

Linear motor Stage

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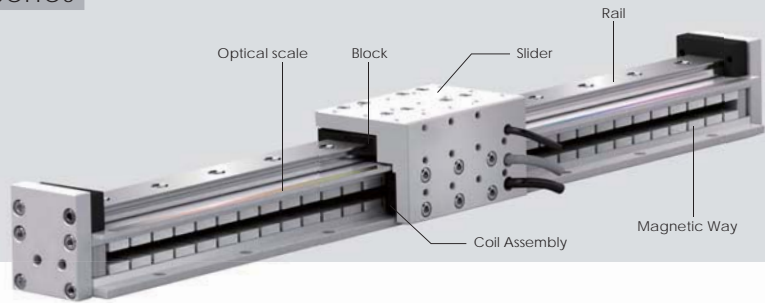
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## CLS-series

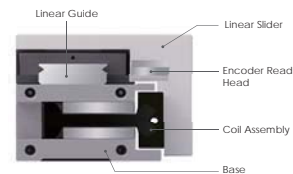


Compared to traditional ball screw modules, the drive coupled CLS series provides superior precision and velocity under many thrust output conditions. The highly integrated model design also enables a much increased productivity and reliability as compared to the accuracy and speed limitations of traditional ball screw systems.

## Features

### 1 High rigidity · Compact Structure

CLS integrates the base with the stator to utilize a wide-type linear guide to move its aluminum slider, sporting also an additional optical scale for enhanced position feedback. The module achieves both a high degree of compactness and rigidity, providing our customers with an optimal choice to satisfy their varying thrust requirements.



### 2 Lightweight · High velocity and Acceleration

The linear motor used in this product is of the ironless type, which combined with its aluminum slider, enables a lightening of motion loads. This enables a high velocity, acceleration and deceleration rate.



### 3 Smooth motion

The unique no clogging force feature of the ironless linear motor enables it to achieve a high stability and low velocity ripple motion, even under very slow motions.

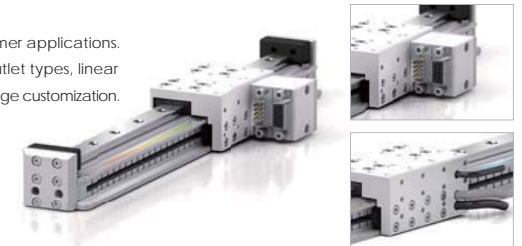
### 4 Multiple slider on same axis

CLS can contain multiple sliders on the same axis, each individually controllable.



### 5 Customization

CLS modules can be customized for specific customer applications. Options include: Mounting hole positions, cable outlet types, linear guide models, weight reduction and specific travel range customization.



## Accuracy

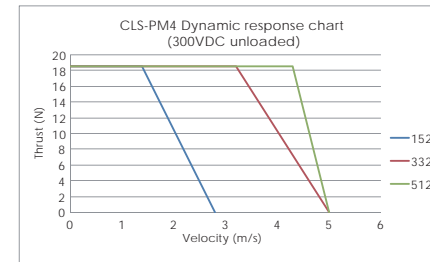
Model	Total length(mm)	Repeatability(μm) <sup>*1,2</sup>	
		Optical scale	Straightness(μm) <sup>*2</sup>
CLS-PM-4/6	152	2	6
	332		8
	512		10
CLS-PA-X2/4	220	2	6
	340		8
	520		10
	820		20
	1000		20
	1480		25
CLS-PB-X2/4/6	230	2	6
	530		10
	830		20
	1010		20
	1250		25
	1490		30

\*1. This is the standard value of the aluminum base when fixed upon a 0.01/300mm platform. We can reach higher specifications by changing the method and material based on the customer's actual requirements.

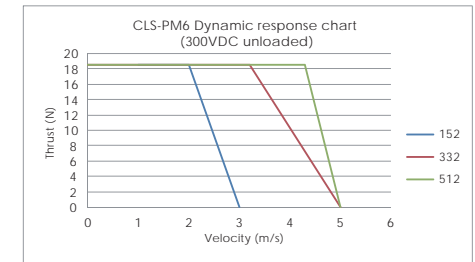
\*2. This value is achieved from the 1 μm encoder head. System accuracy can be increased further according to customer requirements to 0.5μm, 0.2, and 0.1μm resolutions.



## Dynamic Characteristics



The chart is made with maximum velocity set to 5m/s. For higher velocities or special requirements, please contact **cpc**

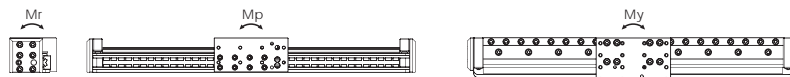


The chart is made with maximum velocity set to 5m/s. For higher velocities or special requirements, please contact **cpc**

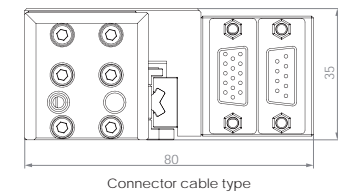
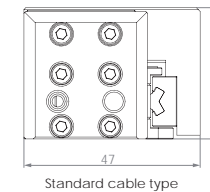
## CLS-PM Module Parameters

CLS	PM-4	PM-6				
<b>Motor parameters</b>						
Continuous force (N)	18.5	25.5				
Peak force (N)	74	102.5				
Continuous current (A <sub>peak</sub> )	5	4.6				
Peak current (A <sub>peak</sub> )	20	18.4				
Force constant (N/A <sub>peak</sub> )	3.7	5.5				
Back EMF constant (V-L/m/s)	4.3	6.5				
Resistance (Ohms)	1.2	1.7				
Inductance (mH)	0.04	0.07				
Magnetic pole pitch (mm)	15	15				
<b>Stage parameters</b>						
Total length (mm)	152	332	512			
Effective travel (mm)	45	225	405	15	195	375
Slider mass (kg) <sup>(1)</sup>	0.25	0.35				
Module weight(kg) <sup>(1)</sup>	0.7	1.4	2.1	0.9	1.5	2.2
<b>Linear Guide Rated Load and Static Moment</b>						
Model code	MR7WN	MR7WL				
Block quantity	2	2				
Load capacity (KN)	C (dyn)	2.4	3.1			
	Co (stat)	4.2	6.3			
Static moment (Nm)	Mro(Nm)	30	45.3			
	Mpo(Nm)	40.7	97.2			
	Myo(Nm)	40.7	97.2			

(1) Moving Load refers to mass before the addition of the payload mass. This includes the slider platform, motor forcer, linear guide, cabling, optical encoder read head and so forth. For the Connector type termination option, this adds 0.12 kg to the product weight.

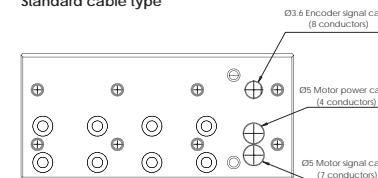


## Assembly Dimensions



## Wiring Definition

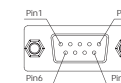
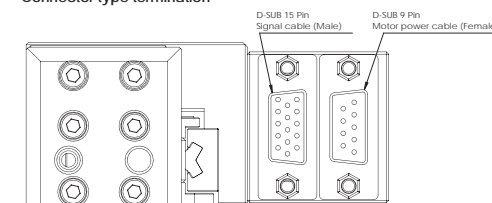
### Standard cable type



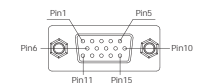
### OUTPUT CABLE

Motor Wire Table		Hall Sensor Wire Table and Thermal Protection Wire Table				Encoder Signal connections	
Color	Function	Color	Function	Color	Function	Color	Function
White	phase U	Pink	Hall A U phase	Brown		Black	GND
Yellow	phase V	Yellow	Hall B V phase	Blue	Thermal sensor	Brown	Index-
Brown	phase W	Green	Hall C W phase			Blue	B-
Green	PE	Grey	Hall IC + 5V			Yellow	A-
		White	GND			Red	5V
						Orange	Index+
						Purple	B+
						Green	A+

### Connector type termination

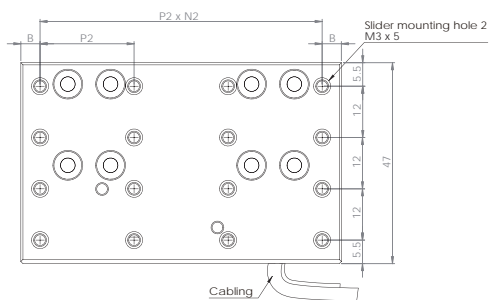
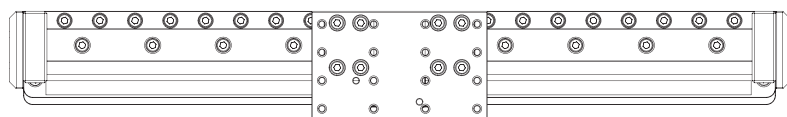
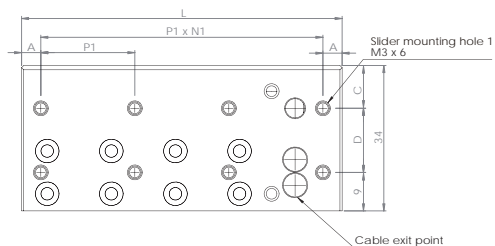
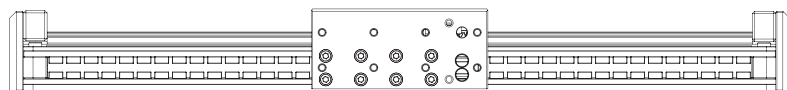


Pin No.	Function
1	
2	U
6	
3	
7	V
8	
4	W
5	
9	Hall A U phase
Frame	Isolation & GND



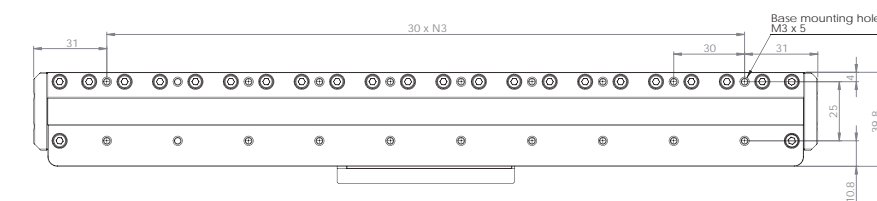
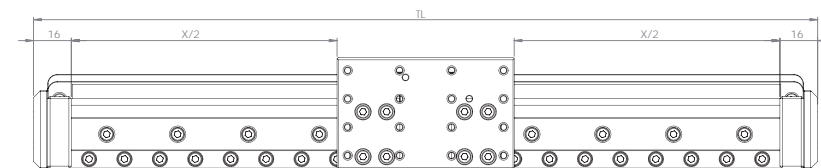
Pin No.	Function	Pin No.	Function
1	GND	11	Hall C W phase
2	Index-	12	Hall IC + 5V
3	B-	13	Hall GND
4	A-	14	Thermal sensor
5	5V	15	Thermal sensor
6	Index+	Frame	Isolation
7	B+		
8	A+		
9	Hall A U phase		
10	Hall B V phase		

## Slider Dimension



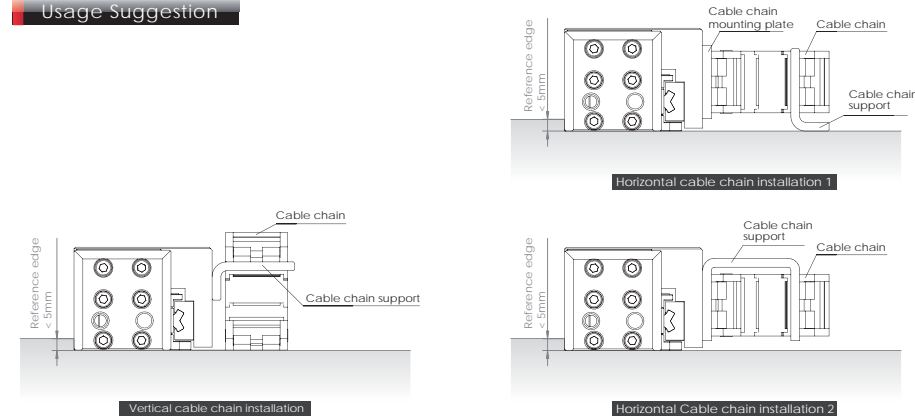
Motor Model	Slider Length (L)	A	P1	N1	B	P2	N2	C	D	Unit: mm
PM4	75	4.5	22	3	4.5	22	3	10	15	
PM6	105	7.5	30	3	7.5	30	3	8	17	

## Mounting Dimension



Unit: mm			
Motor Model	Total Length (TL)	Effective Travel (X)	N3
PM4	152	45	3
	332	225	9
	512	405	15
PM6	152	15	3
	332	195	9
	512	375	15

## Usage Suggestion





CLS - PAX series

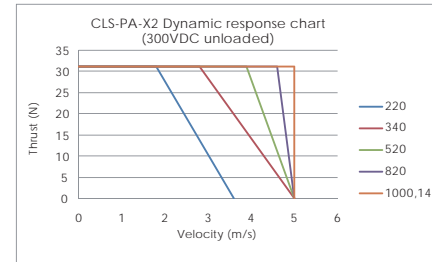
## CLS-PAX Module Parameters

CLS	PA-X2					PA-X4								
<b>Motor parameters</b>														
Continuous force (N)	31					55								
Peak force (N)	123.8					220.2								
Continuous current (A <sub>peak</sub> )	3.6					3.2								
Peak current (A <sub>peak</sub> )	14.4					12.8								
Force constant (N/A <sub>peak</sub> )	8.6					17.2								
Back EMF constant (V-L/m/s)	10					20								
Resistance (Ohms)	4.3					8.5								
Inductance (mH)	0.83					1.65								
Magnetic pole pitch (mm)	30					30								
<b>Stage parameters</b>														
Total length (mm)	220	340	520	820	1000	1480	220	340	520	820	1000	1480		
Effective travel (mm)	90	210	390	690	870	1350	30	150	330	630	810	1290		
Slider mass (kg) <sup>(1)</sup>	0.5					0.8								
Module weight(kg) <sup>(1)</sup>	2.1	2.9	3.9	5.7	7.5	16.2	2.4	3.2	4.2	6	7.8	16.5		
<b>Linear Guide Rated Load and Static Moment</b>														
Model code	MR12WN					MR12WL								
Block quantity	2					2								
Load capacity (kN)	C (dyn)					8.1								
	Co (stat)					15.6								
Static moment (Nm)	Mro(Nm)					191								
	Mpo(Nm)					341								
					Myo(Nm)					341				

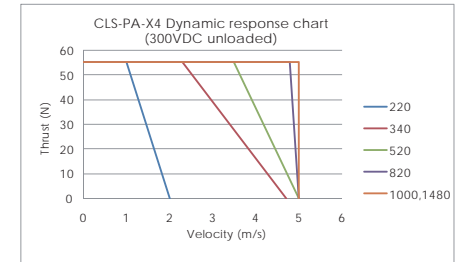
(1) Moving Load refers to mass before addition of payload mass. This includes the slider platform, motor forcer, linear guide, cabling, optical encoder read head etc. For the Connector type termination option, this adds a further 0.12 kg to the product weight.



