

High Performance Stepper Motors L3 Series



- **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 Running with extremely low Resonance even at low-speed Operation**

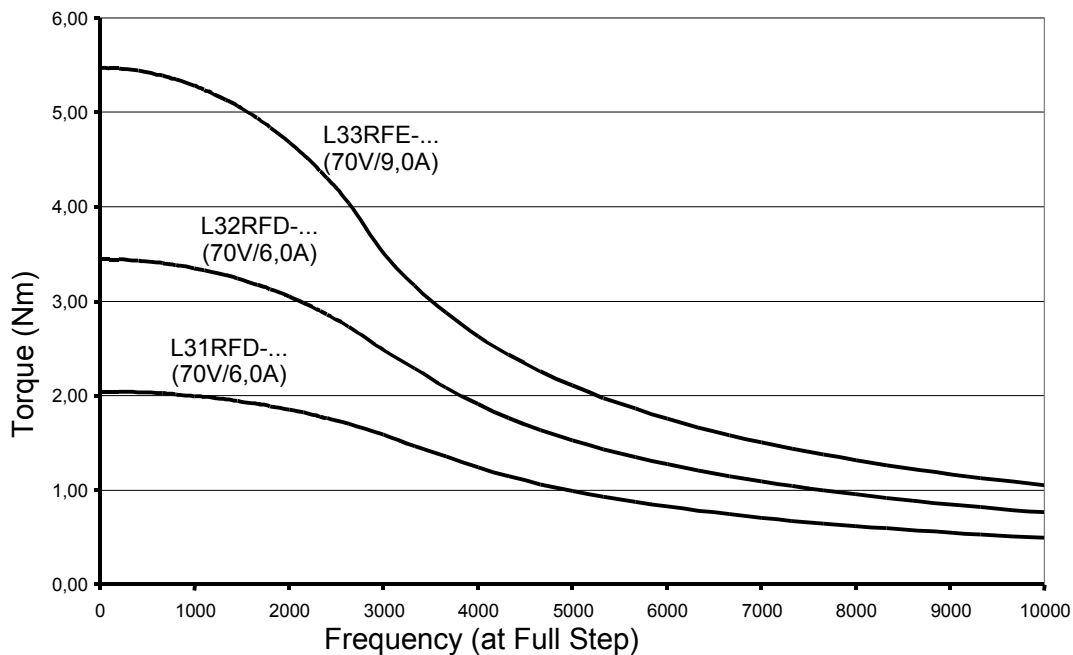
Technical Data (Standard Types)

		L33RFE-00N-NN-00			
		L32RFD-00N-NN-00		L31RFD-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 ² 10 ⁻³	0,066	0,12	0,18
Mass	m	kg	1,6	2,4	3,6
Length	L	mm	67	94	125

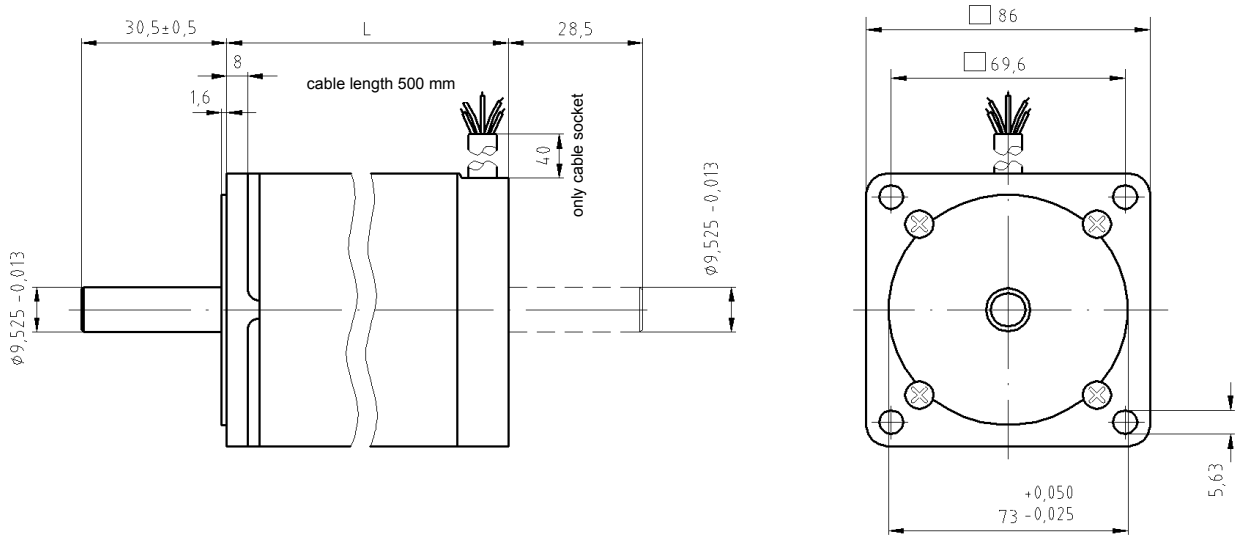
Standard Version: NEMA 34, smooth shaft Ø 9,52 mm
8 flying leads for serial or parallel connection

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

Torque Characteristics (Connection bipolar, parallel)



Dimensions



all dimensions in mm

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

subject to change without notice

Sales and Service

We are committed to quality customer service. In order to serve you in the most effective way please contact your local sales representative for assistance.

If you do not know the local sales representative please contact our customer support.

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Visit the european Danaher Motion Website at **www.Danaher-Motion.de** for further information about Danaher Motion and our product range.