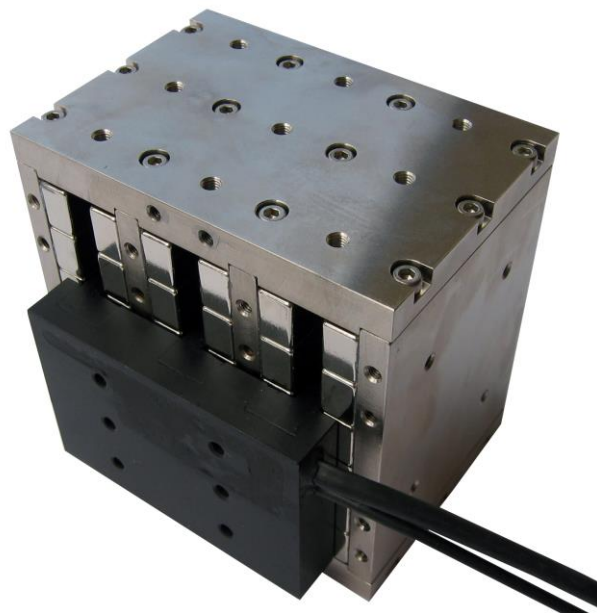


AHM Series

High Force Ironless Brushless Linear Motor



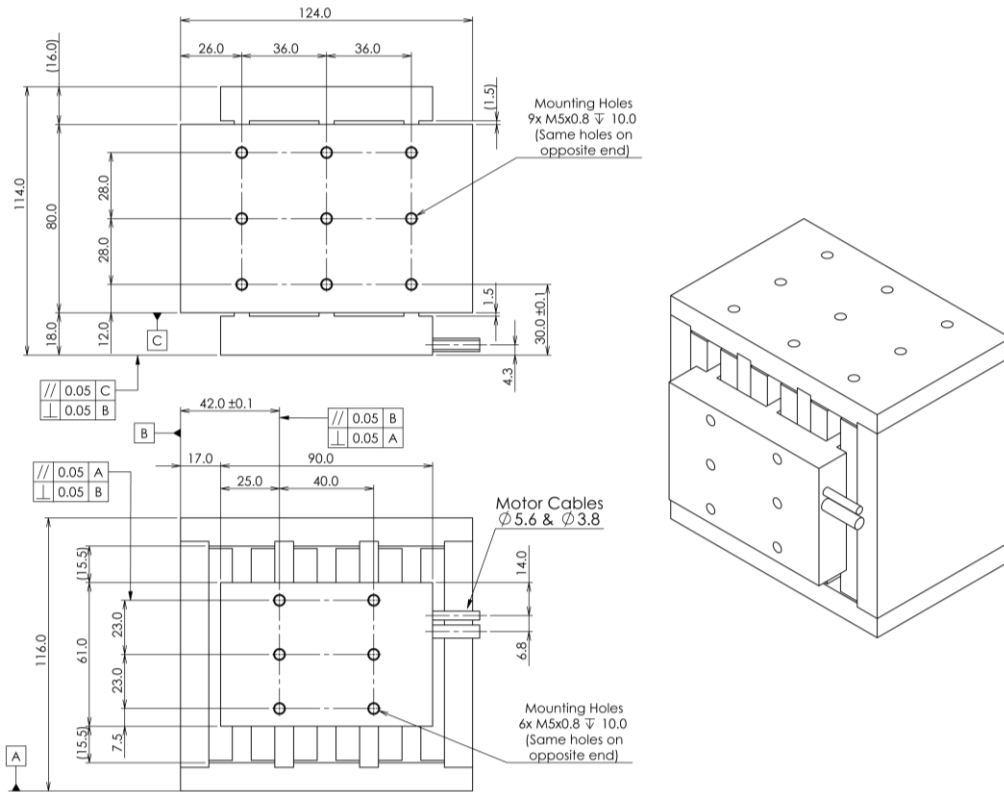
- **Ironless technology**
- **Zero cogging force**
- **Compact size**
- **Low coil mass**
- **Suitable for applications with short stroke and high accelerations**