## Dynamic Characteristics

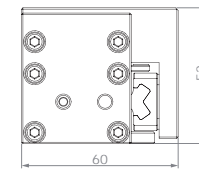


The chart is made with maximum velocity set to 5m/s. For higher velocity or special requirements, please contact **cpc**

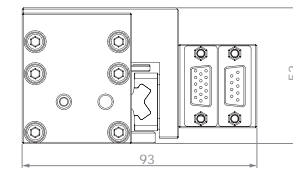


The chart is made with maximum velocity set to 5m/s. For higher velocity or special requirements, please contact **cpc**

## Assembly Dimensions

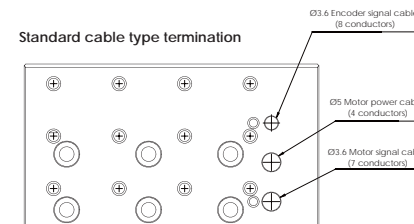


Standard cable type



Connector type

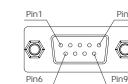
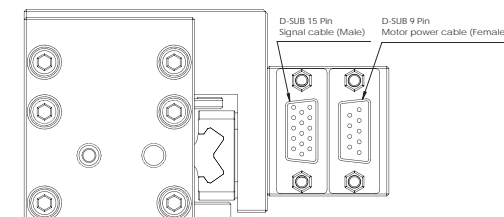
## Wiring Definition



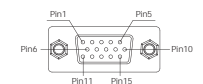
Standard cable type termination

Motor Wire Table		Hall Sensor Wire Table and Thermal Protection Wire Table				Encoder Signal connections	
Color	Function	Color	Function	Color	Function	Color	Function
White	phase U	Pink	Hall A U phase	Brown	Thermal sensor	Black	GND
Yellow	phase V	Yellow	Hall B V phase	Blue		Blue	Index-
Brown	phase W	Green	Hall C W phase			Red	5V
Green	PE	Grey	Hall IC + 5V			Orange	Index+
		White	GND			Purple	B+
						Green	A+

## Connector type termination

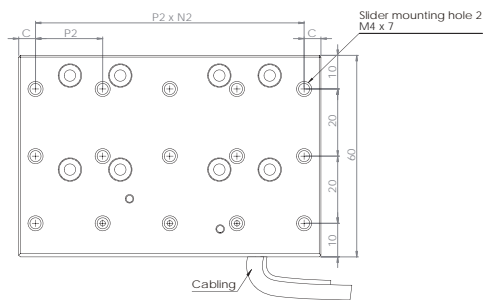
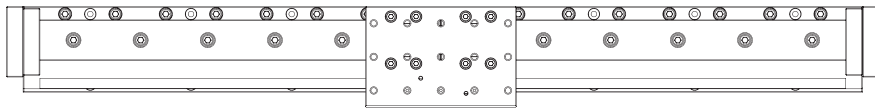
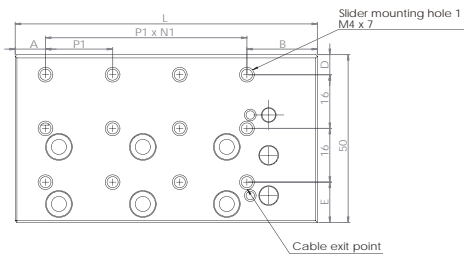
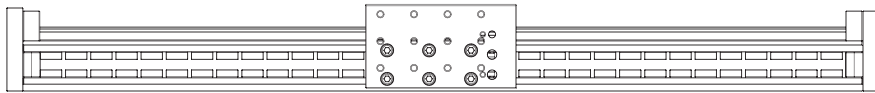


Pin No.	Function
1	
2	U
6	
3	
4	
7	V
8	
4	
5	W
Frame	Isolation & GND



Pin No.	Function	Pin No.	Function
1	GND	11	Hall C W phase
2	Index-	12	Hall IC + 5V
3	B-	13	Hall GND
4	A-	14	Thermal sensor
5	5V	15	Thermal sensor
6	Index+	Frame	Isolation
7	B+		
8	A+		
9	Hall A U phase		
10	Hall B V phase		

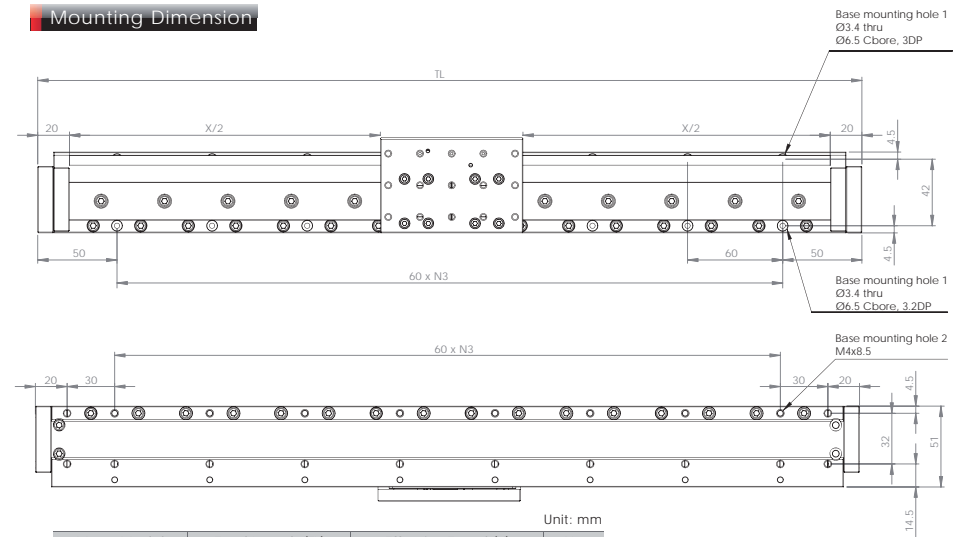
## Slider Dimension



Unit: mm

Motor Model	Slider Length (L)	A	B	P1	N1	C	P2	N2	D	E
PA-X2	90	9	21	20	3	5	20	4	6	12
PA-X4	150	9	21	35	3	5	35	4	6	12

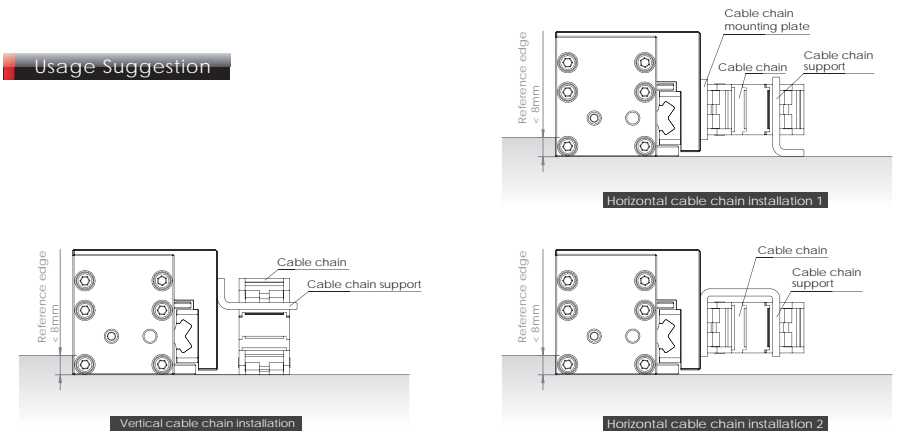
## Mounting Dimension



Unit: mm

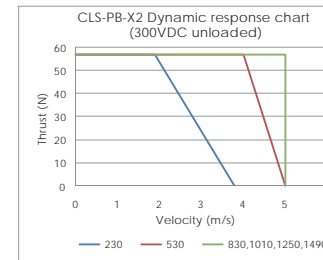
Motor Model	Total Length (TL)	Effective Travel (X)	N3
PA-X2	220	90	2
	340	210	4
	520	390	7
	820	690	12
	1000	870	15
PA-X4	1480	1350	23
	220	30	2
	340	150	4
	520	330	7
	820	630	12
	1000	810	15
	1480	1290	23

## Usage Suggestion

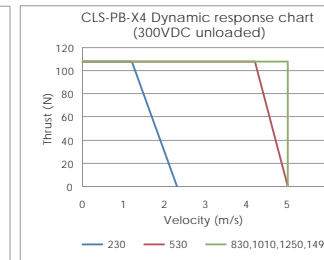




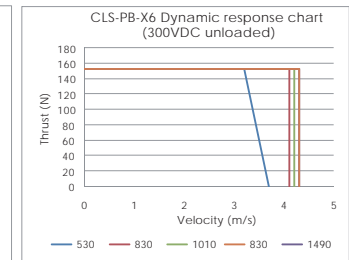
### Dynamic Characteristics



The chart is made with maximum velocity set to 5m/s. For higher velocity or special requirements, contact **cpc**



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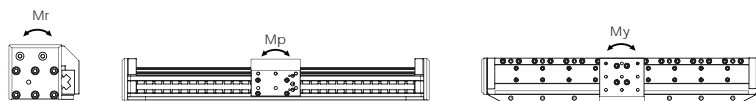


The chart is made with maximum velocity set to 5m/s. For higher velocity or special requirements, contact **cpc**

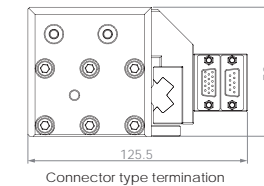
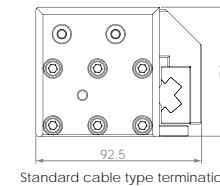
### CLS-PBX Module Parameters

CLS	PB-X2						PB-X4						PB-X6					
<b>Motor parameters</b>																		
Continuous force (N)	56.8						107.8						153.3					
Peak force (N)	227						431.4						613					
Continuous current (A <sub>peak</sub> )	4						3.8						3.6					
Peak current (A <sub>peak</sub> )	16						15.2						14.4					
Force constant (N/A <sub>peak</sub> )	14.2						28.4						42.6					
Back EMF constant (V-L/m/s)	16.5						33						49.5					
Resistance (Ohms)	4.1						8.3						12.4					
Inductance (mH)	1.44						2.87						4.31					
Magnetic pole pitch (mm)	30						30						30					
<b>Stage parameters</b>																		
Total length (mm)	230	530	830	1010	1250	1490	230	530	830	1010	1250	1490	530	830	1010	1250	1490	
Effective travel (mm)	95	395	695	875	1115	1355	35	335	635	815	1055	1295	275	575	755	995	1235	
Slider mass (kg) <sup>(1)</sup>	0.7						1						1.3					
Module weight(kg) <sup>(1)</sup>	3.7	8.5	13.3	16.2	20	23.9	4	8.8	13.6	16.5	20.3	24.2	9.4	14.2	17.1	20.9	24.8	
<b>Linear Guide Rated Load and Static Moment</b>																		
Model code	WRC21/15MN						WRC21/15MN						WRC21/15MN					
Block quantity	1						2						2					
Load capacity (kN)	C (dyn)						19.8						19.8					
	Co (stat)						35.5						35.5					
Static moment (Nm)	Mro(Nm)						315						630					
	Mpo(Nm)						105						670					
Myo(Nm)						105						670						

(1) Moving Load refers to mass before addition of payload mass. This includes the slider platform, motor forcer, linear guide, cabling, optical encoder read head etc. For the Connector type termination option, this adds 0.12 kg to the product weight.

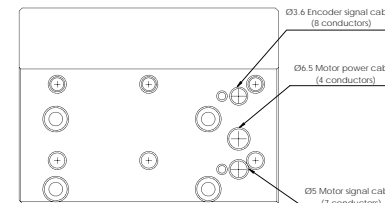


### Assembly Dimensions



### Wiring Definition

#### Standard cable type

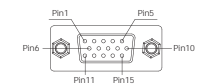
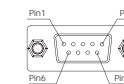
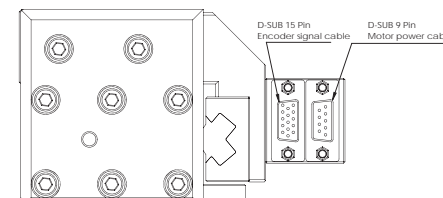


#### OUTPUT CABLE

Motor Wire Table		Hall Sensor Wire Table and Thermal Protection Wire Table			
Color	Function	Color	Function	Color	Function
White	phase U	Pink	Hall A U phase	Brown	Thermal sensor
Yellow	phase V	Yellow	Hall B V phase	Blue	
Brown	phase W	Green	Hall C W phase		
Green	PE	Grey	Hall IC + 5V		
		White	GND		

Encoder Signal connections	
Color	Function
Black	GND
Brown	Index-
Blue	B-
Yellow	A-
Red	5V
Orange	Index+
Purple	B+
Green	A+

#### Connector type



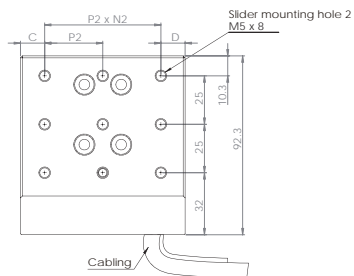
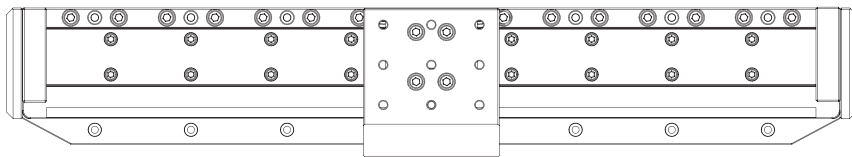
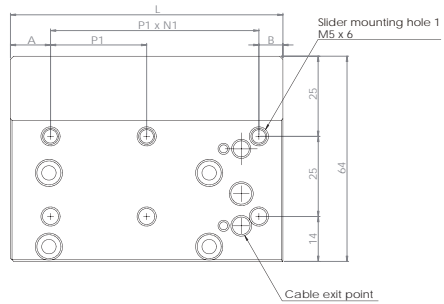
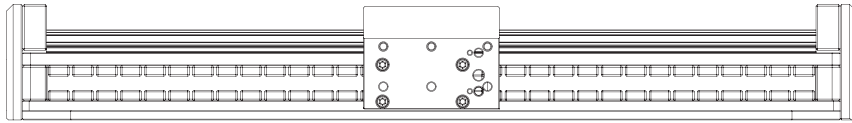
Pin No.	Function
1	
2	U
6	
3	
7	V
8	
4	
5	W
Frame	Isolation & GND

Pin No.	Function
1	GND
2	Index-
3	B-
4	A-
5	5V
6	Index+
7	B+
8	A+
9	Hall A U phase
10	Hall B V phase

Pin No.	Function
11	Hall C W phase
12	Hall IC + 5V
13	Hall GND
14	Thermal sensor
15	Thermal sensor
Frame	Isolation

