

Tactuator MMXC series

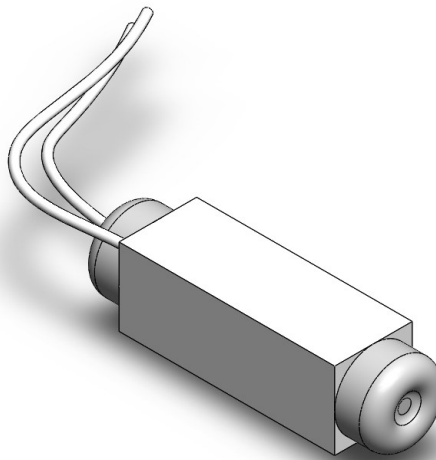
(Tactuator: Tactile Actuator; MM: Medium Motor, XC: series number,-LF: Low Freq.-HF: High Freq.)

Tactuator series, a new contribution from Tactile Labs' products 'voice coil vibrotactile motors' family, is a revolutionary new design based on years of experience in manufacturing 'Haptuator Mark II'. High valuable feedbacks from collaborators, scientific partners and customers bring it into form to overcome the unsatisfied points of Haptuator Mark II for most application requirements.

The new MMXC series products increase the acceleration/volume density by allowing higher displacements thanks to the new revolutionary shape and materials of the membrane, meanwhile offer wider performance frequency bandwidth. Therefore, Tactuator provides more efficient vibrotactile results. As well as Haptuator series products, it can be driven as a common loudspeaker and is compatible with most audio amplifiers.

Products of Tactuator MMXC Series

Two models are available: MM3C-HF and MM3C-LF.

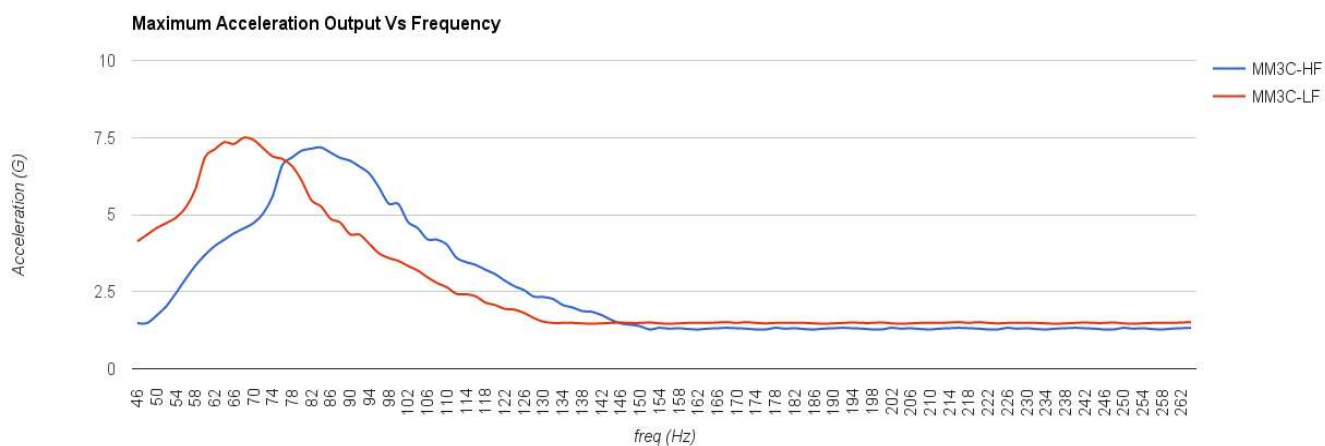


Tactuator MM3C

Characteristics

Model	Units	MM3C-LF	MM3C-HF
Dimensions	mm	36x9.5x9.5	36x9.5x9.5
Weight	g	9	9
Resonance frequency	Hz	70	85
Acceleration @ 1V input, @ res. freq.	G	5.4	5.5
Maximum acceleration @ res. freq.	G	7.6	7.5
Rated Bandwidth	Hz	30-1000	30-1000
Typical Impedance	Ω	5.5	5.5
Maximum Input Voltage	Volt	5	5
Maximum Input Current	Amper	1	1

Output Acceleration



MM3C-LF and MM3C-HF Accelerations.

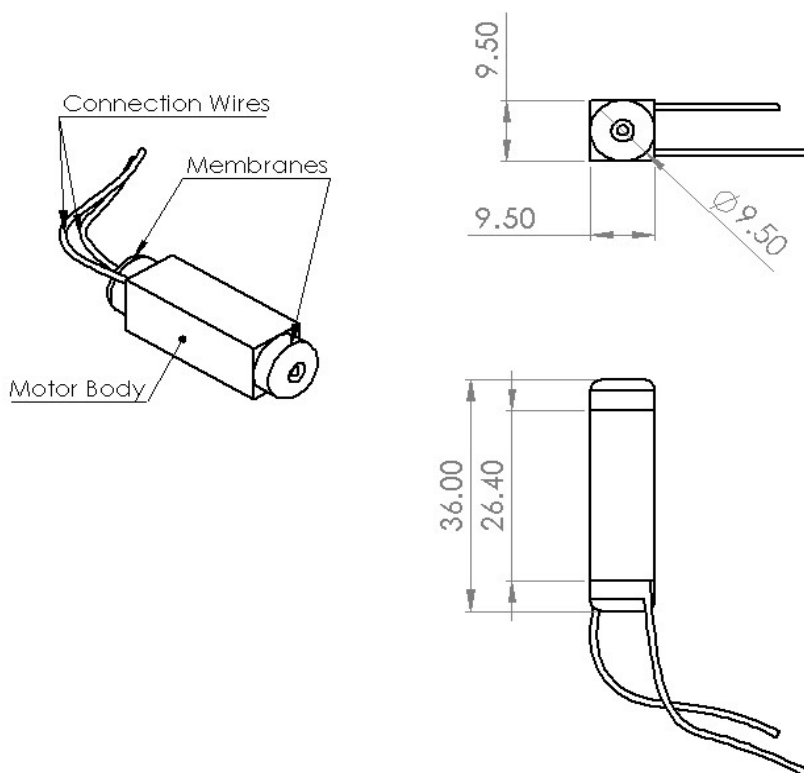
Notes:

1. Tactuators can be driven as a 4-8 Ω loudspeaker by most audio amplifiers if the input current and voltage are within the recommended operating conditions. Tactuator should be AC-coupled to avoid driving a DC current into the unit.

1. It is not recommended to drive the Tactuator under 30Hz: the output acceleration would not be optimal. Driving at a minimum of 10 Hz or above 1000 Hz should not damage the actuator. However, for frequencies above 800 Hz, the signal output becomes audible, hence not as optimal for haptic applications.

Mechanical Installment and Dimension

When attach the Tactuator to objective, we recommend leave 3mm clearance at both ends of Tactuator, for the displacement of axle part.



MM3C dimensions