

Single Axis Robot

KS Series

4.1 Features

- For use in clean room
- Stainless steel cover
- Already installed AC servo motor (optional)
- High repeatability $\pm 0.02\text{mm}$
- Dustproof
- Different strokes available

4.2 Applications

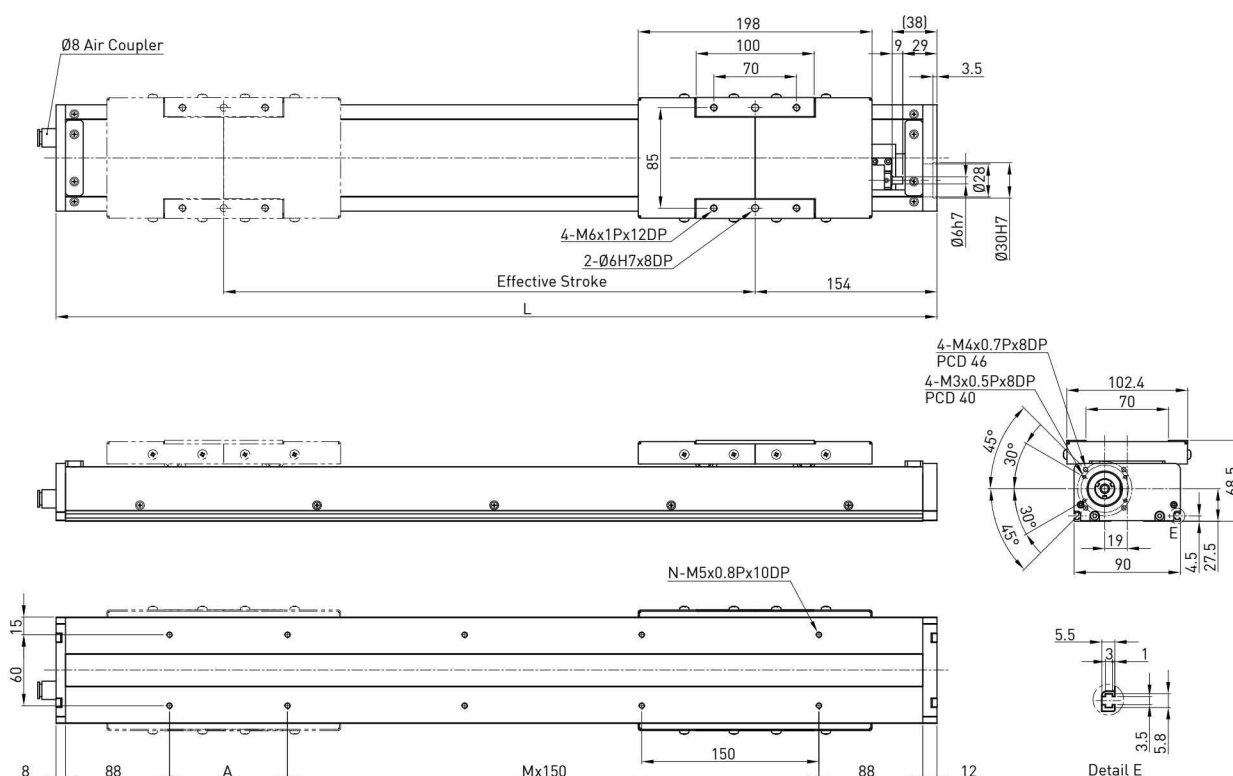
- FPD industry
- Semiconductor
- Medical applications
- FPD glass transfer
- Inspection & testing equipment

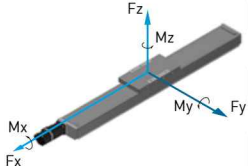


4.3 KS Series

Model Number for KS090

KS090	-10	P	-0600	A	F0	S1	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	5mm 10mm	P: Precision C: Normal		A: Standard	F0: Direct	S1:OMRON SX671 S2:OMRON SX674 S3:SUNX GX-F12A S4:SUNX GL-F12A-P None: No Limit Switch	M: Supplied With Motor None: Without Motor

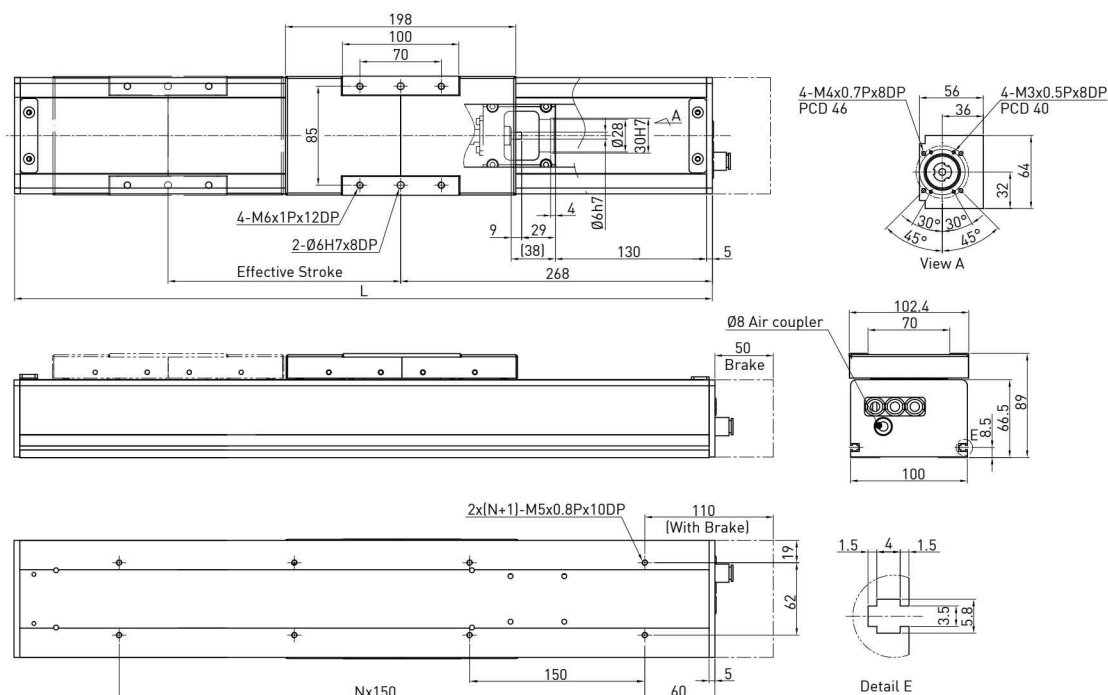


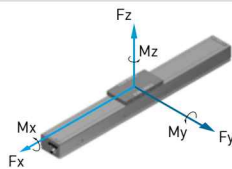
Effective stroke (mm)	L	A	M	N	Weight (kg)	AC motor output	W	100		
						Drive		Ballscrew C7(normal)		
50	346	150	0	4	3.38	Lead	mm	5	10	
100	396	50	1	6	3.78	Rated RPM	RPM	3000	3000	
150	446	100	1	6	4.18	Max linear speed*	mm/sec	250	500	
200	496	150	1	6	4.58	Rated thrust	N	280	140	
250	546	50	2	8	4.98	Repeatability	mm	±0.02		
300	596	100	2	8	5.38	Effective stroke	mm	50~600		
350	646	150	2	8	5.78	Max load (H)	kg	24	12	
400	696	50	3	10	6.18		Fyd	N	50	
450	746	100	3	10	6.58		Fzd	N	240	120
500	796	150	3	10	7.19		Mxd	N-m	5	4.5
550	846	50	4	12	7.38		Myd	N-m	2.3	2.1
600	896	100	4	12	7.78		Mzd	N-m	2.3	2.1
						Rated dynamic load**				
						Permitted load condition***	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			

* Vibration might occur when the effective stroke is longer than 650mm.
The maximum speed should be decreased by 15% for every 100mm of increased stroke.
** The load condition is based on 10,000km operation.
*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS100-FI

KS100	-20	P	-800	A	FI	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FI: Internal	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output Drive	W	100				
						Ball screw C7(normal)				
200	600	3	9.1	Lead	mm	5	10	20		
300	700	4	9.8	Rated RPM	RPM	3000	3000	3000		
400	800	4	10.5	Max linear speed*	mm/sec	250	500	1000		
500	900	5	11.2	Rated thrust	N	280	140	70		
600	1000	6	11.9	Repeatability	mm	±0.02				
700	1100	6	12.6	Effective stroke	mm	200~800				
800	1200	7	13.3	Max load (H)	kg	8	6	3.5		
				Rated dynamic load**		Fyd	N	20	20	20
						Fzd	N	80	60	35
						Mxd	N-m	1.1	1.2	1.1
						Myd	N-m	0.9	0.9	0.9
						Mzd	N-m	0.9	0.9	0.9
				Permitted load condition***				$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads		

* Vibration might occur when the effective stroke is longer than 650mm.

