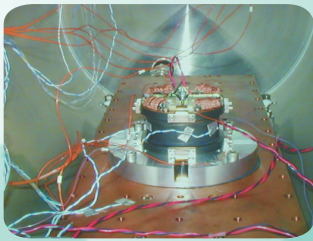


Voice Coil Vacuum Compatible VC-1



Description

VC-1 is a Voice Coil or moving coil actuator vacuum compatible. The elastic guiding is an option. The Joule losses (3W) in the moving coil are dissipated through a thermal drain.

Technical characteristics

References	Unit	VC-1
Notes		space product
Stroke	mm	3
Maximal force in air	N	30
Peak force in air	N	90
Maximal force in vacuum	N	13
Maximal current in air	A	16
Maximal current in vacuum	A	7
Peak current	A	50
Dissipated power in air	W	28
Dissipated power in vacuum	W	5,5
Dissipated peak power	W	280
Mass	g	500
Moving mass	g	50
Stiffness	N/mm	1.8
Eigen frequency	Hz	30
Dimensions	mm	71 * 71 * 49
Mechanical interface		Housing : 4 * M3
Electrical interface		2 wires AWG

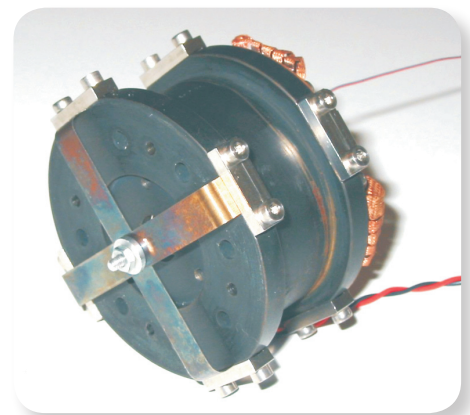


Figure 1: View of the LPM20-3 motor.

Space evaluation program

The Voice Coil VC-1 followed a space evaluation program including

- Functional tests,
- Thermal vacuum test (-40 / 80°C),
- Lifetime test (1e6 cycles, full stroke).