SYNTAX® CABLE

The **VALENTINI** range of cables SYNTAX® CABLE is developed for the particular application and rigorous environments of the audio & video installation, studio recording, musical entertainment and every where the electrical and mechanical properties are required.

AUDIO MULTICORE mod. 7YPR..

The SYNTAX® AUDIO MULTICORE are developed for the particular application and rigorous environments of the audio & video installations, studio recording, musical entertainment and every where the electrical and mechanical properties are required.
It is formed with precise talc lined ridges that cradel the cores in formation yet allow them to slide against one other. This solve the problems of twisting and knots when the cable is employed, without losing the right flexibility.
The XLPE conductors insulation is particulary resistant to high temperatures, to avoid warping or shrinkage when soldering. The pairs are twisted and the external PVC jacket are individually numbered. An aluminium/polyester foil shield provide a 100% screen and the wire drain inside allows fast installation. All the conductors are made by high purity Oxigen Free Copper.
The external very flexible PVC jacket is made by high tech polymer to get benefits like impact absorbing, slipping over rouge surfaces and suppleness down to minus 30°C.

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

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

INSTALLATION AUDIO mod. 7XCBL02SX

The smaller external diameter of this cable, made by OFC high performace, is the best for the inside wiring of racks and audio equipment installations. The XLPE conductors insulation is particulary resistant to high temperatures, to avoid warping or shrinkage when soldering. The pairs are twisted, the aluminium/polyester foil shield provide a 100% screen and the wire drain inside allows a fast installation.

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

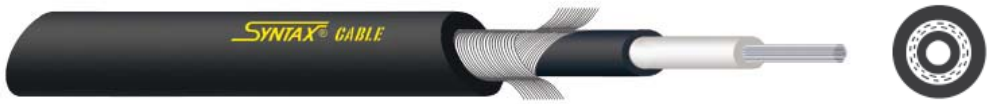
AUDIO MICROPHONE mod. 7XSP03N

The featuring of this cable provide an excellent fexibility using a double PVC jacket made with high tech polymer to grant trampling-proof, anti-knotting and long flex life. The two insulated twisted conductors wires are shielded with a high density copper spiral for highly screening performance. The wire drain inside allows a fast installation.
A note for the conductors made with tinned OFC and the PVC flame-retardant external jacket.

- Nominal resistance:	<96 ohm/km	- Mutual capacitance:	1Khz 160 nF/km
- Conductors:	tinned OFC 24 AWG 19 x 0,12 mm	- Operating temperature:	-30° +70° C.
- Screen:	high density spiral OFC 95% cov.	- Overall diameter:	Ø 6,10 mm
- Drain wire:	tinned OFC 24 AWG 19 x 0,12 mm	- External jacket:	black PVC Ø 6,5mm flame-retardant
- Conductors jacket:	red/blue XLPE		(Red – Green – Blue on demand)

CABLES

INSTRUMENT CABLE mod. 7XHP01SX



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 section of 0.50 mm². 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 screen by the combination of double tinned copper spiral shielding and conductive carbon shield.
Due to the thick sturdy jacket it is very robust and strain relief, protected against cable breaks and convinces with high bending cycles. Despite the robustness it is very easy to wind, as it is made with a special PVC pigment and a fine stranding of the internal conductor.

CONSTRUCTION DETAIL

- Conductor: 1 x 0.50 mm² tinned copper OFC 21 AWG 64 x 0,10 mm
- Insulation: Foam skin PE, Diameter =2.40 mm
- Colour: Clear
- Shield: conductive carbon + double tinned copper wrap
- External jacket: Flexible PVC flame-retardant Black colour
- Overall diameter: Ø 7.00 mm
- Operating temperature: -30°C to 70°C

ELECTRICAL DETAIL at 20°C

- Conductor resistance: ≤ 39.5 ohm/Km
- Insulation resistance: ≥ 1 Gohm/Km
- Capacitance: 89 pF/m nominal
- Operating rating: < 50 V
- Voltage test: 1.5 kVdc x 1 min.

DIGITAL AES/EBU-DMX mod. 7XDDS03SX

A single pair DIGITAL AES/EBU-DMX CABLE, in according with the standard AES/EBU and DMS use specifications, is manufactured with reliably consistent impedance and use a special polymer sheath to achieve low capacitance. To ensure a high level protection from EMI/RFI noise, the shield is made with two different screens: the first by high-density spiral tinned copper, the second by aluminium/polyester foil. Blue PVC flame-retardant external jacket, trampling-proof, impact absorbing and long flex life.

