

## Speed of opening, stability, descent rate

Inspection certificate number:

EP\_366.2024

Test Report

### Manufacturer data

Manufacturer name: **Dudek Paragliders**  
 Representative: **POWAIR sp. z o.o.**  
 Street: **Ul. Centralna 2U**  
 Post code / Place: **86-031 Osielsko**  
 Country: **Poland**

### Sample data

Name:	<b>Nano SQ</b>	Size:	<b>25</b>
Steerable <sup>(1)</sup> :	<b>No</b>	Maximum weight in flight <sup>(2)</sup> [kg]:	<b>100</b>
Weight <sup>(3)</sup> [kg]:	<b>0.99</b>	Volume packed [cm <sup>3</sup> ]:	<b>3350</b>
Serial number:	<b>R-04844</b>		

### Test results <sup>(4)</sup>

	Test no. 1	Test no. 2
Measured opening time [s]:	<b>3.18</b>	<b>2.75</b>
<b>Unsteerable parachute and steerable parachute with locked controls (if applicable)</b>		
Measured sink rate [m/s] ( $\leq 5.5$ ):	<b>5.13</b>	<b>5.28</b>
Stability test:	<b>Stable</b>	<b>Stable</b>

### Steerable parachute and steerable parachute with unlocked controls (if applicable)

Measured sink rate [m/s] ( $\leq 4.0$ ):	<b>n/a</b>	<b>n/a</b>
Stability test:	<b>n/a</b>	<b>n/a</b>
Test of steerability:	<b>n/a</b>	<b>n/a</b>

### Test data

	Test no. 1	Test no. 2
Place of test	<b>Villeneuve</b>	<b>Villeneuve</b>
Date of test	<b>14.05.2024</b>	<b>17.05.2024</b>
Atmosphere AGL		
[°C]	<b>1</b>	<b>12</b>
RH [%]	<b>78</b>	<b>78</b>
[hPa]	<b>958</b>	<b>966</b>
Wind [m/s]	<b>0.4</b>	<b>0.4</b>
Corrected mass with uncertainty ( $m_{corr}$ ) [kg]:	<b>100.2</b>	<b>96.3</b>

### If steerable with brake lock system

Place of test	<b>n/a</b>	<b>n/a</b>
Date of test	<b>n/a</b>	<b>n/a</b>
Atmosphere AGL		
[°C]	<b>n/a</b>	<b>n/a</b>
RH [%]	<b>n/a</b>	<b>n/a</b>
[hPa]	<b>n/a</b>	<b>n/a</b>
Wind [m/s]	<b>n/a</b>	<b>n/a</b>
Corrected mass with uncertainty ( $m_{corr}$ ) [kg]:	<b>n/a</b>	<b>n/a</b>

## Strength test - 40 m/s opening shock

Inspection certificate number: **EP\_366.2024****Test Report**

### Manufacturer data

Manufacturer name: **Dudek Paragliders**  
Representative: **POWAIR sp. z o.o.**  
Street: **Ul. Centralna 2U**  
Post code / Place: **86-031 Osielsko**  
Country: **Poland**

### Sample data

Name:	<b>Nano SQ</b>	Size:	<b>25</b>
Steerable	<b>No</b>	Maximum weight [kg]:	<b>100</b>
Weight [kg]	<b>0.987</b>	Volume packed [cm <sup>3</sup> ]:	<b>3350</b>
Serial number:	<b>R-04845</b>		

### Test data <sup>(1)</sup>

	Test no. 1	Test no. 2
Place of test	<b>St-Cierges</b>	<b>St-Cierges</b>
Date of test	<b>29.04.2024</b>	<b>29.04.2024</b>
Maximum weight [kg]	<b>100</b>	<b>100</b>
Inspector:	<b>Claude Thurnheer</b>	<b>Claude Thurnheer</b>

### Atmosphere AGL

[°C]	<b>7</b>	<b>7</b>
RH [%]	<b>73</b>	<b>73</b>
[hPa]	<b>924</b>	<b>924</b>
Wind [m/s]	<b>1</b>	<b>1</b>

### Test results

	Test no. 1	Test no. 2
Strength test (40m/s shock)	<b>POSITIVE</b>	<b>POSITIVE</b>
Aircraft speed uncertainty K=2 [m/s] <sup>(2)</sup>	<b>2.9</b>	<b>2.9</b>

Identification number: **MISC\_296.2025****Dudek Paragliders Nano SQ-25 Riser****Result summary**

Maximum strength for riser, bridle: **25847.8 [N]**  
Duration at the requested load: **7.0 [s]**

Place of declaration: **Villeneuve**  
Date of issue: **24.01.2025**  
Managing director: **Andrea Wigger**

Signature:



This signature approves the validity of the test report

Air Turquoise SA has thoroughly tested the sample of emergency parachute mentioned above and certifies its conformity with the standards: EN 1651:2018+A1:2020<sup>(1)</sup> and NF  
2-565-20 chapter 6.1.4

Instrument	Validity	Manufacturer	Type no.	S/N
Load sensor	23.08.2028	HBM	1-S9M/50KN-1	31314652
Geos n° 11 Skywatch	18.06.2025	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Riser: lowest part of the the parachute system, which is connected to the harness. Bridle: connection between risers and harness, can also be a strap.

<sup>(2)</sup> The connecting strap has to have a minimum load capacity of 24000 [N]. The exposed part of the connecting belt has to be protected against environmental factors.

<sup>(3)</sup> Calculated value includes the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor  $k = 2$ . The value of the measured lies within the assigned range of values with a probability of 95%.

<sup>(4)</sup> This standards is NOT covered by accreditation D-IS-19457-01

Identification number: **MISC\_295.2025****Dudek Paragliders Container one size****Result summary**

Inner container strength test. Applied minimum 700 N for at least 10 seconds and at maximum strength.

Duration at the required strength: **28.4 [s]**Maximum strength before broken: **1217.7 [N]**

Place of declaration:

**Villeneuve**

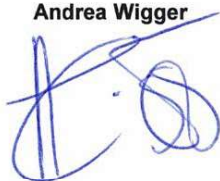
Date of issue:

**24.01.2025**

Managing director:

**Andrea Wigger**

Signature:



Instrument	Validity	Manufacturer	Type no.	S/N
Load sensor 10kN SL2	23.08.2028	Burster / MTS	8431-6010-N000S000	593507
Winch	check every 12 month	Arwin	300/600	N/A
Geos n° 11 Skywatch	18.06.2025	JDC elec.	Geos n° 11	22

This signature approves the validity of the test report

Air Turquoise SA has thoroughly tested the sample of riser/bridle mentioned above and certifies its conformity with the following standards:

**EN 12491:2015+A1:2021<sup>(4)</sup> chapter 5.3.2 and NF L 2-565-20 chapter 6.1.8**<sup>(1)</sup> Inner container: container of the folded emergency parachute.<sup>(2)</sup> Inner container (the connection between handgrip and inner container) is loaded at min 700 [N] over 10 seconds. The deployment system is loaded until breaking. Each component is tested.<sup>(3)</sup> Calculated value includes the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor  $k = 2$ . The value of the measured lies within the assigned range of values with a probability of 95%.<sup>(4)</sup> This standard is NOT covered by accreditation D-IS-19457-01

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