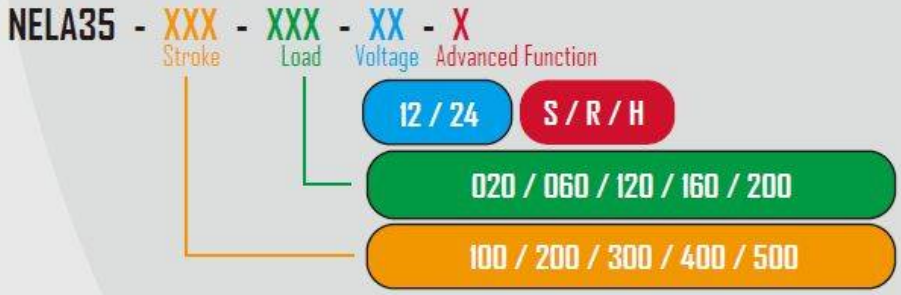
Technical Data

The technical data for the NELA 24VDC linear actuators is summarised in the specification images below. They cover the stroke, the maximum force, the duty cycle, the IP rating, and the operating temperature range for each model.

NELA35

Load(Model No.)	020	060	120	160	200
Max. Load(N)	200	600	1,200	1,600	2,000
Overload Protection Load(N)	210	650	1,300	1,700	2,100
Max. Self-Locking Load(N)	170	650	1,250	1,600	2,400
Speed at Max. Load(mm/s)	47.2	18.9	9.8	7.5	5.2
Speed at No Load(mm/s)	120.0	32.1	16.7	12.9	8.8
Hall Resolution(mm/pulse)	0.183	0.073	0.037	0.029	0.020

***Max. Self-Locking Load = Max. Vertical Loading Ability**



Advanced Function

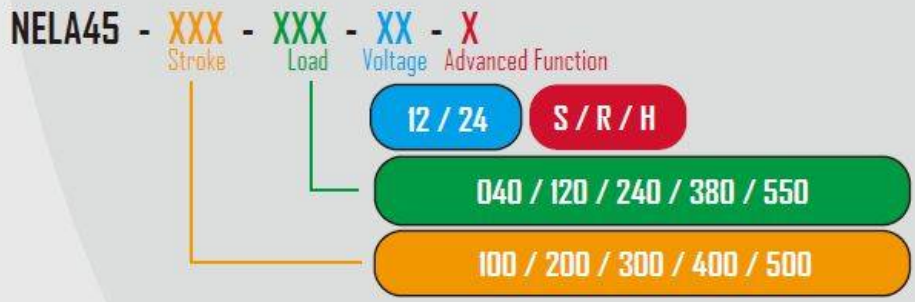
Stroke Setting (S) : 2 sets of wiring (4 wires) total for the upper and lower limits.
Reed Switches (R) : Built-in two reed switches for stroke setting.
Hall Effect Sensor (H) : Retrieve signals to your PLC for dedicated relative positioning.

***For H version, there is no built-in OCD; Users may monitor it via their own PLC.**

NELA45

Load(Model No.)	040	120	240	380	550
Max. Load(N)	400	1,200	2,400	3,800	5,500
Overload Protection Load(N)	410	1,250	2,450	3,900	5,600
Max. Self-Locking Load(N)	430	1,300	2,470	4,600	6,000
Speed at Max. Load(N)	68.5	19.6	10.1	5.4	3.9
Speed at No Load(N)	112.5	32.1	16.7	8.8	6.3
Hall Resolution(mm/pulse)	0.4048	0.1092	0.0559	0.0295	0.0211

***Max. Self-Locking Load = Max. Vertical Loading Ability**



Advanced Function

Stroke Setting (S) : 2 sets of wiring (4 wires) total for the upper and lower limits.

Reed Switches (R) : Built-in two reed switches for stroke setting.

Hall Effect Sensor (H) : Retrieve signals to your PLC for dedicated relative positioning.

***For H version, there is no built-in OCD; Users may monitor it via their own PLC.**

Notes on the data

- The NELA35 and NELA45 share the same 24VDC supply, the same 20% duty cycle and the same IP66 protection class. - The NELA45 provides a higher maximum force and a higher maximum current, so it is intended for heavier loads. - The operating temperature range is -20 / +60 °C for both models. - The stroke is configurable in 100mm increments from 100 to 500mm. - Always verify the selected model against the application requirements (load, duty cycle, ambient temperature).

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

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

Last update: **2026/09/11 07:58**