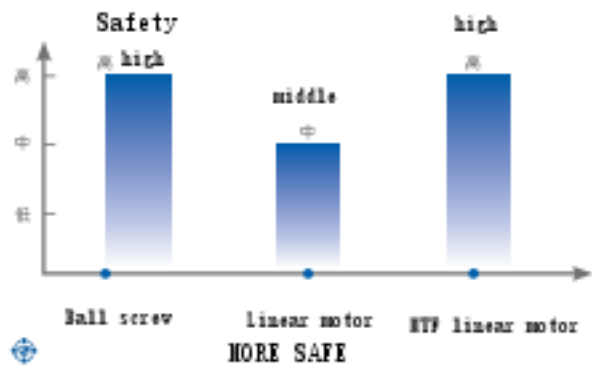
## ADVANTAGES OF MTF LINEAR MOTORS



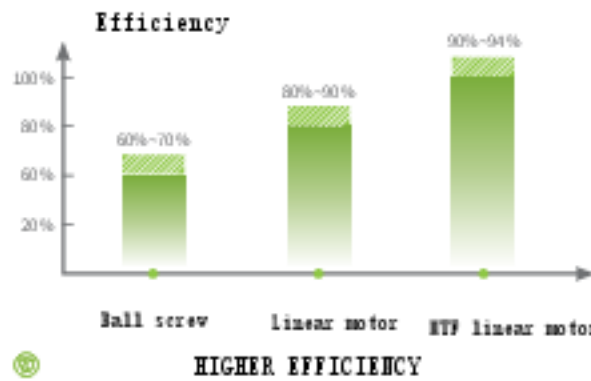
Due to much less amount of magnets applied compared to conventional linear motors, MTF linear motor price is much more attractive.



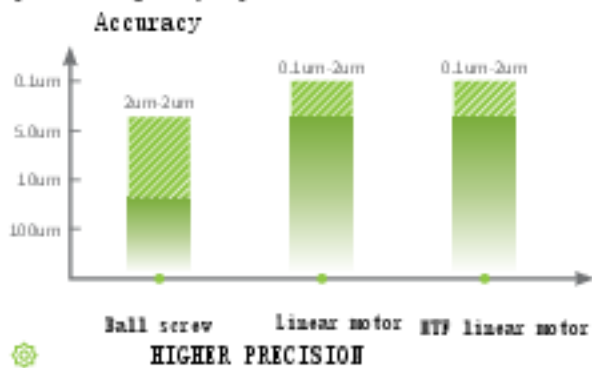
Using non-contact drive, and no magnet on the stator, there is no risk of degumming.



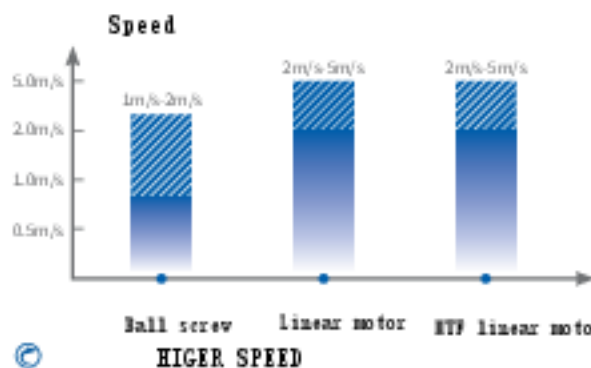
No magnetic field on the stator, MTF linear motor will not affect medical AIDS such as cardiac pacemakers, and the safety during installation process is greatly improved.



Unique patented design, small calorific value, linear motor efficiency is more than 90%.



Control method is completely same as that of conventional linear motor, and can obtain much higher accuracy than the ball screw.



Same as conventional linear motor control, MTF linear motor can achieve much higher speed than the ball screw.

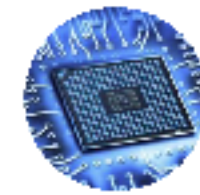
## The applications of MTF linear motors



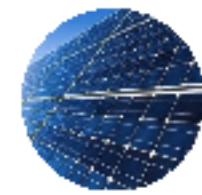
IC Package



Testing Of Semiconductor Equipments



IC Patching



Photovoltaic Panel Manufacture



Lithium Battery Manufacture



Laser Cutting Equipments



Medical Apparatus And Instruments



Machine Tools

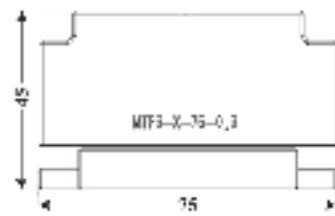
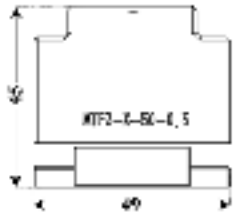


Optical Equipments



Display Panel Manufacture

## MTF3 MOVER AND STATOR QUICK SELECTION



MTF3-50

MTF3-50 series

MTF3-75

MTF3-75 series

MTF3-90

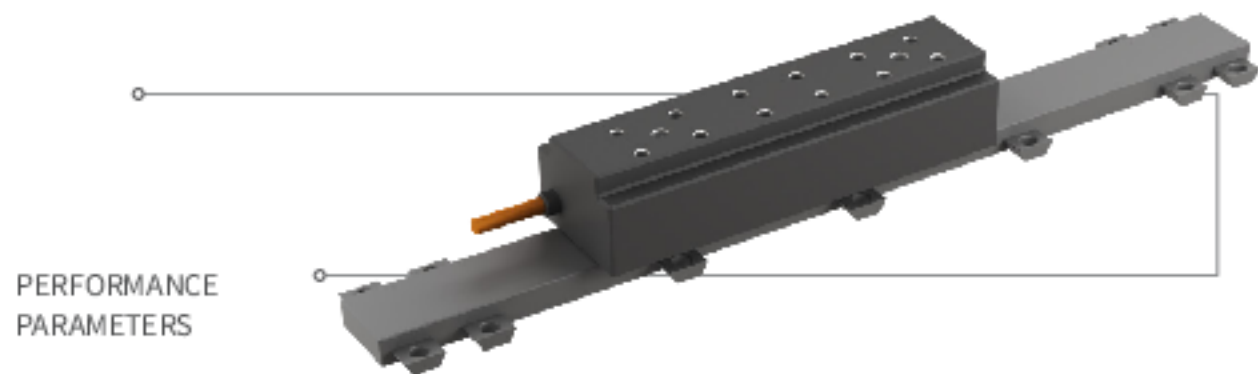
MTF3-90 series



	MTF3-S1-50-A	MTF3-S1-50-B	MTF3-S1-75-A	MTF3-S1-75-B	MTF3-S1-90-A	MTF3-S1-90-B
Continue Force N	46.0	60.0	104.0	138.0	124.0	165.0
Peak Force N	165.0	190.0	349.0	414.0	443.0	509.0
Continue Current Arms	3.0	4.0	3.0	4.0	3.0	4.0
Peak Current Arms	12.0	16.0	12.0	16.0	12.0	16.0
Resistance L-L ohm	1.6	1.6	1.6	1.6	1.8	1.8
Inductance L-L mH	8.9	8.9	12.4	12.4	14.2	14.2
Force Constant N/Arms	15.3	15.3	34.7	34.7	41.3	41.3
Back-EMF Constant Vpeak / (m/s)	17.0	17.0	32.5	32.5	42.3	42.3
Magnetic Period mm	9.0	9.0	9.0	9.0	9.0	9.0
Attraction Force N	650.0	650.0	1140.0	1140.0	1540.0	1540.0
Maximum Coil Temperature °C	100.0	100.0	100.0	100.0	100.0	100.0
Motor Constant N/sqrt (W)	9.9	9.7	22.4	22.3	25.2	25.1
Electrical Time Constant ms	5.6	5.6	7.7	7.7	7.9	7.9
Heat Dissipation Constant W/°C	0.6	0.6	0.8	0.8	1.2	1.2
Mechanical Gap mm	0.8	0.8	0.8	0.8	0.8	0.8
Mover Weight kg	1.2	1.2	1.9	1.9	2.3	2.3

	MTF3-S2-50-A	MTF3-S2-50-B	MTF3-S2-75-A	MTF3-S2-75-B	MTF3-S2-90-A	MTF3-S2-90-B	MTF3-S3-90-A	MTF3-S3-90-B
Continue Force N	92.0	120.0	208.0	276.0	248.0	330.0	372.0	495.0
Peak Force N	330.0	380.0	698.0	828.0	896.0	1018.0	1329.0	1527.0
Continue Current Arms	3.0	4.0	6.0	8.0	6.0	8.0	9.0	12.0
Peak Current Arms	12.0	16.0	24.0	32.0	24.0	32.0	36.0	48.0
Resistance L-L ohm	3.2	3.2	0.8	0.8	0.9	0.9	0.6	0.6
Inductance L-L mH	17.8	17.8	6.2	6.2	7.1	7.1	4.7	4.7
Force Constant N/Arms	30.7	30.7	34.5	34.5	41.3	41.3	41.3	41.3
Back-EMF Constant Vpeak / (m/s)	34.0	34.0	32.5	32.5	42.3	42.3	42.3	42.3
Magnetic Period mm	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Attraction Force N	1300.0	1300.0	2280.0	2280.0	3080.0	3080.0	4620.0	4620.0
Maximum Coil Temperature °C	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Motor Constant N/sqrt (W)	14.0	13.7	31.6	31.5	35.6	35.5	43.6	43.5
Electrical Time Constant ms	5.6	5.6	7.7	7.7	7.9	7.9	7.9	7.9
Heat Dissipation Constant W/°C	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3
Mechanical Gap mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Mover Weight kg	2.3	2.3	3.8	3.8	4.4	4.4	6.6	6.6

# MTF3 - S1-50-A(B)



PERFORMANCE PARAMETERS

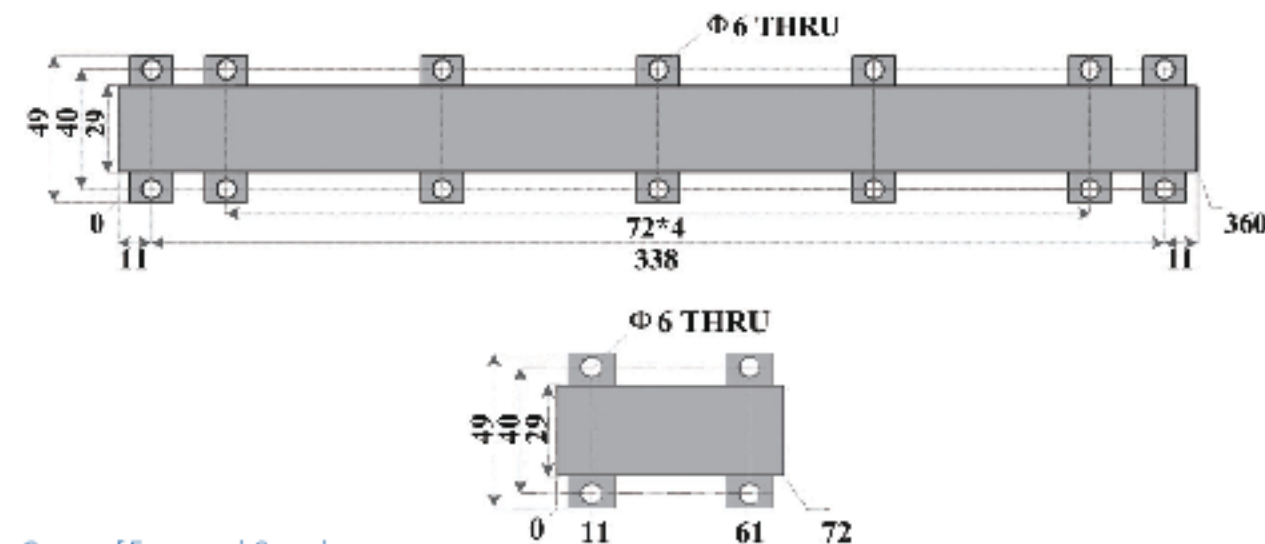
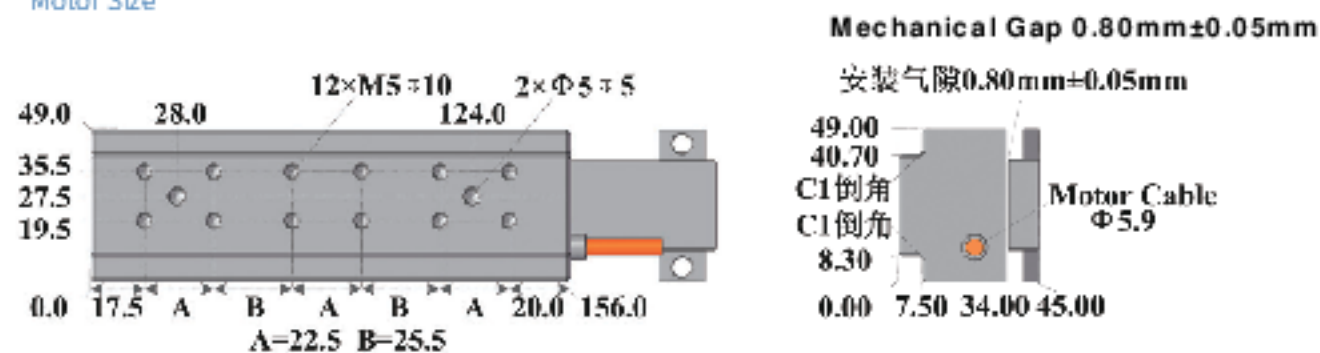
	Unit	MTF3-S1-50-A	MTF3-S1-50-B
Continue Force	N	46.0	60.0
Peak Force	N	165.0	190.0
Continue Current (RMS)	A	3.0	4.0
Peak Current (RMS)	A	12.0	16.0
Resistance(25°C) (L-L)	Ohm	1.6	1.6
Inductance (L-L)	mH	8.9	8.9
Force Constant	N/A(RMS)	15.3	15.3
Back-EMF Constant Vpeak/(m/s)	Vpeak/(m/s)	17.0	17.0
Magnetic Period	mm	9.0	9.0
Attraction Force	N	650.0	650.0
Maximum Coil Temperature°C	°C	100.0	100.0
Motor Constant	N/sqrt(W)	9.9	9.7
Electrical Time Constant	ms	5.6	5.6
Heat Dissipation Constant	W/°C	0.6	0.6
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	1.2	1.2

● **Note:** The data was obtained at the 20 °C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
Any use of the motor beyond speed/force limit to motor damage and serious injuries. To ensure safe, customers should use the motor in the limited range. We'll not be responsible for it if the motor is used in an improper way.

