M-Force 01

Mechanical / Electrical / Thermal parameters	
Type	Push-Pull Moving Magnet Linear Motor
Nominal Size (H x W x L)	280 mm x 266 mm x 126 mm 11 in x 10.5 in x 5 in
Linear Displacement	±15 mm / ±0.6 in
Max Displacement	±25 mm / ±1 in
Peak displacement	±37 mm / ±1.45 in
Peak Force Output	4000 N
Weight	21.5 kg
Peak Current Handling	170 A
Peak Voltage Handling	400 V
Power Handling	5 kW / AES
Peak Power Handling	25 kW
Thermal Resistance (pink noise)	0.06 °C/W
Thermal Capacity	11100 J / °C

Electromechanical Parameters Motor only – no diaphragm	
Re	0.260 Ω
Motor moving mass	0.950 kg
Bl	24.0 T·m
Le @ 1 kHz	0.00430 H
L1 (LR-2 model)	0.00430 H
L2 (LR-2 model)	0.00190 H
R2 (LR-2 model)	1.10 Ω
Mechanical resonance	19.5 Hz
Mechanical spring	0.00007 m/N
Mechanical loss	23 N·s/m
Motor strength $(Bl)^2/Re$	2215 $(T·m)^2/Ω$
Maximum acceleration	3800 m/s^2

M-Force 02

Mechanical / Electrical / Thermal parameters	
Type	Push-Pull Moving Magnet Linear Motor
Nominal Size (H x W x L)	280 mm x 266 mm x 126 mm 11 in x 10.5 in x 5 in
Linear Displacement	±10 mm / ±0.4 in
Max Displacement	±20 mm / ±0.8 in
Peak displacement	±37 mm / ±1.45 in
Peak Force Output	4000 N
Weight	21.5 kg
Peak Current Handling	170 A
Peak Voltage Handling	400 V
Power Handling	5 kW / AES
Peak Power Handling	25 kW
Thermal Resistance (pink noise)	0.06 °C/W
Thermal Capacity	11100 J / °C

Electromechanical Parameters Motor only – no diaphragm	
Re	0.192 Ω
Motor moving mass	0.950 kg
Bl	24.0 T·m
Le @ 1 kHz	0.00312 H
L1 (LR-2 model)	0.00312 H
L2 (LR-2 model)	0.00142 H
R2 (LR-2 model)	1.05 Ω
Mechanical resonance	19.5 Hz
Mechanical spring	0.00007 m/N
Mechanical loss	23 N·s/m
Motor strength $(Bl)^2/Re$	3000 $(T·m)^2/Ω$
Maximum acceleration	4800 m/s^2