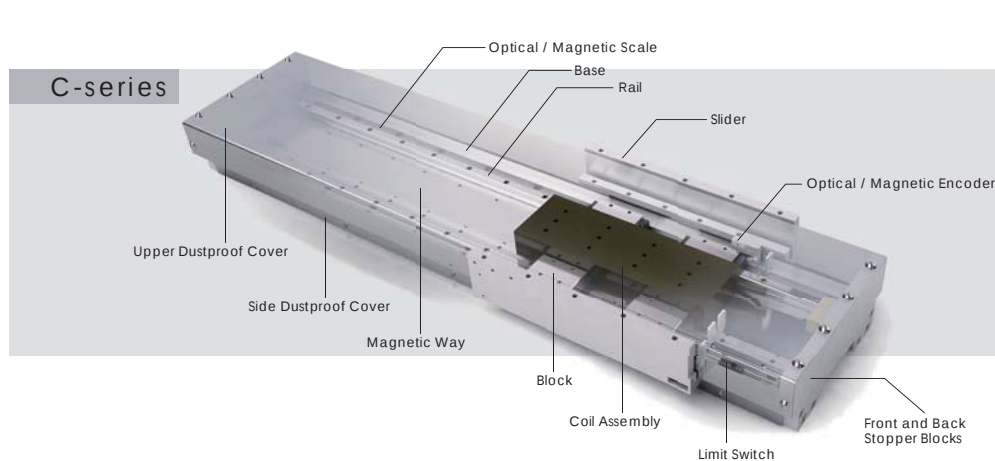




Direct drive systems can significantly improve productivity, yield, and dynamic motion performance. The cpc CLMS model utilizes a high precision positioning platform that is composed of a high load linear guide, high efficiency linear motor, and a position feedback encoder. With its ease of use, this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

Features

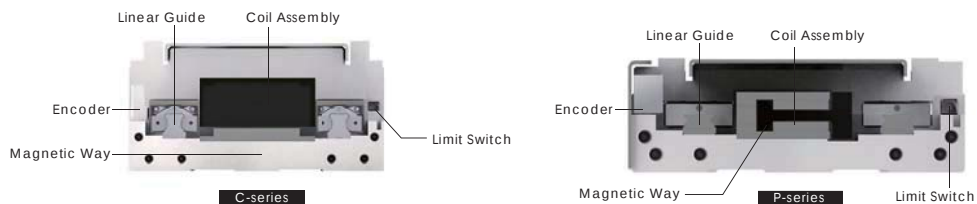
1 Exceptional dustproof design

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 bellow 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.

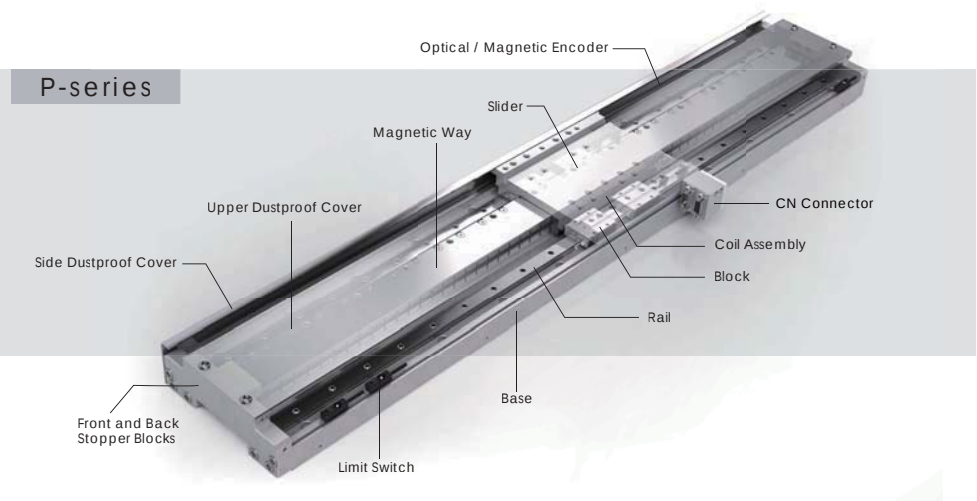


3 High reliability

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/s². We also have available a module with an effective travel length of above 2m.

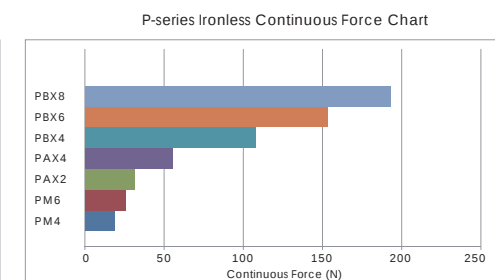
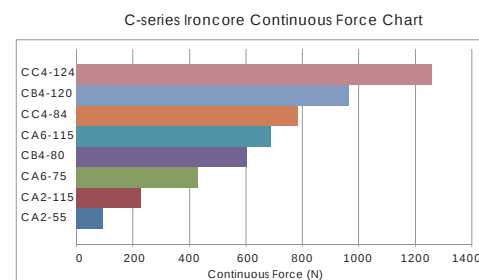


5 Customization

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(μm)*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

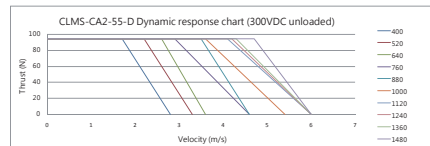
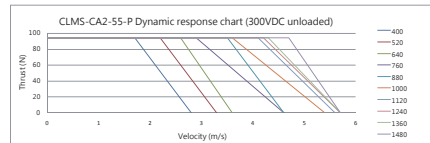
Accuracy P-series

