

## PIEZO LEGS DEMO MOTOR DATA

### Piezo LEGS demo motor

Dimensions [mm] (L×W×H)	Complete 22×10,8×18	Phase voltage <sup>3</sup> [V]	0 to -42
Weight [g]	Complete 20	Resolution <sup>4</sup> [nm]	10
Velocity <sup>1</sup> [mm/s]	2100 Hz 12.5	Maximum step length <sup>5</sup> [μm]	3
Frequency range <sup>1</sup> [Hz]	0-2100	Stroke <sup>6</sup> [mm]	35
Force <sup>2</sup> [N]	Stall force 6.4 Holding force 7.3	Phase capacitance at 22 °C <sup>7</sup> [nF]	430
		Power consumption <sup>8</sup> [mW/Hz]	5
		Temperature range [°C]	-20 to +70

- 1) Recommended maximum drive frequency 2.1 KHz. Absolute maximum drive frequency 8 KHz.
- 2) Force ± 10%
- 3) The phase voltage is to be cycled between 0 to -42 V. Maximum allowed phase voltage is 48 V.
- 4) Dependant on phase voltage resolution (approximately 35 nm/V).
- 5) Maximum ± 10 % step length variations at no load.
- 6) Stroke dependant on length of drive rod. Longer drive rod available on request.
- 7) Capacitance at 22 °C ± 5%. Capacitance at -20 °C approximately -20% and at 70 °C approximately +40%.
- 8) Dependant on drive electronics. The power consumption may be up to 70% lower using energy recovering electronics.

Specifications subject to change without prior notice.

**For more information, please contact in Germany:**

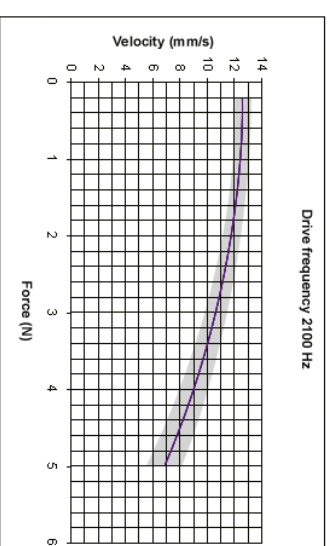
**Mr. Arne Hauberg**

**Distributor of PiezoMotor AB**

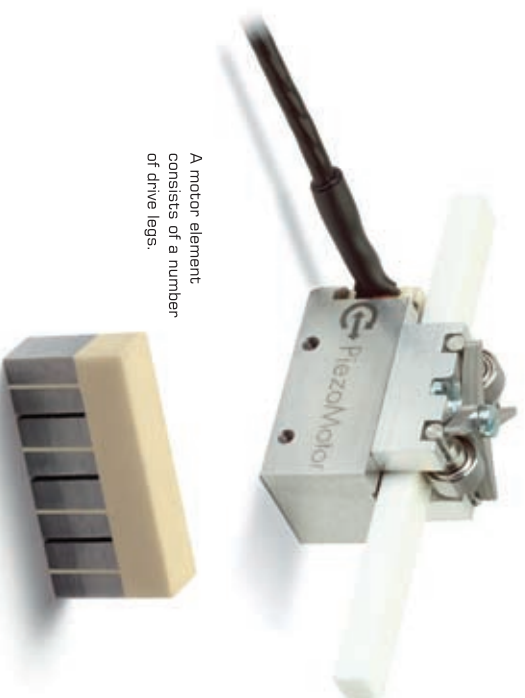
**+49 (0)40 85159439**

**[a.hauberg@nanos-instruments.com](mailto:a.hauberg@nanos-instruments.com)**

**[www.nanos-instruments.com](http://www.nanos-instruments.com)**



Motor performance for a drive frequency of 2100 Hz. The grey area expresses one standard deviation for the motor data.



A motor element consists of a number of drive legs.