

made in Italy

Professional Cables



PROEL

www.proel.com

Made in Italy

100% MADE IN ITALY

5 ANNI DI GARANZIA!

- Sono tanti i punti di forza dei cavi professionali Proel. Progettazione, ricerca, design e produzione tutta italiana, frutto di partnership produttive con importanti aziende del nostro paese.

5 YEARS WARRANTY!

- Proel professional cables have so many strong points: they are completely Italian as for design, research and production cycle, being the result of fertile partnership with the best Companies in our country.

5 AÑOS DE GARANTÍA!

- Los cables profesionales Proel tienen muchos puntos de fuerza. Proyección, investigación, diseño y producción todo completamente italiano, resultado de alianzas productivas con empresas líderes en nuestro país.

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Company



Sin dalla sua fondazione, avvenuta nel 1991, Proel ha dedicato particolare attenzione al mercato dei cavi audio/video professionali e grazie alla collaborazione con affermati professionisti ed esperti tra i più importanti nel settore, è divenuta un punto di riferimento nel campo internazionale.



Since its founding in 1991, Proel has paid particular attention to the market of professional audio/video cables and it has become a benchmark in the international arena by partnering with renowned professionals and experts among the most important in the sector.



Desde su fundación en 1991, Proel ha prestado especial atención al mercado de los cables profesionales de audio/video y asociándose con profesionales de reconocido prestigio y expertos entre los más importantes en el sector, se ha convertido en un punto de referencia en el ámbito internacional.



Research & Development



Grazie alla capillare presenza sul mercato ed ai feedback ricevuti, l'azienda è costantemente impegnata nell'ampliamento della gamma dei prodotti, con riguardo anche ad ambiti diversi da quelli normalmente gestiti, come la domotica, il public address, l'home theatre, la luce architettonica, l'installazione nei luoghi di culto e nel navale. L'azienda riesce a sviluppare prodotti unici ed innovativi in grado di offrire molteplici soluzioni per soddisfare qualsiasi esigenza o richiesta da parte del cliente, dal semplice cavo per il musicista fino alle grandi installazioni.



Thanks to its widespread presence in the market and the feedback received, the company is constantly engaged in broadening the range of products, including those matters than normally the company doesn't deal with, such as home automation, public address, home theatre, architectural lighting, installations in worships and in shipbuildings. The company is able to develop unique and innovative products to offer multiple solutions to meet any need or request of the client, from simple cable for the musician to bigger installations.



Gracias a su amplia presencia en el mercado y a los feedback recibidos, la compañía está constantemente ocupada en la ampliación de la gama de productos, incluso con respecto a materias distintas de las que habitualmente se ocupa, como domótica, megafonía, home theatre, iluminación arquitectónica, instalación en los lugares de culto y en la construcción naval. La empresa desarrolla productos únicos e innovadores para ofrecer múltiples soluciones y satisfacer cualquier necesidad o petición del cliente, desde un simple cable para el músico a las grandes instalaciones.



Partnership



La forte partnership stabilita con alcune tra le più importanti aziende di produzione italiane, fa in modo che tutti i cavi siano prodotti mediante l'utilizzo di tecnologie ed attrezzature di ultima generazione, accompagnate da un'accurata selezione delle materie prime impiegate. Tutto ciò consente a Proel di essere sempre all'avanguardia nel mercato internazionale.



The strong partnership established with some of the most important Italian manufacturing companies, makes sure that all cables are produced through the use of the latest technologies and equipments, accompanied by a careful selection of raw materials. All that allows Proel be at the forefront in the international market.



La fuerte alianza establecida con algunas de las empresas fabricantes más importantes de Italia, se asegura de que todos los cables se producen a través del uso de tecnología y equipos de última generación, acompañado por una cuidada selección de las materias primas. Todo lo que permite Proel estar a la vanguardia en el mercado internacional.



Customization



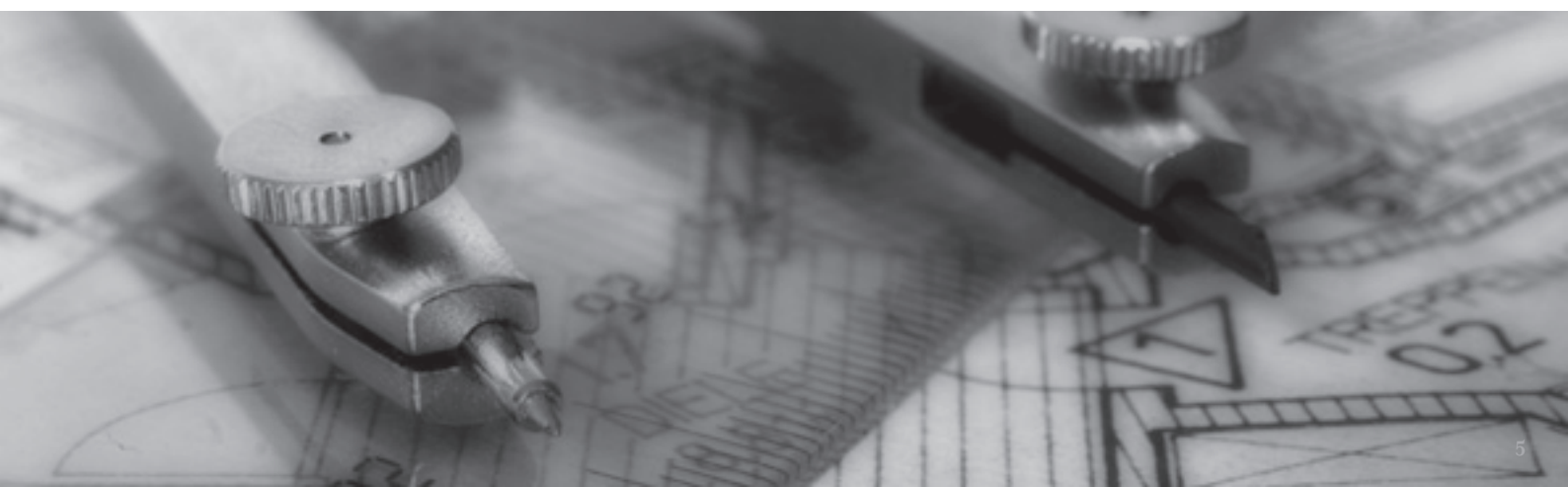
Gli obiettivi di Proel sono da sempre focalizzati sulla soddisfazione del cliente, sulla qualità dei prodotti offerti ed il loro sviluppo, al passo con il progresso tecnologico, l'innovazione, la creatività, l'efficienza. La grande flessibilità aziendale consente di soddisfare le esigenze di ogni singolo cliente, riuscendo così a creare dei prodotti "custom", seguendo e curando ogni minimo dettaglio tecnico, per proseguire con la stampa ed il confezionamento personalizzati e fino all'organizzazione del trasporto.



Proel goals have always been focused on customer satisfaction, quality of products and their development, keeping pace with technological progress, innovation, creativity and efficiency. The flexibility allows the company to meet the needs of each customer, allowing them to create "custom" products, following and taking care of every technical detail, followed by customized printing and packaging and the organization of transport.



