



**SYNTAX<sup>®</sup> CABLE**

**ANALOGIC  
DIGITAL  
VIDEO  
SPEAKER  
ENERGY  
HYBRID  
DRUMS**

MULTICORE - NOISLESS 100% FOIL SHIELD - SUBZERO USE  
8 JACKETED PAIRS - OFC EXTRAFLEX MULTICORE - NOISLESS 100% FOIL SHIELD - SUBZERO USE

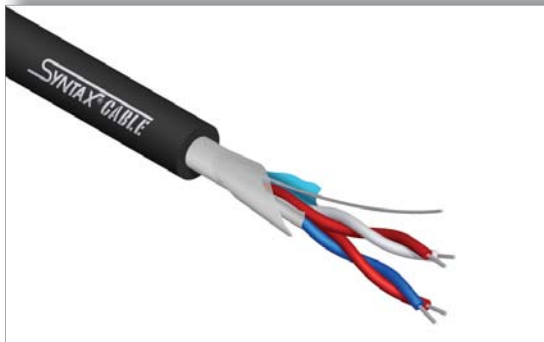
**SYNTAX<sup>®</sup> CABLE**

SUBZERO USE MADE IN ITALY

8 JACKETED PAIRS - OFC EXTRAFLEX MULTICORE - NOISLESS 100% FOIL SHIELD - SUBZERO USE

**SYNTAX<sup>®</sup> CABLE**

*syntax*  
**no compromise**



## SYNTAX<sup>®</sup> CABLE

The **VALENTINI** Syntax Cable range has been developed for the particular application and rigorous environments of the audio, lighting and video installation, studio recording and musical entertainment, everywhere excellent electrical and mechanical properties are required.

### ANALOGIC

Multipair, microphone, audio installation and instrument cables.

Developed for high-standard professional application in rigorous environments.

### DIGITAL

Installation single pair, two twisted pair, multipair and data cables. The cables have been designed in accordance with the standard norms specification on the management of digital equipment.

### VIDEO

Designed for standard or high definition digital video signal. "All-copper" construction enhances signal strength, while high-density shielding protects the signal from outside interference.

### SPEAKER

Clarity and balance of sound, high conductivity and brilliance to cover the full dynamic range of sound.

### ENERGY

Flexible and easy to handle.

Professional cables for lighting, audio and video technology. The best choice when winding operations are intensive.

### HYBRID

With just one cable you can manage more signals and avoid confusion.

Versatile, suitable for parallel controls of audio, lighting and video applications.

### CABLE DRUMS

We enlarged the internal diameter of the drums to make it extremely functional and prevent your cables from damage caused by winding.

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## AUDIO MULTIPAIR mod. 7YPR..



7YPR04SX

The SYNTAX® AUDIO MULTIPAIR cables are developed for high-standard professional applications in the rigorous environments of the audio & video installations, studio recording and musical entertainment, everywhere excellent electrical and mechanical properties are required. The pairs are twisted and jacketed; the external PVC jacket of each pair is individually numbered. All jacketed pairs are inside an outer PVC sheath whose internal talc dusted lined ridges allow the cores to slide against one other, yet maintain them properly clustered even under heavy usage and continuous rewinding. This solves the problems of twisting and knotting of the cores while keeping the right cable flexibility. The XLPE conductor insulation is particularly resistant to high temperatures, so as to avoid warping or shrinkage when soldering. The aluminium/polyester foil shield provides a 100% screen and the drain wire inside allows fast installation. All the conductors are made of High Purity Oxygen Free Copper. The extra-flexible PVC external jacket is anti-trampling and anti-scratch for usage at either extremely low or high temperatures, ranging from -30°C up to +70°C.

- Conductors: tinned OFC 24 AWG 19 x 0,12 mm
- Conductors jacket: red/blue XLPE
- Drain wire: tinned OFC 24 AWG 19 x 0,12 mm
- Screen: aluminium/polyester foil 100% coverage
- Pair jacket: flame-retardant flex PVC black Ø=2,7 mm
- Operating temperature: -30° +70° C.
- D.C.R. conductors: <90 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance CDR/CDR: 1Khz - 100 nF/Km
- Capacitance CDR/SCR: 1Khz - 200 nF/Km
- Overall jacket: flame retardant super flex PVC black



7YPR16SX

N. PAIR	PART N.	Ø CABLE
2	7YPR02SX	7,2 mm
4	7YPR04SX	9,6 mm
8	7YPR08SX	12,2 mm
12	7YPR12SX	14,5 mm
16	7YPR16SX	16,3 mm
24	7YPR24SX	20,8 mm
32	7YPR32SX	22,8 mm
40	7YPR40SX	25,2 mm
48	7YPR48SX	27,0 mm

## INSTALLATION AUDIO mod. 7XCBL02SX



Thanks to its small external diameter, this cable represents the best solution for the internal wiring of racks and audio equipment installations. It is made up of a twisted pair of tinned OFC conductors and tinned drain wire. The XLPE conductor insulation is particularly resistant to high temperatures, so as to avoid warping or shrinkage when soldering. The aluminium/polyester foil shield provides 100% protection from external noises and the tinned drain wire allows faster installation.

- Conductors: tinned OFC 24 AWG 19 x 0,12 mm
- Conductors jacket: red/blue XLPE
- Drain wire: tinned OFC 24 AWG 19 x 0,12 mm
- Screen: aluminium/polyester foil 100% coverage
- External jacket: flame-retardant PVC black - Ø 2,7mm
- Operating temperature: -30° +70° C.
- D.C.R. conductors: <90 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance CDR/CDR: 1Khz 100 nF/Km
- Capacitance CDR/SCR: 1Khz 200 nF/Km

See 7XDCBL02SX for Digital AES/EBU version

# ANALOGIC CABLES

## AUDIO MICROPHONE mod. 7XSPM03N - 7XSPM03R - 7XSPM03B - 7XSPM03V



7XSPM03N

- Conductors: tinned OFC 24 AWG 19 x 0,12 mm
  - Conductors jacket: red/blue XLPE
  - Drain wire: tinned OFC 24 AWG 19 x 0,12 mm
  - Screen: high density spiral OFC 95% cov.
  - Nominal resistance: <math><96 \Omega/\text{Km}</math>
  - Mutual capacitance: 1Khz 160 nF/Km
  - Operating temperature: -30° +70° C.
  - External jacket: PVC Ø 6,5mm flame-retardant
- 7XSPM03N** - black  
**7XSPM03R** - red  
**7XSPM03B** - blue  
**7XSPM03V** - green



7XSPM03R

7XSPM03B

7XSPM03V

SYNTAX AUDIO MICROPHONE. The featuring of this cable provides excellent flexibility and anti-knotting properties. The two insulated twisted conductors and drain wire are shielded with a high density copper wrap for the highest screening performance. This particular construction featuring the drain wire also improves the mechanical strength of the cable. The conductors are made of tinned OFC and insulated with a high thermal resistance XLPE sheath to avoid warping or shrinkage when soldering. The special PVC compound of the outer jacket improves flexibility, abrasion resistance and water repellence as well as making the cable suitable for subflooring and anti-knotting. The jacket is flame retardant and allows the use of the cable even with very low temperatures.

## AUDIO MICROPHONE mod. 7XSP03N



- Conductors: tinned OFC 24 AWG 19 x 0,12 mm
- Conductors jacket: red/blue XLPE
- Drain wire: tinned OFC 24 AWG 19 x 0,12 mm
- Screen: high density spiral OFC 95% cov.
- Nominal resistance: <math><96 \Omega/\text{Km}</math>
- Mutual capacitance: 1Khz 160 nF/Km
- Operating temperature: -30° +70° C.
- External jacket: black PVC Ø 6,5mm flame-retardant (other colours on demand)

This microphone cable version has a double jacket, which allows its usage also with connectors having a small cable gland. The special PVC compound used for the jackets grants very high flexibility, abrasion resistance and water repellence as well as making the cable suitable for subflooring and anti-knotting.

The inner pair consists of two twisted conductors of electrolytic tinned copper, insulated by a high thermal resistance XLPE sheath to avoid warping or shrinkage when soldering. The connection of the ground contact is made easier by a tinned copper wire (drain wire). The shield consists of an electrolytic copper spiral, wrapping the twisted pair and the drain wire along the entire length of the cable. This particular construction featuring the drain wire also improves the mechanical strength of the cable. The jackets are made of flame retardant PVC compound and allow the use of the cable even with very low temperatures.