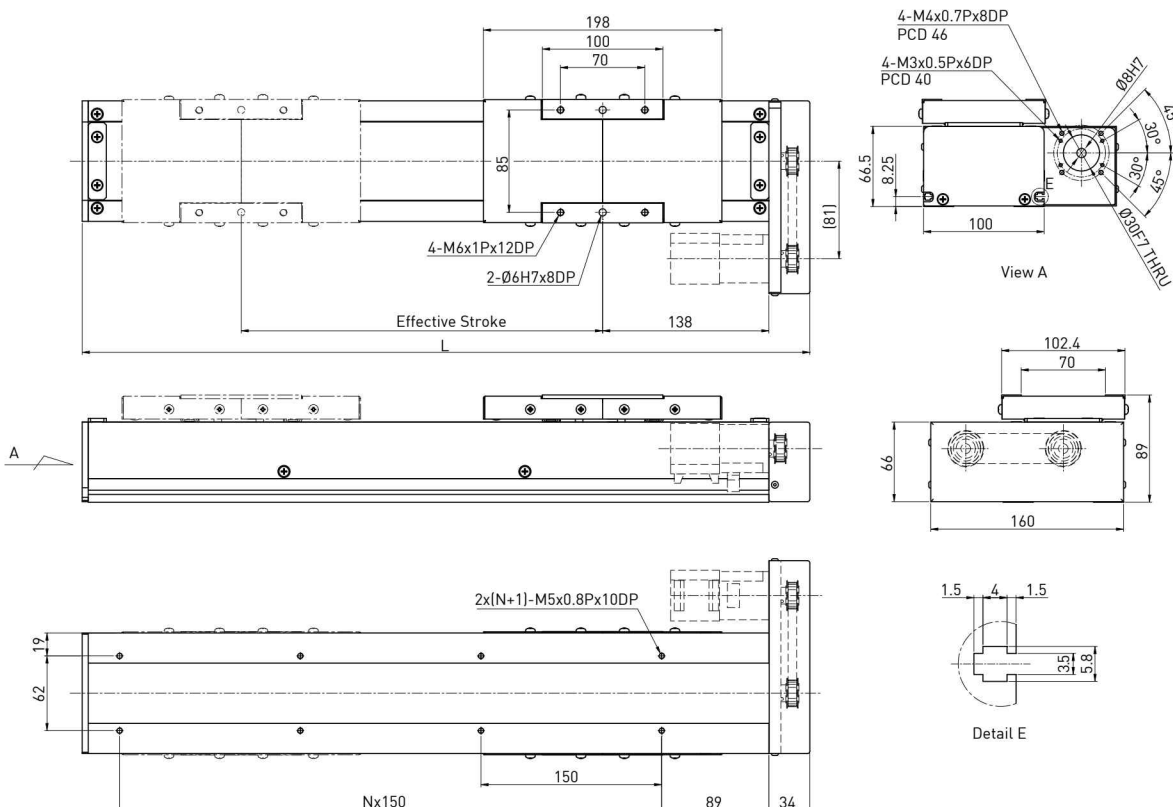
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

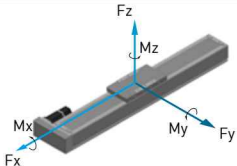
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS100-FL

KS100	-20	P	-800	A	FL	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FL: Left	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	100			
				Drive		Ballscrew C7(normal)			
200	504	2	6.0	Lead	mm	5	10	20	
300	604	3	6.9	Rated RPM	RPM	3000	3000	3000	
400	704	3	7.8	Max linear speed*	mm/sec	250	500	1000	
500	804	4	8.7	Rated thrust	N	280	140	70	
600	904	5	9.6	Repeatability	mm	±0.02			
700	1004	5	10.5	Effective stroke	mm	200~800			
800	1104	6	11.4	Max load (H)	kg	8	6	3.5	
					Fyd	N	20	20	20
					Fzd	N	80	60	35
					Mxd	N-m	1.1	1.2	1.1
					Myd	N-m	0.9	0.9	0.9
					Mzd	N-m	0.9	0.9	0.9
									$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads

* Vibration might occur when the effective stroke is longer than 650mm.

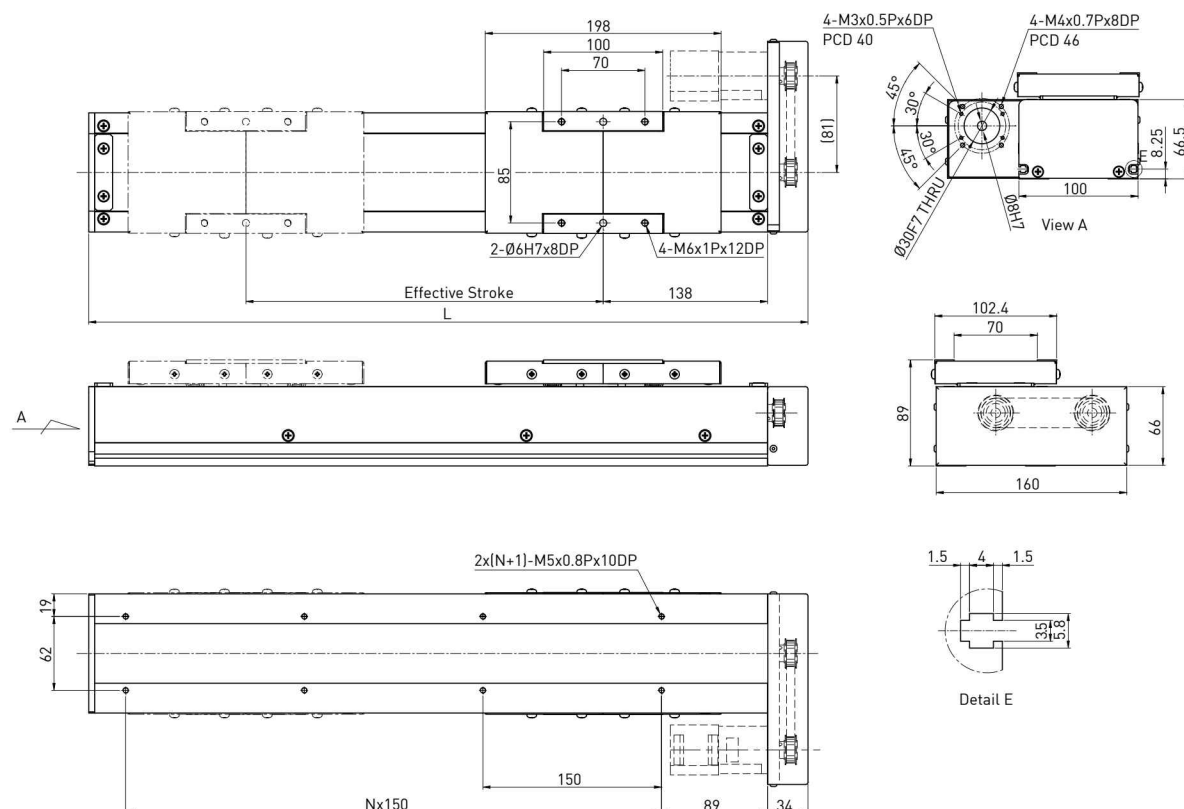
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

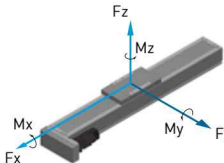
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS100-FR

KS100	-20	P	-800	A	FR	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FR: Right	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	100			
				Drive		Ballscrew C7(normal)			
200	504	2	6.0	Lead	mm	5	10	20	
300	604	3	6.9	Rated RPM	RPM	3000	3000	3000	
400	704	3	7.8	Max linear speed*	mm/sec	250	500	1000	
500	804	4	8.7	Rated thrust	N	280	140	70	
600	904	5	9.6	Repeatability	mm	±0.02			
700	1004	5	10.5	Effective stroke	mm	200~800			
800	1104	6	11.4	Max load (H)	kg	8	6	3.5	
					Fyd	N	20	20	20
					Fzd	N	80	60	35
					Mxd	N-m	1.1	1.2	1.1
					Myd	N-m	0.9	0.9	0.9
					Mzd	N-m	0.9	0.9	0.9
				Rated dynamic load**					
Permitted load condition***				$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads					

* Vibration might occur when the effective stroke is longer than 650mm.

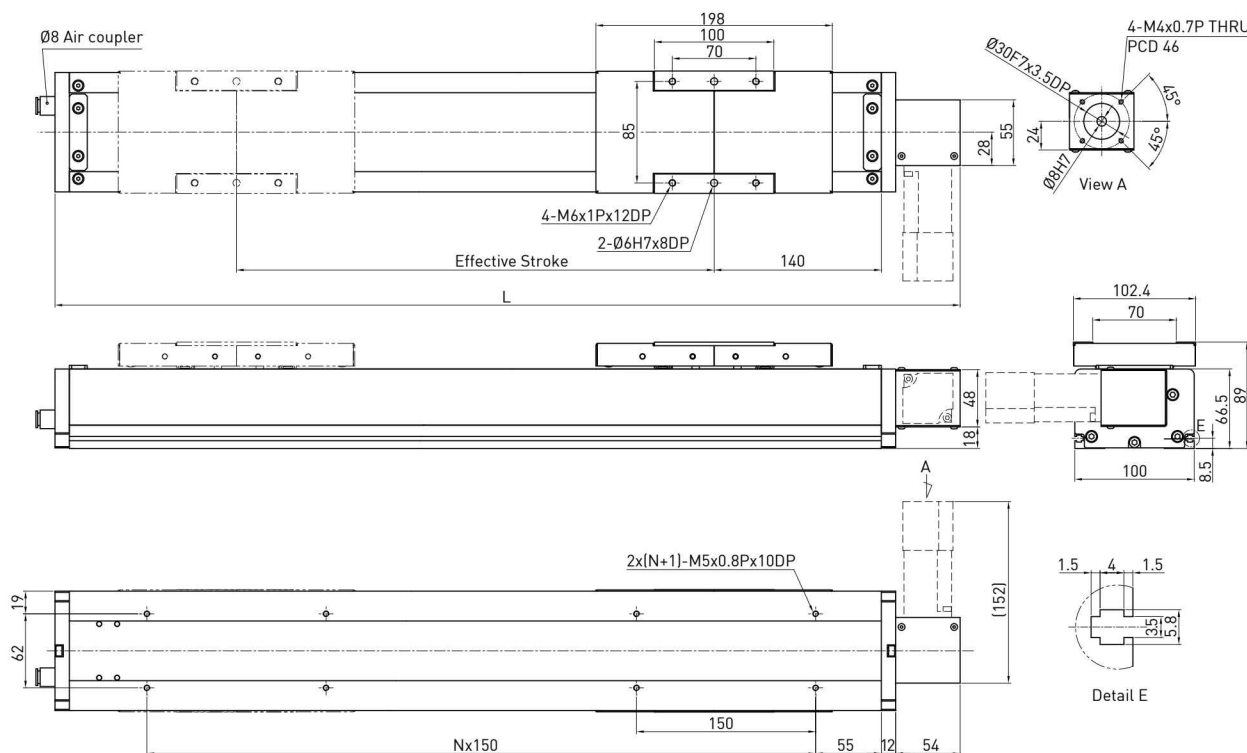
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