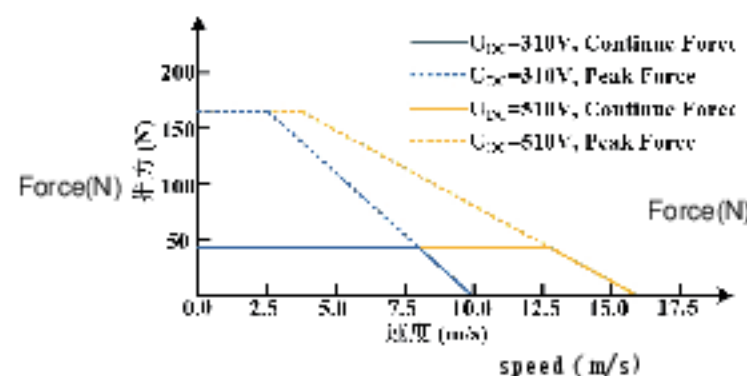
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Weight(kg)
MTF3-T9-50-360	360	49	10.2	0.70
MTF3-T9-50-72	72	49	10.2	0.17

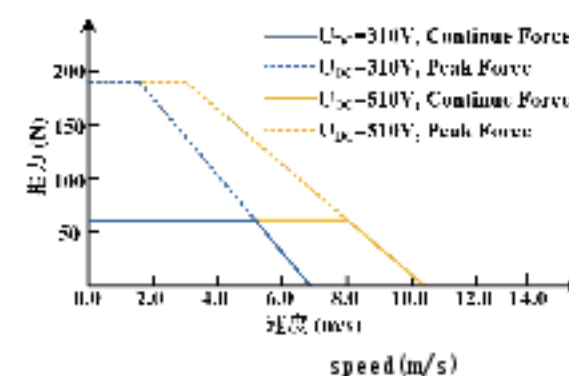
## Motor Size



## Curve of Force and Speed

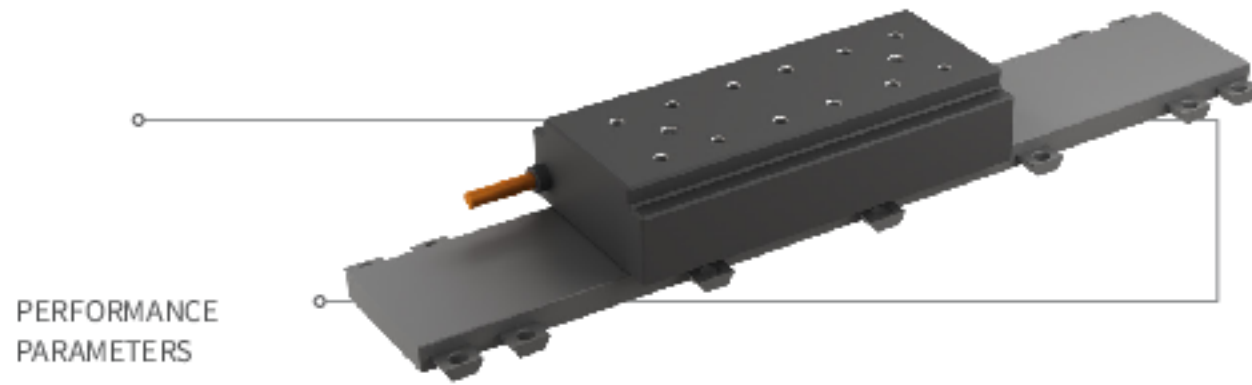


MTF3-S1-50-A



MTF3-S1-50-B

# MTF3 - S1-75-A(B)



PERFORMANCE PARAMETERS

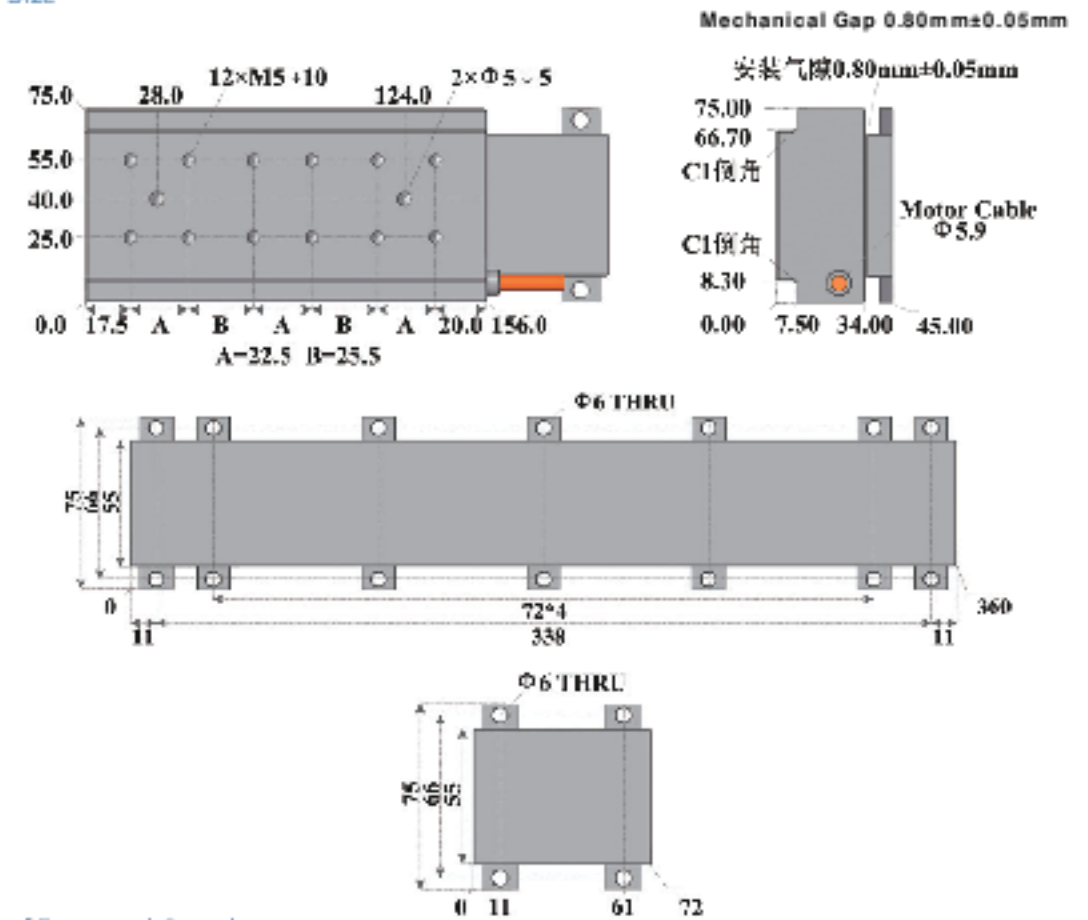
	Unit	MTF3-S1-75-A	MTF3-S1-75-B
Continue Force	N	104.0	138.0
Peak Force	N	349.0	414.0
Continue Current (RMS)	A	3.0	4.0
Peak Current (RMS)	A	12.0	16.0
Resistance(25°C) (L-L)	Ohm	1.6	1.6
Inductance (L-L)	mH	12.4	12.4
Force Constant	N/A(RMS)	34.7	34.7
Back-EMF Constant $V_{peak}/(m/s)$	$V_{peak}/(m/s)$	32.5	32.5
Magnetic Period	mm	9.0	9.0
Attraction Force	N	1140.0	1140.0
Maximum Coil Temperature	°C	100.0	100.0
Motor Constant	N/sqrt(W)	22.4	22.3
Electrical Time Constant	ms	7.7	7.7
Heat Dissipation Constant	W/°C	0.8	0.8
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	1.9	1.9

• **Note:** The data was obtained at the 20°C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
Any use of the motor beyond speed/force limit to motor damage and serious injuries. To ensure safe, customers should use the motor in the limited range. We'll not be responsible for it if the motor is used in an improper way.

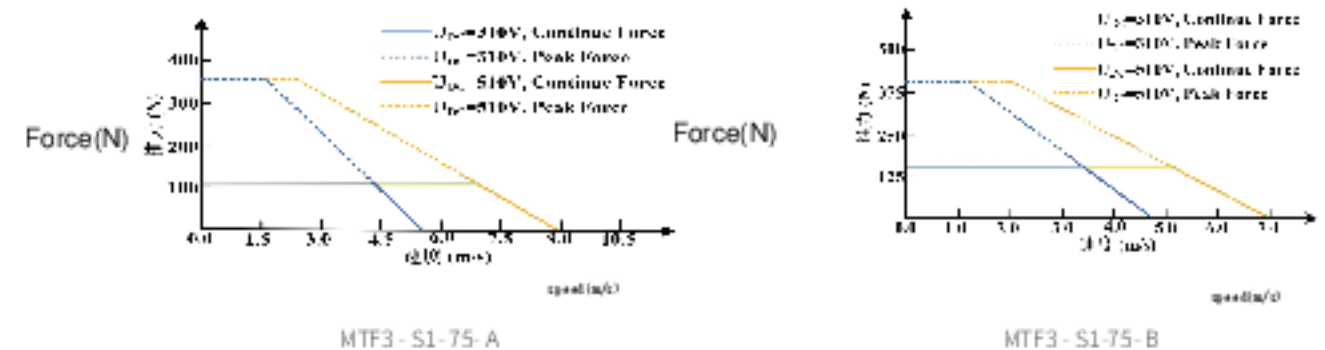
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Weight(kg)
MTF3-T9-75-360	360	75	10.2	1.30
MTF3-T9-75-72	72	75	10.2	0.30

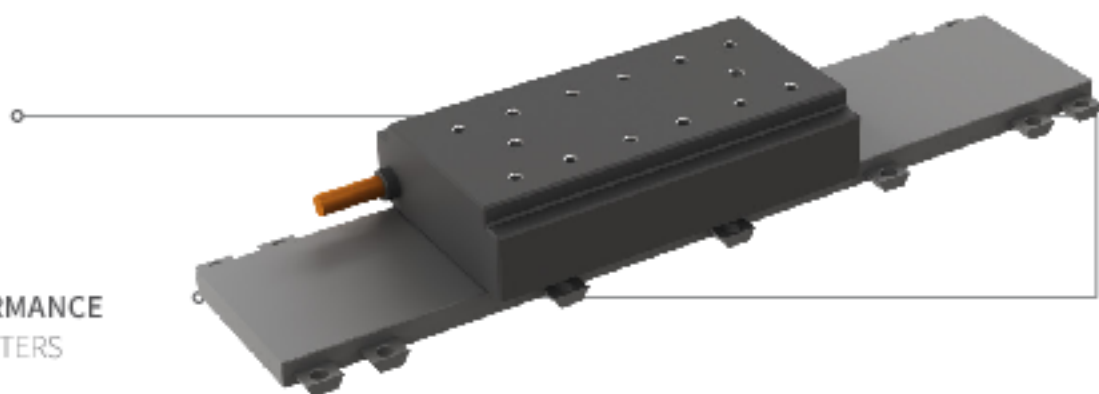
## Motor Size



## Curve of Force and Speed



# MTF3 - S1-90-A(B)



## PERFORMANCE PARAMETERS

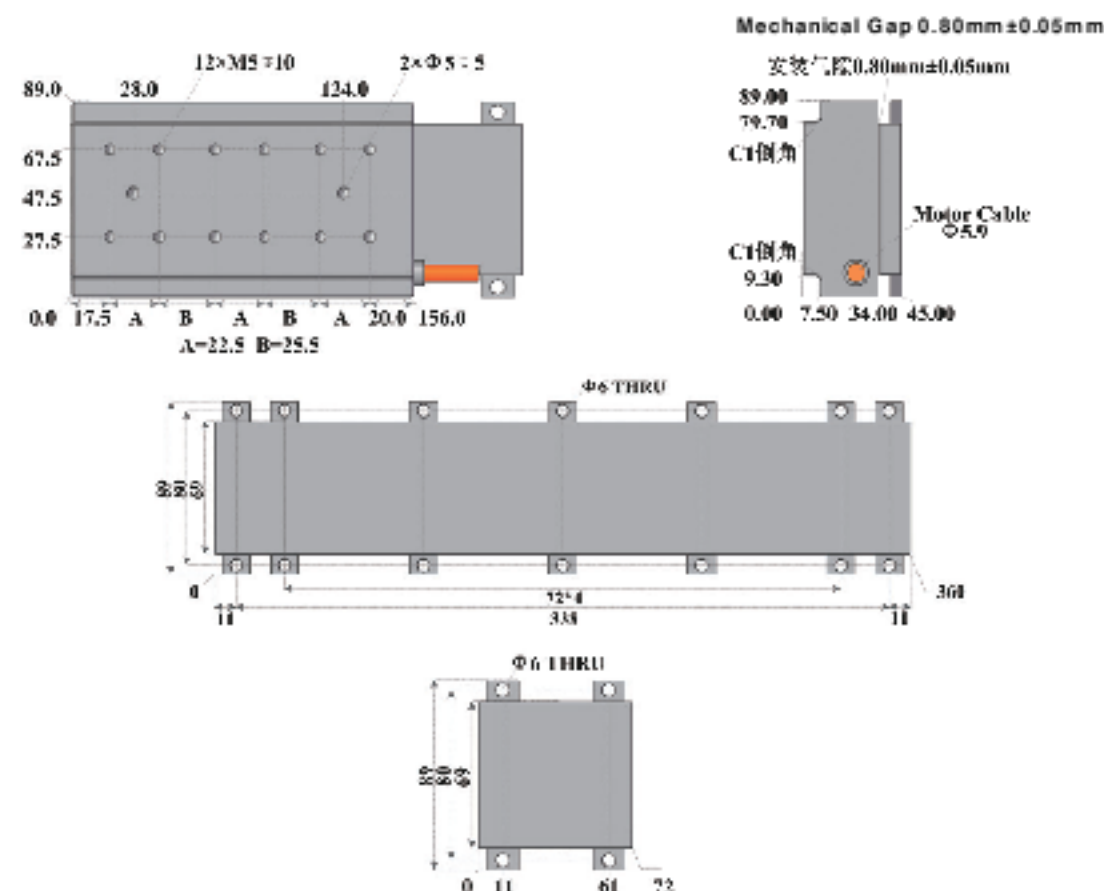
	Unit	MTF3-S1-90-A	MTF3-S1-90-B
Continue Force	N	124.0	165.0
Peak Force	N	443.0	509.0
Continue Current (RMS)	A	3.0	4.0
Peak Current (RMS)	A	12.0	16.0
Resistance(25°C) (L-L)	Ohm	1.8	1.8
Inductance (L-L)	mH	14.2	14.2
Force Constant	N/A(RMS)	41.3	41.3
Back-EMF Constant Vpeak/(m/s)	Vpeak/(m/s)	42.3	42.3
Magnetic Period	mm	9.0	9.0
Attraction Force	N	1540.0	1540.0
Maximum Coil Temperature°C	°C	100.0	100.0
Motor Constant	N/sqrt(W)	25.2	25.1
Electrical Time Constant	ms	7.9	7.9
Heat Dissipation Constant	W/°C	1.2	1.2
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	2.3	2.3

• **Note:** The data was obtained at the 20°C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
Any use of the motor beyond speed/force limit to motor damage and serious injuries. To ensure safe, customers should use the motor in the limited range. We'll not be responsible for it if the motor is used in an improper way.

