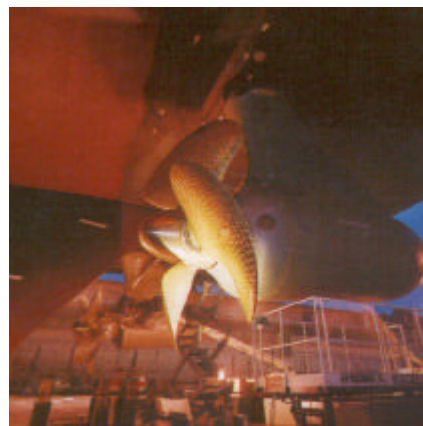
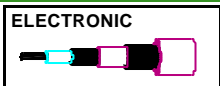


CABLES FOR SHIPBOARD INDUSTRY

Catalogue





Nexans

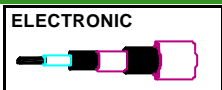
A leader worldwide as well as in Europe and France, Nexans is pleased to enable its customers to benefit from its leading-edge expertise across a broad line of high technology sectors. Telecommunication, civil and military electronics, transport, aeronautics, spatial, Nexans strives towards the same objective: to design, manufacture and distribute high performance data transmission cables vital to high technology industries.

The performance synergies between these industries keep Nexans at the leading edge providing products and solutions that best meet your interconnections requirements.

Application

Goods and people protection, miniaturization, electromagnetic compatibility, high temperature resistance, mechanical and chemical resistance in harsh environments, weight and space saving, optical elements : our range of cables is specially dedicated to the Shipboard Industry.

However, the following products represent an overview of our expertise. Indeed, our development and design engineers are at your disposal to provide their experience in customising any of our products to meet your specific requirements.



Summary

Part 1	Wiring cables: thin wall cables and weight performance cables	Page 4
	<i>FLAMEX halogen free cables</i>	<i>Page 5</i>
	<i>Halogen free multicore cables</i>	<i>Page 9</i>
Part 2	Coaxial cables for video and links between electronic equipments	Page 14
	<i>Coaxial cables 50 W</i>	<i>Page 15</i>
	<i>Coaxial cables 75 W</i>	<i>Page 19</i>
Part 3	Special cables	Page 26
	<i>Special cables for video-surveillance equipment</i>	<i>Page 27</i>
	<i>Low voltage cables</i>	<i>Page 32</i>
Part 4	Cables for computer network (LAN)	Page 36
Part 5	Field bus cables / Cables for industrial networks	Page 44
Part 6	Fiber optical cables	Page 51
Part 7	Sensor measurement cables	Page 60

Part 1

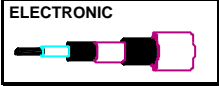
Wiring cables: thin wall cables and weight performance cables

FLAMEX

Halogen free cables

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Filotex[®]

Hook - up Wires : FLAMEX range

Applications

- Data transmission for on - board instrumentation and control equipment.

Fire Performance :

- Flame and fire retardant (IEC 332 - 1/2/3 Cat C),
- Halogen free cable (IEC 754 - 1),
- Non corrosive and non toxic cable (IEC 754 - 2),
- Low smoke emission and opacity (IEC 1034).

PRODUCT REFERENCES

FLAMEX SH24 SERIES

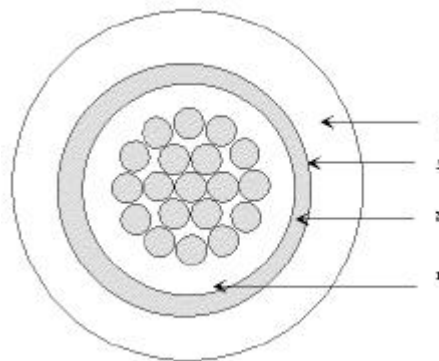
Main data :

- High temperature resistance (150°C : FLAMEX SH24),
- Small size (thin wall cables),
- Light weight (thin wall cables),
- High mechanical properties,
- High chemical resistance (acids, alkalis, oil, ...),
- Operating voltage : 750V.

CONSTRUCTION

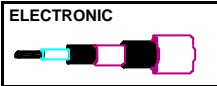
- ① CONDUCTOR
Stranded annealed Tin
Copper
- ② INSULATION : Halogen free
FLAMEX SH24
- ③ SCREEN : Braid
Tin Plated Copper (+Tape)
- ④ JACKET : Halogen free (M16)
black
Ø = see the chart next page

Unscreened hook-up wires :



Standards :

- Approved Bureau Veritas,
- IEC332 - 3 Cat C,
- IEC 754 - 1 & - 2, IEC 1034.



Filotex®

Hook - up Wires : FLAMEX range

Unscreened and unjacketed Hook-up Wires

Designation	Gauge AWG	Conductor		Insulation		Average Weight (kg / km)	Insulation color
		Stranding n x Ø	Section (mm ²)	Min. Ø (mm)	Max. Ø (mm)		
FLAMEX 15 ⁽¹⁾ 0.22	24	7 x 0.20 TC	0.22	1.00	1.20	2.80	On order
FLAMEX 24 0.38	22	19 x 0.16 TC	0.38	1.10	1.30	4.60	On order
FLAMEX 24 0.60	20	19 x 0.20 TC	0.60	1.30	1.50	6.80	Yellow
FLAMEX 24 0.93	18	19 x 0.25 TC	0.93	1.55	1.75	10.20	White
FLAMEX 24 1.00	18	32 x 0.20 TC	1.00	1.60	1.80	10.70	On order
FLAMEX 24 1.34	16	19 x 0.30 TC	1.34	1.80	2.00	14.00	Green
FLAMEX 24 1.50	16	30 x 0.25 TC	1.50	1.95	2.15	15.80	On order
FLAMEX 24 1.82	14	37 x 0.25 TC	1.82	2.10	2.40	19.10	Yellow
FLAMEX 24 2.61	14	37 x 0.30 TC	2.61	2.50	2.80	27.20	White

TC : Tinned Copper / (1) FLAMEX 15 : maximum operating temperature = +130°C.

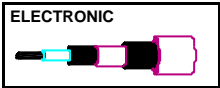
- Standard color available for any FLAMEX 24 cross section : white, blue, yellow – green, brown, black, red, grey (above mentioned colors are on stock versions)
- Marking : E X.XX – NFF 63-808-239-FILOTEx P2- ** ** (X.XX : cross section, ** ** production week and year)

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Issue 2 - June 2001 - 7 -



Filotex®

Hook - up Wires : FLAMEX range

Screened and Jacketed Hook-up Wires

Designation	Gauge AWG	Conductor		Insulation Nominal Ø (mm)	Cable Nominal Ø (mm)	Average Weight (kg / km)
		Stranding n x Ø	Section (mm ²)			
FLAMEX 24 16 0.38 BLG	22	19 x 0.16 TC	0.38	1.20 ± 0.10	2.25 ± 0.20	11.50
FLAMEX 24 16 0.60 BLG	20	19 x 0.20 TC	0.60	1.40 ± 0.10	2.55 ± 0.20	14.50
FLAMEX 24 16 0.93 BLG	18	19 x 0.25 TC	0.93	1.65 ± 0.10	2.70 ± 0.20	19.00
FLAMEX 24 16 1.00 BLG	18	32 x 0.20 TC	1.00	1.70 ± 0.10	2.70 ± 0.20	19.00
FLAMEX 24 16 1.34 BLG	16	19 x 0.30 TC	1.34	1.90 ± 0.10	2.95 ± 0.20	24.00
FLAMEX 24 16 1.50 BLG	16	30 x 0.25 TC	1.50	2.05 ± 0.10	3.10 ± 0.20	27.00
FLAMEX 24 16 1.82 BLG	14	37 x 0.25 TC	1.82	2.25 ± 0.15	3.40 ± 0.20	32.00
FLAMEX 24 16 2.61 BLG	14	37 x 0.30 TC	2.61	2.65 ± 0.15	3.80 ± 0.20	42.50

TC : Tinned Copper

- Standard color available for any FLAMEX 24 cross section : white, blue, yellow – green, brown, black, red, grey
- Marking : E X.XX BLG – NFF 63-808-239-FILOTEX P2- ** ** (X.XX : cross section, ** ** production week and year)

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Issue 2 - June 2001 - 8 -

Halogen free multicore cables



Filotex®

Multicore Cable Halogen free 2X2.50 G

PRODUCT REFERENCES

FILOTEX Ref : **ET 297 122**

CONSTRUCTION

- ① 2 CORES :
50x0.25 mm or 37x0.30 mm
Tinned Copper (2.50mm²)
Insulation : Halogen free
Ø = 2.45 mm
- ② TAPE : Polyester separator
- ③ JACKET : halogen free
black

Ø = 6.00 mm ± 0.30mm

Applications

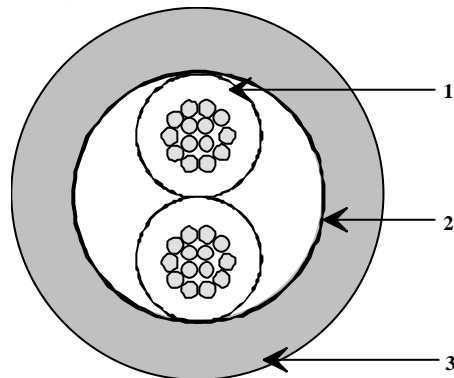
- ❑ Data transmission cable,
- ❑ dedicated to the shipboard industry,
- ❑ Thin wall cable.

Main data

- ❑ Multi core unshielded cable,
- ❑ Flame retardant (IEC 332/1),
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Operating temperature : -30°C to + 105°C,
- ❑ Low toxicity index.

Electrical data

- ❑ Operating voltage : 250V



Standard :

- ❑ Bureau Veritas and Lloyd's Register (approved)

Cores color :

- ❑ Black, red

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Filotex®

Multicore Cable Halogen free 3X1.50 G

PRODUCT REFERENCES

FILOTEX Ref : **ET 2PB421**

CONSTRUCTION

① 3 CORES :
30x0.25 mm or 37x0.223 mm
Tinned Copper (1.50mm²)
Insulation : Halogen free
Ø = 2.00 mm

② TAPE : Polyester separator

③ JACKET : halogen free
black

Ø = 5.40 mm ± 0.30mm

Applications

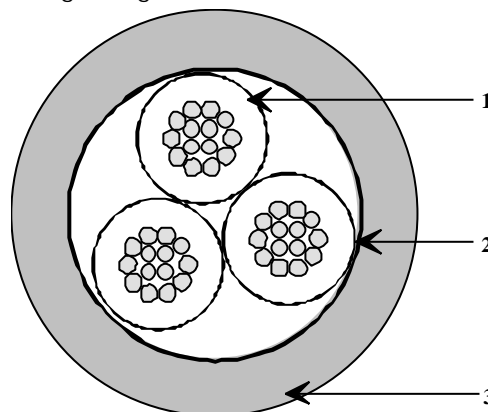
- ❑ Data transmission cable,
- ❑ dedicated to the shipboard industry,
- ❑ Thin wall cable.

Main data

- ❑ Multi core unshielded cable,
- ❑ Flame retardant (IEC 332/1),
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Operating temperature : -30°C to + 105°C,
- ❑ Low toxicity index.

Electrical data

- ❑ Operating voltage : 250V



Standard :

- ❑ Bureau Veritas and Lloyd's Register (approved)

Cores color :

- ❑ Black, red, yellow /green

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Issue 2 - June 2001 - 11 -



Filotex®

Multicore Cable Halogen free 3X2.50 G

PRODUCT REFERENCES

FILOTEX Ref : **ET 297 123**

CONSTRUCTION

- ① 3 CORES :
50x0.25 mm or 37x0.30 mm
Tinned Copper (2.50mm²)
Insulation : Halogen free
Ø = 2.45 mm
- ② TAPE : Polyester separator
- ③ JACKET : halogen free
black

Ø = 6.40 mm ± 0.30mm

Applications

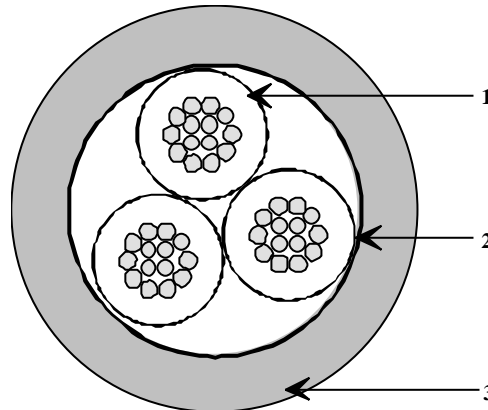
- ❑ Data transmission cable,
- ❑ dedicated to the shipboard industry,
- ❑ Thin wall cable.

Main data

- ❑ Multi core unshielded cable,
- ❑ Flame retardant (IEC 332/1),
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Operating temperature : -30°C to + 105°C,
- ❑ Low toxicity index.

Electrical data

- ❑ Operating voltage : 250V



Standard :

- ❑ Bureau Veritas and Lloyd's Register (approved)

Cores color :

- ❑ Black, red, yellow /green



Filotex[®]

Multicore Cable Halogen free 5X2.50 G

PRODUCT REFERENCES

FILOTEX Ref : **ET 297 150**

CONSTRUCTION

- ① 5 CORES :
50x0.25 mm or 37x0.30 mm
Tinned Copper (2.50mm²)
Insulation : Halogen free
Ø = 2.45 mm
- ② TAPE : Polyester separator
- ③ JACKET : halogen free
black

Ø = 8.00 mm ± 0.30mm

Applications

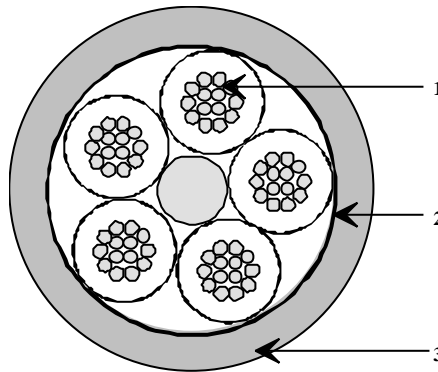
- ❑ Data transmission cable,
- ❑ dedicated to the shipboard industry,
- ❑ Thin wall cable.