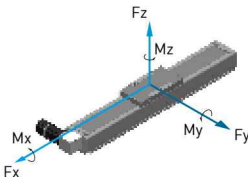
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS100B-FL

KS100	B	-84	C	-3000	A	FL	S2	M
Model	Timing Belt	Pulley Perimeter	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
			C: Normal		A: Standard	FL: Left	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



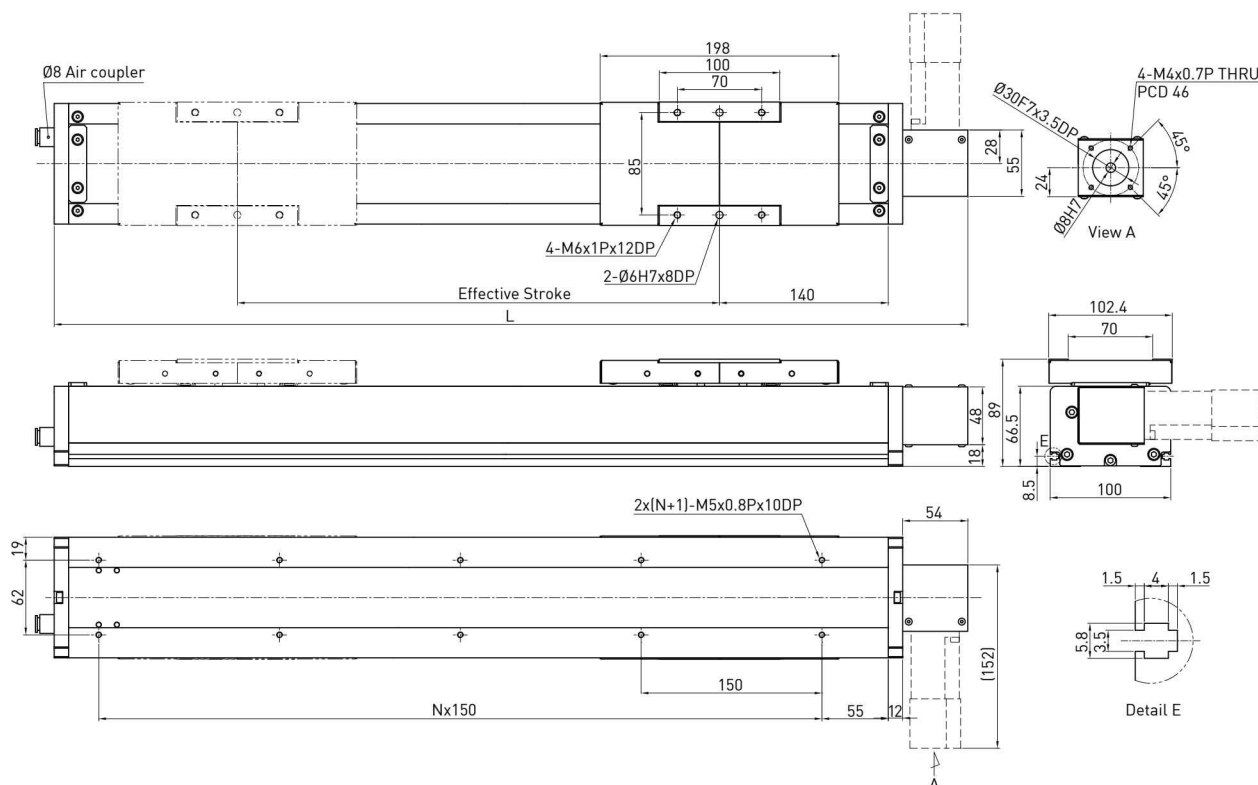
Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	100														
				Drive		Timing Belt														
200	558	2	6.1	Pulley Perimeter	mm	84														
400	758	4	7.6	Pulley RPM	RPM	1286														
600	958	5	9.1	Max linear speed	mm/sec	1800														
800	1158	6	10.6	Rated thrust	N	33														
1000	1358	8	12.1	Repeatability	mm	±0.1														
1200	1558	9	13.6	Effective stroke	mm	200~3000														
1400	1758	10	15.1	Max load (H)	kg	3														
1600	1958	12	16.6	 <table><tr><td>Fyd</td><td>N</td><td>20</td></tr><tr><td>Fzd</td><td>N</td><td>30</td></tr><tr><td>Mxd</td><td>N-m</td><td>1.2</td></tr><tr><td>Myd</td><td>N-m</td><td>1</td></tr><tr><td>Mzd</td><td>N-m</td><td>1</td></tr></table> <th>Rated dynamic load*</th>	Fyd	N	20	Fzd	N	30	Mxd	N-m	1.2	Myd	N-m	1	Mzd	N-m	1	Rated dynamic load*
Fyd	N	20																		
Fzd	N	30																		
Mxd	N-m	1.2																		
Myd	N-m	1																		
Mzd	N-m	1																		
1800	2158	13	18.1																	
2000	2358	14	19.6																	
2200	2558	16	21.1																	
2400	2758	17	22.6																	
2600	2958	18	24.1																	
2800	3158	20	25.6	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads <th>Permitted load condition**</th>	Permitted load condition**															
3000	3358	21	27.1																	

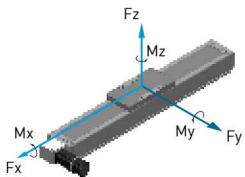
*The load condition is based on 10,000km operation.

**For horizontal applications only. If used in a special condition, please contact HIWIN.

Model Number for KS100B-FR

KS100	B	-84	C	-3000	A	FR	S2	M
Model	Timing Belt	Pulley Perimeter	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
			C: Normal		A: Standard	FR: Right	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



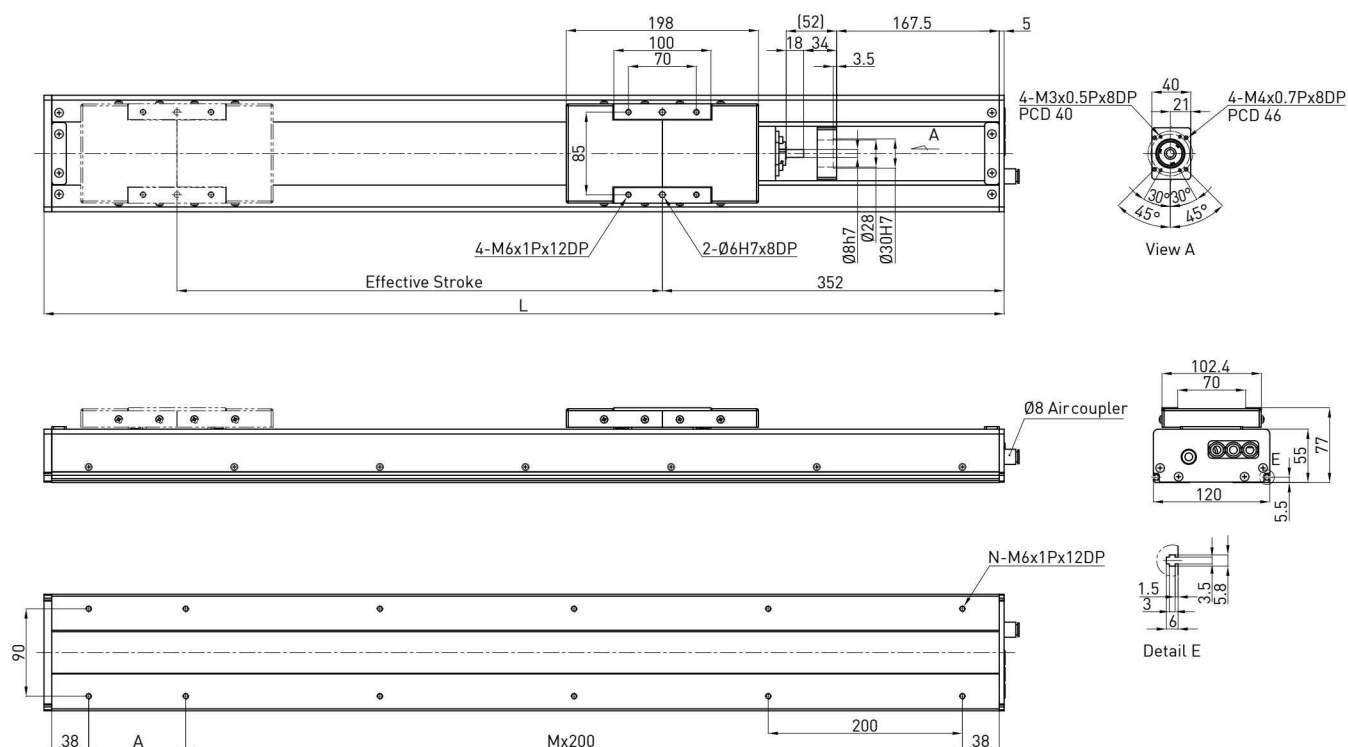
Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	100	
				Drive		Timing Belt	
200	558	2	6.1	Pulley Perimeter	mm	84	
400	758	4	7.6	Pulley RPM	RPM	1286	
600	958	5	9.1	Max linear speed	mm/sec	1800	
800	1158	6	10.6	Rated thrust	N	33	
1000	1358	8	12.1	Repeatability	mm	±0.1	
1200	1558	9	13.6	Effective stroke	mm	200~3000	
1400	1758	10	15.1	Max load (H)	kg	3	
1600	1958	12	16.6	Rated dynamic load* 	Fyd	N	20
1800	2158	13	18.1		Fzd	N	30
2000	2358	14	19.6		Mxd	N-m	1.2
2200	2558	16	21.1		Myd	N-m	1
2400	2758	17	22.6		Mzd	N-m	1
2600	2958	18	24.1				
2800	3158	20	25.6	Permitted load condition** $\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			
3000	3358	21	27.1				

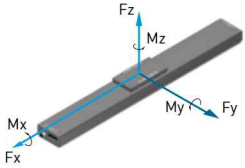
*The load condition is based on 10,000km operation.