Los objetivos de Proel han sido siempre enfocados en la satisfacción del cliente, la calidad de los productos y su desarrollo, a la par con el progreso tecnológico, la innovación, la creatividad y la eficiencia. La flexibilidad permite a la compañía conocer las necesidades de cada cliente, lo que le permite crear productos customizados, siguiendo y cuidando cada detalle técnico, seguido por la impresión y el embalaje personalizado y la organización del transporte.



Materials



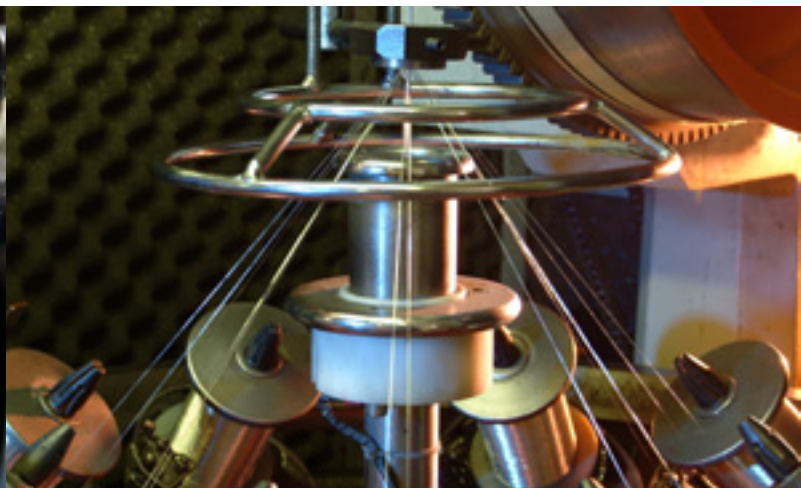
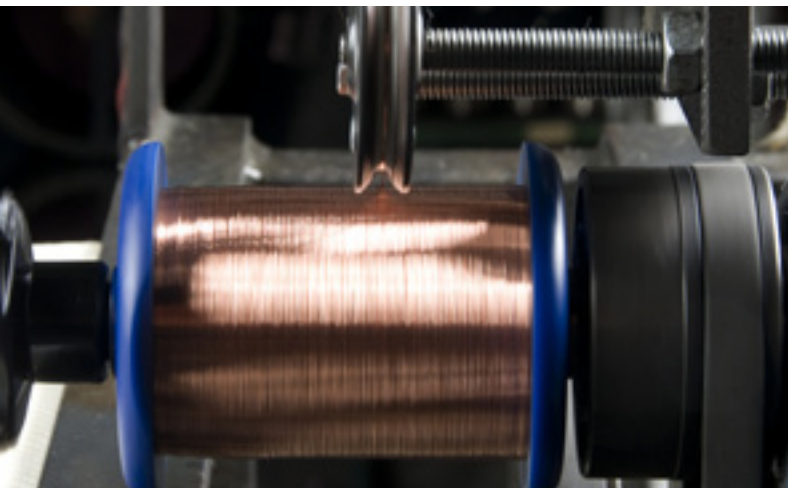
Il rame utilizzato, prodotto basilare per tutti i processi produttivi, è puro al 99,95% ed è completamente privo di ossigeno (O.F.C.). Il processo di trafilatura viene realizzato direttamente in sede di produzione per ottenere le dimensioni necessarie dei fili che vengono poi utilizzati nella trefolatura dei conduttori per raggiungere le varie sezioni utilizzate.



The copper used, basic product for all the production processes, has a purity of 99.95% and it is completely oxygen-free (O.F.C.). The drawing process is realized directly in the manufacturing site to obtain the required dimensions of the wires which are then used in the stranding of conductors to reach the various sections used.



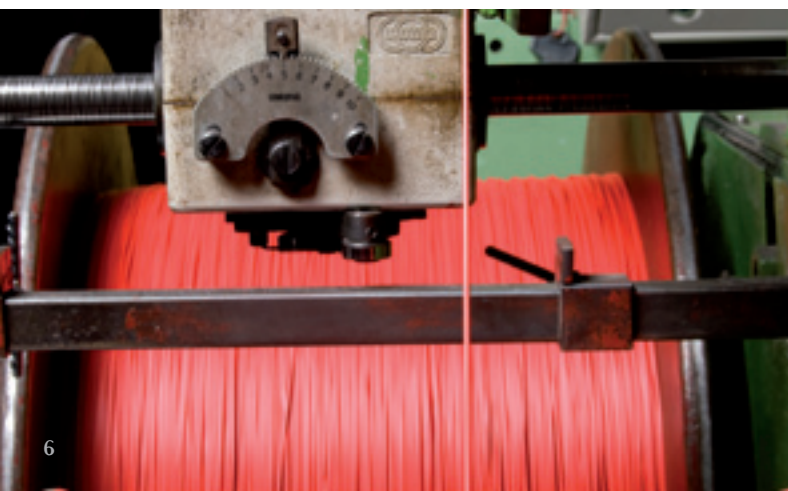
El cobre utilizado, producto de base para todos los procesos de producción, tiene una pureza de 99,95% y es completamente libre de oxígeno (O.F.C.). El proceso de dibujo se realiza directamente en el sitio de fabricación para obtener las dimensiones deseadas de los cables que se usan entonces en el encallamiento de conductores para llegar a las diversas secciones utilizadas.



A questo si aggiungono gli altri materiali, tutti di primissima qualità, utilizzati per l'isolamento dei conduttori e la realizzazione delle guaine, come gomme termoplastiche reticolate, PVC, PUR, FEP, XLPE polipropilene, politene espanso, compound halogen free, compound resistenti alla fiamma, a bassa emissione di fumi e gas tossici, privi di gas corrosivi.

To this are added other materials, all of the highest quality, used for the conductors insulation and the realization of the sleeves, as crosslinked thermoplastic rubber, PVC, PUR, FEP, XLPE polypropylene, foamed polyethylene, halogen free and flame retardant compounds, having low emission of smoke and toxic gases, free of corrosive gases.

A esto se añaden otros materiales, todos de la más alta calidad, que se utilizan para el aislamiento de los conductores y la realización de las cubiertas, como caucho termoplástico reticulado, PVC, PUR, FEP, XLPE polipropileno, espuma de polietileno, compuesto libre de halógenos y compuestos retardantes de llama con baja emisión de humos y gases tóxicos, libre de gases corrosivos.



Products Control



Tutte le prove elettriche e meccaniche rispondono alle norme tecniche applicabili nel pieno rispetto delle direttive Cee. Proel è in grado inoltre di offrire prodotti rispondenti alle normative UL e CSA. Tutti i materiali utilizzati rispondono alla direttiva RoHS (Restriction on Hazardous Substances) che prevede divieto e/o limitazioni di utilizzo per particolari sostanze pericolose quali il piombo (Pb), il mercurio (Hg), il cromo esavalente (Cr-Hex), il Cadmio (Cd), i bifenilipolibromurati (PBB) ed eteri di difenile polibromurati (PBDE).



