TDS90004-9 AUTOBUS network cable 2+2

The TELETASK AUTOBUS cable is used to connect all the TELETASK interfaces and the central unit with each other. The interfaces are connected according to a bus topology. The AUTOBUS runs from one interface to the next interface. This AUTOBUS cable has not only fire retarding but is also 'low smoke fume' (LSF).

APPLICATION

The TELETASK AUTOBUS 2+2 cable is LSF (LOW SMOKE AND FUME POLYVINYL-CHLORIDE) and is used to connect all the TELETASK interfaces and the central unit with each other.

CHARACTERISTICS

AUTOBUS

The TELETASK AUTOBUS is a bi-directional high speed bus. When you press a button (closing a contact), the corresponding interface immediately transmits the command (including error detection and correction information) via the AUTOBUS cable to the central unit. The central unit answers to this command with a confirmation to the transmitting interface. If this is not the case, the interface will retransmit his command.
The cable is compliant with the EN 50575. Euroclass fire behavior according to EN 13501-6: **Eca** (see attachment).
This AUTOBUS cable has not only fire retarding but is also 'low smoke fume' (LSF). The specifications of the used compound are compliant with:

- EN 50 086-2-2
- CEI 20-11 M1
- CEI 20-22 II
- VDE 0207 Part t24, type HM2
- VDE 0250 Part 215, type HM5
- HD 21-14 S1, type TI6.
- UL94-V0
- IEC 60332-3
- IEC 60695-11-10
- IEC 332.3

Mechanical

Colour: blue.
Max. cable length: 1km.
The AUTOBUS cable consists of four copper conductors: 2 x 0.25 mm² (data transmission) + 2 x 1.00 mm² (power supply)..

Electrical

High speed bus cable with speeds up to 1 Megabit.

Insulation voltage (at 20°C):
Of the covering blue sheath: 3000V (test)

Operating voltage:
Of the red and black wire (1mm²): 12V

INSTALLATION

Qualification

Only qualified electrical contractors, who have the necessary training and knowledge of the electrical and electromagnetic regulations concerning the safety of the end-user, are allowed to install the TELETASK products.

The AUTOBUS cable must be protected against mechanical influences, especially during the building process. A non conductive tube is recommended. If used inside a cable tray, a minimum distance of 6 cm between AUTOBUS and power cables must be respected.

The AUTOBUS connection is fourfold:

- the +12V connection (thick red wire)
- the 0V connection (ground) - (thick black wire)
- communication wire 'A' (thin blue wire)
- communication wire 'B' (thin white wire)

! Remark: The AUTOBUS cable is to be wired in bus configuration. This means that the cable starts at the central unit and runs through the house, connecting all the installed interfaces one after another.

! It is recommended to make a 'T'- connection at the level of the central unit which will increase the power level of every connected interface.

Terminating the AUTOBUS.

In order to eliminate reflections on the bus cable, it is necessary to terminate the AUTOBUS by means of a terminating resistor. The resistor is to be connected at each far end of the AUTOBUS cable at the last interface. This is done by setting a jumper (AUTOBUS terminating resistor), which is supplied with every AUTOBUS connector set.
By default, there are no terminating resistors activated.

CONNECTIONS

Central Unit

Use the AUTOBUS plug-in connector on the TELETASK central unit.

Interfaces

Use the special AUTOBUS connector set, delivered with every TELETASK interface. The colours correspond with the wires of the AUTOBUS connector set.

! !!! Star topology cabling is NOT allowed.

DIMENSIONS

Diameter:

6,5 Ø mm +/- 0.2 mm

Length:

TDS90004:	Reels of 100 m
TDS90009:	Reels of 50 m

Packaging:

TDS90004:	33 x 33 x 9 cm
TDS90009:	25 Ø x 8 cm

NET | GROSS WEIGHT

TDS90004:	6,66 kg | 6,72 kg
TDS90009:	3,33 kg | 3,33 kg

Relative humidity
15% to 85%

OPERATING RANGE

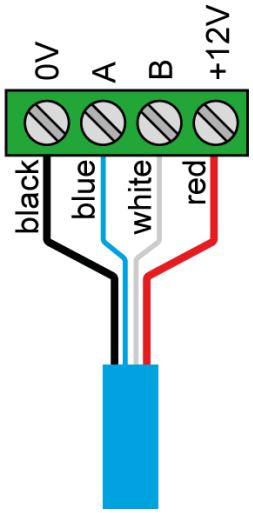
Temperature
-25°C to +80°C max.