Main data

- ❑ Multi core unscreened cable,
- ❑ Flame retardant (IEC 332/1),
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Operating temperature : -30°C to + 105°C,
- ❑ Low toxicity index.

Electrical data

- ❑ Operating voltage : 250V



Standard :

- ❑ Bureau Veritas and Lloyd's Register (approved)

Cores color :

- ❑ Black, red, yellow /green /, blue and braun

Part 2

Coaxial cables for video and links between electronic equipments

Coaxial cables 50 W

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Coaxial Cable FLAMEX Type KX 4 (50 Ohms) Halogen free

PRODUCT REFERENCES

FILOTEX Ref. : **ET 299 947**

CONSTRUCTION

- ① CONDUCTOR :
7 x 0.75 mm Red Copper
- ② INSULATION :
Polyethylene
Ø = 7.25 mm
- ③ SCREEN
0.18 mm Red Copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
Ø = 10.30 mm ± 0.20 mm

Applications

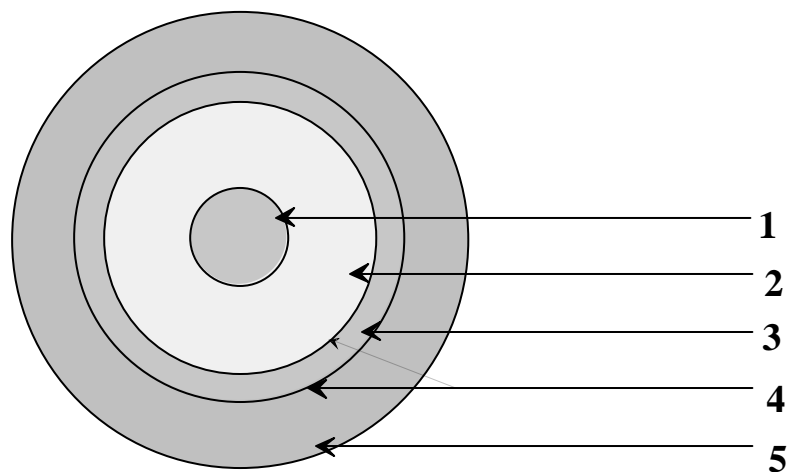
- ❑ Type KX4 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 158 kg/km.

Electrical data

- ❑ Data according to NFC 93550
- ❑ Impedance : 50 Ω,
- ❑ Nominal capacity : 100 pF / m.



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Issue 2 - June 2001 - 16 -

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Filotex®

**Coaxial Cable
FLAMEX Type KX 13
(50 Ohms)
Halogen free**

PRODUCT REFERENCES

FILOTEX Ref. : **ET 299 948**

CONSTRUCTION

- ① CONDUCTOR :
7 x 0.75 mm
Silver plated Copper
- ② INSULATION :
Polyethylene
Ø = 7.25 mm
- ③ SCREEN
Silver plated Copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
Ø = 10.80 mm ± 0.20 mm

Applications

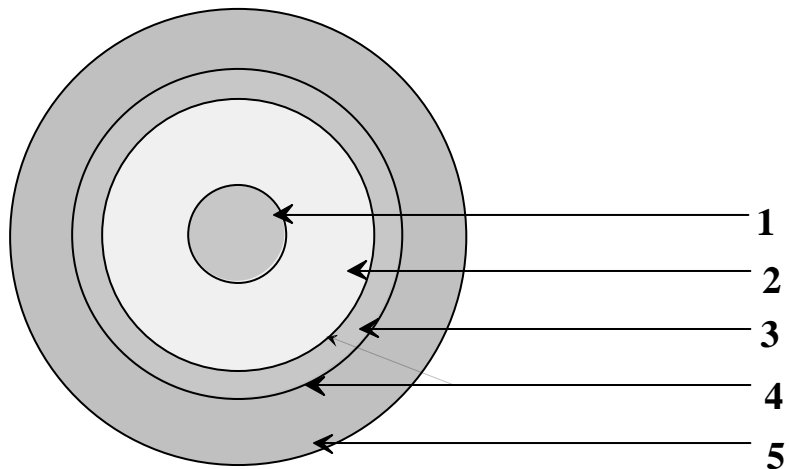
- ❑ Type KX13 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 196 kg/km.

Electrical data

- ❑ Impedance : 50 Ω,
- ❑ Nominal capacity : 100 pF / m.



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Issue 2 - June 2001 - 17 -

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Filotex®

Coaxial Cable FLAMEX Type KX 15 (50 Ohms) Halogen free

PRODUCT REFERENCES

FILOTEX Ref. : ET 299 949

CONSTRUCTION

- ① CONDUCTOR :
19 x 0.18 mm
Tin plated Copper
- ② INSULATION :
Polyethylene
Ø = 2.95 mm
- ③ SCREEN
Tin plated copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
Ø = 4.95 mm ± 0.15 mm

Applications

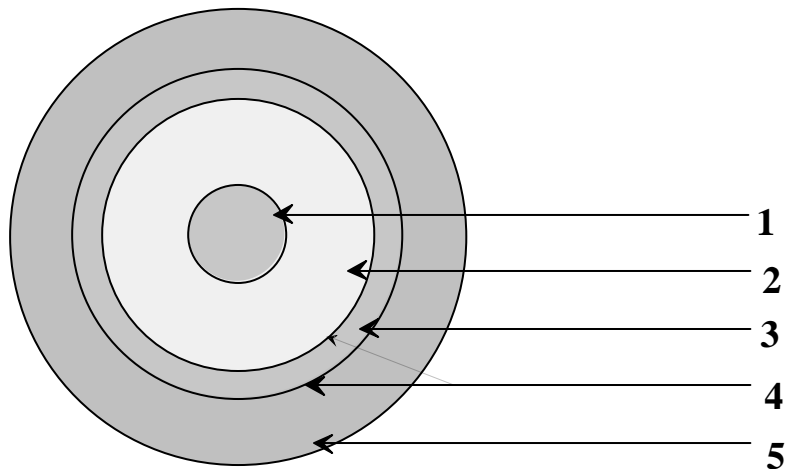
- ❑ Type KX15 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 42 kg/km.

Electrical data

- ❑ Impedance : 50 Ω,
- ❑ Nominal capacity : 100 pF / m.



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Issue 2 26/09/2001

Coaxial cables 75 W



Filotex[®]

RG 59 BU
COAXIAL 75 W
85°C Polyethylene

REFERENCE PRODUIT

FILOTEX Ref : **ET 373757**

CONSTRUCTION

- 1- CONDUCTOR:
 Solid copper clad steel
 1x0.57
 $\varnothing = 0.57 \text{ mm}$
- 2- INSULATION:
 Solid polyethylene
 $\varnothing = 3.71 \text{ mm} \pm 0.10$
- 3- SCREEN:
 Single braid
 Bare copper
- 4- JACKET:
 PVC
 $\varnothing = 6.15 \text{ mm} \pm 0.10$

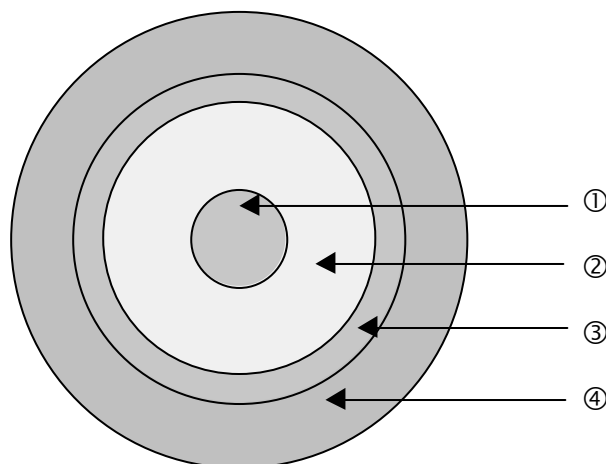
To: MIL C17 US specification

Main Characteristics

- Operating temperature: - 40 to +85°C
- Continuous working voltage: 1700 volts
- Maximum operating frequency: 1 GHz
- Good resistance to flame NFC 32070/C2 & CEI 332 - 1&2
- Capacitance: < 72.2 pF/m
- Relative velocity of propagation: 65.9 %
- Characteristic impedance at 200 MHz: $75 \pm 3 \Omega$
- Attenuation at 100 MHz: 5.8 dB/100m
- Nominal weight: 50 kg/km

Application

High frequency connections.





Filotex[®]

Coaxial Cable Type RG 6 AU (75 Ohms) Halogen free

PRODUCT REFERENCES

FILOTEX Ref. : **ET 299 964**

CONSTRUCTION

- ① CONDUCTOR :
0.72 mm Copper covered
Steel
- ② INSULATION :
Polyethylene $\varnothing = 4.70$ mm
- ③ SCREEN
0.16 mm Silvered Copper braid
0.16 mm Silvered Copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
 $\varnothing = 8.43$ mm

Applications

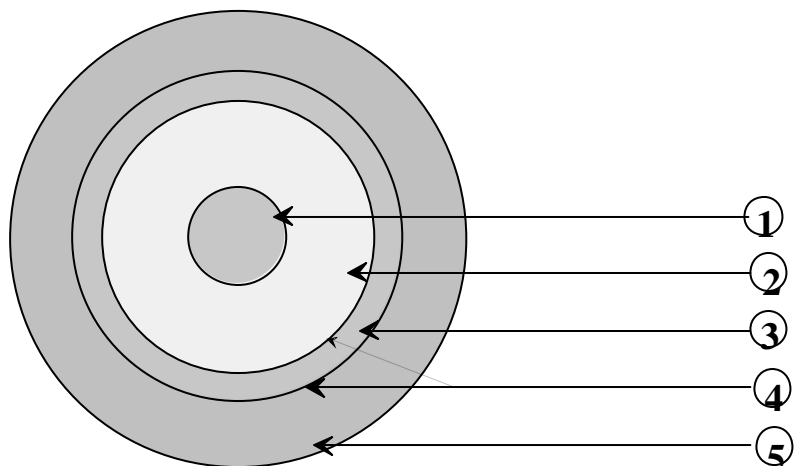
- ❑ Type RG6 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 112 kg/km.

Electrical data

- ❑ Data according to MIL C17 / Type RG6,
- ❑ Impedance : $75 \Omega \pm 3 \Omega$,
- ❑ Nominal capacity : 70 pF / m,
- ❑ Propagation velocity : 66 %.





Filotex[®]

Coaxial Cable Type RG 11 AU (75 Ohms) Halogen free

PRODUCT REFERENCES

FILOTEX Ref. : **ET 299 953**

CONSTRUCTION

- ① CONDUCTOR :
7 x 0.40 mm Tinned Copper
- ② INSULATION :
Polyethylene
Ø = 7.24 mm +/- 0.18 mm
- ③ SCREEN
Bare Copper braid
- ④ TAPES separator
- ⑤ JACKET : halogen free
Ø = 10.30 mm ± 0.18 mm

Applications

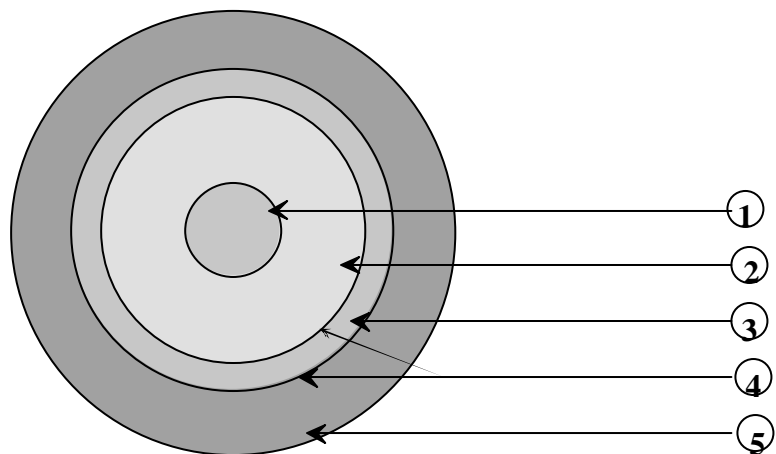
- ❑ Type RG11 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to +80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 146 kg/km.

Electrical data

- ❑ Data according to MIL C17 / Type RG11,
- ❑ Impedance : 75 Ω ± 3 Ω,
- ❑ Nominal capacity : 72.2 pF / m maxi,
- ❑ Propagation velocity : 66 %.