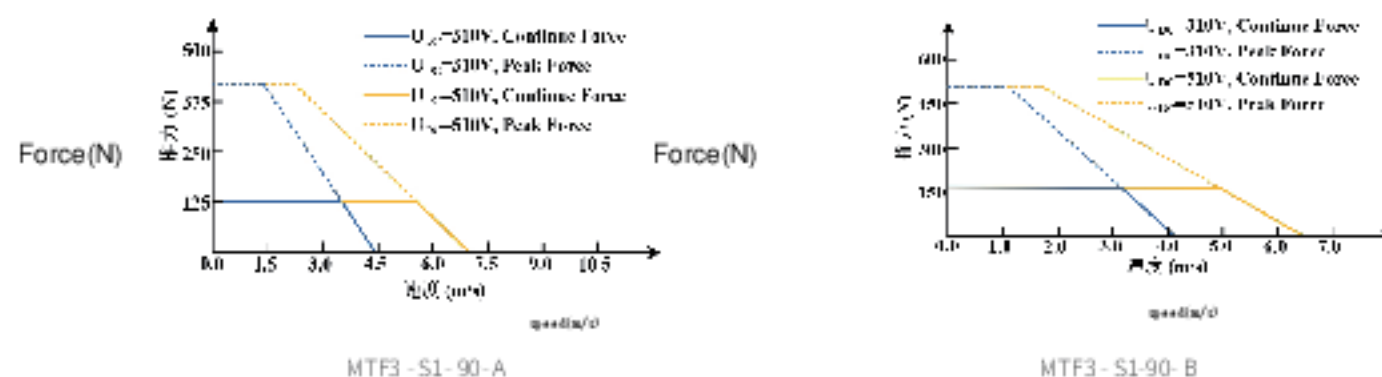
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Mass(kg)
MTF3-T9-90-360	360	89	10.2	1.60
MTF3-T9-90-72	72	89	10.2	0.38

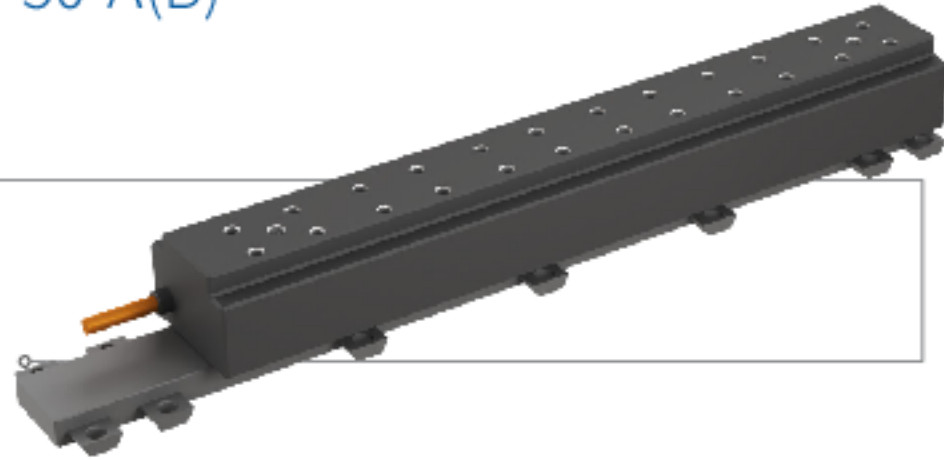
## Motor Size



## Curve of Force and Speed



# MTF3 - S2-50-A(B)



## PERFORMANCE PARAMETERS

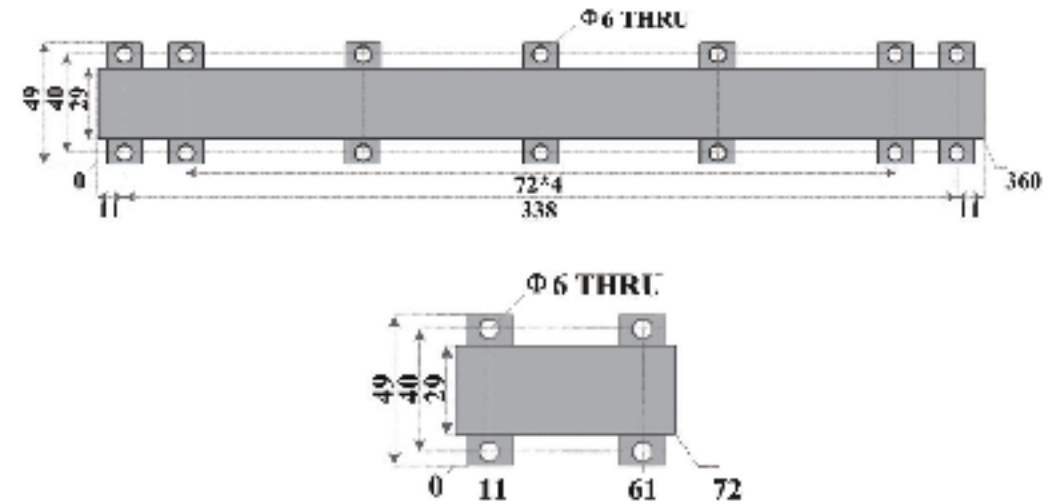
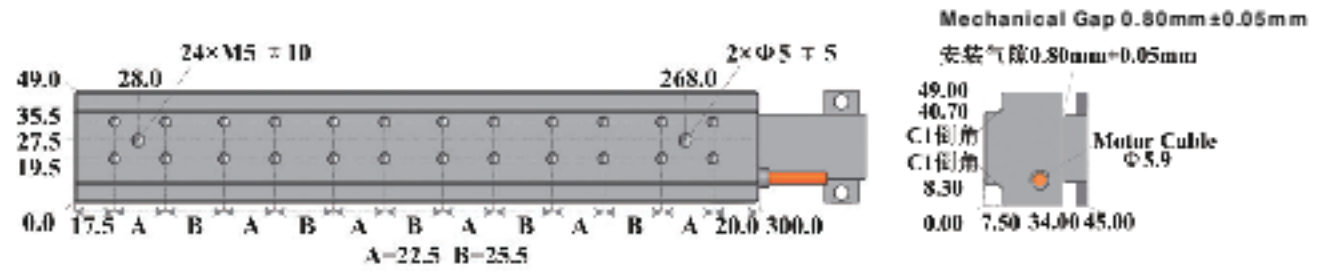
	Unit	MTF3-S2-50-A	MTF3-S2-50-B
Continue Force	N	92.0	120.0
Peak Force	N	330.0	380.0
Continue Current (RMS)	A	3.0	4.0
Peak Current (RMS)	A	12.0	16.0
Resistance(25°C) (L-L)	Ohm	3.2	3.2
Inductance (L-L)	mH	17.8	17.8
Force Constant	N/A(RMS)	30.7	30.7
Back-EMF Constant $V_{peak}/(m/s)$	$V_{peak}/(m/s)$	34.0	34.0
Magnetic Period	mm	9.0	9.0
Attraction Force	N	1300.0	1300.0
Maximum Coil Temperature $^{\circ}C$	$^{\circ}C$	100.0	100.0
Motor Constant	N/sqrt(W)	14.0	13.7
Electrical Time Constant	ms	5.6	5.6
Heat Dissipation Constant	W/ $^{\circ}C$	1.2	1.2
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	2.3	2.3

• **Note:** The data was obtained at the 20°C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
Any use of the motor beyond speed/force limit to motor damage and serious injuries. To ensure safe, customers should use the motor in the limited range. We'll not be responsible for it if the motor is used in an improper way.

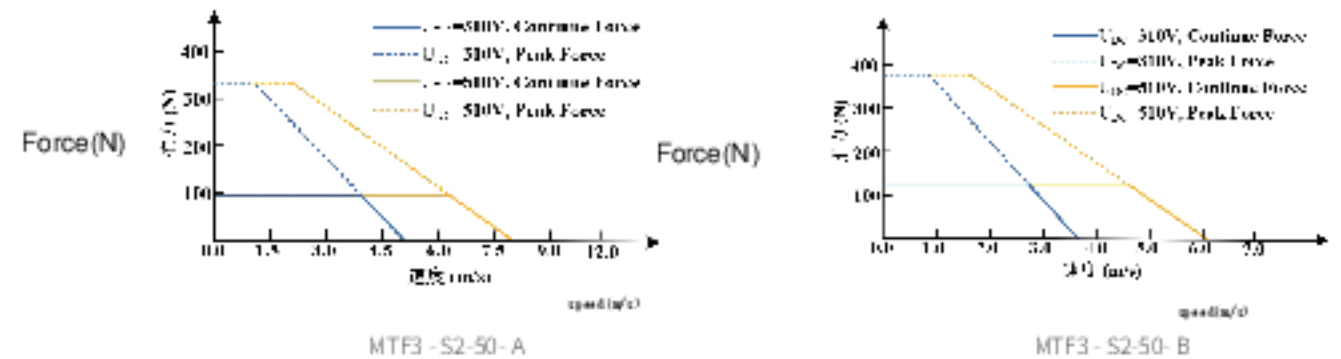
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Weight(kg)
MTF3-T9-50-360	360	49	10.2	0.70
MTF3-T9-50-72	72	49	10.2	0.17

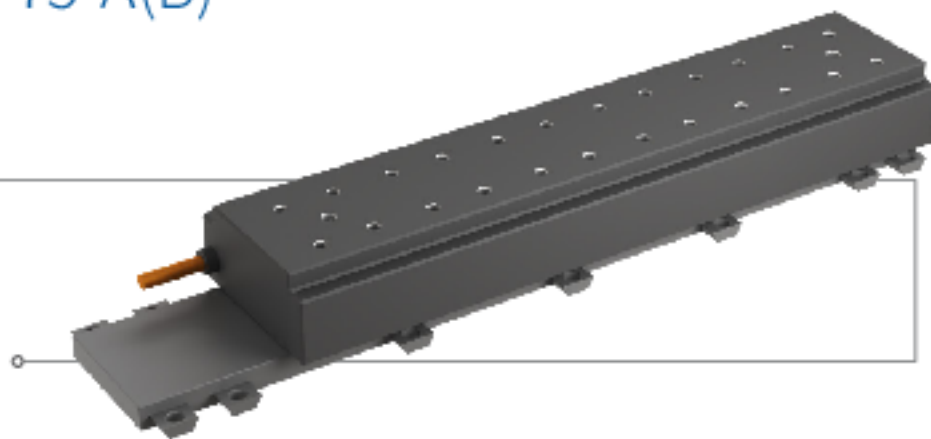
## Motor Size



## Curve of Force and Speed



# MTF3 - S2-75-A(B)



## PERFORMANCE PARAMETERS

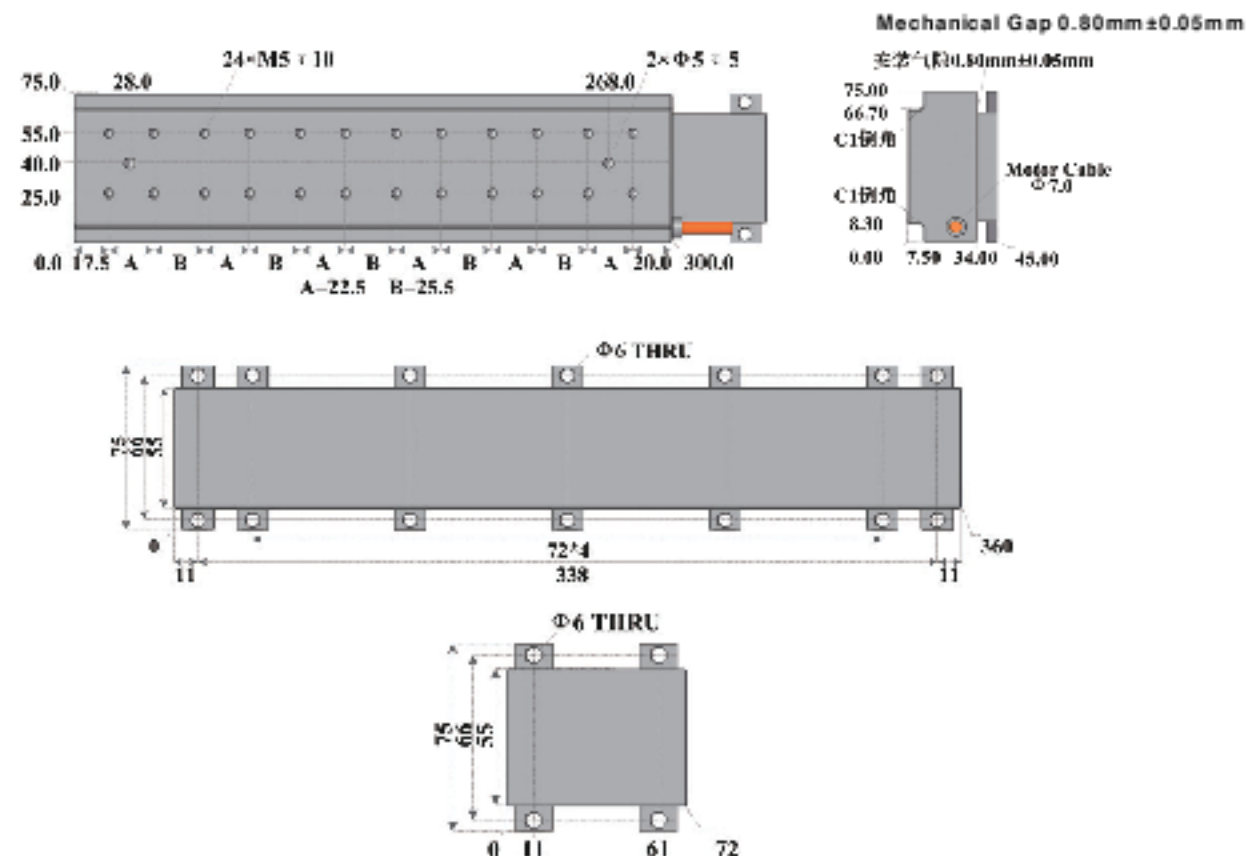
	Unit	MTF3-S2-75-A	MTF3-S2-75-B
Continue Force	N	208.0	276.0
Peak Force	N	698.0	828.0
Continue Current (RMS)	A	6.0	8.0
Peak Current (RMS)	A	24.0	32.0
Resistance(25°C) (L-L)	Ohm	0.8	0.8
Inductance (L-L)	mH	6.2	6.2
Force Constant	N/A(RMS)	34.5	34.5
Back EMF Constant $V_{peak}/(m/s)$	$V_{peak}/(m/s)$	32.5	32.5
Magnetic Period	mm	9.0	9.0
Attraction Force	N	2280.0	2280.0
Maximum Coil Temperature °C	°C	100.0	100.0
Motor Constant	N/sqrt(W)	31.6	31.5
Electrical Time Constant	ms	7.7	7.7
Heat Dissipation Constant	W/°C	1.7	1.7
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	3.8	3.8

• **Note:** The data was obtained at the 20°C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
Any use of the motor beyond speed/force limit to motor damage and serious injuries. To ensure safe, customers should use the motor in the limited range. We'll not be responsible for it if the motor is used in an improper way.