Model	Maximum effective travel (mm)	Repeatability (μm)*1,2		Straightness (mm)*1	Model	Maximum effective travel (mm)	Repeatability (μm)*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								
	405					1025			0.04
1145									
1265									
CLMS-PM6	195	3	2	0.03	CLMS-PB-X6	245	3	2	0.03
						365			
	485								
	605								
	725								
	845								
	965								
	375					1085			0.04
1210									
1325									
CLMS-PA-X2	180	3	2	0.03	CLMS-PB-X8	185	3	2	0.03
	360					305			
	480					425			
	600					545			
	720					665			
	840					785			
	960					905			
	1080					1025			
	1200			0.04		1145			0.04
						1320			
CLMS-PA-X4	130	3	2	0.03	*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 1μm encoder head. System accuracy can be increased further according to differing customer requirements to 0.5, 0.2 and 0.1μm resolutions.				
	310								
	430								
	550								
	670								
	790								
	910								
	1030								
	1150								
	1270			0.04					

Module Parameters C-series

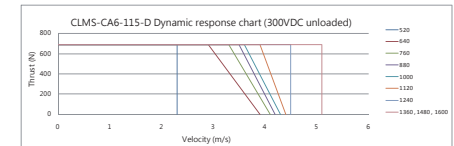
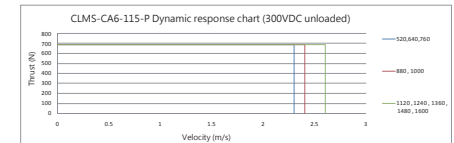
CLMS-CA2-55

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	



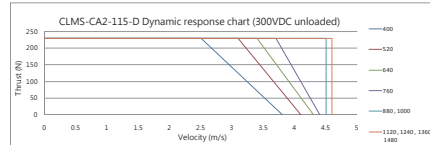
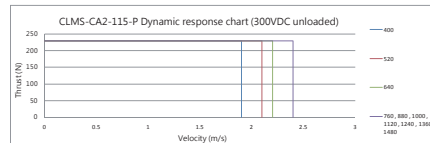
CLMS-CA6-115

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	

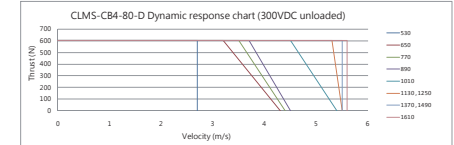
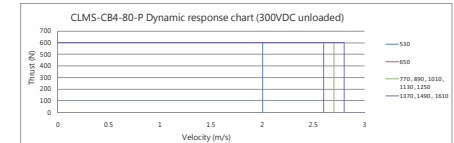


CLMS-CB4-80

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	

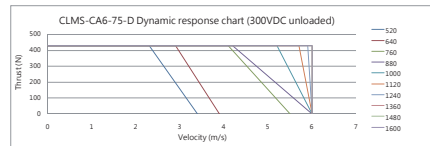
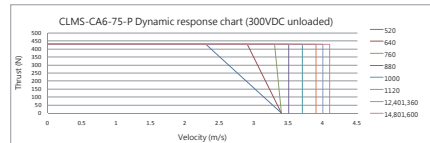


CLMS	CB4-80	
	P	D
Module Parameters		
Continuous force (N)	602.6	
Peak force (N)	1174.3	
Continuous current (Apeak)	8.4	16.8
Peak current (Apeak)	29.8	59.5
Force constant (N/Apeak)	71.7	35.9
Back EMF constant (VL-L/m/s)	79	39.5
Resistance (Ohms)	3.3	0.8
Inductance (mH)	34.38	8.59
Magnetic pole pitch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

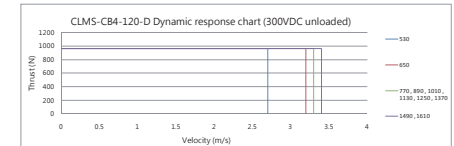
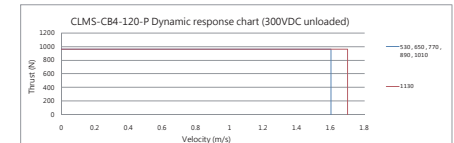


CLMS-CB4-120

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	



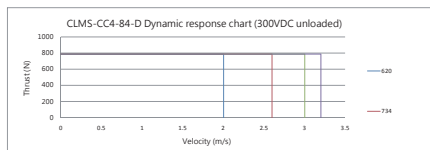
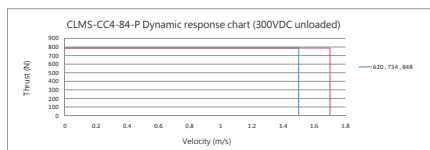
CLMS	CB4-120	
	P	D
Module Parameters		
Continuous force (N)	964.2	
Peak force (N)	1878.9	
Continuous current (Apeak)	8	16
Peak current (Apeak)	29.8	59.5
Force constant (N/Apeak)	120.8	60.4
Back EMF constant (VL-L/m/s)	133.1	66.6
Resistance (Ohms)	4.95	1.24
Inductance (mH)	51.56	12.89
Magnetic pole pitch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



Module Parameters C-series

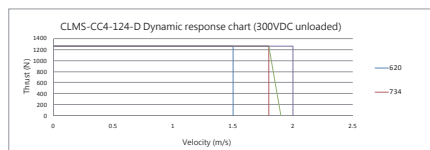
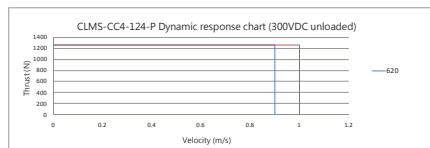
CLMS-CC4-84

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	



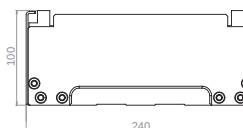
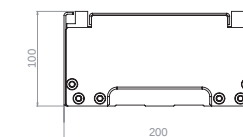
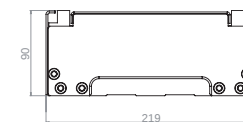
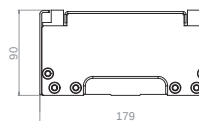
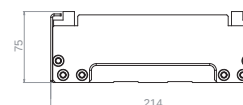
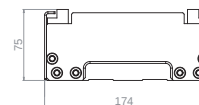
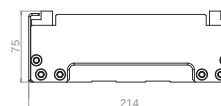
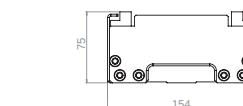
CLMS-CC4-124

