HIGH PRECISION

Aurotek®
A Complete Solution from One Source



Axis Module

Motion Solutions for Your Automation Requirements

SERIES

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Aurotek®
A Complete Solution from One Source

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FULLY INTEGRATED PLUG & PLAY



info@robot.com.tw

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Axis Module Series

Best design for different
sorts of projects



CCT6 -Page5

CCT8 -Page7

CCT9S -Page9

CCT9 -Page11

CCF10 -Page13

CCF12 -Page15

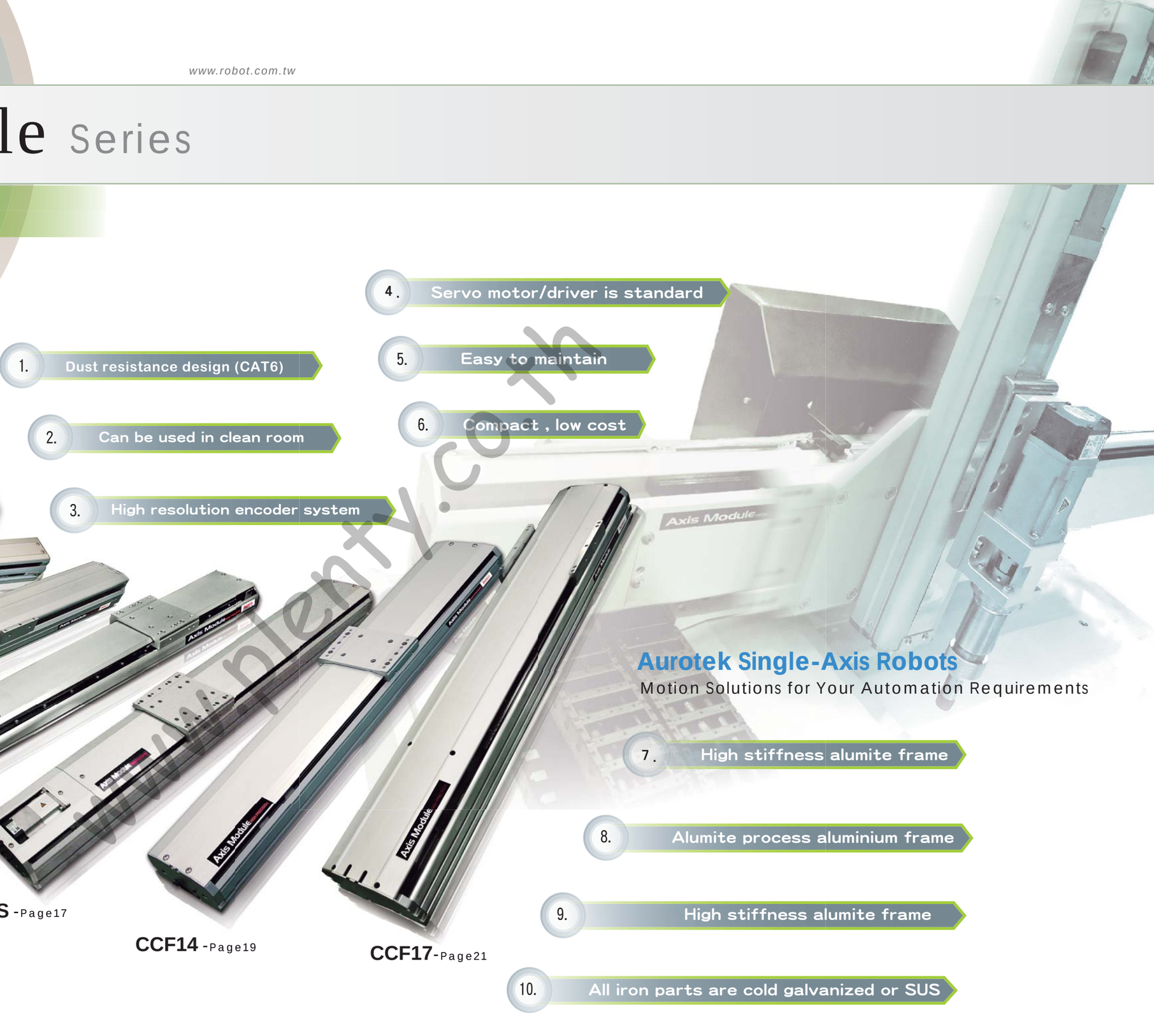
CCF14S -Page17

CCF14 -Page19

CCF17-Page21

PANASONIC Servo Driver

1. Dust resistance design (CAT6)
2. Can be used in clean room
3. High resolution encoder system
4. Servo motor/driver is standard
5. Easy to maintain
6. Compact , low cost



Aurotek Single-Axis Robots

Motion Solutions for Your Automation Requirements

7. High stiffness alumite frame
8. Alumite process aluminium frame
9. High stiffness alumite frame
10. All iron parts are cold galvanized or SUS

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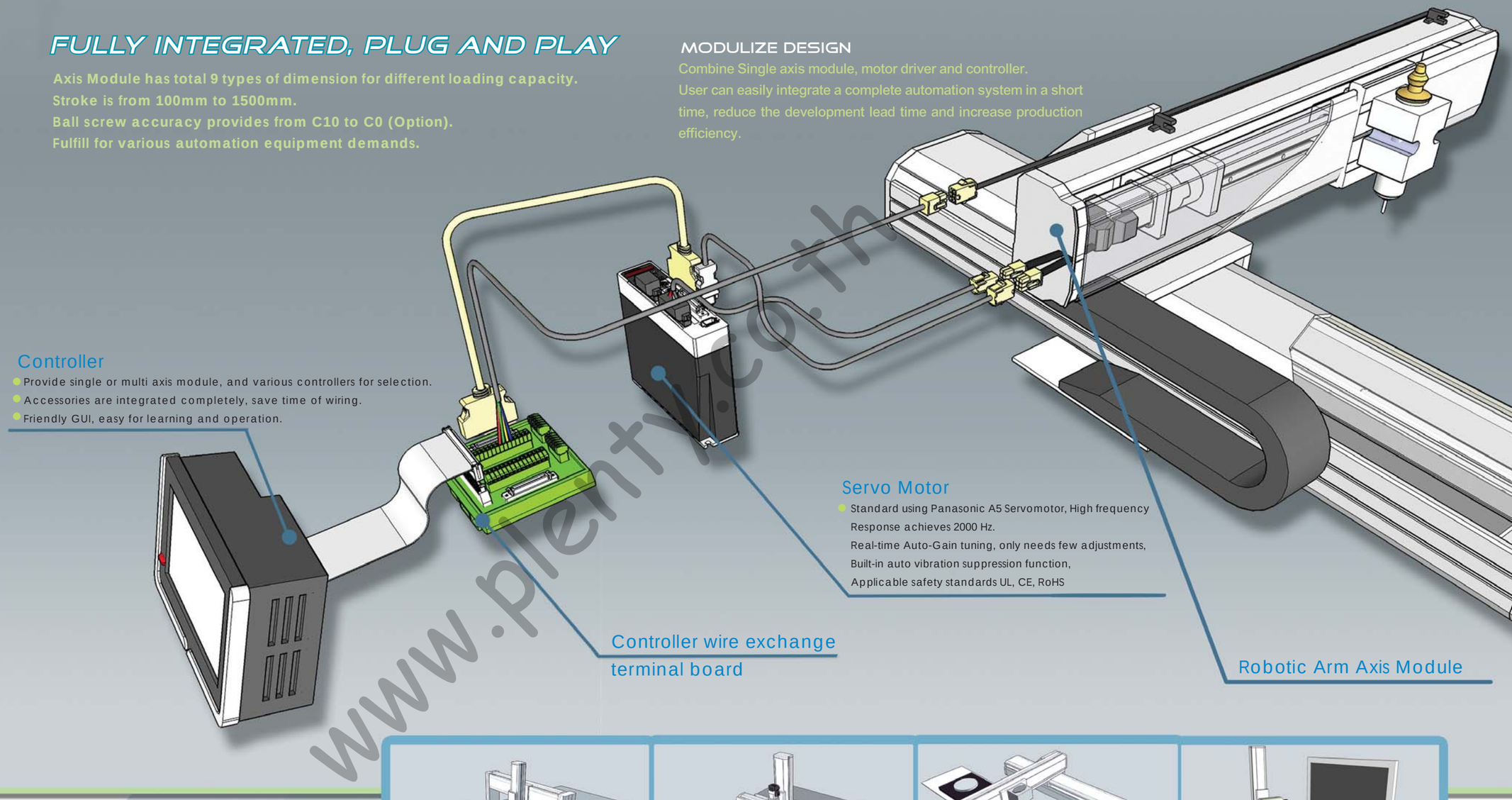
A Complete Solution from One Source

FULLY INTEGRATED, PLUG AND PLAY

Axis Module has total 9 types of dimension for different loading capacity.
Stroke is from 100mm to 1500mm.
Ball screw accuracy provides from C10 to C0 (Option).
Fulfill for various automation equipment demands.

MODULIZE DESIGN

Combine Single axis module, motor driver and controller.
User can easily integrate a complete automation system in a short time, reduce the development lead time and increase production efficiency.



Controller

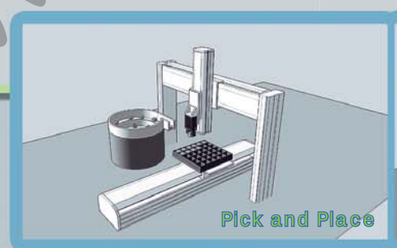
- Provide single or multi axis module, and various controllers for selection.
- Accessories are integrated completely, save time of wiring.
- Friendly GUI, easy for learning and operation.

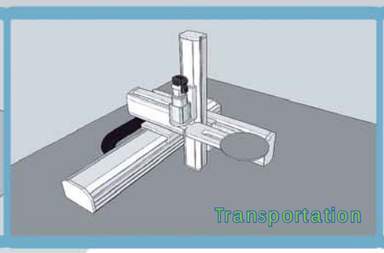
Servo Motor

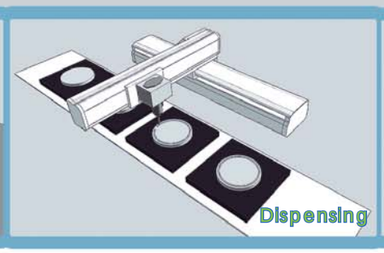
- Standard using Panasonic A5 Servomotor, High frequency Response achieves 2000 Hz.
- Real-time Auto-Gain tuning, only needs few adjustments,
- Built-in auto vibration suppression function,
- Applicable safety standards UL, CE, RoHS

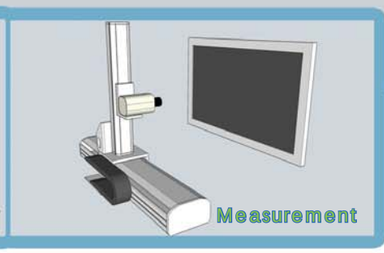
Controller wire exchange terminal board

Robotic Arm Axis Module


Pick and Place


Transportation


Dispensing


Measurement

Multi Axis Module Combinations

CCF14 & CCF14 Combination



CCF12 & CCF12 Combination



CCT9 & CCT6 Combination



CCT6 & CCT6 Combination



CCF14 & CCF14 Combination

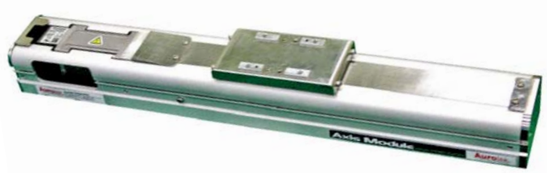


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CCT6

CCT6 R - 510 M A 2 D O J

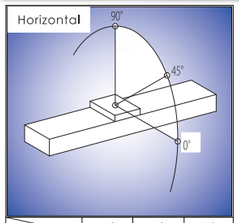
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
CCT6	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	A:10mm 5: 5mm	1: 100V 2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)



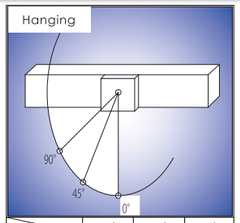
Indirect Type



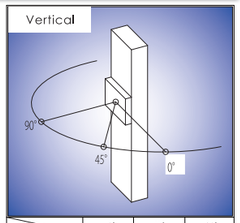
Permissible Deviation



		0°	45°	90°
Lead 10	2 k g	220	295	605
	5 k g	95	130	290
	8 k g	70	110	210
Lead 5	2 k g	270	295	650
	5 k g	95	115	280
	8 k g	40	105	220



		0°	45°	90°
Lead 10	2 k g	280	170	200
	5 k g	95	55	50
	8 k g	55	20	20
Lead 5	2 k g	550	230	145
	5 k g	135	35	25
	8 k g	0	0	0



		0°	45°	90°
Lead 10	1 k g	100	60	120
	2 k g	60	40	60
Lead 5	1 k g	140	105	215
	2 k g	60	55	70
	4 k g	30	25	40

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm	
Ball screw Lead	10mm	5mm
Rated Speed	500mm/s	250mm/s
Theory Thrust	168N	334N
Maximum Stroke Length	630mm	630mm

* Accuracy is not include the expansion of temperature increase.
* Theory thrust force: the Maximum Loading for stop holding on the axis direction.

