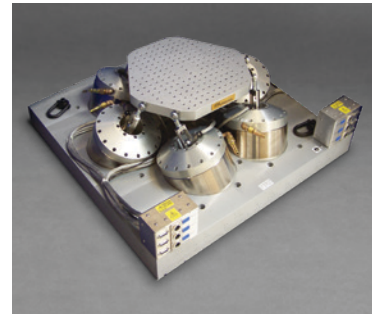


HIGH FORCE VOICE COIL ACTUATORS



The VCA series actuators were developed to fill a market gap for large, high force, linear voice coil actuators. Two standard sizes are offered that each include a linear bearing, encoder, and thermocouple. The linear bearing can be replaced with a flexure that is tuned to fit application-specific needs. Cleanroom and vacuum-compatible versions are also available as well as customizable interfaces.



APPLICATIONS

- Shakers
- Beam steering
- Stabilized platforms
- Fatigue testing

KEY ADVANTAGES

- High accelerations
- High bandwidths
- Smooth, precise motion
- Zero backlash
- No cogging
- No commutation

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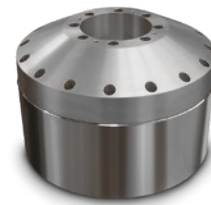
PERFORMANCE CHARACTERISTICS

Features

VCA-300



VCA-350



Stroke length	24 mm	20 mm
Force constant	40 N/Amp	147 N/Amp
Max current - air cooled (5 scfm)	9 Amps (RMS)	12 Amps (RMS)
Max current - uncooled	3 Amps (RMS) for 30 minutes	3 Amps (RMS) for 30 minutes
Resistance	1.6 Ω	4.6 Ω
Inductance	4 mH	35 mH
Frequency output	DC to >1 kHz	DC to >1 kHz
Diameter	151 mm	236 mm
Length	196 mm	215 mm
Total mass	11.5 kg	42 kg
Moving mass	0.5 kg	2 kg
Sensor type	Linear encoder	Linear encoder
Sensor resolution	0.5 μ m	0.5 μ m

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