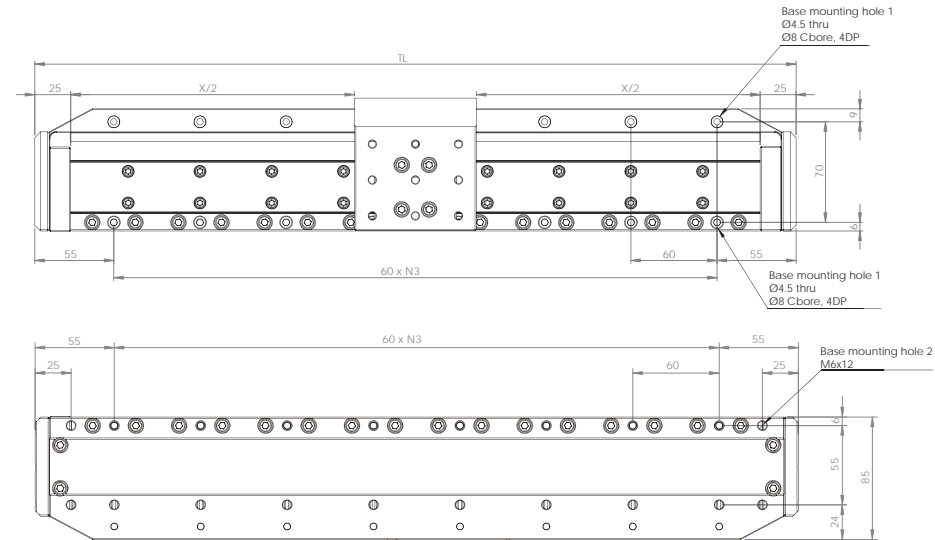


## Slider Dimension



Motor Model	Slider Length (L)	A	B	P1	N1	C	D	P2	N2
PB-X2	85	7.5	7.5	35	2	12.5	12.5	30	3
PB-X4	145	5	5	45	3	12.5	12.5	40	3
PB-X6	205	13	32	40	4	13	32	40	4

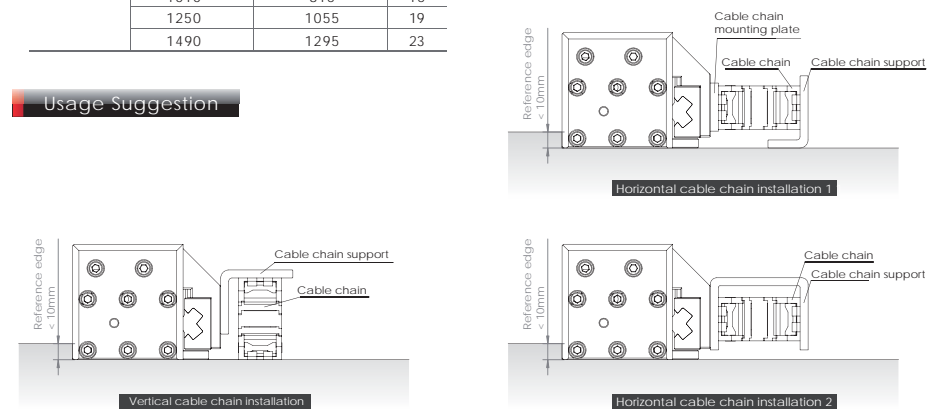
## Mounting Dimension

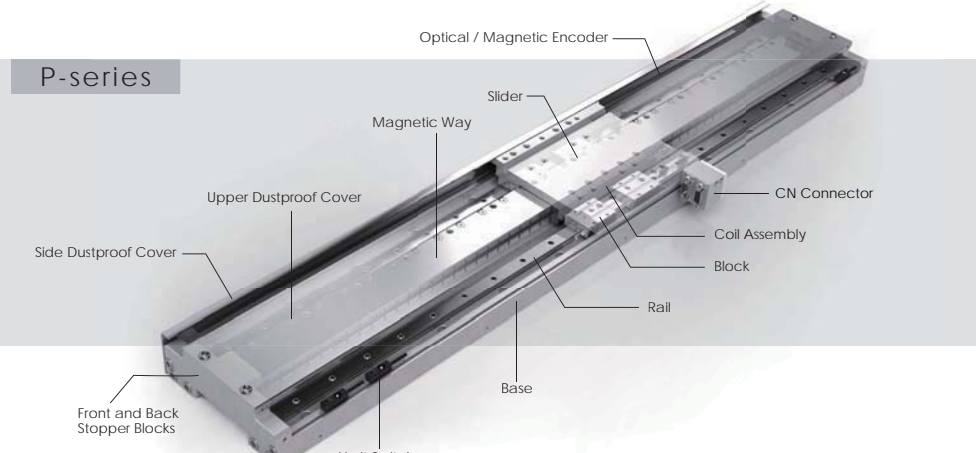
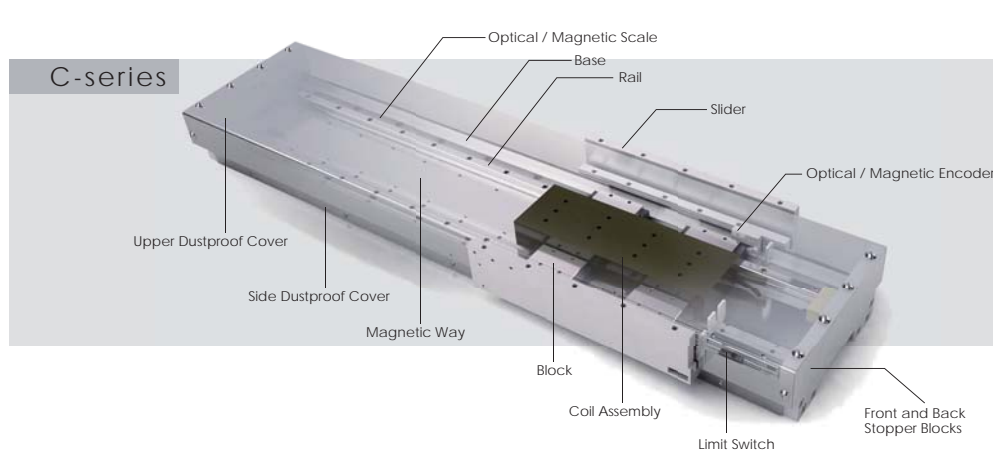


Motor Model	Unit: mm		
	Total Length (TL)	Effective Travel (X)	N3
PB-X2	230	95	2
	530	395	7
	830	695	12
	1010	875	15
	1250	1115	19
PB-X4	1490	1355	23
	230	35	3
	530	335	7
	830	635	12
	1010	815	15
PB-X6	1250	1055	19
	1490	1295	23

Motor Model	Unit: mm		
	Total Length (TL)	Effective Travel (X)	N3
PB-X6	530	275	7
	830	575	12
	1010	755	15
	1250	995	19
	1490	1235	23

## Usage Suggestion





Direct drive systems can significantly improve productivity, yield, and dynamic motion performance. The cpc CLMS model utilizes a high precision positioning platform that is composed of a high load linear guide, high efficiency linear motor, and a position feedback encoder. With its ease of use, this is an ideal replacement for belt and ball screw linear systems.

## Features

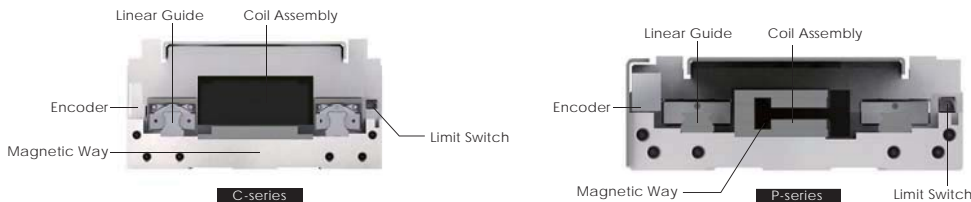
### 1 Exceptional dustproof design

CLMS comes with the special structural design to make the whole module dustproof. This ensures that under adverse working environments, the module will still perform well and that there will be no structural issues caused by below covers.



### 2 Exceptional compact design

CLMS has optimized its space allocation for the linear motor, linear guide, and optical (magnetic) encoder. This enables its size minimization advantage under identical thrust conditions.



### 3 High reliability

The CLMS encoder is installed horizontally, preventing external impact effects from affecting its module position and thereby retaining its high system precision.

### 4 High velocity and acceleration

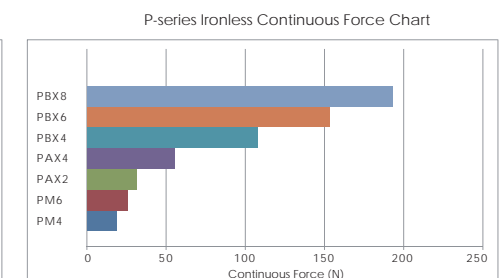
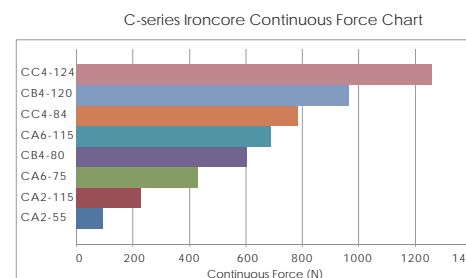
Under an AC 230V current, the CLMS model can reach a highest velocity of 6m/s and an acceleration of 60m/s<sup>2</sup>. We also have available a module with an effective travel length of above 2m.

### 5 Customization

The standard CLMS comes with a magnetic encoder for position feedback. To satisfy higher customer precision needs, optical encoders can be easily installed while retaining the same unit dimensions. We also offer a range of other customized designs such as our multi-slider, X-Y and gantry systems.



### 6 Continuous force



## Accuracy C-series

Model	Maximum effective travel(mm)	Repeatability( $\mu\text{m}$ )*1,2		Straightness(mm)*1
		Magnetic scale	Optical scale	
CLMS-CA2-55/115	190	3	2	0.03
	310			
	430			
	550			
	670			
	790			
	910			
	1030			
	1150			
	1270			
				0.04
CLMS-CA6-75/115	170	3	2	0.03
	290			
	410			
	530			
	650			
	770			
	890			
	1010			
	1130			
	1250			
				0.04
CLMS-CB4-80/120	200	3	2	0.03
	320			
	440			
	560			
	680			
	800			
	920			
	1040			
	1160			
	1280			
				0.04
CLMS-CC4-84/124	210	3	2	0.03
	320			
	430			
	540			
	650			
	760			
	870			
	980			
	1090			
	1200			
				0.04

## Accuracy P-series

Model	Maximum effective travel (mm)	Repeatability ( $\mu\text{m}$ )*1,2		Straightness (mm)*1	Model	Maximum effective travel (mm)	Repeatability ( $\mu\text{m}$ )*1,2		Straightness (mm)*1
		Magnetic scale	Optical scale				Magnetic scale	Optical scale	
CLMS-PM4	225	3	2	0.03	CLMS-PB-X4	125	3	2	0.03
						305			
						420			
						545			
						665			
	785								
	905								
	1025								
	1145								
	1265								
									0.04
CLMS-PM6	195	3	2	0.03	CLMS-PB-X6	245	3	2	0.03
						365			
						485			
						605			
						725			
	845								
	965								
	1085								
	1210								
	1325								
									0.04
CLMS-PA-X2	180	3	2	0.03	CLMS-PB-X8	185	3	2	0.03
	360								
	480								
	600								
	720								
	840								
	960								
	1080								
	1200								
	1320								
				0.04					0.04
CLMS-PA-X4	130	3	2	0.03					
	310								
	430								
	550								
	670								
	790								
	910								
	1030								
	1150								
	1270								
									0.04

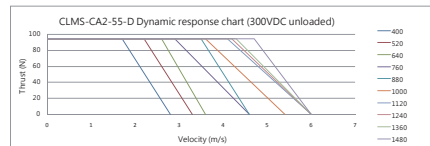
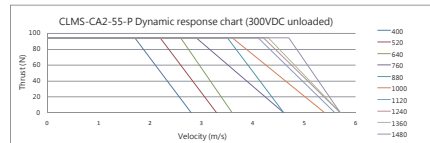
\*1. This is the standard value of the aluminum base fixed on a 0.01/300mm platform. We can reach higher specifications by changing the method and material to satisfy differing customer requirements.

\*2. This is the value derived from equipping the device with a 1 $\mu\text{m}$  encoder head. System accuracy can be increased further according to differing customer requirements to 0.5, 0.2 and 0.1 $\mu\text{m}$  resolutions.

## Module Parameters C-series

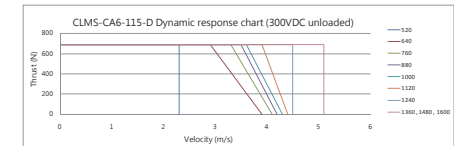
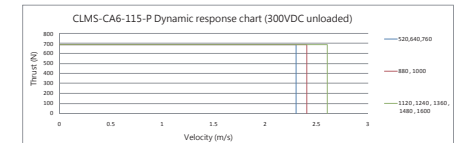
### CLMS-CA2-55

CLMS	CA2-55	
	P	D
Module Parameters		
Continuous force (N)	94.2	
Peak force (N)	242.1	
Continuous current (Apeak)	3.5	7
Peak current (Apeak)	15	28
Force constant (N/Apeak)	26.9	13.5
Back EMF constant (VL-L/m/s)	33.7	16.9
Resistance (Ohms)	5.4	14
Inductance (mH)	25	6.25
Magnetic pole pitch (mm)	20	
Standard slider mass (kg)	2.6	
Sealed slider mass (kg)	4	



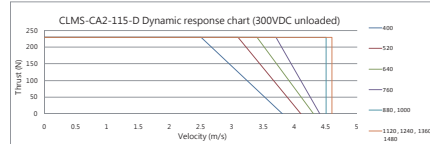
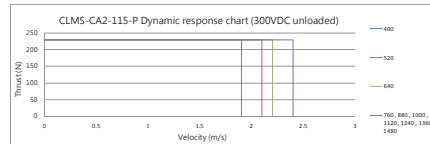
### CLMS-CA6-115

CLMS	CA6-115	
	P	D
Module Parameters		
Continuous force (N)	686.9	
Peak force (N)	1766.4	
Continuous current (Apeak)	10	20
Peak current (Apeak)	42.8	85.5
Force constant (N/Apeak)	68.9	34.4
Back EMF constant (VL-L/m/s)	86.3	43.1
Resistance (Ohms)	3.8	0.9
Inductance (mH)	17.4	4.4
Magnetic pole pitch (mm)	20	
Standard slider mass (kg)	8.1	
Sealed slider mass (kg)	10.4	



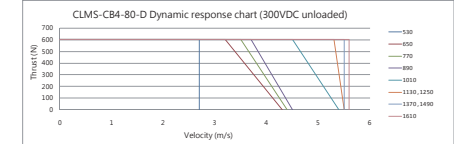
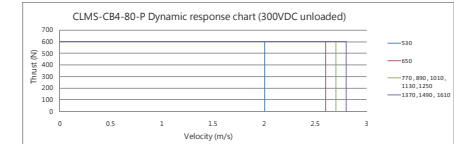
### CLMS-CA2-115

CLMS	CA2-115	
	P	D
Module Parameters		
Continuous force (N)	229	
Peak force (N)	588.8	
Continuous current (Apeak)	3.3	6.7
Peak current (Apeak)	14.3	27.5
Force constant (N/Apeak)	68.9	34.4
Back EMF constant (VL-L/m/s)	86.3	43.1
Resistance (Ohms)	11.3	2.8
Inductance (mH)	52.31	13.08
Magnetic pole pitch (mm)	20	
Standard slider mass (kg)	3.7	
Sealed slider mass (kg)	4.8	



