

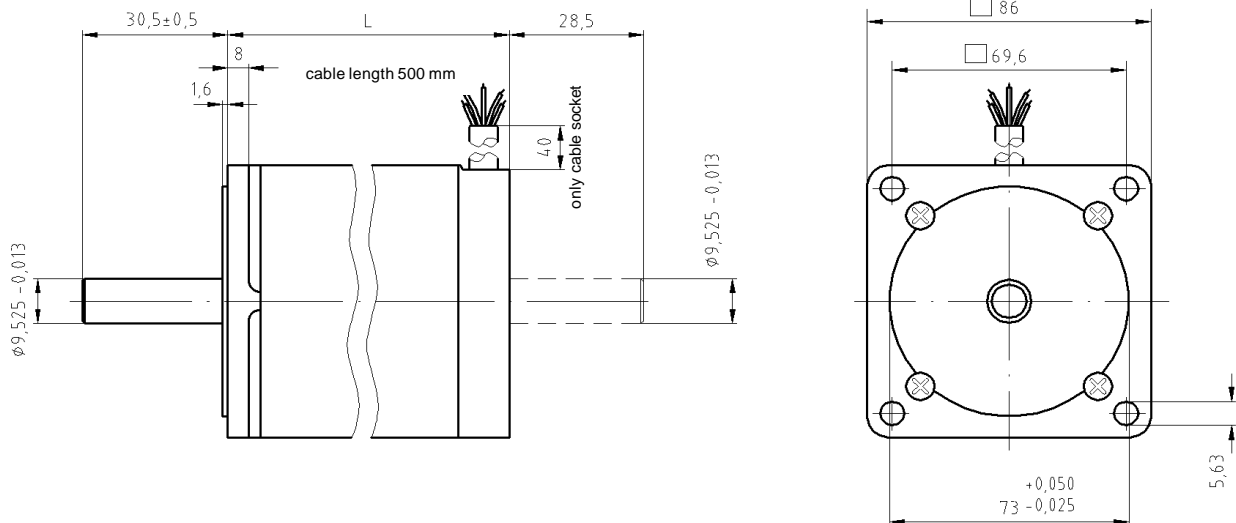
High Performance Stepper Motors L3 Series

Their optimal price-performance ratio, minimal overall dimensions combined with maximum torque performance and reduced inertia and last not least an operation characteristic that has been especially optimized for microstepping tasks are the advantages marking this new series in frame size NEMA 34.

- 2-phase Hybrid Step Motor in Frame Size NEMA 34
- Full Step Angle 1,8°
- Neodymium Magnets for high Power Density in a compact shaped Motor
- Holding Torque from 2,8 up to 7,6 Nm
- 60 % higher Holding Torque as comparable Motors with identical Dimensions
- Outstanding Torque-to-Inertia Ratio due to partially hollow Rotor
- Highest dynamic Performance at shortest Positioning Times
- Magnetic Design optimized for Microstepping Mode
- Smooth and Operation with extremely low Resonance even at low-speed Operation



Dimensions

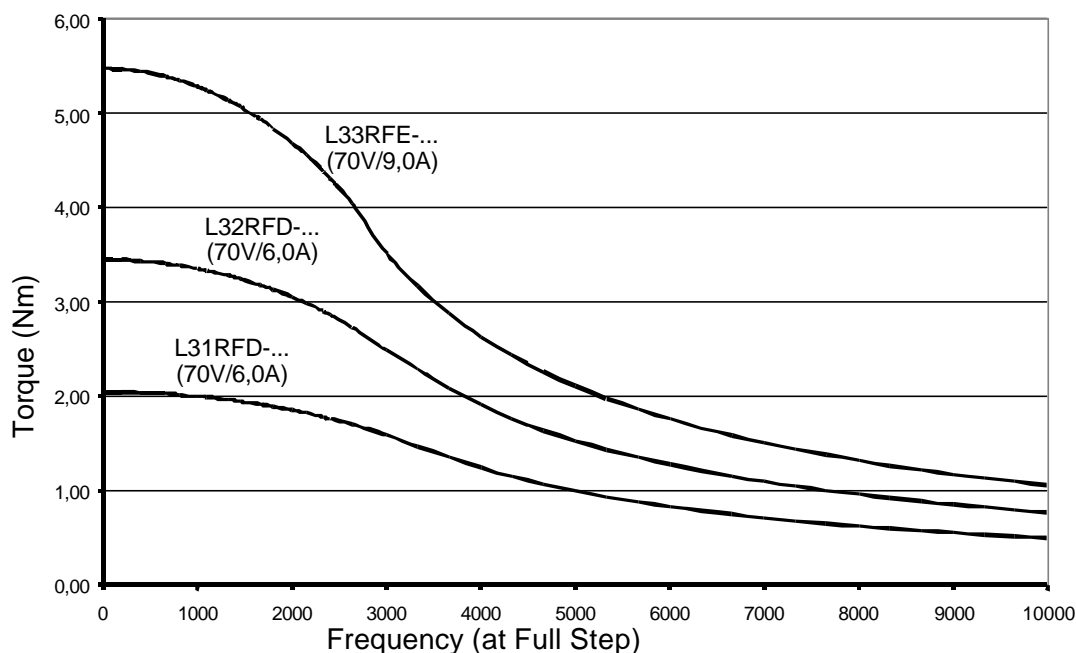


all dimensions in mm

	length
L31RFD-00N-NN-00	67 mm
L32RFD-00N-NN-00	94 mm
L33RFE-00N-NN-00	125 mm

Torque Characteristics

(Connection bipolar, parallel)



Technical Data (Standard Types)

		L33RFE-00N-NN-00			
		L32RFD-00N-NN-00			
		L31RFD-00N-NN-00			
Holding Torque (bipolar, 2 phases parallel connected)	M_H	Nm	2,8	4,8	7,6
Rated Current per Phase (bipolar parallel)	I	A	6,0	6,0	9,0
Rated Current per Phase (bipolar serial)	I	A	3,0	3,0	4,5
Step Angle		°	1,8	1,8	1,8
Angular Tolerance		%	5	5	5
Resistance per Phase	R_{ph}	Ω	0,3	0,75	0,5
Inductance per Phase	L_{ph}	mH	2,1	3,5	2,5
Residual Torque	M_P	Nm	0,09	0,13	0,23
Insulation Class			B	B	B
Rotor Inertia	J	$Kgm^{2x10^{-3}}$	0,066	0,12	0,18
Mass	m	kg	1,6	2,4	3,6
Length	L	mm	67	94	125

Standard Version: NEMA 34, smooth shaft \varnothing 9,52 mm
8 flying leads for serial or parallel connection

Further types and options for this series as well as stepper drives and other accessories are available upon request.