ø12 Maximum Speed mm/sec			
Stroke \ Lead		10mm	5mm
630		459	228

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
K	Servomotor cable connection on the other side of graphic(page-6)
L	Sensors wires connection on the other side of graphic(page-6)

Structure Specification

Drive	Panasonic Motor/Driver 100W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø12, screw lead: 10,5mm
Guide	Linear guide1 set
Limit sensor	PM-R24(or equivalent products)
Home sensor	PM-R24(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

Stroke	30	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630
Length(L)	340	380	420	460	500	540	580	620	660	700	740	780	820	860	900	940
Length & Brake	L+30mm															
M	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
N	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Weight Kg	3.0	3.2	3.3	3.4	3.6	3.8	3.9	4.1	4.3	4.5	4.7	4.8	4.9	5.1	5.2	5.3

Indirect

Stroke	30	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630
L	L = Stroke + 181.5 mm															
M	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
N	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Weight Kg	3.0	3.2	3.3	3.4	3.6	3.8	3.9	4.1	4.3	4.5	4.7	4.8	4.9	5.1	5.2	5.3

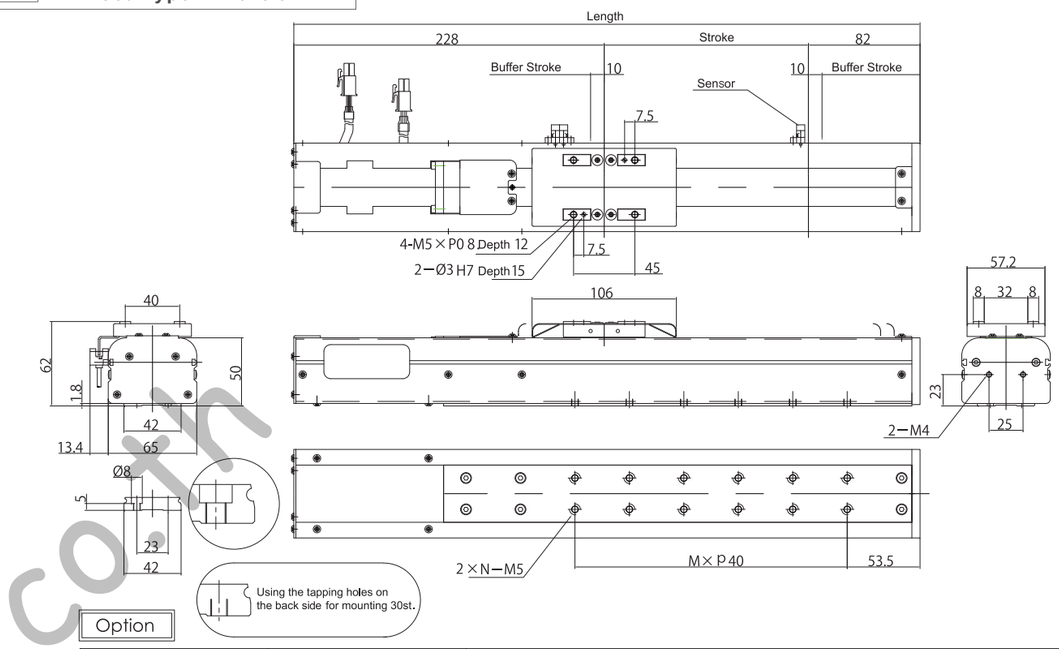
(Dimensions change may be made without notify. The other requirements please contact us.)

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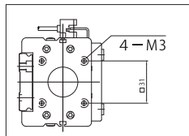
Axis Module SERIES

Aurotek Single-Axis Robots

Direct Type Dimension

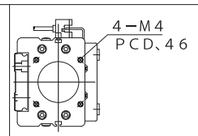


Option



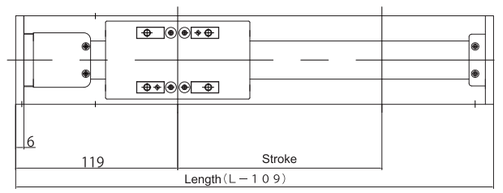
For Stepping Motor

PK—543
PK—544
PK—545



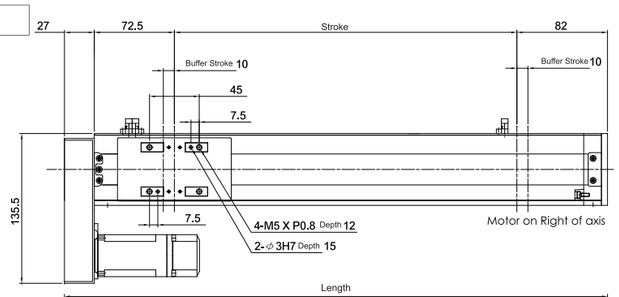
For Mitsubishi Servo Motor

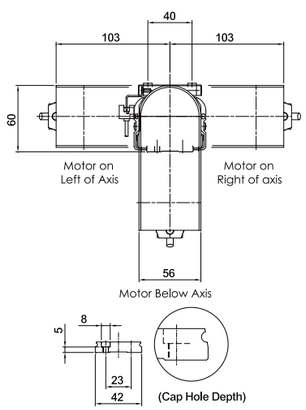
HC—KFS13
HC—MFS13

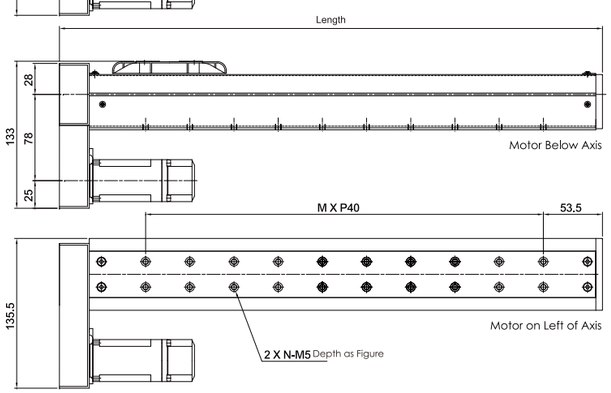


◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension







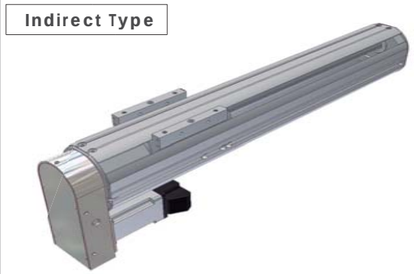
* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

CCT8

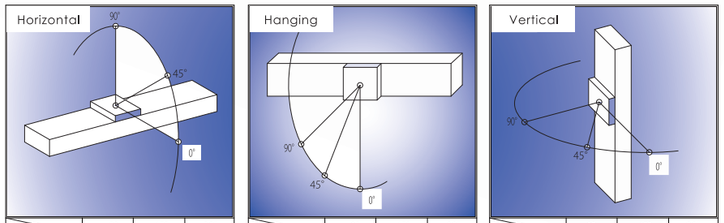
CCT8	R	- 510	M	A	2	D	O	J
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	1: 100V 2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)



Indirect Type



Permissible Deviation



		0°	45°	90°
Lead 20	2 k g	390	455	790
	5 k g	140	170	370
	10 k g	85	100	370
Lead 10	8 k g	100	130	365
	15 k g	50	60	225
	20 k g	32	40	205
Lead 5	20 k g	40	55	345
	25 k g	30	40	305
	30 k g	20	25	215

		0°	45°	90°
Lead 20	2 k g	580	325	320
	5 k g	185	80	70
	10 k g	10	10	10
Lead 10	3 k g	390	199	160
	7 k g	185	80	70
	10 k g	15	15	15
Lead 5	4 k g	1100	235	170
	8 k g	420	55	40
	11 k g	20	20	20

		0°	45°	90°
Lead 20	1 k g	350	250	360
	2 k g	175	125	180
Lead 10	2 k g	250	180	250
	3 k g	115	85	120
	5 k g	90	65	90
Lead 5	6 k g	70	55	75
	9 k g	45	30	43
	12 k g	30	20	30

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	84N	168N	334N
Maximum Stroke Length	1200mm	1200mm	900mm

ø15 Maximum Speed mm/sec

Stroke \ Lead	20mm	10mm	5mm
750	853	426	213
850	672	336	158
950	553	275	
1050	463	231	
1150	388	194	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
K	Servomotor cable connection on the other side of graphic(page-8)
L	Sensors wires connection on the other side of graphic(page-8)

Structure Specification

Drive	Panasonic Motor/Driver 100W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead: 20, 10, 5 mm
Guide	Linear guide1 set
Limit sensor	PM-T44(or equivalent products)
Home sensor	PM-T44(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1110	1170
Length(L)	440	500	560	620	680	740	800	860	920	980	1040	1100	1160	1220	1280	1340	1400	1460
Length & Brake	L+30mm																	
M	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
N	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Weight Kg	4. 1	4. 5	4. 9	5. 3	5. 6	6. 0	6. 6	7. 2	7. 8	8. 4	9. 2	10. 0	10. 6	11. 2	11. 8	12. 4	13. 2	14. 0

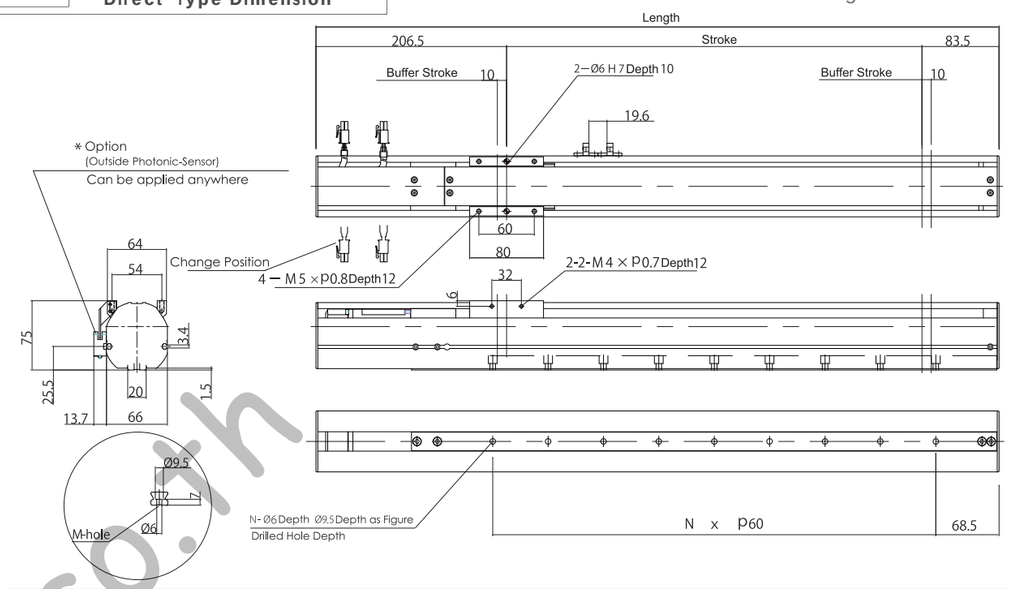
Indirect

Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1110	1170
L	L = Stroke + 190 mm																	
M	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
N	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Weight Kg	4. 1	4. 5	4. 9	5. 3	5. 6	6. 0	6. 6	7. 2	7. 8	8. 4	9. 2	10. 0	10. 6	11. 2	11. 8	12. 4	13. 2	14. 0

(Dimensions change may be made without notify. The other requirements please contact us.)

