

ELECTROTECHNIC AND GAS DEPARTMENT
Insulated Cables And Adhesive Tapes Laboratory

Test Report n°
PAGE : 1 OF 8

01SI00076
DATE : 2008/03/18

Product Fire resisting cables, Rated voltages 450/750 V

Model type FTG10OHM1AM1 2X1,5 mm² 450/750 V

Description See page 2 of this test report
Printing on outer black sheath : "SENSITHERM – FTG10OHM1AM1 450/750 V 2X1,5 IEC 60331-21 "

Applicant SENSITHERM SRL VIA BERLINGUER 15 20040 COLNAGO (MI)

Manufacturer SENSITHERM SRL VIA BERLINGUER 15 20040 COLNAGO (MI)


Test carried out by Laboratorio cavi isolati e nastri adesivi - IMQ S.p.A.
Via Quintiliano, 43 - 20138 MILANO

Scope of the test Fire resisting (IEC 60331-21)

Date of samples receiving 2008-03-13
(Sample shipped and sampled by the applicant)

Date of tests start 2008-03-17 **Date of tests end** 2008-03-17

This test report is composed by 8 Pages, divided as follows :
8 report pages

Cable Testing Lab Technician	Approved by
F. Facchetti 	F. Giorgi 

The results referred in this report are only relevant to the samples tested and described in this report.
Only complete reproduction of this test report is permitted without written authorization of IMQ.

TECHNICAL DATA SHEET OF THE CABLE

SENSITHERM S.r.l.

Fire Resisting Control & Power cables
Micatape, G10 insulated, Screened, Armoured, LSOH outer sheath



Type **MICA/G10/OS/LSOH/SWB/LSOH 450/750 V 2x1,5 mm²**
FTG10OHM1AM1 450/750 V 2x1,5 mm²

Conductor

Plain annealed copper conductor according to IEC60228 cl. 5.

Insulation

Mica tape over the conductor
Elastomeric compound G10 type according to EN 50363-0
Thicknes of insulation > 0,8 mm
Identification cores :
Black, Blue

Layin ap

Core stranded with at least 10 twists/meter

Screen

Collective screen of plastic bonded aluminium tape with tinned drain wire.

Inner Sheath

Halogen Free compound acc. to EN 50290-2-27
Thicknes of jacket => 1,0 mm
Overall diameter 10,5±0,3 mm

Metallic protection

Galvanized steel wire braid acc. IEC 60502-1

Outer sheath

LSOH compound M1 type according to EN 50290-2-27, black
Thicknes of jacket => 1,8 mm
Overall diameter 15,1±0,5 mm

Marking

Sensitherm - FTG10OHM1AM1 450/750 V 2x1,5 IEC 60331-21

Performance

Resistance to fire - Circuit Integrity	acc. IEC 60331-21
Reaction to Flame propagation a) Test of single cable	acc. IEC 60332.1
b) Test on bunched cable	acc. IEC 60332-3-24
Halogen content	acc. CEI EN 50267-2-1

Minimum bending radius

10 times overall diameter

Technical data & Electrical properties

Temperature range -30 + 90°C
Temperature laying - 5 + 50°C
Conductor resistance : < 13,3 Ohm/Km
Insulation resistance : > 100 Mohm x Km
Test voltage - Core/core : 3.000 V
Core-screen : 1.000 V
Screen-armour : 500 V
Operating voltage max 750 V

ELECTROTECHNIC AND GAS DEPARTMENT

Test Report n°

01SI00076

Insulated Cables And Adhesive Tapes Laboratory

PAGE : 3 OF 8

DATE : 2008/03/18

SUMMARY

FIRE RESISTING TEST

4

Reference Document	Title of Document
Standard IEC 60331-11 I Ed. 1999 / 04	Tests for electric cables under fire conditions - Circuits integrity Part 11 : Apparatus - Fire alone at a flame temperature of at least 750 °C
Standard IEC 60331-21 I Ed. 1999 / 04	Tests for electric cables under fire conditions - Circuits integrity Part 21: Procedures and requirements - Cables of rated voltages up to and 0,6/1kV