## AUDIO MICROPHONE mod. 7XSPM02N



- |                          |   |
|--------------------------|---|
| - Conductors:            | bare OFC 24 AWG - 28 x 0,10 mm                                  |
| - Conductors jacket:     | red/blue XLPE Ø 1,4 mm  |
| - Screen:                | high density spiral OFC   |
| - Nominal resistance:    | <85 Ω/Km  |
| - Mutual capacitance:    | 110 nF/Km   |
| - Operating temperature: | -30° +70° C.  |
| - External jacket:       | black PVC Ø 6,4 mm flame-retardant<br>(other colours on demand) |

With the 7XSP02N we found a perfect balance between performance and handling. The high stranding formation and the absence of the drain wire result in extreme flexibility, without reducing the life expectancy of the cable even after many winding operations. The twisted pair conductors' insulation has a larger diameter for a the decrease of the mutual capacity value, which lowers the attenuation of high frequency signals. The shield consists of a high density OFC copper spiral wrap, providing protection from external noises. The jacket is made of a flame retardant PVC compound and allows the use of the cable up to temperatures of -30°C.

## INSTRUMENT CABLE mod. 7XHP01SX



### CONSTRUCTION DETAIL

- |                          |  |
|--------------------------|--|
| - Conductor:             | 1 x 0.50 mm <sup>2</sup> tinned copper OFC,<br>20 AWG 64 x 0,10 mm |
| - Conductors jacket:     | Foam skin PE, Ø =2.40 mm   |
| - Shields:               | Conductive carbon tube<br>+ double tinned copper wrap              |
| - Operating temperature: | -30° + 70°C  |
| - External jacket:       | Flexible PVC flame-retardant Black colour,<br>Ø 7.00 mm            |
| - Conductor resistance:  | ≤ 39.5 Ω/Km  |
| - Insulation resistance: | ≥ 1 GΩ/Km  |
| - Capacitance:           | 89 nF/Km   |
| - Operating rating:      | < 50 V   |
| - Voltage test:          | 1.5 kVdc x 1 min.  |

This professional high end unbalanced cable offers a very low capacitance with loss free transmission, ideal for bass, guitar, and keyboard due to the special stranding and a wire diameter of 0.50 mm<sup>2</sup>. The sound advantages of this design are extremely fast transmission capabilities (ideal for attacks), convincing mid ranges, popping deep basses and an analytical transmission. Brightly and dominant high frequency transmission at long paths on large stages even when are used pickups with lots of coils. This cable can handle the low frequencies of analog machines as easily as the razor-sharp high ranges of virtual synthesizers. A triple shield (double tin-plated copper spiral shielding and conductive carbon tube) ensures total protection from external signal disturbance. The external jacket is as thick as to ensure extreme anti-tearing quality and convinces with high bending cycles. Despite its robustness SYNTAX Instrument cable is very easy to wind, being made of a special PVC compound and by an extra small-gauge wires for the internal conductor.

## DIGITAL CABLES

## DIGITAL MULTIPAIR mod. 7YDPR12E14SX



This highly flexible SYNTAX Digital Multipair cable is developed for applications (both in fixed and outdoor installations) where the managing of digital equipment is a very important part of the whole system and wherever continuous bending cycles are required. The cable has been designed in accordance with the standard AES/EBU specifications, 110 ohm impedance and a very low capacitance. The particular internal arrangement solves the problems of torsion and knotting of the cores while keeping the high flexibility.

The pairs are twisted and individually shielded by a helical tinned copper mesh. The external jacket of each pair is individually numbered. The general outer jacket is made with a high-tech PVC polymer, very flexible and impact absorbing, slipping over rough surfaces and granting suppleness even with very low temperatures.

## 12 TWISTED PAIR

- Conductors: tinned OFC 36 x 0.07 mm - 0,14 mm<sup>2</sup> - AWG 26
- Conductors jacket: white/blue low density polyethylene - Ø 1,1 mm
- Screen: helical tinned copper mesh 95% coverage
- Operating temperature: -30° +80° C
- Pair jacket: Blue PVC flame-retardant Ø=3.30 mm
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- D.C.R. conductors: <140 Ω/Km
- Capacitance cond./cond.: 1Khz 42 nF/Km
- Outer jacket: Ø 17 mm matt Black super flexible PVC flame-retardant

## DIGITAL MULTIPAIR mod. 7YDPR..SX



## 7YDPR04SX

The SYNTAX DIGITAL MULTIPAIR cables are developed for those applications (either in fixed installations or outdoors) where the management of digital equipment are a very important part of the whole system.

The cables have been designed in accordance with the standard AES/EBU specifications, 110 Ω impedance and a very low capacitance thanks to the use of a special gas injected foam for the conductors' insulation.

The particular internal arrangement solves the problems of twisting and knotting of the cores while keeping the right flexibility. The pairs are twisted and individually shielded by aluminium foil with drain wire. The external jacket of each pair is individually numbered. The overall external jacket is made with a high tech PVC polymer, very flexible and impact absorbing, slipping over rough surfaces and granting suppleness even with low temperatures.

- Conductors: tinned OFC 24 AWG - 28 x 0.10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 7 x 0.18 mm
- Screen: aluminium / mylar foil 100% coverage
- Operating temperature: -30° +70° C
- Pair jacket: Black PVC flame-retardant Ø=3.4 mm
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/Km
- Capacitance cond./shield: 1Khz 57 nF/Km
- Overall jacket: matt Black super flexible PVC flame-retardant

N. PAIR	PART N.	Ø CABLE
2	7YDPR02SX	9,6 mm
4	7YDPR04SX	11,2 mm
8	7YDPR08SX	14,8 mm
12	7YDPR12SX	17,4 mm
16	7YDPR16SX	19,5 mm

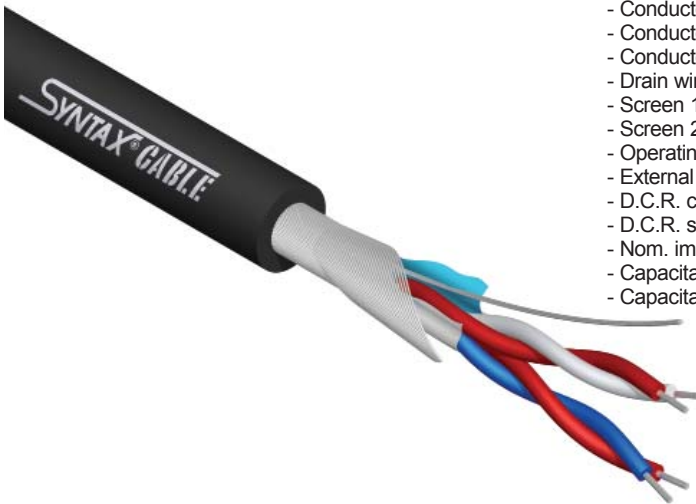
## DIGITAL AES/EBU INSTALLATION mod. 7XDCBL02SX



- Conductors: tinned OFC 24 AWG 28 x 0.10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 7 x 0.18 mm
- Screen: aluminium/mylar foil 100% coverage
- Nominal Impedance: 1-4 Mhz 110 Ω/100 mt
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/Km
- Capacitance cond./shield: 1Khz 57 nF/Km
- Operating temperature: -30° +70° C
- Jacket: Black PVC flame-retardant Ø=3.4 mm

The SYNTAX® Digital Installation cable represents the best solution for the internal wiring of racks and digital equipment installations. The cables have been designed in accordance with the standard AES/EBU specifications, 110 Ω impedance and a very low capacitance thanks to the use of a special gas injected foam for the conductors' insulation. The pairs are made up of tinned OFC conductors, twisted and shielded by aluminium foil with drain wire, providing 100% protection from external noises.