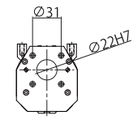
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Direct Type Dimension

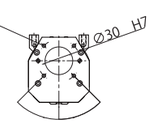


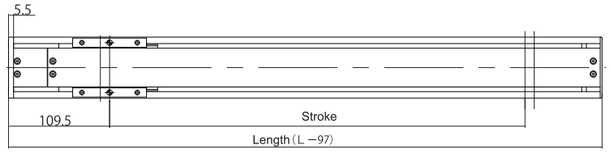
Option

For Stepping Motor
P K—543
P K—544
P K—545



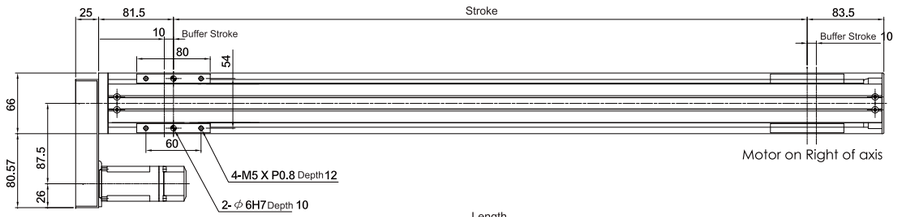
For Mitsubishi Servo Motor
H C—KF S13
H C—M F S13

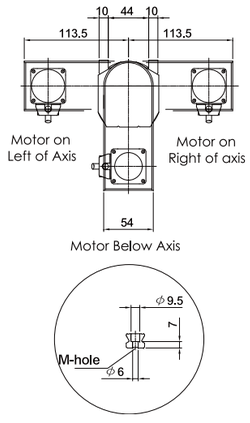


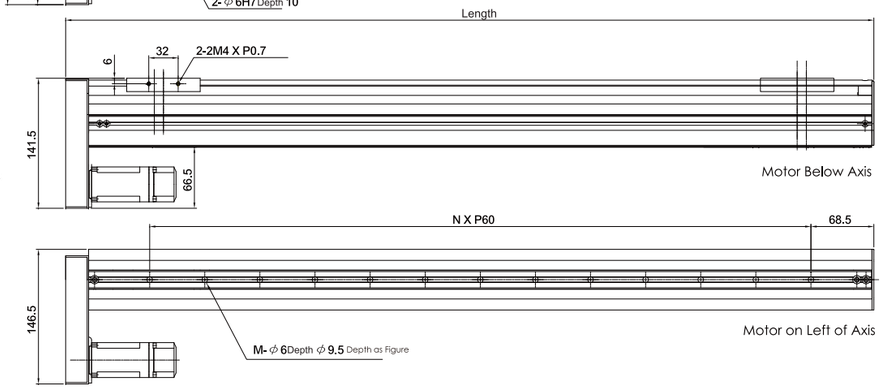


◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension







* Attention： As the Length is too long, the cover would be bent and thus the vibration might be caused

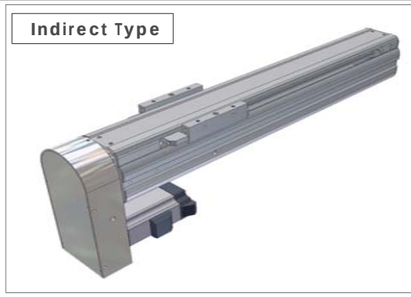
CCT9S

CCT9S R - 510 M A 2 D O J

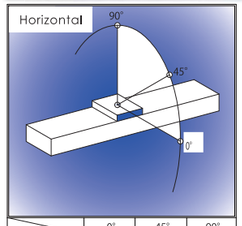
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
CCT9S	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)

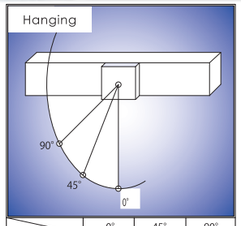


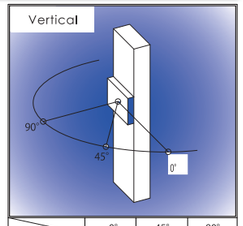
Indirect Type



Permissible Deviation







		0°	45°	90°
Lead 20	8k g	200	230	415
	15k g	100	110	210
	30k g	50	55	120
Lead 10	25k g	70	90	245
	40k g	40	55	175
	55k g	25	35	135
Lead 5	50k g	40	55	255
	60k g	30	35	205
	70k g	25	30	175

		0°	45°	90°
Lead 20	8k g	280	150	135
	15k g	95	45	35
Lead 10	15k g	200	65	45
	20k g	105	30	20
Lead 5	15k g	520	75	50
	20k g	280	30	20

		0°	45°	90°
Lead 20	3k g	220	160	220
	5k g	170	110	160
Lead 10	8k g	200	140	190
	12k g	125	85	130
	15k g	85	65	100
Lead 5	12k g	100	75	100
	15k g	65	45	75
	20k g	35	25	30

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	336N	672N	1344N
Maximum Stroke Length	1200mm	1200mm	900mm

ø15 Maximum Speed mm/sec

Stroke \ Lead	20mm	10mm	5mm
750	853	426	213
850	672	336	158
950	553	275	
1050	463	231	
1150	388	194	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
L	Sensors wires connection on the other side of graphic(page-10)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 400W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead: 20, 10, 5 mm
Guide	Linear guide1 set
Limit sensor	PT-T44(or equivalent products)
Home sensor	PT-T44(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

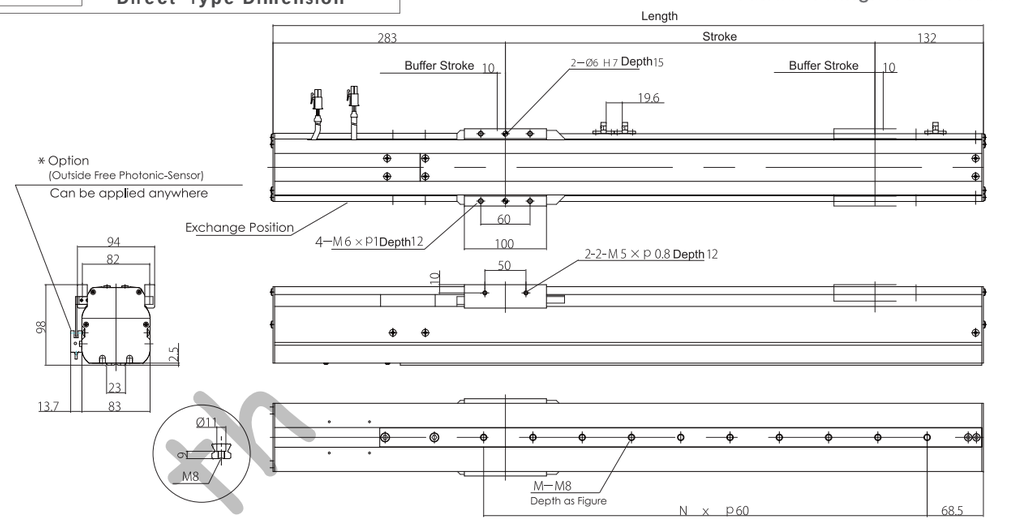
Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1110	1170
Length(L)	565	625	685	745	805	865	925	985	1045	1105	1165	1225	1285	1345	1405	1465	1525	1585
Length & Brake	L+30mm																	
M	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
N	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Weight Kg	7.6	7.9	8.2	8.6	8.9	9.3	9.6	10.0	10.3	10.7	11.0	11.4	11.7	12.1	12.4	12.8	13.1	13.5

Indirect

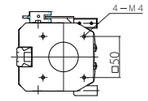
Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1100	1170
L	L = Stroke + 283.5 mm																	
M	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
N	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Weight Kg	7.6	7.9	8.2	8.6	8.9	9.3	9.6	10.0	10.3	10.7	11.0	11.4	11.7	12.1	12.4	12.8	13.1	13.5

(Dimensions change may be made without notify. The other requirements please contact us.)

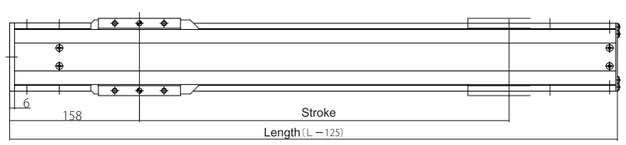
Direct Type Dimension

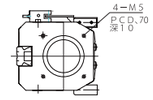


Option

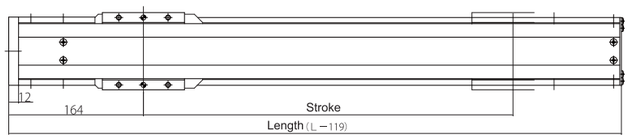


For Stepping Motor
PK—564
PK—566
PK—569



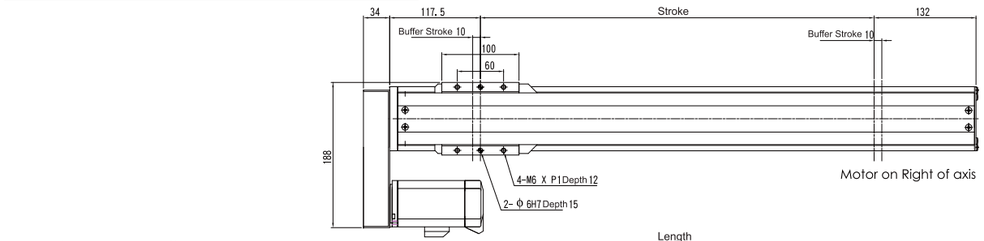


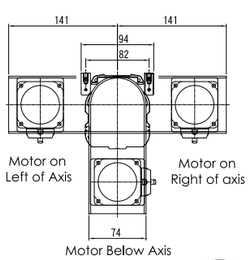
For Mitsubishi Servo Motor
HC—MFS23
HC—MFS43

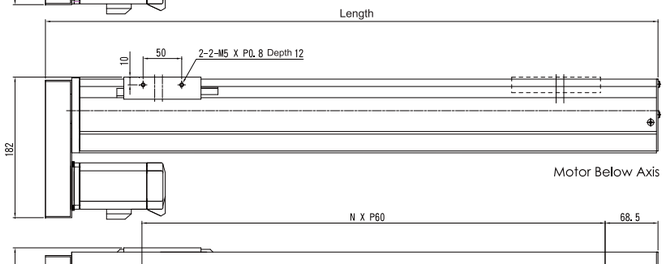


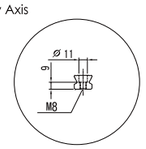
◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension









* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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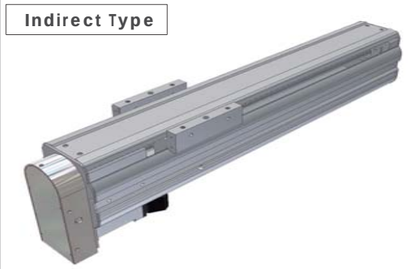
CCT9

CCT9 R - 510 M A 2 D O J

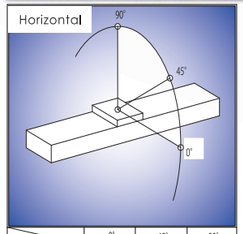
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
CCT9	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	1: 100V 2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)

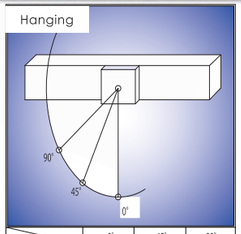


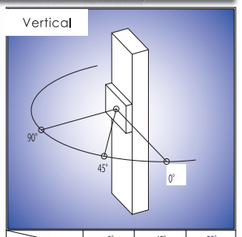
Indirect Type



Permissible Deviation







		0°	45°	90°
Lead 20	4 kg	390	454	790
	12 kg	139	169	365
	25 kg	77	100	370
Lead 10	16 kg	100	130	364
	35 kg	46	60	225
	40 kg	31	40	205
Lead 5	40 kg	39	55	345
	50 kg	30	40	304
	55 kg	20	25	215

		0°	45°	90°
Lead 20	4 kg	580	324	320
	12 kg	184	80	69
	25 kg	0	0	0
Lead 10	8 kg	390	199	160
	15 kg	184	80	69
	20 kg	0	0	0
Lead 5	8 kg	1100	235	170
	15 kg	420	55	40
	20 kg	0	0	0

		0°	45°	90°
Lead 20	1 kg	715	505	715
	2 kg	355	250	355
Lead 10	2 kg	500	354	500
	3 kg	235	165	235
	5 kg	180	129	180
Lead 5	7 kg	140	100	144
	10 kg	85	60	85
	13 kg	55	39	55

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/sec	500mm/sec	250mm/sec
Theory Thrust Force	84N	168N	334N
Maximum Stroke Length	1200mm	1200mm	900mm

ø15 Maximum Speed mm/sec

Stroke \ Lead	20mm	10mm	5mm
750	853	426	213
850	672	336	158
950	553	275	
1050	463	231	
1150	388	194	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
L	Sensors wires connection on the other side of graphic(page-12)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 100W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead: 20, 10, 5 mm
Guide	Linear guide 1 set
Limit sensor	PM-T44(or equivalent products)
Home sensor	PM-T44(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

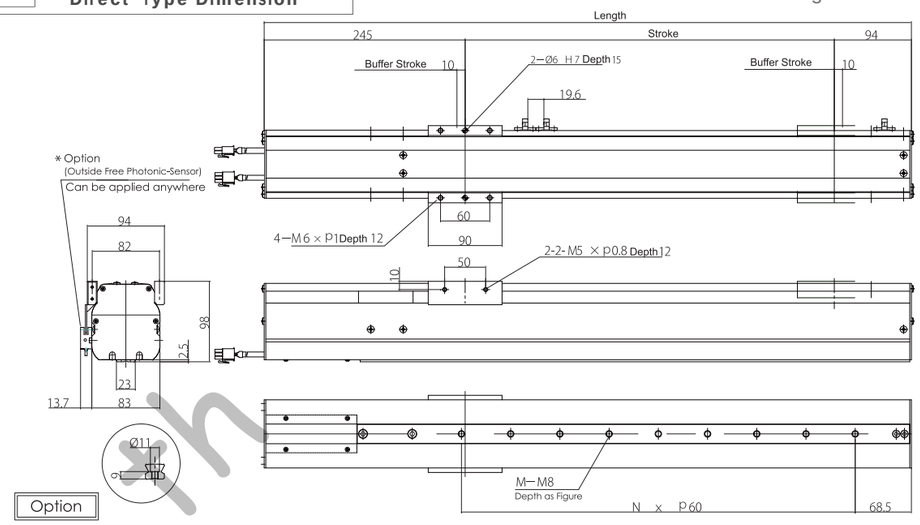
Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1110	1170
Length(L)	489	549	609	669	729	789	849	909	969	1029	1089	1149	1209	1269	1329	1389	1449	1509
Length & Brake	L+30mm																	
M	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
N	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Weight Kg	6.5	6.8	7.1	7.5	7.8	8.2	8.5	8.9	9.2	9.6	9.9	10.3	10.6	11.0	11.3	11.7	12.0	12.4

Indirect

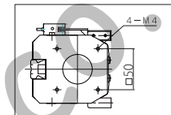
Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1100	1170
L	L = Stroke +214 mm																	
M	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
N	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Weight Kg	6.5	6.8	7.1	7.5	7.8	8.2	8.5	8.9	9.2	9.6	9.9	10.3	10.6	11.0	11.3	11.7	12.0	12.4

(Dimensions change may be made without notify. The other requirements please contact us.)