Filotex[®]

**Coaxial Cable
FLAMEX Type RG 34 BU
(75 Ohms)
Halogen free**

PRODUCT REFERENCES

FILOTEX Ref. : **ET 297 147**

CONSTRUCTION

- ① CONDUCTOR :
7 x 0.63 mm Red Copper
(2.18 mm²)
- ② INSULATION :
Polyethylene
∅ = 11.70 ± 0.25 mm
- ③ SCREEN
0.18 mm Red Copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
∅ = 16 mm ± 0.25 mm

Applications

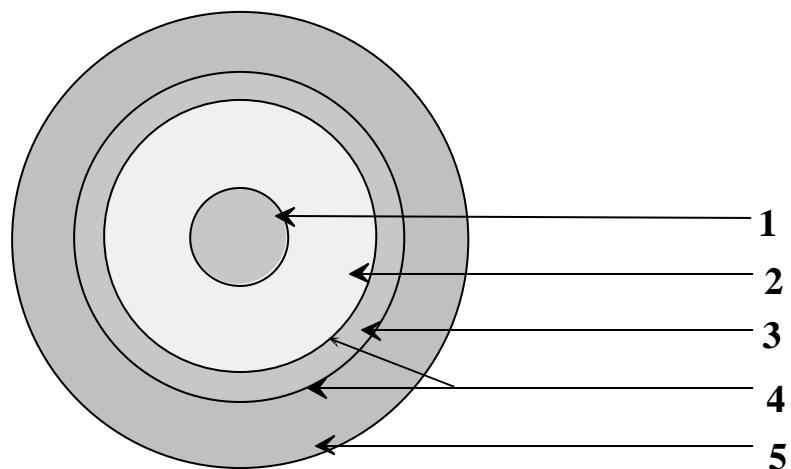
- ❑ Type RG34 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 311 kg/km.

Electrical data

- ❑ Data according to MIL C17 / Type RG34,
- ❑ Impedance at 200 MHz: 75 Ω ± 3 Ω,
- ❑ Nominal capacity : 70 pF / m,
- ❑ Propagation velocity : 66 %
- ❑ Attenuation at 400 MHz : ≤ 12.5 dB/100 m



ELECTRONIC



Filotex[®]

Coaxial Cable FLAMEX Type KX 6 A (75 Ohms) Halogen free

PRODUCT REFERENCES

FILOTEX Ref. : ET 299 952

CONSTRUCTION

- ① CONDUCTOR :
7 x 0.20 mm Red Copper
- ② INSULATION :
Polyethylene
Ø = 3.70 mm
- ③ SCREEN
0.16 mm Red Copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
Ø = 6.10 mm ± 0.15 mm

Applications

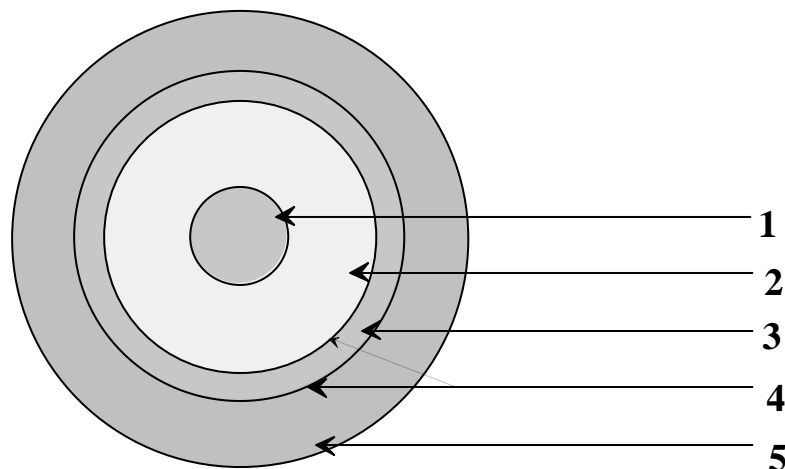
- ❑ Type KX6A Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 53 kg/km.

Electrical data

- ❑ Impedance : 75 Ω,
- ❑ Nominal capacity : 67 pF / m.



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Issue 2 - June 2001 - 24 -

ELECTRONIC



Filotex[®]

Coaxial Cable FLAMEX Type KX 8 (75 Ohms) Halogen free

PRODUCT REFERENCES

FILOTEX Ref. : ET 299 951

CONSTRUCTION

- ① CONDUCTOR :
7 x 0.40 mm
Red Copper
- ② INSULATION :
Polyethylene
Ø = 7.25 mm
- ③ SCREEN
Red Copper braid
- ④ TAPES
- ⑤ JACKET : halogen free
Ø = 10.30 mm ± 0.20 mm

Applications

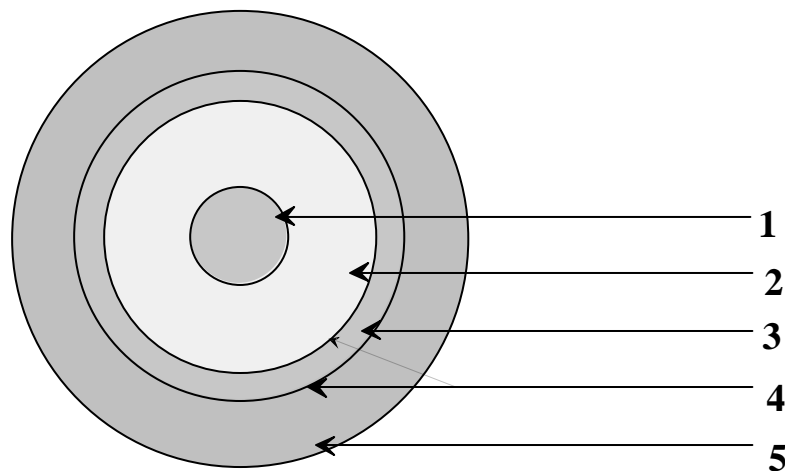
- ❑ Type KX8 Coaxial cable, flame and fire retardant (halogen free),
- ❑ For electronic video equipment.

Main data

- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Flame and fire retardant : IEC 332-1 and 3-Cat C,
- ❑ Average weight of the cable : 140 kg/km.

Electrical data

- ❑ Impedance : 75 Ω,
- ❑ Nominal capacity : 67 pF / m.



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 nexans

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Part 3

Special cables

Special cables for video-surveillance equipment

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Filotex®

Special Cable incl. Coaxial 75Ω, Bus and Power Cable

PRODUCT REFERENCES

FILOTEX Ref : **ET 2PC 023**

CONSTRUCTION

- ① FILLER
- ② 1 TRIPLE
 - ∅ = 5.25 mm
 - 30 x 0.25 Red Copper
(16 AWG / 1.50mm²)
 - Insulation: halogen free
 - ∅ = 2.40 mm
 - Color coding :red / white / blue
 ASSEMBLY incl. a polyester tape
- ③ 2 SCREENED PAIRS
 - ∅ = 5.40 mm
 - 12 x 0,20 Red Copper
Section 0.38 mm² / 22 AWG
 - Insulation : Halogen free
 - ∅ = 2.00 mm
 - Color coding : white / blue,
black jacket with "1" and "2"
marking
- ④ COAXIAL CABLE 75 Ω
Halogen free jacket
- ⑤ TAPE : Polyester
- ⑥ JACKET : halogen free dark blue
∅ = 14.50 mm ± 0.50 mm

Applications

- ❑ Data transmission cable for video - surveillance equipment,
- ❑ dedicated to shipboard industry.

Standards

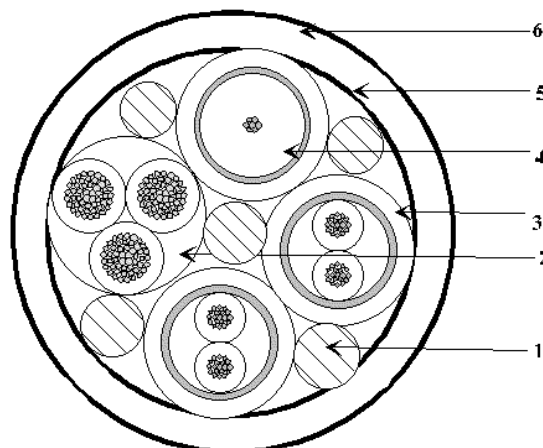
- ❑ Bureau Veritas approved

Main data

- ❑ Special cable incl. a 75 Ω coaxial cable, power and bus cable,
- ❑ Flame and fire retardant (IEC332-1/2/3 Cat C)
- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Average weight of the cable : 270 kg / km.

Electrical values

- ❑ Operating voltage : 250V,
- ❑ Conductor linear resistance (triple) : 13.3 Ω/km,
- ❑ Conductor linear resistance (pair) : 52.0 Ω/km,
- ❑ Coaxial cable impedance : 75 Ω ± 3 (at 200 MHz),
- ❑ Coaxial cable capacitance : 67 pf / m ± 3,
- ❑ Coaxial cable propagation velocity : 66 %,
- ❑ Coaxial cable attenuation : < 27.00 dB / 100 m (at 200 MHz)
< 5.90 dB / 100 m (at 10 MHz)
< 1.85 dB / 100 m (at 1 MHz)





Filotex®

Special Cable incl. Coaxial 75W, Bus and Power Cable

PRODUCT REFERENCES

FILOTEX Ref : **ET 2PC 024**

CONSTRUCTION

- ① FILLER
- ② 2 TRIPLES $\varnothing = 5.25$ mm
30 x 0.25 Red Copper
Section : 1.50 mm^2 / 16 AWG
Insulation: halogen free
 $\varnothing = 2.40$ mm
Color coding :
- red / white / blue
- yellow / white / blue
ASSEMBLY incl. a polyester tape
- ③ 2 SCREENED PAIRS
 $\varnothing = 5.40$ mm
12 x 0.20 Red Copper
Section 0.38 mm^2 / 22 AWG
Insulation : Halogen free
 $\varnothing = 2.00$ mm
Color coding : white / blue,
Black jacket with "1" and "2"
marking
- ④ COAXIAL CABLE 75 Ω
Halogen free jacket
- ⑤ TAPE : Polyester
- ⑥ JACKET : halogen free dark blue
 $\varnothing = 17.50 \text{ mm} \pm 0.50 \text{ mm}$

Applications

- ❑ Data transmission cable for video - surveillance equipment,
- ❑ dedicated to shipboard industry.

Standards

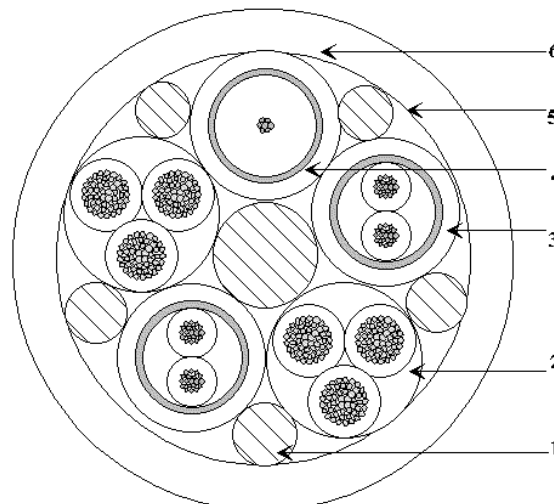
- ❑ Bureau Veritas approved

Main data

- ❑ Special cable incl. a 75 Ω coaxial cable, power and bus cable,
- ❑ Flame and fire retardant (IEC332-1/2/3 Cat C)
- ❑ Operating temperature : -30°C to $+80^\circ\text{C}$,
- ❑ Average weight of the cable: 380 kg / km.

Electrical values

- ❑ Operating voltage : 250V,
- ❑ Conductor linear resistance (triple) : $13.3 \Omega/\text{km}$,
- ❑ Conductor linear resistance (pair) : $52.0 \Omega/\text{km}$,
- ❑ Coaxial cable impedance : $75 \Omega \pm 3$ (at 200 MHz),
- ❑ Coaxial cable capacitance : $67 \text{ pf} / \text{m} \pm 3$,
- ❑ Coaxial cable propagation velocity : 66 %,
- ❑ Coaxial cable attenuation : $< 27.00 \text{ dB} / 100 \text{ m}$ (at 200 MHz)
 $< 5.90 \text{ dB} / 100 \text{ m}$ (at 10 MHz)
 $< 1.85 \text{ dB} / 100 \text{ m}$ (at 1 MHz)





Filotex[®]

Special Cable incl. Coaxial 75W, Bus and Power Cable

Applications

- ❑ Data transmission cable for video - surveillance equipment,
- ❑ dedicated to shipboard industry.

Standards

- ❑ Bureau Veritas approved

Main data

- ❑ Special cable incl. a coaxial cable KX6A, power and bus cable,
- ❑ Fire performance : flame and fire retardant (IEC332-1/2/3 Cat C)
- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Average weight of the cable: 400 kg / km.

PRODUCT REFERENCES

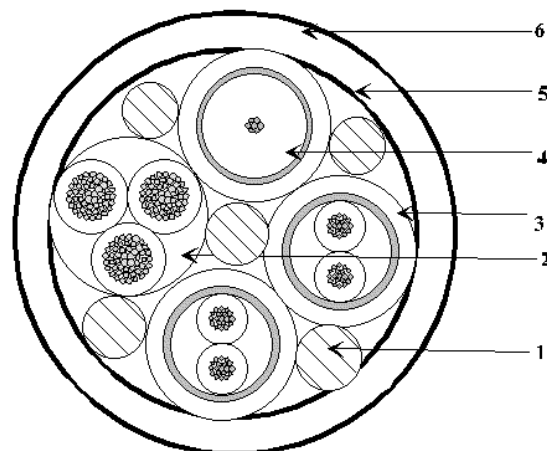
FILOTEX Ref : **ET 2PB 002**

CONSTRUCTION

- ① FILLER PVC
- ② 1 TRIPLE
50 x 0.25 Red Copper
Insulation: PVC $\varnothing = 2.90$ mm
Color coding : red / white / blue
ASSEMBLY incl. a polyester tape
- ③ 2 SCREENED PAIRS :
 $\varnothing = 6$ mm
19 x 0,20 Red Copper
Section 0.60 mm²
Insulation : PVC $\varnothing = 2.00$ mm
Color coding : white / blue,
black jacket with "1" and "2"
marking
- ④ COAXIAL CABLE KX6A
(NFC 93550)
- ⑤ TAPE : Polyester
- ⑥ JACKET : PVC dark blue
 $\varnothing = 16.7$ mm ± 0.50 mm

Electrical values

- ❑ Operating voltage : 250V,
- ❑ Coaxial cable impedance : $75 \Omega \pm 3$ (at 200 MHz),
- ❑ Coaxial cable capacitance : 67 pf / m ± 3 ,
- ❑ Coaxial cable attenuation : < 20 dB / 100 m (at 200 MHz)





Filotex®

Special Cable incl. Coaxial 75W, Bus and Power Cable

Applications

- ❑ Data transmission cable for video - surveillance equipment,
- ❑ dedicated to shipboard industry.