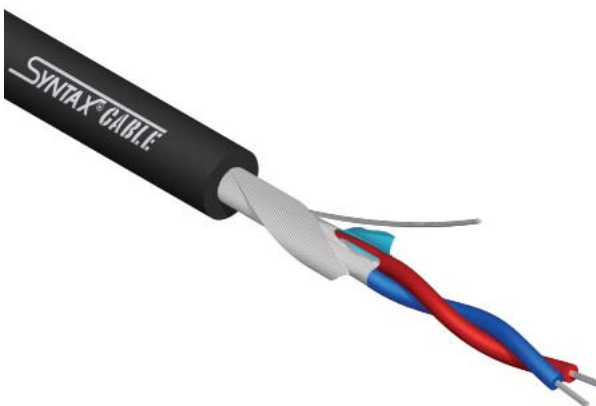
## TWO PAIRS DIGITAL mod. 7XDDS07SX



- Conductors: tinned OFC 24 AWG 19 x 0,12 mm
- Conductors jacket: 1 - red/blue Foam - Skin Ø 1,4 mm
- Conductors jacket: 2 - red/white Foam - Skin Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG 19 x 0,12 mm
- Screen 1: high density spiral tinned OFC 95% cov.
- Screen 2: aluminium / polyester foil 100% coverage
- Operating temperature: -30° +70° C.
- External jacket: black PVC Ø 7,2 mm flame-retardant
- D.C.R. conductors: <90 Ω/Km
- D.C.R. shield: <25 Ω/Km
- Nom. impedance: 1-4 Mhz 110 Ω
- Capacitance cond./cond.: 1Khz 40 nF/Km
- Capacitance cond./shield: 1Khz 80 nF/Km

The SYNTAX® two twisted pairs digital cable is manufactured with reliably consistent impedance and features a special polymer sheath for low capacitance. The shield is made up of two different screens: the first is a high-density spiral tinned copper, the second is an aluminium/polyester foil. The drain wire between the two screens makes connection easier. The second pair may be used for the feedback signal on digital data lines. The external jacket is black PVC flame-retardant, trampling-proof, impact absorbing, water-proof and flexible for longer lifespan.

## DIGITAL AES/EBU-DMX mod. 7XDDS03SXN - 7XDDS03SX



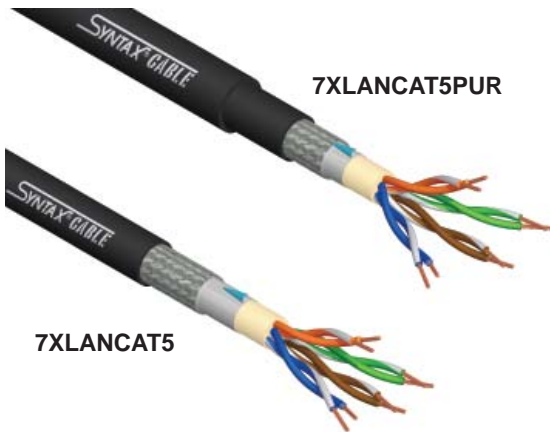
- Conductors: tinned OFC 24 AWG - 19x0,12 mm
- Conductors jacket: red/blue Foam Skin Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 19x0,12 mm
- Screen 1: high density spiral tinned OFC 95% cov.
- Screen 2: aluminium/polyester foil 100% cov.
- Operating temperature: -30° +70° C.
- External jacket: PVC Ø 5,5 mm flame-retardant, Blue (7XDDS03SX), Black (7XDDS03SXN)
- D.C.R. conductors: <90 Ω/Km
- D.C.R. shield: <40 Ω/Km
- Capacitance cond./cond.: 1Khz 40 nF/Km
- Capacitance cond./shield: 1Khz 80 nF/Km
- Nominal Impedance: 1-4 Mhz 110 Ω/100 mt

SYNTAX® single pair DIGITAL AES/EBU-DMX CABLE, (standard AES/EBU and DMX use specifications) is manufactured with reliably consistent impedance and features a special polymer sheath for low capacitance. To ensure a high protection level from EMI/RFI noise, the shield is made up of two different screens: - the first is a high-density spiral tinned copper; - the second is an aluminium/polyester foil. The drain wire between the two screens makes connection easier. Black or Blue PVC flame-retardant external jacket, trampling-proof, impact absorbing and flexible for longer lifespan.

**Furter model is the halogen free 7XDDHF03SX for installation use with external dark green jacket LSZH**

## DIGITAL CABLES

## ETHERNET CABLES mod. 7XLANCAT5 - 7XLANCAT5PUR



- Conductors: Solid bare OFC  $\varnothing=0,51$  mm - 24 AWG
- Conductors jacket: Polyolefin Foam -  $\varnothing=0,95$  mm
- Color code: green, white-green, orange, white-orange, blue, white-blue, brown, white-brown
- First screen: aluminium/mylar overlapping foil 100% tinned copper braid coverage >80%
- Second screen: tinned copper braid coverage >80%
- Resistance of conductors: < 90  $\Omega$ /Km
- Insulation resistance: > 8 G $\Omega$  per Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100  $\Omega$
- Operating temperature: -30° +70° C
- Jacket 7XLANCAT5: PVC black flame retardant  $\varnothing=6,4$  mm
- Jackets 7XLANCAT5PUR: First: PVC black flame retardant  $\varnothing=6,4$  mm  
Second: Polyurethane compound black  $\varnothing=7,7$  mm

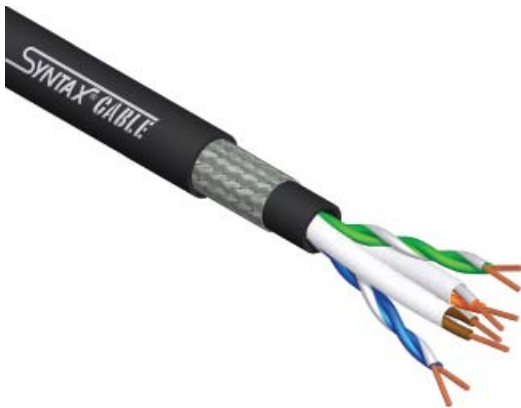
SYNTAX® offers a cable with high intrinsic quality, excellent flexibility and robustness to tackle the difficult jobs in the entertainment world, ensuring reliable performance in critical conditions. With the great spread of the Internet, this kind of cables, widely used in the computer world, are produced on a large scale to drive down prices, often at the expense of transmission quality and manageability.

The Syntax CAT5e cable is designed for use in broadcasting and in all the network installations for transmission of high Class D bit-rates; it is compliant with ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2, ensuring accurate transmission of data up to 90 meter cable length.

To maintain the correct data transfer along the entire length, it is very important that the body of the cable is not deformed by an alteration in the internal position of the four twisted pairs. In this regards, the use of a particular foamy compound keeps the twisted pairs fixed and properly spaced. Moreover, the presence of two shields (one in aluminium foil and the other in tinned copper braid) guarantees a 100% protection from external noise. The version PUR up-jacketed has been particularly designed for heavy outdoor application, for use on cable drum, for mobile transmission vehicles and wherever a high abrasion resistance and continuous bending cycles are needed, preserving an enduring transmission quality. When using this version, the second jacket should be removed near the RJ45 connector, in order to get the right diameter for assembling.

Frequency (MHz)	1	4	10	16	20	31.25	62.50	100
Attenuation (dB/100m)	2.0	3.8	6.1	7.5	8.6	10.7	15.6	19.9
Next (dB)	66.3	57.3	51.3	48.2	46.8	43.9	39.4	36.4

## ETHERNET mod. 7XLANCAT6PUR



- Conductors: Solid bare OFC  $\varnothing=0,57$  mm - 23 AWG
- Conductors jacket: Polyolefin Foam -  $\varnothing=1$  mm
- Color code: green, white-green, orange, white-orange, blue, white-blue, brown, white-brown
- First Jacket: PVC black  $\varnothing=6,2$  mm flame retardant
- Screen: tinned copper braid coverage >80%
- Second jacket: PUR - Polyurethane compound black  $\varnothing=8,0$  mm
- Resistance of conductors: < 75  $\Omega$ /Km
- Insulation resistance: > 5 G $\Omega$ /Km
- Capacity between conductors: 48 nF/Km
- Impedance from 1 to 250MHz: 100  $\Omega \pm 15\%$
- Operating temperature: -30° +70° C

The SYNTAX® 7XLANCAT6PUR Cat6 cable is designed for mobile use in broadcasting and in all Class E network installations with transmission frequency up to 250MHz; it is compliant with ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2 and ensures accurate transmission of data up to 90 meter cable stretches.

For optimal data transfer along the entire cable, the internal position of the four twisted pairs should not be altered. In this regard, a particular foamy tape has been used to surround the twisted pairs and keep them fixed and properly spaced, thus maintaining the correct structure of the cable throughout its length.

A particular method has been used for the tinned copper braid shielding between the first and the second cable sheath, greatly improving the return loss values, which are usually critical with the standard S/FTP shielding.

The outer polyurethane (PUR) sheath has been particularly designed for rigorous conditions in outdoor applications, for use on cable drum, for mobile media vehicles and wherever high abrasion resistance and continuous bending cycles are needed, preserving enduring transmission quality.

