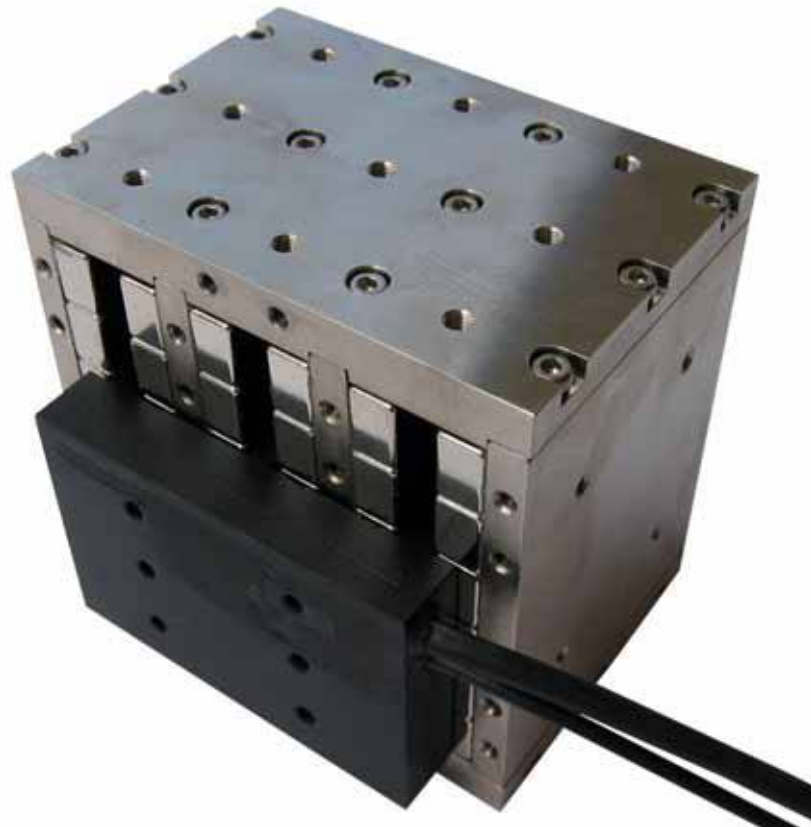




# *AHM Series*

*High Force Ironless Brushless Linear Motor*



- *Ironless linear motor*
- *Zero cogging force*
- *Compact size*
- *Low coil mass*
- *Suitable for applications with short stroke and high accelerations*

# AHM-S80 Series

- 2 sizes available (S1 and S2)
- Maximum peak force 1843 N, maximum continuous force 460 N
- Option of coil and track assembly or complete module with encoder feedback and guides

Specifications		AHM-S80-S1		AHM-S80-S2
Performance Parameters	Unit	Series	Parallel	Parallel
Continuous Force, coil @ 100°C	N	230.4	230.4	460.8
Peak Force	N	921.6	921.6	1843.2
Motor Constant	N/SqRt(W)	24.70	24.70	34.94
Continuous Power	W	87.0	87.0	174.0
Peak Power	W	1391.6	1391.6	2783.2
Electrical Cycle	mm	30	30	30
Max Bus Voltage	V	330	330	330
Max Coil Temperature	°C	130	130	130
Thermal Dissipation Constant	W/°C	1.16	1.16	2.32
Continuous current	Amp	2.4	4.8	4.8
Peak current	Amp	9.6	19.2	19.2
Force Constant	N/Amp	96.0	48.0	96.0
Back EMF Constant	V/m/s	110.9	55.4	110.9
Inductance	mH	5.20	1.30	2.60
Phase Resistance @25°C	Ohms	15.10	3.78	7.55
Electrical Time Constant	ms	0.34	0.34	0.34
<b>Mechanical Parameters</b>				
Coil Mass	gm	976	976	1950
Assembly Mass	Kg	7.6	7.6	13.0
Magnetic Attraction	N	0	0	0
Stroke	mm	29	29	29