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	

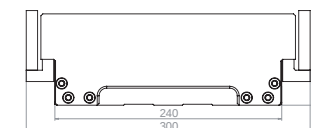
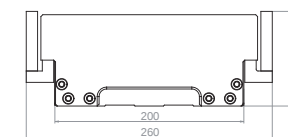
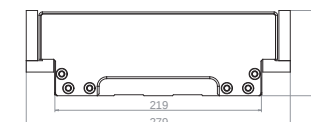
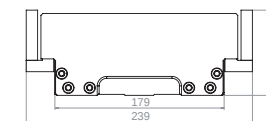
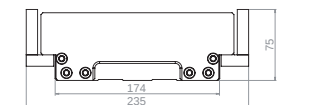
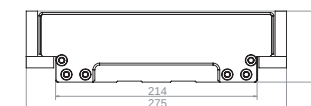
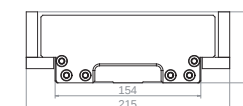


Assembly Dimensions C-series

Standard

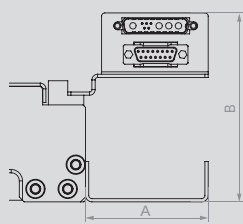


Sealed

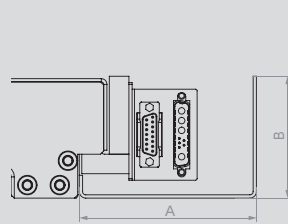


Accessory Options

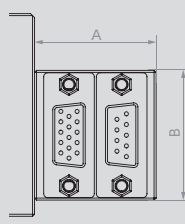
* Size A, B and direction can be assigned by customer.



V-Standard Cable Chain

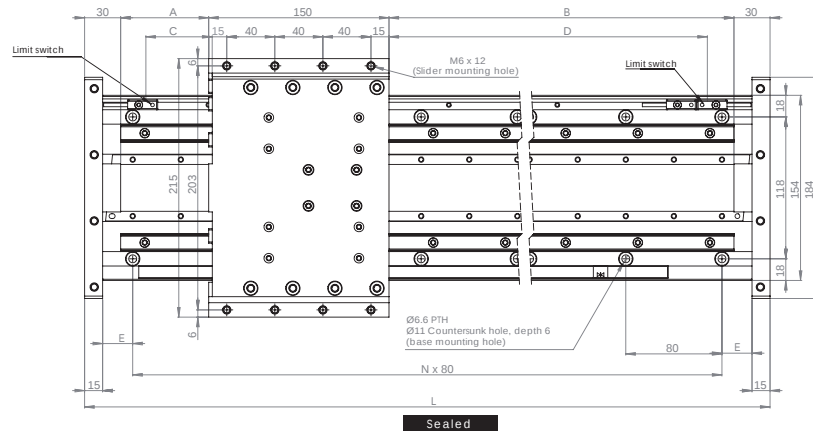
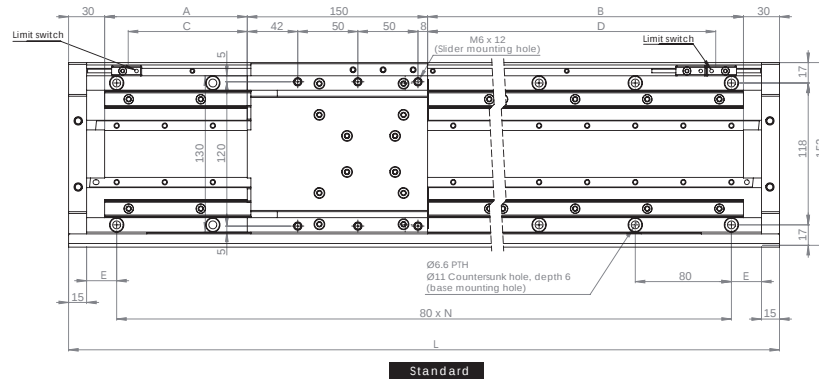


H-Side Cable Chain

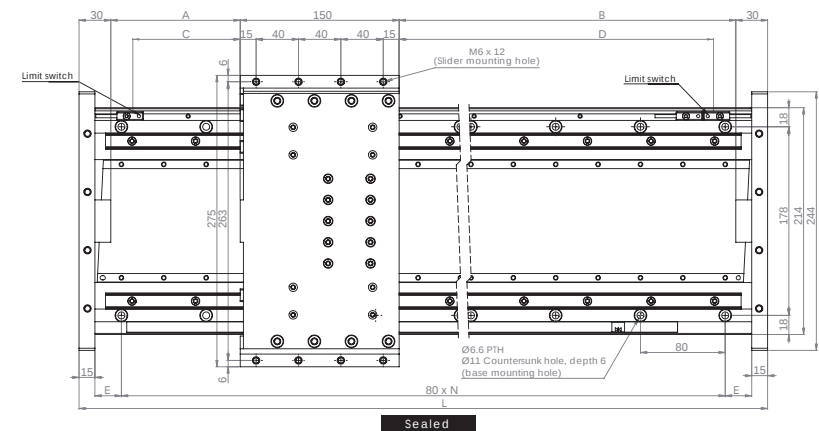
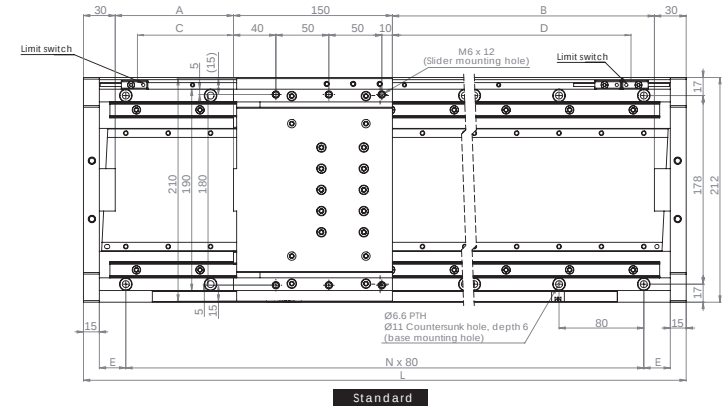


