



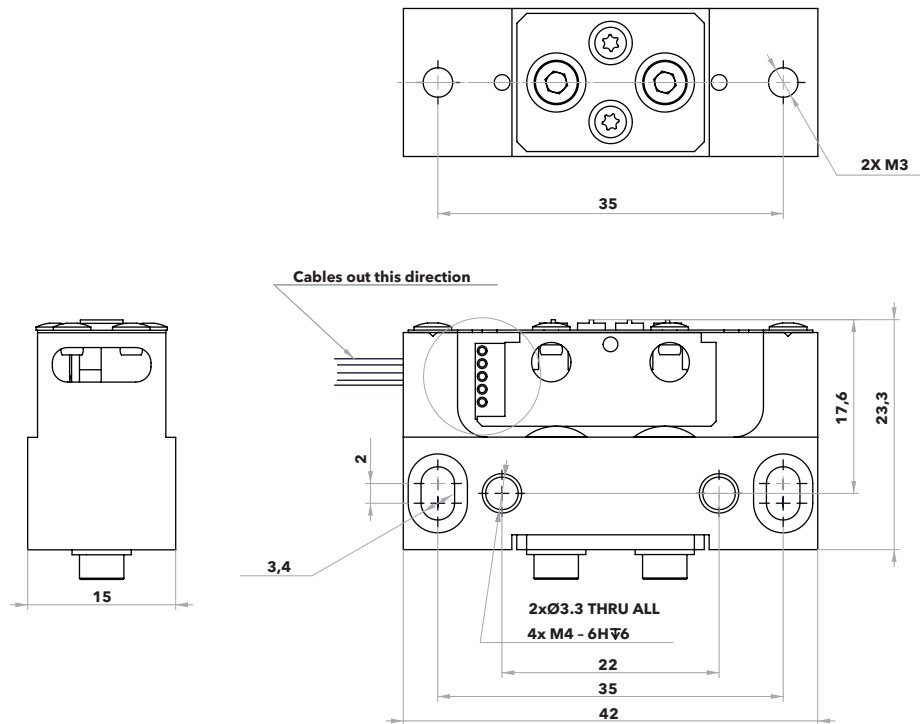
Technical specification LS15

Type	Vacuum (B)	Non-magnetic vacuum (D)
Stroke (mm) For more information, see table on opposite page.		0-130
Speed range (mm/s) @ Rhomb, no load, 20°C		0-12
Step length, full step (µm) @ Delta, no load, 20°C		4.5
Motor resolution, microstep (nm)		<1
Built-in encoder		No
Encoder resolution (µm)		N/A
Stall force (N)		15
Holding force (N)		>15
Recommended operating range (N)		0-8
Operating voltage (V)		42-48
Power consumption (mW/Hz)		7
Mechanical size L x H x D (mm)		42 x 23.3 x 15
Weight (g)		70 (without drive rod)
Operating temperature (°C)		-20 to +70
Vacuum (torr)		10 ⁻⁷
Connector	Soldered cable w. JST 05SR-3S	
Material in motor housing	Stainless steel	Non-magnetic

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

Main dimensions

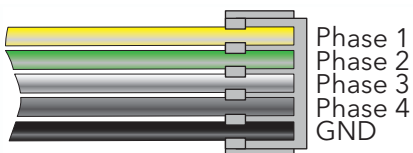
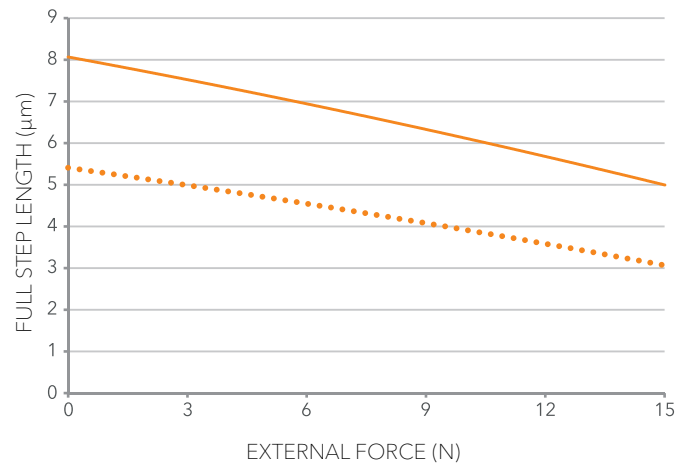
LS15 - Vacuum


Stroke range

Stroke (mm)	Drive rod length (mm)
0-20	40
0-30	50
0-40	60
0-80.8	100.8
0-130	150

Motor speed at 20°C, no load

Waveform	Max freq. (Hz)	Speed range (mm/s)
Delta	1500	0-8
Rhomb		0-12

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.