



TDS90005ZH **AUTOBUS network cable 2+2 in a flexible tube**

The TELETASK AUTOBUS cable in a flexible tube of 16 Ø mm, is used to connect 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 is compliant with EN50575 (Cca, s1, d1, a1).

The flex tube is made from 50% recycled materials:

- RPPC (new): max. 25%
- RPPC (recycled post-consumer): >25%
- RPPC (recycled post-industrial): up to 50%

APPLICATION

Cable:

The internal TELETASK AUTOBUS 2+2 cable is compliant with EN50575 (Cca, s1, d1, a1) and is used to connect the TELETASK interfaces and the central unit with each other.

Flex Tube:

The TDS90005ZH is provided with a flexible tube for easy and fast enrolment to generate lower labour cost for the installation.

CHARACTERISTICS

AUTOBUS cable

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 cable is compliant with CPR EN50575 (Cca, s1, d1, a1)

- EN50399 (heat release & smoke production)
- EN61034-2 (smoke density)
- EN60754-2 (acidity & conductivity)
- EN13501-6 (fire classification)

Mechanical:

- See datasheet TDS90004ZH

Electrical:

- High-speed bus cable with speeds up to 1Megabit.

- Insulation Voltage (at 20°C):

Of the covering blue sheath: 3000V (!!)

- Operating Voltage:

Of the red and black wire (1mm²): 12V

Flex Tube

- Polypropylene copolymer minimum 25% + recycled post-consumer min. 25% + post-industrial recovery recycled max. 50%.
- Flame retarding and colouring additive
- Corresponding standards:
 - EN 61386-22:2005
 - EN 61386-1:2010
 - EN 60421:2008
 - Fire hazard : non flame propagating, according EN 61386-22 p. 12.1:2005

Mechanical:

- Outer diameter: 16mm
- Certification : CEBEC 1152
- Classification: ICTA 3422
- 3 compression force 750N at 23°C
- 4 impact force 6J at -5°C
- 2 minimal ambient temperature -5°C
- 2 maximal ambient temperature +90°C

INSTALLATION

Qualification

Only certified & qualified electrical contractors, who have the necessary training and knowledge of the electrical and electromagnetic regulations 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 - (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. (each device after another)

Remark: The central unit is also a node on the bus, to increase the Voltage level on the interfaces, place the central unit somewhere in the middle of the bus (you can start with two cables at every AUTOBUS connection which is available on your central unit or on the AUTOBUS extension unit TDS10212).

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 TELETASK central unit.

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 cable colours correspond with the wires of the AUTOBUS connector set.

! !!! Star topology cabling is NOT allowed.

DIMENSIONS

Diameter:

Cable: 6,5 Ø mm
Tube: 16 Ø mm

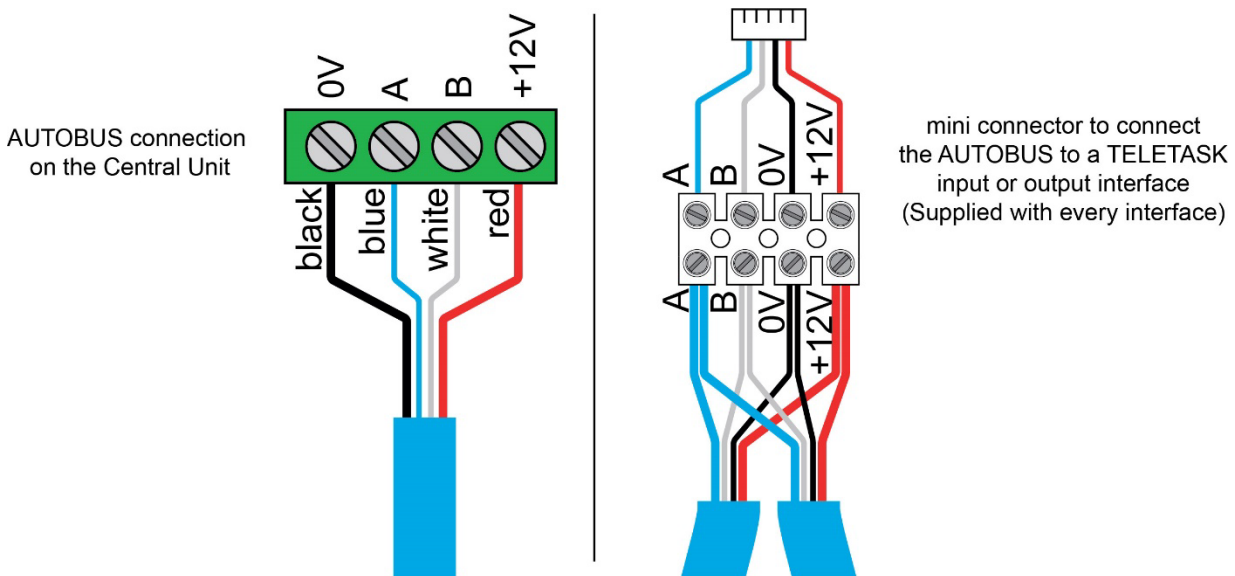
Length:

