



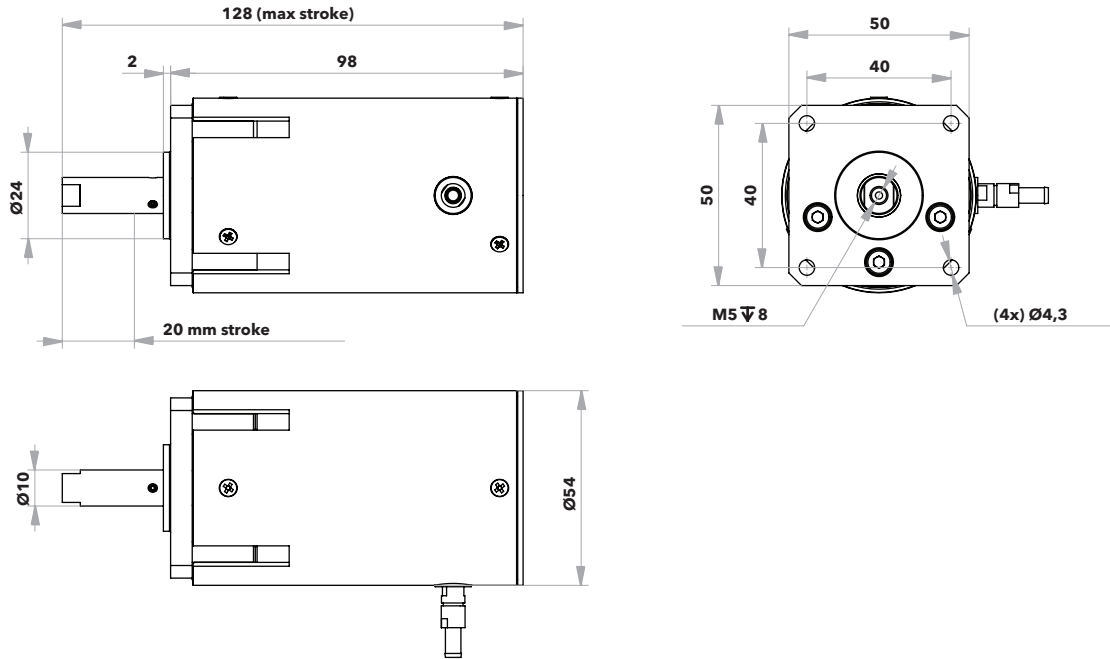
Technical specification LTC450

Type	Vacuum (B)
<b>Stroke (mm)</b> For more information, see table on opposite page.	0-20
<b>Speed range (mm/s)</b> @ Rhomb, no load, 20°C	0-0.2
<b>Step length, full step (µm)</b> @ Delta, no load, 20°C	4
<b>Motor resolution, microstep (nm)</b> 14 bits, 8192 microsteps	<1
<b>Built-in encoder</b>	No
<b>Encoder resolution (µm)</b>	N/A
<b>Stall force (N)</b>	450
<b>Holding force (N)</b>	>450
<b>Recommended operating range (N)</b>	0-225
<b>Operating voltage (V)</b>	42-48
<b>Power consumption (mW/Hz)</b>	300
<b>Mechanical size L x H x D (mm)</b>	98 x 50 x 50
<b>Weight (g)</b>	1060
<b>Operating temperature (°C)</b>	+10 to +70
<b>Vacuum (torr)</b>	10 <sup>-7</sup>
<b>Connector</b>	Cable w. JST 05SR-3S
<b>Material in motor housing</b>	Stainless steel

**Note:** All specifications are subject to change without notice. For more information, see [www.piezomotor.com](http://www.piezomotor.com).

**Main dimensions**

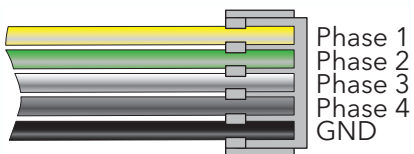
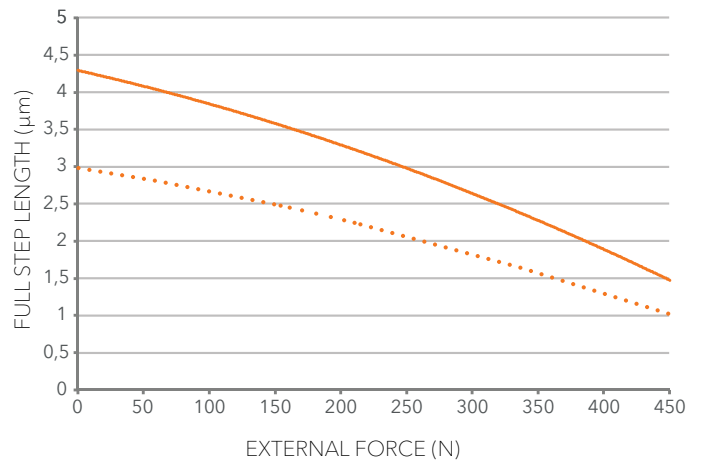
LTC450 - Vacuum


**Stroke range**

Stroke (mm)	Drive rod length
0-20	Fixed

**Motor speed at 20°C, no load**

Waveform	Max freq. (Hz)	Speed range (mm/s)
Delta	50	0-0.15
Rhomb		0-0.2

**Connection**

**Motor performance**


— RHOMB  
••••• DELTA

Motor performance with waveform Rhomb (filled) and waveform Delta (dotted). The full step length is the average distance the drive rod moves when the legs take one full step (i.e. for one waveform cycle).

**Note:** A standard deviation  $\sigma$  of 0.5  $\mu\text{m}$  should be taken into account. Typical values are given for 20°C.