All electrical and mechanical tests meet the applicable technical standards in full compliance with EEC directives. Proel is also able to offer products that meet UL and CSA standards. All the used materials comply with RoHS (Restriction on Hazardous Substances), which prohibits the use and/or limitations for particular hazardous substances such as lead (Pb), mercury (Hg), hexavalent chromium (Cr-Hex), cadmium (Cd), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers



Todas las pruebas eléctricas y mecánicas cumplen con las normas técnicas aplicables en plena conformidad con las directivas de la CEE. Proel es también capaz de ofrecer productos que cumplan con UL y CSA. Todos los materiales utilizados cumplen con RoHS (Restricción de sustancias peligrosas), que prohíbe y/o limita el uso de determinadas sustancias peligrosas como el plomo (Pb), mercurio (Hg), cromo hexavalente (Cr-Hex), cadmio (Cd), bifenilos polibromados (PBB) y éteres de difenilopolibromado (PBDE).



Inoltre, le aziende di produzione, sono tutte adeguate alla regolamentazione della normativa R.E.A.C.H. (Registration, Evaluation and Authorization of Chemicals), che racchiude nuovi standard di valutazione e registrazione delle sostanze chimiche utilizzate in produzione.

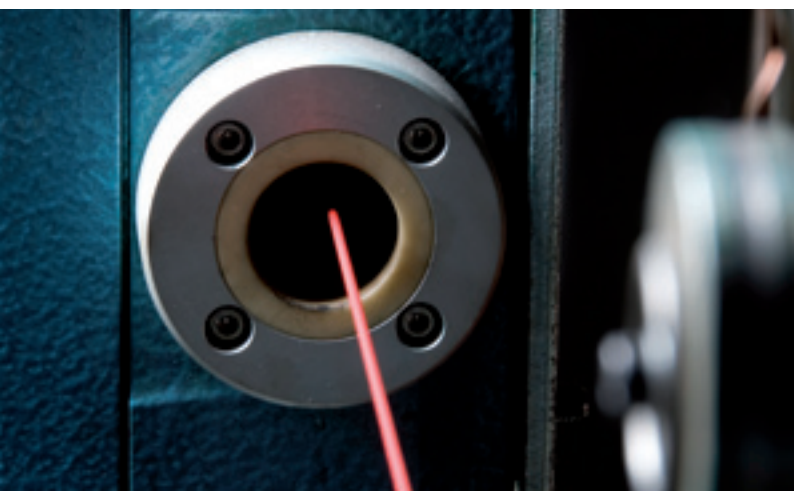
Oltre a tutti questi requisiti, Proel ha anche un occhio molto attento al rispetto dell'ambiente, utilizzando materiali riciclabili per tutte le tipologie di imballi.

(PBDEs). In addition, the production companies are all adequate to the REACH regulation (Registration, Evaluation and Authorisation of Chemicals), which includes new standards for evaluation and registration of chemicals used in production.

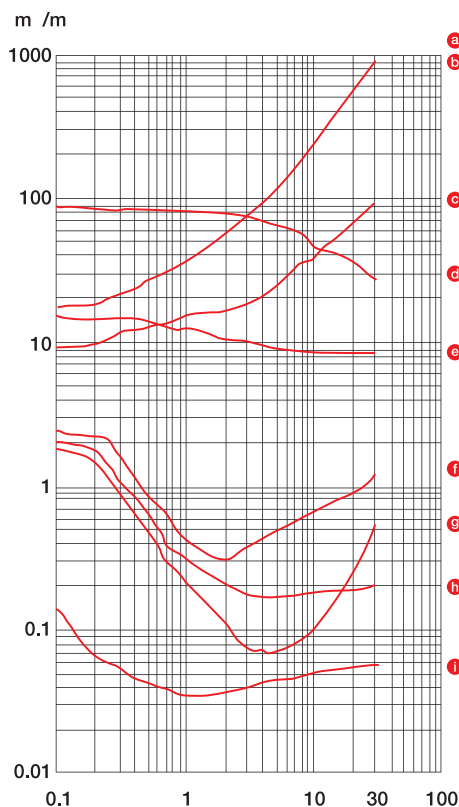
Besides all these requirements, Proel also has a keen eye on the environment, using recyclable materials for all types of packaging.

Además, las empresas de producción están todas adecuadas al reglamento REACH (Registro, Evaluación y Autorización de Sustancias Químicas), que incluye nuevas normas para la evaluación y registración de los productos químicos utilizados en la producción.

Además de todos estos requisitos, Proel tiene también un buen ojo para el medio ambiente, utilizando materiales reciclables para todos tipos de embalaje.



MAIN CABLE PARAMETERS



- A) SPIRALE RAME 90%
- B) TRECCIA DI RAME 75%
- C) TRECCIA DI RAME 90%
- D) ALLUMINIO/POLIESTERE
- E) ALLUMINIO/POLIESTERE + TRECCIA DI RAME 95%
- F) DOPPIA TRECCIA DI RAME 95% SENZA SEPARAZIONE
- G) TRECCIA DI RAME 95% + NASTRO SEPARATORE + TRECCIA DI RAME 95%
- H) TRECCIA DI RAME 95% + ALLUMINIO/POLIESTERE + TRECCIA DI RAME 95%
- I) TRECCIA DI RAME 95% + MOMETAL + TRECCIA DI RAME 95%

- A) COPPER SPIRAL 90%
- B) COPPER BRAID 75%
- C) COPPER BRAID 90%
- D) ALUMINIUM/POLYESTER
- E) ALUMINIUM/POLYESTER + COPPER BRAID 95%
- F) DOUBLE COPPER BRAID 95% WITHOUT SEPARATION
- G) COPPER BRAID 95% + SEPARATING TAPE + COPPER BRAID 95%
- H) COPPER BRAID 95% + ALUMINIUM/POLYESTER COPPER BRAID 95% + ALUMINIUM/POLYESTER
- I) COPPER BRAID 95% + MOMETAL + COPPER BRAID 95%

- A) ESPIRAL COBRE 90%
- B) MALLA COBRE 75%
- C) MALLA COBRE 90%
- D) ALUMINIO/POLIESTER
- E) ALUMINIO/POLIESTER + MALLA COBRE 65%
- F) DOBLE MALLA DE COBRE 95% SIN SEPARACION
- G) MALLA DE COBRE 95% + CINTA SEPARADORA + MALLA DE COBRE 95%
- H) MALLA DE COBRE 95% + ALUMINIO/POLIESTER + MALLA DE COBRE 95%
- I) MALLA COBRE 95% + MOMETAL + MALLA COBRE 95%

PARAMETRI ELETTRICI

RESISTENZA (Misurata in Ohm/unità di lunghezza @ 20°C).
La resistenza del conduttore è di primaria importanza per la determinazione della capacità di trasporto del segnale sulla linea di trasmissione. Più alta è la resistenza più il segnale trasmesso perderà la propria forza e quindi la capacità di arrivare a destinazione. Il suo valore è dato dal rapporto fra la resistività del materiale conduttore e la sua sezione.

CAPACITÀ (Misurata in Farad/unità di lunghezza).
La capacità esprime la propensione di un materiale dielettrico, posto fra due conduttori, di conservare la carica dielettrica quando esiste una differenza di potenziale fra i due conduttori stessi. E' sempre preferibile utilizzare cavi con bassa capacità, per permettere trasmissioni su distanze più lunghe.

