Technical Data

This page gives the **technical data** of the NLiR120Q roto-linear motor. The table lists the electrical and mechanical parameters for the available models.

PARAMETER	UNIT	SYMBOL	NLiR120Q-50-1-M12	NLiR120Q-50-2-M12	NLiR120Q-100-1-M12	NLiR120Q-100-2-M12
Rated Force	N	Fr	21	21	21	21
Peak Force	N	Fp	137	137	137	137
Rated Torque	mNm	Tr	54	108	54	108
Peak Torque	mNm	Tp	132	246	132	246
Stroke	mm		50	50	100	100
Stator length	mm	Sl	305	400	400	450
Stator flange	mm x mm	Sf	35 x 63	35 x 63	35 x 63	35 x 63
Repeatability Linear	mm		+/-0.025	+/-0.025	+/-0.025	+/-0.025
Repeatability rotary	degrees		+/-0.1	+/-0.1	+/-0.1	+/-0.1

Notes on the data

- **Rated force (Fr)** and **peak force (Fp)** refer to the linear axis; **rated torque (Tr)** and **peak torque (Tp)** refer to the rotary axis. - The **stroke** is the linear travel; the **stator length** and **stator flange** define the mounting dimensions. - The **repeatability** is the achievable positioning repeatability on the linear and the rotary axis. - For the detailed datasheet and the force-velocity curves, use the Datasheet Engine tool.

From:
https://www.nilab.at/dokuwiki/ - **NiLAB GmbH Knowledgebase**

Permanent link:
https://www.nilab.at/dokuwiki/doku.php?id=en:integrated_rotolinear:technical_data

Last update: **2026/09/12 14:37**