Standards

- ❑ Bureau Veritas approved

Main data

- ❑ Special cable incl. a coaxial cable KX6A, power and bus cable,
- ❑ Fire performance : flame and fire retardant (IEC332-1/2/3 Cat C)
- ❑ Operating temperature : -30°C to + 80°C,
- ❑ Average weight of the cable: 560 kg / km.

PRODUCT REFERENCES

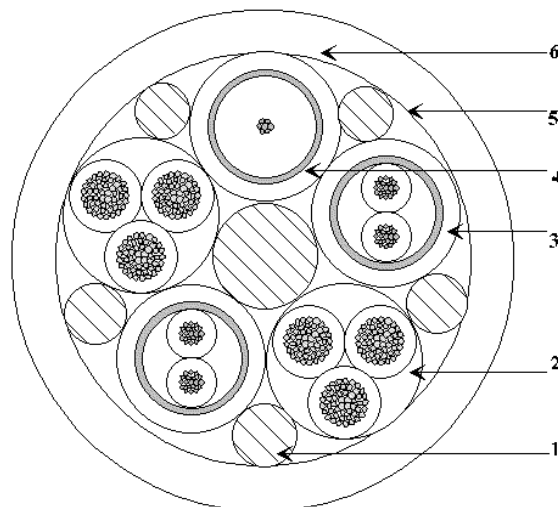
FILOTEX Ref : **ET 2PA 351**

CONSTRUCTION

- ① FILLER PVC
- ② 2 TRIPLES
50 x 0.25 Red Copper
Insulation: PVC $\varnothing = 2.90$ mm
Color coding :
- red / white / blue
- yellow / white / blue
ASSEMBLY incl. a polyester tape
- ③ 2 SCREENED PAIRS
 $\varnothing = 6$ mm
19 x 0,20 Red Copper
Section 0.60 mm²
Insulation : PVC $\varnothing = 2.00$ mm
Color coding : white / blue,
black jacket with "1" and "2"
marking
- ④ COAXIAL CABLE KX6A
(NFC 93550)
- ⑤ TAPE : Polyester
- ⑥ JACKET : PVC dark blue
 $\varnothing = 20.0$ mm ± 0.50 mm

Electrical values

- ❑ Operating voltage : 250V,
- ❑ Coaxial cable impedance : $75 \Omega \pm 3$ (at 200 MHz),
- ❑ Coaxial cable capacitance : 67 pf / m ± 3 ,
- ❑ Coaxial cable attenuation : < 20 dB / 100 m (at 200 MHz)



Low voltage cables



Filotex®

STUDY 123608

2 Cores of High Temperature PTFE Insulated Wire Shielded and Jacketed

PRODUCT REFERENCES

FILOTEX Ref : **ET 123608**

CONSTRUCTION

- ① CORES :
Stranded conductor :
19 x 0.25 Nickel plated
copper
0.21 mm to 0.34 mm Wall
Thickness PTFE Insulation
Diameter = 1.80 ± 0.12 mm
- ② Binder Tape
- ③ 0.12 mm Nickel plated
copper braid
- ④ Polyimide Tape
- ⑤ PTFE Tape
- ⑥ 0.20 mm Galvanized
steel braid
- ⑦ PFA Jacket, 0.31 mm
Nominal Wall Thickness
OD = 6.08 ± 0.10 mm

Applications

- General Electronic Wiring.

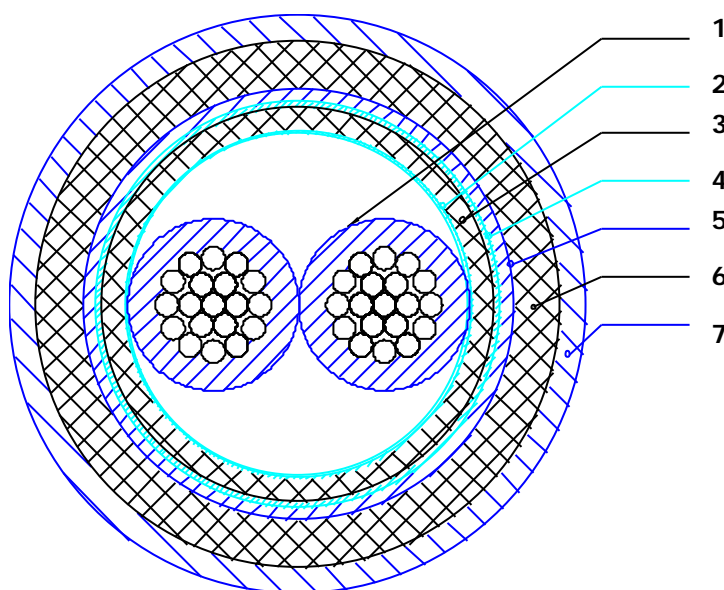
Main data

- Voltage Rating: 600 Volts (RMS),
- Low Operating Temperature: -90°C ,
- High Operating Temperature: $+250^{\circ}\text{C}$,
- Very Good Chemicals Resistance,
- Non Flammable,
- Average weight of the cable : 75 Kg/Km.

Identification

- Color of cores : White, Blue
- Color of Jacket : White

Specification : Study 123608





Filotex®

STUDY 123607

3 Cores of High Temperature PTFE Insulated Wire Shielded and Jacketed

PRODUCT REFERENCES

FILOTEX Ref : **ET 123607**

CONSTRUCTION

① CORES :

Stranded conductor :
19 x 0.30 Nickel plated
copper
0.21 mm to 0.38 mm Wall
Thickness PTFE Insulation

Diameter = 2.10 ± 0.17 mm

② Binder Tape

③ 0.20 mm Galvanized steel braid

④ MFA Jacket, 0.33 mm Nominal Wall Thickness OD = 6.27 ± 0.10 mm

Applications

- General Electronic Wiring.

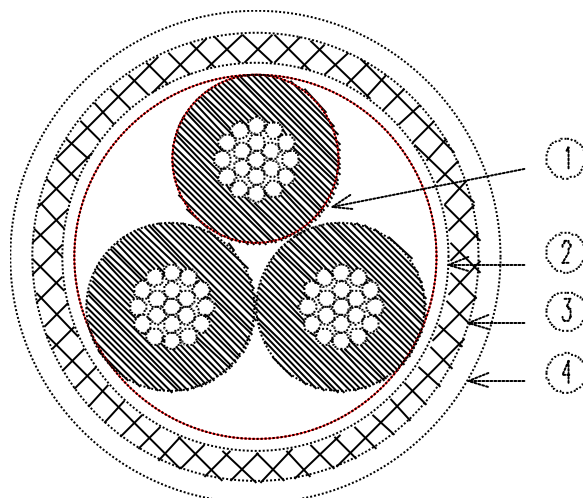
Main data

- Voltage Rating: 600 Volts (RMS),
- Low Operating Temperature: -55°C ,
- High Operating Temperature: $+250^{\circ}\text{C}$,
- Very Good Chemicals Resistance,
- Non Flammable,
- Average weight of the cable : 90.6 Kg/Km.

Identification

- Color of cores : White, Blue, Red
- Color of Jacket : Blue

Specification : Study 123607





Filotex®

STUDY 125351 4 cores of High Temperature PTFE Insulated Wire Shielded and Jacketed

PRODUCT REFERENCES

FILOTEX Ref : **ET 125351**

CONSTRUCTION

① CORES :

Stranded conductor :
19 x 0.20 Nickel plated copper
0.15 mm to 0.20 mm Wall
Thickness PTFE Insulation

Diameter = 1.35 ± 0.05 mm

② Binder Tape

③ 0.12 mm Nickel plated copper
braid

④ Polyimide Tape

PTFE Tape
 $\varnothing = 4.23 \pm 0.10$ mm

Applications

- General Electronic Wiring

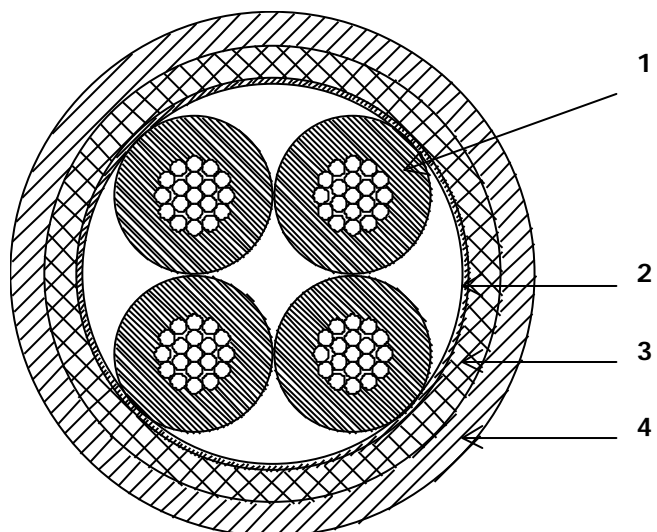
Main Data

- Voltage Rating : 250 Volts (RMS),
- Low Operating Temperature : -55 °C,
- High Operating Temperature : +260 °C,
- Very Good Chemicals Resistance,
- Non Flammable,
- Average weight of the cable : 45.8 Kg/Km.

Identification

- Color of cores : White, Red, White, Red
- Color of Jacket : White

Specification : Study 125351



Part 4

**Cables for
Computer network (LAN)**



Filotex®

STUDY 2PB443

PRODUCT REFERENCES

FILOTEX Ref : **ET 2PB 443**

CONSTRUCTION

- ① 7 x 0.75 mm Bare Copper
(3.09)
- ② Polyethylene Insulation
Ø : 7.30 mm.
- ③ 0.18 mm Bare Copper braid
Ø : 8.15 mm
- ④ Polyester separator tape
- ⑤ Black Halogen free Jacket
Ø : 10.3 mm +/- 0.17 mm
- ⑥ 0.18 mm Bare Copper braid
Ø : 11.00 mm
- ⑦ Black Halogen free Jacket
Ø : 12.40 mm +/- 0.40 mm

Applications

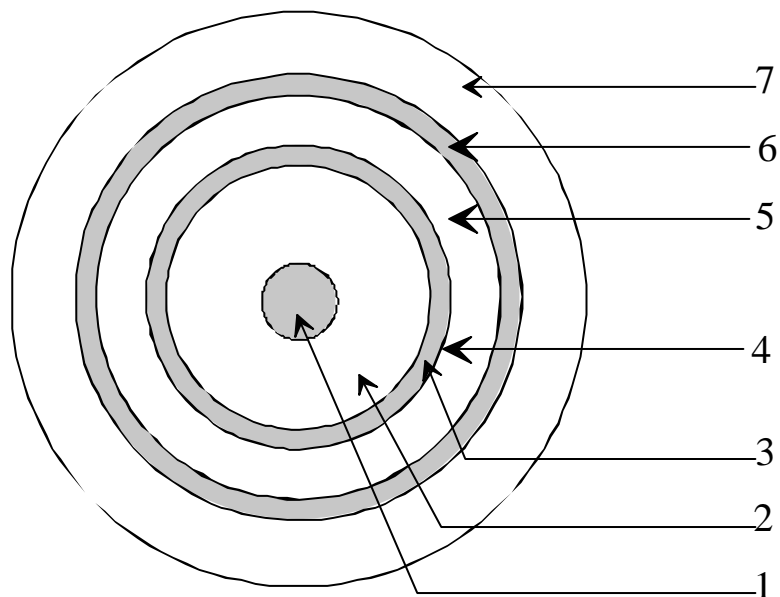
- ❑ Data transmission cable for on – board electronic equipment,
- ❑ Dedicated to shipboard industry.

Characteristics

- ❑ Electrical measurements in accordance with Mil C17
- ❑ Operating Temperature : -40 up to +95°C
- ❑ Zc: 52 Ohms +/- 2 Ohms at 200 MHz
- ❑ Capacity: 96 pF/m nominal
- ❑ Attenuation : 2.05 dB/100 m at 10 MHz
10.30 dB/100 at 200 MHz
15.40 dB/100 at 400 MHz
- ❑ Static Bend radius : 180 mm mini
- ❑ IEC 332-3 - NFF 16101 - IEC 754 1/2
- ❑ Average weight of the cable : 240 Kg/Km

Marking

- ❑ Printed in White : FILOTEX P – 2PB443





Filotex®

Category 5 FTP 4 pair and 2x4 pair shotgun

Applications

- Category 5 cables are the standard 100 MHz.
- They are suitable for basic installations.

Main data

- Operating temperature : -10°C to +40°C
- Fire behaviour: IEC 332.1
- Conform to ISO/IEC 11801 (International), EN 50173, EN 50167, EN 50168 (European), TIA/EIA 568A (American).