IMPEDENZA CARATTERISTICA (Misurata in Ohm).
Il valore di impedenza indica l'opposizione complessiva al flusso degli elettroni offerta da una linea di trasmissione. In un sistema di trasmissione a lunga distanza o in alta frequenza, le componenti più importanti per l'impedenza sono: (a) la corrispondenza tra l'impedenza del cavo e quella del sistema ricevente (per evitare la riflessione e distorsione del segnale); (b) l'uniformità dell'impedenza (legata alla qualità del conduttore, alla geometria del cavo e all'uniformità del dielettrico).

ATTENUAZIONE (Misurata in Decibel/unità di lunghezza).
L'attenuazione determina il livello di trasmissione di una linea (normalmente il rapporto fra la tensione di entrata e quella di uscita). L'attenuazione di un segnale si risolve in una degradazione e distorsione dello stesso, con una perdita nel picco di voltaggio e rallentamento dell'impulso.

VELOCITÀ DI PROPAGAZIONE (Misurata in Percentuale).
La velocità di propagazione è il tempo richiesto da un segnale per viaggiare attraverso una linea di trasmissione. Con "Vp" si intende il rapporto fra le velocità del segnale nel suo mezzo di trasporto (isolamento) e la velocità dello stesso nell'aria, espresso in percentuale (valore in funzione della costante dielettrica del materiale dell'isolamento).

TENSIONE DI LAVORO (Misurata in Volt).
La tensione di lavoro di un cavo è limitata dal riscaldamento dello stesso e dalla temperatura di rammolimento del dielettrico. La potenza trasmissibile dipende dai materiali e dalle dimensioni del cavo oltre, naturalmente, alla temperatura ambiente.

ELECTRICAL PARAMETERS

RESISTANCE (Measured in Ohm/length unit @ 20°C)
The conductor resistance is of utmost importance for the determination of the signal's capacity of transfer on the line of transmission. The higher is the resistance the more the transmitted signal will lose its strength and as a consequence the ability to arrive at destination. Its value is given by the conductor's material resistivity vs. its section.

CAPACITANCE (Measured in Farad/length unit)
The capacity expresses the tendency of a dielectric material between conductors to store dielectric energy when a difference of potential exists between the conductors. It is always better to use low capacitance cables in order to allow transmissions over longer distances.

NOMINAL IMPEDANCE (Measured in Ohm)
The impedance value indicates the total opposition that a transmission line offers to the flow of any varying current. In a long distance or high frequency transmission system, the most important components for impedance are: (a) correspondence between cable impedance and receiving system impedance (to avoid the signal's reflection and distortion); (b) impedance uniformity (linked to conductor quality, cable geometry and dielectric uniformity).

ATTENUATION (Measured in Decibels/length unit)
The attenuation determines the transmission level of a line (usually input voltage vs. output voltage). The signal's attenuation turns into a decrease and a distortion of the signal with a loss in the voltage peak and an impulse slowing.

VELOCITY OF PROPAGATION (Measured in percentage)
The velocity of propagation is the time required by a signal to travel through a transmission line. "Vp" indicates the transmission speed of electrical energy in a length of cable compared to speed of light in free space and it is expressed as a percentage (insulation material dielectric constant dependant value).

WORKING TENSION (Measured in Volts)
The working tension of a cable is limited by its heating and by the dielectric softening temperature. The transferable power depends on materials and on cable dimensions as well as, of course, room temperature.

PARAMETROS ELECTRICOS

RESISTENCIA (Medida en Ohm/unidad de longitud @ 20°C).
La resistencia del conductor tiene una importancia primaria para la determinación de la capacidad de transporte de la señal en la línea de transmisión. Más alta es la resistencia más la señal transmitida perderá su propia fuerza y entonces la capacidad de llegar a destino. Su valor está determinado por la relación entre la resistividad del material conductor y su sección.

CAPACIDAD (Medida en Farad/unidad de longitud)
La capacidad expresa la propensión de un material dieléctrico, puesto entre dos conductores, de conservar la carga dieléctrica cuando exista una diferencia de potencial entre los dos mismos conductores. Es siempre preferible utilizar cables con baja capacidad, para permitir transmisiones sobre distancias más largas.

IMPEDANCIA CARACTERISTICA (Medida en Ohm)
El valor de impedancia indica la oposición total al flujo de los electrones ofrecida por una línea de transmisión. En un sistema de transmisión de larga distancia o en alta frecuencia, las componentes más importantes para la impedancia son: (a) la correspondencia entre la impedancia del cable y la del sistema receptor (para evitar la reflexión y distorsión de la señal); (b) la uniformidad de la impedancia (dependiente de la calidad del conductor, de la geometría del cable y de la uniformidad del dieléctrico).

ATENUACION (Medida en Decibel/unidad de longitud)
La atenuación determina el nivel de transmisión de una línea (normalmente la relación entre el voltaje de entrada y lo de salida). La atenuación de una señal se establece en una degradación y distorsión de la misma, con una pérdida en el pico de voltaje y ralentización del impulso.

VELOCIDAD DE PROPAGACION (Medida en porcentaje)
La velocidad de propagación es el tiempo requerido por una señal para viajar a través de una línea de transmisión. Con "Vp" se entiende la relación entre la velocidad de la señal en su medio de transporte (aislamiento) y la velocidad de la misma en el aire, expresado en porcentaje (valor en función de la constante dieléctrica del material del aislamiento).

VOLTAJE (Medido en Volt)
El voltaje de un cable está limitado por el calentamiento del mismo y por la temperatura de ablandamiento del dieléctrico. La potencia transmissible depende de los materiales y de las dimensiones del cable además, naturalmente, la temperatura ambiente.

