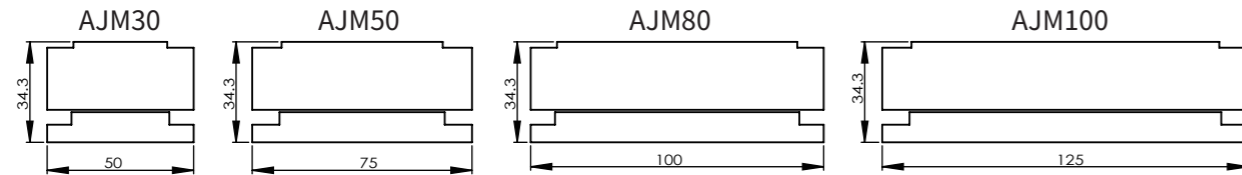


AJM

Specifications



Model		AJM30-B2	AJM30-B4	AJM50-B2	AJM50-B4	AJM80-B2	AJM80-B4	AJM100-B2	AJM100-B4
Performance Parameters	Unit	Series	Parallel	Series	Parallel	Series	Parallel	Series	Parallel
Continuous Force @100 °C	N	68.1	136.2	117.0	234.0	174.5	348.9	223.4	446.8
Peak Force	N	214.7	429.4	369.0	738.1	550.2	1100.4	704.5	1409.1
Force Constant	N/Arms	29.6	29.6	50.9	50.9	75.9	75.9	97.1	97.1
Back EMF Constant	Vpeak/(m/s)	24.2	24.2	41.5	41.5	61.9	61.9	79.3	79.3
Motor Constant	N/Sqrt(W)	11.9	16.8	16.7	23.6	21.2	29.9	24.5	34.6
Resistance (Terminal to Terminal)	Ω	4.1	2.1	6.2	3.1	8.6	4.3	10.5	5.2
Inductance (Terminal to Terminal)	mH	15.2	7.6	24.0	12.0	34.5	17.3	43.7	21.9
Electrical Time Constant	ms	3.7	3.7	3.9	3.9	4.0	4.0	4.2	4.2
Continuous Current @100°C	Arms	2.3	4.6	2.3	4.6	2.3	4.6	2.3	4.6
Peak Current	Arms	9.0	18.0	9.0	18.0	9.0	18.0	9.0	18.0
Continuous Power Dissipation @100°C	W	32.7	65.4	49.0	98.1	68.0	135.9	83.3	166.6
Max. Coil Temperature	°C	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thermal Dissipation Constant	W/ °C	0.4	0.9	0.7	1.3	0.9	1.8	1.1	2.2
Max. Bus Voltage	Vdc	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
Magnetic Period	mm	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Cogging Force (pk to pk)	N	3.1	5.8	5.3	10.0	7.9	14.9	10.2	19.1
Attraction Force	N	378.8	757.6	651.1	1302.1	970.7	1941.4	1242.9	2485.9

Note: All parameters vary in the range of ± 10% except dimensions.

AJM

Motor Coil/Track

Motor Coil

Size	Without hall module		With hall module		Coil Width (mm)
	Coil Length (mm)	Mass (kg)	Coil Length (mm)	Mass (kg)	
AJM30-B2	96	0.6	120	0.62	50
AJM30-B4	176	1.1	200	1.12	50
AJM50-B2	96	0.9	120	0.92	75
AJM50-B4	176	1.7	200	1.72	75
AJM80-B2	96	1.2	120	1.22	100
AJM80-B4	176	2.3	200	2.32	100
AJM100-B2	96	1.5	120	1.52	125
AJM100-B4	176	2.9	200	2.92	125

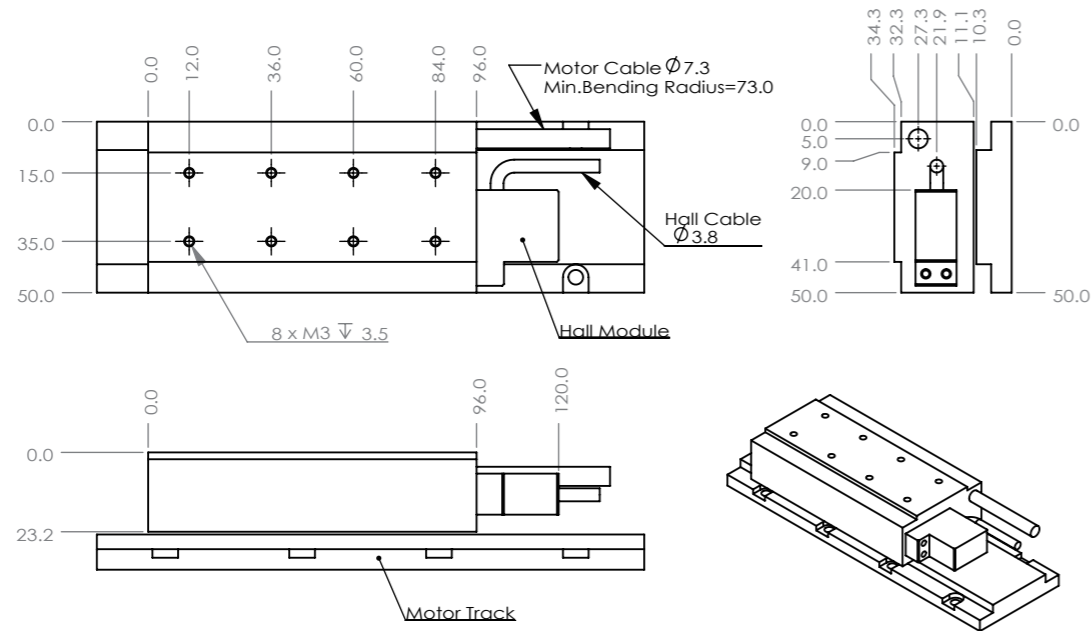
Motor Track

Size	Track Length (mm)	Track Width (mm)	Mass (kg)
AJM30	80	50	0.26
	200	50	0.65
	400	50	1.30
AJM50	80	75	0.40
	200	75	1.00
	400	75	2.00
AJM80	80	100	0.56
	200	100	1.40
	400	100	2.80
AJM100	80	125	0.70
	200	125	1.70
	400	125	3.50