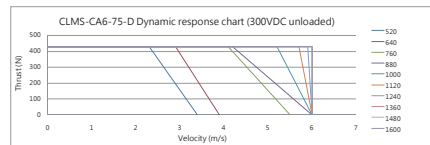
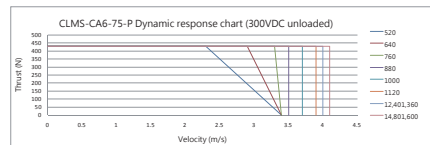
### CLMS-CB4-80

CLMS	CB4-80	
	P	D
Module Parameters		
Continuous force (N)	602.6	
Peak force (N)	1174.3	
Continuous current (Apeak)	8.4	16.8
Peak current (Apeak)	29.8	59.5
Force constant (N/Apeak)	71.7	35.9
Back EMF constant (VL-L/m/s)	79	39.5
Resistance (Ohms)	3.3	0.8
Inductance (mH)	34.38	8.59
Magnetic pole pitch (mm)	30	
Standard slider mass (kg)	8.8	
Sealed slider mass (kg)	10.6	



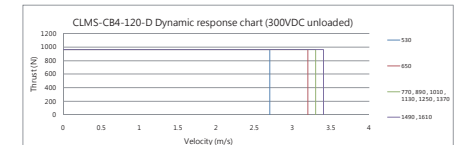
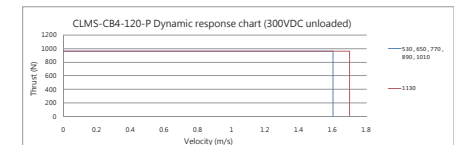
### CLMS-CA6-75

CLMS	CA6-75	
	P	D
Module Parameters		
Continuous force (N)	429.3	
Peak force (N)	1104	
Continuous current (Apeak)	10.5	21
Peak current (Apeak)	45	60
Force constant (N/Apeak)	40.9	20.4
Back EMF constant (VL-L/m/s)	51.2	25.6
Resistance (Ohms)	2.5	0.6
Inductance (mH)	11.4	2.9
Magnetic pole pitch (mm)	20	
Standard slider mass (kg)	5.6	
Sealed slider mass (kg)	7.8	



### CLMS-CB4-120

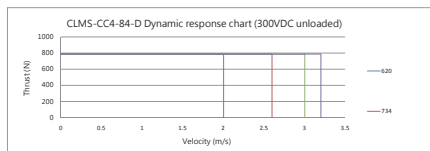
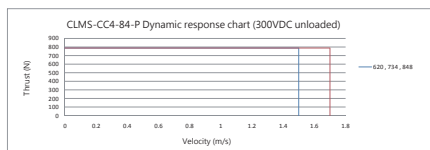
CLMS	CB4-120	
	P	D
Module Parameters		
Continuous force (N)	964.2	
Peak force (N)	1878.9	
Continuous current (Apeak)	8	16
Peak current (Apeak)	29.8	59.5
Force constant (N/Apeak)	120.8	60.4
Back EMF constant (VL-L/m/s)	133.1	66.6
Resistance (Ohms)	4.95	1.24
Inductance (mH)	51.56	12.89
Magnetic pole pitch (mm)	30	
Standard slider mass (kg)	12.8	
Sealed slider mass (kg)	14.6	



## Module Parameters C-series

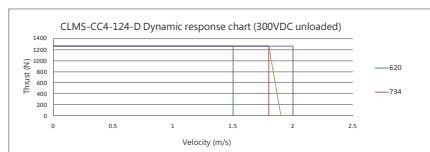
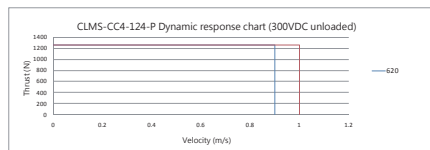
### CLMS-CC4-84

CLMS	CC4-84	
	P	D
Module Parameters		
Continuous force (N)	785.6	
Peak force (N)	1760.1	
Continuous current (Apeak)	7.2	14.4
Peak current (Apeak)	29.8	57.6
Force constant (N/Apeak)	109.1	54.6
Back EMF constant (VL-L/m/s)	133.1	66.5
Resistance (Ohms)	5.1	1.3
Inductance (mH)	7.8	1.95
Magnetic pole pitch (mm)	38	
Standard slider mass (kg)	10.9	
Sealed slider mass (kg)	13.3	



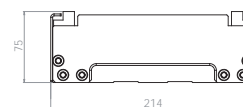
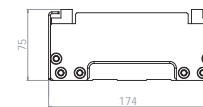
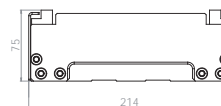
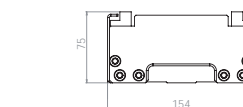
### CLMS-CC4-124

CLMS	CC4-124	
	P	D
Module Parameters		
Continuous force (N)	1257.2	
Peak force (N)	2816.2	
Continuous current (Apeak)	6.8	13.7
Peak current (Apeak)	27.4	54.7
Force constant (N/Apeak)	183.8	91.9
Back EMF constant (VL-L/m/s)	224	112
Resistance (Ohms)	7.5	1.9
Inductance (mH)	114.6	28.7
Magnetic pole pitch (mm)	38	
Standard slider mass (kg)	14.5	
Sealed slider mass (kg)	16.9	

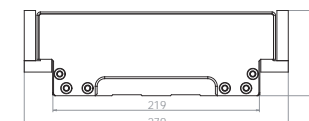
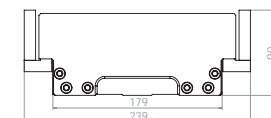
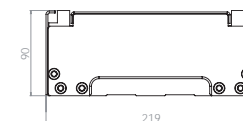
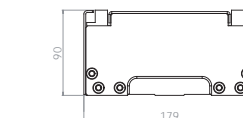
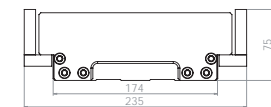
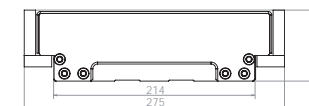
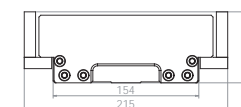


## Assembly Dimensions C-series

### Standard

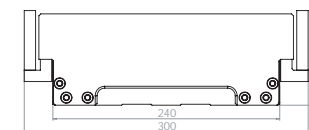
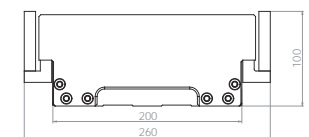
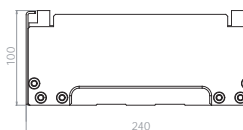
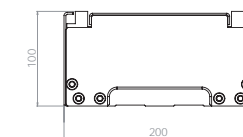
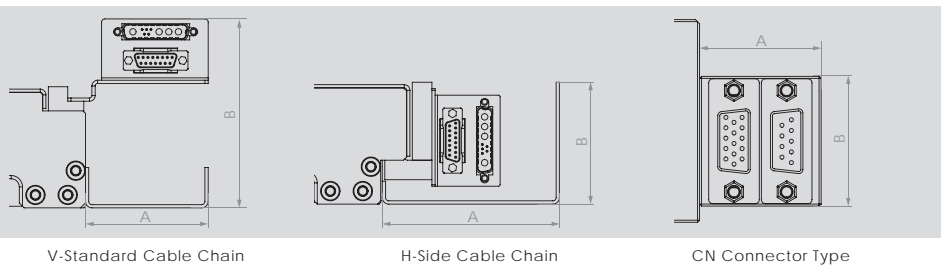


### Sealed

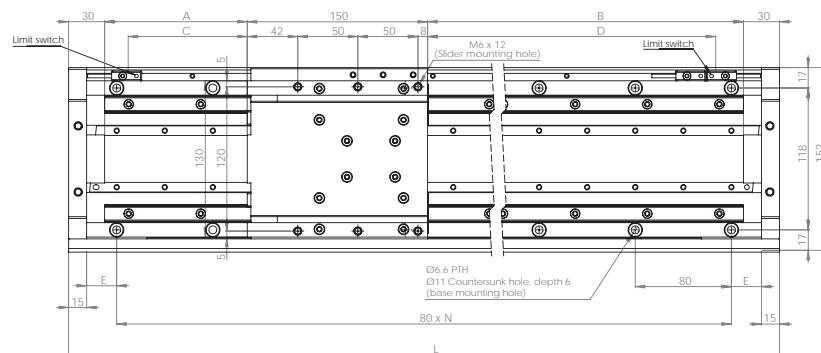


## Accessory Options

\* Size A, B and direction can be assigned by customer.

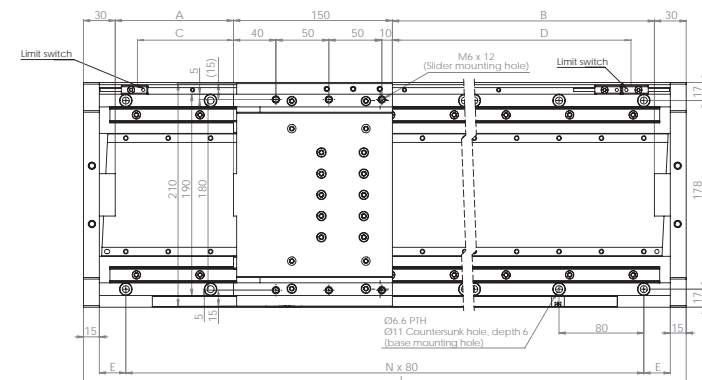


## Mounting Dimensions CLMS-CA2-55

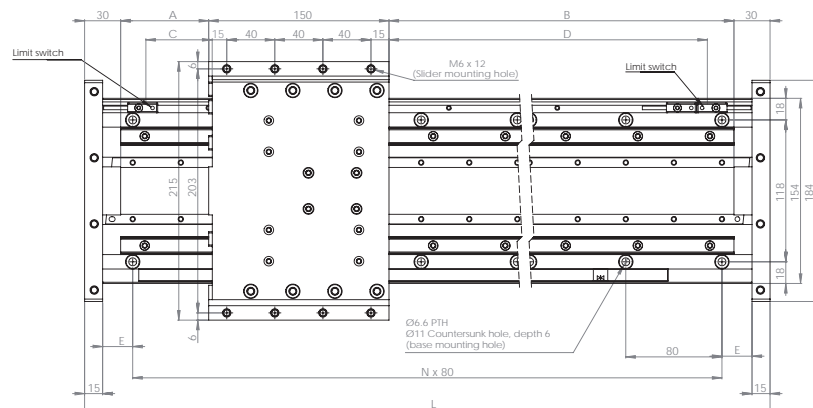


Standard

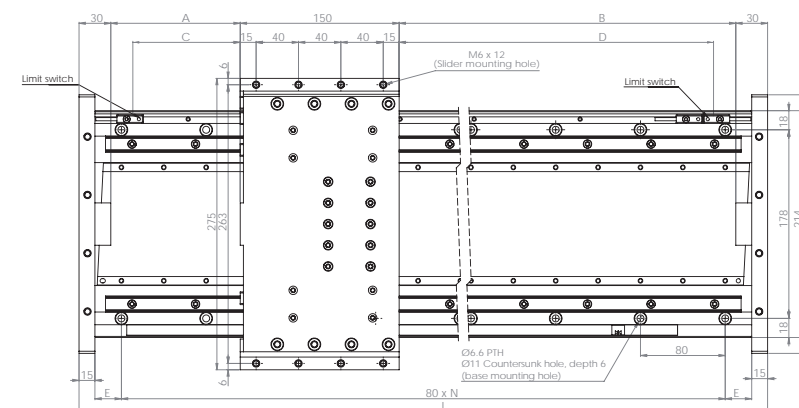
## Mounting Dimensions CLMS-CA2-115



Standard



Sealed



Sealed

## Standard Specifications

Unit : mm

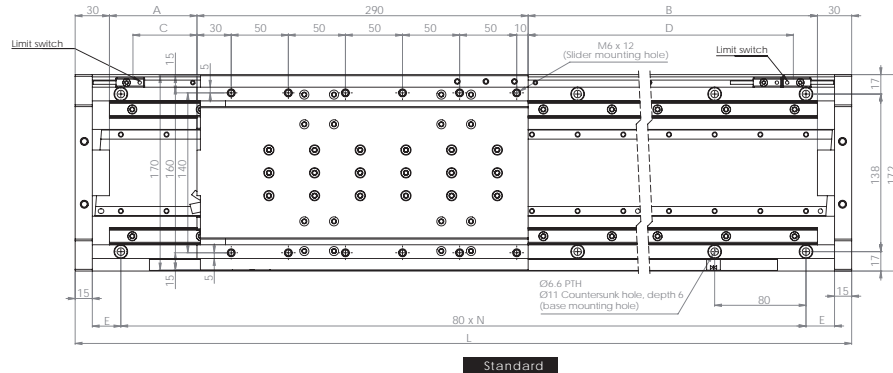
Total length (L)	400	520	640	760	880	1000	1120	1240	1360	1480
Maximum effective travel (A+B)	190	310	430	550	670	790	910	1030	1150	1270
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	25	45	25	45	25	45	25	45	25	45
N	4	5	7	8	10	11	13	14	16	17
Standard module weight (kg)	9.7	11.7	13.8	16	18.1	20.2	22.3	24.4	26.6	28.7
Sealed module weight (kg)	12.2	14.8	17.3	19.9	22.5	25	27.6	30.2	32.7	35.3