MAIN CABLE PARAMETERS

		AWG	DIAMETER mm	SECTION mm ²	RESISTANCE @20°C (Ohm/Km)	WEIGHT (g/m)
Ounce x 28.35	= Gram	43	2.2 0.055	4.84 0.0025	7021	0.0218
Gram x 0.003527	= Ounce	42	2.5 0.063	6.25 0.0032	5446	0.0281
Pound x 0.4536	= Kilogram	41	2.8 0.071	7.84 0.0039	4330	0.0352
Kilogram x 2.205	= Pound	40	3.1 0.079	9.61 0.0049	3540	0.0433
Kilograms/km x 0.6214	= Pounds/kft	39	3.5 0.089	12.3 0.0062	2780	0.0552
Pounds/kft x 1.4881	= Kilogram/km	38	4.0 0.102	16.0 0.0081	2130	0.0720
		37	4.5 0.114	20.3 0.0103	1680	0.0912
		36	5.0 0.127	25.0 0.0127	1360	0.1126
		35	5.6 0.142	31.4 0.0159	1080	0.1412
• AREA CONVERSION TABLE						
Sq. Inch x 6.452	= Sq. Centimeter	34	6.3 0.160	39.7 0.0201	857	0.1785
Sq. Centimeter x 0.1550	= Sq. Inch	33	7.1 0.180	50.4 0.0255	675	0.2276
Sq. Foot x 0.0929	= Sq. Meter	32	8.0 0.203	64.0 0.0324	532	0.2886
Sq. Meter x 10.76	= Sq. Foot	31	8.9 0.226	79.2 0.0401	430	0.3571
Sq. Mile x 2.590	= Sq. Kilometer	30	10.0 0.254	100 0.0507	340	0.4508
Sq. Kilometer x 0.3861	= Sq. Mile	29	11.3 0.287	128 0.0649	266	0.5758
Circular Mil x 0.7854	= Sq. Mil	28	12.6 0.320	159 0.0806	214	0.7157
		27	14.2 0.361	202 0.102	169	0.9076
		26	15.9 0.404	253 0.128	135	1.1383
		25	17.9 0.455	320 0.162	106	1.4433
		24	20.1 0.511	404 0.205	84.2	1.8153
		23	22.6 0.574	511 0.259	66.6	2.3064
		22	25.3 0.643	640 0.324	53.2	2.8867
		21	28.5 0.724	812 0.411	41.9	3.6604
		20	32.0 0.813	1020 0.519	33.2	4.6128
		19	35.9 0.912	1290 0.653	26.4	5.8032
		18	40.3 1.02	1620 0.823	21.0	7.3209
		17	45.3 1.15	2050 1.04	16.6	9.2404
		16	50.8 1.29	2580 1.31	13.2	11.6212
		15	57.1 1.45	3260 1.65	10.4	14.6885
		14	64.1 1.63	4110 2.08	8.28	18.4512
		13	72.0 1.83	5180 2.63	6.56	23.3616
		12	80.8 2.05	6530 3.31	5.21	29.4624
		11	90.7 2.30	8230 4.17	4.14	37.0512
		10	101.9 2.588	10380 5.26	3.277	46.7232
		9	114.4 2.906	13090 6.63	2.600	58.9248
		8	125.5 3.264	16510 8.37	2.061	74.4000
		7	144.3 3.655	20820 10.55	1.634	93.744
		6	162.0 4.115	26240 13.30	1.296	118.147
		5	181.9 4.620	33090 16.77	1.028	148.8
		4	204.3 5.189	41740 21.15	0.8152	187.488
		3	229.4 5.287	52260 26.67	0.6466	235.592
		2	257.6 6.543	66360 33.62	0.5128	299.088
		1	289.3 7.348	83690 42.41	0.4065	376.464
		1/0	324.9 8.252	105600 53.49	0.3223	474.672
		2/0	364.8 9.266	133100 67.43	0.2557	599.664
		3/0	409.6 10.40	167800 85.01	0.2028	755.904
		4/0	460.0 11.68	211600 107.22	0.1608	953.808
• LENGTH CONVERSION TABLE						
Inch x 25.40	= Millimeters					
Millimetres x 0.03937	= Inches					
Feet x 0.3048	= Meters					
Miles x 1.609	= Kilometers					
Kilometers x 0.6214	= Miles					
Ohms/Km x 0.3048	= Ohms/kft					
Meters x 3.2808	= Feet					
Meters x 39.3701	= Inches					
Meters x 1.0936	= Yards					
Mils x 0.001	= Inches					
Mils x 0.0254	= Millimeters					
Ohms/kft x 3.2808	= Ohms/km					
pF/foot x 3.285	= pF/meter					
• METRIC CODES TABLE						
Tera	= 10 ¹² (T)					
Giga	= 10 ⁹ (G)					
Mega	= 10 ⁶ (M)					
Kilo	= 10 ³ (k)					
Hecto	= 10 ² (h)					
Deca	= 10 ¹ (da)					
Deci	= 10 ⁻¹ (d)					
Centi	= 10 ⁻² (c)					
Milli	= 10 ⁻³ (m)					
Micro	= 10 ⁻⁶ (μ)					
Nano	= 10 ⁻⁹ (n)					
Pico	= 10 ⁻¹² (p)					

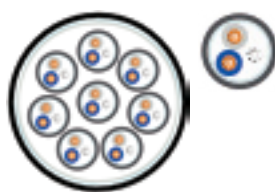
• MATERIAL	ACRONYM	OPERATING TEMPERATURE	ELONGATION AT BREAK	BREAKING LOAD	OXYGEN RATE	SPECIFIC RESISTIVITY
POLYVINYL CHLORIDE	PVC	-30/+60 °C	150/300 %	15/25 N/mm2	25-35	1014
SEMI-RIGID POLYVINYLCHLORIDE	PVC S-R	-10/+80 °C	120/180 %	25/30 N/mm2	25-30	1015
NITRILE POLYVINYL CHLORIDE	PVC NBR	-30/+80 °C	150/300 %	15/25 N/mm2	25-30	1013
LOW-DENSITY POLYETHYLENE	LDPE	-50/+70 °C	400/600 %	10/20 N/mm2	18	1018
HIGH-DENSITY POLYETHYLENE	HDPE	-50/+100 °C	400/600 %	20/30 N/mm2	18	1018
CELLULAR POLYETHYLENE	PEE	-50/+70 °C	300/400 %	8/12 N/mm2	18-30	1017
POLYAMIDE	PA	-70/+120 °C	200/300 %	50/80 N/mm2	18	1014
POLYURETHANE POLYESTER	PUR	-50/+90 °C	300/600 %	30/60 N/mm2	19	1013
PERFLUOROALKOXYL	PFA	-180/+250 °C	200/400 %	20/30 N/mm2	95	1018
ETHYLENE-TETRAFLUOROETHYLENE	ETFE	-100/+150 °C	100/300 %	40/50 N/mm2	30	1016
POLYTETRAFLUOROETHYLENE	PTFE	-180/+250 °C	240/400 %	20/30 N/mm2	95	1018
PERFLUORO ETHYLENE-PROPYLENE	FEP	-100/+200 °C	250/350 %	20/30 N/mm2	95	1018
POLYPROPYLENE	PP	-30/+100 °C	500/700 %	15/25 N/mm2	18	1017
POLYVINYLIDENE FLUORIDE	PVDF	-50/+150 °C	100/300 %	40/50 N/mm2	43	1015
POLYETHERETERKETONE	PEEK	-55/+200 °C	100/150 %	40/50 N/mm2	35	1016
POLYETHYLENE TEREPHTHALATE	PET	-55/+125 °C	100/300 %	30/40 N/mm2	19	1015
INTERPRENE	IP	-30/+90 °C	150/300 %	20/25 N/mm2	25-30	1011
CROSS-LINKED POLYETHYLENE	XLPE	-50/+90 °C	300/400 %	15/25 N/mm2	18*	1018
SILICONE RUBBER	SI	-100/+180 °C	300/500 %	4/12 N/mm2	20*	1015

HIGH QUALITY MULTICORE CABLES



HIGH QUALITY MULTICORE AES/EBU AUDIO CABLES

"CMD" SERIES



CMD

SERIE CMD

I grandi sistemi audio digitali sono apparecchiature ad alta tecnologia che richiedono l'uso di connessioni multiple. Il cavo digitale audio multicoppia PROEL è conforme agli standards AES/EBU. La bassa capacità delle coppie di conduttori isolate e twistate singolarmente, insieme all'impedenza di 110 Ohm, elimina il delay del segnale, e garantisce una trasmissione priva di errori ("bit-error") anche su lunghe distanze. Il cavo AES/EBU PROEL è fornito di filo di drenaggio per la singola coppia di conduttori. Grazie a queste caratteristiche, il cavo è indicato per tutte le applicazioni che necessitano di lunghe distanze di cablaggio (lunghezza massima senza decadimento di prestazioni: 130 m).