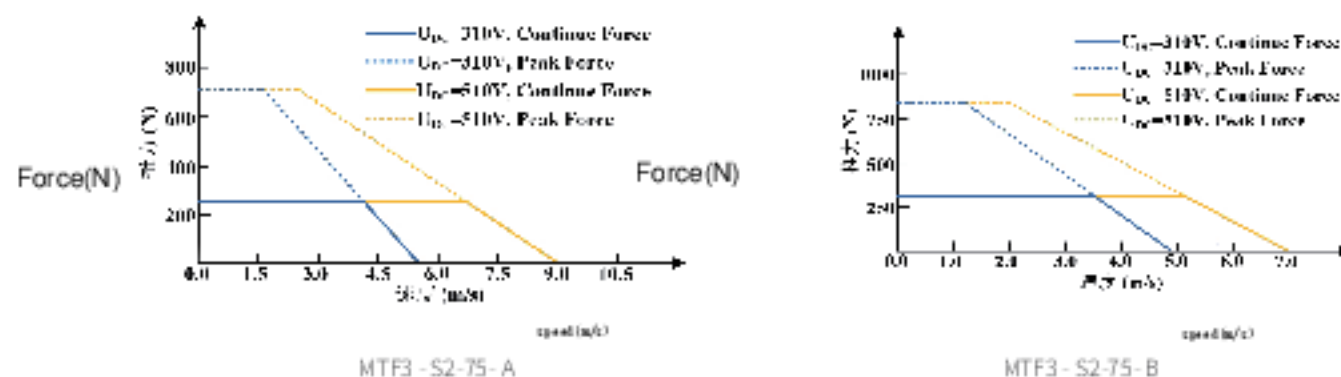
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Weight (kg)
MTF3-T9-75-360	360	75	10.2	1.30
MTF3-T9-75-72	72	75	10.2	0.30

## Motor Size



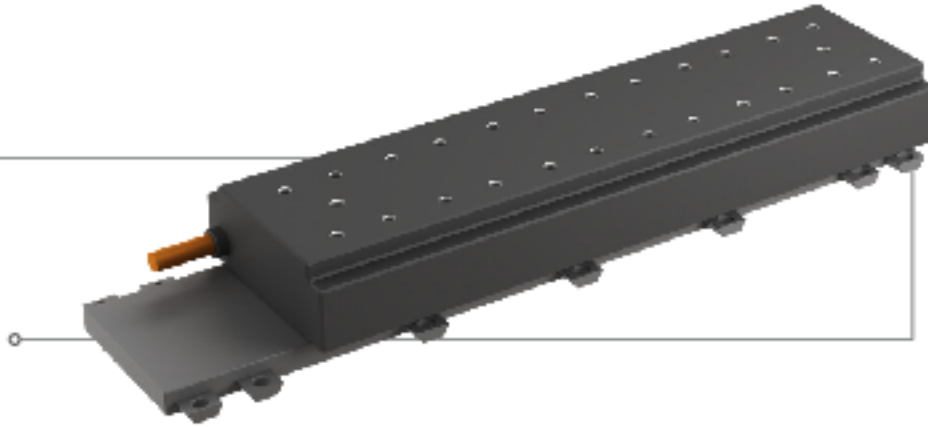
## Curve of Force and Speed





# MTF3 - S2-90-A(B)

## PERFORMANCE PARAMETERS



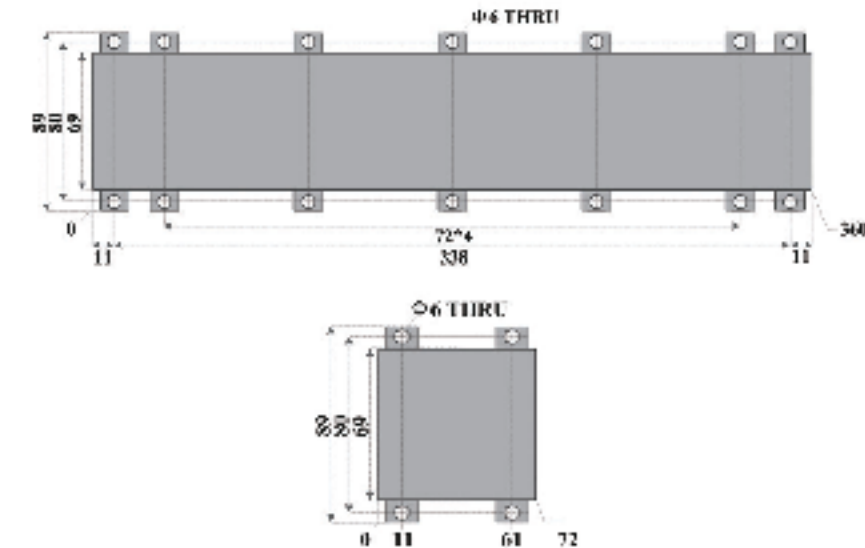
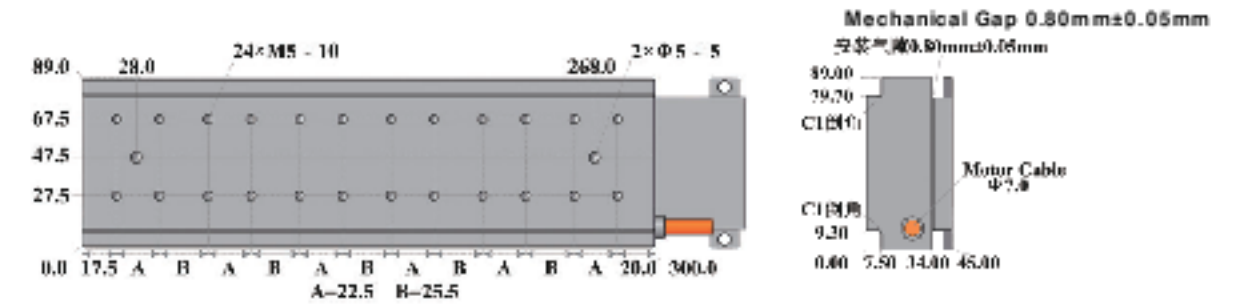
	Unit	MTF3-S2-90-A	MTF3-S2-90-B
Continue Force	N	248.0	330.0
Peak Force	N	896.0	1018.0
Continue Current (RMS)	A	6.0	8.0
Peak Current (RMS)	A	24.0	32.0
Resistance(25°C) (L-L)	Ohm	0.9	0.9
Inductance (L-L)	mH	7.1	7.1
Force Constant	N/A(RMS)	41.3	41.3
Back-EMF Constant $V_{peak}/(m/s)$	$V_{peak}/(m/s)$	42.3	42.3
Magnetic Period	mm	9.0	9.0
Attraction Force	N	3080.0	3080.0
Maximum Coil Temperature°C	°C	100.0	100.0
Motor Constant	N/sqrt(W)	35.6	35.5
Electrical Time Constant	ms	7.9	7.9
Heat Dissipation Constant	W/°C	2.3	2.3
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	4.4	4.4

Note: The data was obtained at the 20°C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
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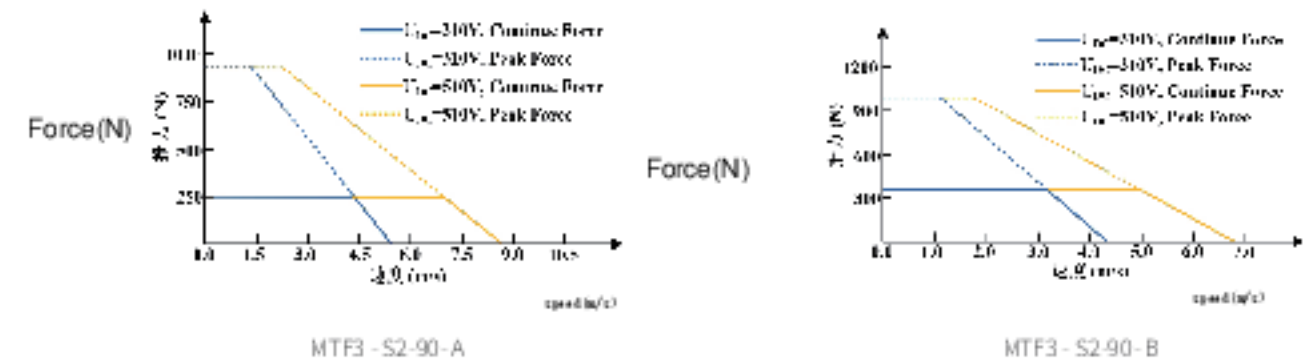
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Weight(kg)
MTF3-T9-90-360	360	89	10.2	1.60
MTF3-T9-90-72	72	89	10.2	0.38

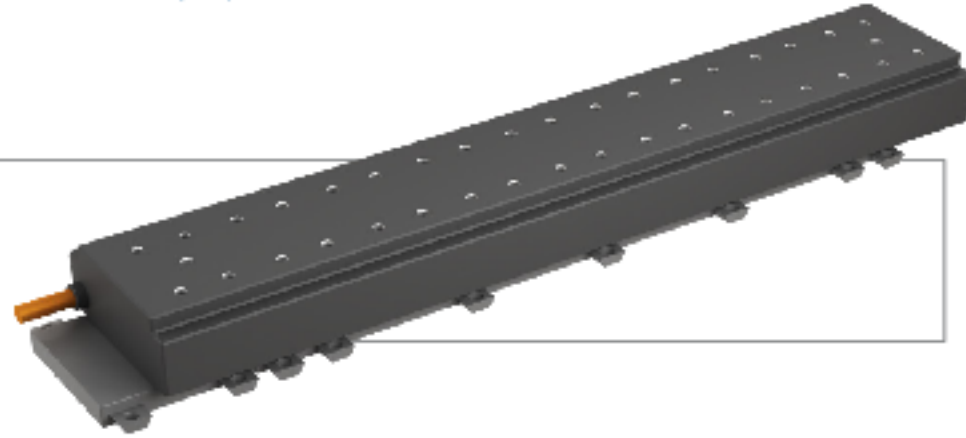
## Motor Size



## Curve of Force and Speed



# MTF3 - S3-90-A(B)



## PERFORMANCE PARAMETERS

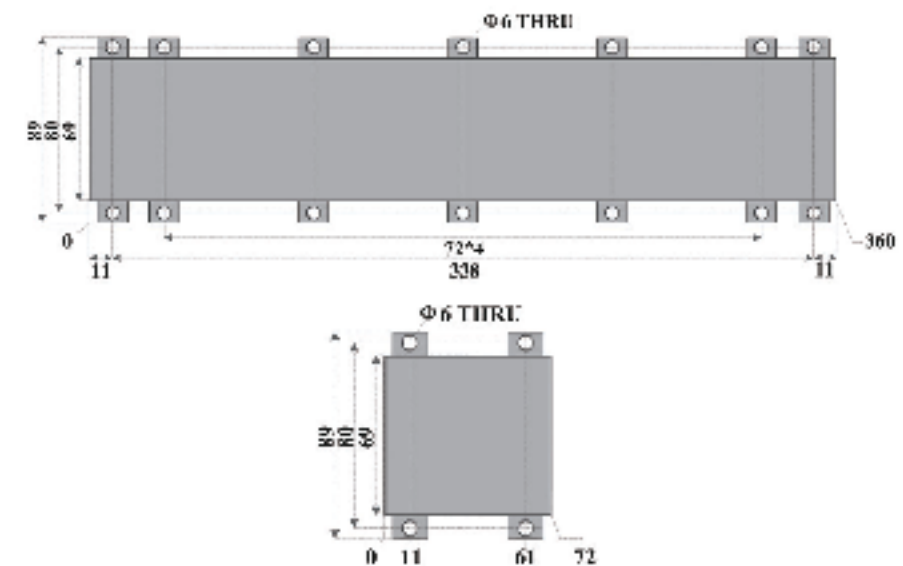
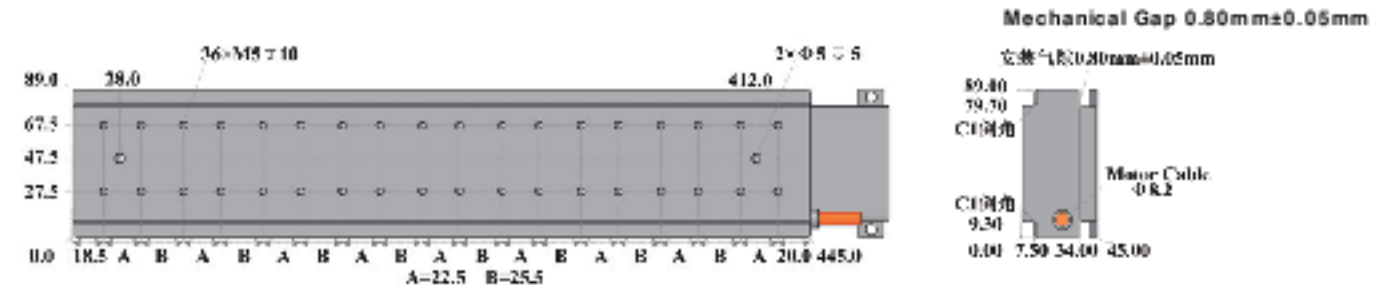
	Unit	MTF3-S3-90-A	MTF3-S3-90-B
Continue Force	N	372.0	495.0
Peak Force	N	1329.0	1527.0
Continue Current (RMS)	A	9.0	12.0
Peak Current (RMS)	A	36.0	48.0
Resistance(25°C) (L-L)	Ohm	0.6	0.6
Inductance (L-L)	mH	4.7	4.7
Force Constant	N/A(RMS)	41.3	41.3
Back-EMF Constant Vpeak/(m/s)	Vpeak/(m/s)	42.3	42.3
Magnetic Period	mm	9.0	9.0
Attraction Force	N	4620.0	4620.0
Maximum Coil Temperature°C	°C	100.0	100.0
Motor Constant	N/sqrt(W)	43.6	43.5
Electrical Time Constant	ms	7.9	7.9
Heat Dissipation Constant	W/°C	2.3	2.3
Mechanical Gap	mm	0.8	0.8
Mover Mass	kg	6.6	6.6

**Note:** The data was obtained at the 20°C ambient temperature, and the continuous current test is based on one carriage with 12mm thick and same length, 2 time of width of the mover.  
Any use of the motor beyond speed/force limit to motor damage and serious injuries. To ensure safe, customers should use the motor in the limited range. We'll not be responsible for it if the motor is used in an improper way.

