

Siège social et site de Liège :

Rue du Chéra, 200 B-4000 Liège Tél: +32(0)4.229.83.11

Fax: +32(0)4.252.46.65 site web: http://www.issep.be Site de Colfontaine :

Zoning A. Schweitzer, rue de la Platinerie B-7340 Colfontaine

B-7340 Colfontaine Tél: +32(0)65.61.08.11 Fax: +32(0)65.61.08.08



Liège, 9th May 2016.

TEST REPORT

Nr 1041/2016

EUROPEAN STANDARD

EN 60332-3-24
COMMON TEST METHODS FOR CABLES UNDER
FIRE CONDITIONS
Part 3-24: Test for vertical flame spread of verticallymounted - bunched wires or cables – category C

- 1. <u>Test applied for by</u>: Mr A. Pristerà for Berica Cavi s.p.a., Via della Meccanica 2, I-36040 Meledo di Sarego (VI), Italy.
- 2. Type of cable (*: information given by the sponsor):

ISSeP nr: LCF/EE/16/13/1.

Cable marking: BERICA CAVI S.P.A. ITALY PV CABLE FG21 M21 IEMMEQU & TUV TYPE Approved PV1-F ROHS CE 2016/00453 1x2.5.

* Reference: SOLAR CABLE 0.6/1kV 1x2.5 NERO LSZH.

Diameter: ~ 5.1 mm.

Colour: black.

Date of samples reception: 15th March 2016.

- 3. Sampling: not carried out by the laboratory.
- 4. Procedure: see par. 5 of EN 60332-3-24 (2009) standard.
- 5. Date of the test: 24th March 2016.
- 6. Results and test conditions: p 2/3 & 3/3
- 7. Classification:

Cable described in § 2 doesn't propagate the flame. It meets the requirements of Annex B from the EN 60332-3-24: 2009.

M. DEVILLERS,

Test Operator.

S. DESMET,

Test Executive.



Remarks: - This test report testifies only to the performances of the object actually tested, and does not presume of performance of similar object;

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E LAC

Test Number: NAP/2020

Test Conditions:

- Cables length: ~ 3.5 m.
- Volume of combustible material: 0.019 l/m.
- Cable diameter: ~ 5.1 mm.
- Number of lengths: 81 (55+26).
- Cables mounting: 2 layers with the cables touching one another.
- Width of the mounted cables: ~30 cm.
- Gas: propane (93 MJ/m³).
- Gas flow: 13.5 Nl/min.
- Power: 20.5 kW.
- Air flow: 72.7 Nl/min.
- Air flow through the chamber: $300 \pm 30 \text{ m}^3/\text{h}$.
- Burner characteristics: American Gas Furnace Co, 254 mm in wide, 11-55 drilling, ribbon-type burner (cat. n° IOL 11-55) with air-gas venturi mixer (cat. n° 14-18).
- Burner position: 600 mm above the floor of the test chamber, 76 mm behind the closest surface of the samples.

Results:

- * Duration of afterburn: 13 min.
- * Overall distance of damage to the jacket above the level of the burner: 92 cm.

Performance requirements:

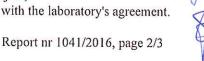
§ 7 of EN 60332-3-24: The performance requirements shall be as given in the relevant cable standard. In the absence of any requirements in the cable standard, it is recommended to use the requirements of Annex B, i.e. after burning has ceased, the charred or affected portion of the cables should not exceed a height of 2.5 m above the bottom edge of the burner, measured at the front and rear of the cable assembly.

Remark:

In the case of doubt, two further tests shall be undertaken. The test shall be deemed as satisfactory if both tests meet the requirements. The laboratory's internal rule is to consider a damaged height higher than 2.12 m but less than 2.5 m as a case of doubt.

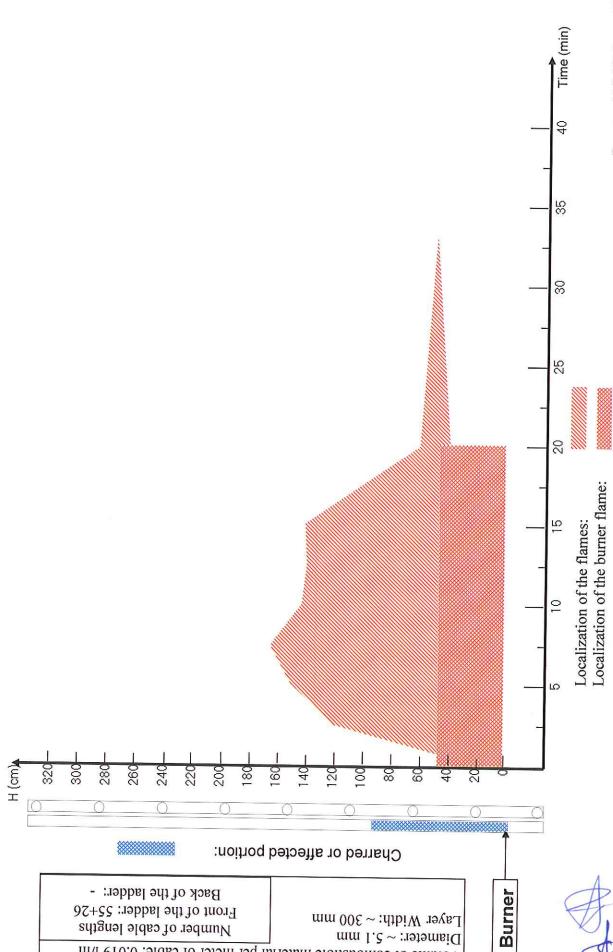
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EN 60332-3-24

LAC N° 060-TEST ISO 17025 Cable: BERICA CAVI S.P.A. ITALY PV CABLE FG21 M21 IEMMEQU & TUV TYPE Approved PV1-F ROHS CE 2016/00453 1x2.5 ISSeP nr: LCF/EE/16/13/1



Volume of combustible material per meter of cable: 0.019 l/m 54/03/16

Test Nr NAP/2020