AHM-S80 Series

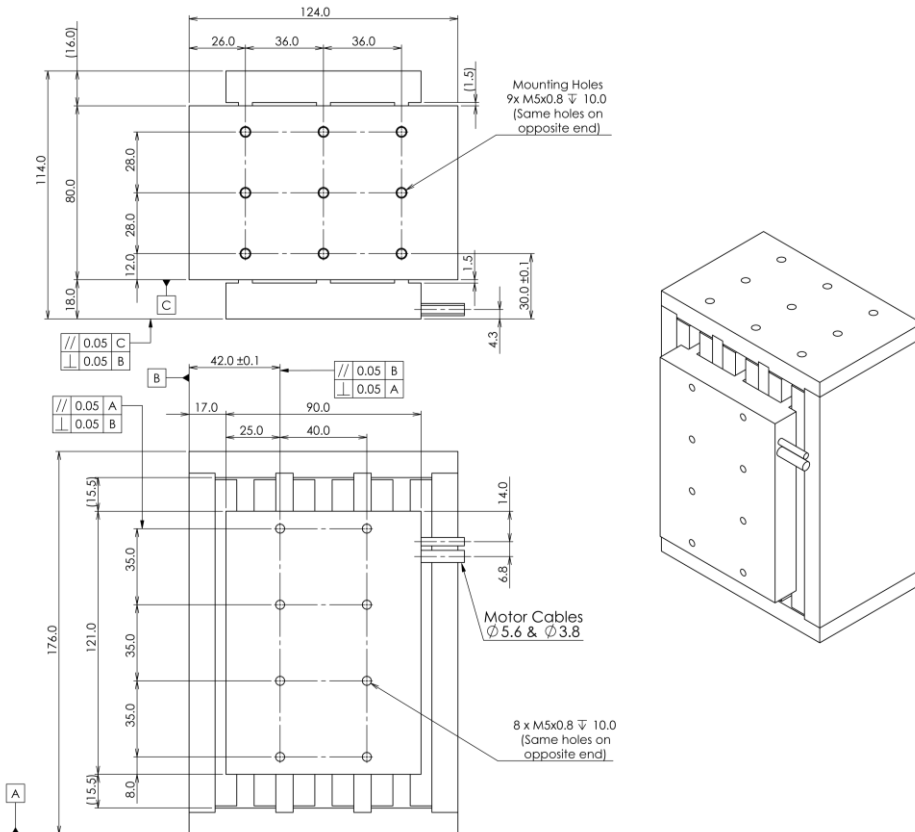
- 2 sizes available (S1 and S2)
- Maximum peak force 1843 N, maximum continuous force 460 N
- Option of coil and track assembly or complete module with encoder feedback and guides

AHM		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)	24.7	24.7	34.9
Continuous Power	W	87.0	87.0	174.0
Peak Power	W	1391.6	1391.6	2783.2
Electrical Cycle	mm	30.0	30.0	30.0
Max Bus Voltage	V	330.0	330.0	330.0
Max Coil Temperature	°C	130.0	130.0	130.0
Thermal Dissipation Constant	W/°C	1.2	1.2	2.3
Continuous current	Arms	2.4	4.8	4.8
Peak current	Arms	9.6	19.2	19.2
Force Constant	N/Arms	96.0	48.0	96.0
Back EMF Constant	Vpeak/(m/s)	78.4	39.2	78.4
Inductance	mH	5.2	1.3	2.6
Phase Resistance @25 °C	Ohms	15.1	3.8	7.6
Electrical Time Constant	ms	0.3	0.3	0.3
Mechanical Parameters				
Coil Mass	Kg	0.976	0.976	1.95
Assembly Mass	Kg	7.6	7.6	13
Magnetic Attraction	N	0	0	0
Stroke	mm	29	29	29