## Standard Specifications

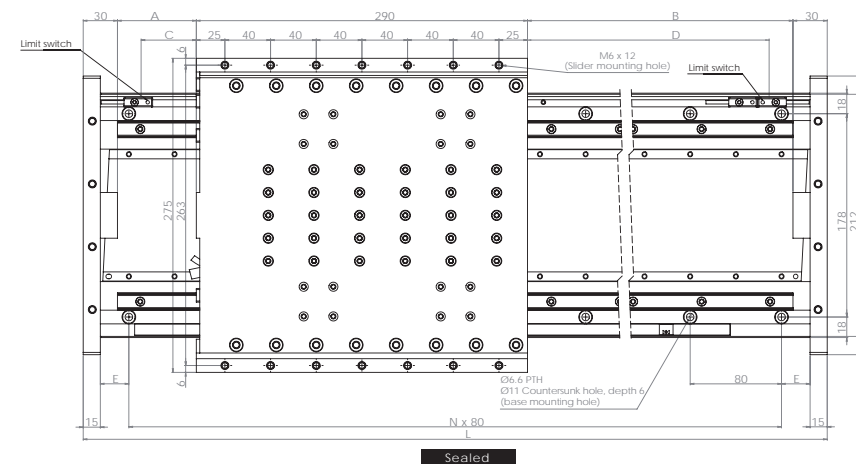
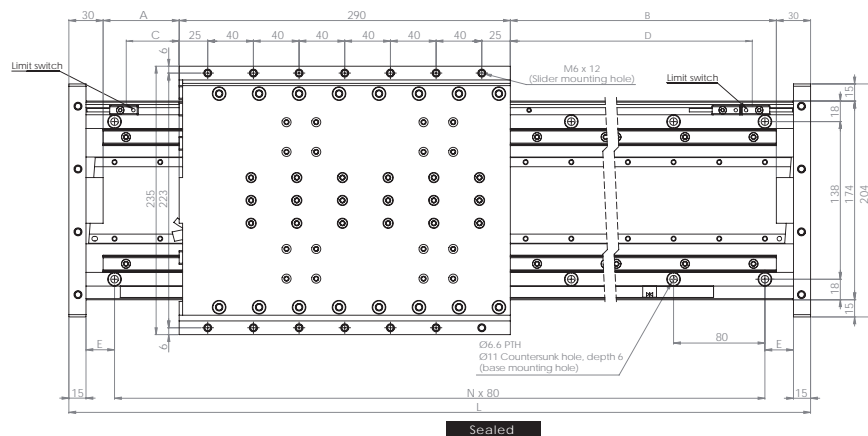
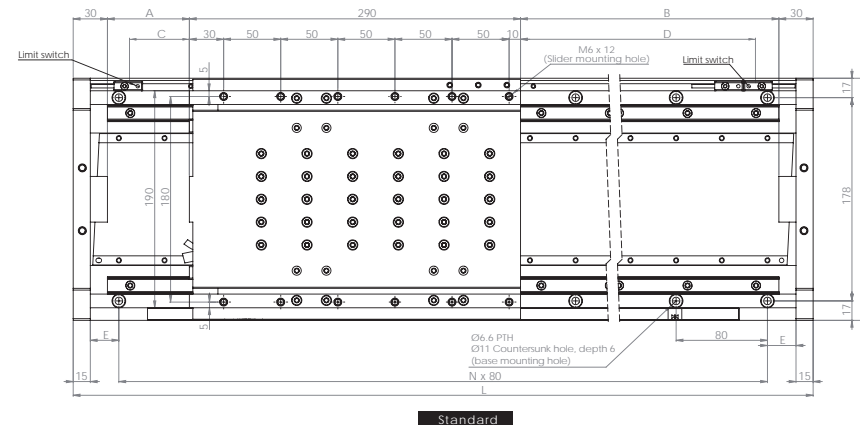
Unit : mm

Total length (L)	400	520	640	760	880	1000	1120	1240	1360	1480
Maximum effective travel (A+B)	190	310	430	550	670	790	910	1030	1150	1270
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	25	45	25	45	25	45	25	45	25	45
N	4	5	7	8	10	11	13	14	16	17
Standard module weight (kg)	14.3	17.5	20.7	23.9	27.2	30.3	33.5	36.7	39.9	43.1
Sealed module weight (kg)	16.5	20.1	23.7	27.3	30.9	34.5	38.1	41.7	45.3	48.8

## Mounting Dimensions CLMS-CA6-75



## Mounting Dimensions CLMS-CA6-115



## Standard Specifications

Unit : mm

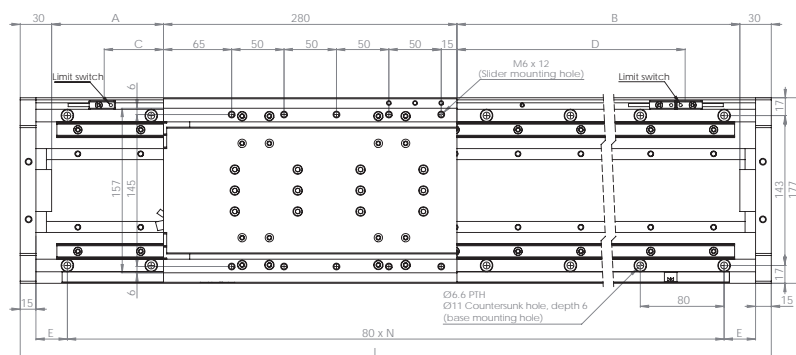
Total length (L)	520	640	760	880	1000	1120	1240	1360	1480	1600
Maximum effective travel (A+B)	170	290	410	530	650	770	890	1010	1130	1250
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	45	25	45	25	45	25	45	25	45	25
N	5	7	8	10	11	13	14	16	17	19
Standard module weight (kg)	14.1	16.3	18.4	20.6	22.7	24.8	27	29.1	31.2	34.2
Sealed module weight (kg)	20.4	23.3	26.2	29.1	32	34.9	37.8	40.7	43.6	46.6

## Standard Specifications

Unit : mm

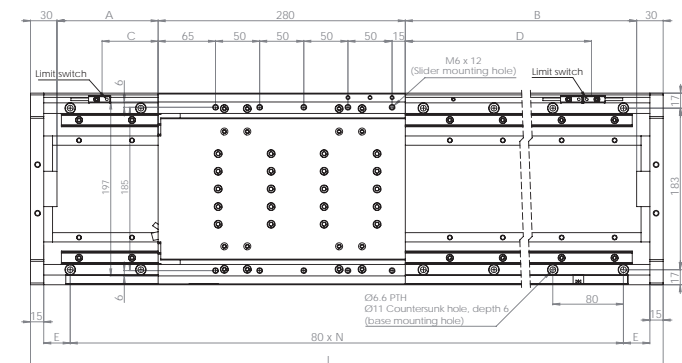
Total length (L)	520	640	760	880	1000	1120	1240	1360	1480	1600
Maximum effective travel (A+B)	170	290	410	530	650	770	890	1010	1130	1250
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	25	45	25	45	25	45	25	45	25	45
N	5	7	8	10	11	12	14	16	17	19
Standard module weight (kg)	22.2	25.4	28.7	32	35.2	38.5	41.7	45	48.2	51.5
Sealed module weight (kg)	23.7	27.3	31	34.6	38.3	41.9	45.6	49.2	52.9	56.5

## Mounting Dimensions CLMS-CB4-80

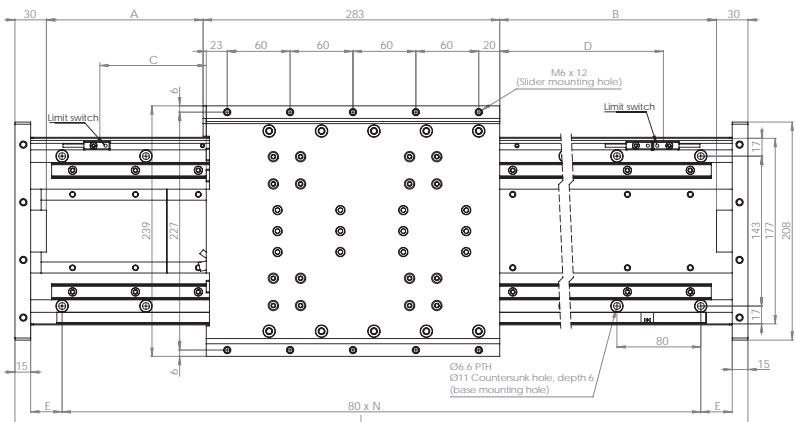


Standard

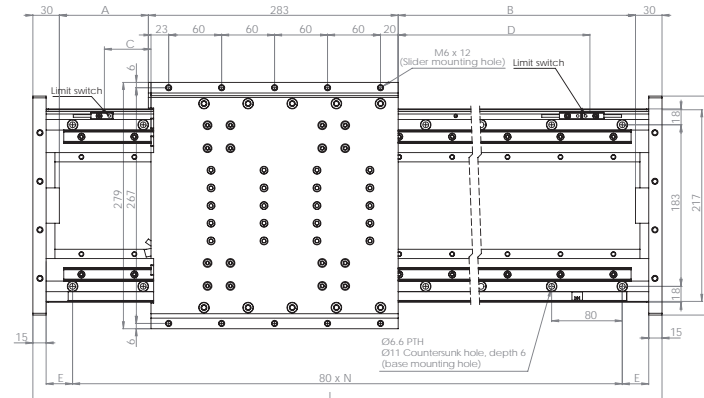
## Mounting Dimensions CLMS-CB4-120



Standard



Sealed



Sealed

## Standard Specifications

Unit : mm

Total length (L)	530	650	770	890	1010	1130	1250	1370	1490	1610
Maximum effective travel (A+B)	200	320	440	560	680	800	920	1040	1160	1280
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	10	30	10	30	10	30	10	30	10	30
N	6	7	9	10	12	13	15	16	18	19
Standard module weight (kg)	18.4	21.6	24.8	28	31.2	34.4	37.6	40.8	44	47.2
Sealed module weight (kg)	23.2	26.1	29.3	32.5	35.7	38.9	42.1	45.3	48.5	51.7

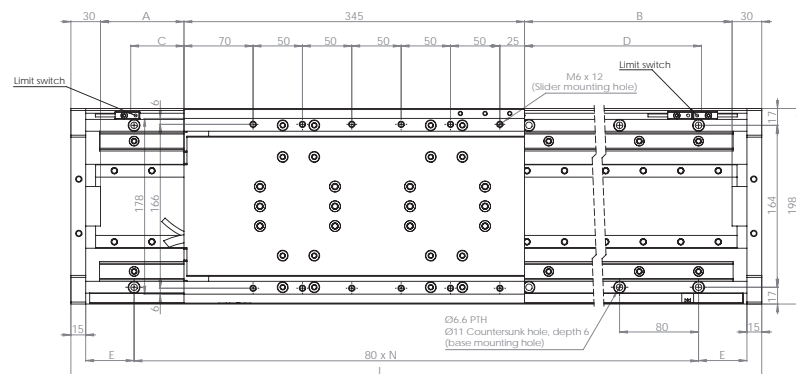
## Standard Specifications

Unit : mm

Total length (L)	530	650	770	890	1010	1130	1250	1370	1490	1610
Maximum effective travel (A+B)	200	320	440	560	680	800	920	1040	1160	1280
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	10	30	10	30	10	30	10	30	10	30
N	6	7	9	10	12	13	15	16	18	19
Standard module weight (kg)	23.7	28.2	32.7	37.2	41.7	46.2	50.7	55.2	59.7	64.2
Sealed module weight (kg)	29.7	34.2	38.7	43.2	47.7	52.2	56.7	61.2	65.7	70.2

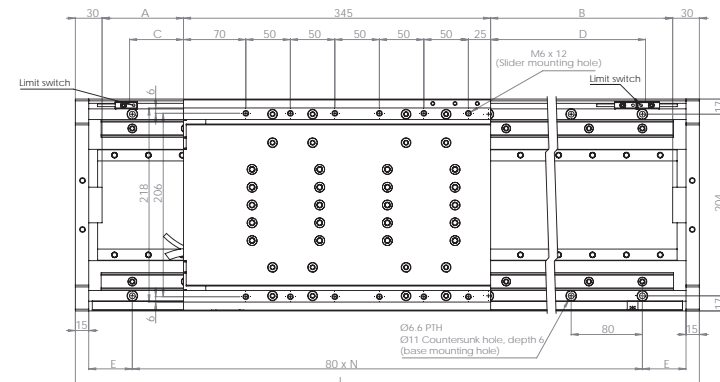


## Mounting Dimensions CLMS-CC4-84

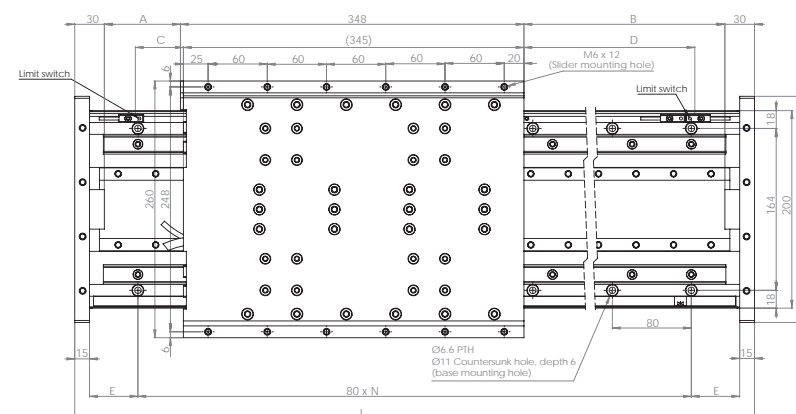


Standard

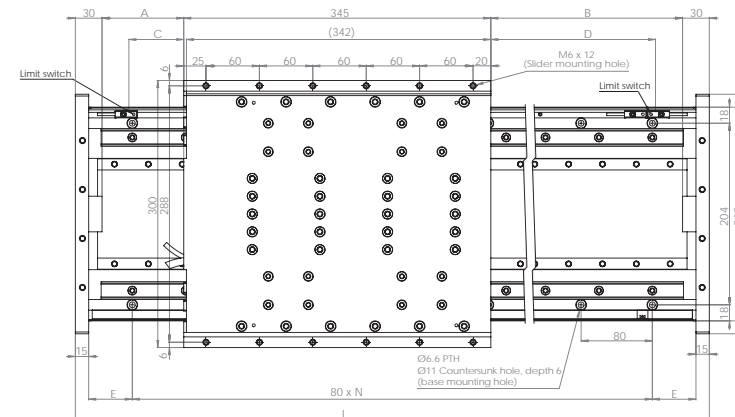
## Mounting Dimensions CLMS-CC4-124



Standard



Sealed



Sealed

## Standard Specifications

Unit : mm

	620	734	848	962	1076	1190	1304	1418	1532	1646
Total length (L)	620	734	848	962	1076	1190	1304	1418	1532	1646
Maximum effective travel (A+B)	210	320	430	540	650	760	870	980	1090	1200
Standard travel (C+D)	150	260	370	490	590	700	810	920	1030	1140
Edge distance of base mounting hole (E)	15	32	49	26	43	20	37	14	31	8
N	7	8	9	11	12	14	15	17	18	20
Standard module weight (kg)	27.8	31.8	35.8	39.8	43.8	47.8	51.8	55.8	59.8	63.8
Sealed module weight (kg)	32.9	36.9	40.9	44.9	48.9	52.9	56.9	60.9	64.9	68.9

## Standard Specifications

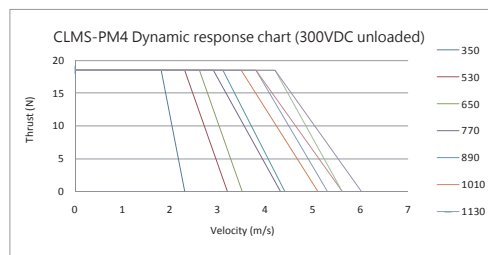
Unit : mm

	620	734	848	962	1076	1190	1304	1418	1532	1646
Total length (L)	620	734	848	962	1076	1190	1304	1418	1532	1646
Maximum effective travel (A+B)	210	320	430	540	650	760	870	980	1090	1200
Standard travel (C+D)	150	260	370	480	590	700	810	920	1030	1140
Edge distance of base mounting hole (E)	15	32	49	26	43	20	37	14	31	8
N	7	8	9	11	12	14	15	17	18	20
Standard module weight (kg)	36	41	46	51	56	61	66	71	76	81
Sealed module weight (kg)	42	47	52	57	62	67	72	77	82	87