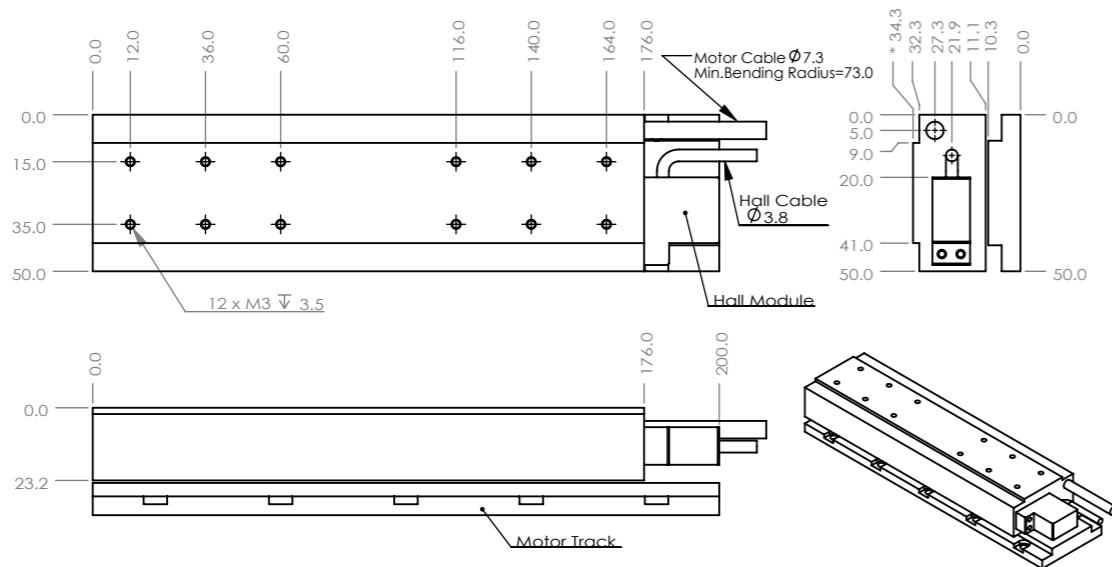
AJM

Dimensions

AJM30-B2



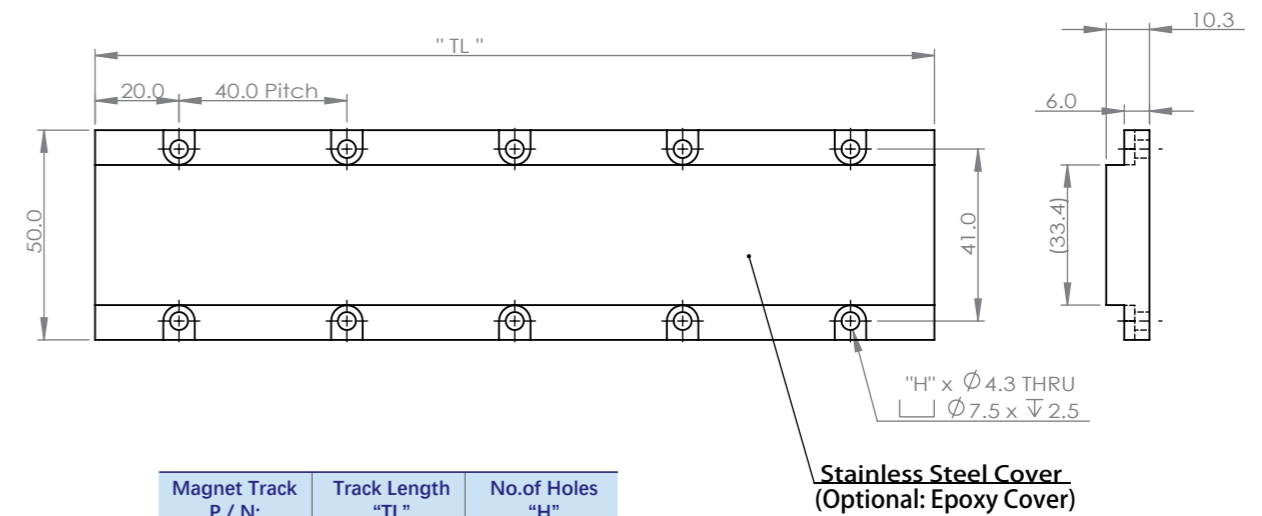
AJM30-B4



AJM

Track

AJM30



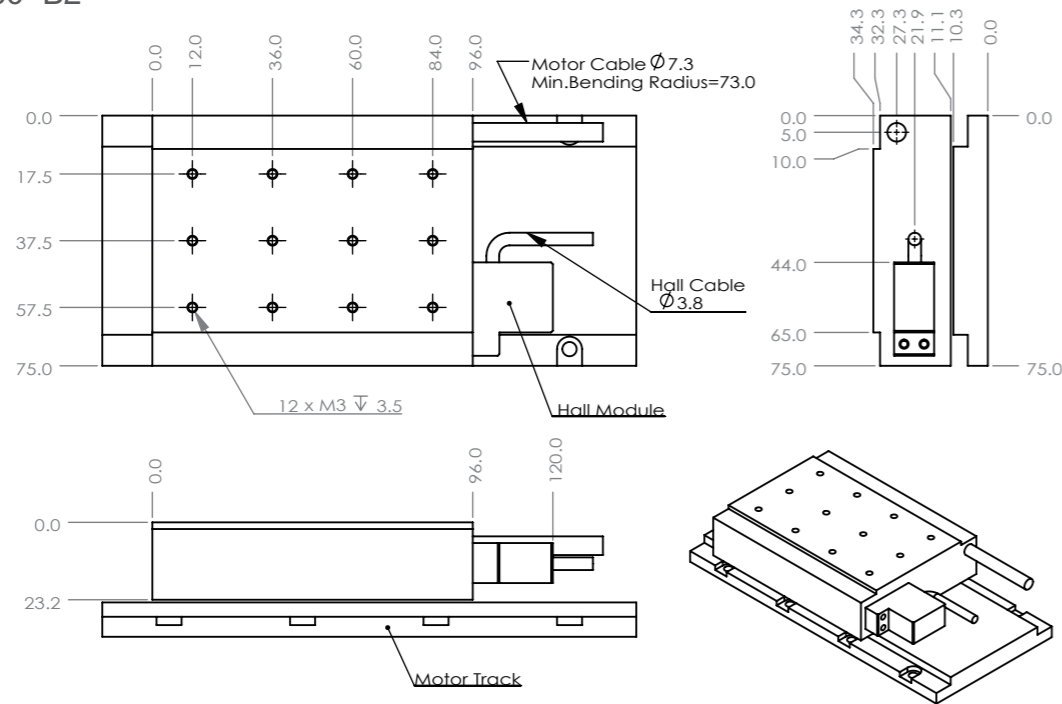
Magnet Track P / N:	Track Length "TL"	No. of Holes "H"
AJM30-TL80	80.0	4
AJM30-TL200	200.0	10
AJM30-TL400	400.0	20

For epoxy cover option, add "E" to P/N. (e.g. AJM30-TL80E)