CN Connector Type

Mounting Dimensions CLMS-CA2-55



Mounting Dimensions CLMS-CA2-115



Standard Specifications

Unit : mm

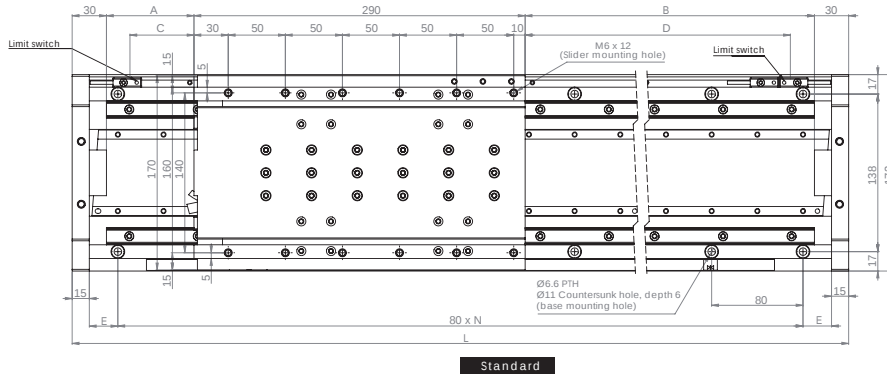
Total length (L)	400	520	640	760	880	1000	1120	1240	1360	1480
Maximum effective travel (A+B)	190	310	430	550	670	790	910	1030	1150	1270
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	25	45	25	45	25	45	25	45	25	45
N	4	5	7	8	10	11	13	14	16	17
Standard 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

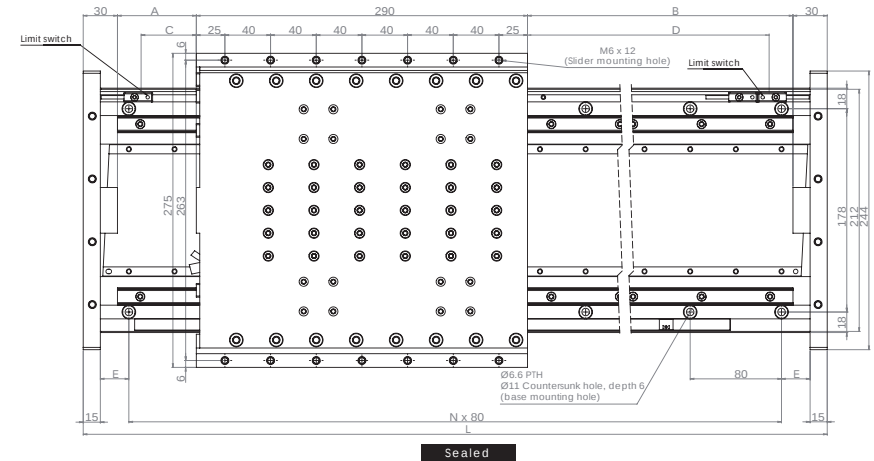
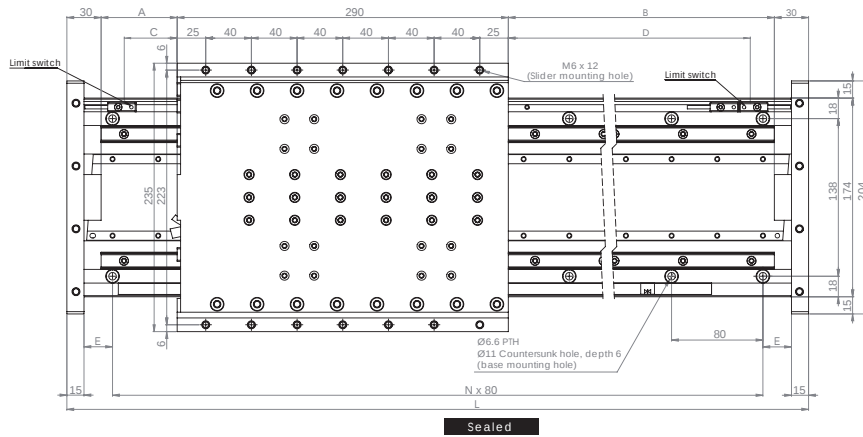
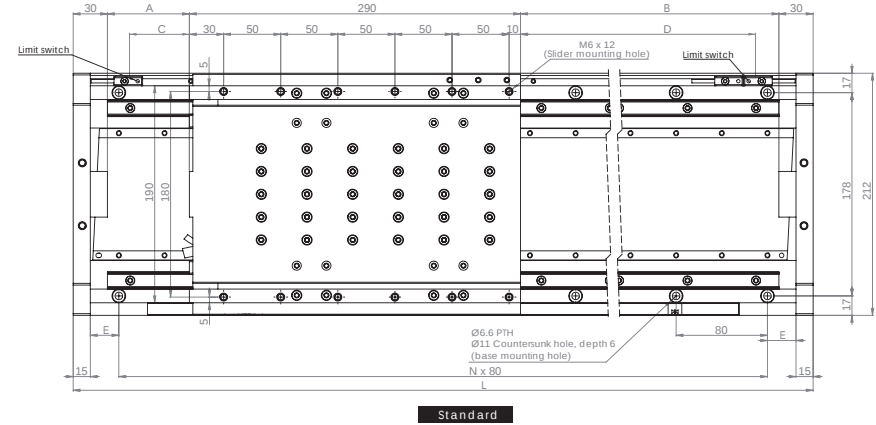
Unit : mm