**For horizontal applications only. If used in a special condition, please contact HIWIN.

Model Number for KS120-FI

KS120	-20	P	-1050	A	FI	S1	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	5 mm 10 mm 20 mm	C: Normal P: Precision		A: Standard	FI: Internal	S1: OMRON SX671 S2: OMRON SX674 S3: SUNX GX-F12A S4: SUNX GX-F12A-P None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	A	M	N	Weight (kg)	AC motor output	W	100			
						Drive		Ballscrew C7(normal)			
100	589	100	2	8	6.32	Lead	mm	5	10	20	
150	639	150	2	8	6.94	Rated RPM	RPM	3000	3000	3000	
200	689	200	2	8	7.57	Max linear speed*	mm/sec	250	500	1000	
250	739	50	3	10	8.2	Rated thrust	N	280	140	70	
300	789	100	3	10	8.83	Repeatability	mm	±0.02			
350	839	150	3	10	9.46	Effective stroke	mm	100~1050			
400	889	200	3	10	10.09	Max load (H)	kg	50	32	20	
450	939	50	4	12	10.72		Fyd	N	50	50	50
500	989	100	4	12	11.35		Fzd	N	500	320	200
550	1039	150	4	12	11.98		Mxd	N-m	25	27	28
600	1089	200	4	12	12.61		Myd	N-m	20	22	23
650	1139	50	5	14	13.24		Mzd	N-m	20	22	23
700	1189	100	5	14	13.87	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads					
750	1239	150	5	14	14.5						
800	1289	200	5	14	15.13						
850	1339	50	6	16	15.76						
900	1389	100	6	16	16.39						
950	1439	150	6	16	17.02						
1000	1489	200	6	16	17.65						
1050	1539	50	7	18	18.28						

* Vibration might occur when the effective stroke is longer than 600mm.

The maximum speed should be decreased by 15% for every 100mm of increased stroke.

** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

* Vibration might occur when the effective stroke is longer than 600mm.

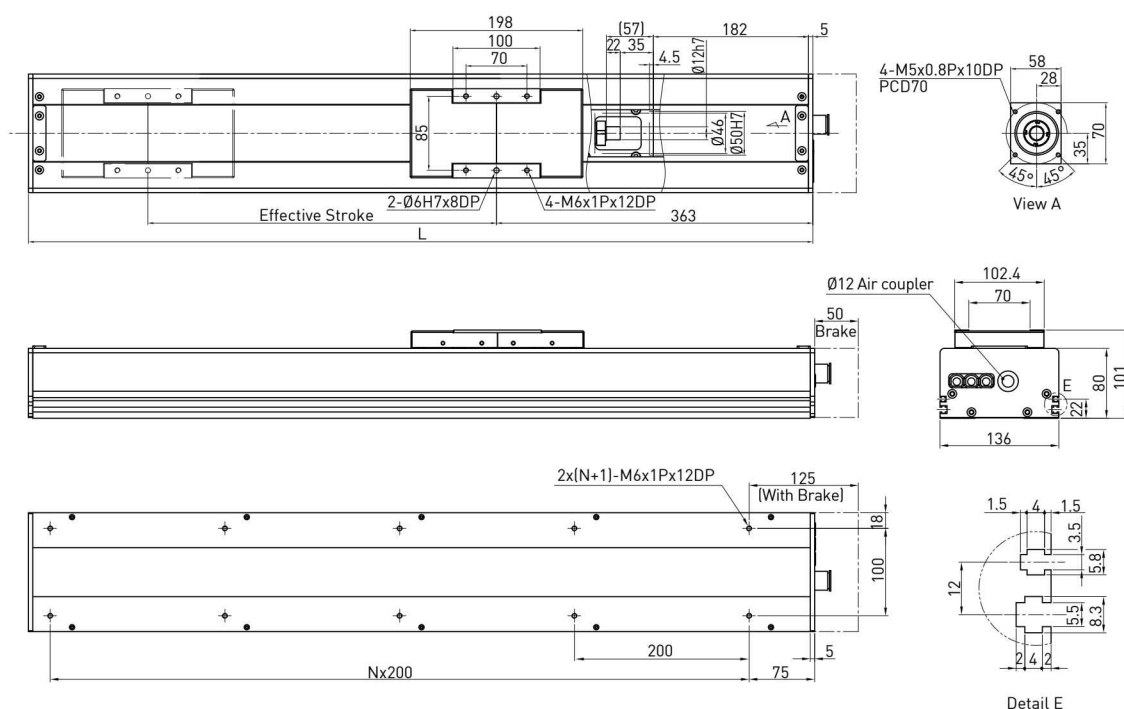
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

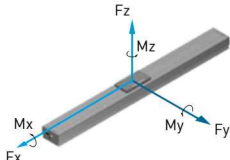
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS140-FI

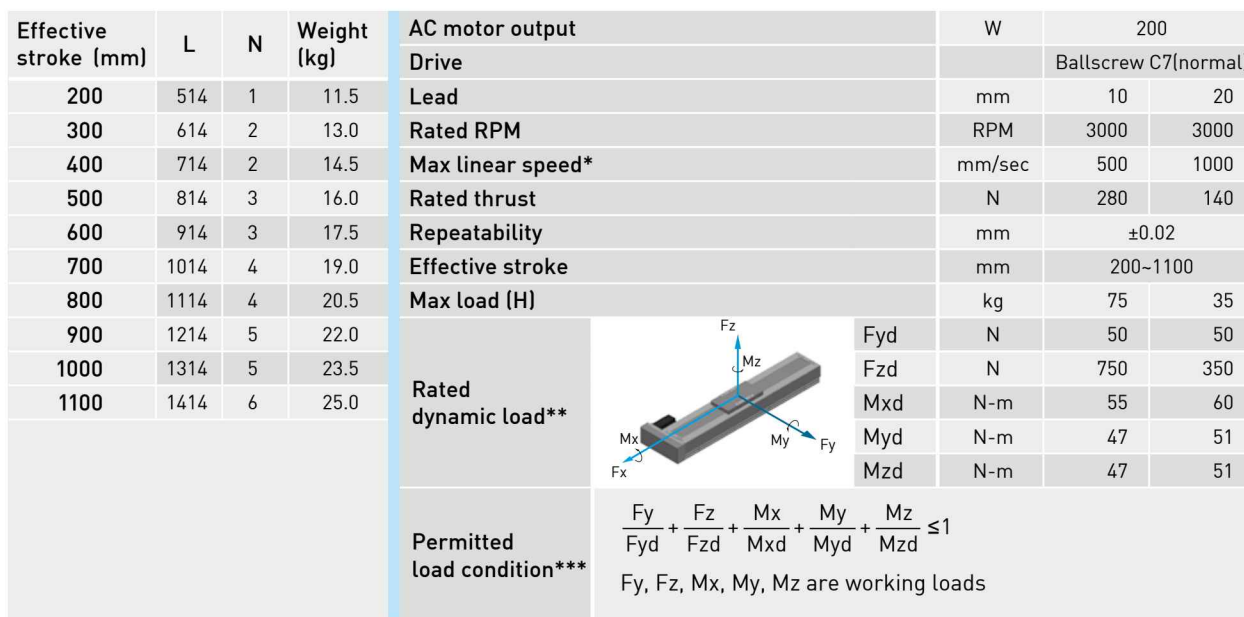
KS140	-20	P	-1100	A	FI	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FI: Internal	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	200			
				Drive		Ballscrew C7(normal)			
200	700	3	13.5	Lead	mm	10	20		
300	800	3	14.7	Rated RPM	RPM	3000	3000		
400	900	4	15.9	Max linear speed*	mm/sec	500	1000		
500	1000	4	17.1	Rated thrust	N	280	140		
600	1100	5	18.3	Repeatability	mm	±0.02			
700	1200	5	19.5	Effective stroke	mm	200~1100			
800	1300	6	20.7	Max load [H]	kg	75	35		
900	1400	6	21.9	Rated dynamic load**		Fyd	N	50	50
1000	1500	7	23.2			Fzd	N	750	350
1100	1600	7	24.4			Mxd	N-m	55	60
						Myd	N-m	47	51
						Mzd	N-m	47	51
				Permitted load condition***	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$				
					Fy, Fz, Mx, My, Mz are working loads				

* Vibration might occur when the effective stroke is longer than 800mm.
The maximum speed should be decreased by 15% for every 100mm of increased stroke.
** The load condition is based on 10,000km operation.
*** If used on the vertical axis or in a special condition, please contact HIWIN.

