



Filotex®

Bus lines for multiplexed transmission

Electrical characteristics

- ❑ Characteristic impedance at 1 MHz : $77 \pm 7 \Omega$
- ❑ Nominal mutual capacitance : 65 pF/m
- ❑ Nominal capacitance between 1 core and shield : 110 pF/m
- ❑ Nominal capacitance between cores and shield : 180 pF/m
- ❑ Nominal attenuation at 1 MHz : 3.5 dB/100 m
- ❑ Linear resistance: ≤ 146 ohms/Km.
- ❑ Insulation resistance: ≥ 1500 Mohms . Km.
- ❑ Voltage withstanding:
 - between conductors: 1000 volts
 - between conductors and shield: 1000 volts
- ❑ Jacket spark test: 1000 Volts
- ❑ Voltage rating : 250 Volts
- ❑ Maximum transfer impedance (m Ω /m):

DC current :	50
1MHz	50
10MHz	50
30 MHz	100

Physical characteristics

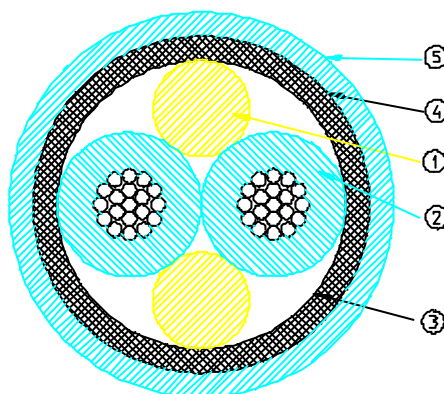
- ❑ Nominal weight : 14.5 g/m
- ❑ Maximum weight : 19 g/m.
- ❑ Minimum static bending radius : 15 mm
- ❑ Good resistance to aircraft fluids
- ❑ Temperature rating: -65°C to +150°C
- ❑ Outer jacket color : white
- ❑ Color of cores: white, blue

PRODUCT REFERENCES

ET 124960

CONSTRUCTION

- ① 2 FILLERS
PTFE
- ② 2 CORES
1 core : AWG 26
Cross section: 0.15 mm²
19 x 0.10 Silver plated copper alloy (EN2083)
Insulation : extruded PTFE
Diameter = 0.80 ± 0.05 mm
- ③ LAY UP
Nominal diameter: 1.60 mm
- ④ SHIELD
Silver plated copper 10/100
Diameter < 2.00 mm
- ⑤ JACKET
UV laser markable ETFE
OD 2.50 ± 0.10 mm



Marking

- "FILOTEX FRANCE ET 124960-***"
(**) = Year of manufacturing
- Red marking for the main line
(Nexans reference: ETUDE 124960-01)
- Blue marking for the branch line
(Nexans reference: ETUDE 124960-02)

Technical requirements and control conditions: according to pr EN 3375

ISSUE	DATE	PAGE	MODIFIED BY	DESCRIPTION OF MODIFICATION
1	21/10/97	1&2	NS	Creation of the document
2	09/03/98	1	NS	Study number added
3	26/06/98	1&2	NS	Color of marking added for identification of 01 and 02 variants
4	21/09/98	1&2	NS	SP number added on each page. Static bend radius added
5	12/07/99	1	NS	Capacitance data added.
6	27/09/99	1	NS	Mutual capacitance added (calculation formula $(2(ca + cb) - cc)/4$)