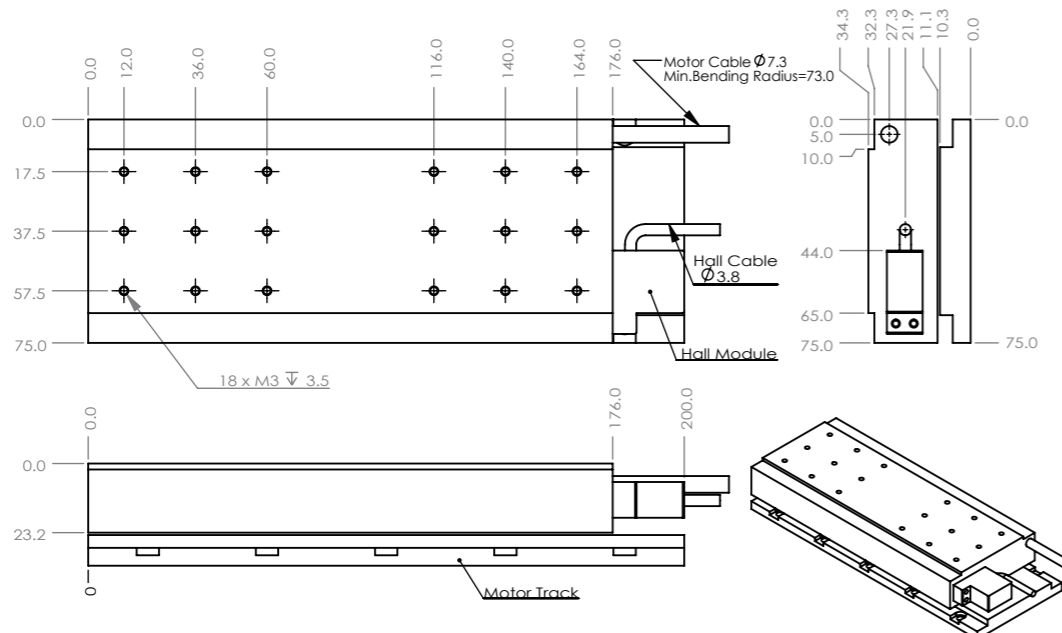
AJM

Dimensions

AJM50-B2



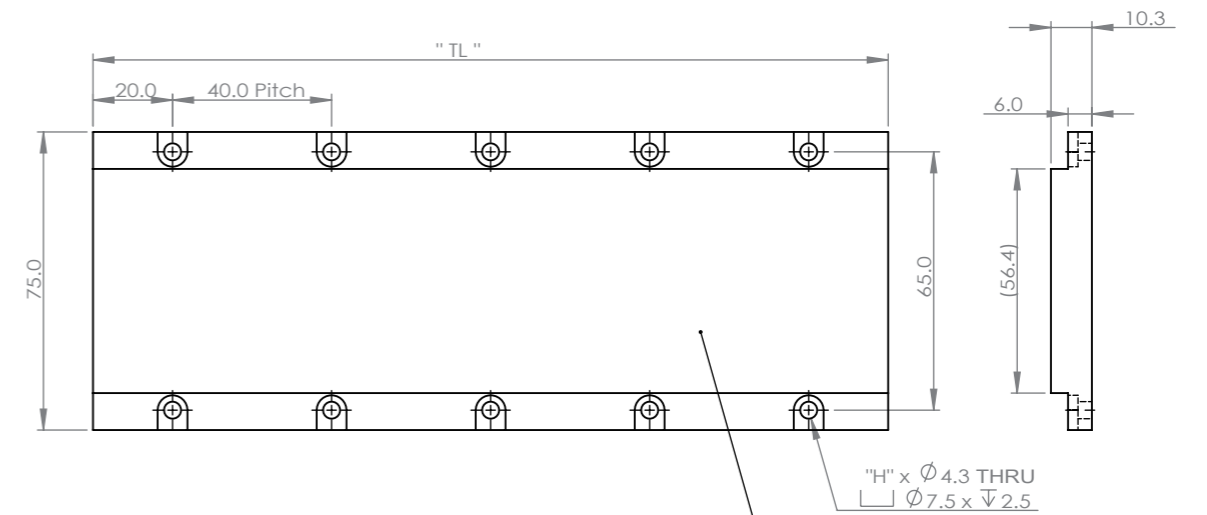
AJM50-B4



AJM

Track

AJM50



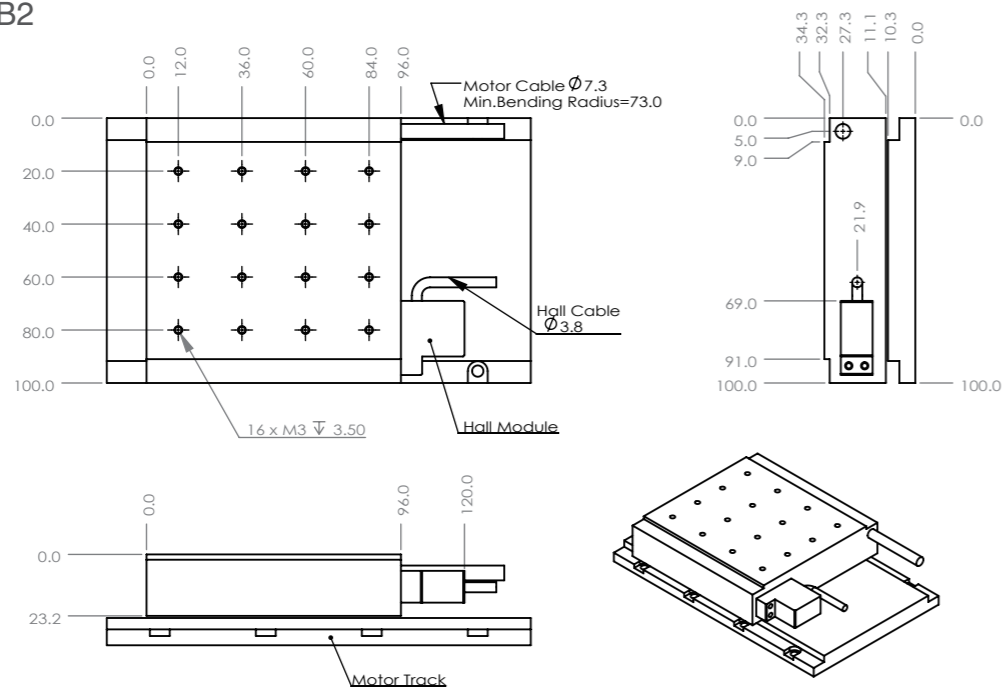
Magnet Track P / N:	Track Length "TL"	No. of Holes "H"
AJM50-TL80	80.0	4
AJM50-TL200	200.0	10
AJM50-TL400	400.0	20

For epoxy cover option, add "E" to P/N. (e.g. AJM50-TL80E)

