

1

2

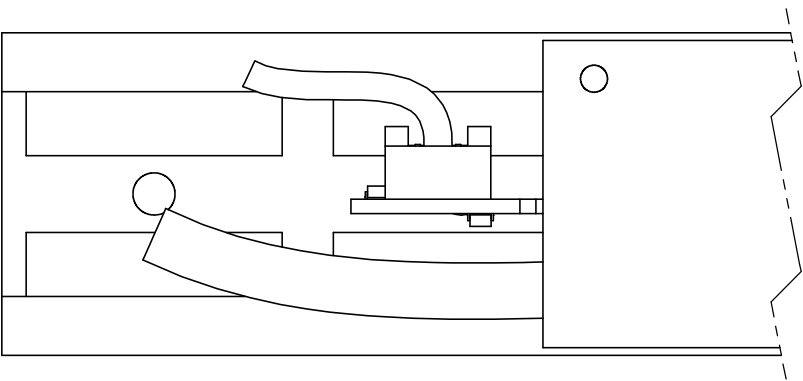
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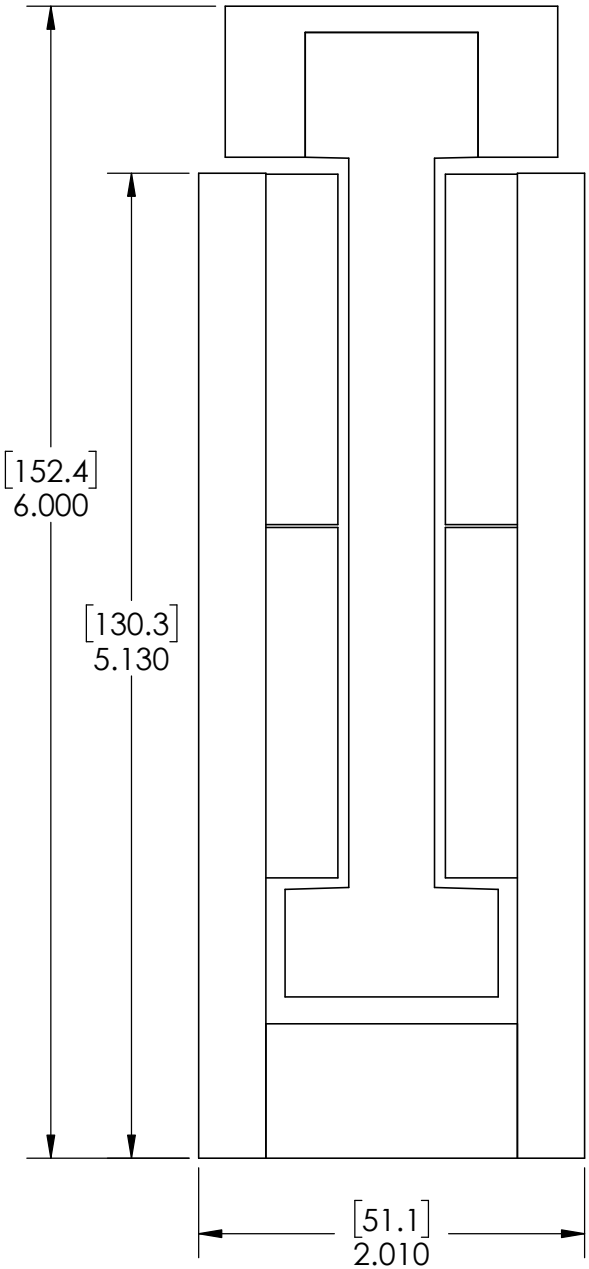
A