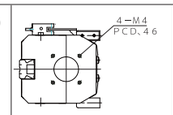
Direct Type Dimension



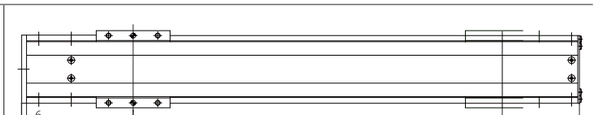
Option

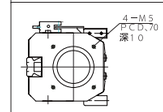


For Stepping Motor
PK-564
PK-566
PK-569

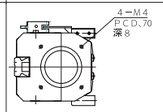


For Mitsubishi Servo Motor
HC-KFS13
HC-MFS13

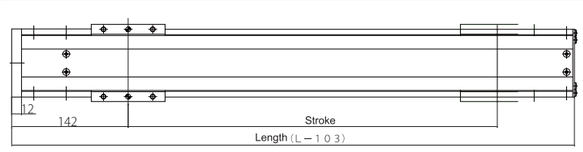




For Mitsubishi Servo Motor
HC-MFS23
HC-MFS43

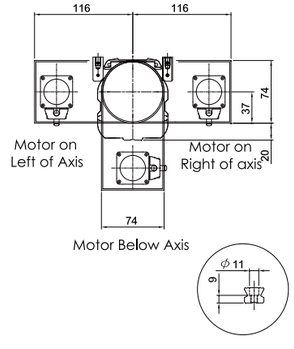


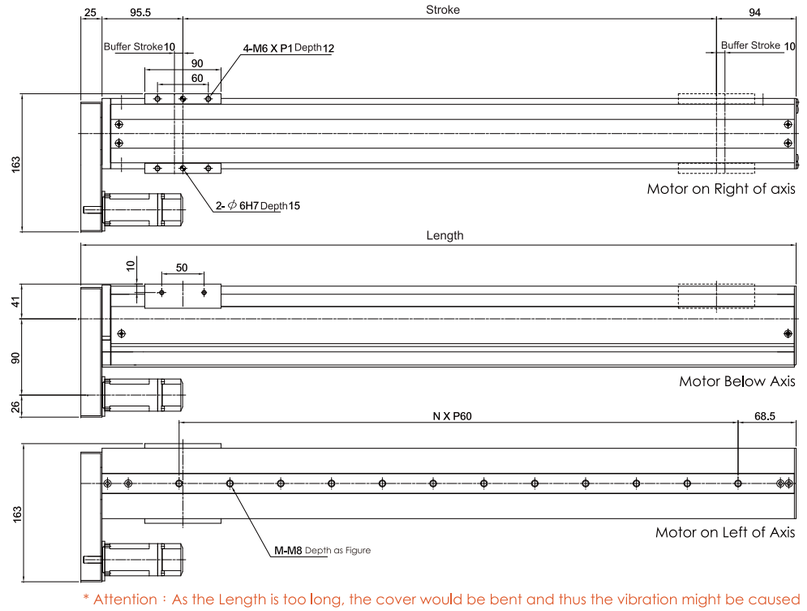
For Panasonic Servo Motor
MSMD02□□1□



◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension





* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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CCF10

CCF10 R - 500 M A 2 D O J

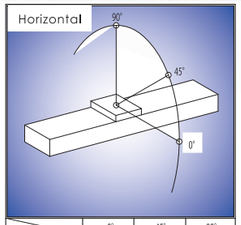
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
CCF10	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	1: 100V 2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)



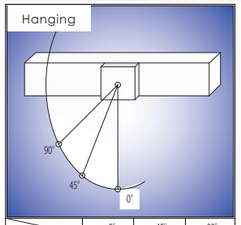
Indirect Type



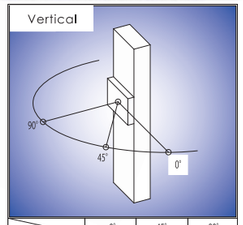
Permissible Deviation



		0°	45°	90°
Lead 20	3 kg	242	263	400
	8 kg	100	120	190
	15 kg	55	70	180
Lead 10	10 kg	67	85	225
	22 kg	22	28	89
	30 kg	7	9	40
Lead 5	25 kg	23	33	315
	45 kg	1	2	52



		0°	45°	90°
Lead 20	3 kg	445	223	195
	7 kg	235	105	75
	15 kg	115	330	18
Lead 10	7 kg	245	125	95
	15 kg	150	35	22
Lead 5	7 kg	610	145	105
	15 kg	280	35	25



		0°	45°	90°
Lead 20	1 kg	423	299	380
	2 kg	215	150	174
Lead 10	2 kg	300	214	260
	4 kg	145	104	105
	6 kg	115	82	74
Lead 5	5 kg	93	65	50
	10 kg	59	40	17
	13 kg	42	29	0

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	84N	168N	334N
Maximum Stroke Length	1200mm	1200mm	900mm

ϕ15 Maximum Speed mm/sec

Stroke \ Lead	20mm	10mm	5mm
750	853	426	213
850	672	336	158
950	553	275	
1050	463	231	
1150	388	194	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
L	Sensors wires connection on the other side of graphic(page-14)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 100W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead: 20, 10, 5 mm
Guide	Linear guide 1 set
Limit sensor	PM-U24(or equivalent products)
Home sensor	PM-U24(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

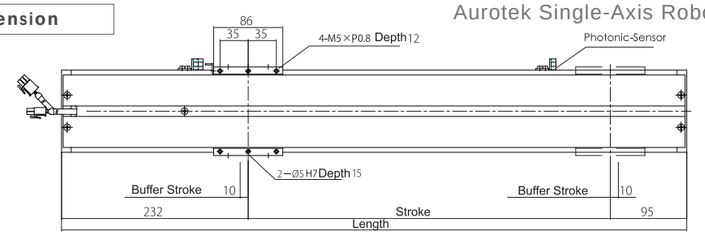
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Length(L)	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577
Length & Brake	L+30mm																						
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	6.8	6.9	7.1	7.4	7.8	8.2	8.6	9.0	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.8	13.2	14.1	15.0	15.9	16.8

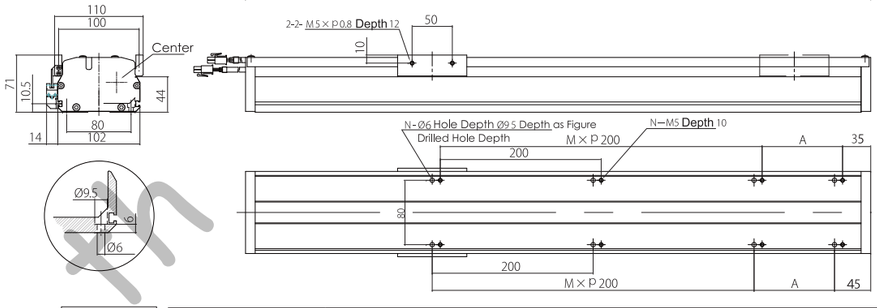
Indirect

Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	L = Stroke + 191 mm																						
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	6.8	6.9	7.1	7.4	7.8	8.2	8.6	9.0	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.8	13.2	14.1	15.0	15.9	16.8

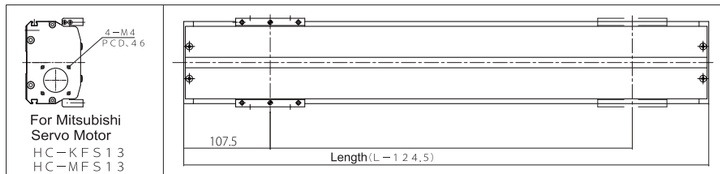
(Dimensions change may be made without notify. The other requirements please contact us.)

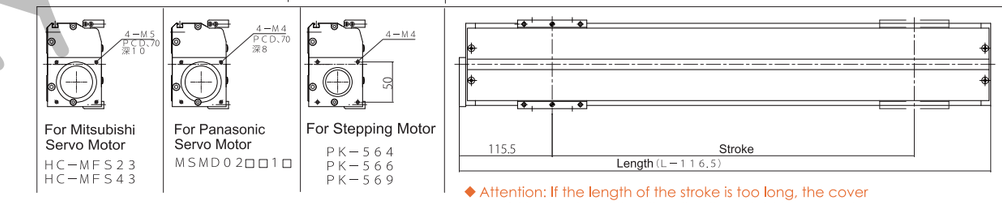
Direct Type Dimension





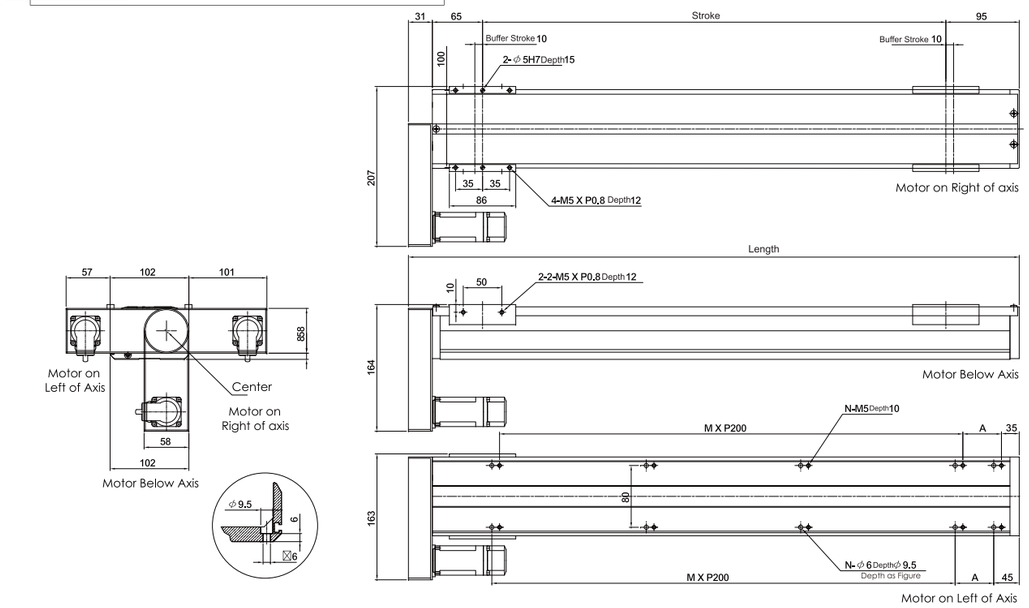
Option





◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension



* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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Axis Module SERIES

Aurotek Single-Axis Robots

CCF12 R - 500 M A 2 D O J

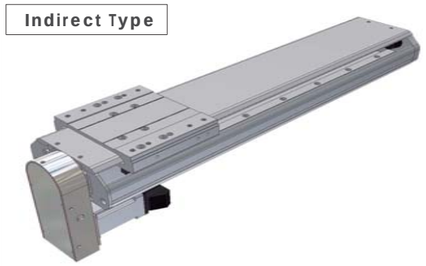
Type | Trans. Direction | Stroke | Servo Motor | Screw Lead | Power | Driver | Cable | Option

CCF12

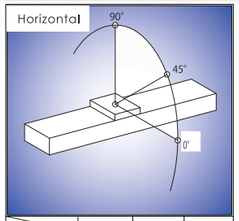
Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	1: 100V 2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)