Electrical values

- Skew: 45 ns/100m
- Velocity of propagation: 68 %
- Propagation delay: < 536 ns/100m
- Transfer impedance: 45 mΩ/m
- Characteristic impedance: 100 ± 15Ω

PRODUCT REFERENCES

FILOTEX Ref :
ET 399 2501: FTP 4 pair
ET 399 2502:
FTP 2x4 pair shotgun

CONSTRUCTION

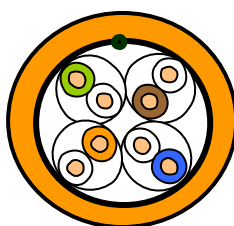
① FTP 4 pair unit
 0.52mm plain copper wire
 Foam skin PE insulation
 Ø = 1.04 mm
 Overall aluminium foil with a
 tinned copper drain wire

② JACKET: Halogen free
 orange sheath
 Ø = 5.90 mm

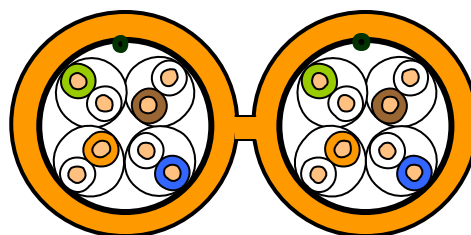
Cable weight:
 41 kg/km (FTP 4 pair)
 82 kg/km
 (FTP 2x4 pair shotgun)

Frequency MHz	Attenuation dB/100 m	NEXT pr/pr dB
1	2,0	65,3
4	4,1	56,3
10	6,5	50,3
16	8,2	47,3
20	9,3	45,8
31.25	11,7	42,9
62.5	17,0	38,4
100	22	35,3

FTP 4 pair



FTP 2x4 pair shotgun





Filotex®

FTP MultiCable 8x4 Pair and 16x4 Pair 100MHz Category 5 Backbone Cable

PRODUCT REFERENCES

FILOTEX Ref :
ET 399 2804: 8x4 pair
ET 399 2805: 16x4 pair

CONSTRUCTION

① FTP 4 pair unit
 0.52mm plain copper wire
 Foam skin PE insulation
 $\varnothing = 1.04 \text{ mm}$
 Overall aluminium foil with a
 tinned copper drain wire
 Halogen free jacket

② Tape

③ JACKET: Halogen free
 orange sheath
 $\varnothing = 21.5 \text{ mm}$ (8x4 pair)
 $\varnothing = 29.8 \text{ mm}$ (16x4 pair)

Cable weight:
 422 kg/km (8x4 pair)
 821 kg/km (16x4 pair)

Applications

- ❑ These cables are designed specifically for use in backbone applications.
- ❑ They are also commonly utilized in horizontal areas in place of 4 pair cables.
- ❑ Due to their specific screen design to give improved EMC Performance, they are ideal for installations that may be subject to higher than normal external electromagnetic noise.

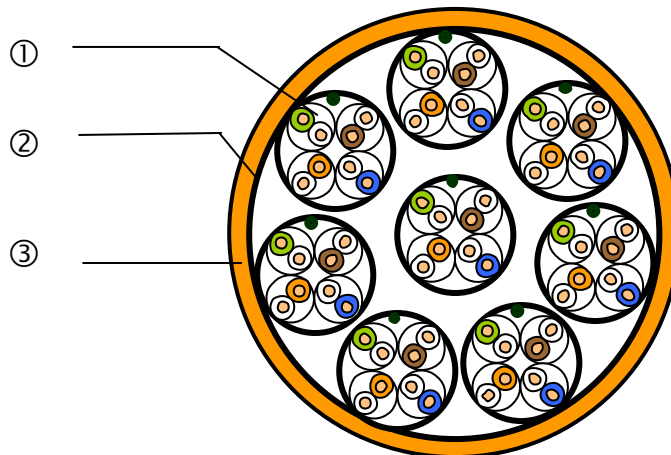
Main data

- ❑ Intended for high speed data applications up to 100 MHz
- ❑ Operating temperature : -20°C to $+60^{\circ}\text{C}$
- ❑ Conform to ISO/IEC 11801 (International), EN 50173, EN 50167, EN 50168 (European), TIA/EIA 568A (American).
- ❑ Fire behaviour: IEC 332.1

Electrical values

- ❑ Mutual capacitance: 56 nF/Km
- ❑ DC resistance: $94 \Omega / \text{Km}$
- ❑ Skew: 0.15 ns/m
- ❑ Pair to ground unbalance: max. 1600 F/km
- ❑ Velocity of propagation: 74 %
- ❑ Transfer impedance at 10 MHz: $80 \text{ m}\Omega/\text{m}$
- ❑ Characteristic impedance: $100 \pm 10\Omega$ from 1 to 100 MHz

Two cores twisted together to form a pair and four such pairs laid up to form the basic unit



Colour code

- Pair 1: white/blue ring – blue
- Pair 2: white/orange ring – orange
- Pair 3: white/green ring – green
- Pair 4: white/brown ring – brown

Technical data: electrical

Frequency MHz	Attenuation		NEXT	
	dB/100m		dB	
ISO/IEC 11801 EN 50173	Standard	Typical	Standard	Typical
1	2.1	2.0	62	65
4	4.3	4.1	53	56
10	6.6	6.3	47	50
16	8.2	7.8	44	47
20	9.2	8.8	42	45
31.25	11.8	11.2	40	43
62.5	17.1	16.2	35	33
100	22.0	21.0	32	35



Filotex®

Multipair Cable 4 pairs, AWG22 Halogen free

Applications

- ❑ Data transmission cable for on – board electronic equipment,
- ❑ Dedicated to shipboard industry.

PRODUCT REFERENCES

FILOTEX Ref : **ET 067 036**

CONSTRUCTION

- ① 4 PAIRS :
7 x 0,25 mm Tinned Copper
Section 0.34 mm² / AWG
22
Insulation : Polyolefin
Ø = 1.26 mm
Drain wire : 7x0.25 Tinned
Copper
Tape : Polyester Aluminum
Tape : Polyester separator
- ② TAPE : Polyester separator
- ③ JACKET : Halogen free, black
Ø = 7.50 mm ± 0.30mm

Main data

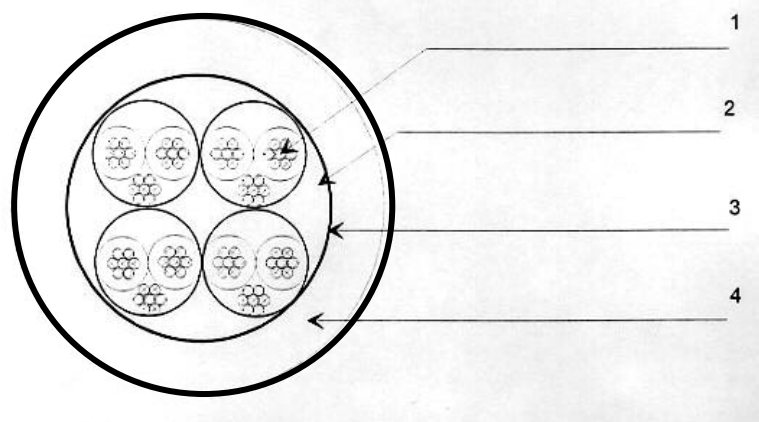
- ❑ Halogen free cable
- ❑ Flame retardant (IEC 332 - 1 / 2)
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Excellent chemical resistance (acids, oil, hydraulic fluids),
- ❑ Operating temperature : -20°C to + 80°C,
- ❑ Average weight of the cable : 82 kg/km,

Electrical values

- ❑ Operating voltage : 250V,

Pair Color Coding

- ❑ White and blue, white and red, white and yellow, white and green





Filotex[®]

Multipair Cable 6 pairs, AWG22 Halogen free

Applications

- ❑ Data transmission cable for on – board electronic equipment,
- ❑ Dedicated to shipboard industry.

PRODUCT REFERENCES

FILOTEX Ref : **ET 296 349**

Main data

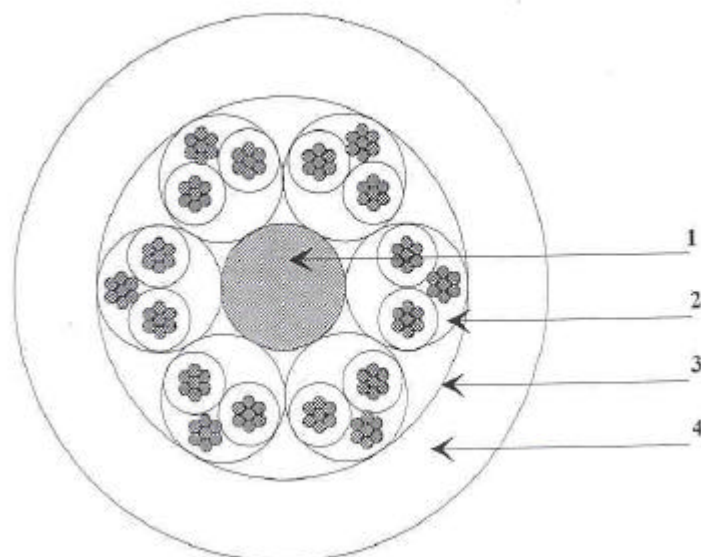
- ❑ Halogen free cable,
- ❑ Flame retardant (IEC 332 - 1 / 2)
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Excellent chemical resistance (acids, oil, hydraulic fluids),
- ❑ Operating temperature : -20°C to + 80°C,
- ❑ Average weight of the cable : 130 kg/km.

Electrical values

- ❑ Operating voltage : 250V

CONSTRUCTION

- ① FILLER
- ② 6 PAIRS :
7 x 0,25 mm Tinned Copper
Section 0.34 mm² / AWG 22
Insulation : Polyolefin
Ø = 1.26 mm ± 0.10mm
Drain wire : 7x0.25 Tinned Copper
Tape : Polyester Aluminum
- ③ TAPE : Polyester
- ④ JACKET : Halogen free, black
Ø = 9.20 mm ± 0.30mm





Filotex[®]

Multipair Cable 10 pairs, AWG22 Halogen free

Applications

- ❑ Data transmission cable for on – board electronic equipment,
- ❑ Dedicated to shipboard industry.

Main data

- ❑ Halogen free cable
- ❑ Flame retardant (IEC 332 - 1 / 2)
- ❑ Thin wall cable : lightness & weight performance,
- ❑ Excellent chemical resistance (acids, oil, hydraulic fluids),
- ❑ Operating temperature : -20°C to + 80°C,
- ❑ Average weight of the cable : 175 kg/km.

Electrical values

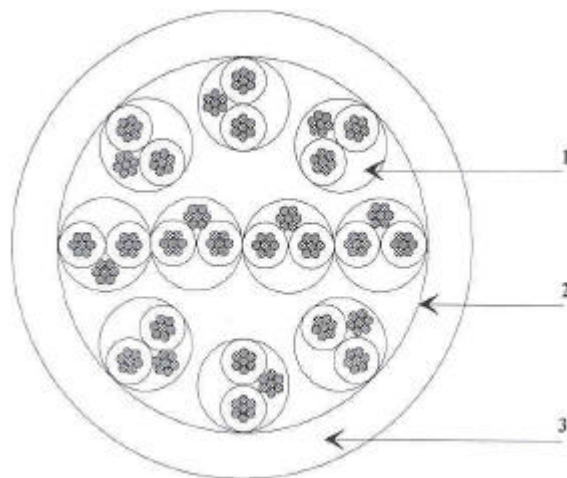
- ❑ Operating voltage : 250V

PRODUCT REFERENCES

FILOTEX Ref : **ET 296 348**

CONSTRUCTION

- ① 10 PAIRS :
7 x 0,25 mm Tinned Copper
Section 0.34 mm²/AWG 22
Insulation : Polyolefin
Ø = 1.26 mm ± 0.10mm
Drain wire : 7x0.25 Tinned
Copper
Tape : Polyester Aluminum
- ② TAPE : Polyester
- ③ JACKET : Halogen free, black
Ø = 10.40 mm ± 0.30mm



Part 5

Fieldbus cables Cables for industrial networks



Filotex[®]

1 Pair cable AWG 22 Halogen free cable for fieldbus

PRODUCT REFERENCES

FILOTEX Ref : **ET 296 356**

CONSTRUCTION

- ① 2 CORES (A) :
Solid conductor Copper 0,65mm
Section : 0,332 mm² AWG 22
Insulation : foamed Polyolefin
Ø = 2,55 mm
- ② 1 DRAIN WIRE (B) :
19 x 0,25 mm Tinned Copper
(0,894 mm²) AWG 18
- ③ TAPE alu polyester aluminum
- ④ JACKET, halogen free M20
Ø = 8,20 mm ± 0,20

Applications

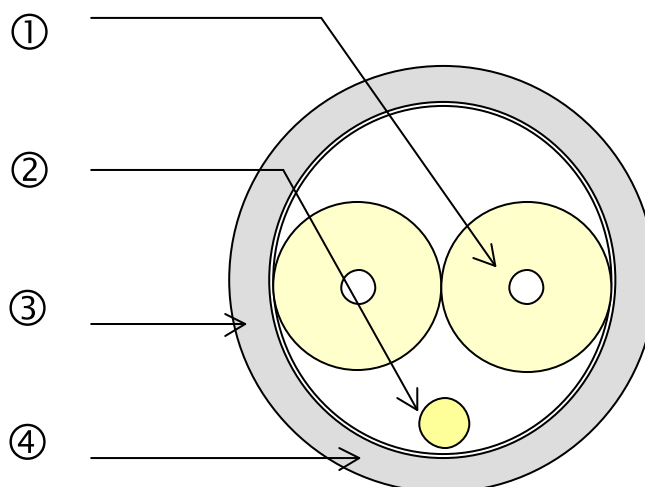
- ❑ Data transmission cable, fire retardant (halogen free),
- ❑ For industrial data network, in accordance with the norm EN50170 and compatible with fieldbus (e.g. FIP, Profibus),
- ❑ To be used for Trunk cable (network backbone).

Main data

- ❑ Halogen free cable,
- ❑ Fire performance : flame and fire retardant (NFC 32070 C1 and IEC 332-3),
- ❑ Smoke density and toxicity : CETEB 10 B,
- ❑ Conductor gauge AWG 22,
- ❑ Operating temperature (max.) : + 80°C,
- ❑ Average weight of the cable : 85 kg / km.