Reels of 100 m

Packing:

Wrapping foil
Staple height max. 5 rolls

SCHEMATIC DRAWING



Reaction to fire classification
in accordance with EN 13501-6 : 2018 + A1 2022

A.1 Introduction :

This classification report defines the classification assigned to the cable with reference, TDS90004ZH, in accordance with the procedures given in EN 13501-6 : 2018 + A1 2022 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 | TDS90004ZH |
| Classification report N° | 2488-6/2023 |
| Issue N° | 1 |
| Issue date | 26 th July 2023 |

A.2 Details of classified product

A.2.1. General

The product TDS90004ZH is defined as a communication cable in accordance with EN 50575 standard.

A.2.2. Product description

| | |
|------------------------------------|--------------------------------------|
| Product description | Communication cable, multi conductor |
| ISSEP N° : | LF 1084 |
| Colour: | blue |
| Diameter : | ~ 6.6 mm |
| Sampling, not carried out by ISSEP | -. |

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 b.v. | 2488-1/2023 | EN 60332-1-2 |
| ISSEP | Teletask b.v. | 2488-2/2023 | EN 50399 |
| ISSEP | Teletask b.v. | 2488-3/2023 | EN 61034-2 |
| ISSEP | Teletask b.v. | 2488-4/2023 2488-5/2023 | EN 60754-2 |

A.3.2. Results

| Test method | Test N° | Parameter | N° test runs | Results | |
|-------------|----------|--|--------------|--------------------------------------|----------------------------|
| | | | | Continuous parameter-mean m / result | Compliance with parameters |
| EN 60332-1 | CVU 3143 | Flame spread H | 1 | 35 mm | compliant |
| EN 50399 | FIP 3148 | THR ₁₂₀₀ | 1 | 10 MJ | |
| | | HRR _{peak} | 1 | 20 kW | |
| | | FIGRA | 1 | 77 W/s | |
| | | FS | 1 | 1.5 m | |
| | | TSP ₁₂₀₀ | 1 | 22 m ² | |
| | | SPR _{peak} | 1 | 0.04 m ² /s | |
| | | Droplets /particles flaming ≤ 10 s flaming > 10 s | 1 | yes no | not-compliant compliant |
| EN 61034-2 | CUB 821 | Minimum light transmittance | | 94 % | |
| EN 60754-2 | B 901 | weighted pH | 3 | > 4.3 | compliant |
| | B 902 | weighted conductivity | 3 | < 2.5 μS/mm | compliant |

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 + A1 2022 standard.

A.4 2. Classification

The product, TDS90004ZH, communication cable, in relation to reaction to fire behaviour, is classified: **Cca**

The additional classification in relation to smoke production is: **s1**

The additional classification in relation to flaming droplets / particles is: **d1**

The additional classification in relation to acidity is: **a1**

Reaction to fire classification

| | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| C_{ca} | - | s | 1 | , | d | 1 | , | a | 1 |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|

A.4 3. Field of application

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

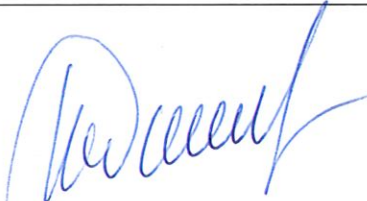
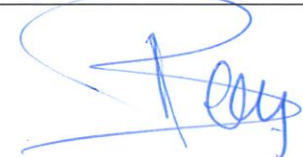
A.5. Limitations

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

The test laboratory has played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of samples tested.

SIGNED

APPROVED

| | |
|--|---|
|  I. Dyakov Test Executive |  Hervé Breulet, Head of Accidental Risks Department |
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