

Technical specification LT20

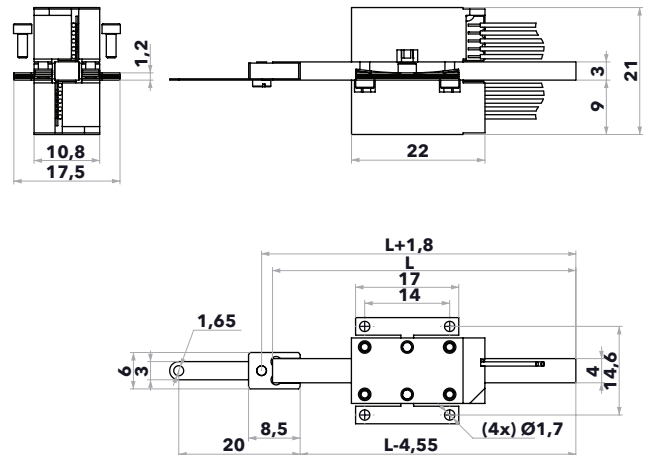
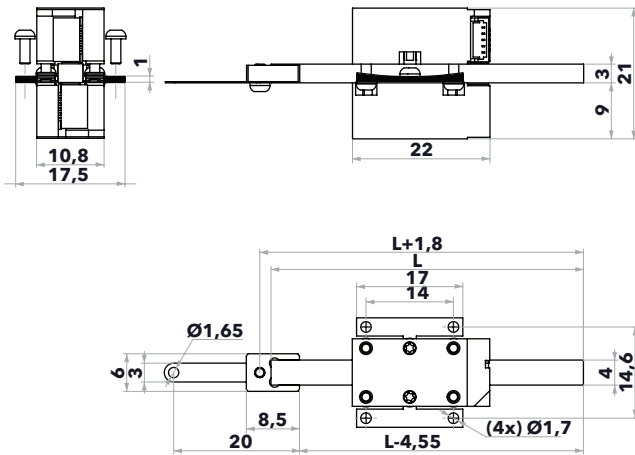
Type	Standard (A)	Non-magnetic (C)	Non-magnetic vacuum (D)
Stroke (mm) For more information, see table on opposite page.		0-74.5	
Speed range (mm/s) @ Rhomb, no load, 20°C		0-24	
Step length, full step (µm) @ Delta, no load, 20°C		4.5	
Motor resolution, microstep (nm) 14 bits, 8192 microsteps		<1	
Built-in encoder		No	
Encoder resolution (µm)		N/A	
Stall force (N)		20	
Holding force (N)		>20	
Recommended operating range (N)		0-10	
Operating voltage (V)		42-48	
Power consumption (mW/Hz)		10	
Operating temperature (°C)		-20 to +70	
Mechanical size L x H x D (mm)		22 x 21 x 17.5	
Weight (g)		29 (with 50 mm drive rod)	
Vacuum (torr)	N/A	N/A	10 ⁻⁷
Connector	2 x JST BM05B-SRSS-TB	2 x JST BM05B-SRSS-TB	Soldered cable w. 2 x JST 05SR-3S
Material in motor housing	Stainless steel	Non-magnetic	Non-magnetic

Note: All specifications are subject to change without notice. For more information, see www.piezomotor.com.

Main dimensions

LT2020A - Standard / C - Non-magnetic

LT2020D - Non-magnetic vacuum



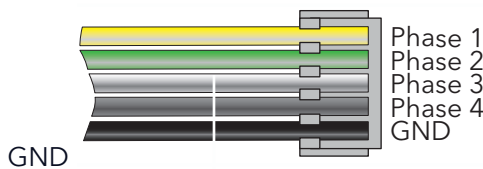
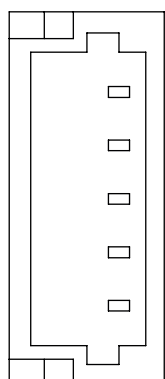
Stroke range

Stroke (mm) with one adapter	Drive rod length (mm)
0-3.5	30
0-13.5	40
0-23.5	50
0-33.5	60
0-74.5	100.8

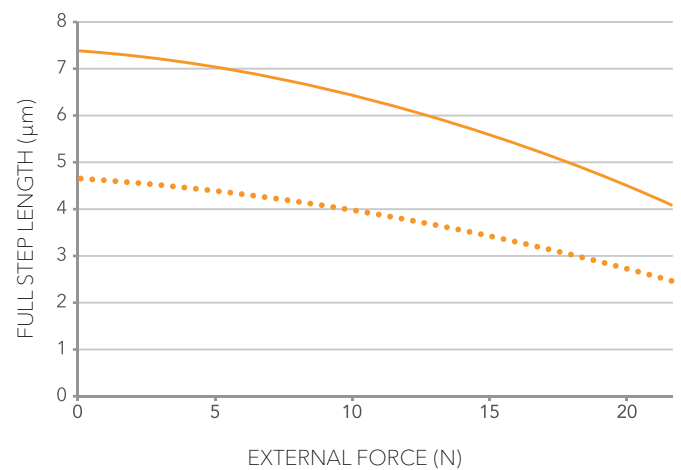
Motor speed at 20°C, no load

Waveform	Max freq. (Hz)	Speed range (mm/s)
Delta	3000	0-15
Rhomb		0-24

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 σ of 0.5 μm should be taken into account. Typical values are given for 20°C.