This version of Cat6 can be wired with standard RJ45 connectors. In order to make the diameter right for assembling, the second jacket should be removed near the RJ45 connector.

Frequency (MHz)	1	4	10	16	20	31.25	62.50	100	200	250
Attenuation (dB/100m)	1.9	3.5	5.4	6.9	7.8	9.9	14.3	18.4	27.1	30.8
Next (dB)	89.3	79.3	69.3	64.7	62.6	58.7	53.0	49.4	44.6	43.2
Return Loss (dB/100m)	30.3	28.5	27.3	26.7	26.4	25.9	25.1	24.2	23.1	21.8

## ETHERNET CABLES mod. 7XLAN4CAT6

The SYNTAX® 7XLAN4CAT6 cable is made up by four Cat6, designed for mobile use in broadcasting and in all Class E network installations with transmission frequency up to 250MHz; it is compliant with ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2 and ensures accurate transmission of data up to 90 meter cable runs. For optimal data transfer along the entire Cat6 cables, the internal position of the four twisted pairs should not be altered. In this regard, a particular foamy tape has been used to surround the twisted pairs and keep them fixed and properly spaced, thus maintaining the correct structure of the cable throughout its length.

A particular method has been used for the tinned copper braid shielding between the first and the second cable sheath, greatly improving the return loss values, which are usually critical with the standard S/FTP shielding.

The outer PVC sheath has been particularly designed for rigorous conditions in outdoor applications, for use on cable drum, for mobile media vehicles and wherever continuous bending cycles are needed, preserving enduring transmission quality.

This version of Cat6 can be wired with standard RJ45 connectors. In order to make the diameter right for assembling, the second jacket should be removed near the RJ45 connector.



### 4 x CAT6

- Conductors: Solid bare OFC Ø=0.57 mm - 23 AWG
- Conductors jacket: Polypropilene Foam - Ø=1 mm
- Color code: green, white-green, orange, white-orange, blue, white-blue, brown, white-brown
- First Jacket: PVC black Ø=6.2 mm flame retardant
- Screen: tinned copper braid coverage >80%
- Second jacket: PUR - Polyurethane compound black Ø=8.0 mm
- Resistance of conductors: < 75 Ω/Km
- Insulation resistance: > 5 GΩ/Km
- Capacity between conductors: 48 nF/Km
- Impedance from 1 to 250MHz: 100 Ω ± 15%
- Operating temperature: -30° +70° C
- Outer jacket: matt Black PVC flame-retardant Ø=21 mm

Frequency (MHz)	1	4	10	16	20	31.25	62.50	100	200	250
Attenuation (dB/100m)	1.9	3.5	5.4	6.9	7.8	9.9	14.3	18.4	27.1	30.8
Next (dB)	89.3	79.3	69.3	64.7	62.6	58.7	53.0	49.4	44.6	43.2
Return Loss (dB/100m)	30.3	28.5	27.3	26.7	26.4	25.9	25.1	24.2	23.1	21.8

## VIDEO CABLES

## HDTV - SDI VIDEO INSTALLATION CABLE mod. 7XVD59RHD



The 7XVD59RHD coaxial video cable meets all the requirements of the Broadcast installations for HDTV and SDI high-definition video in spite of its reduced diameter. The inner conductor insulation is made of a special foam plastic polymer which guarantees a very low capacitance value. This is key to maintaining low damping values on high frequency interconnections even in case of lengthy connections.

The double shielding is made up of tinned copper braid and aluminum foil. It ensures a high level of protection from external noises such as electromagnetic interference (EMI).

The flexible flame retardant PVC outer sheath, makes the cable very easy to handle while maintaining low signal loss in longer distance transmissions.

- Conductor: Solid bare OFC 1 x 0,81 mm - 20 AWG
- Conductor Jacket: Ø 3.75 mm foam-polyolefin
- Shield 1: aluminium foil 100% coverage
- Shield 2: tinned OFC braid 90% coverage
- External Jacket: Grey
- Overall diameter: Ø 6,20 mm
- Capacitance: (800 ÷ 1200 Hz) 53 nF/Km ± 5%
- Electrical resistance (20°C): Inner conductor 36 Ω/Km
- Nominal impedance: 75 Ω ± 3
- Velocity of propagation: 84%

Frequency (MHz)	5	50	100	200	470	742	862	1000	1485	1750	2150	2227	3000
Attenuation (dB/100m)	1.9	5.7	7.9	11.0	17.1	21.6	22.9	24.8	31.9	34.1	38.8	39.9	47.5

## HDTV VIDEO INSTALLATION CABLE mod. 7XVD59HDTV



This SYNTAX® halogen free video coax cable 75 Ω is designed for HDTV high performance applications. The inner conductor insulator is made of a special foam plastic polymer to guarantee a very low value of capacitance also for great length connections.

The first shield (made of red OFC braid) and the second screen (made with tinned OFC braid) guarantee a great protection from external noises. A further aluminum foil shield is placed between the other two and forms a fire-proof barrier.

All materials used to produce the cable, have been chosen to comply with the main safety regulations, namely with the following standards:

- IEC 332-3C fire resistant coaxial cable;
- IEC 754-1 amount halogen acid gasses;
- IEC 754-2 acidity of gasses;
- IEC 1034/1 & 2 smoke density;
- NF x 70/100 gas toxicity.

- Conductor: Solid bare OFC 1x0,81mm - 20 AWG
- Conductor Jacket: Ø 3,70 mm foam-polyolefin
- Shield 1: red OFC braid 85% coverage
- Shield 2: fire-proof aluminium foil
- Shield 3: tinned OFC braid 85% coverage
- External jacket: Polymer LSZH yellow - UV proof
- Overall diameter: Ø 6.20 mm
- Capacitance (800 ÷ 1200 Hz): 60 nF/Km
- Resistance of insulation (20°C, 500V): > 10 GΩ/Km
- Electrical resistance (20°C): Inner conductor < 36 Ω/Km
- Electrical resistance (20°C): Screen < 8 Ω/Km
- Nominal impedance: 75 Ω ± 3
- Test voltage: 7000 Vcc x 1 min
- Velocity of propagation: 79%
- Operating temperature: -15° +70° C

Frequency (MHz)	1	3.6	10	71.5	135	270	360	540	720	750	1000	1500	2000	3000
Attenuation (dB/100m)	0.75	1.50	2.40	6.50	9.10	13.10	15.30	19.20	22.70	23.20	27.50	35.40	41.60	52.80

## SPEAKERS POWER LINE CABLES mod. 7Z..



7Z2SX40



7Z4SX25



7Z8SX25



7Z16SX40

This range of SYNTAX® SPEAKER cables has been developed to obtain maximum flexibility and excellent mechanical properties.

The main characteristic is the extremely dense stranding of the conductors' section, which results in increased conductivity and brilliance of sound. They feature large conductor size to minimize resistance to high power conduction.

All the conductors are numbered and maintained properly clustered inside the outer PVC sheath thanks to the internal lined ridges, even under heavy usage and continuous rewinding.

The cores are talc dusted to slide against one another, thus granting optimal handling.

The external diameters is perfectly suitable for usage with the most commonly used power connectors.

Finally, the arctic polymer PVC jacket allows good flexibility and handling in a wide range of temperatures.

- Conductors OFC strand: section 1.5 mm<sup>2</sup> = 84 x 0.15 - 16 AWG
- Conductors OFC strand: section 2.5 mm<sup>2</sup> = 147 x 0.15 - 13 AWG
- Conductors OFC strand: section 4.0 mm<sup>2</sup> = 224 x 0.15 - 11 AWG
- Operating temperature: -30° +70° C.
- D.C.R. 20° C.: sect. 1.5 mm<sup>2</sup> = 13 Ω/Km
- D.C.R. 20° C.: sect. 2.5 mm<sup>2</sup> = 8 Ω/Km
- D.C.R. 20° C.: sect. 4.0 mm<sup>2</sup> = 5 Ω/Km
- Operating voltage: <50 Vc
- External jacket: flame retardant super flex PVC Black

PART N.	CABLE	
7Z2SX15	2 x 1.5 mm <sup>2</sup>	Ø 7.4 mm
7Z2SX25	2 x 2.5 mm <sup>2</sup>	Ø 8.8 mm
7Z2SX40	2 x 4.0 mm <sup>2</sup>	Ø 11.4 mm
7Z4SX25	4 x 2.5 mm <sup>2</sup>	Ø 10.5 mm
7Z4SX40	4 x 4.0 mm <sup>2</sup>	Ø 13.5 mm
7Z6SX25	6 x 2.5 mm <sup>2</sup>	Ø 13.5 mm
7Z8SX25	8 x 2.5 mm <sup>2</sup>	Ø 14.0 mm
7Z8SX40	8 x 4.0 mm <sup>2</sup>	Ø 20.0 mm
7Z16SX40	16 x 4.0 mm <sup>2</sup>	Ø 23.0 mm

## ENERGY CABLES

## MAINS POWER CABLE

**7ZF...**

The main application of the SYNTAX® MAINFLEX cable is in lighting technology and other current-carrying circuits. The strand construction has been designed to get the best flexibility with a wide range of external temperatures. This cable has good impact absorbing properties and the external jacket is compliant with CEE 20-22/III - IEC 60332-3-24 - EN 50266-2-4 regulations. In the 7ZF0325 cable the 11.3 mm overall diameter is intended to grant IP67 protection when the cable is used with the six-way rubber grommet of our SYNTAX SSX 19 pin Spider connector, for break-in and break-out leads.