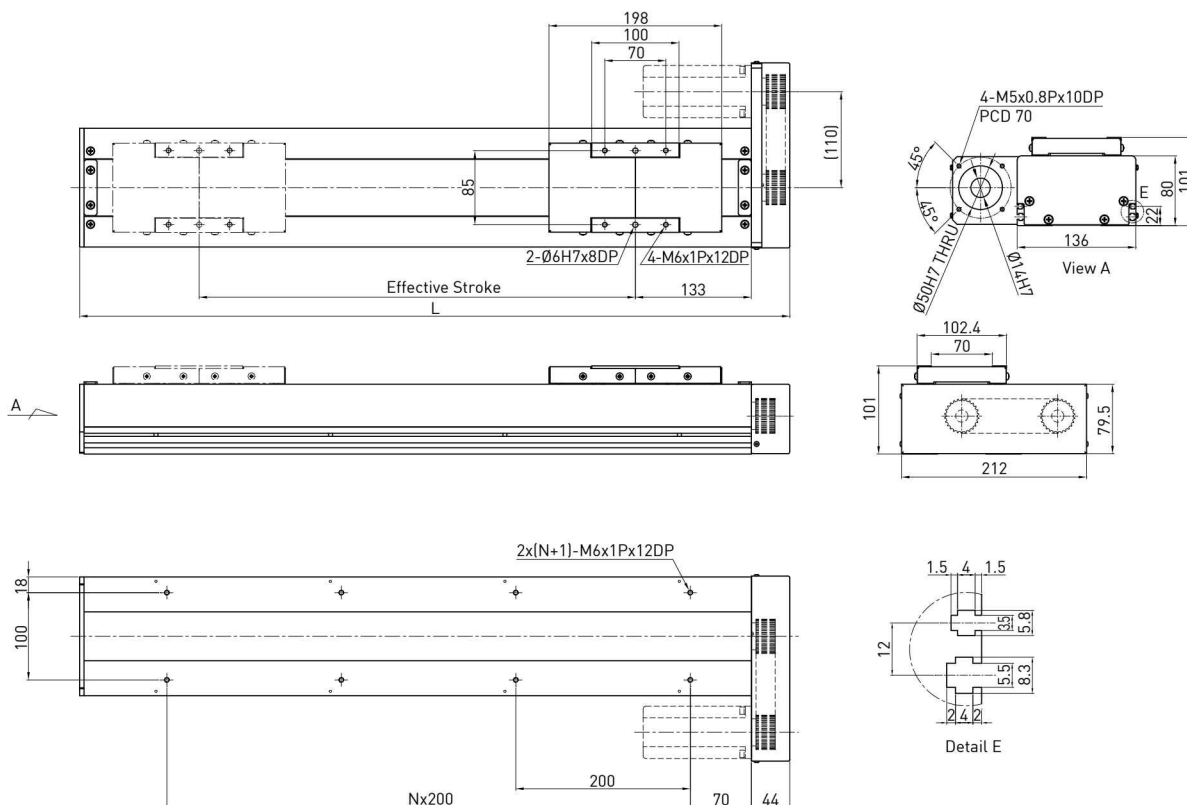
KS140	-20	P	-1100	A	FL	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FL: Left	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor

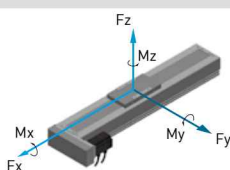


* Vibration might occur when the effective stroke is longer than 800mm.
The maximum speed should be decreased by 15% for every 100mm of increased stroke.
** The load condition is based on 10,000km operation.
*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS140-FR

KS140	-20	P	-1100	A	FR	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FR: Right	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	200		
				Drive		Ballscrew C7(normal)		
200	514	1	11.5	Lead	mm	10	20	
300	614	2	13.0	Rated RPM	RPM	3000	3000	
400	714	2	14.5	Max linear speed*	mm/sec	500	1000	
500	814	3	16.0	Rated thrust	N	280	140	
600	914	3	17.5	Repeatability	mm	±0.02		
700	1014	4	19.0	Effective stroke	mm	200~1100		
800	1114	4	20.5	Max load (H)	kg	75	35	
900	1214	5	22.0		Fyd	N	50	50
1000	1314	5	23.5		Fzd	N	750	350
1100	1414	6	25.0		Mxd	N-m	55	60
					Myd	N-m	47	51
					Mzd	N-m	47	51
				Permitted load condition***	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			

* Vibration might occur when the effective stroke is longer than 800mm.

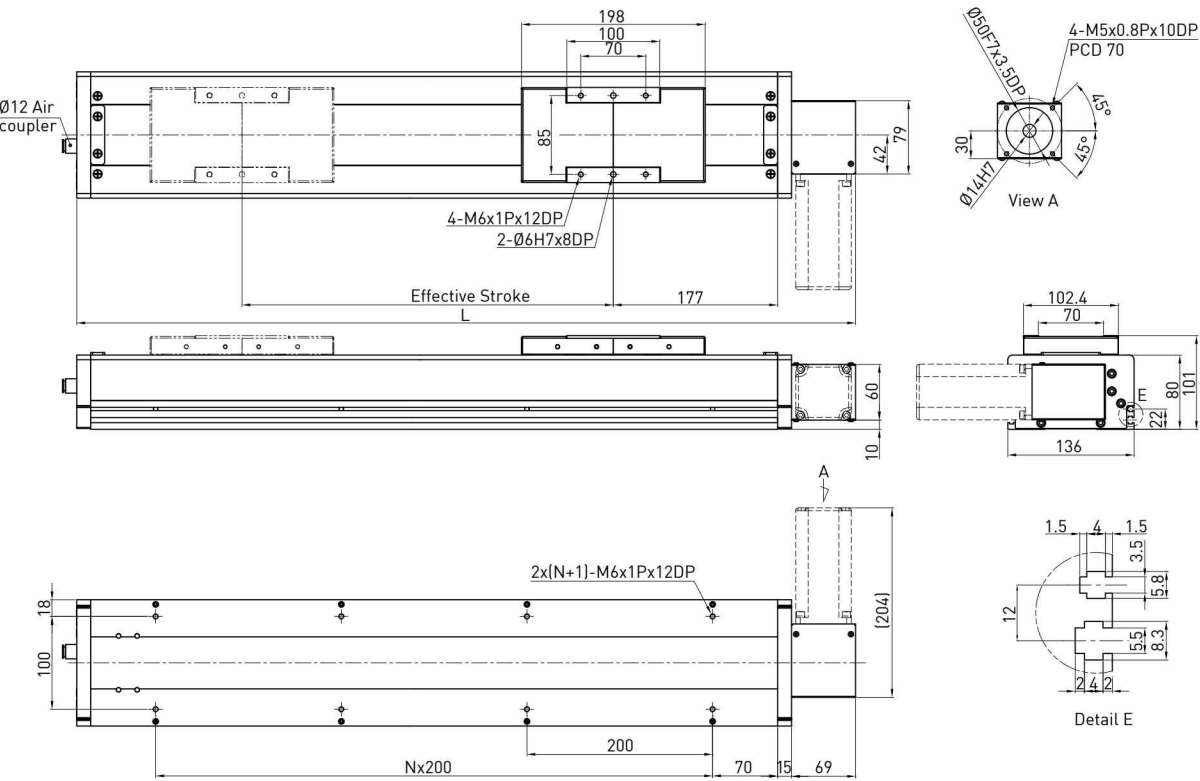
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

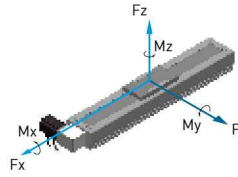
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS140B-FL

KS140	B	-120	C	-3000	A	FL	S2	M
Model	Timing Belt	Pulley Perimeter	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
			C: Normal		A: Standard	FL: Left	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor

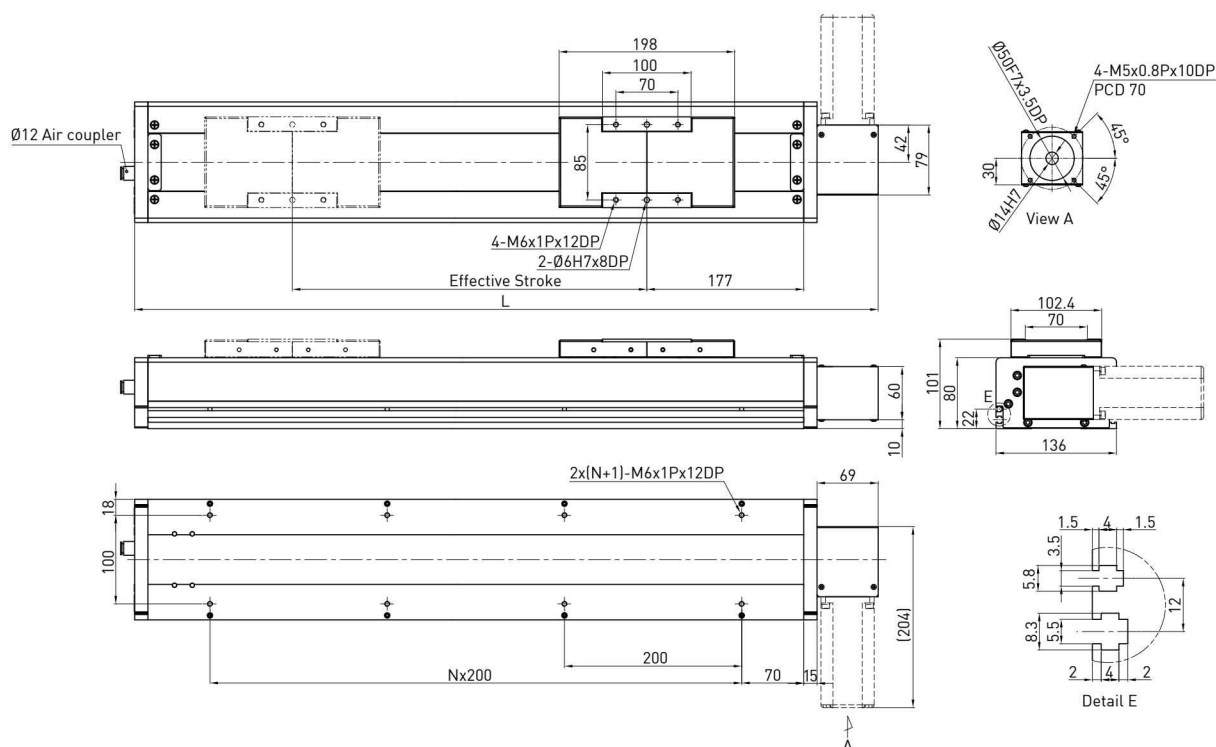


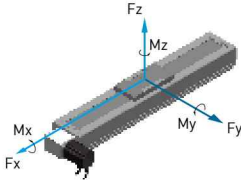
Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	200	
				Drive		Timing Belt	
200	639	2	10.4	Pulley Perimeter	mm	120	
400	839	3	12.6	Pulley RPM	RPM	900	
600	1039	4	14.8	Max linear speed	mm/sec	1800	
800	1239	5	17.0	Rated thrust	N	67	
1000	1439	6	19.2	Repeatability	mm	±0.1	
1200	1639	7	21.4	Effective stroke	mm	200~3000	
1400	1839	8	23.6	Max load (H)	kg	15	
1600	2039	9	25.8		Fyd	N	50
1800	2239	10	28.0		Fzd	N	150
2000	2439	11	30.2		Mxd	N-m	67
2200	2639	12	32.4		Myd	N-m	53
2400	2839	13	34.6		Mzd	N-m	53
2600	3039	14	36.8	Permitted load condition** $\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			
2800	3239	15	39.0				
3000	3439	16	41.2				

*The load condition is based on 10,000km operation.
**For horizontal applications only. If used in a special condition, please contact HIWIN.