## Module Parameters P-series

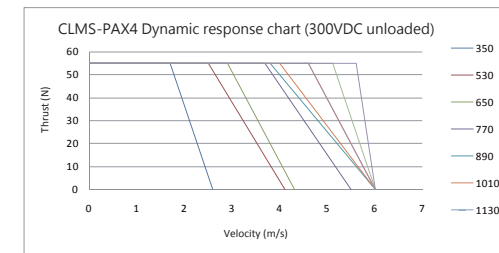
### CLMS-PM4

CLMS	PM4
Module Parameters	
Continuous force (N)	18.5
Peak force (N)	74
Continuous current (Apeak)	5
Peak current (Apeak)	20
Force constant (N/Apeak)	3.7
Back EMF constant (VL-L/m/s)	4.3
Resistance (Ohms)	1.2
Inductance (mH)	0.04
Magnetic pole pitch (mm)	15
Open slider mass (kg)	0.5



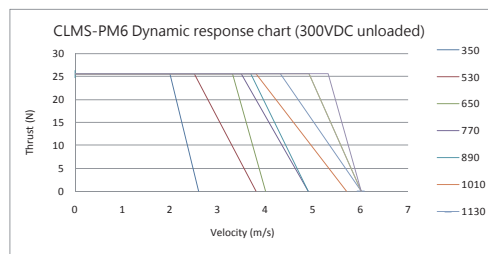
### CLMS-PAX4

CLMS	PAX4
Module Parameters	
Continuous force (N)	55
Peak force (N)	220.2
Continuous current (Apeak)	3.2
Peak current (Apeak)	12.8
Force constant (N/Apeak)	17.2
Back EMF constant (VL-L/m/s)	20
Resistance (Ohms)	8.5
Inductance (mH)	1.65
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	1.4
Open slider mass (kg)	1.4



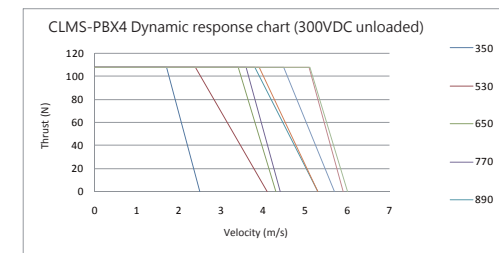
### CLMS-PM6

CLMS	PM6
Module Parameters	
Continuous force (N)	25.5
Peak force (N)	102.1
Continuous current (Apeak)	4.6
Peak current (Apeak)	18.4
Force constant (N/Apeak)	5.5
Back EMF constant (VL-L/m/s)	6.5
Resistance (Ohms)	1.7
Inductance (mH)	0.07
Magnetic pole pitch (mm)	15
Open slider mass (kg)	0.6



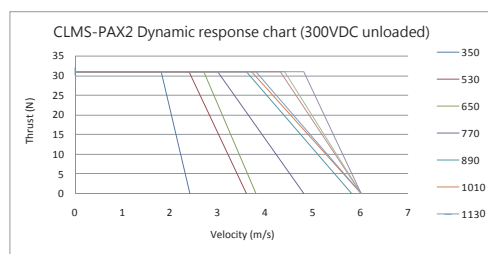
### CLMS-PBX4

CLMS	PBX4
Module Parameters	
Continuous force (N)	107.8
Peak force (N)	431.4
Continuous current (Apeak)	3.8
Peak current (Apeak)	15.2
Force constant (N/Apeak)	28.4
Back EMF constant (VL-L/m/s)	33
Resistance (Ohms)	8.3
Inductance (mH)	2.87
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	2.5
Open slider mass (kg)	2.5



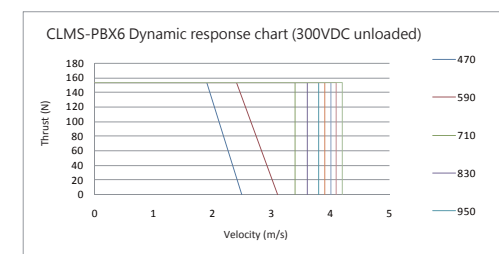
### CLMS-PAX2

CLMS	PAX2
Module Parameters	
Continuous force (N)	31
Peak force (N)	123.8
Continuous current (Apeak)	3.6
Peak current (Apeak)	14.4
Force constant (N/Apeak)	8.6
Back EMF constant (VL-L/m/s)	10
Resistance (Ohms)	4.3
Inductance (mH)	0.83
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	1
Open slider mass (kg)	1



### CLMS-PBX6

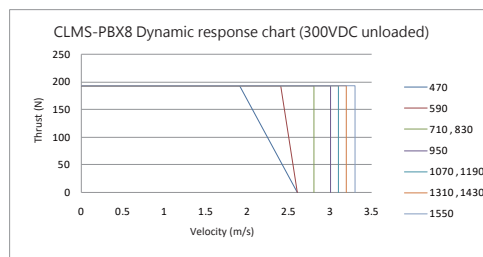
CLMS	PBX6
Module Parameters	
Continuous force (N)	153.3
Peak force (N)	613
Continuous current (Apeak)	3.6
Peak current (Apeak)	14.4
Force constant (N/Apeak)	42.6
Back EMF constant (VL-L/m/s)	49.5
Resistance (Ohms)	12.4
Inductance (mH)	4.31
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	3.4
Open slider mass (kg)	3.4



## Module Parameters P-series

### CLMS-PBX8

CLMS	PBX8
Module Parameters	
Continuous force (N)	193
Peak force (N)	771.9
Continuous current (Apeak)	3.4
Peak current (Apeak)	13.6
Force constant (N/Apeak)	56.8
Back EMF constant (VL-L/m/s)	6.6
Resistance (Ohms)	16.5
Inductance (mH)	5.74
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	4.1
Open slider mass (kg)	4.1

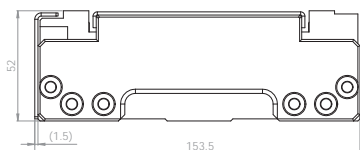


## Assembly Dimensions P-series

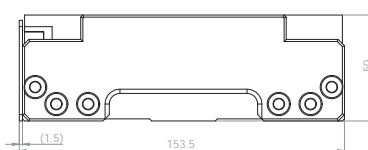
### Standard

### Open

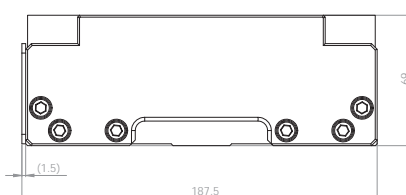
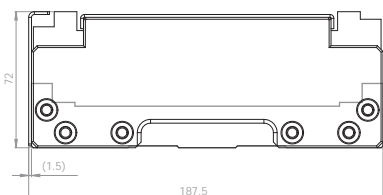
PM  
(Catalogue P34)



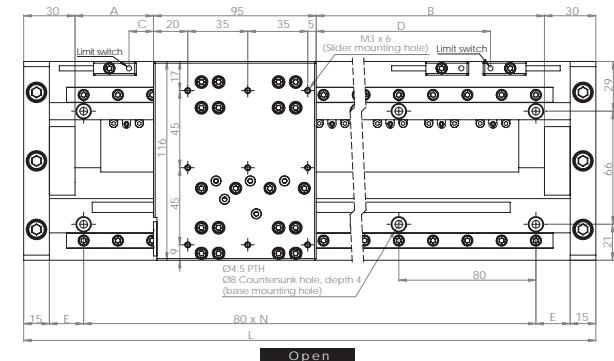
PAX  
(Catalogue P35-36)



PBX  
(Catalogue P37-38)



## Mounting Dimensions CLMS-PM4

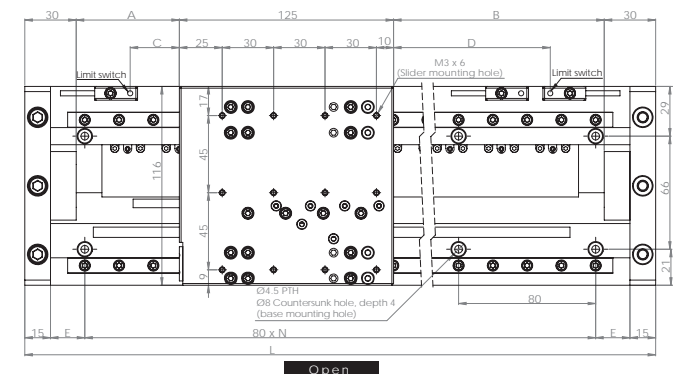


## Standard Specifications

Unit : mm

Total Length (L)	350	530	650
Maximum effective travel (A+B)	225	405	525
Standard travel (C+D)	120	240	360
Edge distance of base mounting hole (E)	15	25	45
N	4	6	7
Open module weight (kg)	2.6	3.2	3.8

## Mounting Dimensions CLMS-PM6

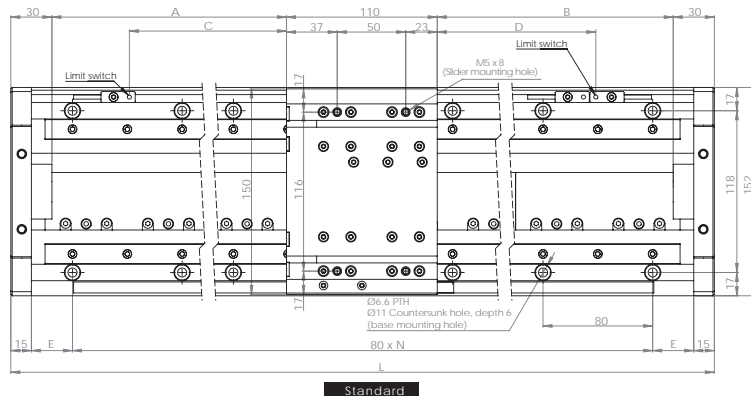


## Standard Specifications

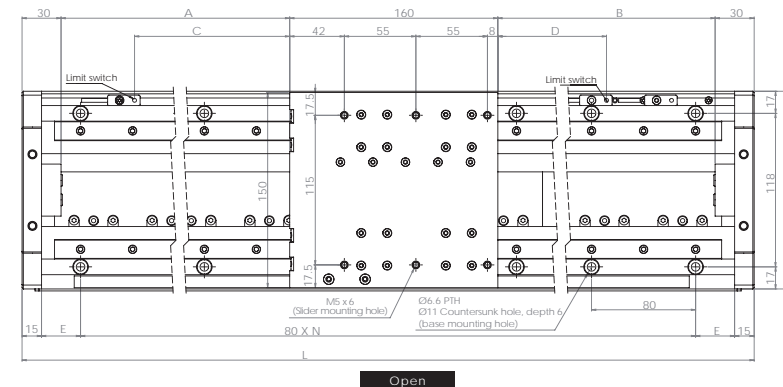
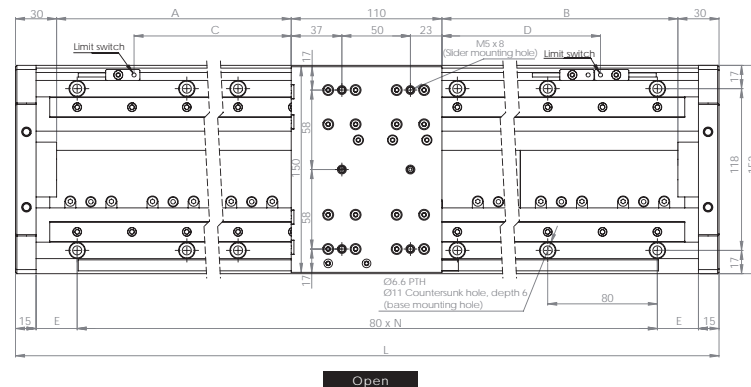
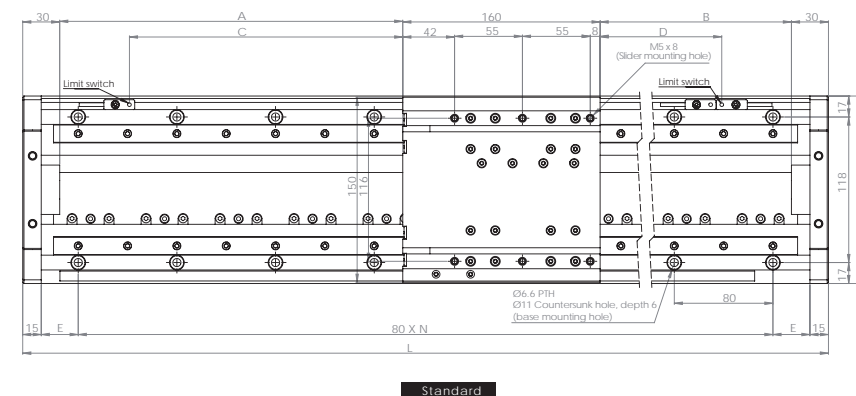
Unit : mm

Total length (L)	350	530	650
Maximum effective travel (A+B)	195	375	495
Standard travel (C+D)	120	240	360
Edge distance of base mounting hole (E)	15	25	45
N	4	6	7
Open module weight (kg)	2.7	3.3	3.9

## Mounting Dimensions CLMS-PAX2



## Mounting Dimensions CLMS-PAX4



## Standard Specifications

Unit : mm

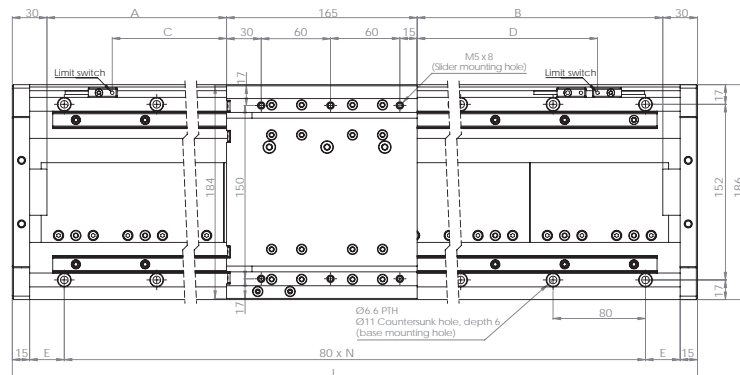
	350	530	650	770	890	1010	1130	1250	1370	1490
Total length (L)	350	530	650	770	890	1010	1130	1250	1370	1490
Maximum effective travel (A+B)	180	360	480	600	720	840	960	1080	1200	1320
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	40	10	30	10	30	10	30	10	30	10
N	4	6	7	9	10	12	13	15	16	18
Standard module weight (kg)	8.2	10.2	12.2	14.2	16.2	18.2	20.2	22.2	24.2	26.2
Open module weight (kg)	7	9	11	13	15	17	19	21	23	25

