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Date of test : 06-12-2019 to 06-14-2019

TEST REPORT SUMMARY N°10938078-001-1

Mechanical test on "CADDY Speed Link Catenary Clip"

Shipping adress:

"Wilson, Eric" Eric.Wilson@nVent.com
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Test engineer:
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With the participation of :
Adrien LE ROUX & Philippe CAUFRIEZ

Head of Testing and Certification Centre
Sébastien THIOLLIER

Attached files: 0

1 AIM AND OBJECTIVE OF THE TESTS

1.1 Aim

This report covers the products presented by nVent:
• SLDW6
• SLDW6 with cables of several diameters
• SLK6LX Catenaries with hook + SLK6 locking device in vertical installation

A presentation of the products provided by the company nVent is attached.

1.2 Objective

The purpose of the request is to perform tests on locking systems presented above in accordance with our price offer No. 32871719.1 and your order 0257037 REC 002 of 24/05/19.

2 REFERENCE DOCUMENT

Our service was performed outside of any normative or regulatory reference.

Our service was carried out according to the installation instructions of Mr. Le Roux of the company nVent.

3 USE OF THE REPORT

Reproduction of this report is only permitted in its entirety.

The results of this test report relate only to the objects tested.

The recipient of the report agrees not to use it for equipment or material that is not strictly identical to the subject of this report.

4 TEST PROTOCOL

4.1 Resources implemented by APAVE

Force sensor 10kN L0002321
CEMIOS Traction Machine + 250kN Force Sensor L0005858
Force sensor 5kN L0008966
Mass set
IPN beam mounting

4.2 Test procedure

The tests were conducted with reference to the "Request for Independent Testing nVent CADDY Speed Link Catenary Revision April 22, 2019" and "Request for Independent Testing nVent CADDY Speed Link Catenary Revision June 6, 2019", taking into account all modifications and validation wanted by Adrien Le Roux & Philippe Caufriez (nVent) during the tests.

Tensile test :

- SLDW6
- SLDW6 with 1.5mm cables
- SLDW6 with 2mm cables
- SLDW6 with 3mm cables
- Catenary SLK6LX 6mm cable with hook end in vertical installation + locking device SLK6

5 RESULTS

Tensile test :

Ref	N°	Ultimate load
SLK6 -@60°	Sample 1	23,49kN
	Sample 2	27,51kN
	Sample 3	28,47kN
	Sample 4	28,79kN
SLK6 -@10°	Sample 1	27,23kN
	Sample 2	27,05kN
	Sample 3	28,06kN
SLK6 -@65°	For information	26,39kN

SLK6 products are advertised for a maximum work load of 453kg in vertical installation by nVent, which implies a breaking load greater than 22.2kN to meet a safety factor of 5: 1.
All samples tested had a break value greater than 22.2kN

Ref	N°	Ultimate load
SLDW6	Sample 3	3,76kN
	Sample 4	3,71kN
	Sample 5	3,88kN

SLDW6 products are advertised for a maximum workload of 71kg per nVent, which implies a breaking load greater than 3.48kN to meet a safety factor of 5: 1.
All the samples tested had a break value greater than 3.48kN.

Ref	N°	Ultimate load
SLK15LXxDW6	Sample 1	1,63kN
	Sample 2	1,58kN
	Sample 3	1,67kN
	Sample 4	1,39kN

SLK15LXxDW6 products are advertised for a maximum workload of 20kg per nVent, which implies a breaking load greater than 980N to meet a safety factor of 5: 1.
All the samples tested had a break value greater than 980N.

Ref	N°	Ultimate load
SLK2LXxDW6	Sample 1	2,61kN
	Sample 2	2,93kN
	Sample 3	2,54kN

SLK2LXxDW6 products are advertised for a maximum workload of 45kg per nVent, which implies a breaking load greater than 2.20kN to meet a safety factor of 5: 1.
All the samples tested had a break value greater than 2.20kN.

Ref	N°	Ultimate load
SLK3LXxDW6	Sample 1	4,58kN
	Sample 2	4,40kN
	Sample 3	4,54kN

The SLK3LXxDW6 products are advertised for a maximum workload of 71kg per nVent, which implies a breaking load greater than 3.48kN to meet a safety factor of 5: 1.
All the samples tested had a break value greater than 3.48kN.

The breaking loads of the products presented by nVent, SLDW6 with and without cable, and SLK6LX (vertical installation) comply with the workloads stated within instruction sheets CFS591 & CFS592.