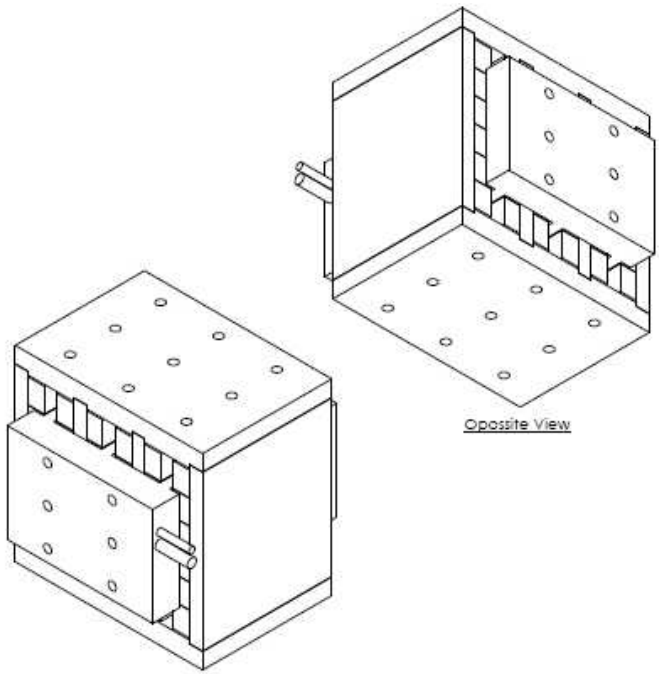
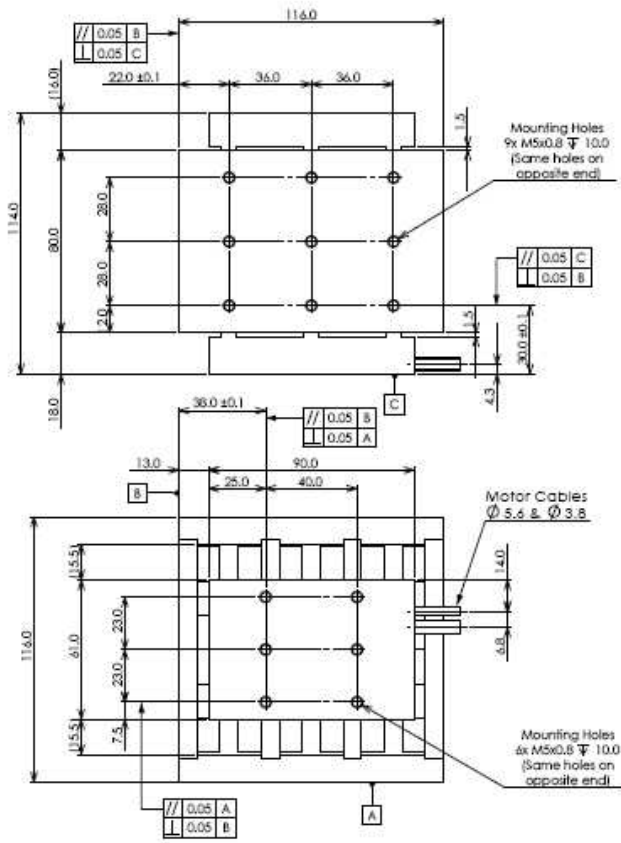
## Part Numbering

Model	Size	Stroke	Thermal sensor	Cable length (m)
AHM	S80-S1	29	J- Thermostat(standard)	2.0, 3.0 or 5.0
	S80-S2		K- Thermocouple	

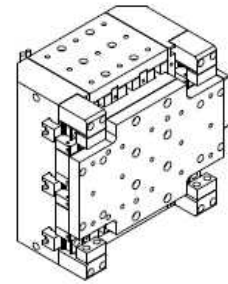
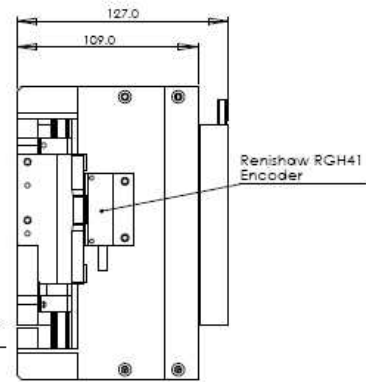
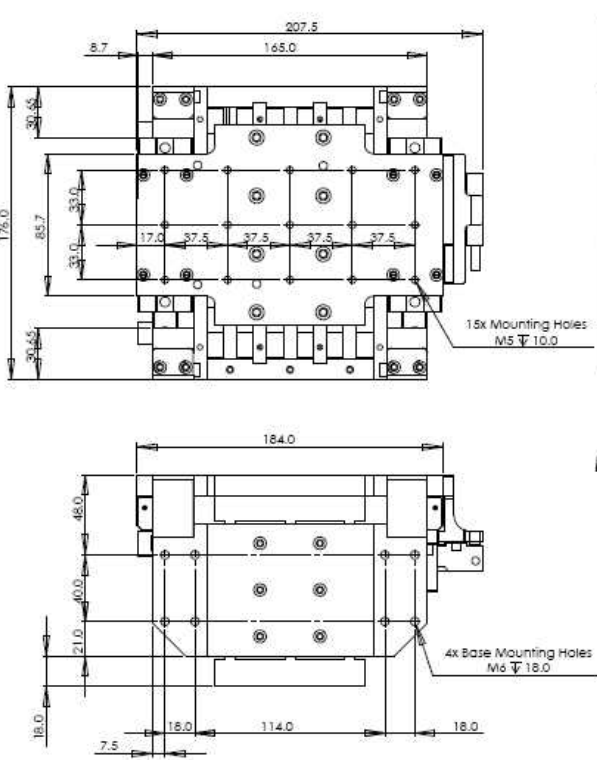
### Example:

AHM-S80-S1-29-J-2.0 (coil and track assembly)

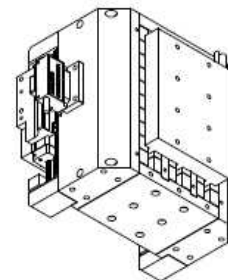
AHM-S80-S2-29-V3-J-3.0 (complete module)



AHM-S80-S1-29 (coil and track assembly)



Model: AHM-S80-S2-29-V3



AHM-S80-S2-29-V3 (complete module)