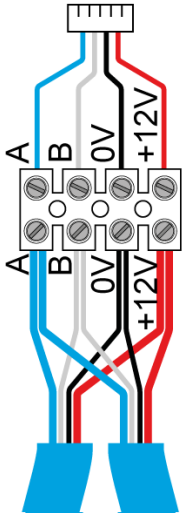
STORAGE

Temperature
-20°C to +65°C

SCHEMATIC DRAWING

AUTOBUS connection
on the Central Unit





mini connector to connect
the AUTOBUS to a TELETASK
input or output interface

ISSeP
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Métrologie environnementale
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Essais - Expertises

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NOTIFIED BODY
Nr 2659

BELAC
N° 060-TEST
ISO 17025

Liège, 29st September, 2021.

TEST REPORT

Nr 2191-1/2021

EN 60332-1-2 **Nov. 2004** **A11 Aug. 2016**	**TESTS ON ELECTRIC AND OPTICAL FIBRE CABLES UNDER FIRE CONDITIONS** **Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame**

1. Test applied by: Mr J Vander Beken for TELETASK BV, Ottergemsesteenweg Zuid 729, 9000 Gent, Belgium.

2. Type of cable (*: information given by the sponsor):
   ISSeP nr: LF 794
   *Reference: AUTOBUS 2+2
   Cable marking: ** ### m.** TELETASK CE AUTOBUS 2+2
   Diameter: ~ 6.5 mm.
   Colour of the outer sheath: blue
   Date of samples reception: 21st September 2021.
   The product is defined as a control cable according to EN 50575.

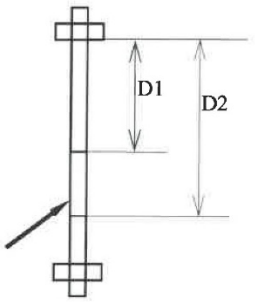
3. Sampling: not carried out by the laboratory.

4. Procedure: see §. 5 of IEC 60332-1-2 standard.

5. Date of the test: 23rd September 2021.

6. Results:

   Test nr : CVU 2926
   Duration of flame application: 60 s
   Time to ignition: 1 s
   After flame duration: 2 s
   Distance D1: 41 cm
   Distance D2: 49.5 cm



7. Classification:

Cable described in 2 meets the requirements of annex A of EN 60332-1-2.

I. Dyakov,
Test Executive

Wallonie

Remarks : - This test report testifies only to the performances of the object actually tested, and does not presume of performance of similar object;
- This report can only be reproduced in full, except with the laboratory's agreement.

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BELAC
N° 060-TEST
ISO 17025

Reaction to fire classification in accordance with EN 13501-6 : 2018

A.1. Introduction :

This classification report defines the classification assigned to the cable with reference cable is AUTOBUS 2+2 in accordance with the procedures given in EN 13501-6 : 2018 standard.

Sponsor	TELETASK BV, Ottergemsesteenweg Zuid 729, 9000 Gent, Belgium.
Prepared by	ISSeP, rue du Chera, 200, 4000 Liège, Belgique
Notified Body N°	2659
Product name	AUTOBUS 2+2
Classification report N°	2191-2/2021
Issue N°	1
Issue date	29. 09. 2021

A.2. Details of classified product

A.2.1. General

The product cable AUTOBUS 2+2 is defined as a communication cable in accordance with EN 50575 standard.

A.2.2. Product description

Product description	Multiple conductor, communication cable
ISSeP N° (tested cables):	LF 794
Color:	blue
Diameters of tested cables:	6.5 mm
Sampling, not carried out by the ISSeP	-

Wallonie

The classification report consists of 3 pages and may only be used or reproduced in its entirety.

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A.3. Reports and results in support of this classification

A.3.1. Test reports

Name of laboratory	Name of test sponsor	Test reports N°	Test method
ISSeP	TELETASK BV	2191-1/2021	EN 60332-1-2

A.3.2. Results

Test method	Test N°	Parameter	N° test runs	Results	
				Continuous parameter-mean m / result	Compliance with parameters
EN 60332-1-2	CVU 2926	Flame spread H	1	85 mm	compliant

The classification report consists of 3 pages and may only be used or reproduced in its entirety.
report n°2191-2/2021, page 2/3

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A.4. Classification and field of application

A.4.1. Reference of classification

This classification has been carried out in accordance with EN 13501-6 : 2018.

A.4.2. Classification

The product, cable AUTOBUS 2+2, communication cable, in relation to reaction to fire behaviour, is classified: $\mathbf{E_{ca}}$

Reaction to fire classification

$\mathbf{E_{ca}}$

A.4.3. Field of application

This classification is valid for the cable described in A 2.2.

A.5. Limitations

This classification document does not represent type approval or certification of the product.

The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of AVCP system 3 and CE marking under Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR).
The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

SIGNED	APPROVED
Igor Dyakov, Test Executive.	Hervé Breulet, Head of Accidental Risks Department