Caratteristica della coppia:

Ogni coppia è schermata in alluminio e rivestita singolarmente in PVC nero con numerazione stampata su entrambe le facce. L'isolamento del conduttore è in polietilene espanso bianco/blue.

CMD SERIES

Big digital audio systems are made of high technology equipment requiring the use of multiple connections. PROEL multipair digital audio cable is compliant with AES/EBU standards. The low capacitance of insulated and individually twisted pairs of conductors, as well as the 110 Ohm impedance, eliminates signal delay and grants a bit-error free transmission, even over long distances. PROEL AES/EBU cable features drain wire for single pair of conductors. Thanks to these features, the cable is suitable for all applications requiring long distance wiring (max. length without performance decay: 130 m).

Pair features:

Each pair is individually insulated with Aluminium foil shield and PVC jacket, and number-printed on both sides. The conductor insulation is of white/blue foamed polyethylene.

SERIE CMD

Los grandes sistemas audio digitales son equipos de alta tecnología que requieren el uso de conexiones múltiples. El cable digital audio multipares PROEL está conforme a los estándares AES/EBU. La baja capacidad de los pares de conductores aislados y trenzados individualmente, junto a la impedancia de 110 Ohm, elimina el delay de la señal y garantiza una transmisión sin errores incluso sobre largas distancias. El cable AES/EBU PROEL está dotado de hilo drenaje para el simple par de conductores. Gracias a estas características, el cable está indicado para todas las aplicaciones que precisan largas distancias de cableado (largo máx. sin caída de las prestaciones: 130 m).

Característica del par:

Cada par está aislado individualmente con Papel de aluminio y cubierta de PVC, y número impreso en ambos lados. El conductor aislamiento es de color blanco/azul en espuma de polietileno.

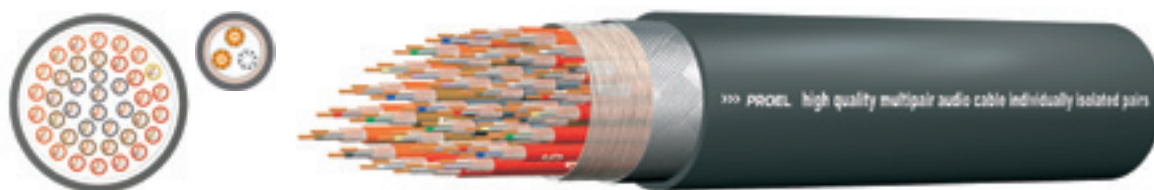
TECHNICAL SPECIFICATIONS

CMD SERIES

Application fields	- Digital audio transmissions - Recording studio fixed installation - Stage boxes	Jacket	PAIRS: Black PVC Ø 3.00 mm numbered CABLE: super flexible PVC	Crosstalk Attenuation	10 MHz = > 50 dB/100 m 15 KHz = > 100 dB/100 m
		Drain Wire (each pair)	Tinned copper 24 AWG = 7 x 0.18 mm (0.22 mm ²)	Velocity of Propagation	80 %
Conductors	Flexible tinned copper 24 AWG = 28 x 0.10 mm (0.22 mm ²)	Colour	Black	Operating temperature	-30°C / +70°C
Insulation	Foam PEE Ø 1.20 mm	Electrical resistance	< 86 Ohm/Km (conductor) @ 20°C	Working tension	< 50 V AC < 75 V DC
Shield	PAIRS	Electrical capacitance	37 pF/m (conductor/conductor) @ 1KHz	Minimum bending radius	12 x overall diameter
	Aluminium foil 100%		57 pF/m (conductor/shield) @ 1KHz	Packaging	custom packaging
	CABLE	Nominal impedance	110 Ohm		
	Cotton tape				

Order Code	Number of pairs	Outer diameter	Weight	Standard reel length	Max reel length
CMD02	2	Ø 8.60 mm	67 Kg/Km	100 m	1000
CMD04	4	Ø 10.00 mm	102 Kg/Km	100 m	1000
CMD08	8	Ø 13.40 mm	183 Kg/Km	100 m	1000
CMD12	12	Ø 15.80 mm	252 Kg/Km	100 m	1000
CMD16	16	Ø 17.60 mm	345 Kg/Km	100 m	1000

HIGH QUALITY MULTICORE AUDIO CABLES "CMT" SERIES



CMT40

SERIE CMT

La serie di cavi multipolari CMT si compone di coppie isolate e schermate al 100%, numerate singolarmente e colorate per essere facilmente identificate al fine di ridurre i tempi di connessione e prevenire costosi errori di "phasing". La guaina esterna in PVC antiabrasivo fornisce una buona flessibilità anche alle più elevate temperature. L'estrema flessibilità del cavo consente un riavvolgimento facilitato.

Caratteristica della coppia:

Ogni coppia è singolarmente schermata in rame rosso e rivestita in PVC colorato a seconda degli standard internazionali con numerazione stampata su entrambe le facce. L'isolamento del conduttore è in polietilene reticolato.

CMT SERIES

The CMT series of multicore cables consists of 100% insulated and shielded pairs, individually numbered and coloured to allow an easy identification in order to reduce connection time and prevent expensive phasing errors. The non-abrasive PVC overall jacket offers a good flexibility even at very high temperatures. The cable extreme flexibility allows an easy winding.

Pair features:

Each pair is individually shielded with bare copper and insulated with PVC jacket, coloured according to international regulations and number-printed on both sides. The conductor insulation is made of cross-linked polyethylene.

SERIE CMT

La serie de cables multipolares CMT está compuesta por pares recubiertos y apantallados al 100%, numerados individualmente con colores para facilitar su identificación y, por consiguiente, reducir el tiempo de conexión y prevenir errores de "phasing". La cubierta exterior en PVC anti-abrasión garantiza una buena flexibilidad incluso con las temperaturas más elevadas. La extrema flexibilidad del cable permite un rebobinado fácil.

Característica del par:

Cada par está apantallado en cobre y recubierto individualmente en PVC de color dependiendo de los estándares internacionales con numeración estampada en ambas caras. El aislamiento del conductor es en polietileno reticulado.