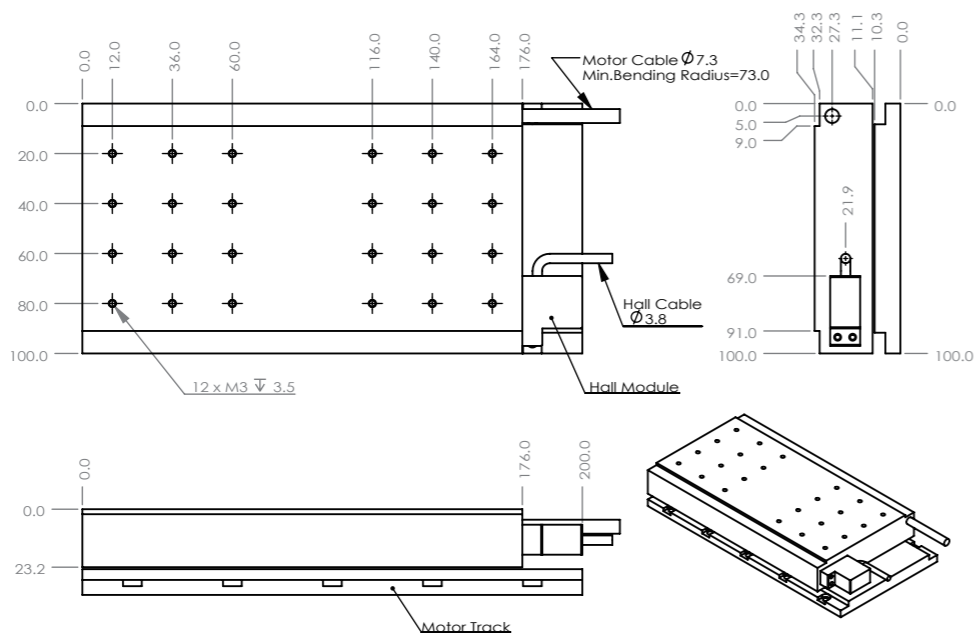
AJM

Dimensions

AJM80-B2



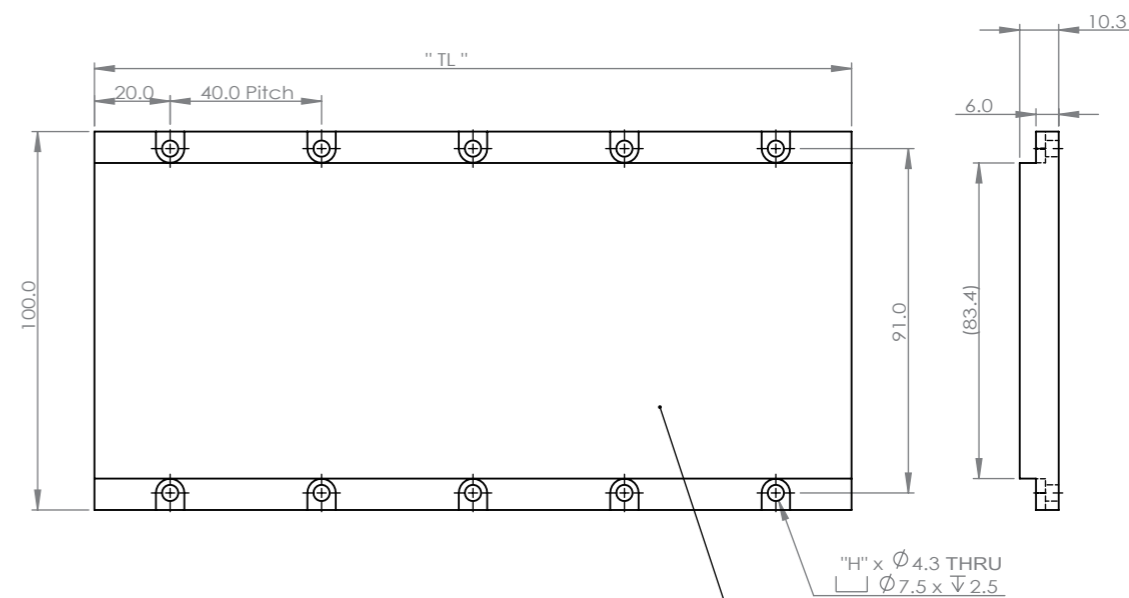
AJM80-B4



AJM

Track

AJM80



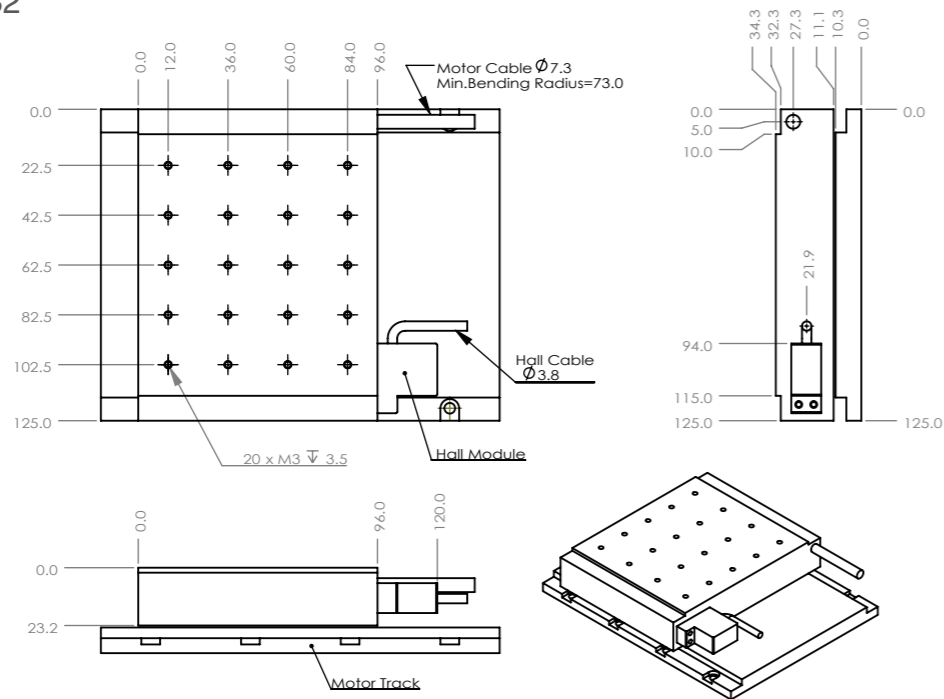
Magnet Track P / N:	Track Length "TL"	No. of Holes "H"
AJM80-TL80	80	4
AJM80-TL200	200	10
AJM80-TL400	400	20

For epoxy cover option, add "E" to P/N.(e.g. AJM80-TL80E)