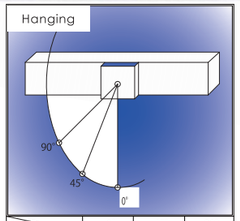
Indirect Type



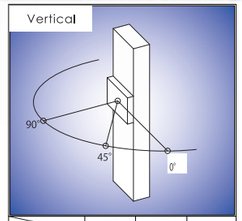
Permissible Deviation



		0°	45°	90°
Lead 20	2k g	425	400	750
	10k g	330	175	400
	20k g	105	140	380
Lead 10	15k g	140	175	310
	35k g	70	95	200
	45k g	55	80	200
Lead 5	30k g	80	130	320
	40k g	70	95	280
	55k g	700	65	220



		0°	45°	90°
Lead 20	2k g	500	300	470
	7k g	240	105	120
	14k g	175	50	35
Lead 10	12k g	180	115	90
	20k g	125	76	5
Lead 5	20k g	530	65	35
	25k g	300	8	4



		0°	45°	90°
Lead 20	1k g	280	340	580
	2k g	130	160	290
Lead 10	2k g	190	270	590
	4k g	80	110	220
	5k g	55	85	180
Lead 5	5k g	35	70	135
	9k g	15	40	80
	11k g	8	13	52

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	84N	168N	334N
Maximum Stroke Length	1200mm	1200mm	900mm

ø15 Maximum Speed mm/sec			
Stroke \ Lead	20mm	10mm	5mm
750	853	426	213
850	672	336	158
950	553	275	
1050	463	231	
1150	388	194	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
L	Sensors wires connection on the other side of graphic(page-16)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 100W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead: 20, 10, 5 mm
Guide	Linear guide 2 set
Limit sensor	PM-U24(or equivalent products)
Home sensor	PM-U24(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

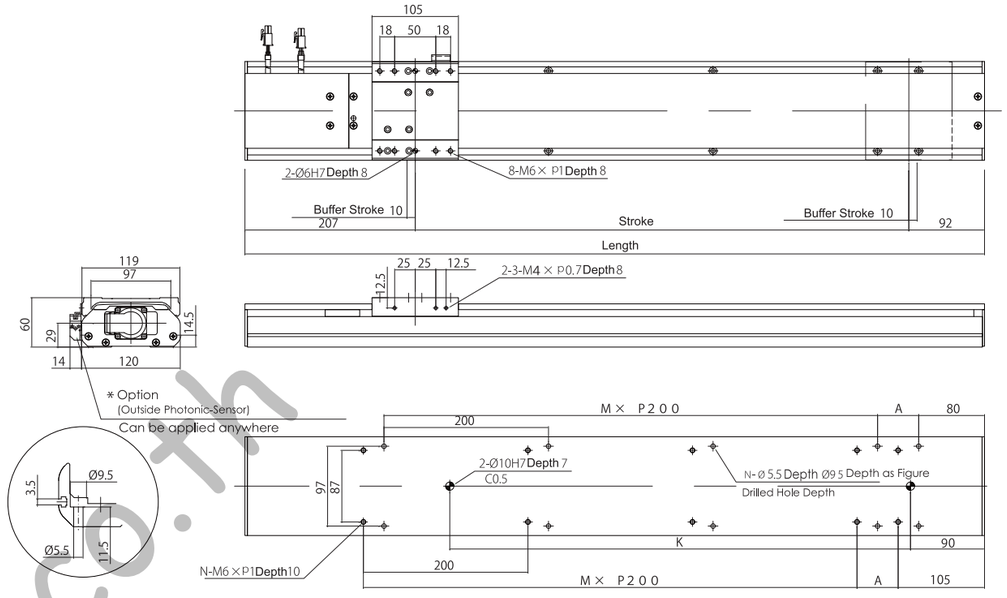
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Length(L)	449	499	549	599	649	699	749	799	849	899	949	999	1049	1099	1149	1199	1249	1299	1349	1399	1449	1499	1549
Length & Brake	L+30mm																						
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
K	200	240	240	240	400	400	400	400	560	560	560	560	720	720	720	720	880	880	880	880	1040	1040	1040
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	5.8	6.3	6.8	7.4	8.0	8.7	8.8	9.0	9.7	10.5	11.5	12.5	13.2	14.0	14.6	15.3	16.1	17.0	17.5	18.0	18.7	19.5	20.3

Indirect

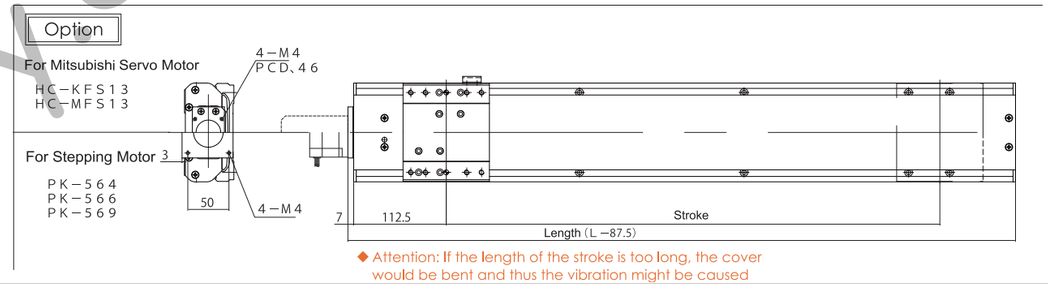
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	L = Stroke + 200 mm																						
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
K	200	240	240	240	400	400	400	400	560	560	560	560	720	720	720	720	880	880	880	880	1040	1040	1040
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	5.8	6.3	6.8	7.4	8.0	8.7	8.8	9.0	9.7	10.5	11.5	12.5	13.2	14.0	14.6	15.3	16.1	17.0	17.5	18.0	18.7	19.5	20.3

(Dimensions change may be made without notify. The other requirements please contact us.)

Direct Type Dimension

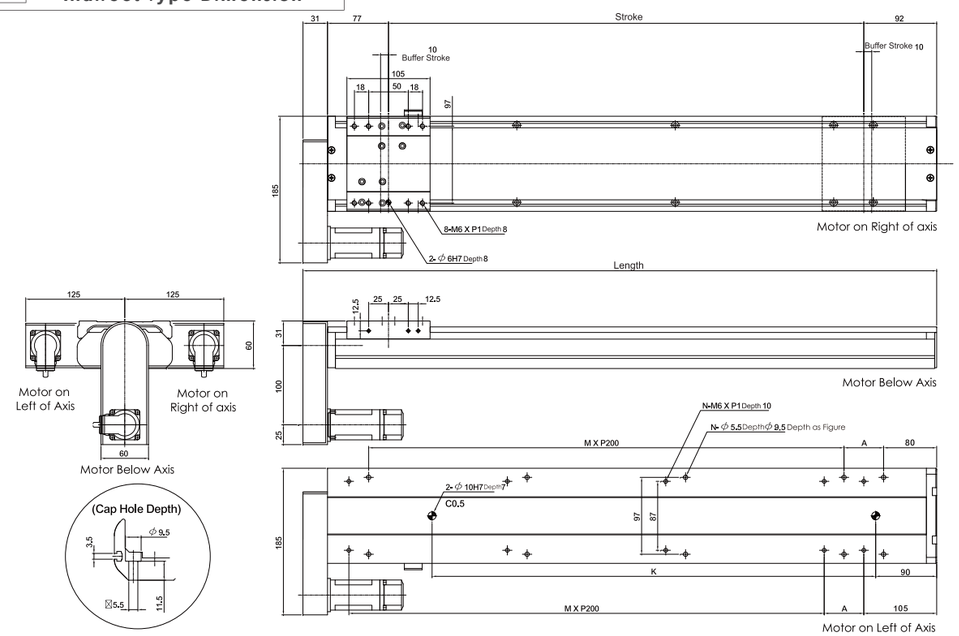


Option



◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension



* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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Axis Module SERIES

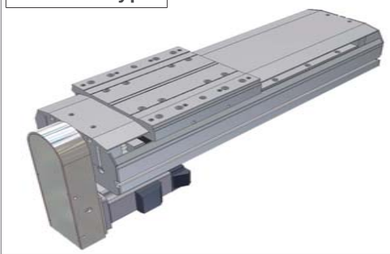
Aurotek Single-Axis Robots

CCF14S R - 500 M A 2 D O J

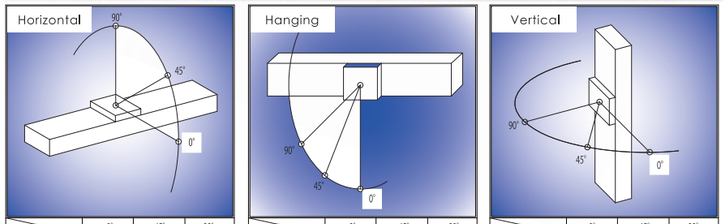
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
CCF14S	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)



Indirect Type



Permissible Deviation



		0°	45°	90°
Lead 20	8 kg	465	490	1010
	15 kg	250	275	590
	25 kg	150	180	385
Lead 10	25 kg	200	266	610
	40 kg	135	180	459
	55 kg	95	129	390
Lead 5	40 kg	135	190	935
	55 kg	110	150	775
	70 kg	90	125	679

		0°	45°	90°
Lead 20	8 kg	520	285	313
	15 kg	290	165	165
	30 kg	175	80	75
Lead 10	25 kg	605	195	165
	40 kg	380	190	75
	55 kg	225	25	20
Lead 5	15 kg	410	38	30
	20 kg	200	9	8

		0°	45°	90°
Lead 20	3 kg	500	580	980
	5 kg	380	440	740
Lead 10	8 kg	235	330	625
	12 kg	160	220	412
	15 kg	120	165	310
Lead 5	15 kg	95	125	260
	20 kg	70	100	200
	25 kg	60	85	165

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	336N	672N	1344N
Maximum Stroke Length	1200mm	1200mm	900mm

ø15 Maximum Speed mm/sec

Stroke \ Lead	20mm	10mm	5mm
950	812	406	
1050	680	340	
1150	575	286	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 400W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead:20, 10, 5 mm
Guide	Linear guide 2 set
Limit sensor	PM-U24(or equivalent products)
Home sensor	PM-U24(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

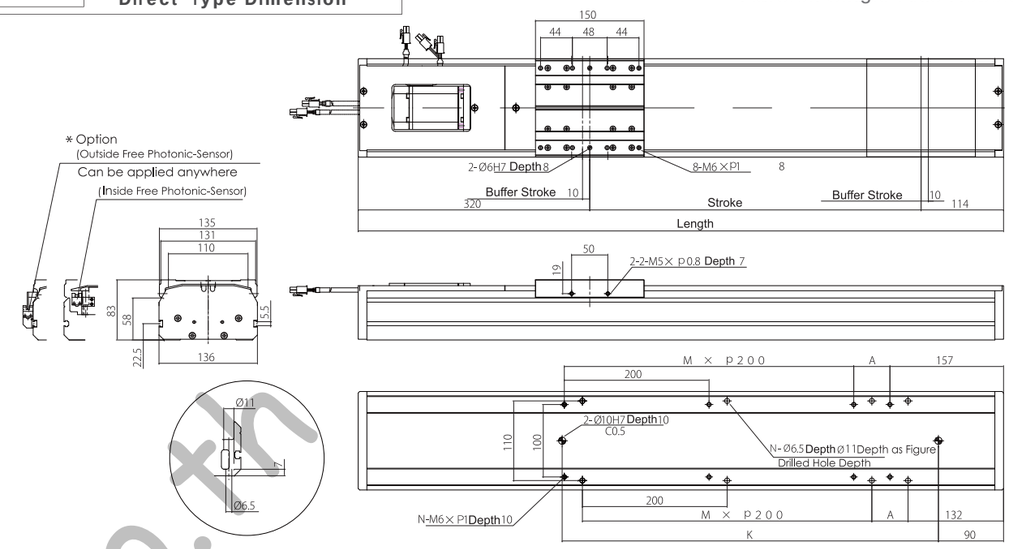
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Length(L)	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384	1434	1484	1534	1584	1634	1684
Length & Brake	L+30mm																						
K	240	240	240	240	400	400	400	400	560	560	560	560	720	720	720	720	880	880	880	880	1040	1040	1040
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	10.6	11.3	12.0	12.6	13.3	13.9	14.6	15.3	16.0	16.6	17.2	17.8	18.4	19.0	19.7	20.3	21.0	21.6	22.3	22.9	23.6	24.2	24.9

Indirect

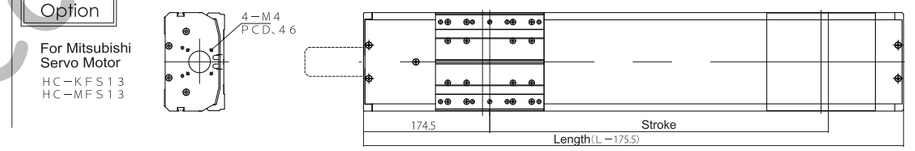
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	L = Stroke + 269.5 mm																						
K	240	240	240	240	400	400	400	400	560	560	560	560	720	720	720	720	880	880	880	880	1040	1040	1040
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	10.6	11.3	12.0	12.6	13.3	13.9	14.6	15.3	16.0	16.6	17.2	17.8	18.4	19.0	19.7	20.3	21.0	21.6	22.3	22.9	23.6	24.2	24.9

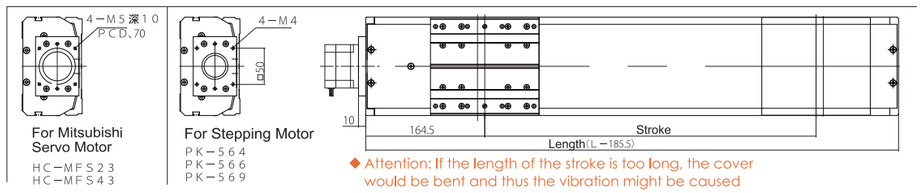
(Dimensions change may be made without notify. The other requirements please contact us.)