**CABLE DETAILS**

- Jacket: Black matt PVC flame retardant
- Resistance of conductors: IEC 60344
- Insulation resistance: > 200 MΩ/Km
- Operating Voltage: 450/750 V
- Temperature range: -30°C +70°C

P. Number	Cores	Inner conductors	Diameter
7ZF0325	3x2.5 mm <sup>2</sup>	Brown-Blue-Green/Yellow	Ø 11.3 mm
7ZF0340	3x4 mm <sup>2</sup>	Brown-Blue-Green/Yellow	Ø 13.0 mm
7ZF0360	3x6 mm <sup>2</sup>	Brown-Blue-Green/Yellow	Ø 14.0 mm
7ZF0525	5x2.5 mm <sup>2</sup>	Brown-Blue-Black-Grey-Green/Yellow	Ø 12.5 mm
7ZF0540	5x4 mm <sup>2</sup>	Brown-Blue-Black-Grey-Green/Yellow	Ø 15.0 mm
7ZF0560	5x6 mm <sup>2</sup>	Brown-Blue-Black-Grey-Green/Yellow	Ø 16.0 mm

## MOTOR POWER SUPPLY

**7ZF0425M**

The cable 7ZF0425M motor power supply, is the right solution for managing the three-phase motors used for the lifting of aluminum trusses or specific equipments in the exhibition's world and entertainment market.

The three phases are identified by the number placed on the sheath of the inner conductors while the yellow-green wire is used for grounding. The conductors have a cross section of 2.5 mm<sup>2</sup> that allows you to manage high power.

The outer jacket is flexible black PVC, flame retardant comply with IEC 60332-3-24 - EN 50266-2-4

**CABLE DETAILS**

- Conductors: 3 x 2.5 mm<sup>2</sup> black PVC numbered  
1 x 2.5 mm<sup>2</sup> Green/Yellow
- Jacket: Black matt PVC Ø 12.2 mm
- Resistance of conductors: IEC 60344
- Insulation resistance: > 200 MΩ/Km
- Operating Voltage: 450/750 V
- Temperature range: -30°C +70°C

## MULTICORE POWER CABLE

### 7ZF...T



These SYNTAX® MULTICORE POWER cables are manufactured with a flexible and impact absorbing external jacket, compliant with CEE 20-22/III - IEC 60332-3-24 - EN 50266-2-4 fire resistant regulations.

Thanks to the particular distribution of the inner conductors, the SYNTAX® MULTICORE POWER cables are anti-knotting and have excellent flexibility, handling, mechanical resistance and easy winding characteristics.

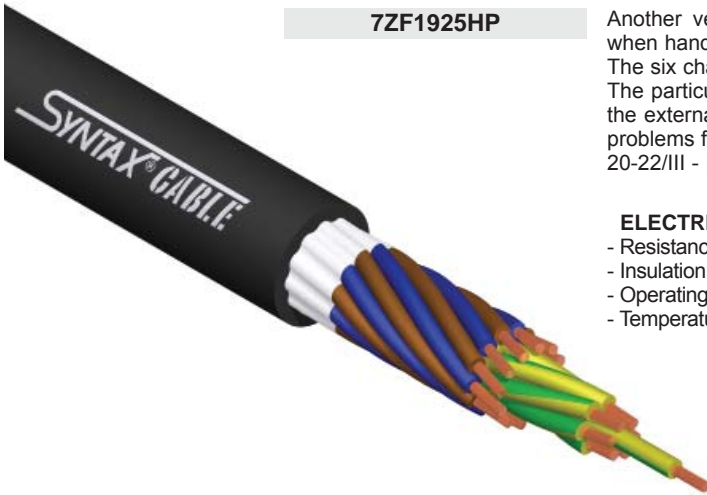
They are also suitable for continuous rolling/unrolling either in indoor or outdoor use. Designed for lighting applications, it perfectly matches with our 19 pin SSX power connector series.

Part N.	CABLES	
7ZF1915T	19 x 1.5 mm <sup>2</sup> - 18 numbered jackets + Green/Yellow	Ø 18,0 mm
7ZF1925T	19 x 2.5 mm <sup>2</sup> - 18 numbered jackets + Green/Yellow	Ø 22,3 mm
7ZF1225T	12 x 2.5 mm <sup>2</sup> - 11 numbered jackets + Green/Yellow	Ø 18,0 mm

#### ELECTRICAL DETAIL

- Resistance of conductors: IEC 60344
- Insulation resistance: > 200 MΩ/Km
- Operating Voltage: 450/750 V
- Temperature range: -30°C +70°C

### 7ZF1925HP



Another version of the 19x2,5 Power Multicore, designed for usage when handling operations are very intensive.

The six channels are easily recognizable by color and numbering.

The particular distribution of the inner cables and the material used for the external jacket allow many rolling and unrolling cycles, without any problems for the cable lifespan. The PVC black jacket comply with CEE 20-22/III - IEC 60332-3-24 - EN 50266-2-4 fire resistant regulations.

#### ELECTRICAL DETAIL

- Resistance of conductors: IEC 60344
- Insulation resistance: > 200 MΩ/Km
- Operating Voltage: 450/750 V
- Temperature range: -30°C +70°C

### 7ZF1925PUR



This version of 19x2,5 Power Multicore is intended for usage when halogen-free cable is requested. The particular distribution of the inner cables and Polyurethane jacket (PUR), provides high shear strength and extremely long lifespan, despite the smaller thickness of the cable sheath. The several advantages are: slim cable for easier handling, less total weight and compliance with halogen-free norms, thanks to the PUR native features. External overall diameter 18 mm, weight 0,62 kg/mt, good flexibility.

#### ELECTRICAL DETAIL

- Resistance of conductors: IEC 60344
- Insulation resistance: > 200 MΩ/Km
- Operating Voltage: 300/500 V
- Temperature range: -40°C +80°C

# HYBRID CABLES

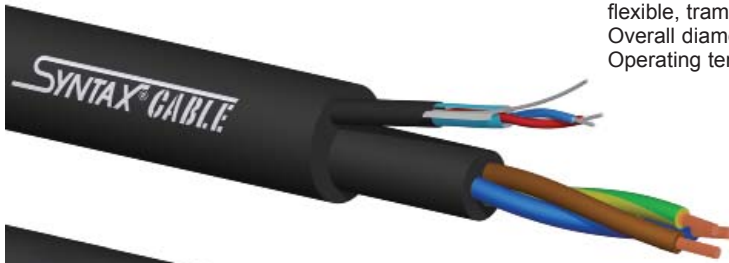
## POWER + DIGITAL mod. 7XD1F315SX - 7XD2F315SX

The SYNTAX® POWER+DIGITAL is a hybrid cable with a jacketed 3 x 1.5 mm<sup>2</sup> main power cable combined with one or two DMX twisted pairs (7XD1F315SX or 7XD2F315SX).

The digital signal pair is shielded by an aluminium/polyester foil screen and covered with a black PVC jacket. The power line is equipped with its own PVC jacket for added safety in compliance with the I.E.C. regulation. Suitable for parallel controls of light mixing boards via power line and DMX signal via digital cable. Also used for analogic audio cabinets when power is supplied. The external flame-retardant black PVC jacket is very flexible, trampling-proof, impact absorbing and water-proof.

Overall diameter 7XD1F315SX: 14 mm - 7XD2F315SX: 14.5 mm.  
Operating temperature -30° to 70° C.