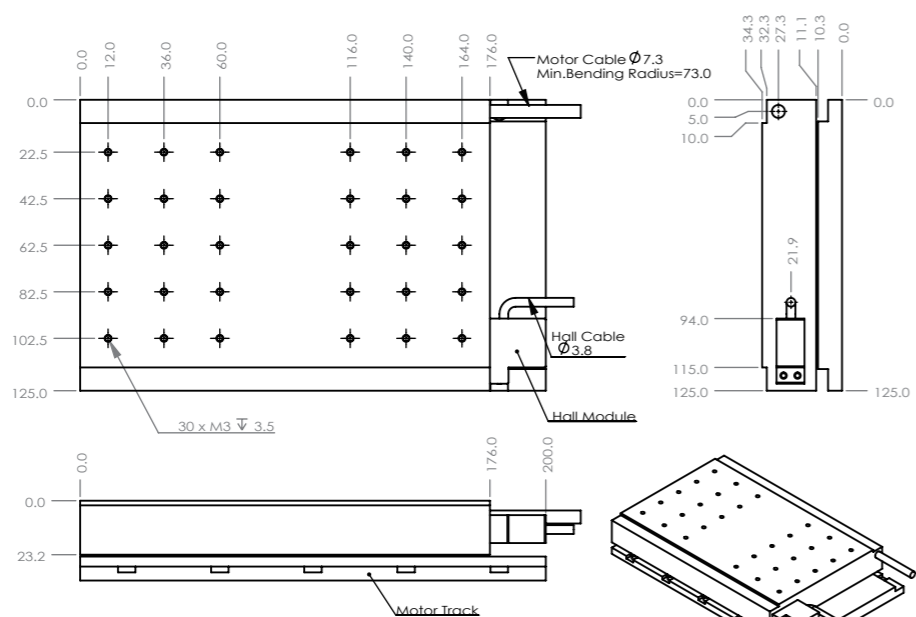
AJM

Dimensions

AJM100-B2



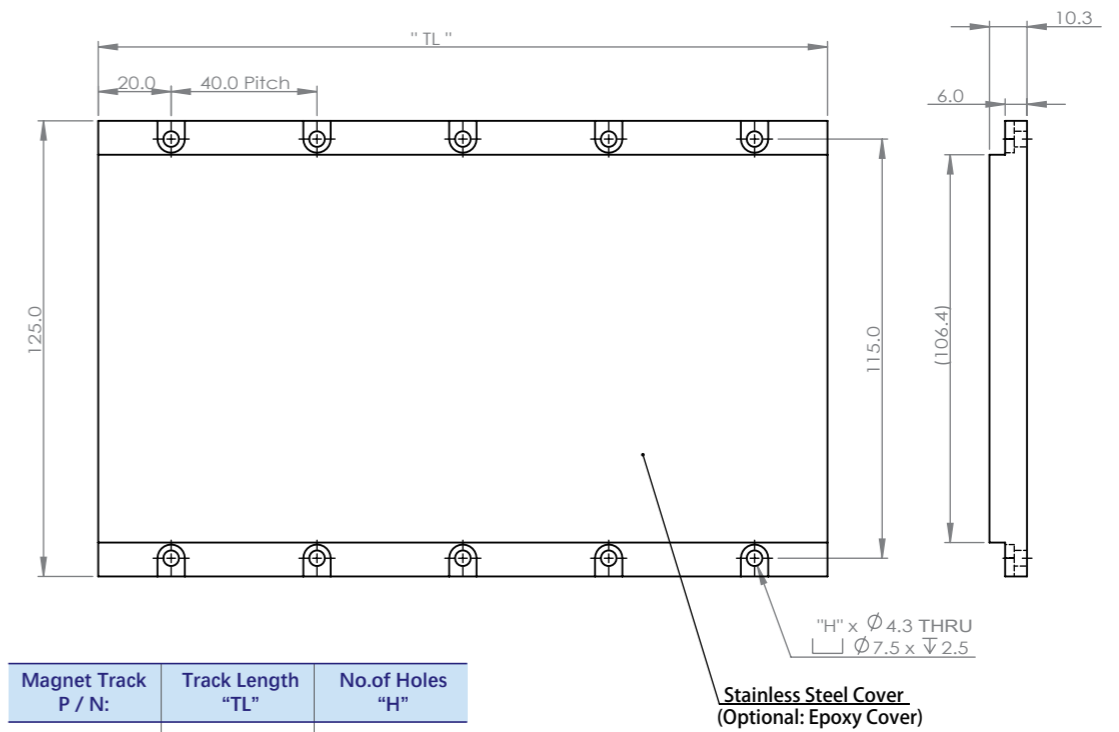
AJM100-B4



AJM

Track

AJM100



Magnet Track P / N:	Track Length "TL"	No. of Holes "H"
AJM100-TL80	80.0	4
AJM100-TL200	200.0	10
AJM100-TL400	400.0	20

For epoxy cover option, add "E" to P/N.(e.g. AJM100-TL80E)

AJM

Part Numbering



Coil

AJM30-B2-J-H9D-3.0-FB

Model

AJM30/AJM50/AJM80/AJM100

Size

B2/B4

Thermal Sensor

J = Thermostat (standard), K = PT100 (RTD)
K4 = PTC Thermistor, KTY81/121
K5 = RTD, PT1000 Sensor

Ferrite Bead Options

Blank⁴, FB⁵

Cable Length (m)