Electrical values

- ❑ Impedance : 150 Ω ± 10% at 1MHz,
- ❑ Attenuation : < 14 dB / km at 1 MHz,
- ❑ Operating voltage : 500 V,
- ❑ Conductor resistance : ≤ 57 Ω / km,
- ❑ Capacitance conductor / conductor : 37 pF / m.





Filotex[®]

2 Pairs cable AWG 22 Halogen free cable for fieldbus

PRODUCT REFERENCES

FILOTEX Ref: **ET 296 421**

CONSTRUCTION

- ① 2 CORES (B) :
 . 2 cores (A) pairs :
 Solid conductor Copper
 0.65mm
 Section : 0,332 mm² AWG 22
 Insulation : foamed Polyolefin
 Ø = 2,55 mm
 Drain wire 19x0,25 Tinned
 Cu
 . Tape Polyester Aluminum
 . Tape Separator Polyester
- ② TAPE aluminum polyester
 Aluminum
- ③ FILLER halogen free
- ④ JACKET halogen free M20
 Ø = 13,00 mm ± 0,30

Applications

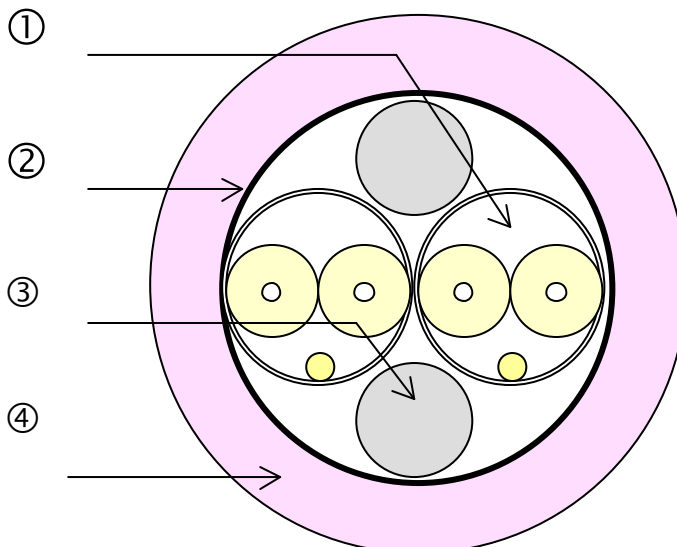
- ❑ Data transmission cable, fire retardant (halogen free),
- ❑ for industrial data network, in accordance with the norm EN50170 and compatible with fieldbus (e.g. FIP, Profibus),

Main data

- ❑ Halogen free cable,
- ❑ Fire performance : flame and fire retardant (NFC 32070 C1 and IEC 332-3),
- ❑ Smoke density and toxicity : CETEB 10 B,
- ❑ Conductor gauge AWG 22,
- ❑ Operating temperature (max.) : + 80°C,
- ❑ Average weight of the cable : 170 kg / km.

Electrical data

- ❑ Impedance : 150 Ω ± 10% at 1MHz,
- ❑ Attenuation : < 14 dB / km at 1 MHz,
- ❑ Operating voltage : 500 V,
- ❑ Conductor resistance : ≤ 57 Ω / km,
- ❑ Capacitance conductor / conductor : 37 pF / m,





Filotex[®]

Screened Cable 1 Pair, 22 AWG Halogen free cable for fieldbus

PRODUCT REFERENCES

FILOTEX Ref : **ET 298 719**

CONSTRUCTION

- ① 2 CORES (A) :
Solid conductor Copper 0.65 mm
Section : 0.34 mm² AWG 22
Insulation : foamed Polyolefine
Ø = 2.55 mm
- ② 1 DRAIN WIRE (B) :
19 x 0.25 mm Tinned Copper
(0.93mm²) AWG 18
- ③ TAPE
aluminum polyester aluminum
- ④ INNER JACKET halogen free
Ø = 6.40 mm ± 0.20
- ⑤ BRAID tinned copper
- ⑥ OUTER JACKET halogen free
M20 Ø = 9.80 mm ± 0.25

Applications

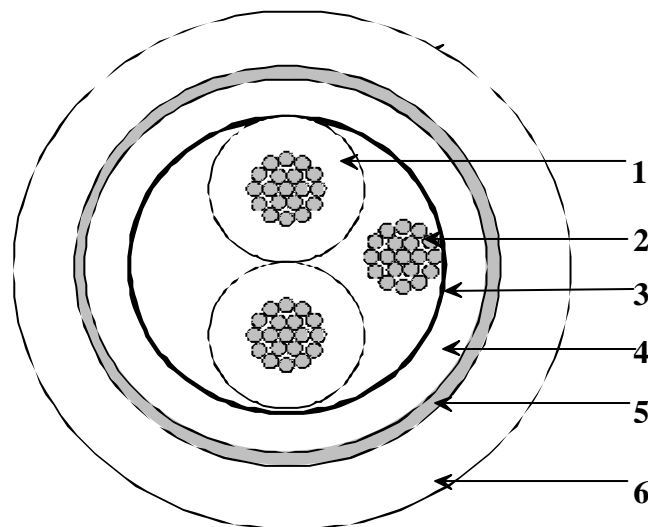
- ❑ Data transmission cable, fire retardant (halogen free),
- ❑ For industrial data network, in accordance with the norm EN50170 and compatible with fieldbus (e.g. FIP, Profibus),

Main data

- ❑ Halogen free cable,
- ❑ Fire performance : flame and fire retardant (NFC 32070 C1 and IEC 332-3),
- ❑ Smoke density and toxicity : CETEB 10 B,
- ❑ Operating temperature (max.) : + 80°C,
- ❑ Average weight of the cable : 154 kg / km.

Electrical data

- ❑ Impedance : 150 Ω ± 10% at 1MHz,
- ❑ Attenuation : < 14 dB / km at 1 MHz,
- ❑ Operating voltage : 500 V,
- ❑ Conductor resistance : ≤ 57 Ω / km,
- ❑ Capacitance conductor / conductor : 37 pF / m,





Filotex®

Screened Cable 2 Pairs AWG 22 Halogen free cable for fieldbus

PRODUCT REFERENCES

FILOTEX Ref : **ET 296 328**

CONSTRUCTION

- ① 2 CORES (B) :
 . 2 cores (A) pairs :
 solid cond. Copper 0,65 mm
 Section : 0,332 mm² AWG 22
 Insulation : foamed Polyolefin
 Ø = 2,55 mm
 Drain wire 19 x 0,25 Tinned Cu
 . Tape Polyester Aluminum
 . Tape Separator Polyester
- ② TAPE aluminum polyester
 Aluminum
- ③ INNERJACKET, halogen free
 Ø = 11,50 mm ± 0,40
- ④ BRAID tinned copper 0,20 mm
- ⑤ OUTERJACKET, halogen free
 M20 Ø = 15,00 mm ± 0,40

Applications

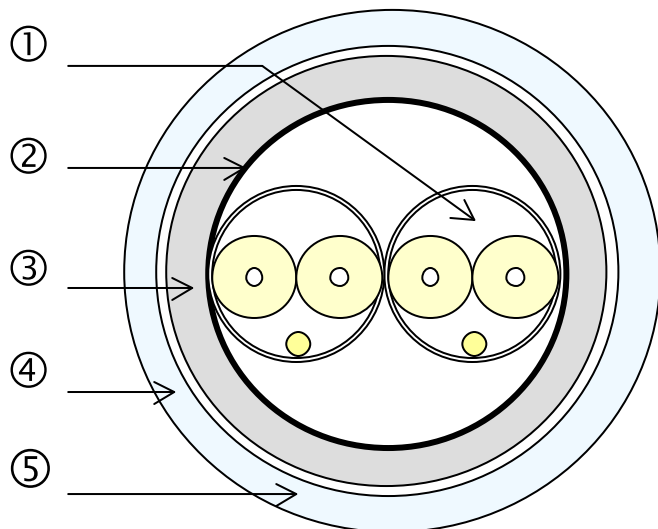
- ❑ Data transmission cable, fire retardant (halogen free),
- ❑ For industrial data network, in accordance with the norm EN50170 and compatible with fieldbus (e.g. FIP, Profibus).

Main data

- ❑ Halogen free cable,
- ❑ Fire performance : flame and fire retardant (NFC 32070 C1 and IEC 332-3),
- ❑ Smoke density and toxicity : CETEB 10 B,
- ❑ Conductor gage AWG 22,
- ❑ Operating temperature (max.) : + 80°C,
- ❑ Average weight of the cable : 312 kg / km.

Electrical data

- ❑ Impedance : 150 Ω ± 10% at 1MHz,
- ❑ Attenuation : < 14 dB / km at 1 MHz,
- ❑ Operating voltage : 500 V,
- ❑ Conductor resistance : ≤ 57 Ω / km,
- ❑ Capacitance conductor / conductor : 37 pF / m,





Filotex®

Screened Cable 1 Pair 22 AWG + Power Supply 16 AWG Halogen free cable for Fieldbus

Applications

- ❑ Data transmission cable, fire retardant (halogen free),
- ❑ for industrial data network, in accordance with the norm EN50170 and compatible with fieldbus (e.g. FIP, Profibus),
- ❑ including a power supply cable.

PRODUCT REFERENCES

FILOTEX Ref : **ET 298 720**

Main data

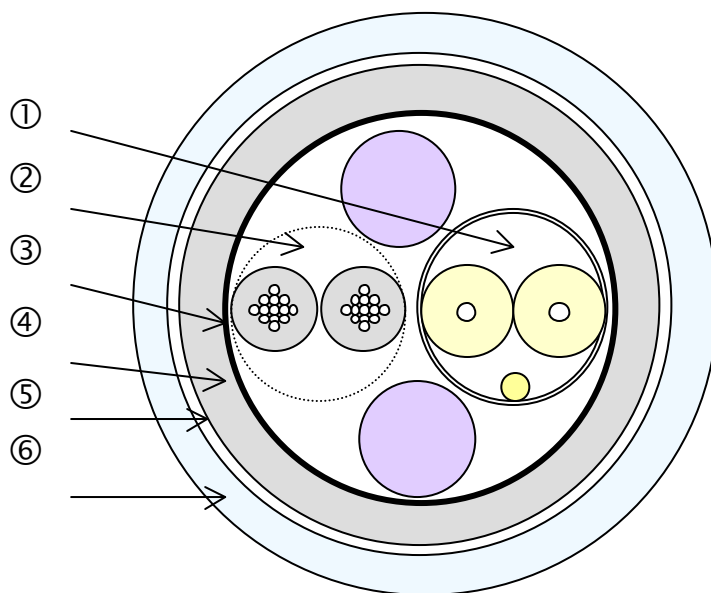
- ❑ Halogen free cable,
- ❑ Fire performance : flame and fire retardant (NFC 32070 C1 and IEC 332-3),
- ❑ Smoke density and toxicity : CETEB 10 B,
- ❑ Operating temperature (max.) : + 80°C,
- ❑ Average weight of the cable : 330 kg / km.

CONSTRUCTION

- ① 1 PAIR :
Solid Copper 0,65 mm
Section : 0,332 mm² AWG 22
Insulation : foamed Polyolefine
Ø = 2,55 mm
Drain wire (Tinned copper)
/ Tape Polyester Aluminum
- ② 2 CORES (B) :
37 x 0,223 mm Tinned Copper
Section : 1,45mm² AWG 16
Insulation : halogen free
Ø = 2,20 mm ± 0,05
- ③ TAPE separator Polyester
- ④ INNERJACKET halogen free
Ø = 11,50 mm ± 0,40
- ⑤ BRAID tinned copper 0.20mm
- ⑥ OUTER JACKET halogen free
M20 Ø = 15,00 mm ± 0,40

Electrical data

- ❑ Impedance : 150 Ω ± 10% at 1MHz,
- ❑ Attenuation : < 14 dB / km at 1 MHz,
- ❑ Operating voltage : 500 V,
- ❑ Conductor resistance : ≤ 57 Ω / km,
- ❑ Capacitance conductor / conductor : 37 pF / m,





Filotex[®]

PAIR AWG 24 Screened and PU Jacketed

PRODUCT REFERENCE

FILOTEX Ref : **2PC 496**

CONSTRUCTION

① FILLERS

② PAIR :

Conductor :
7 x 0.20 mm bare copper
(0.22mm²/AWG24),

Insulation : Foam PP
Ø = 2.55 mm nom,

③ POLYESTER / ALU FOIL :

Alu outside Kr ≥ 25%,

④ SHIELD :

Braid of bare copper 0.145mm
Kr ≥ 62%,

⑤ JACKET : OHAL PU

Ø = 7.00 ± 0.20 mm,

Application:

- ❑ FIP cable (Busline),

Main Characteristics

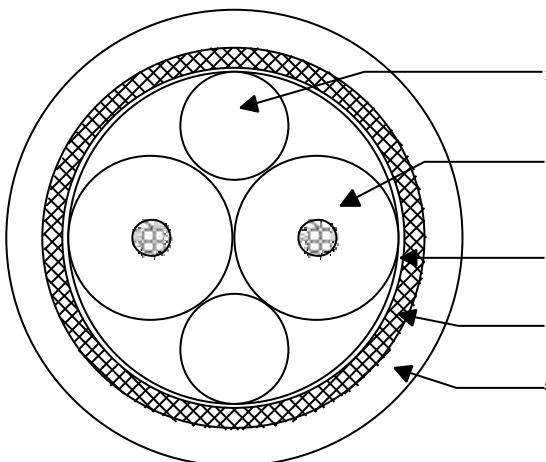
- ❑ Halogen free cable,
- ❑ This cable is flame retardant (to IEC332/1),
- ❑ Bending radius : 65mm in static,
- ❑ Operating temperature : -30°C to +80°C,