AHM-S80-S1-29



AHM-S80-S2-29



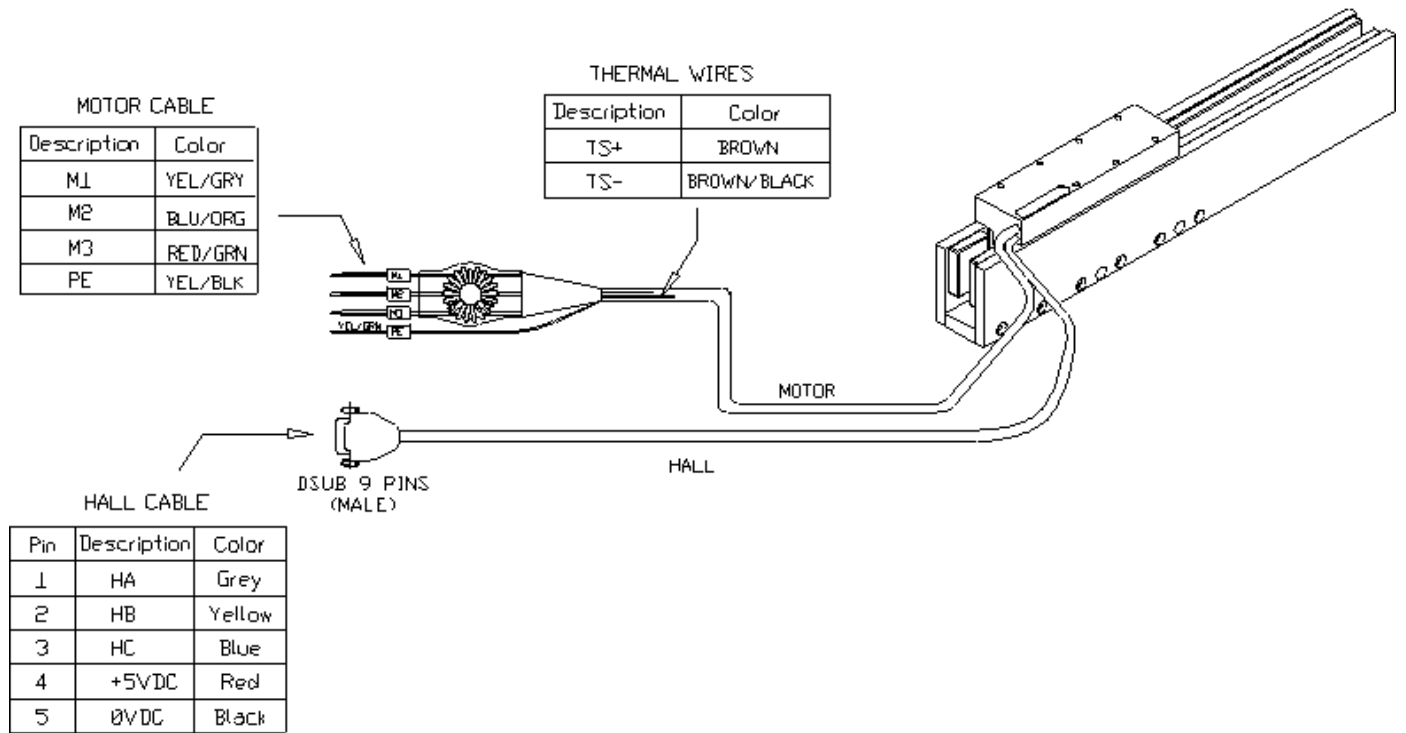
Part Numbering

Model	Connection Type	Size	Stroke	Thermal Sensor	Cable Length (m)
AHM	S = Series Connection	S80-S1 or S80-S2	29	J- Thermostat(standard)	3.0
	P = Parallel Connection			K- Thermocouple	

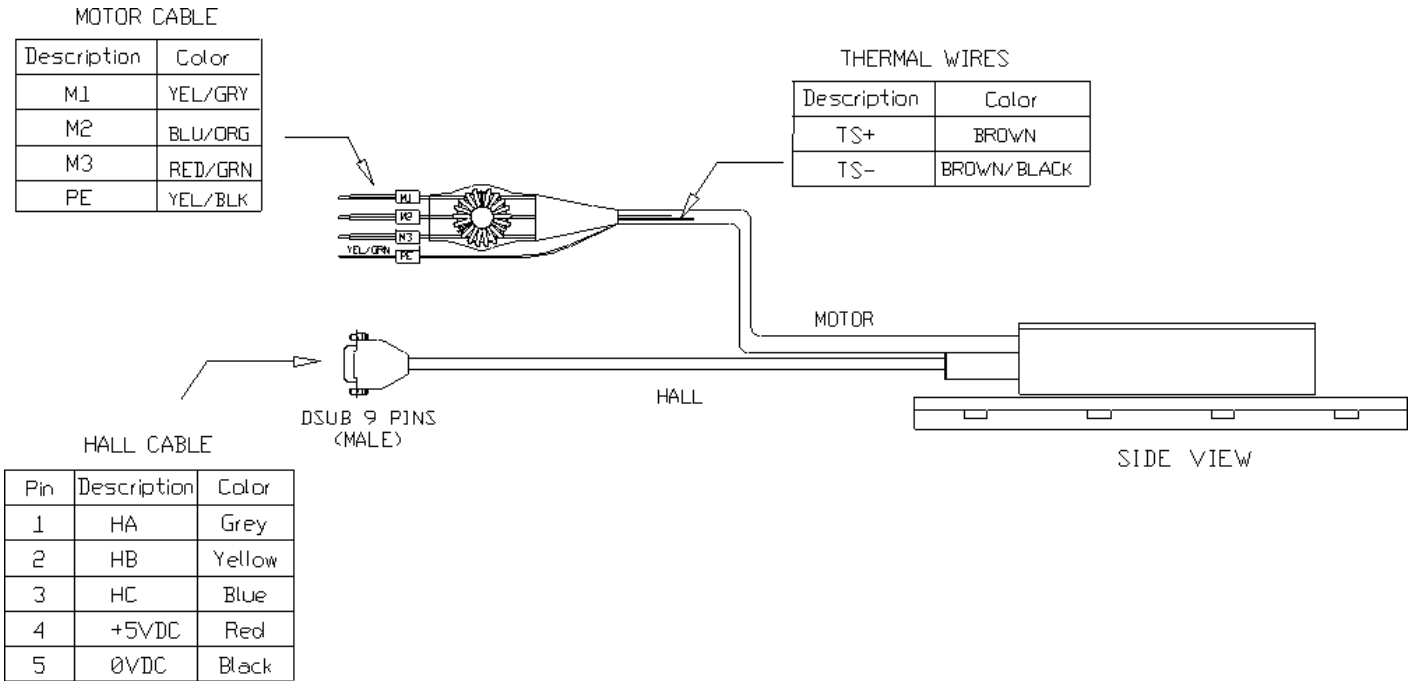
Example: AHM-S-S80-S1-29-J-3.0

Connector Pin Assignment

AUM



ACM1



ACM2, ACM3, ACM4, ACM5