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

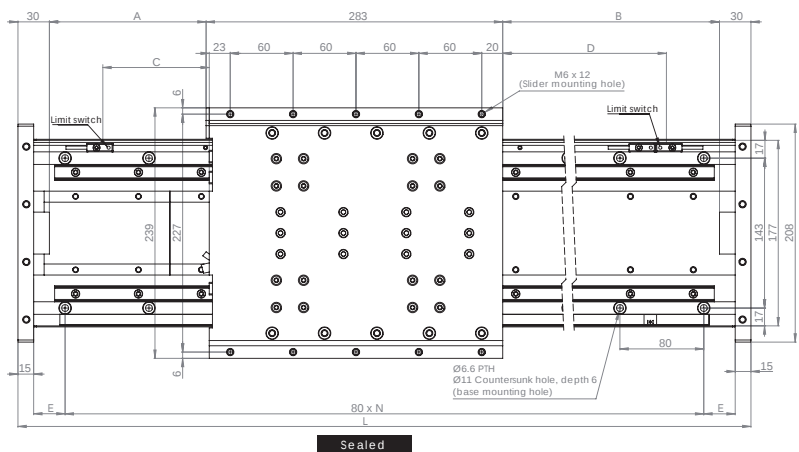
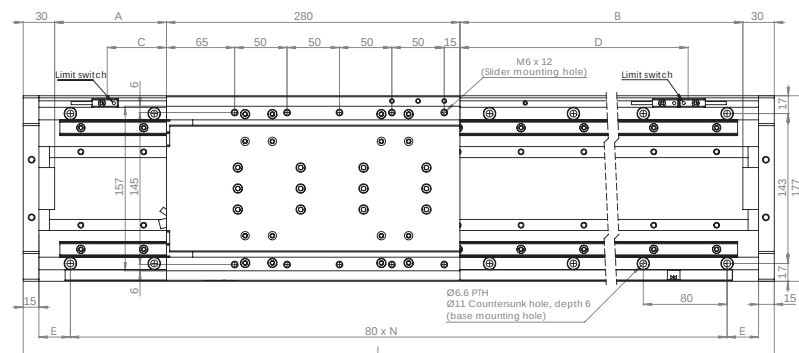
Total length (L)	520	640	760	880	1000	1120	1240	1360	1480	1600
Maximum effective travel (A+B)	170	290	410	530	650	770	890	1010	1130	1250
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	45	25	45	25	45	25	45	25	45	25
N	5	7	8	10	11	13	14	16	17	19
Standard 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

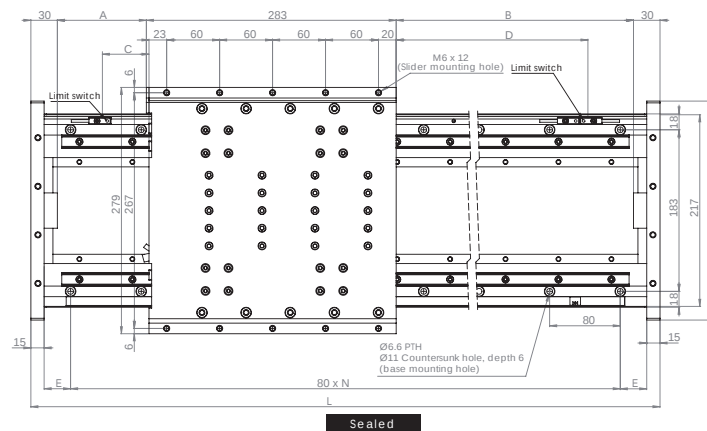
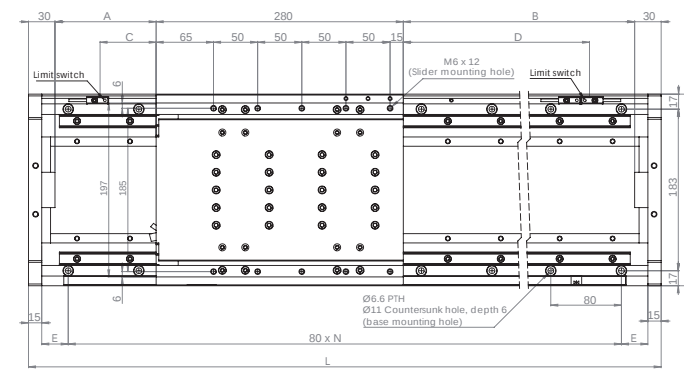