OPTIONAL HALL MODULE MUST BE IN
MAGNET TRACK FOR COMMUTATION

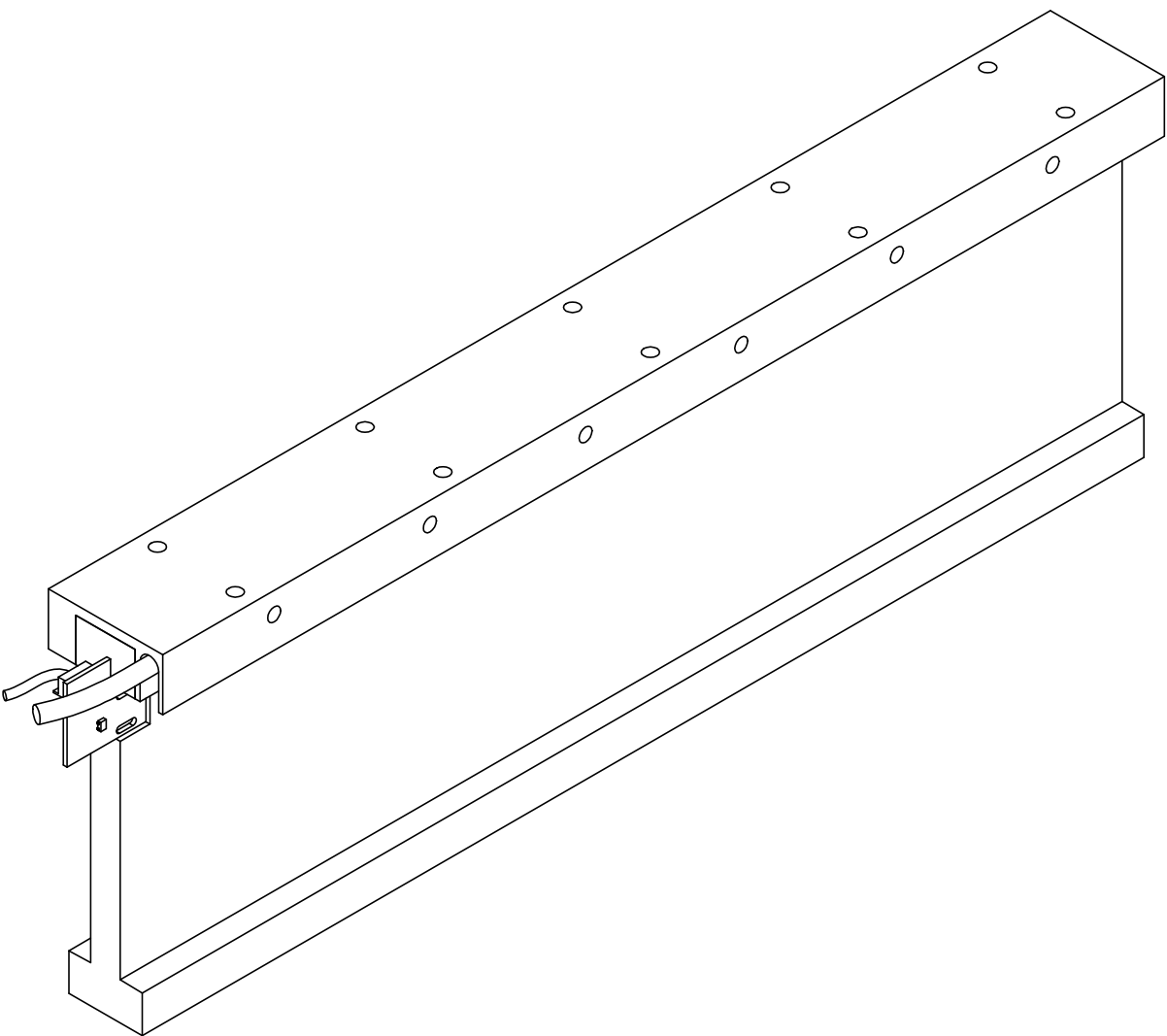


B

MOTOR COIL SHOWN
WITH MAGNET TRACK



C



D

A

B

C

D

Motor Specifications		
BLDM-F12		
General		
Continuous Force	lbs [N]	130 [578]
Continuous Current	Amps	3.9
Continuous Power	Watts	273
Peak Force @ 10% Duty	lbs [N]	338 [1726]
Peak Current @ 10% Duty	Amps	11.6
Peak Power @ 10% Duty	Watts	2457
Electrical		
Force Constant	lbs/Amp [N/Amp]	33.44 [148.8]
Back EMF	V/in/sec [V/m/sec]	3.77 [148.4]
Resistance	Ohms	14
Inductance	mH	18
Electrical Time Constant	msec	1.3
Km Motor Constant	lbs/sqW [N/sqW]	8.93 [39.7]
Mechanical		
Electrical Cycle Length	in [mm]	2.4 [60.96]
Number of Poles	12	
Coil Assembly Length		
with Hall Sensor	in [mm]	15.75 [400]
without Hall Sensor	in [mm]	15.2 [386.1]
Coil Assembly Weight	lbs [kg]	9.88 [4.49]
Magnet Track Weight	lbs/in [kg/m]	1.9 [0.034]

Wiring	
Motor	
Phase A	White/Red Stripe
Phase B	White
Phase C	White/Black Stripe
Ground	White/Green Stripe
Thermostat 1	Blue
Thermostat 2	Orange
Hall Effect	
Hall A	White
Hall B	Red
Hall C	Black
Hall Ground	Green
Hall Power (+5-24VDC)	Brown, Orange, Violet, Yellow