3.0

Hall Options

Blank¹, H9D², NH³



Track

AJM30-TL200-E

Model

AJM30,AJM50,AJM80,AJM100

Cover Type

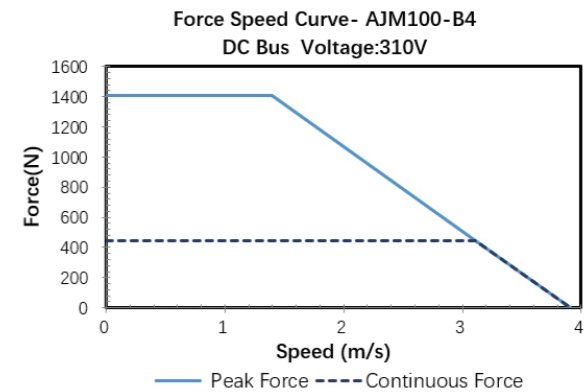
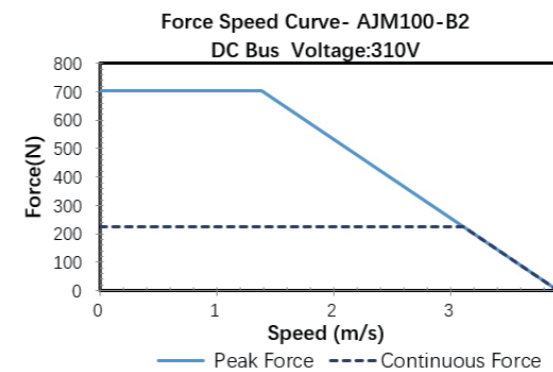
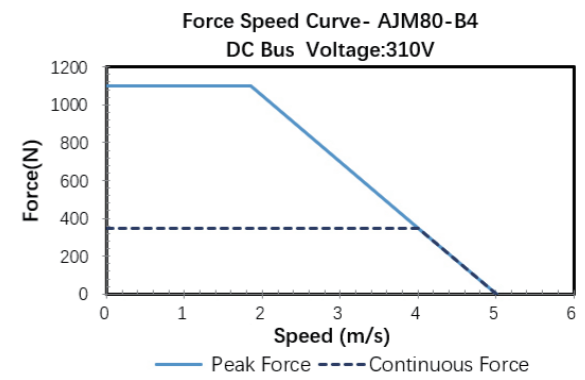
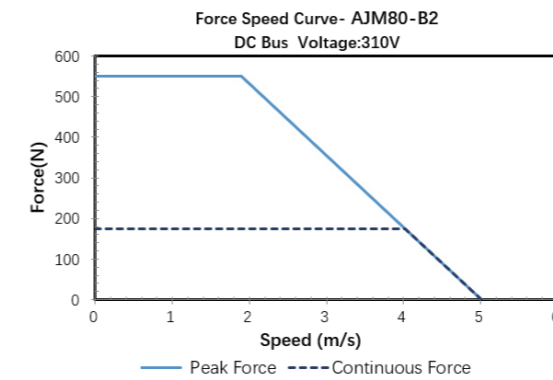
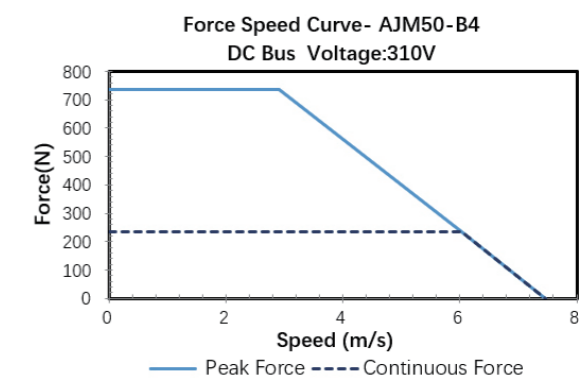
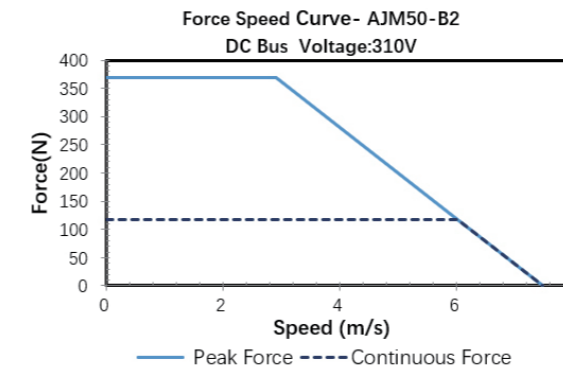
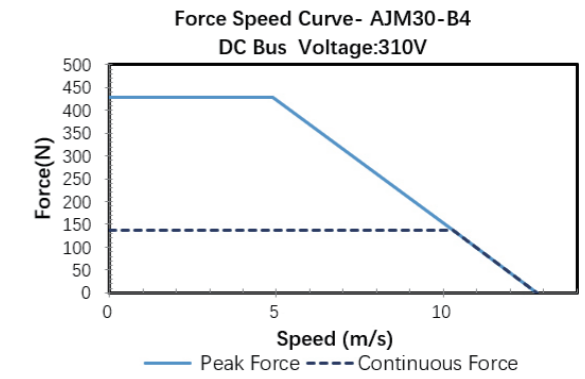
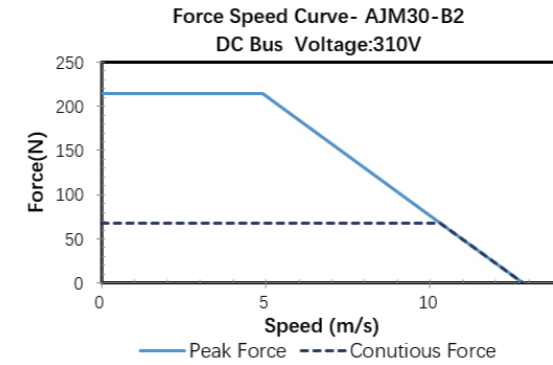
Blank⁶, E⁷