Model Number for KS140B-FR

KS140	B	-120	C	-3000	A	FR	S2	M
Model	Timing Belt	Pulley Perimeter	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
			C: Normal		A: Standard	FR: Right	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



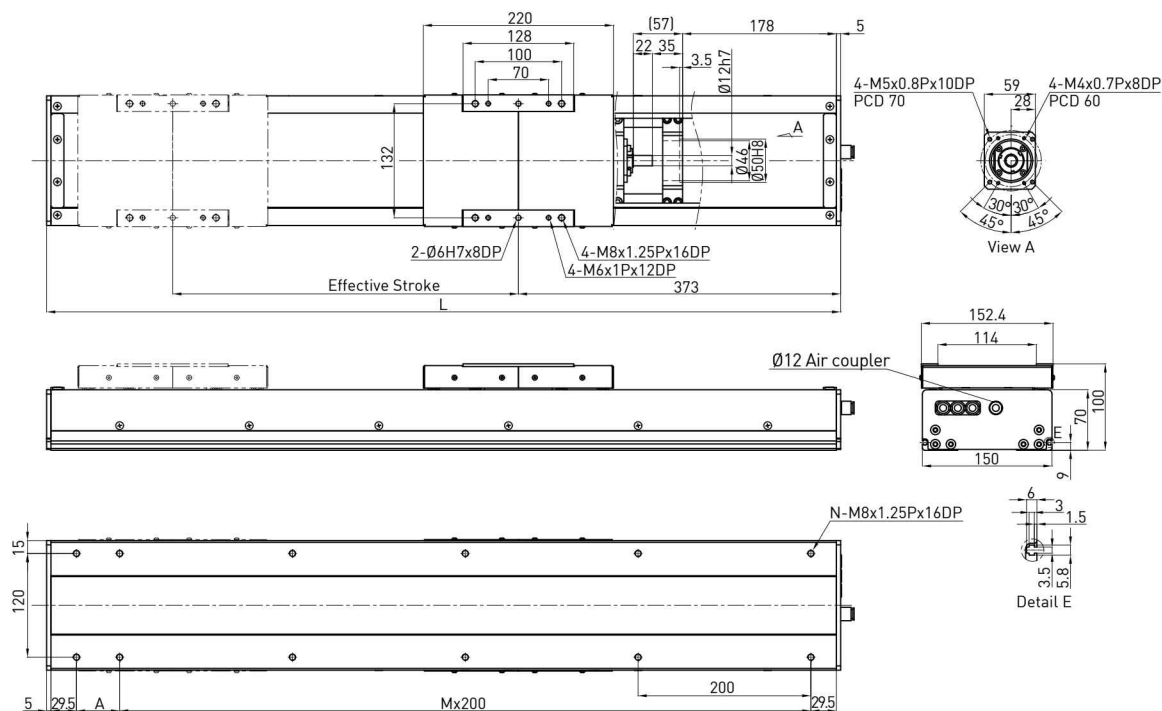
Effective stroke (mm)	L	N	Weight (kg)	AC motor output			W	200
				Drive				Timing Belt
200	639	2	10.4	Pulley Perimeter			mm	120
400	839	3	12.6	Pulley RPM			RPM	900
600	1039	4	14.8	Max linear speed			mm/sec	1800
800	1239	5	17.0	Rated thrust			N	67
1000	1439	6	19.2	Repeatability			mm	±0.1
1200	1639	7	21.4	Effective stroke			mm	200~3000
1400	1839	8	23.6	Max load (H)			kg	15
1600	2039	9	25.8	Rated dynamic load*		Fyd	N	50
1800	2239	10	28.0			Fzd	N	150
2000	2439	11	30.2			Mxd	N-m	67
2200	2639	12	32.4			Myd	N-m	53
2400	2839	13	34.6			Mzd	N-m	53
2600	3039	14	36.8	Permitted load condition**	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			
2800	3239	15	39.0					
3000	3439	16	41.2					

*The load condition is based on 10,000km operation.

**For horizontal applications only. If used in a special condition, please contact HIWIN.

Model Number for KS150-FI

KS150	-10	P	-1250	A	FI	S1	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10 mm 20 mm	C: Normal P: Precision		A: Standard	FI: Internal	S1: OMRON SX671 S2: OMRON SX674 S3: SUNX GX-F12A S4: SUNX GX-F12A-P None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	A	M	N	Weight (kg)	AC motor output Drive	W	200
150	669	200	2	8	13.96	Lead	mm	10
200	719	50	3	10	14.84	Rated RPM	RPM	3000
250	769	100	3	10	15.72	Max linear speed*	mm/sec	500
300	819	150	3	10	16.6	Rated thrust	N	280
350	869	200	3	10	17.48	Repeatability	mm	±0.02
400	919	50	4	12	18.36	Effective stroke	mm	150~1250
450	969	100	4	12	19.24	Max load (H)	kg	80
500	1019	150	4	12	20.12			40
550	1069	200	4	12	21			
600	1119	50	5	14	21.88			
650	1169	100	5	14	22.76			
700	1219	150	5	14	23.64			
750	1269	200	5	14	24.52			
800	1319	50	6	16	25.4			
850	1369	100	6	16	26.28			
900	1419	150	6	16	27.16			
950	1469	200	6	16	28.04			
1000	1519	50	7	18	28.92			
1050	1569	100	7	18	29.8			
1100	1619	150	7	18	30.68			
1150	1669	200	7	18	31.56			
1200	1719	50	8	20	32.44			
1250	1769	100	8	20	33.32			

Rated dynamic load**

Fy

Fzd

Mxd

Myd

Mzd

Permitted load condition***

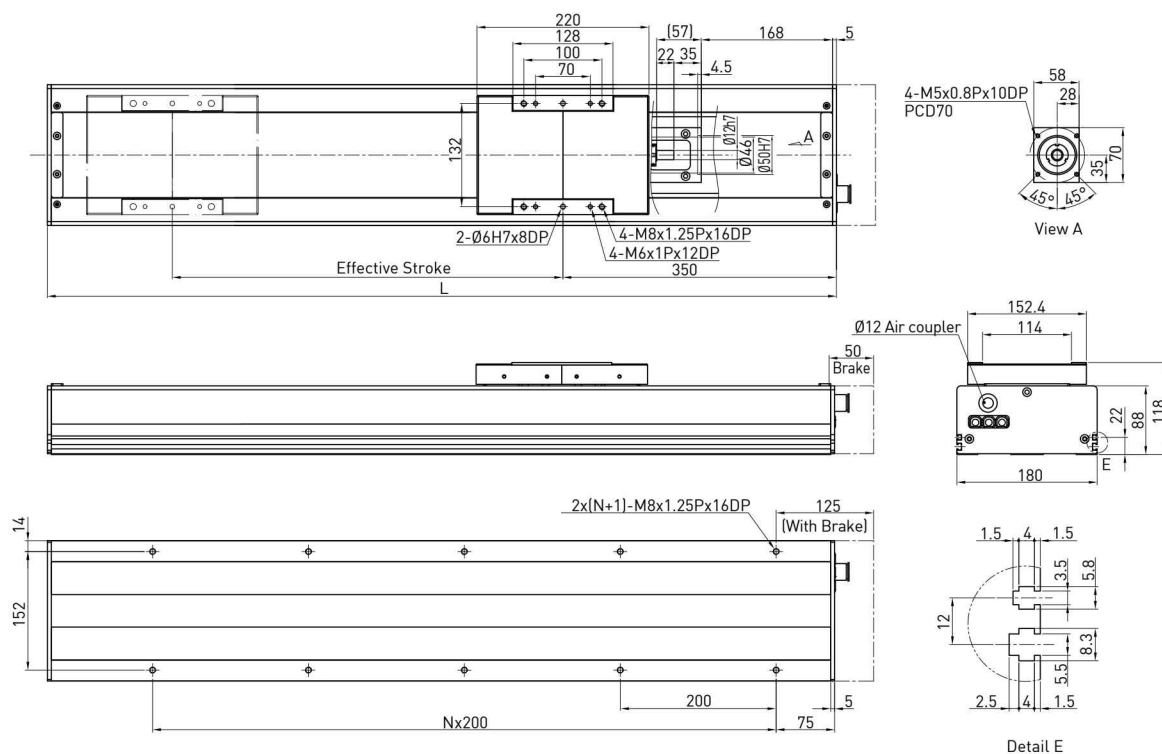
$$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$$

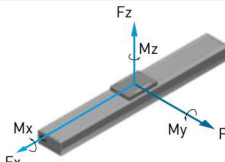
Fy, Fz, Mx, My, Mz are working loads

* Vibration might occur when the effective stroke is longer than 700mm.
The maximum speed should be decreased by 15% for every 100mm of increased stroke.
** The load condition is based on 10,000km operation.
*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS180-FI

KS180	-20	P	-1200	A	FI	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FI: Internal	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	400		
				Drive		BallscREW C7(normal)		
200	710	3	16.5	Lead	mm	10	20	
300	810	3	18.1	Rated RPM	RPM	3000	3000	
400	910	4	19.7	Max linear speed*	mm/sec	500	1000	
500	1010	4	21.3	Rated thrust	N	560	280	
600	1110	5	22.9	Repeatability	mm	±0.02		
700	1210	5	24.4	Effective stroke	mm	200~1200		
800	1310	6	26	Max load (H)	kg	110	50	
900	1410	6	27.6		Fyd	N	50	50
1000	1510	7	29.2		Fzd	N	1100	500
1100	1610	7	30.8		Mxd	N-m	60	65
1200	1710	8	32.3		Myd	N-m	45	53
					Mzd	N-m	45	53
				Rated dynamic load**				
				Permitted load condition***	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			

* Vibration might occur when the effective stroke is longer than 800mm.