Direct Type Dimension



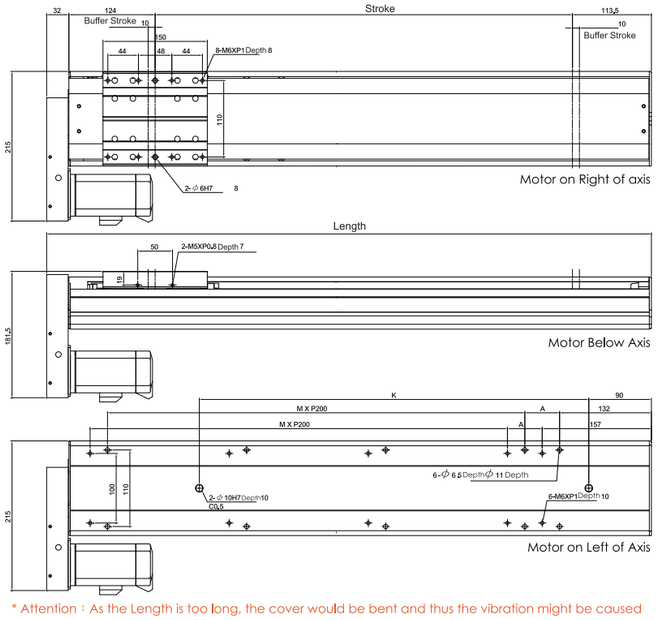
Option





◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension



* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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Axis Module SERIES

Aurotek Single-Axis Robots

CCF14 R - 500 M A 2 D O J

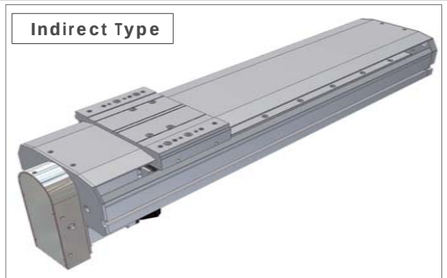
Type | Trans. Direction | Stroke | Servo Motor | Screw Lead | Power | Driver | Cable | Option

CCF14

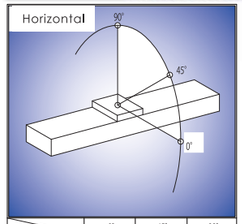
Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	1: 100V 2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)

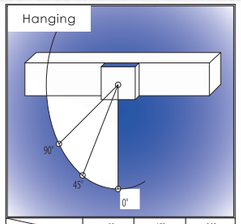


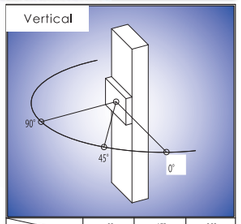
Indirect Type



Permissible Deviation







		0°	45°	90°
Lead 20	2 kg	465	450	850
	10 kg	370	195	440
	20 kg	120	160	420
Lead 10	15 kg	160	195	345
	35 kg	80	110	225
	45 kg	62	90	230
Lead 5	30 kg	90	130	350
	40 kg	80	110	310
	55 kg	800	75	250

		0°	45°	90°
Lead 20	2 kg	560	330	520
	7 kg	260	125	134
	14 kg	209	55	43
Lead 10	12 kg	315	130	105
	20 kg	140	84	6
Lead 5	20 kg	580	71	42
	25 kg	330	10	5

		0°	45°	90°
Lead 20	1 kg	310	370	640
	2 kg	145	180	310
Lead 10	2 kg	210	290	603
	4 kg	90	120	245
	5 kg	65	95	200
Lead 5	5 kg	45	81	150
	9 kg	20	45	90
	11 kg	9	15	60

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	84N	168N	334N
Maximum Stroke Length	1200mm	1200mm	900mm

ø15 Maximum Speed mm/sec

Stroke \ Lead	20mm	10mm	5mm
750	853	426	213
850	672	336	158
950	553	275	
1050	463	231	
1150	388	194	

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 100W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø15, screw lead: 10.5mm
Guide	Linear guide2 set
Limit sensor	PM-U24(or equivalent products)
Home sensor	PM-U24(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

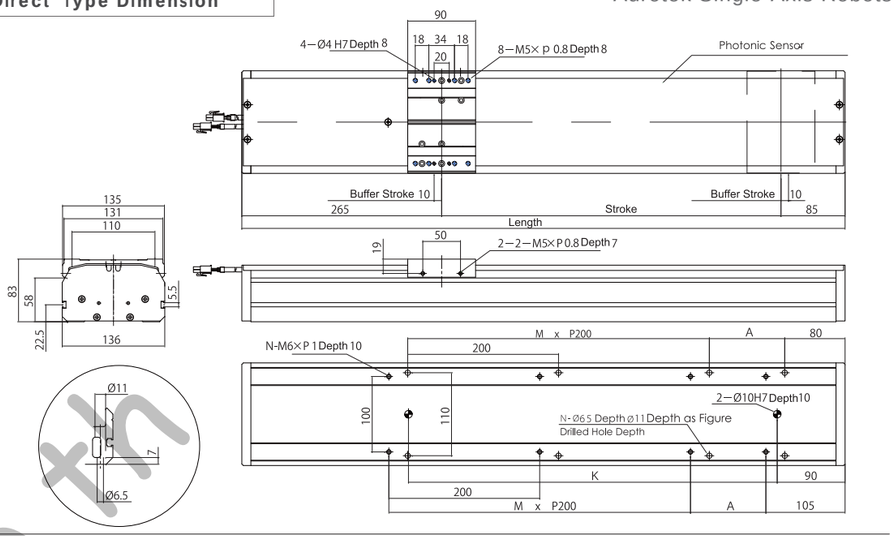
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Length(L)	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600
Length & Brake	L+30mm																						
K	240	240	240	240	400	400	400	400	560	560	560	560	720	720	720	720	880	880	880	880	1040	1040	1040
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	9.2	9.9	10.6	11.2	11.9	12.5	13.2	13.9	14.6	15.2	15.8	16.4	17.0	17.6	18.3	18.9	19.6	20.2	20.9	21.5	22.2	22.8	23.5

Indirect

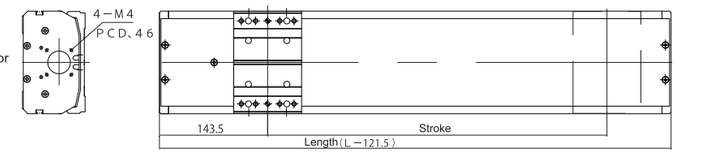
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	L = Stroke + 209.5 mm																						
K	240	240	240	240	400	400	400	400	560	560	560	560	720	720	720	720	880	880	880	880	1040	1040	1040
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
Weight Kg	9.2	9.9	10.6	11.2	11.9	12.5	13.2	13.9	14.6	15.2	15.8	16.4	17.0	17.6	18.3	18.9	19.6	20.2	20.9	21.5	22.2	22.8	23.5

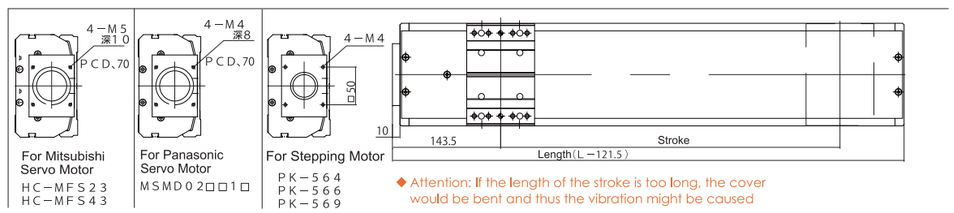
(Dimensions change may be made without notify. The other requirements please contact us.)

Direct Type Dimension



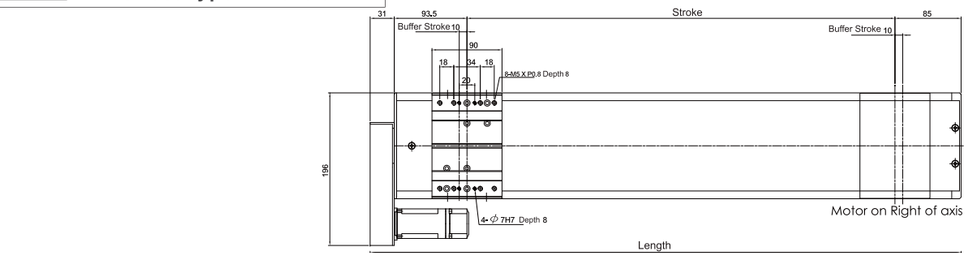
Option

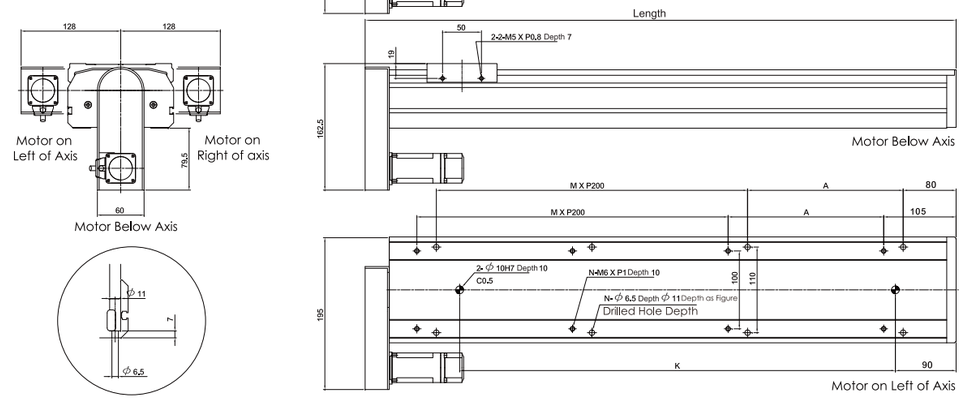




◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension





(Cap Hole Depth)

* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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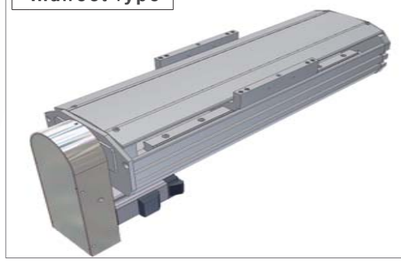
CCF17

CCF17 R - 500 M A 2 D O J

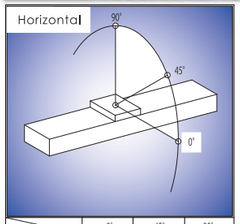
Type	Trans. Direction	Stroke	Servo Motor	Screw Lead	Power	Driver	Cable	Option
CCF17	N: Direct R: Right L: Left D: Below	Unit:mm	M: W/O Break T : WITH Break N: W/O Motor (Option)	H: 20mm A: 10mm 5: 5mm	2: 200V N: None	D: With Driver N: W/O Driver (Option)	O: 3m R: 10m P: 5m S: 20m Q: 8m N: None	*Left Side (Option Table)

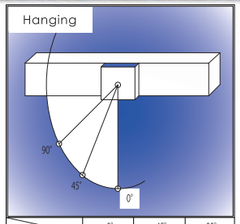


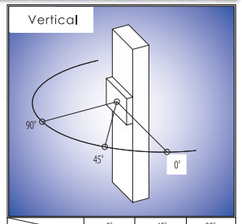
Indirect Type



Permissible Deviation







		0°	45°	90°
Lead 20	8 kg	465	490	1010
	15 kg	250	275	590
	25 kg	150	180	385
Lead 10	25 kg	200	266	610
	40 kg	135	180	459
	55 kg	95	129	390
Lead 5	40 kg	135	190	935
	55 kg	110	150	775
	70 kg	90	125	679

		0°	45°	90°
Lead 20	8 kg	520	285	313
	15 kg	290	165	165
	30 kg	175	80	75
Lead 10	25 kg	605	195	165
	40 kg	380	190	75
	55 kg	225	25	20
Lead 5	15 kg	410	38	30
	20 kg	200	9	8

		0°	45°	90°
Lead 20	3 kg	500	580	980
	5 kg	380	440	740
Lead 10	8 kg	235	330	625
	12 kg	160	220	412
	15 kg	120	165	310
Lead 5	15 kg	95	125	260
	20 kg	70	100	200
	25 kg	60	85	165

*The reference number on the above list may change by the speed, environment, impact loading and installation accuracy. Please use in the safety range.
*If loading situation is over the above list, should design support guide.
*As used in vertical descending, the discharge resist should make a confirmation.
*The life span 4,000 Km is based on the linear guide safety range.