- 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.
- External jacket: Blue PVC Ø 5,5 mm flame-retardant
- D.C.R.: conductors <90 ohm/km; shield <40 ohm/km
- Capacitance: cond./cond. 1Khz 40 nF/km; cond./shield 1Khz 80 nF/km
- Nominal Impedence: 1-4 Mhz 110 ohm/100 mt
- Operating temperature: -30° +70° C.

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

TWO PAIRS DIGITAL mod. 7XDDS07SX

The SYNTAX® two twisted pairs digital cable, is manufacture with reliably consistent impedance and use a special polymer sheath to achieve low capacitance. The shield is made with two different screens: the first by high-density spiral tinned copper, the second by aluminium/polyester foil. For easy connection the drain wire is present between the two screens. 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 long flex life.

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

VIDEO INSTALLATION CABLE mod. 7XVD59D

SYNTAX® standard coax cable 75 ohm nominal impedance, designed for video signals. By the two shields composition, red copper braid and tinned copper braid, has been developed for outdoor installation to keep low attenuation values over extended distances.

- Inner conductor:	solid OFC red copper 1 x 0,60 mm	- Overall diameter:	Ø 6,10 mm
- Shield 1:	OFC red copper braid (85% cov.)	- Capacitance (800 ÷ 1200 Hz)	67 pF/mt ± 5%
- Shield 2:	OFC tinned copper braid (85% cov.)	- Nominal impedance:	75 Ω ± 3
- Dielectric diameter:	Ø 3.5 mm polyethylene	- Velocity of propagation:	66%
- External Jacket:	Grey standard (Red – Green – Blue on demand)		

NOMINAL ATTENUATION (dB/100 m)				
50 MHz	100 MHz	200 MHz	400 MHz	1000 MHz
7	12	16	25	43

HDTV VIDEO INSTALLATION CABLE MOD. 7XVD59HDTV

This SYNTAX® halogen free video coax cable 75 ohm, is designed for HDTV high performance applications.
The jacket around the inner conductor is made with a special foam plastic polymer to guarantee a very low value of capacitance also for great length connections. The first shield, made with OFC red braid copper, together the second screen, made with tinned braid copper, warrants a great protection from external noises.
A further shield aluminum foil made is placed between the other two and forms a fire-proof barrier.
All the used materials to produce the cable, have been chosen to satisfy the main safety regulations in order to make the cable compliant to 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

- Inner conductor	solid OFC red copper 1 x 0,81 mm	
- Shield 1	OFC red copper braid (85% cov.)	
- Shield 2	OFC tinned copper braid (85% cov.)	
- Shield 3	fire-proof aluminium foil	
- Dielectric diameter	Ø 3,70 mm foam-polyolefin	
- External jacket	Polymer LSZH yellow – UV proof	
- Overall diameter	Ø 6.20 mm	
- Weight	60 g/m	
- 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
		Screen < 8 Ω/kM
- Nominal impedance		75 Ω ± 3
- Test voltage		7000 Vcc x 1 min
- Velocity of propagation		79%
- Transfer function		(1-30 MHz) : 10 mΩ/m
- Operating temperature range		-15° +70° C

NOMINAL ATTENUATION (dB/100 m)		
1.0 MHz	0.75	
3.6 MHz	1.50	
10.0 MHz	2.40	
71.5 MHz	6.50	
135.0 MHz	9.10	
270.0 MHz	13.10	
360.0 MHz	15.30	
540.0 MHz	19.20	
720.0 MHz	22.70	
750.0 MHz	23.20	
1000.0 MHz	27.50	
1500.0 MHz	35.40	
2000.0 MHz	41.60	
3000.0 MHz	52.80	

CABLES

SPEAKERS POWER LINE CABLES mod. 7Z..

This range of SYNTAX® SPEAKER cables has been developed for maximum flexibility and mechanical properties. The main characteristic is the use of very small section wires to get the full section, which increase conductivity and brillance of sound. They feature large conductor size, to minimize resistance to conduction of high power.
The mould of the jacket hugs the cores in position whilst the wall thickness and elasticity gives protection from knocks and scrapes. The external diameters match perfectly with the main power connectors. Finally the artic polymer PVC jacket keeps the cables easy to flex and rig in a wide range of temperatures.