TECHNICAL SPECIFICATIONS

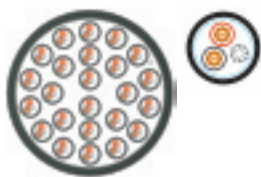
CMT SERIES

Application fields	• Live events monitoring • Recording Studio fixed installation • Stage Boxes	Jacket	PAIRS: PVC Ø 2.80 mm numbered CABLE: PVC	Attenuation	1 MHz = 2.20 dB/100 m 3 MHz = 3.70 dB/100 m 6 MHz = 5.30 dB/100 m 8 MHz = 6.10 dB/100 m 10 MHz = 6.80 dB/100 m
Conductors	Flexible bare copper 26 AWG = 18 x 0.10 mm (0.14 mm ²)	Drine Wire (each pair)	Tinned copper 24 AWG = 7 x 0.18 mm (0.22 mm ²)	Velocity of Propagation	66 %
Insulation	XLPE Ø 1.05 mm	Colour	Black	Operating temperature	-20°C/+80°C
Shield	PAIRS Spiral bare copper 97% CABLE Cotton tape 100% Tinned copper braid 85%	Electrical resistance	127 Ohm/Km (conductor) @ 20°C 43 Ohm/Km (shield) @ 20°C	Working tension	< 50 V AC < 75 V DC
		Electrical capacitance	52 pF/m (conductor/conductor) @ 1KHz 89 pF/m (conductor-shield) @ 1KHz	Minimum bending radius	15 x overall diameter
		Nominal impedance	100 Ohm ± 3 Ohm	Packaging	custom packaging

Order Code	Number of pairs	Outer diameter	Weight	Standard reel length	Max reel length
CMT2	2	Ø 8.40 mm	88 Kg/Km	100 m	250
CMT4	4	Ø 10.60 mm	145 Kg/Km	100 m	250
CMT8	8	Ø 13.40 mm	230 Kg/Km	100 m	250
CMT12	12	Ø 15.10 mm	310 Kg/Km	100 m	250
CMT16	16	Ø 16.50 mm	389 Kg/Km	100 m	250
CMT24	24	Ø 21.60 mm	587 Kg/Km	100 m	250
CMT32	32	Ø 23.90 mm	739 Kg/Km	50 m	150
CMT40	40	Ø 28.30 mm	953 Kg/Km	50 m	150
CMT48	48	Ø 29.50 mm	1165 Kg/Km	50 m	150

HIGH QUALITY MULTICORE AUDIO CABLES

"CMI" SERIES



CMI24

SERIE CMI

La serie di cavi multipolari CMI si compone di coppie schermate al 100% (due conduttori isolati e twistati assieme al filo di drenaggio garantendo una totale protezione dagli effetti di cross-talk), numerate singolarmente, per essere facilmente identificate (riducendo così i tempi di connessione). La guaina esterna è realizzata in PVC ad alta resistenza che evita abrasioni durante l'uso ed inoltre è conforme alle norme CEI 20-35 / IEC 332.1 (non propagante la fiamma). Inoltre essa fornisce una buona flessibilità anche alle più elevate temperature. L'estrema flessibilità del cavo consente un riavvolgimento facilitato.

Caratteristica della coppia:

Ogni coppia è schermata in alluminio e rivestita singolarmente in PVC nero con numerazione stampata su entrambe le facce. L'isolamento del conduttore è in polietilene reticolato rosso/nero.

CMI SERIES

The CMI series of multicore cables consists of 100% shielded pairs (two insulated conductors twisted together with drain wire in order to grant a total protection against crosstalk effects), individually number-printed to allow an easy identification (therefore reducing connection time). Overall jacket is made by flexible flame retardant PVC complying with CEI 20-35 and IEC 332.1 regulations; it offers a good flexibility even at very high temperatures. The cable extreme flexibility allows an easy winding.

Pair features:

Each pair is individually insulated with Aluminium foil shield and PVC jacket, and number-printed on both sides. The conductor insulation is of red/black cross-linked polyethylene.

SERIE CMI

La serie de cables multipolares CMI está compuesta por pares apantallados al 100% (dos conductores aislados trenzados juntos con el hilo drenaje garantizan una protección total de los efectos de cross talk), numerados individualmente para facilitar sus identificación (y reducir por consiguiente el tiempo de conexión). La cubierta exterior en PVC está realizada en conformidad con las normas CEI 20.35 e IEC 332.1 (cubierta que no propaga la llama). Además, ella garantiza una buena flexibilidad incluso con las temperaturas más elevadas. La extrema flexibilidad del cable permite un rebobinado fácil.

Característica del par:

Cada par está aislado individualmente con Papel de aluminio y cubierta de PVC, y número impreso en ambos lados. El aislamiento del conductor es de color rojo/hegro en polietileno reticulado.

TECHNICAL SPECIFICATIONS

CMI SERIES						
Application fields	• Live events monitoring • Stage Boxes	Drine Wire (each pair)	Tinned copper 24 AWG = 7 x 0.18 mm (0.22 mm²)	Velocity of Propagation	66 %	
Conductors	Bare copper 24 AWG = 28 x 0.10 mm (0.22 mm²)	Colour	Black	Operating temperature	-20°C/+80°C	
Insulation	XLPE Ø 1 mm	Electrical resistance	< 87 Ohm/Km (conductor) @ 20°C	Working tension	< 50 V AC < 75 V DC	
Shield	CONDUCTORS Aluminium-Mylard 100% CABLE	Electrical capacitance	63 pF/m (conductor/conductor) @ 1 KHz 107 pF/m (conductor/shield) @ 1 KHz	Packaging	custom packaging	
	Cotton tape 100%	Nominal impedance	80 Ohm ± 3 Ohm			
Jacket	PAIRS PVC Ø 2.80 mm CABLE PVC 70 shore	Attenuation	1 MHz = 2.10 dB/100 m 3 MHz = 3.60 dB/100 m 6 MHz = 5.00 dB/100 m 8 MHz = 5.80 dB/100 m 10 MHz = 6.50 dB/100 m			
Order Code	Number of pairs	Outer diameter	Weight	Minimum bending radius	Standard reel length	Max reel length
CMI4	4	Ø 9.30 mm	94 Kg/Km	18 x overall diameter	100 m	250
CMI8	8	Ø 12.20 mm	164 Kg/Km	18 x overall diameter	100 m	250
CMI12	12	Ø 14.80 mm	223 Kg/Km	18 x overall diameter	100 m	250
CMI16	16	Ø 16.60 mm	316 Kg/Km	25 x overall diameter	100 m	250
CMI24	24	Ø 19.60 mm	440 Kg/Km	25 x overall diameter	100 m	250
CMI32	32	Ø 22.60 mm	581 Kg/Km	25 x overall diameter	100 m	150

HIGH QUALITY MULTICORE AUDIO CABLES

"CMN" SERIES



CMN20

SERIE CMN

La serie di cavi multipolari CMN si compone di coppie schermate al 100% individualmente rivestite in polipropilene trasparente numerato (due conduttori con isolante in XLPE twistati assieme al filo di drenaggio garantendo una totale protezione dagli effetti di cross-talk). La guaina esterna in PVC è realizzata in conformità agli standard CEI 20.2011 e IEC 332.1 (guaina non propagante l'incendio). Inoltre essa fornisce una buona flessibilità anche alle più elevate temperature. L'estrema flessibilità del cavo consente un riavvolgimento facilitato.

Caratteristica della coppia:

Ogni coppia è rivestita singolarmente in polipropilene trasparente numerato. Lo schermo è realizzato con foglio di alluminio e filo di drenaggio. L'isolamento del conduttore è in XLPE bianco/rosso.