## Standard Specifications

Unit : mm

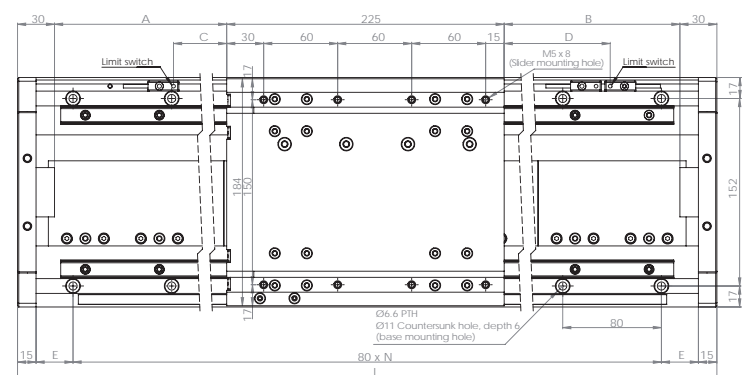
	350	530	650	770	890	1010	1130	1250	1370	1490
Total length (L)	350	530	650	770	890	1010	1130	1250	1370	1490
Maximum effective travel (A+B)	130	310	430	550	670	790	910	1030	1150	1270
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	40	10	30	10	30	10	30	10	30	10
N	4	6	7	9	10	12	13	15	16	18
Standard module weight (kg)	8.6	10.6	12.6	14.6	16.6	18.6	20.6	22.6	24.6	26.6
Open module weight (kg)	7.4	9.4	11.4	13.4	15.4	17.4	19.4	21.4	23.4	25.4

## Mounting Dimensions CLMS-PBX4

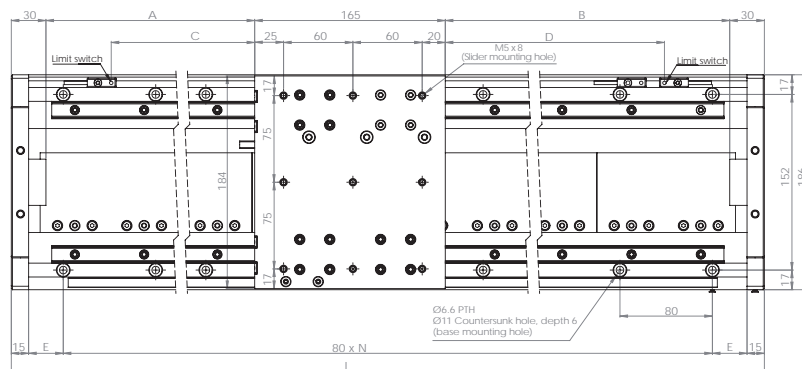


Standard

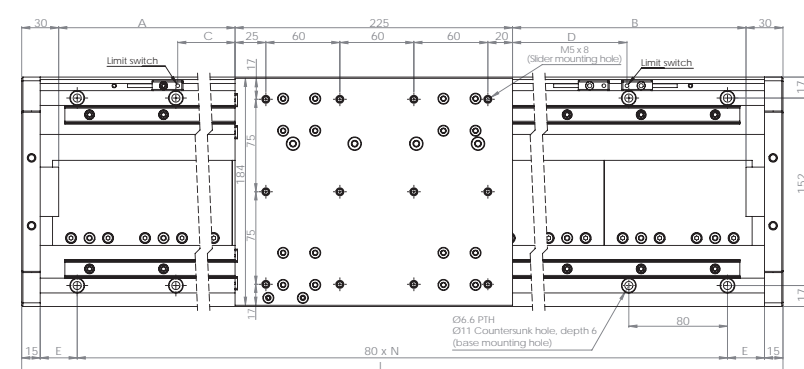
## Mounting Dimensions CLMS-PBX6



Standard



Open



Open

## Standard Specifications

Unit : mm

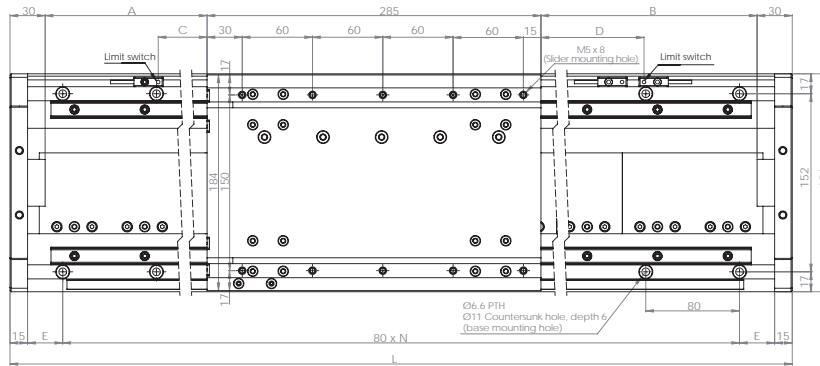
Total length (L)	350	530	650	770	890	1010	1130	1250	1370	1490
Maximum effective travel (A+B)	125	305	420	545	665	785	905	1025	1145	1265
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	40	10	30	10	30	10	30	10	30	10
N	3	6	7	9	10	12	13	15	16	18
Standard module weight (kg)	13.3	17	20.7	24.4	28.1	31.8	35.5	39.2	42.9	46.6
Open module weight (kg)	12	15.7	19.4	23.1	26.8	30.5	34.2	37.9	41.6	45.3

## Standard Specifications

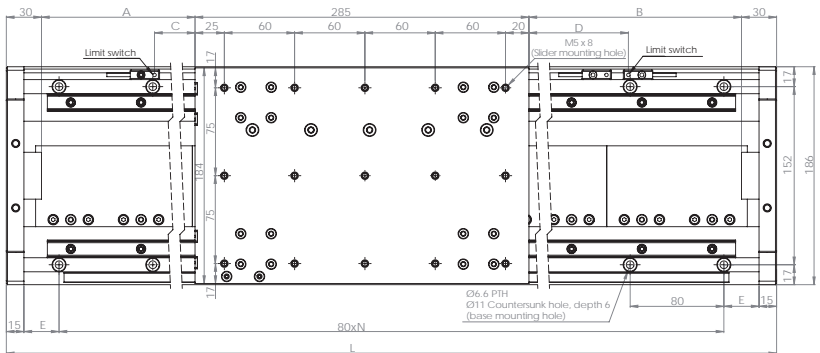
Unit : mm

Total length (L)	530	650	770	890	1010	1130	1250	1370	1490	1610
Maximum effective travel (A+B)	245	365	485	605	725	845	965	1085	1210	1325
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	10	30	10	30	10	30	10	30	10	30
N	6	7	9	10	12	13	15	16	18	19
Standard module weight (kg)	14.2	17.9	21.6	25.3	29	32.7	36.4	40.1	43.8	47.5
Open module weight (kg)	12.8	16.5	20.2	23.9	27.6	31.3	35	38.7	42.4	46.1

## Mounting Dimensions CLMS-PBX8



Standard



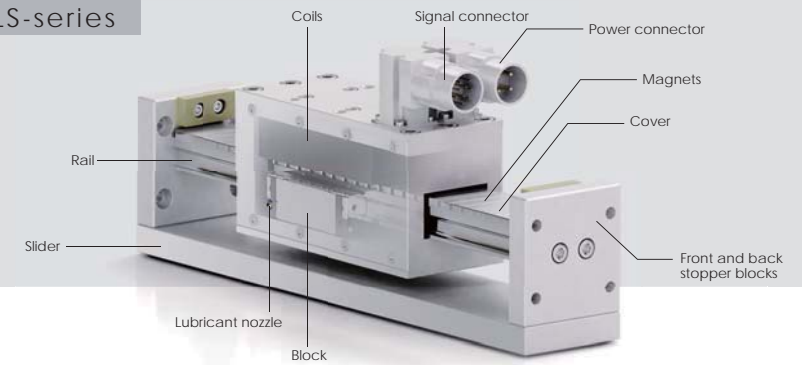
Open

## Standard Specifications

Unit : mm

	530	650	770	890	1010	1130	1250	1370	1490	1610
Total length (L)	530	650	770	890	1010	1130	1250	1370	1490	1610
Maximum effective travel (A+B)	185	305	425	545	665	785	905	1025	1145	1265
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	10	30	10	30	10	30	10	30	10	30
N	6	7	9	10	12	13	15	16	18	19
Standard module weight (kg)	14.9	18.6	22.3	26	29.7	33.4	37.1	40.8	44.5	48.2
Open module weight (kg)	13.4	17.1	20.8	24.5	28.2	31.9	35.6	39.3	43	46.7

## MMLS-series



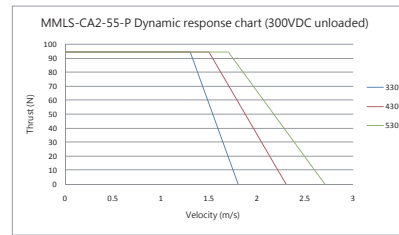
The most significant feature of the MMLS series is that the moving parts are composed of magnets and rails. With this design, there won't be the usual cable movement-induced issues from unwanted dust penetration to cable disconnection. As such, this series is particularly suitable for application in vacuum and clean room conditions. Moreover, as the coils for this product are fixed, heat is more easily dissipated to its mounting structure, thus making this series suitable for short travel and high rate cycle transfer applications.



## Module Parameters

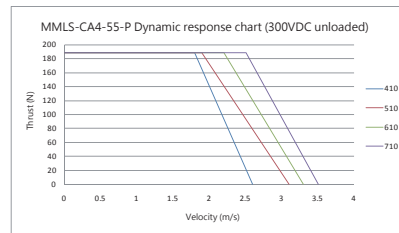
### MMLS-CA2-55

MMLS	CA2-55	
	P	D
Module Parameters		
Continuous force (N)	94.2	
Peak force (N)	242.1	
Continuous current (Apeak)	3.5	7
Peak current (Apeak)	15	28
Force constant (N/Apeak)	26.9	13.5
Back EMF constant (VL-L/m/s)	33.7	16.9
Resistance (Ohms)	5.4	14
Inductance (mH)	25	6.25
Magnetic pole pitch (mm)	20	



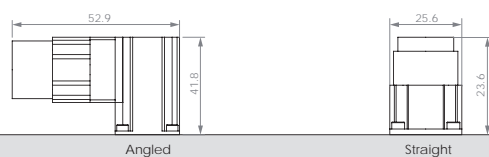
### MMLS-CA4-55

MMLS	CA4-55	
	P	D
Module Parameters		
Continuous force (N)	188.3	
Peak force (N)	484.2	
Continuous current (Apeak)	7	14
Peak current (Apeak)	30	60
Force constant (N/Apeak)	26.9	13.5
Back EMF constant (VL-L/m/s)	33.7	16.9
Resistance (Ohms)	2.7	0.7
Inductance (mH)	12.5	3.13
Magnetic pole pitch (mm)	20	

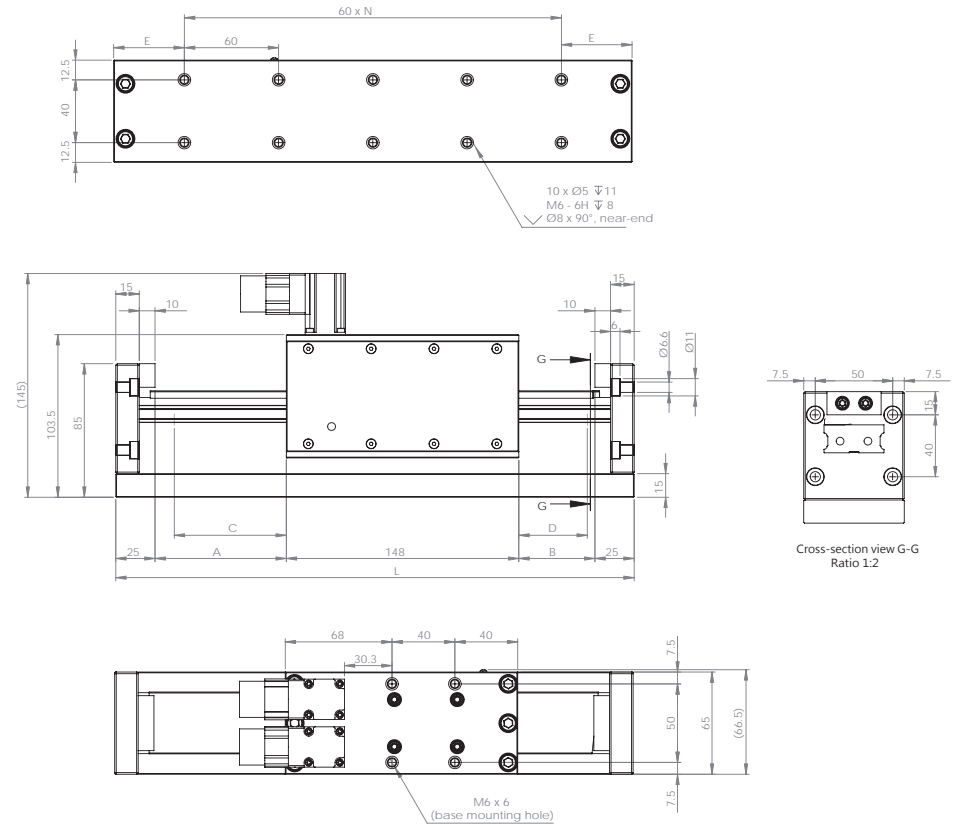


## Accessory Options

### Cable connector



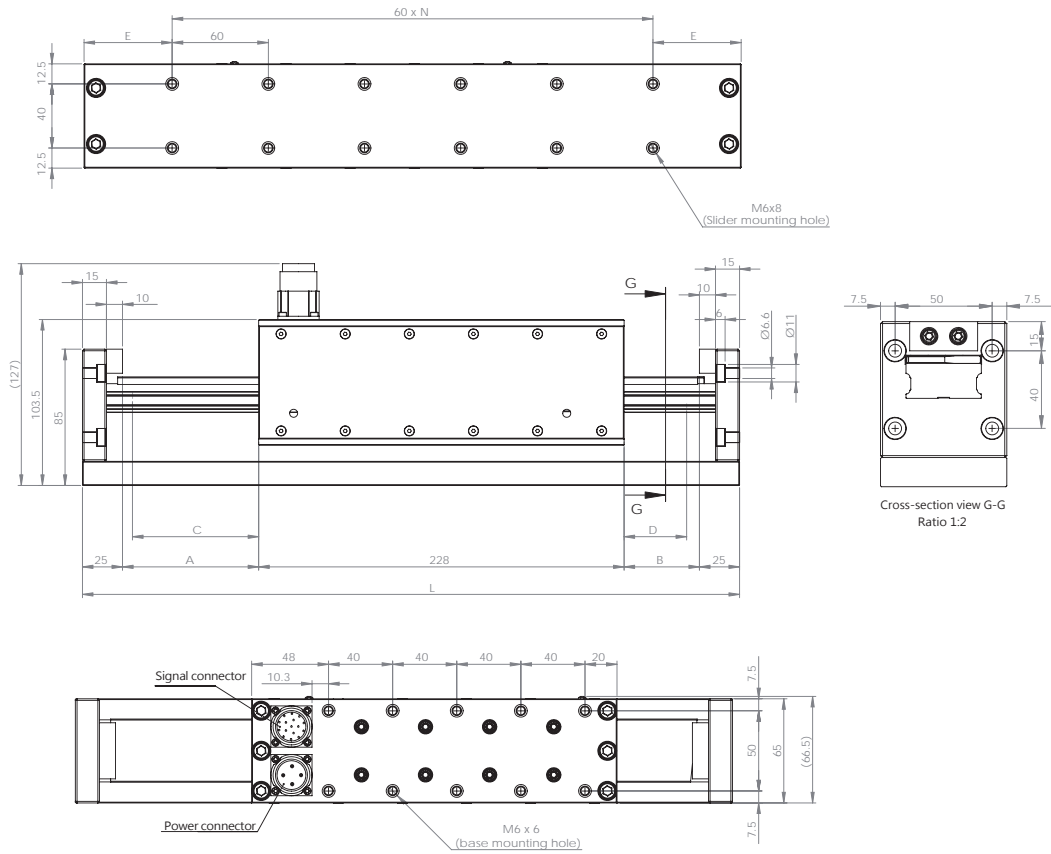
## Mounting Dimensions MMLS-CA2-55



## Standard Specifications

	Unit : mm	
Total length (L)	330	430
Maximum effective travel (A+B)	132	232
Standard travel (C+D)	100	200
Rail length	300	400
Slider mounting hole edge pitch(E)	45	35
N	4	6
Slider mass(kg)	3	3.9
Module weight(kg)	5.1	5.9

## Mounting Dimensions MMLS-CA4-55



## Standard Specifications

	Unit : mm			
Total length (L)	410	510	610	710
Maximum effective travel (A+B)	132	232	332	432
Standard travel (C+D)	100	200	300	400
Rail length	380	480	580	680
Slider mounting hole edge pitch(E)	55	45	35	25
N	5	7	9	11
Slider mass(kg)	3.7	4.6	5.4	6.3
Module weight(kg)	6.7	8	8.9	9.8

cpc is capable of supplying a total solution linear guide, driver, magnetic encoder and linear motor stage system. Years of experience allows us to overcome most challenges and achieve high degrees of customer satisfaction. More importantly, our technology gives us great advantages in quality and competitiveness, making us the market leader in the industry.