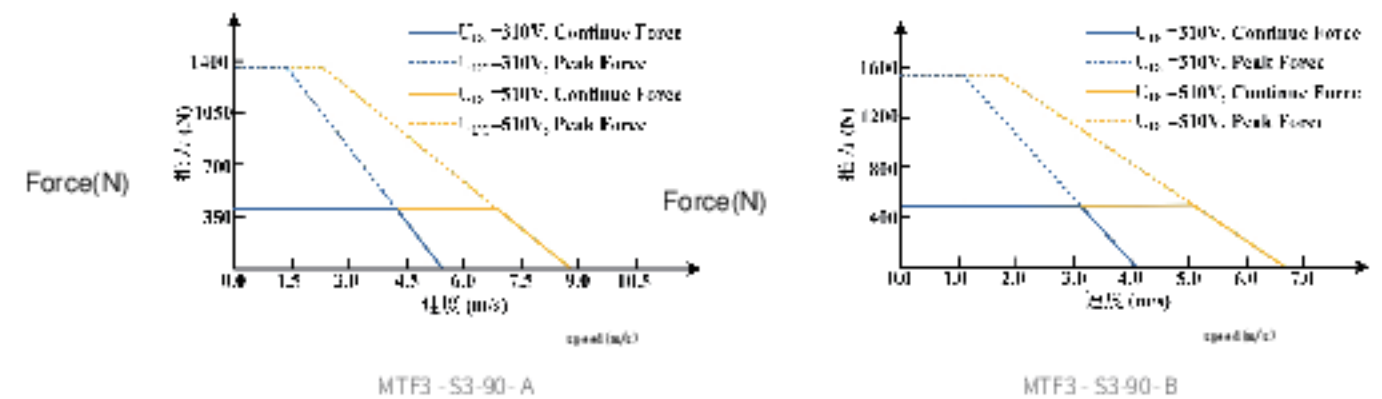
## Applicable Stators

Model	Length(mm)	Width(mm)	Height(mm)	Weight(kg)
MTF3-T9-90-360	360	89	10.2	1.60
MTF3-T9-90-72	72	89	10.2	0.38

## Motor Size



## Curve of Force and Speed





# SDL MTF LINEAR MOTOR MODULE

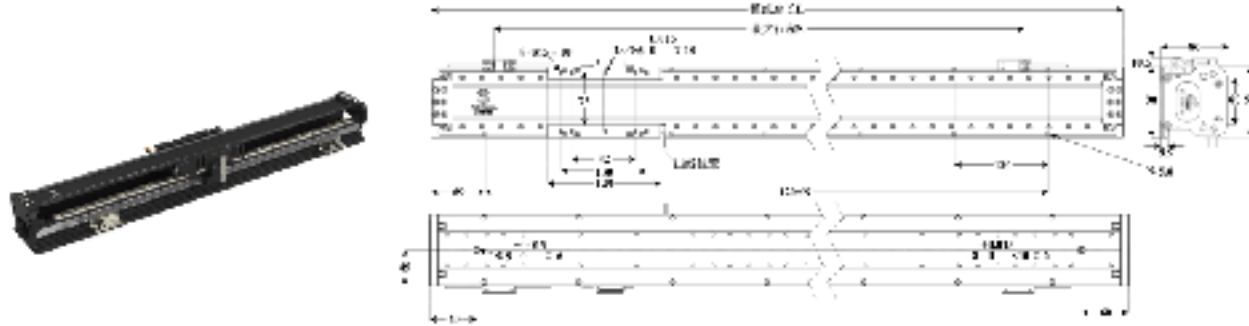
MTF linear motor modules, due to the merits of high integration, high precision, high speed, high secure and easy protection, are widely used in the equipments of 3C, LCD display, photovoltaic and medical.

Specifically, MTF linear motor modules have great advantages in the long travel and applications that are sensitive to magnetic field



SDL90 Series		SDL140 series		SDL175 series			SDL210 series		
Base width	Total module	Module height	Match motor	Rated thrust	Peak Force	rated current	Linear guide	Horizontal installation Max load	Wall mounting Max load
90mm	100.5mm	86mm	MTF3-S1-50-A	46N	165N	3A	12 double linear guide	20kg	10kg
			MTF3-S1-50-B	60N	190N	4 A			
			MTF3-S2-50-A	92N	330N	3 A			
			MTF3-S2-50-B	120N	380N	4 A			
140mm	150mm	95mm	MTF3-S1-75-A	104N	349N	3 A	15 low height dual linear guide	40kg	20kg
			MTF3-S1-75-B	138N	414N	4 A			
			MTF3-S2-75-A	208N	698N	6 A			
			MTF3-S2-75-B	276N	828N	8 A			
			MTF3-S1-90-A	124N	443N	3 A			
			MTF3-S1-90-B	165N	509N	4 A			
			MTF3-S2-90-A	248N	886N	6 A			
			MTF3-S2-90-B	330N	1018N	8 A			
175mm	205mm	95mm	MTF3-S1-90-A	124N	443N	3 A	15 high height dual linear guide	80kg	40kg
			MTF3-S1-90-B	165N	509N	4 A			
			MTF3-S2-90-A	248N	886N	6 A			
			MTF3-S2-90-B	330N	1018N	8 A			
210mm	240mm	95mm	MTF3-S1-90-A	124N	443N	3 A	25 dual linear guide	500kg	300kg
			MTF3-S1-90-B	165N	509N	4 A			
			MTF3-S2-90-A	248N	886N	6 A			
			MTF3-S2-90-B	330N	1018N	8 A			
			MTF3-S3-90-A	372N	1329N	9 A			
			MTF3-S3-90-B	495N	1527N	12 A			

# SDL90-MTF3-S1-50-A(B)



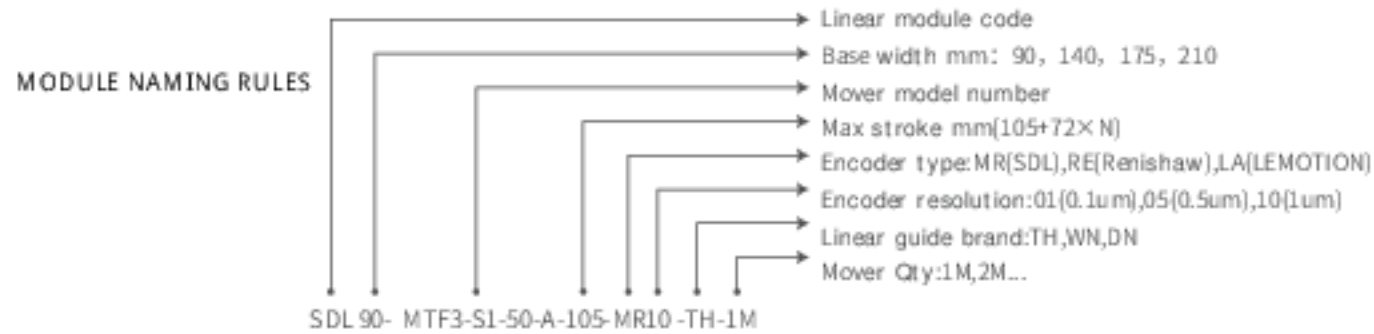
## Mechanical parameter

Effective stroke S(mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+205$	310	670	1030	1390	1750	2110	2470	2830	3190	3550
Module weight M(kg)	$M=4.5+0.56 \times k$	4.5	7.3	10.1	12.9	15.7	18.5	21.3	24.1	26.9	29.7

Remarks(1)Effective stroke progressive increase by 72mm, k is an integer, 1,2,3.. (2)Single effective stroke is 3321mm, longer length can be customized.

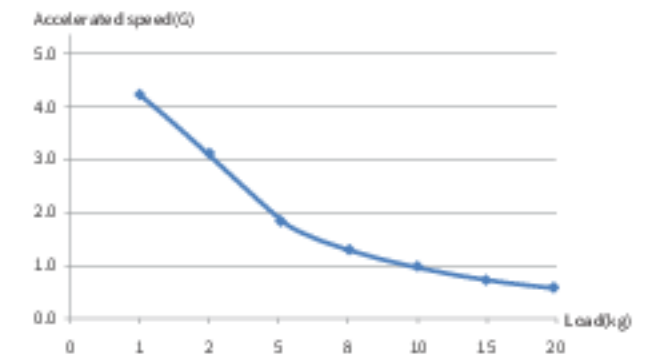
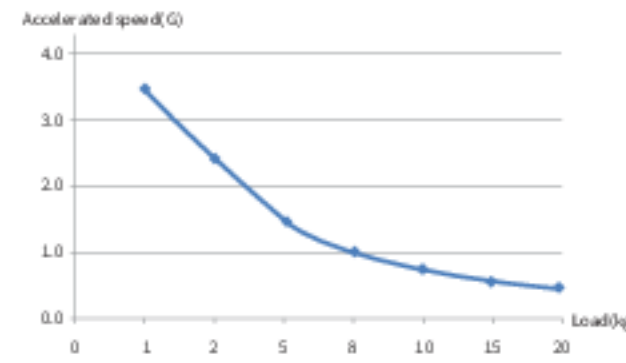
## PERFORMANCE PARAMETER

	SDL90-MTF3-S1-50-A	SDL90-MTF3-S1-50-B
Continue Force/Peak Force	46N/165N	60N/190N
Continue Current / Peak Current	3A/12A	4A/16A
Accuracy ( grating )	Repeatability ±1.5 μm, absolute accuracy (after compensation)±3.0 μm/500mm	
Accuracy ( magnetic grid )	Repeatability ±3.0 μm, absolute accuracy (after compensation)±6.0 μm/500mm	
Braightness	±7.5 μm/300mm (installed on the marble with 5um flatness)	
Flatness ( μm )	±7.5 μm/300mm (installed on the marble with 5um flatness)	
Linear guide	Model 12 double linear guide	
Moving weight	1.9kg	
Maximum speed	1.2m/s	



## TYPICAL APPLICATIONS

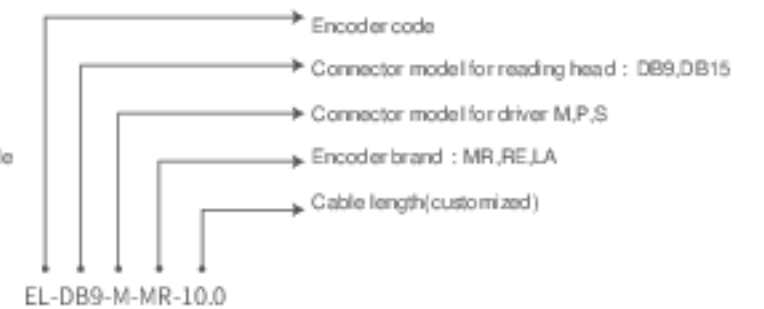
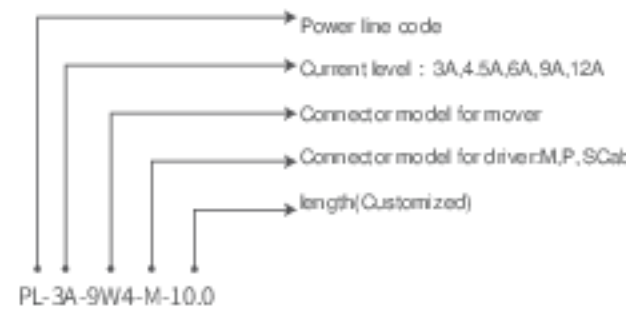
	SDL90-MTF3-S1-50-A	SDL90-MTF3-S1-50-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
1	3.3	4.2
2	2.4	3.1
5	1.4	1.8
8	1.0	1.2
10	0.8	1.0
15	0.6	0.7
20	0.4	0.6



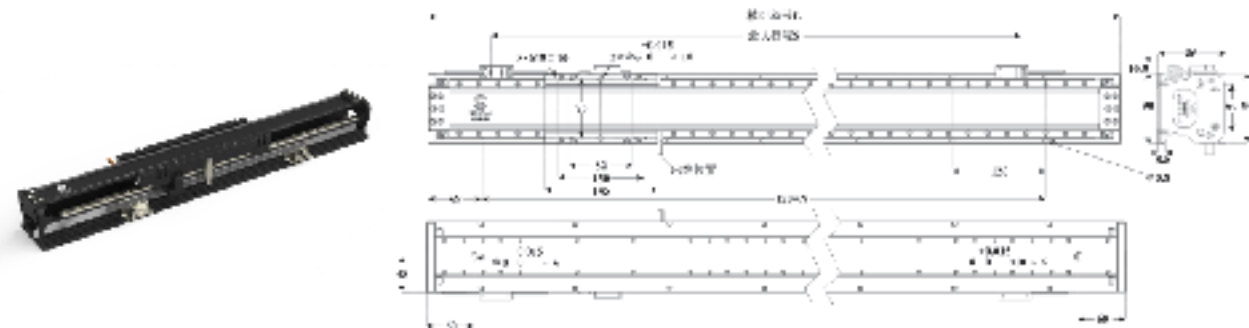
## Accessory information

Adapter driver				
SDL90-MTF3-S1-50-A		SDL90-MTF3-S1-50-B		
Brand	Model(Pulse type)	Model(Bus type)	Model(Pulse type)	Model(Bus type)
Mitsubishi(M)	None	MR-J4-60B-RJ001 (CClink optical fiber)	None	MR-J4-70B-RJ001 (CClink optical fiber)
Panasonic(P)	MCDLN35SL	MCDLN35BL (EtherCAT)	MCDLN35SL	MCDLN35BL (EtherCAT)
Servotronics(S)	CDHD-0032AAP1	CDHD-0032AEC2 (EtherCAT)	CDHD-4D52AAP1	CDHD-4D52AEC2 (EtherCAT)

Adapter cable		
	SDL90-MTF3-S1-50-A	SDL90-MTF3-S1-50-B
Power cable	PL-3A-9W4-xx-xx	PL-4.5A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx



# SDL90-MTF3-S2-50-A(B)



## Mechanical parameter

Effective stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+34$	454	814	1174	1534	1894	2254	2614	2974	3334	3694
Model weight M(kg)	$M=7.3+0.56 \times k$	7.3	10.1	12.9	15.7	18.5	21.3	24.1	26.9	29.7	32.5

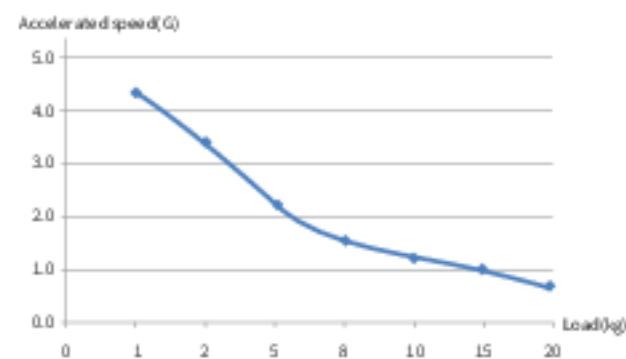
Remarks (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3.. (2) Single effective stroke is 3777mm, longer length can be customized.