Track Length

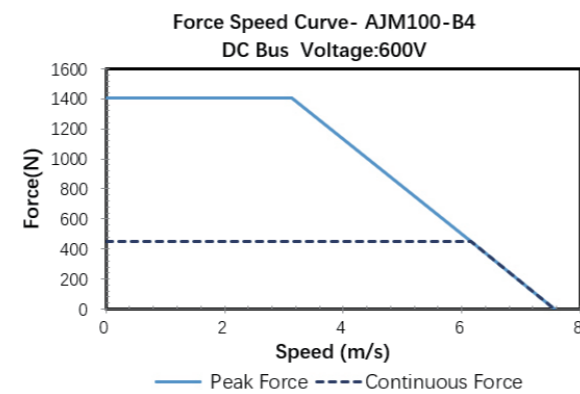
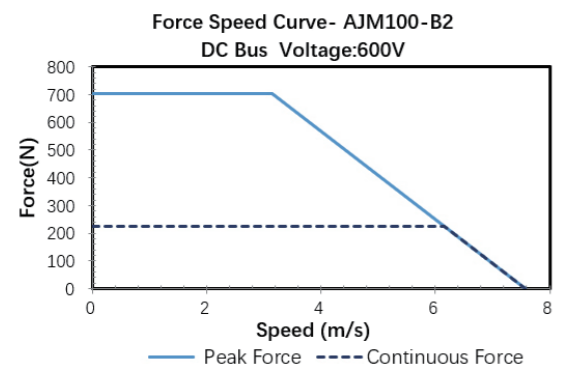
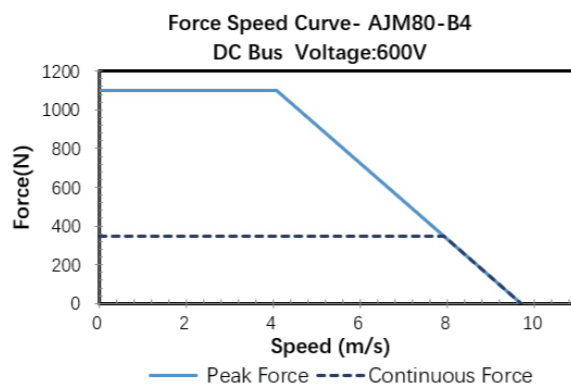
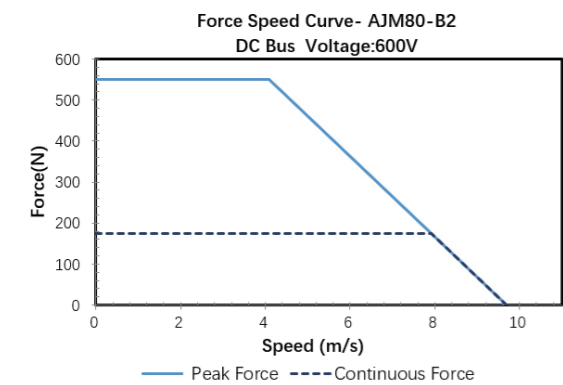
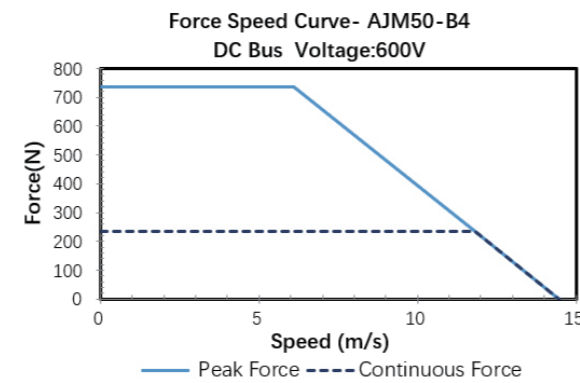
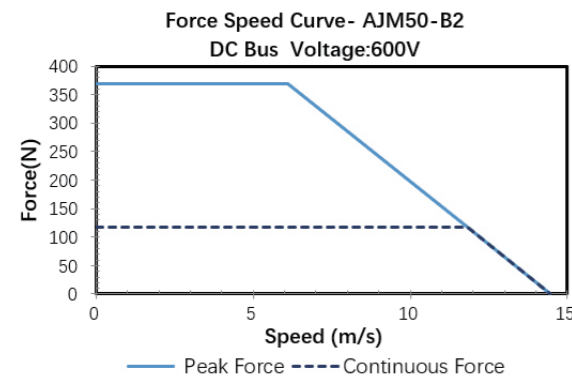
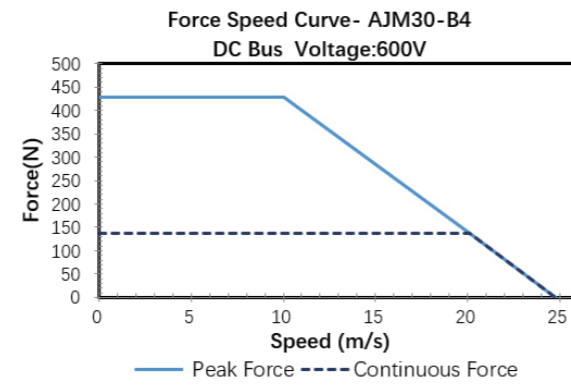
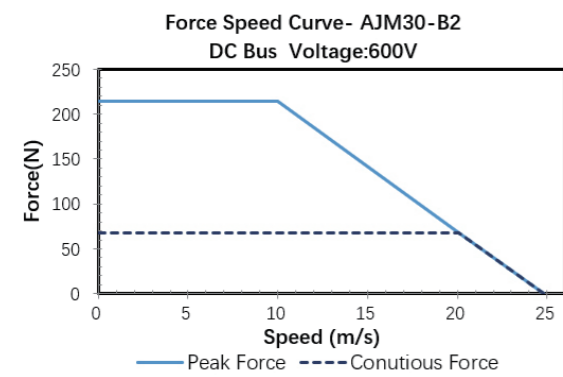
TL80/ TL200/ TL400

- 1 Blank = comes with hall module & hall cable terminated in flying leads. (standard)
- 2 H9D = comes with hall module & hall cable terminated with 9-Pins D-Sub connector.
- 3 NH = comes without hall module
- 4 Blank = motor cable terminated in flying leads.(standard)
- 5 FB = motor cable terminated with ferrite bead.
- 6 Blank = Stainless steel cover
- 7 E = Epoxy cover

DC Bus Voltage = 310 Vdc



DC Bus Voltage = 600 Vdc



Motor & Hall Cable Wiring

AJM

MOTOR CABLE

PIN	DESCRIPTION	COLOR
-	M1	BROWN
-	M2	WHITE
-	M3	GREEN
-	PE	YELLOW
-	T1	PINK
-	T2	BLUE

HALL CABLE

PIN	DESCRIPTION	COLOR
1	HA	GREY
2	HB	YELLOW
3	HC	BLUE
4	5VDC	RED
5	0VDC	BLACK

