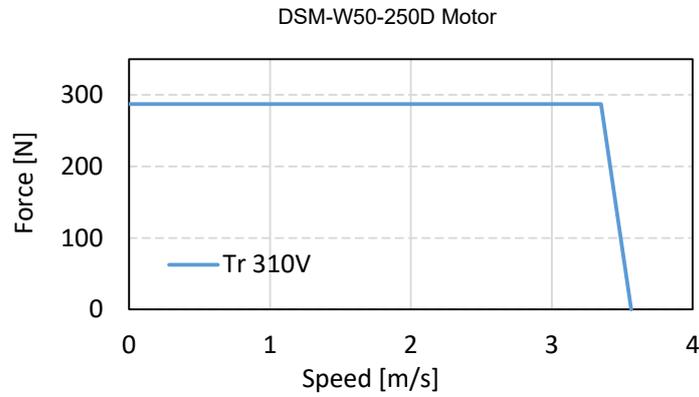
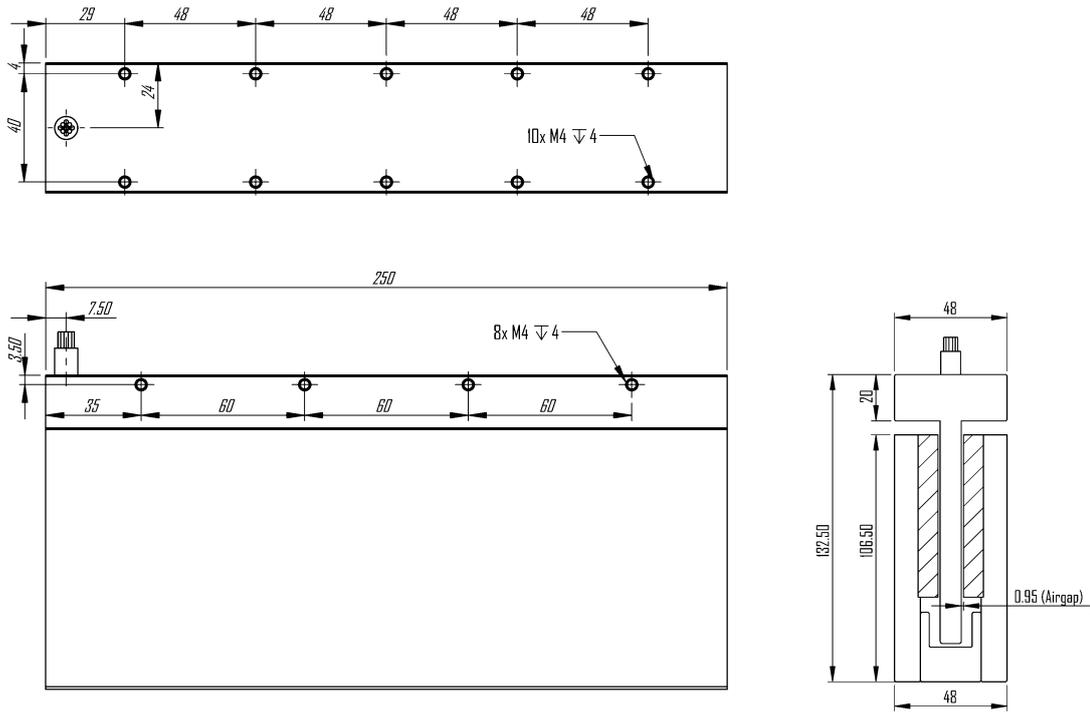


| Motor Parameters | Symbols | Units | DSM-W50-250D |
|-------------------------|-----------|---------------|---------------------|
| PERFORMANCE | | | |
| Peak Force | F_p | N | 533.5 |
| Continuous Force | F_c | N | 266.8 |
| Motor Constant | K_m | N/VW | 8.9 |
| ELECTRICAL | | | |
| Peak Current | I_p | A_{rms} | 5.0 |
| Continuous Current | I_c | A_{rms} | 2.5 |
| Force Constant | K_f | N/A_{rms} | 106.7 |
| Back EMF Constant | K_v | $V/(m/s)$ | 87.0 |
| Line Resistance @25°C | R_{LL} | ohm | 6.5 ($\pm 20\%$) |
| Line Inductance (@60Hz) | L_{LL} | mH | 14.2 ($\pm 30\%$) |
| Terminal Voltage | V_{DC} | V | 310 |
| Electrical Time Cons. | τ_e | ms | 2.19 |
| THERMAL | | | |
| Thermal Resistance | R_{th} | $^{\circ}C/W$ | 1.8 |
| Max. Winding Temp. | T_w | $^{\circ}C$ | 135 |
| MECHANICAL | | | |
| Forcer Length | L | mm | 250 |
| Forcer Weight | W_f | kg | 2.1 |
| Magnet Pitch | $2\tau_p$ | mm | 60 |
| Attractive Force | F_a | N | 0 |

DSM-W50 Force-Speed Curves



Coil Assembly



Track Assembly