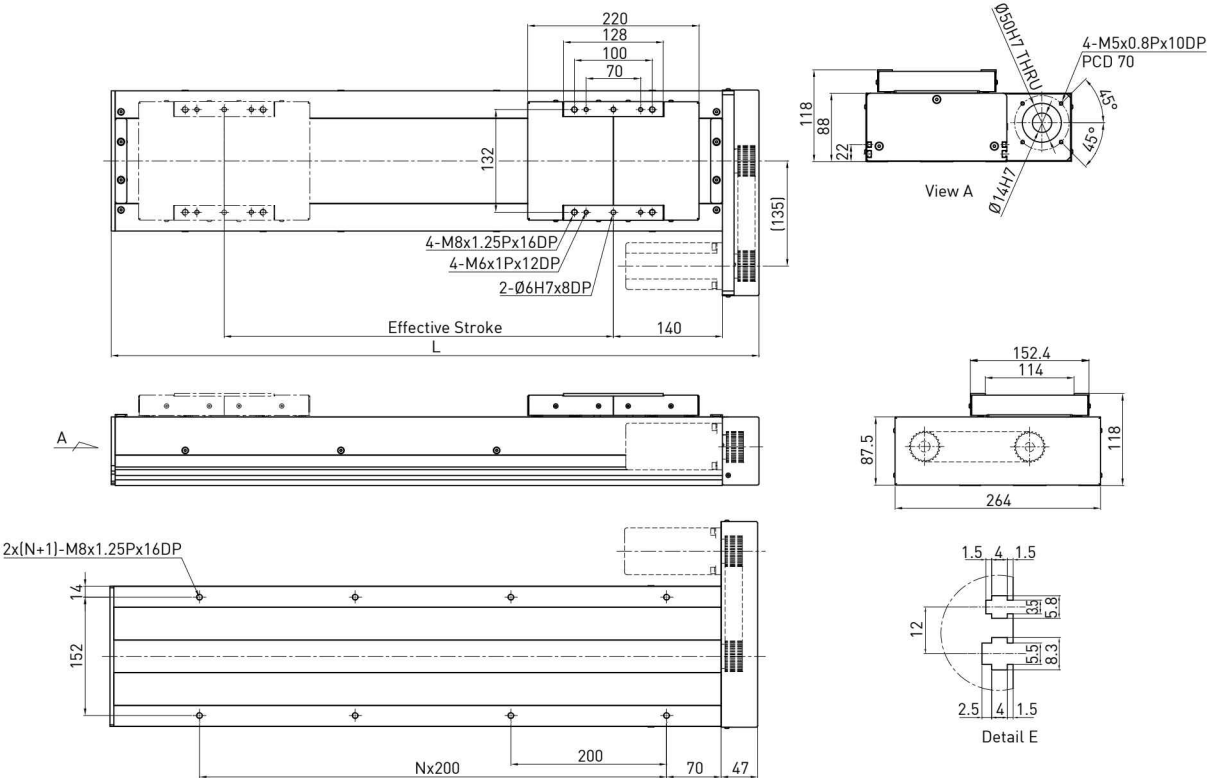
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

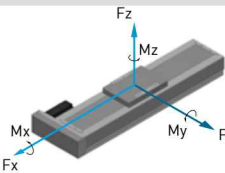
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS180-FL

KS180	-20	P	-1200	A	FL	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FL: Left	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor

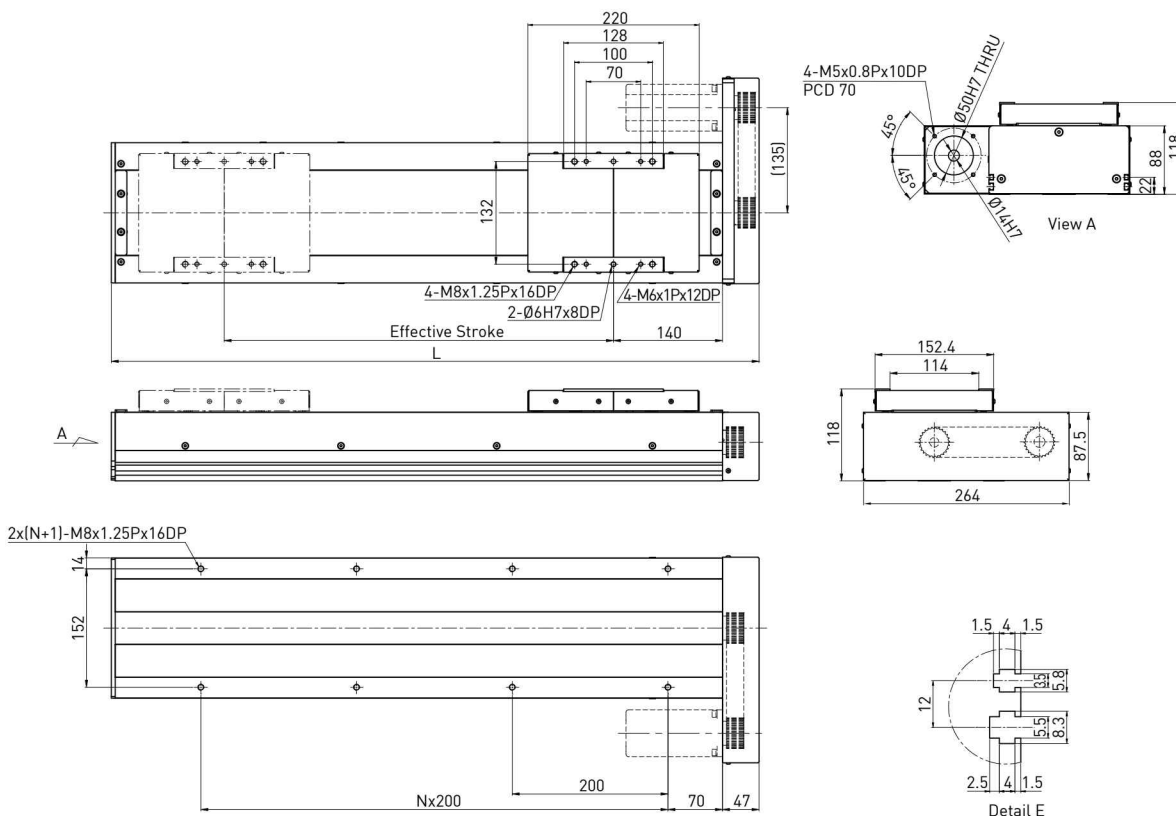


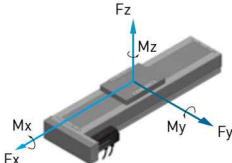
Effective stroke (mm)	L	N	Weight (kg)	AC motor output		400		
				Drive	W	Ballscrew C7(normal)		
200	532	1	11.3	Lead	mm	10	20	
300	632	2	12.3	Rated RPM	RPM	3000	3000	
400	732	2	13.3	Max linear speed*	mm/sec	500	1000	
500	832	3	14.3	Rated thrust	N	560	280	
600	932	3	15.3	Repeatability	mm	±0.02		
700	1032	4	16.3	Effective stroke	mm	200~1200		
800	1132	4	17.3	Max load (H)	kg	110	50	
900	1232	5	18.3	Rated dynamic load** 	Fyd	N	50	50
1000	1332	5	19.3		Fzd	N	1100	500
1100	1432	6	20.3		Mxd	N-m	60	65
1200	1532	6	21.3		Myd	N-m	45	53
					Mzd	N-m	45	53
				Permitted load condition***	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			

* Vibration might occur when the effective stroke is longer than 800mm.
The maximum speed should be decreased by 15% for every 100mm of increased stroke.
** The load condition is based on 10,000km operation.
*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS180-FR

KS180	-20	P	-1200	A	FR	S2	M
Model	Lead	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
	10mm 20mm	P: Precision C: Normal		A: Standard	FR: Right	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	400		
				Drive		Ballscrew C7(normal)		
200	532	1	11.3	Lead	mm	10	20	
300	632	2	12.3	Rated RPM	RPM	3000	3000	
400	732	2	13.3	Max linear speed*	mm/sec	500	1000	
500	832	3	14.3	Rated thrust	N	560	280	
600	932	3	15.3	Repeatability	mm	±0.02		
700	1032	4	16.3	Effective stroke	mm	200~1200		
800	1132	4	17.3	Max load (H)	kg	110	50	
900	1232	5	18.3		Fyd	N	50	50
1000	1332	5	19.3		Fzd	N	1100	500
1100	1432	6	20.3		Mxd	N-m	60	65
1200	1532	6	21.3		Myd	N-m	45	53
					Mzd	N-m	45	53
				Permitted load condition***	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			

* Vibration might occur when the effective stroke is longer than 800mm.