Standard Specifications

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

Mounting Dimensions CLMS-CB4-120

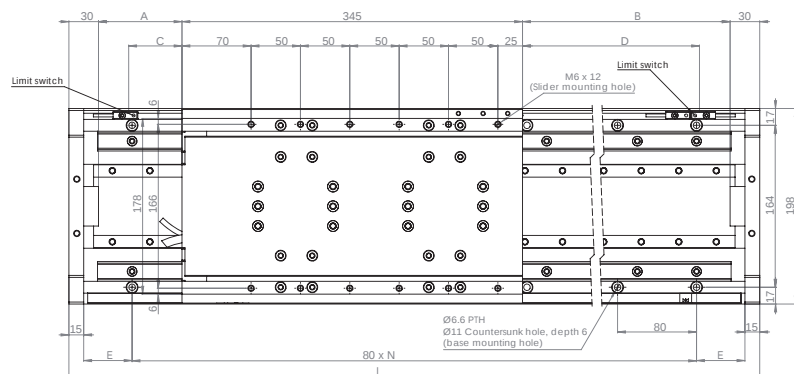


Standard Specifications

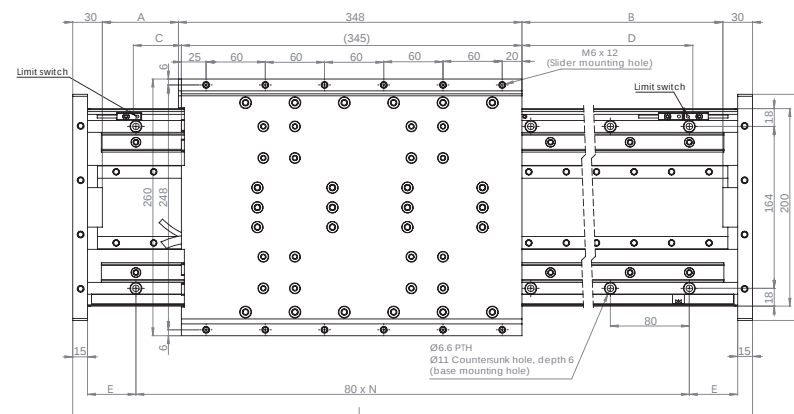
Unit : mm

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

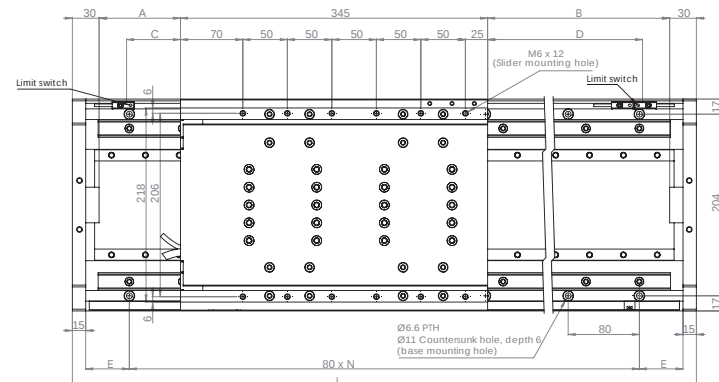


Standard

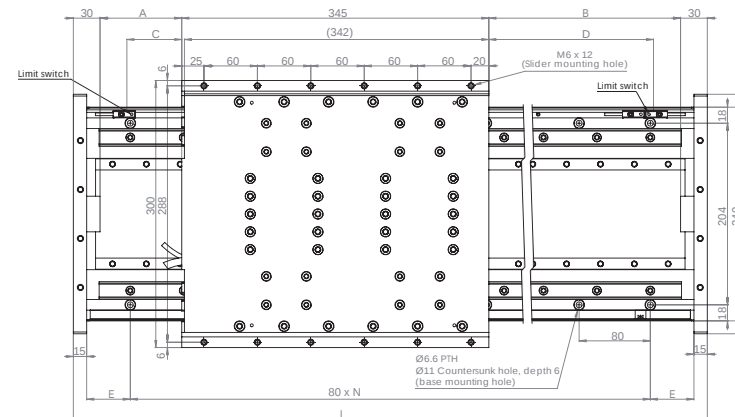


Sealed

Mounting Dimensions CLMS-CC4-124



Standard



Sealed

Standard Specifications

Unit : mm

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

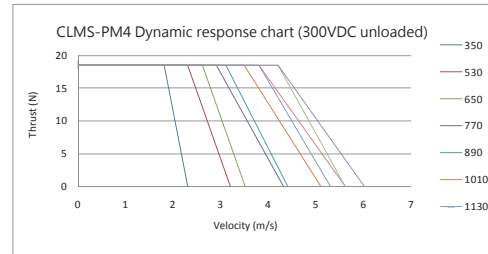
Unit : mm

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

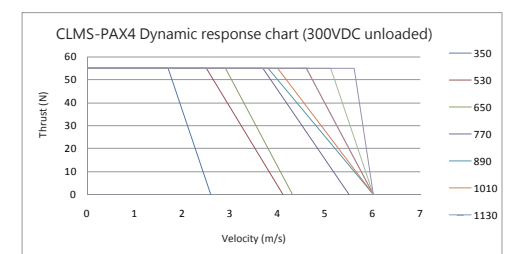
CLMS-PM4

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



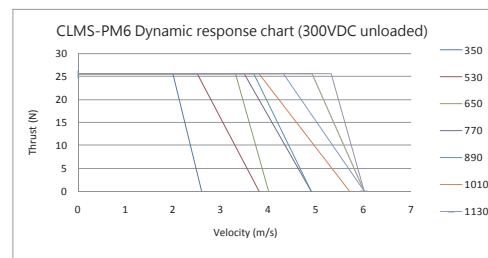
CLMS-PAX4

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



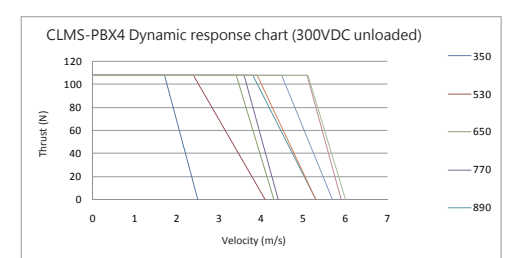
CLMS-PM6

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



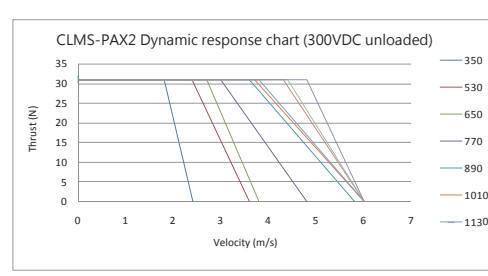
CLMS-PBX4

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



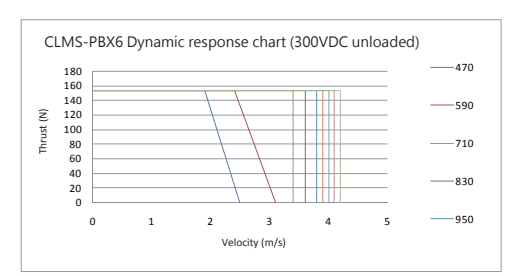
CLMS-PAX2

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

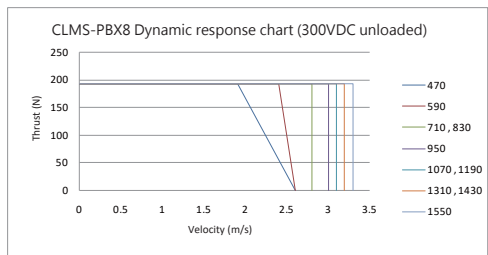
CLMS	PBX6
Module Parameters	
Continuous force (N)	153.3
Peak force (N)	613
Continuous current (Apeak)	3.6
Peak current (Apeak)	14.4
Force constant (N/Apeak)	42.6
Back EMF constant (VL-L/m/s)	49.5
Resistance (Ohms)	12.4
Inductance (mH)	4.31
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	3.4
Open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