Function Specification

Repeatability Accuracy	±0.02 mm		
Ball screw Lead	20mm	10mm	5mm
Rated Speed	1000mm/s	500mm/s	250mm/s
Theory Thrust Force	336N	672N	1344N
Maximum Stroke Length	1500mm	1500mm	1500mm

ø20 Maximum Speed mm/sec			
Stroke \ Lead	20mm	10mm	5mm
850	820	410	205
950	683	341	170
1050	578	289	144
1150	496	248	124
1250	430	215	107
1350	402	201	100
1450	377	188	94

(Fix-Support)(rated rpm 3,000)

Option

Type / Mark	Specification
I	Home Sensor(1)
J	Limit sensors(2) and Home Sensor(1)
X	Special specification

Structure Specification

Drive	Panasonic Motor/Driver 400W (Please connect our sales to confirm the type of motor)
Connection	Direct : coupling Indirect: Belt
Transmit	C7 ball screw Ø20, screw lead: 20, 10, 5mm
Guide	Linear guide 2 set
Limit sensor	PM-L24(or equivalent products)
Home sensor	PM-L24(or equivalent products)

Standard Dimensions

*Position accuracy is from one side
*Impacted or damaged Coupling will cause the mechanic resonance.

Direct

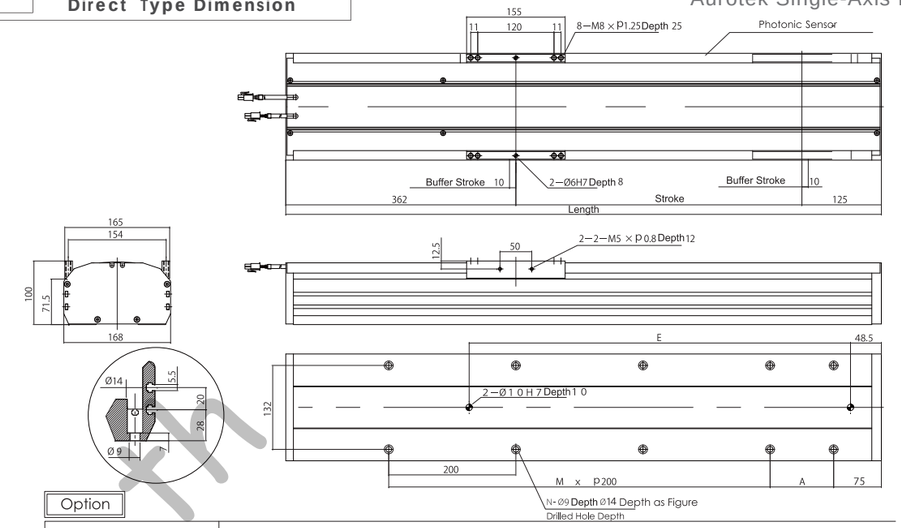
Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
Length(L)	637	687	737	787	837	887	937	987	1037	1087	1137	1187	1237	1287	1337	1387	1437	1487	1537	1587	1637	1687	1737	1787	1837	1887	1937	1987
Length & Brake	L+30mm																											
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
E	240	240	240	420	420	420	600	600	600	780	780	780	780	960	960	960	960	1140	1140	1140	1140	1320	1320	1320	1320	1320	1320	1320
M	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7
N	6	6	6	6	8	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
Weight Kg	16.0	17.0	18.0	19.0	20.0	21.0	22.5	24.0	25.0	26.0	27.0	28.0	28.5	29.0	29.5	30.0	31.0	32.0	32.5	33.0	33.5	34.0	35.0	36.0	37.0	38.0	38.5	39.0

Indirect

Stroke	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
L	L = Stroke + 313 mm																											
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
E	240	240	420	420	420	600	600	600	780	780	780	780	780	960	960	960	960	1140	1140	1140	1140	1320	1320	1320	1320	1320	1320	1320
M	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7
N	6	6	6	6	8	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
Weight Kg	16.0	17.0	18.0	19.0	20.0	21.0	22.5	24.0	25.0	26.0	27.0	28.0	28.5	29.0	29.5	30.0	31.0	32.0	32.5	33.0	33.5	34.0	35.0	36.0	37.0	38.0	38.5	39.0

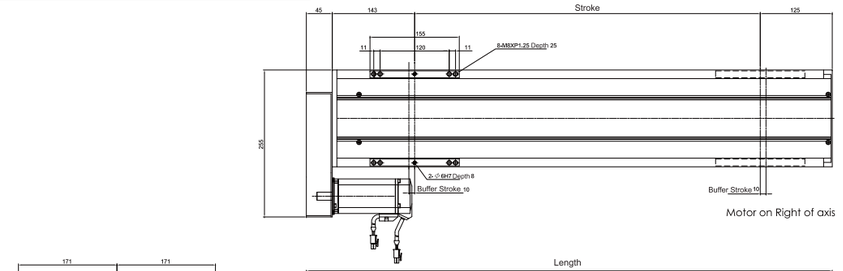
(Dimensions change may be made without notify. The other requirements please contact us.)

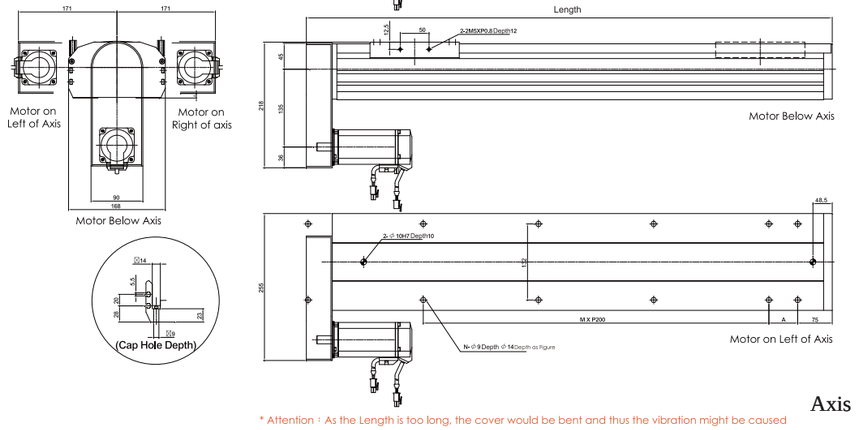
Direct Type Dimension



◆ Attention: If the length of the stroke is too long, the cover would be bent and thus the vibration might be caused

Indirect Type Dimension





* Attention : As the Length is too long, the cover would be bent and thus the vibration might be caused

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Cubii Features

- Full Functions, Strong, Reliable yet Economical
- PC and Teaching Pad Programmable
- Easy Check and Maintenance through Good Mechanical Design
- Optional 4th Axis Adoptable with Interpolations
- In-line Linkable

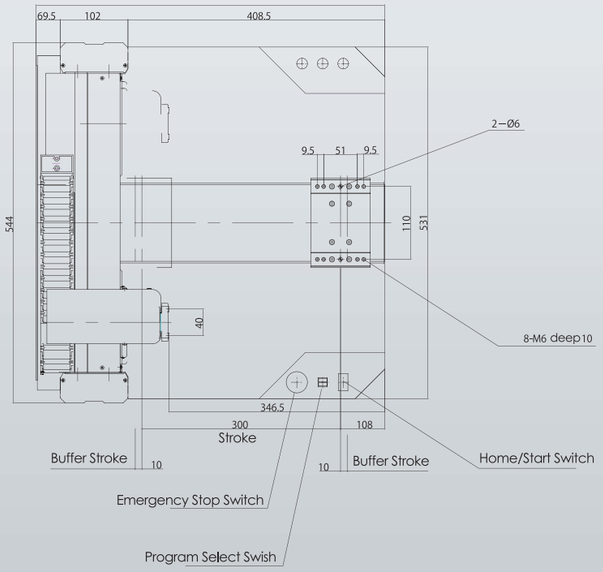
Specifications

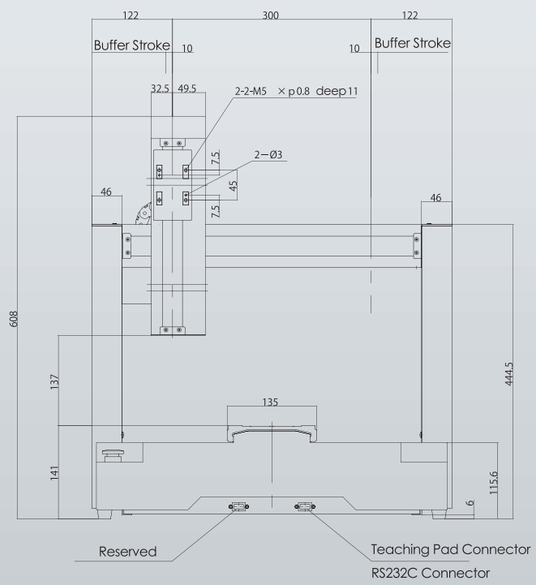
Machine Specifications

Working Area	X	300mm
	Y	300mm
	Z	150mm
Max. Speed	X	500mm/sec
	Y	500mm/sec
	Z	500mm/sec
Repeatability	X	±0.01mm
	Y	±0.01mm
	Z	±0.01mm
Max. Load	Horizontal Axis	10kg
	Vertical Axis	4kg
Drive	X, Y Axis: Panasonic 100W AC Servo Motor Z Axis: Panasonic 100W AC Servo Motor (with Break)	
	C7 Degree Ball Screw	
Weight	50kg	
Ambient Temperature	0°C ~40°C	

Controller Specifications

Axial Control	3 Axes
Interpolations	Max. 3 Axes Linear Interpolation
	2 Axes Circular Interpolation
Programming	Jog Teaching by Teaching Pad / PC
Pre-set Position Capacity	500 Points
Programming Capacity	32 programs x 150 Steps
Power	Single Phase 200V ±10%
I/O	Input: 7 Points, Output: 8 Points
Communication Interface	RS232C





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MINAS A4

Option



MINAS-A4

Panasonic A4 Features:

* 2MPPS of high-speed pulse input as a standard.
* Installation of new advanced real time auto-gain tuning.
* Further downsizing in driver and motor.
* High functionality damping control to suppress resonance of even a low stiffness load.
* 1kHz of velocity response frequency.
* Full-closed control as a standard.
* 2500P/r incremental encoder and 17-bit absolute/incremental encoder.



A4N-高速網路型驅動器



A4P 位置控制型驅動器



A4A-RS485通信型驅動器



A4F-全閉迴路型驅動器

A small step for axis.
Large step ahead for system motion.



1 **Quick**

- 2.0 kHz frequency response
- 20 bits/revolution
- Low cogging torque
- The input/output pulse 4 Mpps

2 **Smart**

- Highly functional real-time auto-gain tuning
- Manual/auto notch filter
- Manual/auto damping filter
- Motion simulation

3 **Light**

- New structure
- Innovative core
- Innovative encoder

4 **Safe**

Complies with European safety standards
Low noise
IP67 enclosure rating

5 **Easy**

Set-up support software
Localized in 4 languages
Service life prediction
Encoder temperature monitor

A5 MINAS www.plenty.co.th

Details of Features

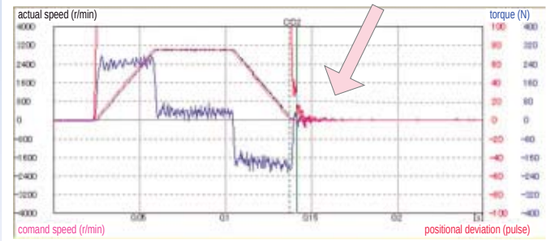
1. Further Adjustment-Free Operation

High-functionality Real-Time Auto-Gain Tuning

- Corresponds to even variation of load inertia. Offers real automatic gain tuning to low and high stiffness machines with a combination of an adaptive filter.
- Supports the vertical axis application where the load torque is different in rotational direction.
- Prevents the machine from over-traveling during automatic gain tuning with over-travel detecting function.
- Enables you to set and check while monitoring real-time automatic gain tuning conditions on the front panel.

Waveform adjusted via auto-tuning driven by a ball screw

Stabilization time of 4 ms or less

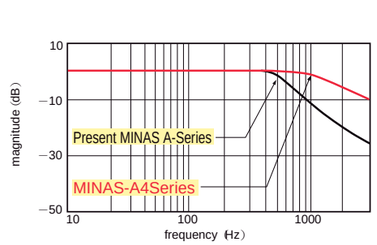


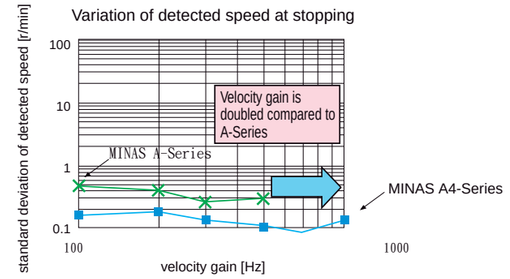
2. Further High-Speed and High-Response

Velocity response (bandwidth) of 1kHz

- Implementation of Instantaneous Velocity Observer realizes a detection of motor speed with higher speed and higher resolution.