X-Y table

Open frame transmitted light table

Gantry

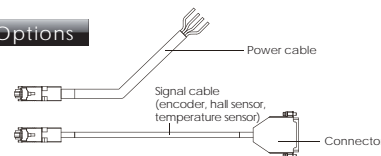
For more details, please contact [cpc](#).



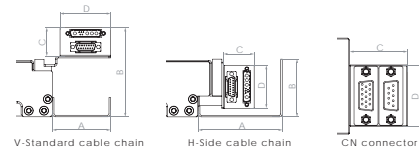
## Ordering Information

CLMS	1250	CB	4	80	CR	M	A	I	N	C	N	-
												J : Customized
												N/A : N Direct interface cable length: 1,2,3,4,5,6,7,8,9(m)
												Cable Interface : Direct: D Joint: C Transfer board: T
												Connector type: N/A : N V: Angled S: Straight
												Number of Sliders : I, II, III
												Resolution : A: 1μm B: 0.5μm C: 0.2μm D: 0.1μm
												Encoder : O: Optical encoder M: Magnetic encoder
												Dustproof : N : N/A S: Standard Type CR: Dust Seal O: Open
												Motor Width : CLS N/A CLMS CA : 55,75,115 CB : 80,120 CC : 84,124 PM,PAX,PBX : - MMLS CA : 55
												Number of coil assembly : CLS : PM : 4,6 PAX : 2,4 PBX : 2,4,6 CLMS : 2,4,6,8 MMLS : 2,4
												Motor Model CLS : PM,PAX,PBX CLMS : Ironcore CA,CB,CC Ironless PM,PAX,PBX MMLS : CA
												Total Length : CLS PM4(6) : 152,332,512mm PBX2(4) : 230,530,830,1010,1250,1490mm PAX2(4) : 220,340,520,820,1000,1480mm P B X 6 : 530,830,1010,1250,1490mm
												CLMS CA2-55(115) : 400,520,640,760,880,1000,1120,1240,1360,1480mm CA6-75(115) : 520,640,760,880,1000,1120,1240,1360,1480,1600mm CB4-80(120) : 530,650,770,890,1010,1130,1250,1370,1490,1610mm CC4-84(124) : 620,734,848,962,1076,1190,1304,1418,1532,1646mm PM4(6) : 350,530,650mm PAX2(4) : 350,530,650,770,890,1010,1130,1250,1370,1490mm P B X 4 : 350,530,650,770,890,1010,1130,1250,1370,1490mm PBX6(8) : 530,650,770,890,1010,1130,1250,1370,1490,1610mm
												MMLS CA2-55 : 330,430mm CA4-55 : 410,510,610,710mm
												Stage Series : CLS - Single Rail Compact stage CLMS - Double Rail Compact Stage MMLS - Moving Magnet Stage

## Accessory Options



CLMS	C	H-CB	S	C
Connector Head Type: N: N/A C: cpc driver head J: Customized				
Connector and transfer board cable length: 1,2,3,4,5,6,7,8,9m				
Cable Chain Type : V-CA Standard cable chain V-CB Standard cable chain H-CA Side cable chain H-CB Side cable chain CN-PAX/PBX connector CN J: Customized				
Cable Type : PM: PM Power Cable PAX: PAX Power Cable PBX: PBX Power Cable S: Signal Cable C: Ironcore Power Cable				
Stage Series : CLS - Single rail compact stage CLMS - Double rail compact stage MMLS - Moving magnet stage				



	V-Standard cable chain	H-Side cable chain	Dimension within cable chain (Cx D)
CA	A=76, B=117	A=119, B=75	CA,CB Standard 54x66
CB	A=109, B=128	A=119, B=82	CA,CB Dust Seal 54x55
J	Customized	Customized	CN-PAX,(PBX) connector 35x32(44x33)
			J Customized

## Sizing Form

Customer Name /	Filling Date(DD/MM/YEAR) /
Contact Person /	Telephone /
E-mail /	Fax /

### 1. Point-to-Point motion without constant velocity

Property: Specific travel distance in specific time  
Application: Pick and place, carriage etc.

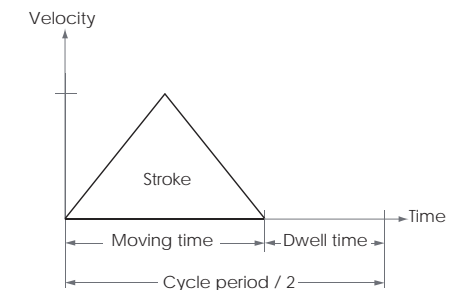
a. Known Motion Condition	
(1) Load mass	kg
(2) Effective stroke	m
(3) Moving time	s
(4) Dwell time	s

b. Driver Condition	
(1) Max. output voltage	V
(2) Continuous current	A
(3) Peak current	A

c. Encoder	
(1) <input type="checkbox"/> Analog <input type="checkbox"/> Digital	
(2) Resolution	μm

d. Working Environment	
(1) <input type="checkbox"/> Room temperature	
(2) <input type="checkbox"/> Constant temperature ____ °C	
(3) <input type="checkbox"/> Vacuum ____ Torr	
(4) <input type="checkbox"/> Clean room ____ level	

e. Motion Precision	
(1) Positioning accuracy	μm
(2) Repetitive accuracy	μm



f. Motion Direction	
(1) <input type="checkbox"/> Horizontal	
(2) <input type="checkbox"/> Vertical	
(3) <input type="checkbox"/> Tilt ____ degrees	

g. Installation Method	
(1) <input type="checkbox"/> Lying flat	
(2) <input type="checkbox"/> Vertically standing	
(3) <input type="checkbox"/> Wall mount	

h. Space Restrictions	
(1) <input type="checkbox"/> None	
(2) <input type="checkbox"/> Yes ____ mm x ____ mm x ____ mm	

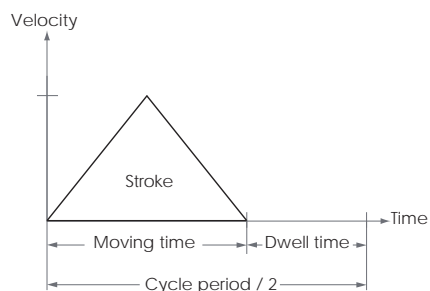
Sizing Form

Customer Name /	Filling Date(DD/MM/YEAR) /
Contact Person /	Telephone /
E-mail /	Fax /

2. Point-to-Point Motion without constant velocity section

Feature: Specific travel distance in specific time  
 Application: Pick and place, carriage etc.

a. Known Motion Condition	
(1) Load mass	kg
(2) Effective stroke	m
(3) Frequency	Hz
(4) Dwell time	s



b. Driver Condition	
(1) Max. output voltage	V
(2) Continuous current	A
(3) Peak current	A

c. Encoder	
(1) <input type="checkbox"/> Analog <input type="checkbox"/> Digital	
(2) Resolution	μm

f. Motion Direction	
(1) <input type="checkbox"/> Horizontal	
(2) <input type="checkbox"/> Vertical	
(3) <input type="checkbox"/> Tilt _____ degrees	

d. Working Environment	
(1) <input type="checkbox"/> Room temperature	
(2) <input type="checkbox"/> Constant temperature _____ °C	
(3) <input type="checkbox"/> Vacuum _____ Torr	
(4) <input type="checkbox"/> Clean room _____ level	

g. Installation Method	
(1) <input type="checkbox"/> Lying flat	
(2) <input type="checkbox"/> Vertically standing	
(3) <input type="checkbox"/> Wall mount	

e. Motion Precision	
(1) Positioning accuracy	μm
(2) Repetitive accuracy	μm

h. Space Restrictions	
(1) <input type="checkbox"/> None	
(2) <input type="checkbox"/> Yes _____ mm x _____ mm x _____ mm	

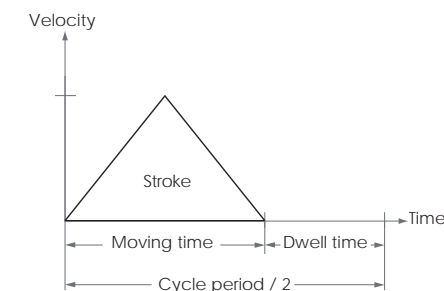
Sizing Form

Customer Name /	Filling Date(DD/MM/YEAR) /
Contact Person /	Telephone /
E-mail /	Fax /

3. Point-to-Point Motion without constant velocity

Feature: Specific travel distance in specific time  
 Application: Pick and place, carriage etc.

a. Known Motion Condition	
(1) Load mass	kg
(2) Effective stroke	m
(3) Acceleration	m/s <sup>2</sup>
(4) Dwell time	s



b. Driver Condition	
(1) Max. output voltage	V
(2) Continuous current	A
(3) Peak current	A

c. Encoder	
(1) <input type="checkbox"/> Analog <input type="checkbox"/> Digital	
(2) Resolution	μm

f. Motion Direction	
(1) <input type="checkbox"/> Horizontal	
(2) <input type="checkbox"/> Vertical	
(3) <input type="checkbox"/> Tilt _____ degrees	

d. Working Environment	
(1) <input type="checkbox"/> Room temperature	
(2) <input type="checkbox"/> Constant temperature _____ °C	
(3) <input type="checkbox"/> Vacuum _____ Torr	
(4) <input type="checkbox"/> Clean room _____ level	

g. Installation Method	
(1) <input type="checkbox"/> Lying flat	
(2) <input type="checkbox"/> Vertically standing	
(3) <input type="checkbox"/> Wall mount	

e. Motion Precision	
(1) Positioning accuracy	μm
(2) Repetitive accuracy	μm

h. Space Restrictions	
(1) <input type="checkbox"/> None	
(2) <input type="checkbox"/> Yes _____ mm x _____ mm x _____ mm	

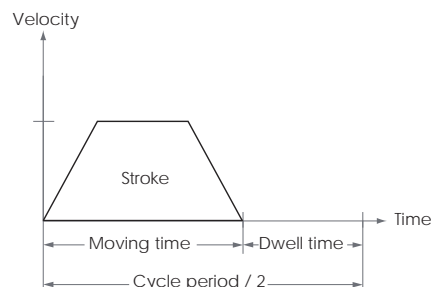
Sizing Form

Customer Name /	Filling Date(DD/MM/YEAR) /
Contact Person /	Telephone /
E-mail /	Fax /

4. Point-to-Point Motion with constant velocity

Feature: Work performed under constant velocity  
Application: Scanning, inspection, cutting etc.

a. Motion Condition	
(1) Load mass	kg
(2) Effective stroke	m
(3) Moving time	s
(4) Dwell time	s
(5) Acceleration	m/s <sup>2</sup>



b. Driver Condition	
(1) Max. output voltage	V
(2) Continuous current	A
(3) Peak current	A

c. Encoder	
(1) <input type="checkbox"/> Analog <input type="checkbox"/> Digital	
(2) Resolution	μm

f. Motion Direction	
(1) <input type="checkbox"/> Horizontal	
(2) <input type="checkbox"/> Vertical	
(3) <input type="checkbox"/> Tilt _____ degrees	

d. Working Environment	
(1) <input type="checkbox"/> Room temperature	
(2) <input type="checkbox"/> Constant temperature _____ °C	
(3) <input type="checkbox"/> Vacuum _____ Torr	
(4) <input type="checkbox"/> Clean Room _____ level	

g. Installation Method	
(1) <input type="checkbox"/> Lying flat	
(2) <input type="checkbox"/> Vertically standing	
(3) <input type="checkbox"/> Wall mount	

e. Motion Precision	
(1) Positioning accuracy	μm
(2) Repetitive accuracy	μm

h. Space Restrictions	
(1) <input type="checkbox"/> None	
(2) <input type="checkbox"/> Yes _____ mm x _____ mm x _____ mm	

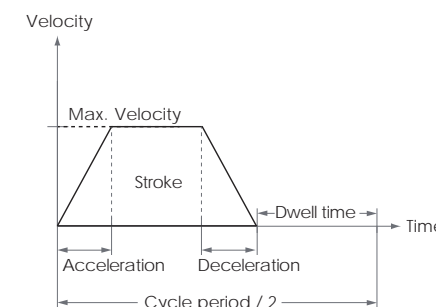
Sizing Form

Customer Name /	Filling Date(DD/MM/YEAR) /
Contact Person /	Telephone /
E-mail /	Fax /

5. Point-to-Point Motion with constant velocity section

Feature: Work performed under constant velocity  
Application: Scanning, inspection, cutting etc.

a. Motion Condition	
(1) Load mass	kg
(2) Effective stroke	m
(3) Max. velocity	m/s
(4) Acceleration time	s
(5) Dwell time	s



b. Driver Condition	
(1) Max. output voltage	V
(2) Continuous current	A
(3) Peak current	A

c. Encoder	
(1) <input type="checkbox"/> Analog <input type="checkbox"/> Digital	
(2) Resolution	μm

f. Motion Direction	
(1) <input type="checkbox"/> Horizontal	
(2) <input type="checkbox"/> Vertical	
(3) <input type="checkbox"/> Tilt _____ degrees	

d. Working Environment	
(1) <input type="checkbox"/> Room temperature	
(2) <input type="checkbox"/> Constant temperature _____ °C	
(3) <input type="checkbox"/> Vacuum _____ Torr	
(4) <input type="checkbox"/> Clean room _____ level	

g. Installation Method	
(1) <input type="checkbox"/> Lying flat	
(2) <input type="checkbox"/> Vertically standing	
(3) <input type="checkbox"/> Wall mount	

e. Motion Precision	
(1) Positioning accuracy	μm
(2) Repetitive accuracy	μm

h. Space Restrictions	
(1) <input type="checkbox"/> None	
(2) <input type="checkbox"/> Yes _____ mm x _____ mm x _____ mm	