Color code

- ❑ Item 2 : to be defined,
- ❑ Item 5 : Purple RAL 4005,

Electrical values

- ❑ Operating voltage : 225 VAC,
- ❑ Linear resistance of conductor ≤ 152Ω / Km at 20°C,
- ❑ Linear resistance of shield ≤ 10Ω / Km at 20°C,
- ❑ Insulation resistance : 5GΩ x Km,
- ❑ Capacitance : 30nF/Km nom at 800Hz,
- ❑ Impedance : 185 ± 18 Ω at 38.4KHz,
- ❑ Impedance : 150 ± 15 Ω at 3 to 20MHz,
- ❑ Attenuation : 0.5dB/100m max at 38.4KHz,
2.5dB/100m max at 4MHz,
5.2dB/100m max at 16MHz,



Part 6

Fiber optical cables



Filotex[®]

STUDY 2PC020

PRODUCT REFERENCES

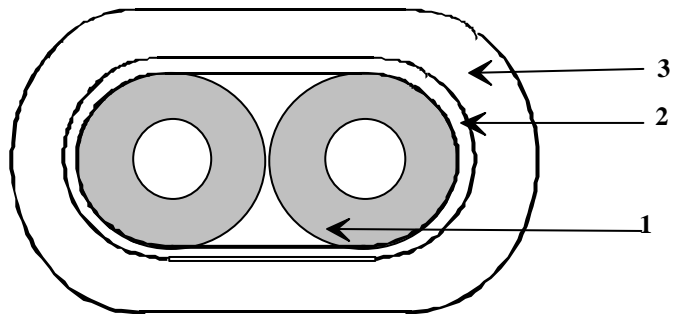
FILOTEX Ref : **ET 2PC 020**

Characteristics

- Average weight of the cable : 8 kg/km

CONSTRUCTION

1. 2 Plastic Fiber 1 mm
2. Black PVC Jacket
Ø : 2.20 x 4.40 mm
3. Black Halogen Free Jacket
Ø : 3.40 x 5.70 mm





Filotex[®]

4 SINGLE FIBER CABLE

PRODUCT REFERENCES

FILOTEX Ref : **2PC274**

CONSTRUCTION Multimode optical fiber

- ① OPTICAL FIBER :
Core : Glass $\varnothing = 62.5 \pm 3 \mu\text{m}$

Cladding : Glass
 $\varnothing = 125 \pm 3 \mu\text{m}$,
Coating : Acrylate
 $\varnothing = 245 \pm 10 \mu\text{m}$,
Buffer : Hytrel
 $\varnothing = 900 \pm 50 \mu\text{m}$,
- REINFORCEMENT :
Aramide yarn
- HALOGEN FREE JACKET :
 $\varnothing = 2.5 \pm 0.30 \text{ mm}$,
- ② HALOGEN FREE FILLER :
 $\varnothing = 2.5 \text{ mm nom}$,
- ③ POLYESTER SEPARATOR TAPE :
 $\varnothing = 7.42 \text{ mm nom}$,
- ④ REINFORCEMENT :
Aramide yarn
- ⑤ HALOGEN FREE JACKET :
 $\varnothing = 11.5 \pm 0.30 \text{ mm}$,

Applications

- ❑ Short and middle distance communication in shipboard equipment.

Main Characteristics

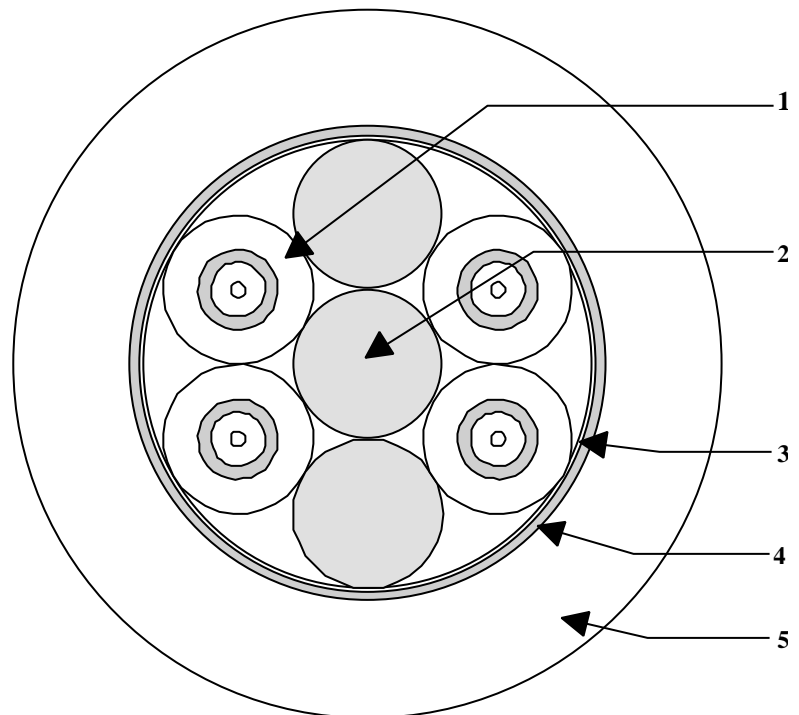
- ❑ Halogen free,
- ❑ They are flame and fire retardant (to IEC 332/1 & 3),
- ❑ Smoke em. / toxic fume em. / corrosive (to IEC 1034/1/2; IEC 754/1/2),
- ❑ Temperature Range : -25°C to $+70^{\circ}\text{C}$,

Color code

- ❑ Item 1 : Orange with Black marking (1 to 4),
- ❑ Item 5 : Black with White marking

Multimode optical fiber properties

- ❑ Attenuation – 850 nm : $\leq 5 \text{ dB / Km}$,
- ❑ Attenuation – 1310 nm : $\leq 3.5 \text{ dB / Km}$,
- ❑ Transmission regularity – 850 nm : $< 0.2 \text{ dB}$,





Filotex[®]

OUTDOOR CABLE Unitube with Dielectric Armour Halogen Free

PRODUCT REFERENCE

FILOTEX Ref : **UD-1030**

CONSTRUCTION Monomode optical fiber

① 6 OPTICAL FIBER :

Core : Glass $\varnothing = 9.1 \pm 0.5$
 μm

Cladding : Glass

$\varnothing = 125 \pm 2$ μm ,

Coating : Acrylate

$\varnothing = 245 \pm 10$

μm ,

Gel filled tube containing up to
6 individually coloured fibres,

Tube : $\varnothing = 2.75\text{mm nom}$,

② DIELECTRIC FRP ARMOUR

③ PE HD JACKET :

$\varnothing = 9.10$ nom,

Application

- Long distance communication between radar and electronic equipment,
- Provides rodent protection.

Main Characteristics :

- Approximate weight : 75g/m,
- Operating temperature : -30°C to $+60^{\circ}\text{C}$,
- Storage temperature : -40°C to $+70^{\circ}\text{C}$.

Color code

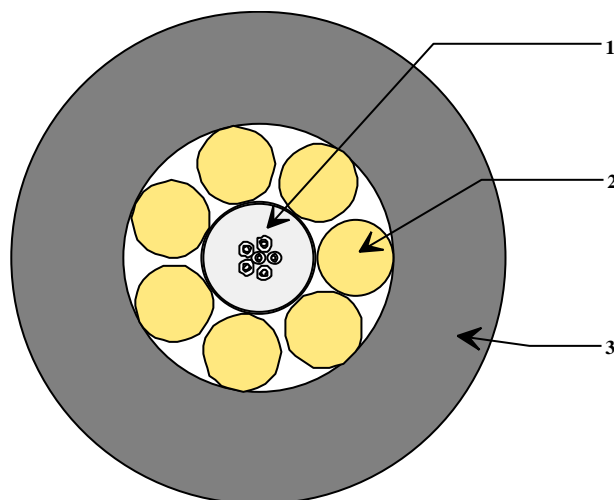
- Item 1 : to be defined,
- Item 4 : black.

Monomode optical fiber properties :

- Attenuation – 1310 nm : ≤ 0.40 dB / Km,
- Attenuation – 1550 nm : ≤ 0.26 dB / Km,
- Dispersion at (1285 – 1330) nm : ≤ 4 ps / nm.Km.

Mechanical properties :

- Loading in installation / in operation : 250 daN / 160 daN,
- Min bending radius in installation / in operation : 225 mm / 180 mm,
- Crush resistance : 400 N/cm.





Filotex[®]

UNIVERSAL CABLE Standard Reinforced Unitube

PRODUCT REFERENCE

FILOTEX Ref : **2PC 576**

CONSTRUCTION Multimode optical fiber

① 4 OPTICAL FIBER :

Core : Glass
 $\varnothing = 62.5 \pm 3 \mu\text{m}$,

Cladding : Glass
 $\varnothing = 125 \pm 2 \mu\text{m}$,
 Coating : Acrylate
 $\varnothing = 245 \pm 10 \mu\text{m}$,

② TUBE :

Gel filled tube containing to
 4 individually coloured fibres,
 $\varnothing = 3.00 \text{ mm nom}$,

③ GLASS ROVINGS

④ JACKET : Halogen free
 $\varnothing = 6.50 \text{ nom}$

Main Characteristics :

- ❑ **Application:** Short distance communication,
 Provides rodent protection,
 Flame retardant halogen free cable (to IEC332/1),
- ❑ Approximate weight : 50g/m,
- ❑ Operating temperature : -30°C to +60°C,
- ❑ Storage temperature : -40°C to +70°C.

Color code

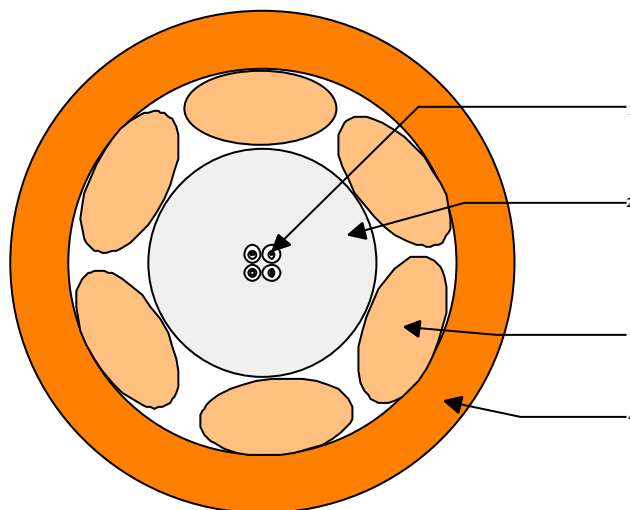
- ❑ Item 1 : Blue, Orange, Green, Brown,
- ❑ Item 4 : Orange.

Multimode optical fiber properties :

- ❑ Attenuation – 850 nm (cabled) : $\leq 3.50 \text{ dB / Km}$,
- ❑ Attenuation – 1300 nm (cabled) : $\leq 1.50 \text{ dB / Km}$,
- ❑ Bandwidth – 850 nm : $\geq 200 \text{ MHz.Km}$,
- ❑ Bandwidth – 1300 nm : $\geq 500 \text{ MHz.Km}$.

Mechanical properties :

- ❑ Loading in installation / in operation : 110 daN / 60 daN,
- ❑ Min bending radius in installation / in operation : 130 mm / 100 mm,
- ❑ Crush resistance : 200 N/cm.





Filotex[®]

OUTDOOR CABLE Standard Unitube with Corrugated Steel Armour

PRODUCT REFERENCE

FILOTEX Ref : **2PC 577**

CONSTRUCTION Multimode optical fiber

① 4 OPTICAL FIBER :

Core : Glass
 $\varnothing = 62.5 \pm 3 \mu\text{m}$,

Cladding : Glass
 $\varnothing = 125 \pm 2 \mu\text{m}$,
 Coating : Acrylate
 $\varnothing = 245 \pm 10 \mu\text{m}$,

② TUBE :

Gel filled tube containing to
 4 individually coloured fibres,
 $\varnothing = 3.00 \text{ mm nom}$,

③ GLASS ROVINGS

④ CORRUGATED STEEL TAPE ARMOUR

⑤ JACKET : HDPE

$\varnothing = 8.50 \text{ nom}$,

Main Characteristics :

- ❑ **Application:** Short distance communication,
 For areas where rodent protection is required,
- ❑ Approximate weight : 75g/m,
- ❑ Operating temperature : -30°C to +60°C,
- ❑ Storage temperature : -40°C to +70°C.

Color code

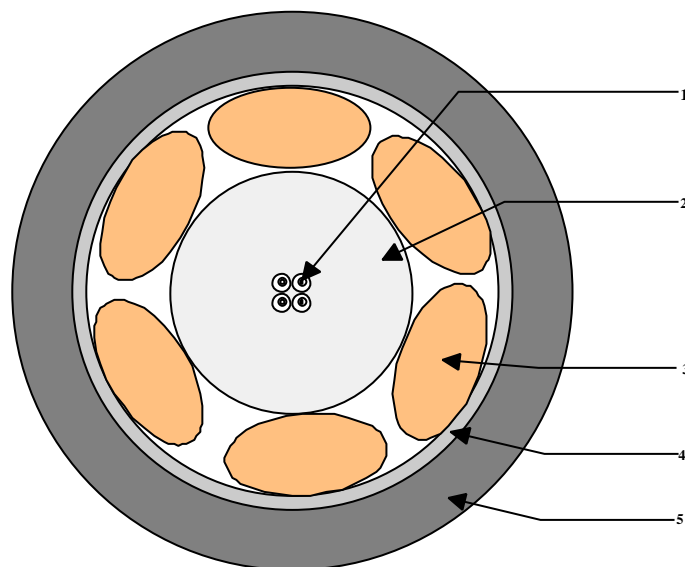
- ❑ Item 1 : Blue, Orange, Green, Brown,
- ❑ Item 5 : black.