*) In case of high stiffness machine





High-functionality Real-Time Auto-Gain Tuning

- Supports the low stiffness machine of belt-driven and the high stiffness machine of short stroke ball screw driven, and enables to realize high-speed positioning with high-functionality real-time auto-gain tuning.

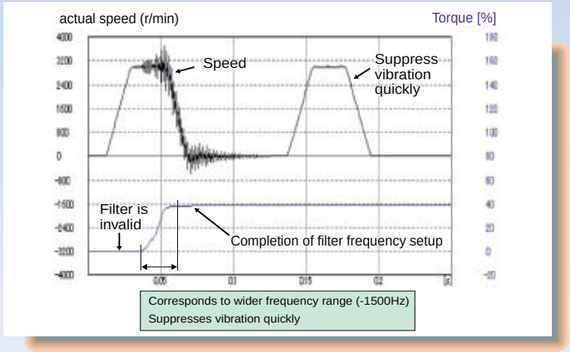
3. Further Reduction of Vibration

■Adaptive filter

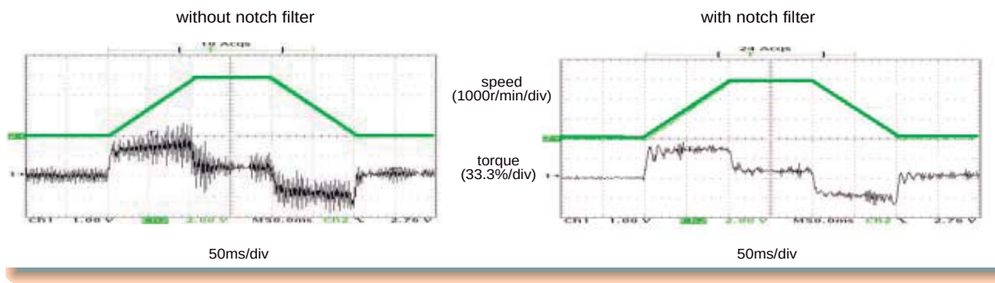
- Makes the notch filter frequency automatically follow the machine resonance frequency.
- Suppression of "Judder" noise of the machine can be expected which is caused by variation of the machines or resonance frequency due to aging.

■2-channel notch filters

- 2-channel notch filters are equipped in the driver independent from adaptive filter.
- You can set up both frequency and width for each of 2 filters, and set up frequency in unit of 1Hz.
- Suppression of "Judder" noise of the machine which has multiple resonance points can be expected

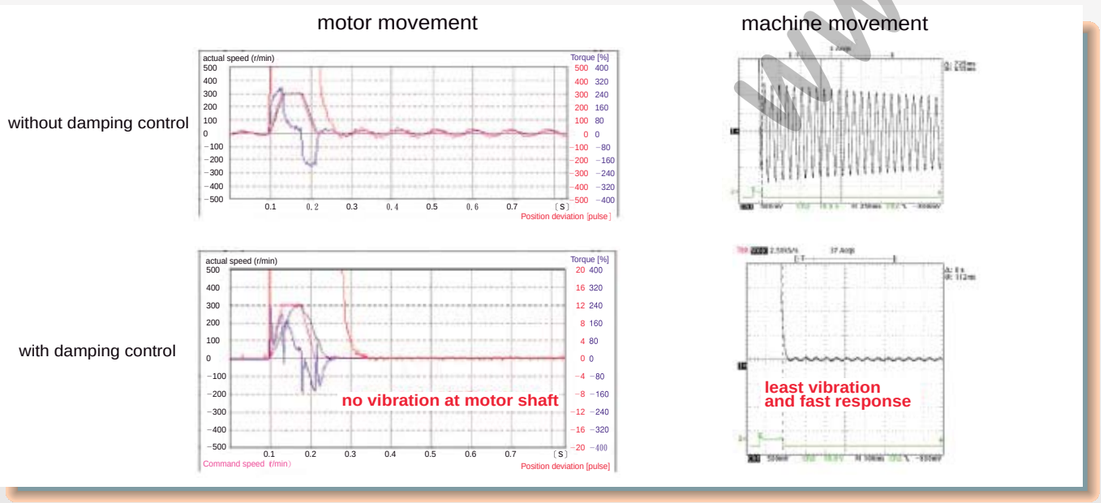


Effect of notch filter



■Damping control

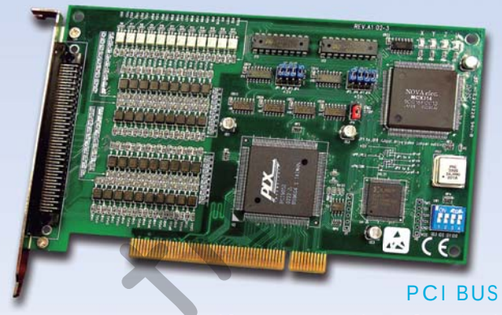
- 2-channel damping filters are equipped in this driver. You can suppress vibration occurring at both starting and stopping in low stiffness machine, by manually setting up vibration frequency in 0.1Hz unit.
- You can also switch the vibration frequency set by 2-channel with rotating direction or with an external input to correspond to the variation of vibration frequency caused by the machine position.
- Easy setup with entry of only frequency and filter value. Improper setup values do not result in unstable operation



Option

MC Serial Control Board

MC-8141P/MC8281P

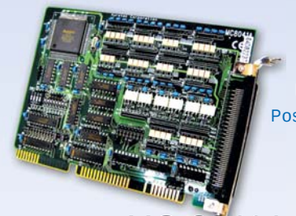


PCI BUS
4/8 Axes Motion Control
Linear/Circular interpolation
Position compare trigger signal
Highest Pulse Frequency



MC-8040A

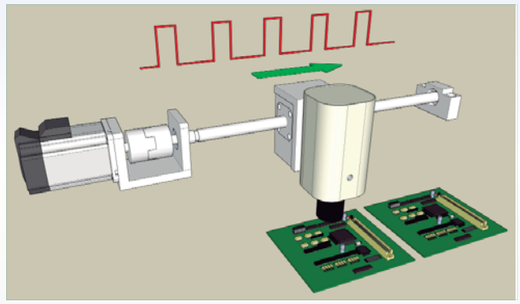
MC-8040A
ISA BUS
4 Axes motion control
Point to Point
Highest Pulse Frequency
4MPPS



MC-8041A

MC-8041A
ISA BUS
4 axes motion control
Linear/Circular interpolation
Position compare trigger signal
Highest Pulse Frequency
4MPPS

Motion Control Function



Function

Any 3 axes linear interpolation, or any 2 axes circle interpolation Highest speed 4MPPS.
Also any 2 or 3 axes continuous interpolation (circle only by 2 axes), Highest speed 2MPPS.

Position Compare Trigger Signal Function

As motor moves by a span of distance and output the trigger signal to video capture card. To achieve line scan function.

I/O Function

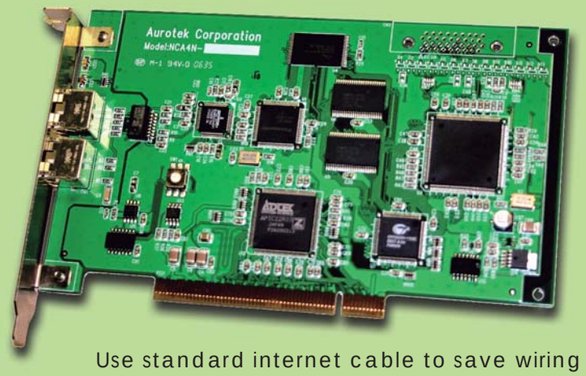
Each axle has its inputs (for + l i m i t , - l i m i t) and servomotor use assigned input(i n - p o s , a l a r m . . .)
Each axes has general purpose 3 inputs and 4 inputs.

Continuous Interpolation

It means combination multi section of lines or circles without acceleration, moves in constant speed. Using operation as dispensing, and fire cutting...

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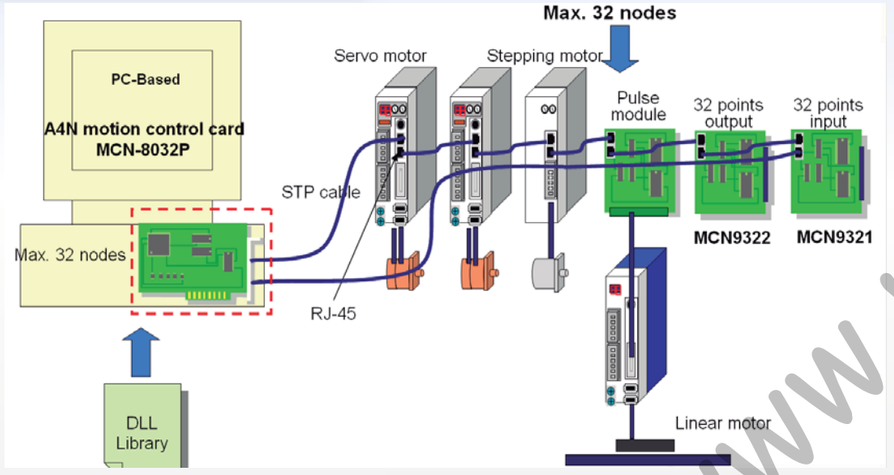
RTEX Network Motion Control Card



MCN-8032P

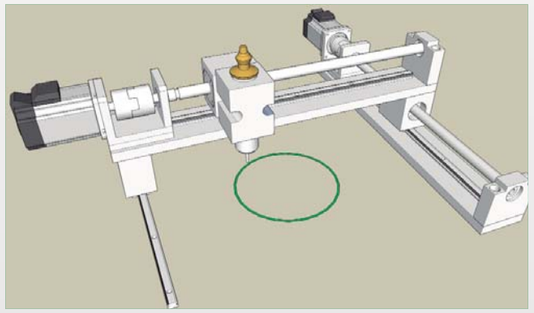
Use standard internet cable to save wiring cost.
100Base-Tx Real-time communication, cycle time 1ms
Parallel mechanic 2 axes move together position trigger signal
Circle linear interpolation
Max 32 axes motor or I/O mod

System construction



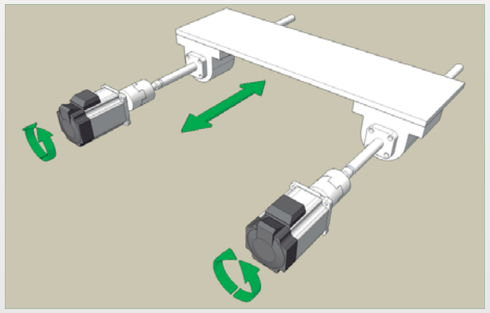
Feature

Linear and circular interpolation



MCN-8032P is able to excute 32-axis linear interpolation or 16 pairs 2-axis circular interpolation.

Gantry sychronization movement



MCN-80329 is able to drive 2 motors synchronously which can move a gantry stage.

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Axis Module Actuator Selected Specifications

Date :

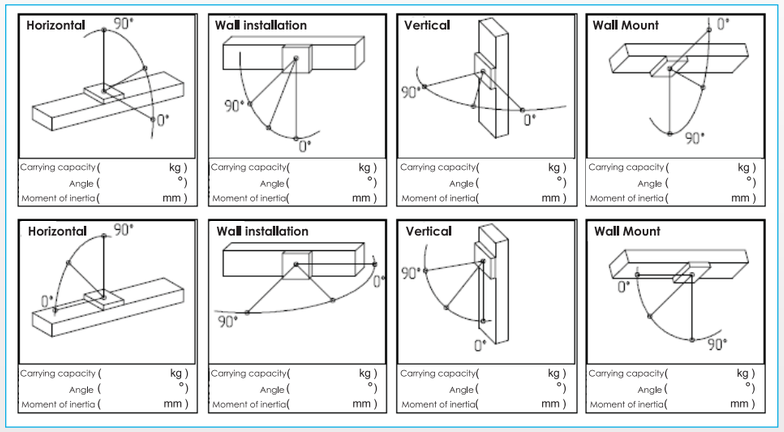
Company Name : Dept :

Contact Name : E-mail :

Address :

TEL : FAX :

Application					
Usage time			Quantity		軸
Stroke X	mm	Accuracy	mm	Speed	mm/sec
Stroke Y	mm	Accuracy	mm	Speed	mm/sec
Stroke Z	mm	Accuracy	mm	Speed	mm/sec
Brake	with • without	Power	V	Ball Screw Lead	mm
Motor	with • without	Motor type			
Sensor	with • without	Sensor type			
Driver	with • without	Driver type			
Controller	with • without	Controller type			



Now Use Type :

Response Date :

Other :