## PERFORMANCE PARAMETERS

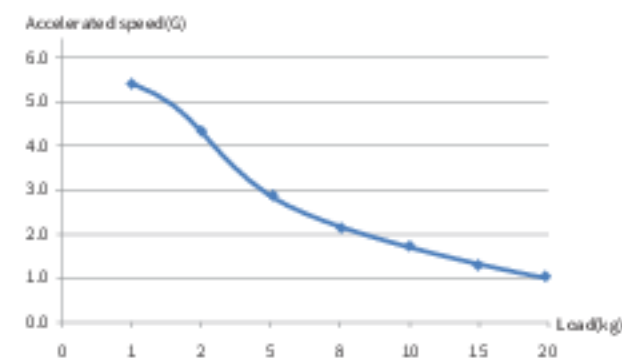
	SDL90-MTF3-S2-50-A	SDL90-MTF3-S2-50-B
Continue Force/Peak Force	92N/330N	120N/380N
Continue current/Peak Current	3A/12A	4A/16A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/900\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/900\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (installed on the marble with 5um flatness)	
Linear guide	Model 12 double linear guide	
Moving weight	3.5kg	
Maximum Speed	1.2m/s	

## TYPICAL APPLICATIONS

	SDL90-MTF3-S2-50-A	SDL90-MTF3-S2-50-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
1	4.2	5.4
2	3.4	4.4
5	2.2	2.9
8	1.6	2.1
10	1.4	1.8
15	1.0	1.3
20	0.8	1.0



SDL90-MTF3-S2-50-A@1.2m/s



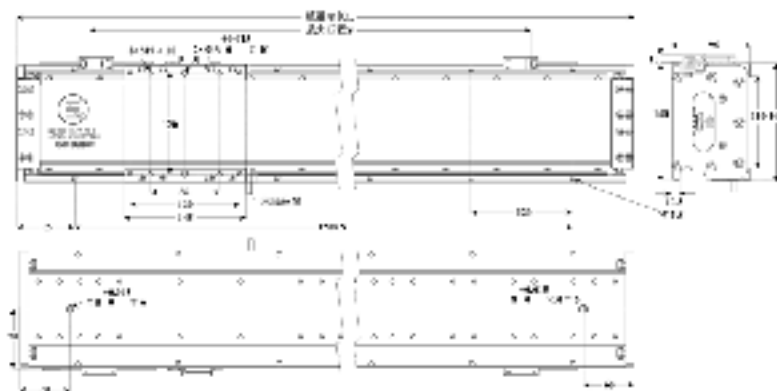
SDL90-MTF3-S2-50-B@1.2m/s

## Accessory information

Adapter driver				
SDL90-MTF3-S2-50-A		SDL90-MTF3-S2-50-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi (M)	None	MR-J4-60B-RJ001 (CClink optical fiber)	None	MR-J4-70B-RJ001 (CClink optical fiber)
Panasonic (P)	MCDLN35SL	MCDLN35BL (EtherCAT)	MCDLN35SL	MCDLN35BL (EtherCAT)
Servotronics (S)	CDHD-0032AAP1	CDHD-0032AEC2 (EtherCAT)	CDHD-4D52AAP1	CDHD-4D52AEC2 (EtherCAT)

Adapter cable		
	SDL90-MTF3-S2-50-A	SDL90-MTF3-S2-50-B
Power cable	PL-3A-9W4-xx-xx	PL-4.5A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL140-MTF3-S1-75-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+205$	310	670	1030	1390	1750	2110	2470	2830	3190	3550
Module Weight M (kg)	$M=7.8+0.90 \times k$	7.8	12.3	16.8	21.3	25.8	30.3	34.8	39.3	43.8	48.3

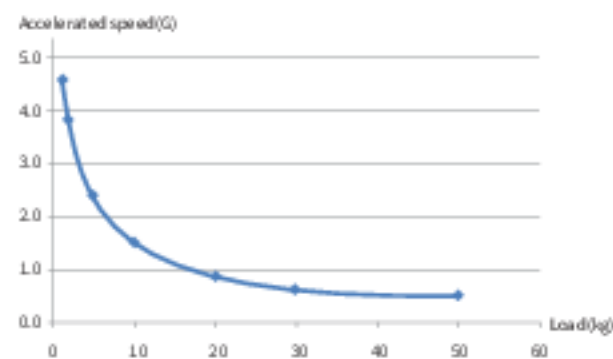
Remarks: (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 3921mm, longer length can be customized.

## PERFORMANCE PARAMETE

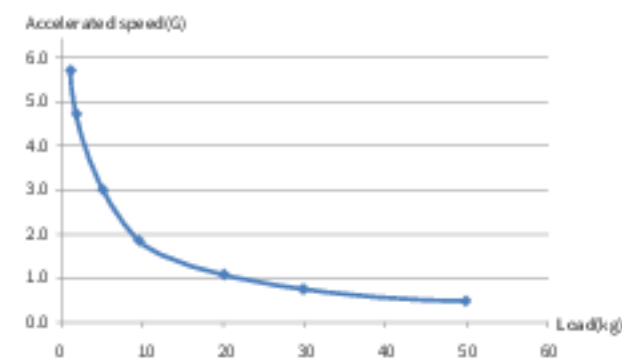
	SDL140-MTF3-S1-75-A	SDL140-MTF3-S1-75-B
Continue Force/Peak Force	104N/349N	138N/414N
Continue current/Peak Current	3A/12A	4A/16A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 15 double linear guide	
Moving weight	3.5kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL140-MTF3-S1-75-A	SDL140-MTF3-S1-75-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
1	4.6	5.7
2	3.8	4.7
5	2.4	3.0
10	1.5	1.9
20	0.9	1.1
30	0.6	0.8
50	0.4	0.5



SDL140-MTF3-S1-75-A@2m/s



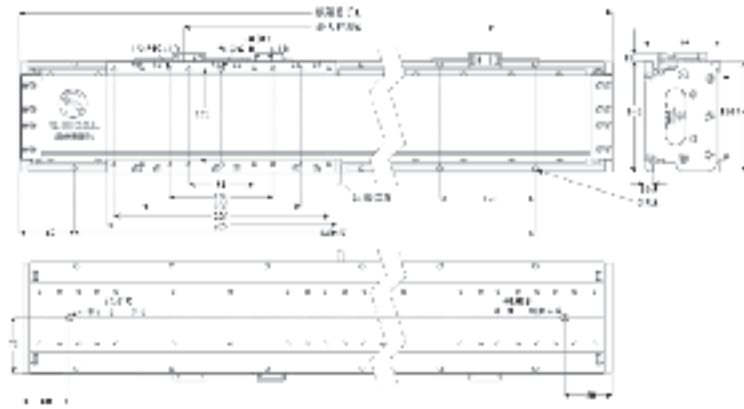
SDL140-MTF3-S1-75-B@2m/s

## Accessory information

Adapter driver				
SDL140-MTF3-S1-75-A		SDL140-MTF3-S1-75-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-60B-RJ001 (CClink optical fiber)	None	MR-J4-70B-RJ001 (CClink optical fiber)
Panasonic(P)	MCDLN35SL	MCDLN35BL (EtherCAT)	MCDLN35SL	MCDLN35BL (EtherCAT)
Servotronics(S)	CDHD-0032AAP1	CDHD-0032AEC2 (EtherCAT)	CDHD-4D52AAP1	CDHD-4D52AEC2 (EtherCAT)

Adapter cable		
	SDL140-MTF3-S1-75-A	SDL140-MTF3-S1-75-B
Power cable	PL-3A-9W4-xx-xx	PL-4.5A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL140-MTF3-S2-75-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+349$	454	814	1174	1534	1894	2254	2614	2974	3334	3694
Module Weight M(kg)	$M=12.5+0.90 \times k$	12.5	17.0	21.5	26.0	30.5	35.0	39.5	44.0	48.5	53.0

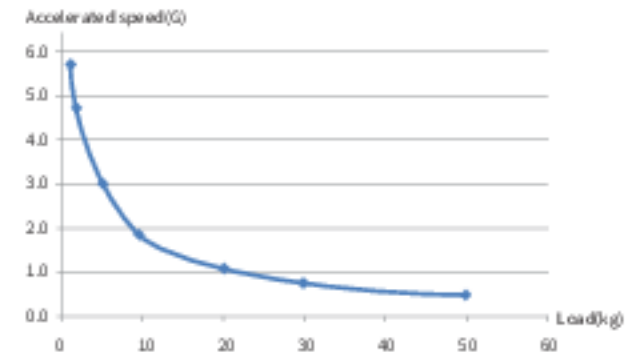
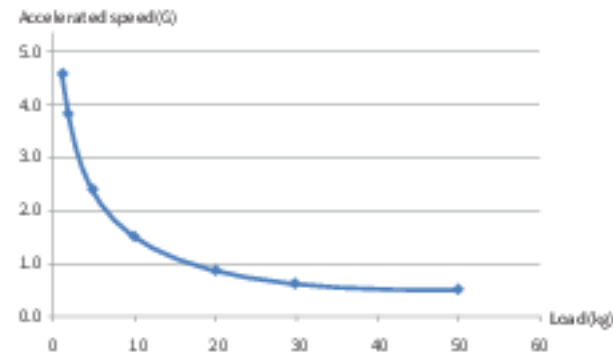
Remarks(1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 3777mm, longer length can be customized.

## PERFORMANCE PARAMETERS

	SDL140-MTF3-S2-75-A	SDL140-MTF3-S2-75-B
Continue Force/Peak Force	208N/698N	276N/828N
Continue current/Peak Current	6A/24A	8A/32A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	7.5 $\mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 15 double linear guide	
Moving weight	6.4kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL140-MTF3-S2-75-A	SDL140-MTF3-S2-75-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
1	5.4	7.0
2	4.9	6.1
5	3.6	4.5
10	2.5	3.1
20	1.6	2.0
30	1.1	1.4
50	0.7	0.9

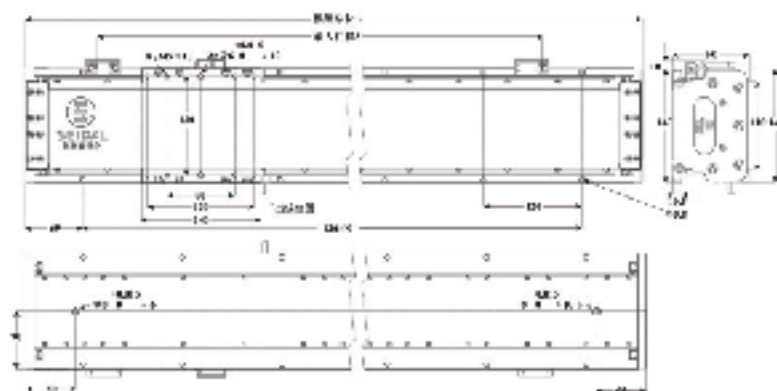


## 附件信息

Adapter driver				
SDL140-MTF3-S2-75-A		SDL140-MTF3-S2-75-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-100B-RJ001 (CClink 光纤)	无	MR-J4-200B-RJ001 (CClink 光纤)
Panasonic(P)	MDDL N55SL	MDDL N55BL (EtherCAT)	MDDL N55SL	MDDL N55BL (EtherCAT)
Servo tronix(S)	CDHD-0062AAP1	CDHD-0062AEC2 (EtherCAT)	CDHD-0082AAP1	CDHD-0082AEC2 (EtherCAT)

Adapter cable		
	SDL140-MTF3-S2-75-A	SDL140-MTF3-S2-75-B
Power cable	PL-6A-9W4-xx-xx	PL-9A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL140-MTF3-S1-90-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module Length L (mm)	$L=S+205$	310	670	1030	1390	1750	2110	2470	2830	3190	3550
Module Weight M (kg)	$M=8.5+0.97 \times k$	8.5	13.4	18.2	23.1	27.9	32.8	37.6	42.5	47.3	52.2

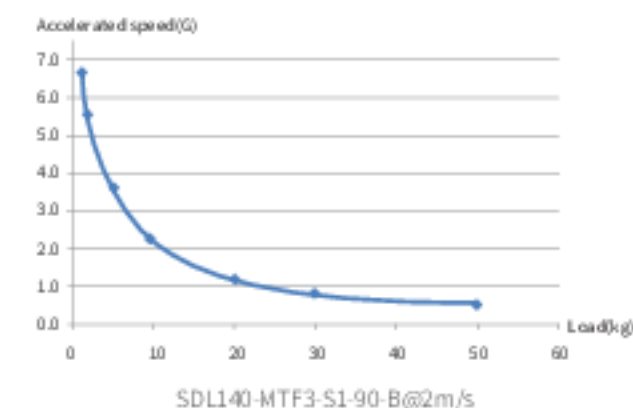
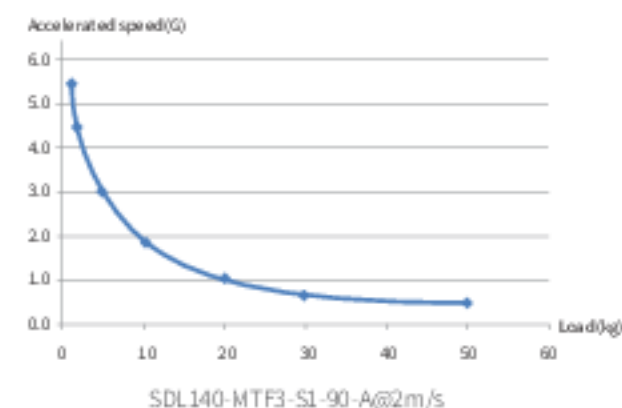
Remarks (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 3921mm, longer length can be customized.