7XD1F315SX



7XD2F315SX



### 1(2) x DIGITAL

- Conductors: Bare OFC 24 AWG 19 x 0,12 mm red/blue Foam - Skin Ø 1,4 mm
- Conductors jacket: tinned OFC 24 AWG 7 x 0,20 mm
- Drain wire: aluminium/polyester foil 100% cov.
- Screen: Black PVC Ø 3,8 mm flame-retardant
- External jacket: 1-4 Mhz 110 Ω
- Nominal Impedence: <90 Ω/Km
- D.C.R. conductors: <70 Ω/Km
- D.C.R. shield: 1Khz 40 nF/Km
- Capacitance cond./cond: 1Khz 80 nF/Km
- Capacitance cond./shield:

### 1 x POWER

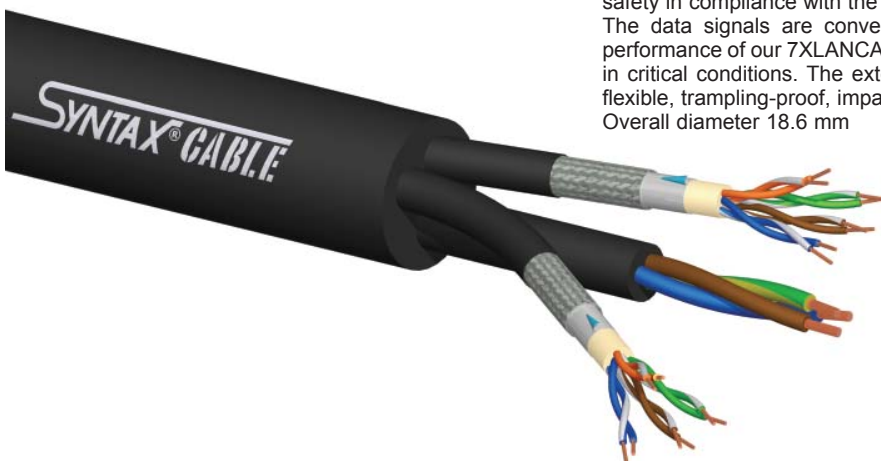
- Conductors: stranded OFC 3 x 1.5 mm<sup>2</sup> - 15 AWG
- Conductors jacket: Brown, Blue, Green-Yellow PVC
- External jacket: Black PVC Ø 6,8 mm flame retardant

Overall jacket: Black PVC super flex flame retardant  
7XD1F315SX: Ø 14,0 mm  
7XD2F315SX: Ø 14,5 mm

## POWER + 2 x CAT5E mod. 7YPW3LN2

The combined SYNTAX® 7YPW3LN2 cable finds its main application in the digital signage field, whenever a clean, easy and fast cabling is required. The power line is equipped with its own PVC jacket for added safety in compliance with the I.E.C. regulation.

The data signals are conveyed by two Cat5e cable with the same performance of our 7XLANCAT5 cable, to ensure a reliable performance in critical conditions. The external flame-retardant black PVC jacket is flexible, trampling-proof, impact absorbing and easy to handle.  
Overall diameter 18.6 mm



### 2 x CAT5E

- Conductors: Solid bare OFC Ø=0,51mm - 24 AWG
- Conductors jacket: Polyolefin Foam - Ø=0,95 mm
- Color code: Comply EIA/TIA 568
- First screen: aluminium-mylar foil 100% cov.
- Second screen: tinned copper braid cov. >80%
- Resistance of conductors: < 90 Ω/Km
- Insulation resistance: > 10.000 Ω/Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100 Ω
- Jacket: Black PVC Ø 6,4mm flame-retardant

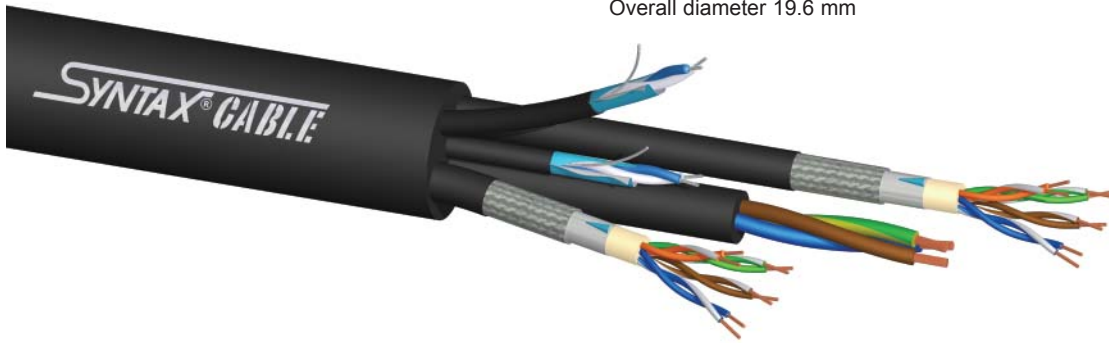
### 1 x POWER

- Conductors: stranded OFC 3 x 1.5 mm<sup>2</sup> - 15 AWG
- Conductors jacket: Brown, Blue, Green-Yellow PVC
- External jacket: Black PVC Ø 6,8 mm flame-retardant

Overall jacket: matt Black PVC flame-retardant Ø=18,6 mm

## POWER + 2 x CAT5E + 2 x DIGITAL mod. 7YPW3LN2DG2

The SYNTAX® 7YPW3LN2DG2 cable has the same specs as the 7YPW3LN2 cable with the addition of two AES/EBU digital pair cables. Overall diameter 19.6 mm



### 2 x CAT5E

- Conductors: Solid bare OFC Ø=0,51mm - 24 AWG
- Conductors jacket: Polyolefin Foam - Ø=0,95 mm
- Color code: Comply EIA/TIA 568
- First screen: aluminium-mylar foil 100% cov.
- Second screen: tinned copper braid cov. >80%
- Resistance of conductors: < 90 Ω/Km
- Insulation resistance: > 10.000 Ω/Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100 Ω
- Jacket: Black PVC Ø 6,4 mm flame-retardant

### 2 x DIGITAL

- Conductors: tinned OFC 24 AWG - 28 x 0,10mm
- Conductors jacket: white/blue gas injected foam Ø 1,4mm
- Drain wire: tinned OFC 24 AWG - 7 x 0,18mm
- Screen: aluminium/mylar foil 100% cov.
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- External jacket: Black PVC flame-retardant Ø 3,4mm
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/Km
- Capacitance cond./shield: 1Khz 57 nF/Km

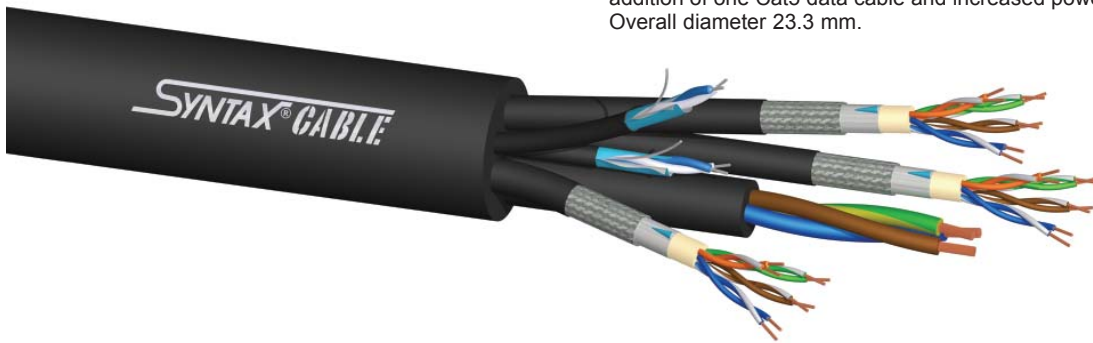
### 1 x POWER

- Conductors: stranded OFC 3 x 1.5 mm<sup>2</sup> - 15AWG
- Conductors jacket: Brown, Blue, Green-Yellow PVC
- External jacket: Black PVC Ø 6,4 mm flame-retardant

Overall jacket: matt Black PVC flame-retardant Ø=19,6 mm

## POWER + 3 x CAT5E + 2 x DIGITAL mod. 7YPW3LN3DG2

The SYNTAX® 7YPW3LN3DG2 cable was designed for usage on the new digital consoles, which use the third Cat5 as redundant line. The cable has the same specs as the 7YPW3LN2DG2 cable with the addition of one Cat5 data cable and increased power line up to 2.5mm<sup>2</sup>. Overall diameter 23.3 mm.