- D.C.R. 20° C.: sect. 1.5 mm² = 13 ohm/km
  sect. 2.5 mm² = 8 ohm/km
  sect. 4.0 mm = 5 ohm/km
- External jacket: flame-retardant flex PVC Black
- Operating voltage: <50 Vca
- Operating temperature: -30° +70° C.
- Conductors OFC strand: sect. 1.5 mm² = 84 x 0.15 - 16 AWG
  sect. 2.5 mm² = 147 x 0.15 - 13 AWG
  sect. 4.0 mm² = 224 x 0.15 - 11 AWG

PART N.	CABLE
7Z2SX15 = 2 x 1.5 mm²	Ø 7.4 mm
7Z2SX25 = 2 x 2.5 mm²	Ø 8.8 mm
7Z2SX40 = 2 x 4.0 mm²	Ø 11.4 mm
7Z4SX25 = 4 x 2.5 mm²	Ø 10.5 mm
7Z4SX40 = 4 x 4.0 mm²	Ø 13.5 mm
7Z6SX25 = 6 x 2.5 mm²	Ø 13.5 mm
7Z8SX25 = 8 x 2.5 mm²	Ø 14.0 mm
7Z8SX40 = 8 x 4.0 mm²	Ø 20.0 mm
7Z16SX40 = 16 x 4.0 mm²	Ø 22.0 mm

MULTICORE POWER CABLE mod. 7ZF..

These SYNTAX® MULTICORE POWER cables are manufactured with a flexible and impact absorbing external jacket, comply with CEE 20-22/III - IEC 60332-3-24 - EN 50266-2-4 fire resistant regulations.
Excellent flexibility, mechanical resistance and ease handling.
Designed for lighting applications, match perfectly with power connectors 19 pin SSX series.

- **7ZF1915** 19x1.5 mm² - 19 poles x 1.5 mm² - 18 numbered jackets + Green/Yellow - Ø 18.0 mm
- **7ZF1925** 19x2.5 mm² - 19 poles x 2.5 mm² - 18 numbered jackets + Green/Yellow - Ø 22.3 mm
- **7ZF1225** 12x2.5 mm² - 12 poles x 2.5 mm² - 11 numbered jackets + Green/Yellow - Ø 18.0 mm
- **7ZF0525** 5x2.5 mm² - Brown-Blue-Black-Grey-Green/Yellow - Ø 12.5 mm
- **7ZF0540** 5x4 mm² - Brown-Blue-Black-Grey-Green/Yellow - Ø 15.0 mm
- **7ZF0560** 5x6 mm² - Brown-Blue-Black-Grey-Green/Yellow - Ø 16.0 mm

7ZF1925HP

Another version of the 19 x 2,5 Power Multicore, is designed to use where the handling operations are very intensive.
The particular distribution of the inner cables and the material used for the external jacket, allow a lot of cycles of rolling and unrolling, without any problem for the cable life.
Also the six channels are easy recognizable by color and number assignation.

MAINFLEX POWER CABLE mod. 7ZF0325

The main application of the SYNTAX® MAINFLEX cable is for lighting technology and other current-carrying circuits.
The strand construction was designed to get the best flexibility for a wide range of external temperature.
This cable has a good impact absorbing and the external jacket is compliant with CEE 20-22/III - IEC 60332-3-24 - EN 50266-2-4 regulations.
The 11.5 mm overall diameter match perfectly the six ways rubber insert of the SYNTAX SSX 19 pin Spider connector, for break-ins and break-outs leads.

- Construction	3x2.5 mm² Brown-Blue-Green/Yellow inner conductors
- Jacket	Black matt PVC Ø 11.2 mm comply with CEE 20-22/III - IEC 60332-3-24 - EN 50266-2-4
- Temperature range	min. -30 °C max. 70 °C
- **7ZF0340** 3x4 mm²	Brown-Blue-Green/Yellow inner conductors - Ø 13.0 mm
- **7ZF0360** 3x6 mm²	Brown-Blue-Green/Yellow inner conductors - Ø 14.0 mm

MAIN POWER + DMX mod. 7XD1F315SX

The SYNTAX® POWER+DMX has a main power line with a wires section of 3 x 1.5 mm² and one DMX 512 twisted pair cable. The digital signal pair is shielded with 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 for light mixing boards via power line and DMX signal via digital cable. Also used for analogic audio cabinets when power supplyed. The external black PVC jacket flame-retardant is very flexible, trampling-proof, impact absorbing and water-proof. Overall diameter 14.5 mm. Operating temperature -30° to 70° C.