Multimode optical fiber properties :

- ❑ Attenuation – 850 nm (cabled) : $\leq 3.50 \text{ dB / Km}$,
- ❑ Attenuation – 1300 nm (cabled) : $\leq 1.50 \text{ dB / Km}$,
- ❑ Bandwidth – 850 nm : $\geq 200 \text{ MHz.Km}$,
- ❑ Bandwidth – 1300 nm : $\geq 500 \text{ MHz.Km}$.

Mechanical properties :

- ❑ Loading in installation / in operation : 130 daN / 70 daN,
- ❑ Min bending radius in installation / in operation : 170 mm / 120 mm,
- ❑ Crush resistance : 300 N/cm.





Filotex[®]

OUTDOOR CABLE Standard Unitube with Corrugated Steel Armour

PRODUCT REFERENCE

FILOTEX Ref : **2PC 578**

CONSTRUCTION Multimode optical fiber

- ① 6 OPTICAL FIBER :
Core : Glass
 $\varnothing = 62.5 \pm 3 \mu\text{m}$,

Cladding : Glass
 $\varnothing = 125 \pm 2 \mu\text{m}$,
Coating : Acrylate
 $\varnothing = 245 \pm 10 \mu\text{m}$,

- ② TUBE :
Gel filled tube containing to
6 individually coloured fibres,
 $\varnothing = 3.00 \text{ mm nom}$,

- ③ GLASS ROVINGS

- ④ CORRUGATED STEEL TAPE
ARMOUR

- ⑤ JACKET : HDPE
 $\varnothing = 8.50 \text{ nom}$.

Main Characteristics :

- ❑ **Application:** Short distance communication,
For areas where rodent protection is required,
- ❑ Approximate weight : 75g/m,
- ❑ Operating temperature : -30°C to +60°C,
- ❑ Storage temperature : -40°C to +70°C.

Color code

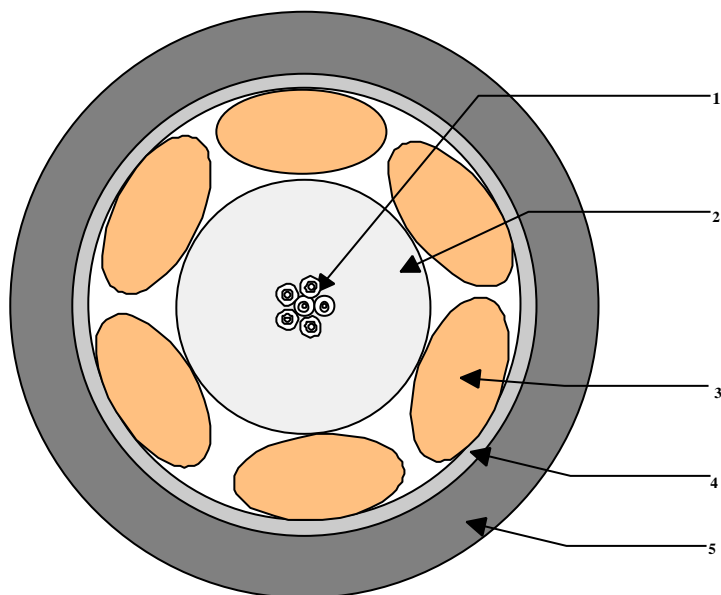
- ❑ Item 1 : Blue, Orange, Green, Brown, Grey, White,
- ❑ Item 5 : black.

Multimode optical fiber properties :

- ❑ Attenuation – 850 nm (cabled) : $\leq 3.50 \text{ dB / Km}$,
- ❑ Attenuation – 1300 nm (cabled) : $\leq 1.50 \text{ dB / Km}$,
- ❑ Bandwidth – 850 nm : $\geq 200 \text{ MHz.Km}$,
- ❑ Bandwidth – 1300 nm : $\geq 500 \text{ MHz.Km}$.

Mechanical properties :

- ❑ Loading in installation / in operation : 130 daN / 70 daN,
- ❑ Min bending radius in installation / in operation : 170 mm / 120 mm,
- ❑ Crush resistance : 300 N/cm.



ELECTRONIC



Filotex[®]

UNIVERSAL CABLE Standard Tight Buffer

PRODUCT REFERENCE

FILOTEX Ref : **2PC 579**

CONSTRUCTION Multimode optical fiber

- ① 2 OPTICAL FIBER :
Core : Glass
 $\varnothing = 62.5 \pm 3 \mu\text{m}$,

Cladding : Glass
 $\varnothing = 125 \pm 2 \mu\text{m}$,
Coating : Acrylate
 $\varnothing = 245 \pm 10 \mu\text{m}$,
Buffer : Hytrel
 $\varnothing = 900 \pm 50 \mu\text{m}$,

- ② ARAMID YARN
REINFORCEMENT

- ③ JACKET : Halogen free
 $\varnothing = 4.70 \text{ nom}$,

Main Characteristics :

- ❑ **Application:** Short distance communication,
Flame retardant halogen free cable (to IEC332/3),
- ❑ Approximate weight : 20g/m,
- ❑ Operating temperature : -30°C to +60°C,
- ❑ Storage temperature : -40°C to +70°C.

Color code

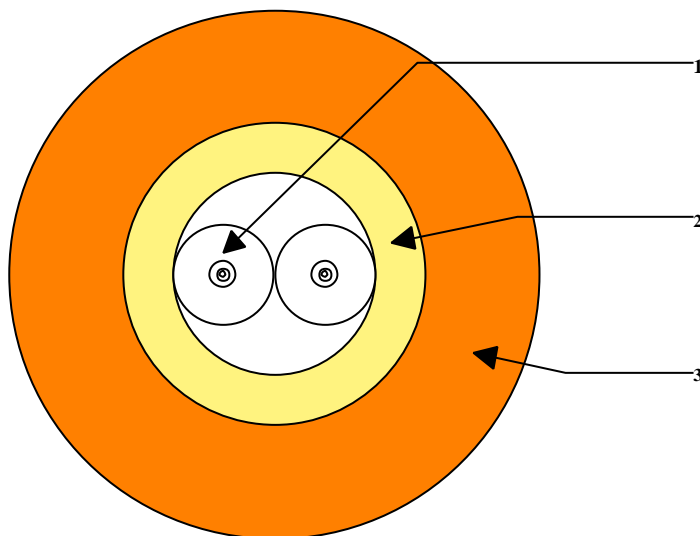
- ❑ Item 1 : Blue, Orange,
- ❑ Item 3 : Orange.

Multimode optical fiber properties :

- ❑ Attenuation – 850 nm (cabled) : $\leq 3.50 \text{ dB / Km}$,
- ❑ Attenuation – 1300 nm (cabled) : $\leq 1.50 \text{ dB / Km}$,
- ❑ Bandwidth – 850 nm : $\geq 200 \text{ MHz.Km}$,
- ❑ Bandwidth – 1300 nm : $\geq 500 \text{ MHz.Km}$.

Mechanical properties :

- ❑ Loading in installation / in operation : 80 daN / 40 daN,
- ❑ Min bending radius in installation / in operation : 90 mm / 35 mm,
- ❑ Crush resistance : 300 N/cm.





Filotex[®]

INDOOR CABLE Standard Patch Cord

PRODUCT REFERENCE

FILOTEX Ref : **2PC 580**

CONSTRUCTION Multimode optical fiber

- ① 12 PATCH CORD :
Core : Glass
 $\varnothing = 62.5 \pm 3 \mu\text{m}$,

Cladding : Glass
 $\varnothing = 125 \pm 2 \mu\text{m}$,
Coating : Acrylate
 $\varnothing = 245 \pm 10 \mu\text{m}$,
Buffer : Hytrel
 $\varnothing = 900 \pm 50 \mu\text{m}$,

REINFORCEMENT :
Aramide yarn

HALOGEN FREE JACKET :
 $\varnothing = 2.45 \pm 0.20 \text{ mm}$,

- ② POLYESTER SEPARATOR TAPE

- ③ JACKET : Halogen free
 $\varnothing = 13.60 \text{ nom.}$

Main Characteristics :

- ❑ **Application:** Short distance communication,
Flame retardant halogen free cable (to IEC332/3),
- ❑ Approximate weight : 200g/m,
- ❑ Operating temperature : -30°C to +70°C,
- ❑ Storage temperature : -40°C to +80°C.

Color code

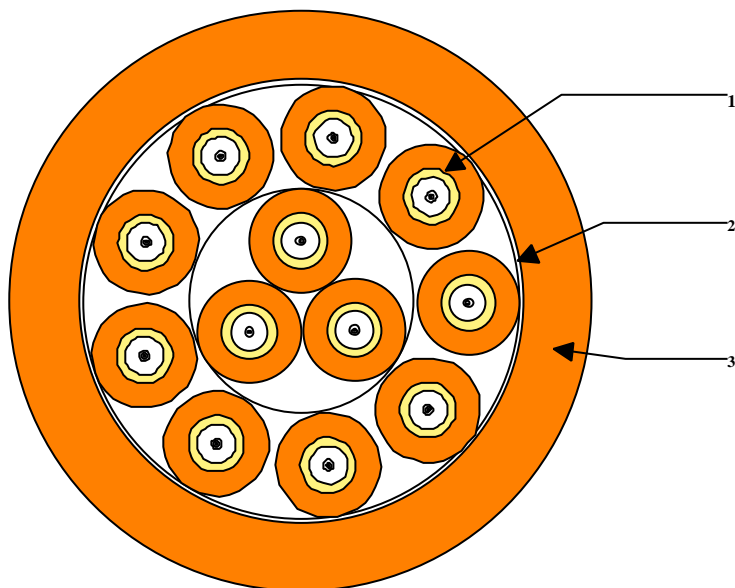
- ❑ Item 1 : Orange with marking,
- ❑ Item 3 : Orange.

Multimode optical fiber properties :

- ❑ Attenuation – 850 nm (cabled) : $\leq 3.50 \text{ dB / Km}$,
- ❑ Attenuation – 1300 nm (cabled) : $\leq 1.50 \text{ dB / Km}$,
- ❑ Bandwidth – 850 nm : $\geq 200 \text{ MHz.Km}$,
- ❑ Bandwidth – 1300 nm : $\geq 500 \text{ MHz.Km}$.

Mechanical properties :

- ❑ Loading in installation / in operation : 250 daN / 100 daN,
- ❑ Min bending radius in installation / in operation : 270 mm / 140 mm,
- ❑ Crush resistance : 300 N/cm.



Part 7

Sensor measurement cables



Filotex[®]

STUDY 289 735

PRODUCT REFERENCES

FILOTEX Ref : **ET 289735**

Characteristics

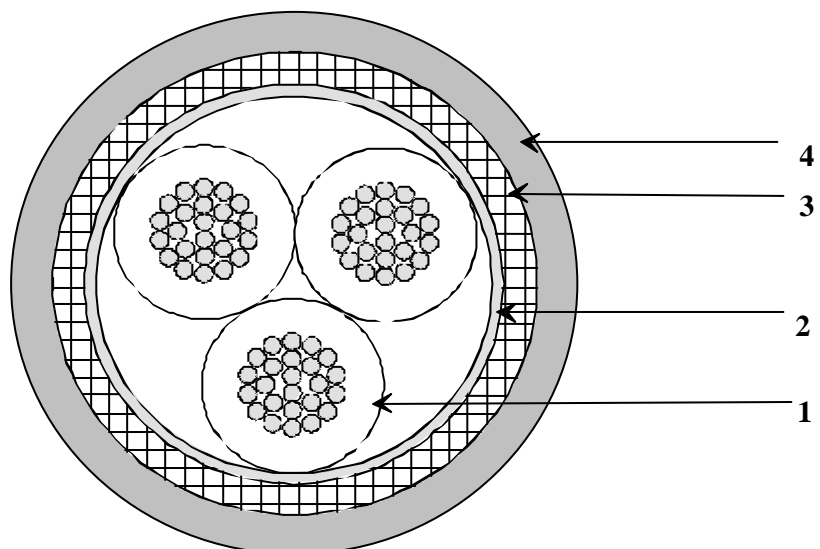
- Operating voltage : 250 V
- Test voltage : 1500 V
- Operating temperature : -30°C to +105°C
- Fire behaviour : CEI 332/3
- Weight of the cable : 95 kg/km

CONSTRUCTION

1. 3 cores :
Red – Black – Blue
24x0.20 mm Tinned Copper
(0°75 mm² AWG 20)
Free Halogen Insulation
Ø : 1.70 mm +/- 0.10 mm
2. Polyester separator tape
3. 0.20 mm Tinned Copper
braid Kr = 60 %
4. Black Free Halogen Jacket
Ø = 7.50 mm ± 0.30 mm

Marking

- Printed in White.





Filotex[®]

STUDY 296426

PRODUCT REFERENCES

FILOTEX Ref : **ET 296 426**

CONSTRUCTION

5. 5 Cores :
white printed in black from 1 to 5
24x0.20 mm Tinned Copper
(0°75 mm² AWG 20)
Free Halogen Insulation
Ø : 1.70 mm +/- 0.10 mm
6. Polyester separator tape
7. 0.20 mm Tinned Copper
braid Kr = 60 %
8. Black Free Halogen Jacket
Ø = 8.50 ± 0.30 mm

Characteristics

- Operating voltage : 250 V
- Test voltage : 1500 V
- Operating temperature : -30°C to +105°C
- Fire behaviour : CEI 332/3
- Average weight of the cable : 130 kg/km

Marking

- Printed in White