## PERFORMANCE PARAMETERS

	SDL140-MTF3-S1-90-A	SDL140-MTF3-S1-90-B
Continue Force/Peak Force	124N/443N	165N/509N
Continue current/Peak Current	3A/12A	4A/16A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 15 double linear guide	
Moving weight	3.8kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATION

	SDL140-MTF3-S1-90-A	SDL140-MTF3-S1-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
1	5.4	6.7
2	4.5	5.5
5	3.0	3.6
10	1.9	2.3
20	1.1	1.3
30	0.8	0.9
50	0.5	0.6



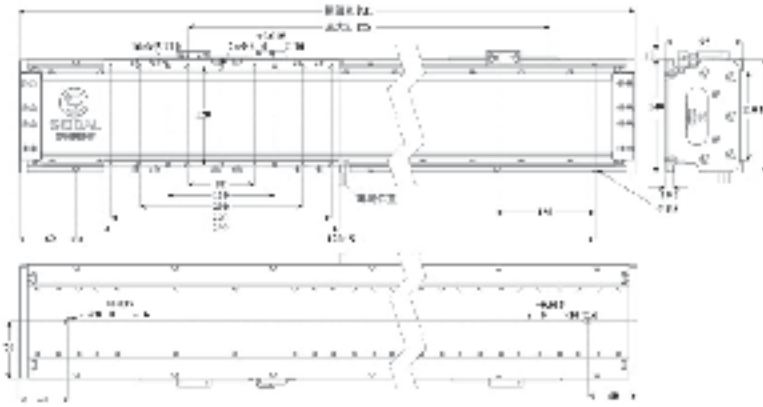
## Accessory information

Adapter driver				
SDL140-MTF3-S1-90-A		SDL140-MTF3-S1-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi (M)	None	MR-J4-60B-RJ001 (CClink optical fiber)	None	MR-J4-70B-RJ001 (CClink optical fiber)
Panasonic (P)	MCDLN35SL	MCDLN35BL (EtherCAT)	MCDLN35SL	MCDLN35BL (EtherCAT)
Servotronics (S)	CDHD-0032AAP1	CDHD-0032AEC2 (EtherCAT)	CDHD-4D52AAP1	CDHD-4D52AEC2 (EtherCAT)

Adapter cable		
	SDL140-MTF3-S1-90-A	SDL140-MTF3-S1-90-B
Power cable	PL-3A-9W4-xx-xx	PL-4.5A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx



# SDL140-MTF3-S2-90-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+349$	454	814	1174	1534	1894	2254	2614	2974	3334	3694
Module Weight M (kg)	$M=13.5+0.97 \times k$	13.5	18.3	23.2	28.0	32.9	37.7	42.6	47.4	52.3	57.1

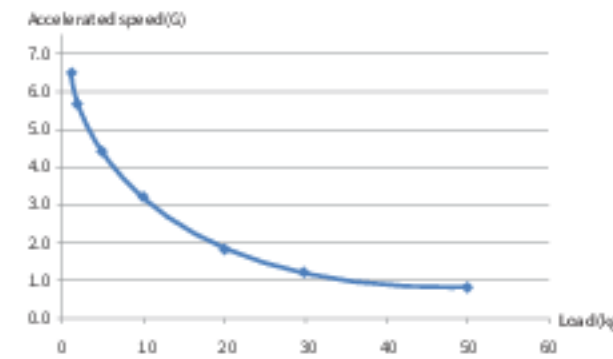
Remarks(1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 37.7mm, longer length can be customized.

## PERFORMANCE PARAMETERS

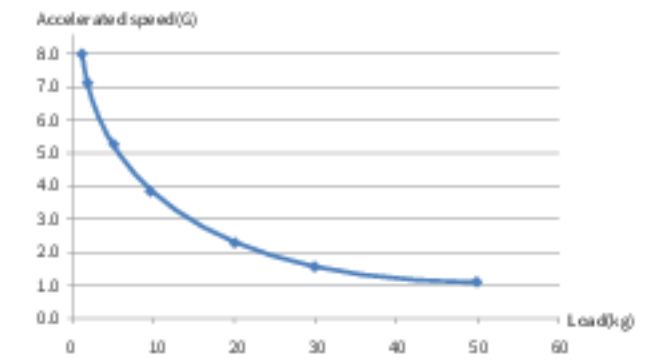
	SDL140-MTF3-S2-90-A	SDL140-MTF3-S2-90-B
Continue Force/Peak Force	248N/886N	330N/1018N
Continue current/Peak Current	6A/24A	8A/32A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 15 double linear guide	
Moving weight	7.0kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL140-MTF3-S2-90-A	SDL140-MTF3-S2-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
1	6.5	8.0
2	5.8	7.1
5	4.4	5.3
10	3.1	3.8
20	1.9	2.4
30	1.4	1.7
50	0.9	1.1



SDL140-MTF3-S2-90-A@2m/s



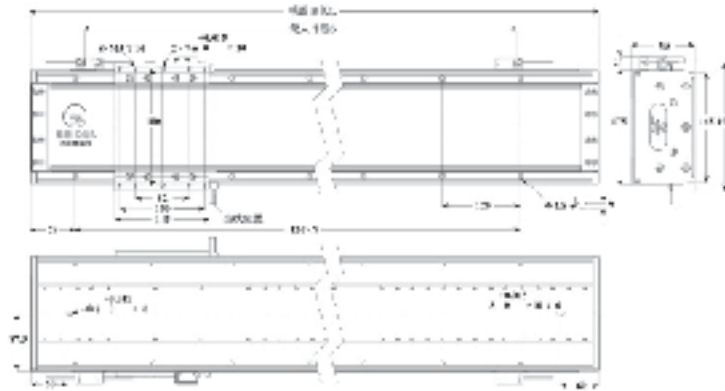
SDL140-MTF3-S2-90-B@2m/s

## Accessory information

Adapter driver				
SDL140-MTF3-S2-90-A		SDL140-MTF3-S2-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-100B-RJ001 (CClink 光纤)	无	MR-J4-200B-RJ001 (CClink 光纤)
Panasonic(P)	MDDL55SL	MDDL55BL (EtherCAT)	MDDL55SL	MDDL55BL (EtherCAT)
Servotronics(S)	CDHD-0062AAP1	CDHD-0062AEC2 (EtherCAT)	CDHD-0082AAP1	CDHD-0082AEC2 (EtherCAT)

Adapter cable		
	SDL140-MTF3-S2-90-A	SDL140-MTF3-S2-90-B
Power cable	PL-6A-9W4-xx-xx	PL-9A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL175-MTF3-S1-90-A(B)



## Mechanical parameter

Stroke S (mm)	S=105+72×k	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	L=S+205	310	670	1030	1390	1750	2110	2470	2830	3190	3550
Module Weight M (kg)	M=8.6+0.73×k	8.6	12.3	15.9	19.6	23.2	26.9	30.5	34.2	37.8	41.5

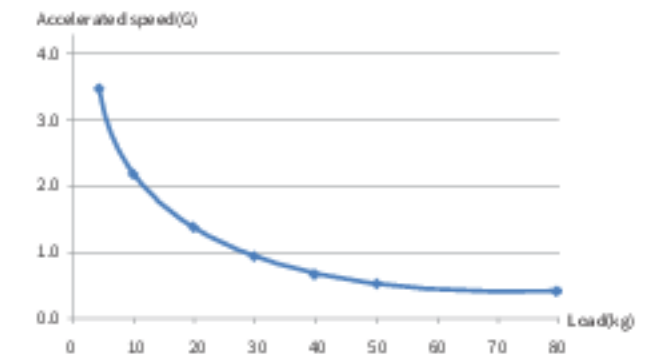
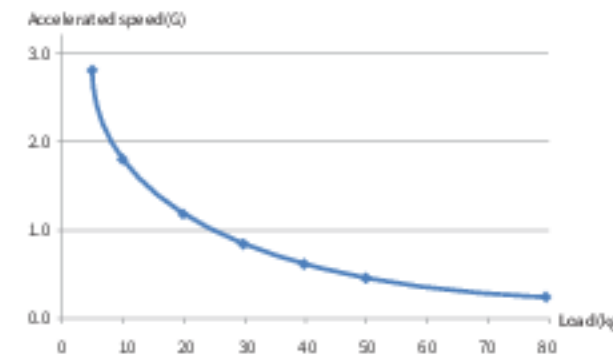
Remarks (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 392mm, longer length can be customized.

## PERFORMANCE PARAMETERS

	SDL175-MTF3-S1-90-A	SDL175-MTF3-S1-90-B
Continue Force/Peak Force	124N/443N	165N/509N
Continue current/Peak Current	3A/12A	4A/16A
Accuracy(Grating)	Repeatability ±1.5 μm, absolute accuracy (after compensation) ±3.0 μm/500mm	
Accuracy(Magnetic grid)	Repeatability ±3.0 μm, absolute accuracy (after compensation) ±6.0 μm/500mm	
Straightness	±7.5 μm/300mm (Installed on the marble with 5μm flatness)	
Flatness(μm)	±7.5 μm/300mm (Installed on the marble with 5μm flatness)	
Linear guide	Model 15 double linear guide	
Moving weight	4.7kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL175-MTF3-S1-90-A	SDL175-MTF3-S1-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
5	2.9	3.5
10	1.9	2.3
20	1.1	1.3
30	0.8	0.9
40	0.6	0.7
50	0.5	0.6
80	0.3	0.4

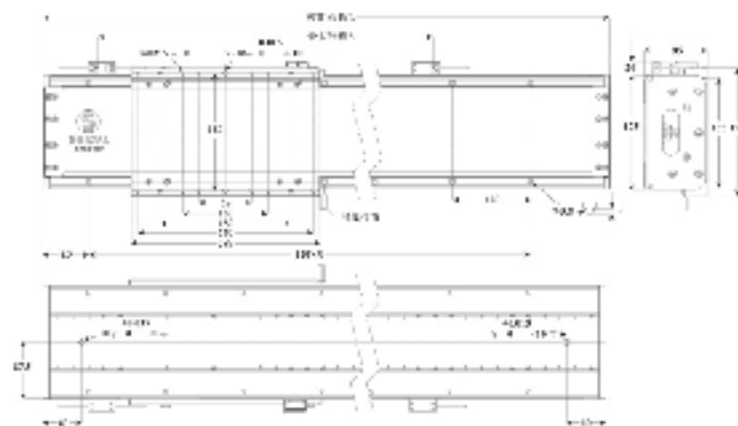


## Accessory information

Adapter driver				
SDL175-MTF3-S1-90-A		SDL175-MTF3-S1-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-60B-RJ001 (CClink optical fiber)	None	MR-J4-70B-RJ001 (CClink optical fiber)
Panasonic(P)	MCDLN35SL	MCDLN35BL (EtherCAT)	MCDLN35SL	MCDLN35BL (EtherCAT)
Servotronics(S)	CDHD-0032AAP1	CDHD-0032AEC2 (EtherCAT)	CDHD-4D52AAP1	CDHD-4D52AEC2 (EtherCAT)

Adapter cable		
	SDL175-MTF3-S1-90-A	SDL175-MTF3-S1-90-B
Power cable	PL-3A-9W4-xx-xx	PL-4.5A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL175-MTF3-S2-90-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+349$	454	814	1174	1534	1894	2254	2614	2974	3334	3694
Module weight M (kg)	$M=13.7+0.73 \times k$	13.7	17.4	21.0	24.7	28.3	32.0	35.6	39.3	42.9	46.6

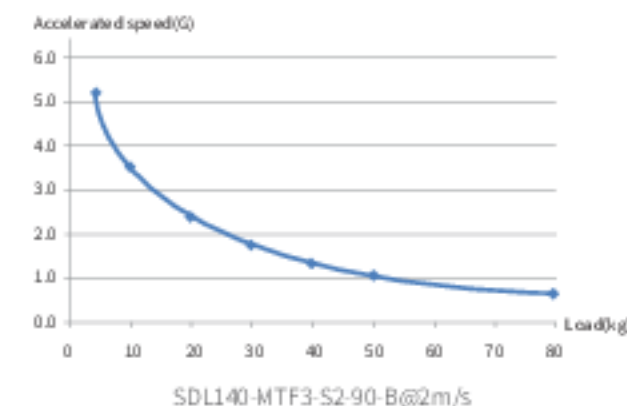
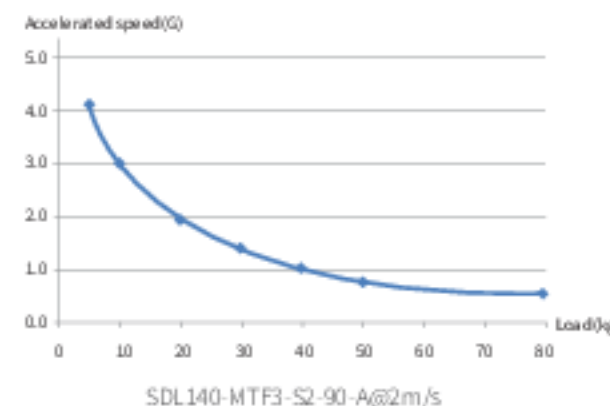
Remarks (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3.. (2) Single effective stroke is 3777mm, longer length can be customized.