DIGITAL

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

POWER

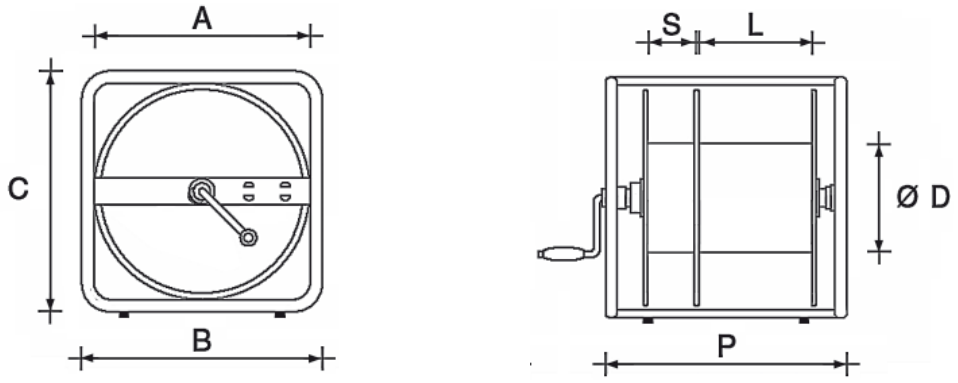
- External jacket:	Black PVC Ø 7,5 mm flame-retardant
- Conductors:	3 x bare OFC 15 AWG 82 x 0,15 mm - 1.5 mm²
- Conductors jacket:	Brown, Blue, Yellow-Green PVC Ø 2,5 mm twisted

CABLE DRUMS

7SYCD300 - 7SYCD400

The SYNTAX® cable drums CD series are the last solution for the application which need to roll, saving the inside structure of the cable as the internal drum housing is over sized by a diameter of 200 mm.
The drum spins are fitted by two protected bearings and include an adjustable friction-brake.
The two separate compartments allow to house the bulky cable and connectors in the smaller one and roll the cable in the large section.
Available an elastic band with VELCRO ends, to stop the cable during the transport.
A removable crank handle is housed on the drum side and the frame design allows to stack over for space-saving.
Any metal part of the cable-reel is finished by a sturdy black paint.

DIMENSIONS (mm)



7SYCD300 DIMENSIONS (mm)						
A	C	B	D	S	L	P
460	500	500	200	90	300	500

7SYCD400 DIMENSIONS (mm)						
A	C	B	D	S	L	P
460	500	500	200	90	400	600

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
7SYCD300	drum capacity sector **L** (mt)	780	600	320	190	125	100	90	68	50	45	34	30
7SYCD400		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

7SYCD300

Weight 18,0 kg.

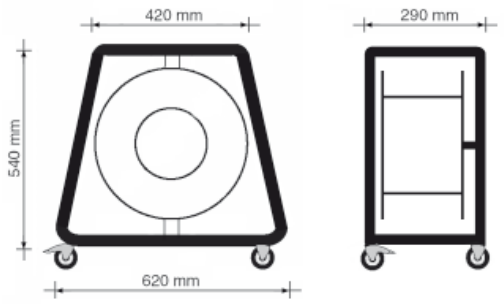
7SYCD400

Weight 21,5 kg.

7SYCR190

These SYNTAX® solidly constructed drums are suitable for many uses in recording, live entertainment and outside broadcast, and are particularly useful for the construction of audio multicore systems.
The steel drum is supported on one side with a spindle constructed from 40 mm steel. This means that a central axle is not required to be attached on both sides allowing useable panels to be mounted on one side of the drum. At last the revolving stagebox. The centre of the drum has a large aperture with an optional quick release plate for stowing cable tails. A drum brake is also included as standard.
Alternatively, the drum itself can be used as a stage box using one of the 16, 24, or 32 holed XLR mounting side plates, making a small easy to set up and take down rig possible.

DIMENSIONS



CLOSING SIDE PLATE

Weight 13,0 kg.

XLR HOLED SIDE PLATE

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