### 3 x CAT5E

- Conductors: Solid bare OFC Ø=0,51mm - 24 AWG
- Conductors jacket: Polyolefin Foam - Ø=0,95 mm
- Color code: Comply EIA/TIA 568
- First screen: aluminium-mylar foil 100% cov.
- Second screen: tinned copper braid cov. >80%
- Resistance of conductors: < 90 Ω/Km
- Insulation resistance: > 10.000 Ω/Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100 Ω
- Jacket: Black PVC Ø 6,4 mm flame-retardant

### 2 x DIGITAL

- Conductors: tinned OFC 24 AWG - 28 x 0,10mm
- Conductors jacket: white/blue gas injected foam Ø 1,4mm
- Drain wire: tinned OFC 24 AWG - 7 x 0,18mm
- Screen: aluminium/mylar foil 100% cov.
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- External jacket: Black PVC flame-retardant Ø 3,4mm
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/Km
- Capacitance cond./shield: 1Khz 57 nF/Km

### 1 x POWER

- Conductors: stranded OFC 3 x 2.5 mm<sup>2</sup> - 13AWG
- Conductors jacket: Brown, Blue, Green-Yellow PVC
- External jacket: Black PVC Ø 9,1 mm flame-retardant

Overall jacket: matt Black PVC flame-retardant Ø=23,3 mm

# HYBRID CABLES

## POWER + 1 x CAT5E + 1 x VIDEO + 2 x DIGITAL mod. 7YPW3LN1VD1DG2

Another version in our hybrid series range, the SYNTAX 7YPW3LN1VD1DG2 cable is designed as the 7YPW3LN2DG2 cable, but it has one CAT5 and one HDTV video cable instead of two CAT5 cables.  
Overall diameter 19.6 mm



### 1 x CAT5E

- Conductors: Solid bare OFC Ø=0,51mm - 24 AWG
- Conductors jacket: Polyolefin Foam - Ø=0,95mm
- Color code: Comply EIA/TIA 568
- First screen: aluminium-mylar foil 100% cov.
- Second screen: tinned copper braid cov. >80%
- Resistance of conductors: < 90 Ω/Km
- Insulation resistance: > 10.000 Ω/Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100 Ω
- Jacket: Black PVC flame-retardant Ø 6,4 mm

### 1 x VIDEO

- Conductors: solid OFC red copper 1 x 0,81 mm
- Conductors jacket: Ø 3,75 mm foam-polyolefin
- Shield 1: OFC tinner copper braid
- Shield 2: aluminium foil
- External jacket: gray PVC flame-retardant Ø 5.8 mm
- Capacitance: 60 nF/km
- Resistance of insulation: >10 Ω/Km
- Electrical resistance: Inner conductor < 36 Ω/Km
- Electrical resistance: Screen < 8 Ω/Km
- Nominal impedance: 75 Ω/Km ± 3

### 2 x DIGITAL

- Conductors: tinned OFC 24 AWG - 28 x 0,10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 7 x 0,18 mm
- Screen: aluminium/mylar foil 100% coverage
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- External jacket: Black PVC flame-retardant Ø 3,4 mm
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/km
- Capacitance cond./shield: 1Khz 57 nF/km

### 1 x POWER

- Conductors: stranded OFC 3 x 1.5 mm² - 15 AWG
- Conductors jacket: Brown, Blue, Green-Yellow PVC
- External jacket: Black PVC Ø 6,8 mm flame retardant

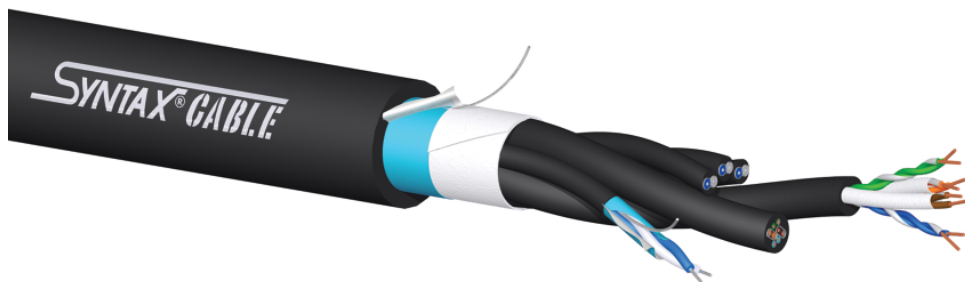
Overall jacket: matt Black PVC flame-retardant Ø=19,6 mm

## 2 x CAT6 + 4 x DIGITAL mod. 7YLN2DG4

The hybrid cable SYNTAX® 7YLN2DG4 perfectly meets the connectivity requirements for the management of Ethernet data signals up to 250MHz frequency and for balanced digital audio lines distribution. Its composition consists of two Cat6 cables and four AES/EBU lines and is suitable to connect many of the new audio, video and lighting digital systems, whenever a clean, easy and fast cabling is required.

In addition to the individual shielding on each AES/EBU cable, the overall shield with drain wire ensures protection from external noise (EMI) for Cat6 lines, greatly improving the return loss value, which is usually critical with standard S/FTP shielding.

The highly flexible PVC outer jacket, oversized and flame-retardant, ensures excellent handling and durability in mobile applications. The outer diameter 17.5 mm..



### 2 x CAT6

- Conductors: Solid bare OFC - Ø=0,57mm
- Conductors jacket: Polyolefin Foam - Ø=1 mm
- Color code: Comply EIA/TIA 568
- Jacket: Black PVC flame-retardant Ø=6,2 mm
- Resistance of conductors: < 75 Ω/Km
- Insulation resistance: > 5 GΩ/Km
- Capacity between conductors: 48 nF/Km
- Impedance from 1 to 250MHz: 100Ω ± 15%

### 4 x DIGITAL

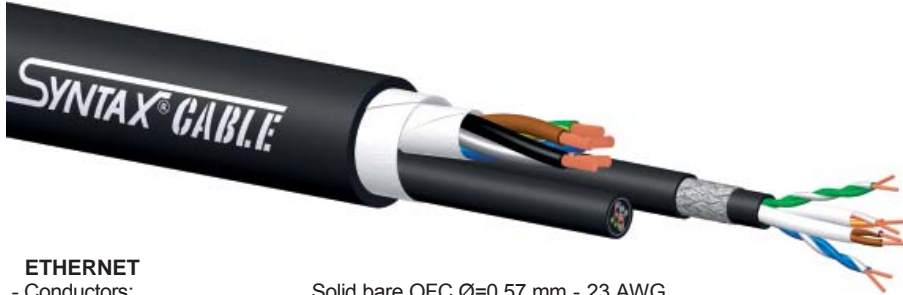
- Conductors: tinned OFC 24 AWG - 28 x 0,10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 7 x 0,18 mm
- Screen: aluminium/mylar foil 100% coverage
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- External jacket: Black PVC flame-retardant Ø=3,4 mm
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/Km
- Capacitance cond./shield: 1Khz 57 nF/Km

Overall jacket: matt Black PVC flame-retardant Ø=17,5 mm  
 Overall screen: aluminium-mylar foil 100% coverage  
 Drain wire: tinned OFC 24 AWG 7 x 0,18 mm  
 Operating temperature: -30° +70° C

## ETHERNET CABLES mod. 7XPW5LAN2CAT6

Specifically designed for the new SGH Syntax Gigamod Hybrid connector.

Useful to make backbone Lines, Rack Links connection that need a balanced load distribution, Hi-Power Video devices distribution system. The SYNTAX® 7XPW5LAN2CAT6 hybrid cable finds its main application in the field of digital signals, whenever tidy, easy and fast wiring is required. It is particularly suited for backbone lines, rack link connections where a well-balanced load distribution is needed, Hi-Power Video distribution devices and systems. The power line is wrapped by non woven overlapping tape, a solution granting improved stability and reduced overall diameter (Ø=21,5). The data signals are conveyed by two Cat6 cables having the same characteristics as our 7XLANCAT6PUR cable, so as to ensure reliable performance in critical conditions. The external flame-retardant black PVC jacket is flexible, trampling-proof, impact absorbing and easy to handle.