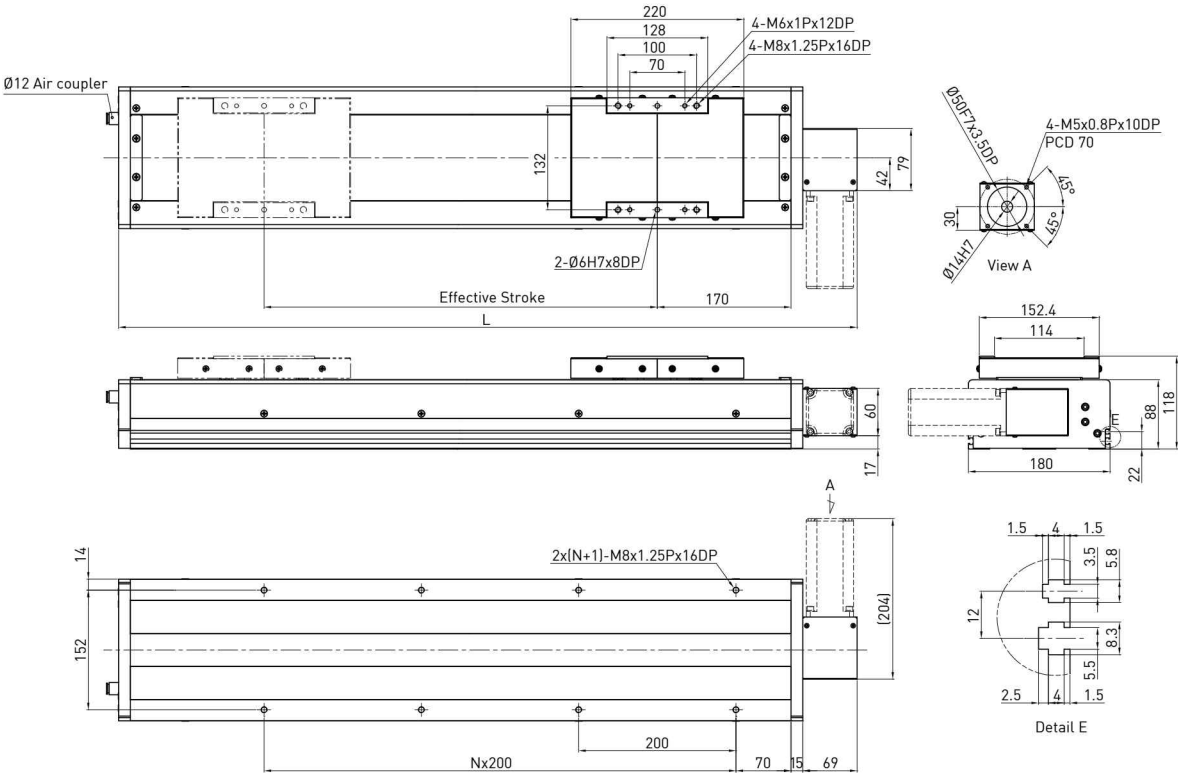
The maximum speed should be decreased by 15% for every 100mm of increased stroke.

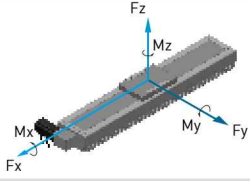
** The load condition is based on 10,000km operation.

*** If used on the vertical axis or in a special condition, please contact HIWIN.

Model Number for KS180B-FL

KS180	B	-120	C	-3000	A	FL	S2	M
Model	Timing Belt	Pulley Perimeter	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
			C: Normal		A: Standard	FL: Left	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor

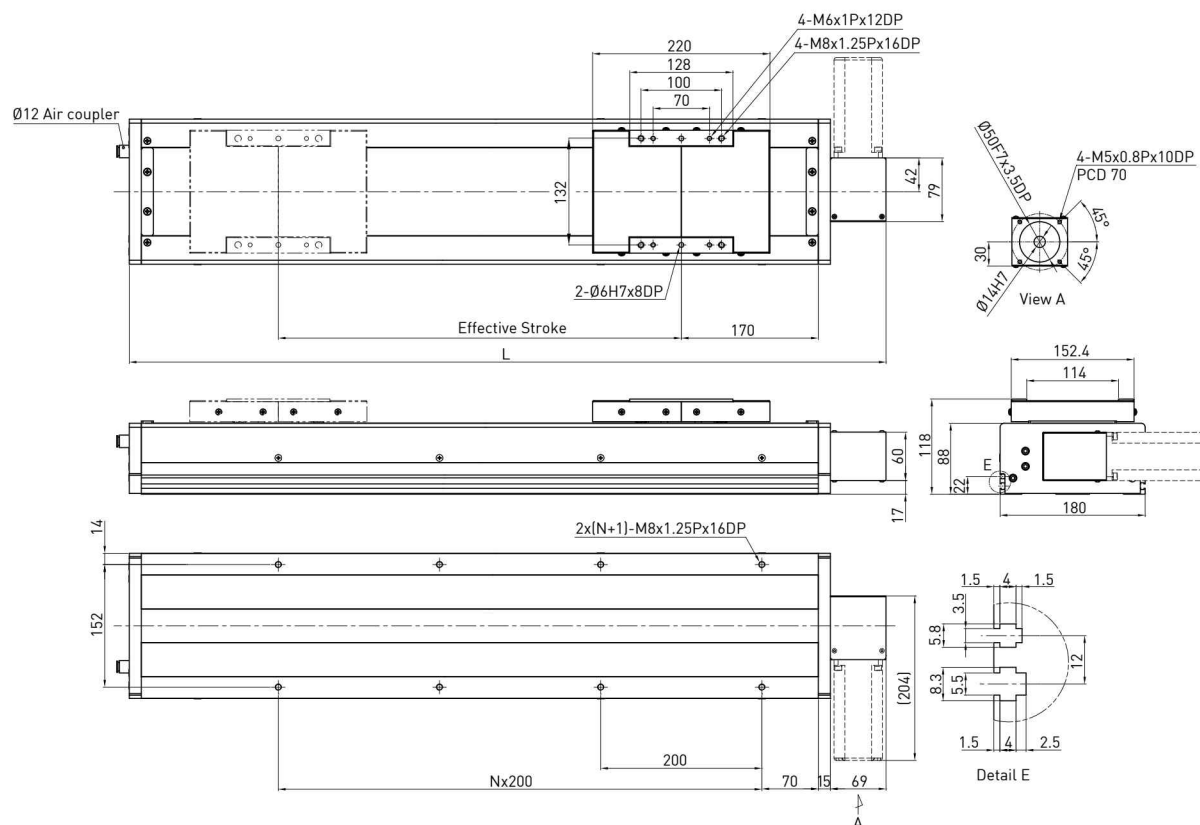


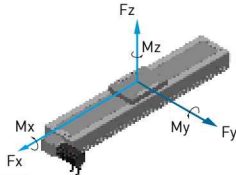
Effective stroke (mm)	L	N	Weight (kg)	AC motor output	W	400	
				Drive		Timing Belt	
200	639	2	14.2	Pulley Perimeter	mm	120	
400	839	3	17.0	Pulley RPM	RPM	900	
600	1039	4	19.8	Max linear speed	mm/sec	1800	
800	1239	5	22.6	Rated thrust	N	133	
1000	1439	6	25.4	Repeatability	mm	±0.1	
1200	1639	7	28.2	Effective stroke	mm	200~3000	
1400	1839	8	31.0	Max load (H)	kg	30	
1600	2039	9	33.8		Fyd	N	50
1800	2239	10	36.6		Fzd	N	300
2000	2439	11	39.4		Mxd	N-m	70
2200	2639	12	42.2		Myd	N-m	55
2400	2839	13	45.0		Mzd	N-m	55
2600	3039	14	47.8	Permitted load condition** $\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads			
2800	3239	15	50.6				
3000	3439	16	53.4				

*The load condition is based on 10,000km operation.
**For horizontal applications only. If used in a special condition, please contact HIWIN.

Model Number for KS180B-FR

KS180	B	-120	C	-3000	A	FR	S2	M
Model	Timing Belt	Pulley Perimeter	Precision Grade	Effective Stroke	Slider Type	Motor Flange	Limit Switch	Motor
			C: Normal		A: Standard	FR: Right	S2: OMRON SX674 None: No Limit Switch	M: Supplied With Motor None: Without Motor



Effective stroke (mm)	L	N	Weight (kg)	AC motor output				W	400
				Drive					Timing Belt
200	639	2	14.2	Pulley Perimeter				mm	120
400	839	3	17.0	Pulley RPM				RPM	900
600	1039	4	19.8	Max linear speed				mm/sec	1800
800	1239	5	22.6	Rated thrust				N	133
1000	1439	6	25.4	Repeatability				mm	±0.1
1200	1639	7	28.2	Effective stroke				mm	200~3000
1400	1839	8	31.0	Max load (H)				kg	30
1600	2039	9	33.8	Rated dynamic load*		Fyd	N	50	
1800	2239	10	36.6			Fzd	N	300	
2000	2439	11	39.4			Mxd	N-m	70	
2200	2639	12	42.2			Myd	N-m	55	
2400	2839	13	45.0			Mzd	N-m	55	
2600	3039	14	47.8	Permitted load condition**	$\frac{F_y}{F_{yd}} + \frac{F_z}{F_{zd}} + \frac{M_x}{M_{xd}} + \frac{M_y}{M_{yd}} + \frac{M_z}{M_{zd}} \leq 1$ Fy, Fz, Mx, My, Mz are working loads				
2800	3239	15	50.6						
3000	3439	16	53.4						

*The load condition is based on 10,000km operation.

**For horizontal applications only. If used in a special condition, please contact HIWIN.