## PERFORMANCE PARAMETER

	SDL175-MTF3-S2-90-A	SDL175-MTF3-S2-90-B
Continue Force/Peak Force	248N/886N	330N/1018N
Continue current/Peak Current	6A/24A	8A/32A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 15 double linear guide	
Moving weight	8.3kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL175-MTF3-S2-90-A	SDL175-MTF3-S2-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
5	4.1	5.1
10	3.0	3.6
20	1.9	2.3
30	1.4	1.7
40	1.1	1.3
50	0.9	1.1
80	0.6	0.7

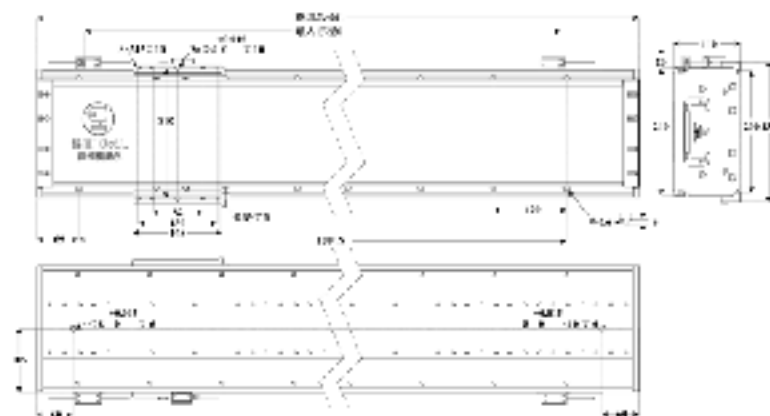


## Accessory information

Adapter driver				
SDL175-MTF3-S2-90-A		SDL175-MTF3-S2-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi (M)	None	MR-J4-100B-RJ001 (CClink optical fiber)	None	MR-J4-200B-RJ001 (CClink optical fiber)
Panasonic (P)	MDDL N55SL	MDDL N55BL (EtherCAT)	MDDL N55SL	MDDL N55BL (EtherCAT)
Servotronics (S)	CDHD-0062AAP1	CDHD-0062AEC2 (EtherCAT)	CDHD-0082AAP1	CDHD-0082AEC2 (EtherCAT)

Adapter cable		
	SDL175-MTF3-S2-90-A	SDL175-MTF3-S2-90-B
Power cable	PL-6A-9W4-xx-xx	PL-9A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL210-MTF3-S1-90-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+205$	310	670	1030	1390	1750	2110	2470	2830	3190	3550
Module weight M(kg)	$M=14.1+1.68 \times k$	14.1	22.5	30.9	39.3	47.7	56.1	64.5	72.9	81.3	89.7

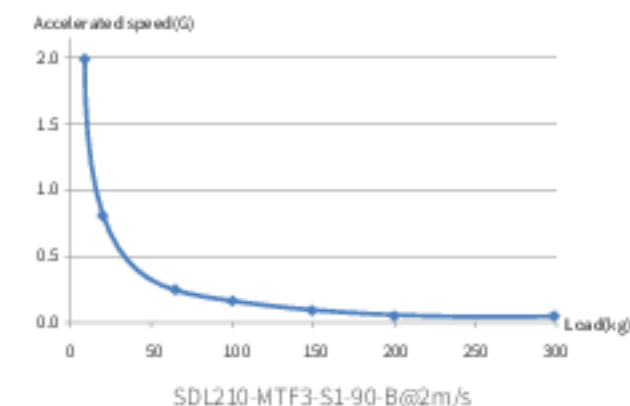
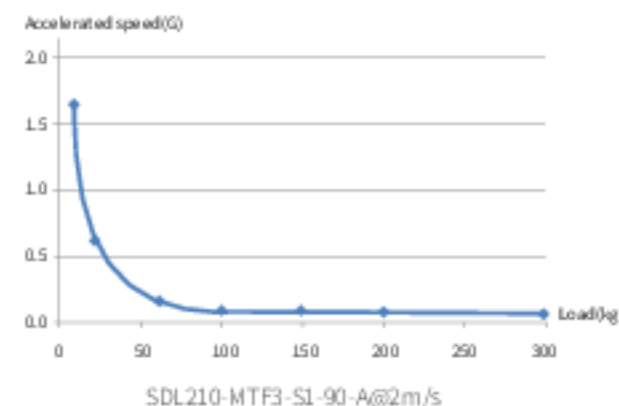
Remarks (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 3921mm, longer length can be customized.

## PERFORMANCE PARAMETERS

	SDL210-MTF3-S1-90-A	SDL210-MTF3-S1-90-B
Continue Force/Peak Force	124N/443N	165N/509N
Continue current/Peak Current	3A/12A	4A/16A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 25 double linear guide	
Moving weight	6.1kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL210-MTF3-S1-90-A	SDL210-MTF3-S1-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
10	1.6	2.0
40	0.6	0.7
70	0.3	0.4
100	0.2	0.3
150	0.2	0.2
200	0.1	0.2
300	0.1	0.1

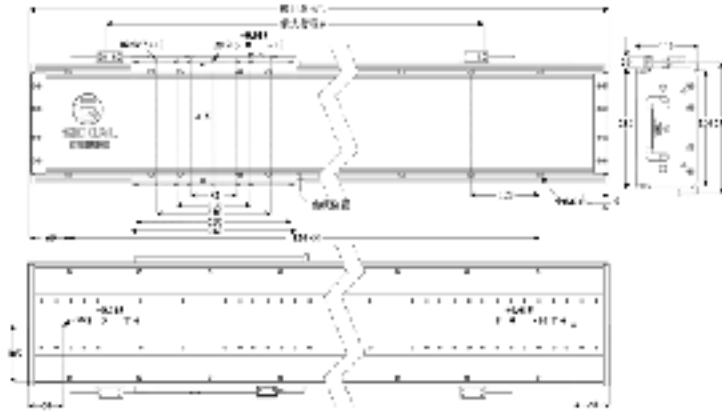


## Accessory information

Adapter driver				
SDL210-MTF3-S1-90-A		SDL210-MTF3-S1-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-60B-RJ001 (CClink optical fiber)	None	MR-J4-70B-RJ001 (CClink optical fiber)
Panasonic(P)	MCDLN35SL	MCDLN35BL (EtherCAT)	MCDLN35SL	MCDLN35BL (EtherCAT)
Servotronics(S)	CDHD-0032AAP1	CDHD-0032AEC2 (EtherCAT)	CDHD-4D52AAP1	CDHD-4D52AEC2 (EtherCAT)

Adapter cable		
	SDL210-MTF3-S1-90-A	SDL210-MTF3-S1-90-B
Power cable	PL-3A-9W4-xx-xx	PL-4.5A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL210-MTF3-S2-90-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+349$	454	814	1174	1534	1894	2254	2614	2974	3334	3694
Module weight M(kg)	$M=23.0+1.68 \times k$	23.0	31.4	39.8	48.2	56.6	65.0	73.4	81.8	90.2	98.6

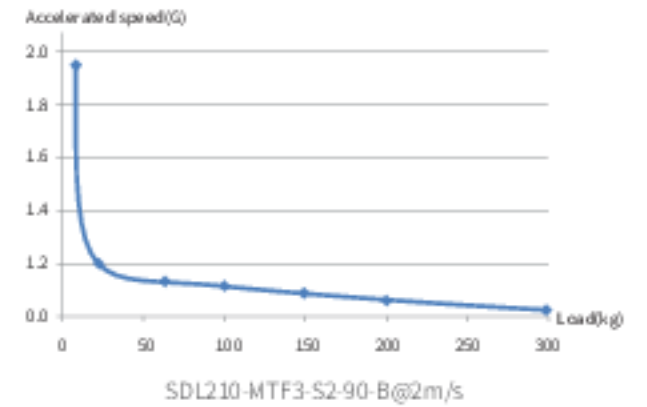
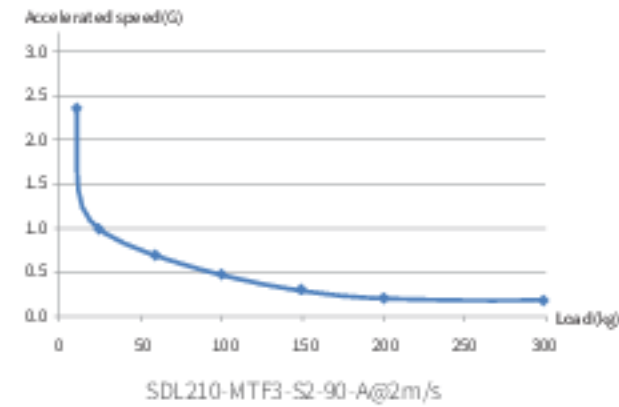
Remarks(1)Effective stroke progressive increase by 72mm, k is an integer, 1,2,3..(2)Single effective stroke is 3777mm, longer length can be customized.

## PERFORMANCE PARAMETERS

	SDL210-MTF3-S2-90-A	SDL210-MTF3-S2-90-B
Continue Force/Peak Force	248N/886N	330N/1018N
Continue current/Peak Current	6A/24A	8A/32A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide	Model 25 double linear guide	
Moving weight	11.7kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL210-MTF3-S2-90-A	SDL210-MTF3-S2-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
10	2.4	2.9
40	1.0	1.2
70	0.6	0.8
100	0.5	0.6
150	0.3	0.4
200	0.2	0.3
300	0.2	0.2

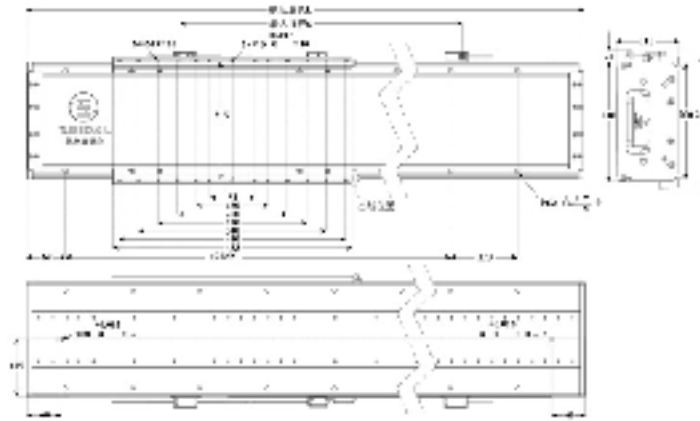


## Accessory information

Adapter driver				
SDL210-MTF3-S2-90-A		SDL210-MTF3-S2-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-100B-RJ001 (CClink optical fiber)	None	MR-J4-200B-RJ001 (CClink optical fiber)
Panasonic(P)	MDDL N55SL	MDDL N55BL (EtherCAT)	MDDL N55SL	MDDL N55BL (EtherCAT)
Servotronics(S)	CDHD-0062AAP1	CDHD-0062AEC2 (EtherCAT)	CDHD-0082AAP1	CDHD-0082AEC2 (EtherCAT)

Adapter cable		
	SDL210-MTF3-S2-90-A	SDL210-MTF3-S2-90-B
Power cable	PL-6A-9W4-xx-xx	PL-9A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx

# SDL210-MTF3-S3-90-A(B)



## Mechanical parameter

Stroke S (mm)	$S=105+72 \times k$	105	465	825	1185	1545	1905	2265	2625	2985	3345
Module length L (mm)	$L=S+493$	598	958	1318	1678	2038	2398	2758	3118	3478	3838
Module weight M (kg)	$M=30.8+1.68 \times k$	30.8	39.2	47.6	56.0	64.6	72.8	81.2	89.6	98.0	106.4

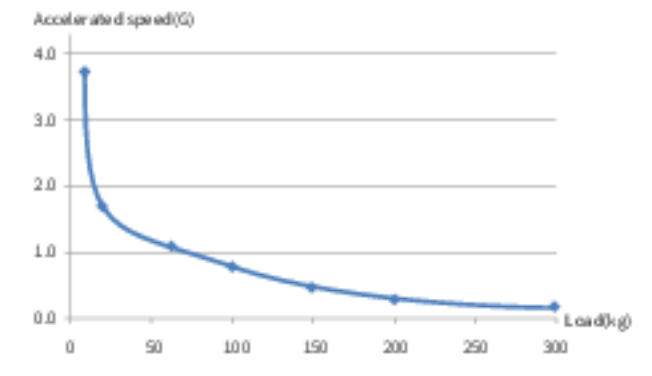
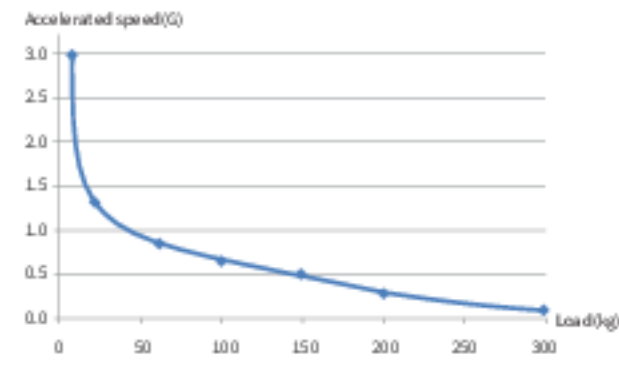
Remarks (1) Effective stroke progressive increase by 72mm, k is an integer, 1,2,3... (2) Single effective stroke is 3633mm, longer length can be customized.

## PERFORMANCE PARAMETERS

	SDL210-MTF3-S3-90-A	SDL210-MTF3-S3-90-B
Continue Force/Peak Force	372N/1329N	495N/1527N
Continue current/Peak Current	9A/36A	12A/48A
Accuracy(Grating)	Repeatability $\pm 1.5 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 3.0 \mu\text{m}/500\text{mm}$	
Accuracy(Magnetic grid)	Repeatability $\pm 3.0 \mu\text{m}$ , absolute accuracy (after compensation) $\pm 6.0 \mu\text{m}/500\text{mm}$	
Straightness	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Flatness( $\mu\text{m}$ )	$\pm 7.5 \mu\text{m}/300\text{mm}$ (Installed on the marble with 5um flatness)	
Linear guide)	Model 25 double linear guide	
Moving weight	16.1kg	
Maximum Speed	3m/s	

## TYPICAL APPLICATIONS

	SDL210-MTF3-S3-90-A	SDL210-MTF3-S3-90-B
Loading (kg)	Accelerated speed (G)	Accelerated speed (G)
10	3.0	3.7
40	1.4	1.7
70	0.9	1.1
100	0.7	0.8
150	0.5	0.6
200	0.4	0.4
300	0.2	0.3



## Accessory information

Adapter driver				
SDL210-MTF3-S3-90-A		SDL210-MTF3-S3-90-B		
Brand	Model (Pulse type)	Model (Bus type)	Model (Pulse type)	Model (Bus type)
Mitsubishi(M)	None	MR-J4-200B-RJ001 (CClink optical fiber)	None	MR-J4-200B-RJ001 (CClink optical fiber)
Panasonic(P)	MDDLN55SL	MDDLN55BL (EtherCAT)	MEDLN83SL	MEDLN83BL (EtherCAT)
Servotronics(S)	SDHD-0102AAP1	CDHD-0102AEC2 (EtherCAT)	CDHD-0124DAP1	CDHD-0124DEC2 (EtherCAT)

Adapter cable		
	SDL210-MTF3-S3-90-A	SDL210-MTF3-S3-90-B
Power cable	PL-9A-9W4-xx-xx	PL-12A-9W4-xx-xx
Encoder cable	EL-xx-xx-xx-xx	EL-xx-xx-xx-xx