### ETHERNET

- Conductors: Solid bare OFC Ø=0.57 mm - 23 AWG
- Conductors jacket: Polyolefin Foam - Ø=1 mm
- Color code: green, white-green, orange, white-orange, blue, white-blue, brown, white-brown
- First Jacket: PVC black Ø=6.2 mm flame retardant
- Screen: tinned copper braid coverage >80%
- Second jacket: PUR - Polyurethane compound black Ø=8.0 mm
- Resistance of conductors: < 75 Ω/Km
- Insulation resistance: > 5 GΩ/Km
- Capacity between conductors: 48 nF/Km
- Impedance from 1 to 250MHz: 100 Ω ± 15%
- Operating temperature: -30° +70° C

### POWER

- Conductors: Stranded bare copper 5x2,5mm² IEC60228 CLASS 5
- Conductors Jacket: blue, brown, grey, green-yellow PVC
- Operating Temperature: -30 +70 °C
- Operating Voltage: 450/750V
- External non woven overlapping tape

Frequency (MHz)	1	4	10	16	20	31.25	62.50	100	200	250
Attenuation (dB/100m)	1.9	3.5	5.4	6.9	7.8	9.9	14.3	18.4	27.1	30.8
Next (dB)	89.3	79.3	69.3	64.7	62.6	58.7	53.0	49.4	44.6	43.2
Return Loss (dB/100m)	30.3	28.5	27.3	26.7	26.4	25.9	25.1	24.2	23.1	21.8

## 6 x VIDEO + 8 x DIGITAL mod. 7YVD6DG8HD

The hybrid SYNTAX® 7YVD6DG8HD cable is ideally suitable for the broadcasting world, as it has been conceived to manage combined audio and video signal distribution. The digital twisted pairs have been designed in accordance with the AES/EBU audio standard and the video cables are suitable for HDTV-SDI high performance applications.

Using this cable and the exclusive SYNTAX SV 25/6 multipin audio/video combo connector, it is possible produce several extension leads and eventually link them to any audio/video stage-box. Overall diameter 24,5 mm.



### 6 x VIDEO

- Conductor: Solid bare OFC 1 x 0,81mm - 20 AWG
- Conductor jacket: Ø 3,75 mm foam-polyolefin
- Shield 1: aluminium foil 100% coverage
- Shield 2: tinned OFC braid 90% coverage
- External jacket: Grey PVC numbered Ø 5.8 mm (800 ÷ 1200 Hz) 53 nF/Km ± 5%
- Capacitance: >10 Ω/Km
- Resistance of insulation: Inner conductor < 36 Ω/Km
- Electrical resistance: Screen < 8 Ω/Km
- Nominal impedance: 75 Ω ± 3
- Velocity of propagation: 84%

### 8 x DIGITAL AES/EBU

- Conductors: tinned OFC 24 AWG - 28 x 0,10mm
- Conductors jacket: white/blue gas injected foam Ø 1,4mm
- Drain wire: tinned OFC 24 AWG - 7 x 0,18mm
- Screen: aluminium/mylar foil 100% cov.
- Nominal Impedence: 1-4 Mhz 110 Ω/100 mt
- External jacket: Black PVC flame-retardant Ø 3,4mm
- D.C.R. conductors: <86 Ω/Km
- D.C.R. shield: <70 Ω/Km
- Capacitance cond./cond.: 1Khz 37 nF/Km
- Capacitance cond./shield: 1Khz 57 nF/Km

Overall screen: high density tinned copper braid  
Overall jacket: matt red PVC flame-retardant Ø = 24,5 mm

Frequency (MHz)	5	50	100	200	470	742	862	1000	1485	1750	2150	2227	3000
Attenuation (dB/100m)	1.9	5.7	7.9	11.0	17.1	21.6	22.9	24.8	31.9	34.1	38.8	39.9	47.5

# CABLE DRUMS

## 7SYCD300 - 7SYCD400

The SYNTAX® cable drums CD series has an extremely strong structure, thanks to high resistance bent and soldered structural steel tubes. External finish is high-resistance matt black powder.

The crank handle can be lodged on the side of the external frame, making the cable drum a proper parallelepiped without any protrusion for space-saving in freight.

Designed for professional application, the central roller presents an oversize 200 mm diameter which allows rewinding even large diameter cables, avoiding damage to the cables' electrical and mechanical features. The drum is mounted on ball bearings and divided in two sections, the narrower of which is suited for housing cables' ends. We also supply elastic band with velcro® ends, in order to avoid freight damage, binding the cables' ends tight to the drum.

On the side opposite to the crank, a friction-adjustable brake is installed, to stop the roller revolving during transport.

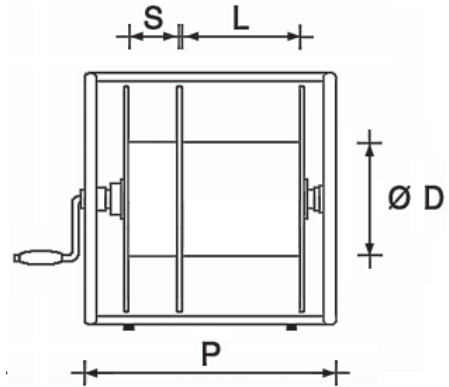
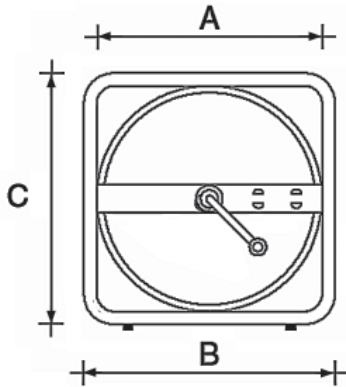
Protective rubber feet on the bottom of the structure ensure the right ground-detachment and easier stacking up.

### 7SYCD300

### 7SYCD400

#### DIMENSIONS (mm)

#### DIMENSIONS (mm)



#### 7SYCD300

A	C	B	D	S	L	P
460	500	500	200	90	300	500

#### 7SYCD400

A	C	B	D	S	L	P
460	500	500	200	90	400	600

### 7SYCD300



Weight 18,0 kg.

### 7SYCD400



Weight 21,5 kg.

#### SUMMARY TABLE OF DRUM CABLE CAPACITY (mt) BASED ON DIAMETER OF OUR MAIN CABLES RANGE (mm)

	Cable diameter (mm)	6,2	7,2	9,6	12,2	14,5	16,3	18,0	20,8	22,8	25,2	27,0	30,0
<b>7SYCD300</b>	drum capacity sector L (mt)	780	600	320	190	125	100	90	68	50	45	34	30
<b>7SYCD400</b>	drum capacity sector L (mt)	1040	820	430	250	170	130	125	90	65	60	43	40
	drum capacity sector S (mt)	240	190	95	55	38	27	23	19	15	12	9	7

## 7SYCR190

This cable drum is easy to use and suitable for many jobs as recording studios, live entertainment shows, broadcasting and are particularly useful for the construction of multicore distribution system.

Its perimetric structure completely clusters the drum. The high resistance frame, made up of bent and soldered structural steel, prevents accidental mechanical damage and is matt black powder coated. The internal diameter of the roller allows to easily wind/rewind either large cables or more delicate video and optical fiber cables.

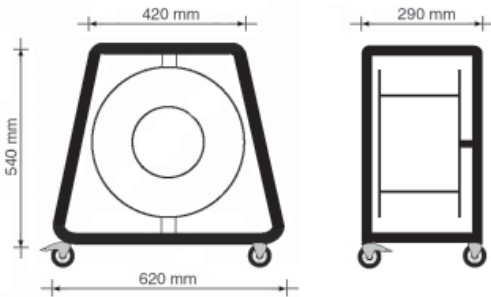
The central shaft of the steel roller is attached on one side only through a spindle fixed on a 40 mm boxed steel, while the other side is free. This drum side has a large opening where an optional quick-release plate can be set to house the cable ends. Alternatively, a 16, 24, or 32 hole drilled plate for XLR mounting can be fitted on the open side to obtain a revolving stage-box.

The crank handle is located on the same side, while on the opposite side a friction-adjustable brake is supplied, to stop the roller rotation during transport.

The cable drum has four wheels (two of which with brakes), for easier moving.



### DIMENSIONS



### ACCESSORY SIDE PLATES

7SYCRP16	16 holes for XLR " D " type
7SYCRP24	24 holes for XLR " D " type
7SYCRP32	32 holes for XLR " D " type
7SYCRP00	Closing side plate

### SUMMARY TABLE OF DRUM CABLE CAPACITY (mt) BASED ON DIAMETER OF OUR MAIN CABLES RANGE (mm)

Cable diameter (mm)	5,5	6,2	6,5	7,2	9,6	11,2	12,2	14,5	16,3	18,0	20,8	22,8
drum capacity (mt)	450	350	330	270	150	100	84	60	45	37	25	22



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