Module Parameters P-series

CLMS-PBX8

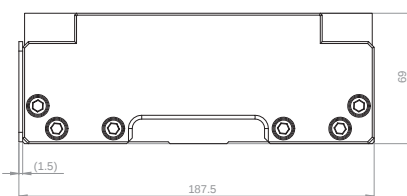
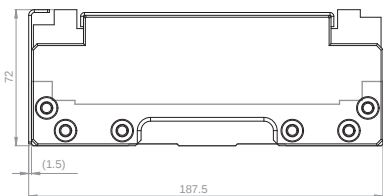
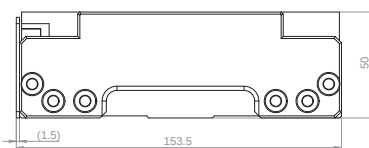
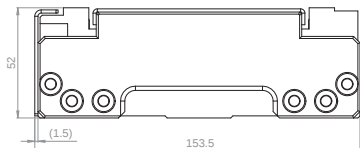
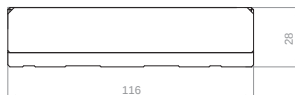
CLMS	PBX8
Module Parameters	
Continuous force (N)	193
Peak force (N)	771.9
Continuous current (Apeak)	3.4
Peak current (Apeak)	13.6
Force constant (N/Apeak)	56.8
Back EMF constant (VL·m/s)	66
Resistance (Ohms)	16.5
Inductance (mH)	5.74
Magnetic pole pitch (mm)	30
Standard slider mass (kg)	4.1
Open slider mass (kg)	4.1



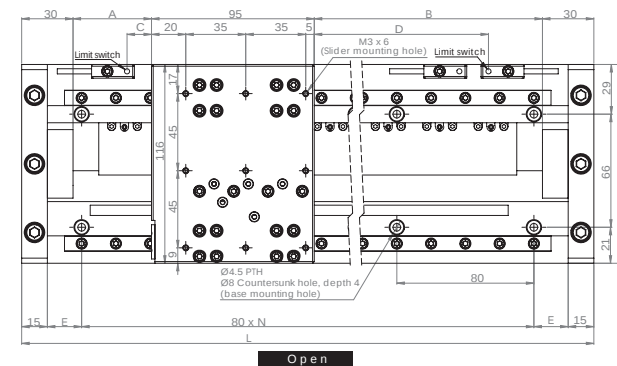
Assembly Dimensions P-series

Standard

Open



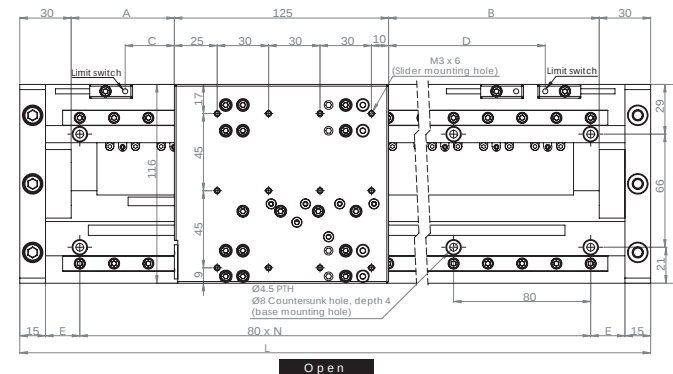
Mounting Dimensions CLMS-PM4



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

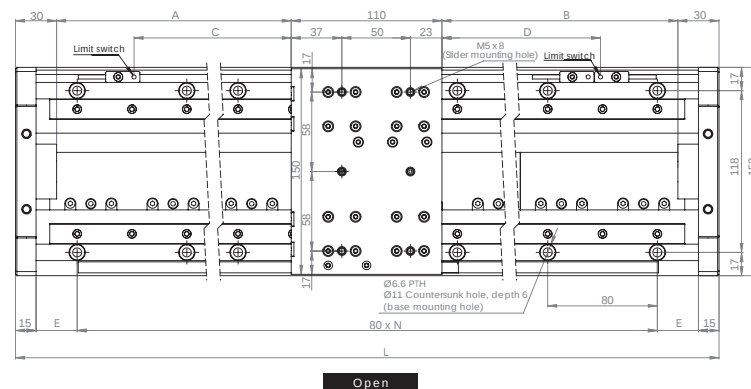
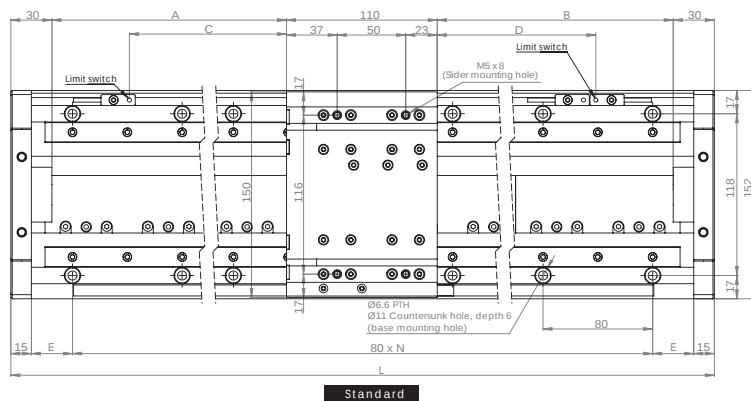
Mounting Dimensions CLMS-PM6



