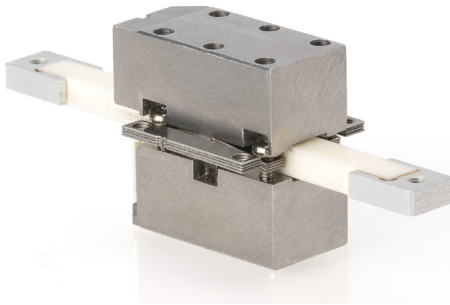




Piezo LEGS® LT20ACD



Key features

- 20 N force
- Sub nanometer precision
- Direct drive and no backlash
- No power draw in hold position
- Unparalleled size to force ratio

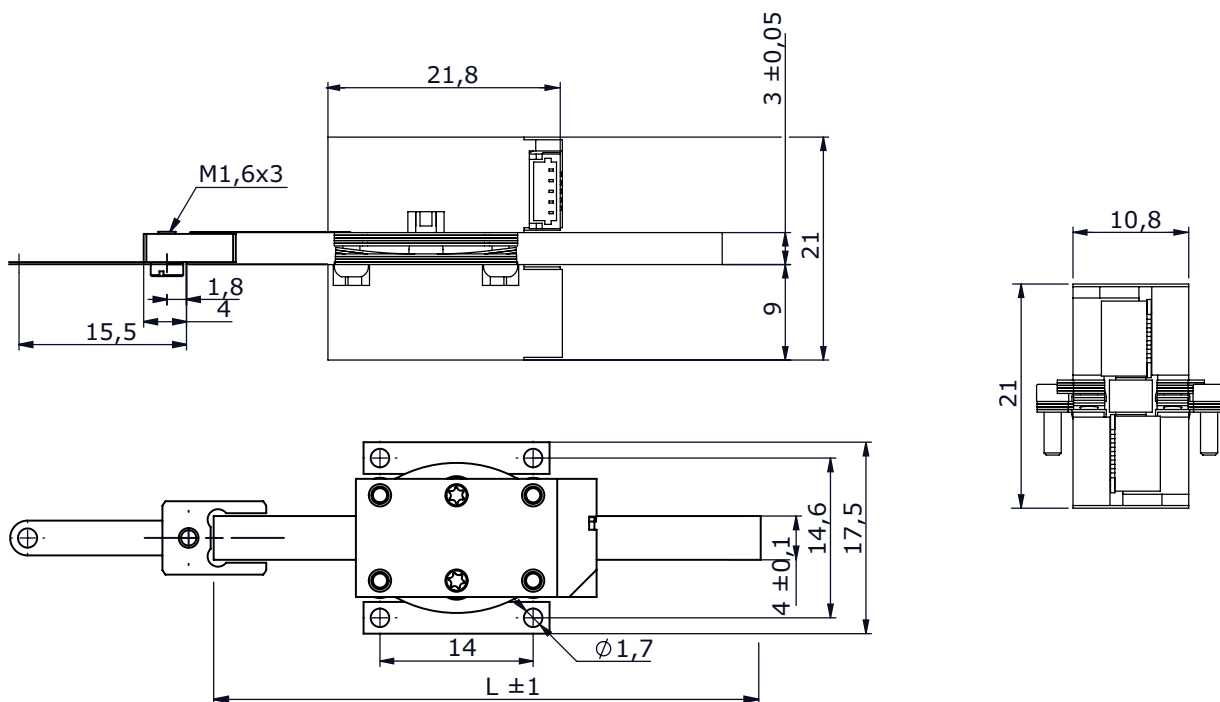
Product Description

The LT20 linear motor is designed for a wide range of OEM applications in typical environments. The primary focus of the design is on ease of integration. The exceptional high-speed dynamics and nanometer resolution make it suitable for numerous applications.

The motor is ideally suited for move and hold applications or automatic adjustments. In the hold

position, it consumes no power. The drive technology is direct, eliminating the need for gears or lead screws to generate linear motion. The motor is free from mechanical play or backlash. Available in three versions: Standard stainless steel for normal environments (A), Vacuum version (C) and Non-magnetic vacuum version (D).

Product Dimensions (mm)



SWEDEN
Stationsgatan 14
SE-753 40 Uppsala

USA
4215 Pleasant Rd
Fort Mill, SC 29708

JAPAN
Acuvi KK, Ark Mori Bldg
West wing 16th floor
1-12-32 Akasaka, Minato-ku Tokyo
107-6016 Japan

piezomotor.com



Piezo LEGS® LT20ACD

Type	Normal (A)	Non-magnetic (C)	Non-magnetic Vacuum (D)
Maximum stroke	74.5 mm		
Speed range @ Rhomb, no load, 20°C	1 nm/s – 20 mm/s (check driver)		
Step length, full step @ Delta, no load, 20°C	3.3 µm		
Maximum speed (driver and waveform dependent)	20 mm/s		
Max operating frequency (driver dependent)	2.5 kHz		
Movement resolution	<1 N		
Stall force	20 N		
Holding force	>20 N		
Vacuum	No		Yes (10 ⁻⁷ torr)
Non-magnetic	No	Yes	
Max operating voltage	48 V		
Power consumption	10 mW/Hz		
Mechanical size L x H x D	22 x 21.8 x 10.8 mm		
Weight with 50 mm drive rod ^a	29 g		
Material in motor housing	Stainless steel	Arcap (non-magnetic)	
Operating temperature (recommended)	-20 to +70 °C		
Storage temperature	-20 to +70 °C		
Built in encoder	No		
Connector motor (motor side)	2 x JST BM05B-SRSS-TB		Soldered cable w. 2 x JST 05SR-3S
Control	Open loop or closed loop		
Lifetime (Cycles), [Room temp,1ATM and Half Load]	2,5 X 10 ⁹ WFM-S*		
Index	N/A		
Max. acceleration	800 Hz/ms		

All specifications are subject to change without notice.

Standard lengths of drive rods are 30, 40, 50, 60 and 101 mm, Other drive rod lengths between 30 and 100.8 mm can made on request, at an extra charge.

*Wave Form Step

Controllers

PMD301

1-sxis micro-step driver/controller - max 3 kHz, RS485 or USB

PMD401

1-axis micro-step driver/controller - stackable PCB, max 1.5 kHz, RS485 or SPI

Starter Kit

PMD301/401 controller, motor cables, USB-to-RS485 cable, and power supply

Piezo Drive lab software downloadable from acuvi.com

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