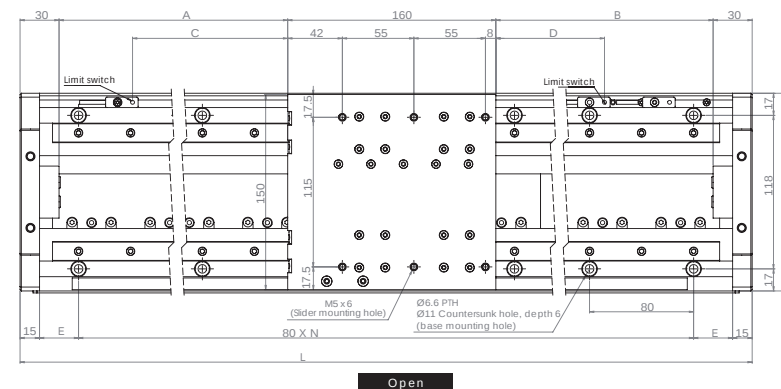
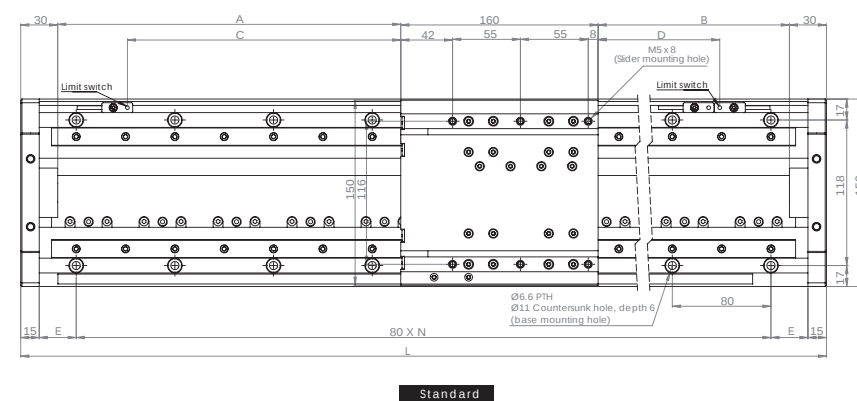
Standard Specifications

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

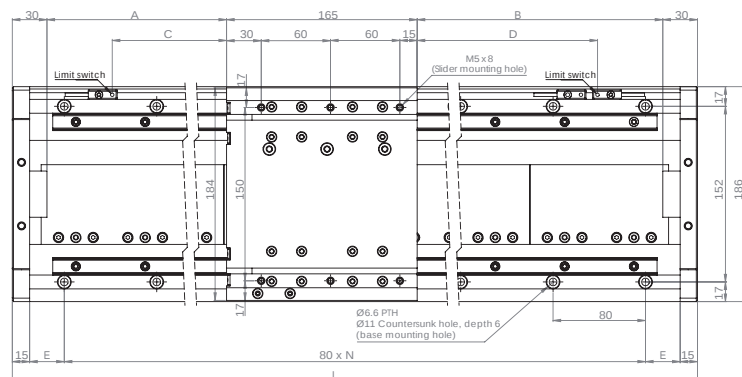
Total length (L)	350	530	650	770	890	1010	1130	1250	1370	1490
Maximum effective travel (A+B)	180	360	480	600	720	840	960	1080	1200	1320
Standard travel (C+D)	120	240	360	480	600	720	840	960	1080	1200
Edge distance of base mounting hole (E)	40	10	30	10	30	10	30	10	30	10
N	4	6	7	9	10	12	13	15	16	18
Standard 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

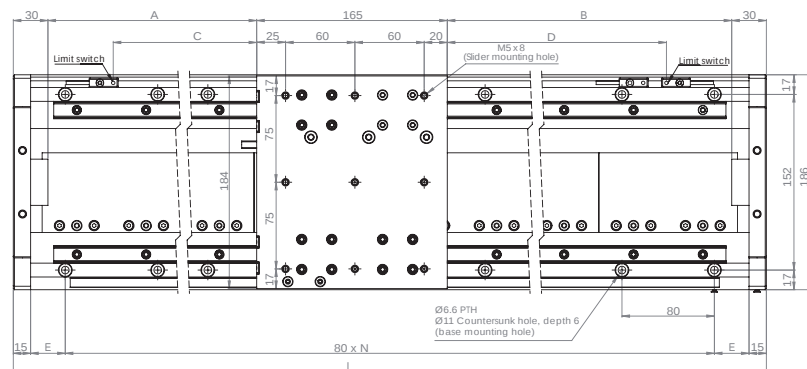
Unit : mm

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



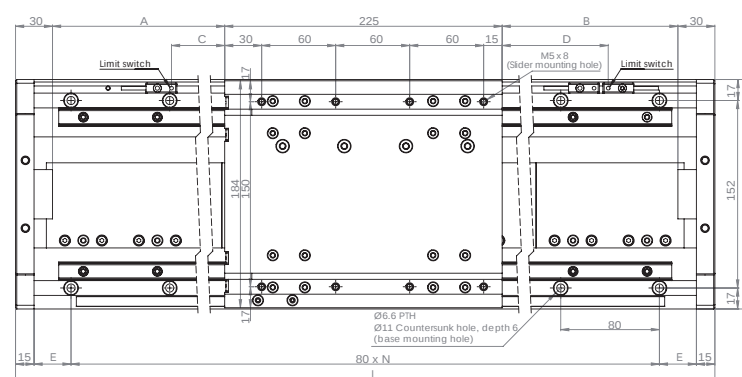
Open

Standard Specifications

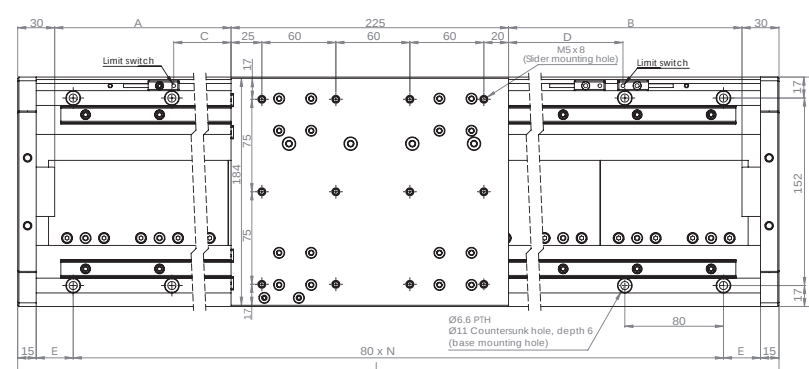
Unit : mm

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

Mounting Dimensions CLMS-PBX6



Standard



Open

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