CMN SERIES

The CMN series of multicore cables consists of 100% shielded pairs individually insulated with number-printed transparent polypropylene (two XLPE jacket insulated conductors twisted together with drain wire in order to grant a total protection against crosstalk effects). The PVC overall jacket is made in accordance with CEI 20.2011 and IEC 332.1 regulations (flame retardant jacket). Moreover, it offers a good flexibility even at very high temperatures. The cable extreme flexibility allows an easy winding.

Pair features:

Each pair is individually insulated with number-printed transparent polypropylene. Two XLPE (red/white) jacket insulated conductors twisted together with drain wire.

SERIE CMN

La serie de cables multipolares CMN está compuesta por pares apantallados al 100% recubiertos individualmente de polipropileno transparente numerado (dos conductores aislados con cubierta en XLPE trenzados juntos con el hilo drenaje garantizan una protección total contra los efectos de cross-talk). La cubierta exterior en PVC está realizada en conformidad con las normas CEI 20.2011 e IEC 332.1 (cubierta que no propaga la llama). Además, ella asegura una buena flexibilidad incluso con las temperaturas más elevadas. La extrema flexibilidad del cable permite un rebobinado fácil.

Característica del par:

Cada par está aislado individualmente con polipropileno transparente numerado. Dos conductores aislados con cubierta en XLPE trenzados juntos con el hilo drenaje.

TECHNICAL SPECIFICATIONS

CMN SERIES

Application fields	• Live events monitoring • Stage boxes • Recording studios	Drine Wire (each pair)	Tinned copper	Velocity of Propagation	66 %
		Colour	24 AWG = 7 x 0.18 mm (0.22 mm ²)	Operating temperature	-20°C/+80°C
Conductors	Bare copper	Electrical resistance	127 Ohm/Km (conductor) @ 20°C	Working tension	< 50 V AC
Insulation	26 AWG = 18 x 0.10 mm (0.14 mm ²)		99 Ohm/Km (shield) @ 20°C	Minimum bending radius	< 75 V DC
Shield	XLPE Ø 1 mm white/red	Electrical capacitance	52 pF/m (conductor-conductor) @ 1 KHz	Packaging	10 x overall diameter
	CONDUCTORS		89 pF/m (conductor-shield) @ 1 KHz		custom packaging
	Aluminium foil copper colour 100%	Nominal impedance	100 ± 3 Ohm		
	CABLE				
	Cotton tape 100%				
Jacket	PAIRS	Attenuation	1 MHz = 2.20 dB/100 m		
	Number-printed transparent PP Ø 2.80 mm		3 MHz = 3.90 dB/100 m		
	CABLE		6 MHz = 5.50 dB/100 m		
	Flexible PVC 60 shore		8 MHz = 6.40 dB/100 m		
			10 MHz = 7.10 dB/100 m		

Order Code	Number of pairs	Outer diameter	Weight	Standard reel length	Max reel length
CMN8	8	Ø 9.70 mm	136 Kg/Km	100 m	250
CMN12	12	Ø 11.90 mm	161 Kg/Km	100 m	250
CMN16	16	Ø 13.20 mm	198 Kg/Km	100 m	250
CMN20	20	Ø 14.40 mm	242 Kg/Km	100 m	250
CMN24	24	Ø 15.00 mm	279 Kg/Km	100 m	250
CMN32	32	Ø 18.10 mm	371 Kg/Km	50 m	150
CMN40	40	Ø 21.60 mm	480 Kg/Km	50 m	150
CMN48	48	Ø 22.30 mm	530 Kg/Km	50 m	150

HIGH QUALITY AUDIO/VIDEO COAXIAL CABLES



COAXIAL CABLES

RG59 75Ω COAXIAL VIDEO CABLES

SERIE RG59 75Ω

I cavi RG59 75 Ohm hanno una doppia schermatura, e sono specifici per quelle applicazioni che esigono integrità di segnale, nitidezza, attenuazione d'impedenza e flessibilità, come nei circuiti video analogici e negli studi di trasmissione. Rappresentano la soluzione ideale per i collegamenti d'antenna e per l'interconnessione di apparecchiature video professionali.

RG59 75Ω SERIES

RG59 75 Ohm cables feature a double shielding and they are especially designed for those applications requiring signal integrity, sharpness, impedance attenuation and flexibility, such as in analogic video circuits and in broadcasting studios. They represent the ideal solution for aerial connections and for professional video equipment interconnection.

SERIE RG59 75Ω

Los cables RG59 75 Ohm tienen un doble apantallado y están diseñados especialmente para las aplicaciones que requieren integridad de señal, nitidez, atenuación de impedancia y flexibilidad, como en los circuitos video analógicos y en los estudios de transmisión. Representan la solución ideal para las conexiones de antena y para la interconexión de equipos de video profesionales.



HPC805

• Cavo video RG59 75 Ohm a doppia schermatura (rame rosso - rame stagnato) con guaina in PVC.

• RG59 75 Ohm double shielded (bare copper - tinned copper) cable with PVC jacket.

• Cable vídeo RG59 75 Ohm de doble apantallado (cobre - cobre estañado) con cubierta en PVC.

TECHNICAL SPECIFICATIONS

HPC805					
Application fields	- Digital video transmissions - Camera, TV, DVD connections - Patch bay video interconnections - BNC connections	Colour	Red RAL3000	Velocity of Propagation	66 %
		Electrical resistance	< 63 Ohm/Km (conductor) @ 20°C < 6.1 Ohm/Km (shield) @ 20°C	Operating temperature	-20°C/+80°C
Conductors	Electrolytic bare copper 22 AWG = 1 x 0.60 mm (0.32 mm ²)	Electrical capacitance	55 pF/m (conductor/conductor) @ 1 KHz	Weight	56 Kg/Km
Insulation	PE Ø 3.70 mm ± 0.05 mm	Nominal impedance	75 Ohm ± 5	Minimum bending radius	30 mm
Shield	Copper/Tinned copper double braid 90%	Attenuation	10 MHz = 3.10 dB/100 mt 50 MHz = 6.50 dB/100 mt 100 MHz = 10.25 dB/100 mt 200 MHz = 14.71 dB/100 mt	Additional notes	Return loss: > 30 dB @ 300-600 Mhz
Jacket	PVC Ø 6.10 mm ± 0.20 mm Complying with IEC 332.1			Packaging	100 m carton reel



HPC815

• Nuovo cavo video digitale RG59 "Low Loss" 75 Ohm a doppia schermatura (alluminio-rame stagnato) con guaina flessibile **LSZH**.

• New RG59 "Low Loss" 75 Ohm digital video double shielded (aluminium - tinned copper) cable with flexible **LSZH** jacket.

• Nuevo cable vídeo digital RG59 "Low Loss" 75 Ohm de doble apantallado (aluminio-cobre estañado) con cubierta flexible **LSZH**.

TECHNICAL SPECIFICATIONS

HPC815					
Application fields	- Digital video transmissions - Camera, TV, DVD connections - Satellite device interconnections - BNC and RCA connections	Colour	Blue RAL5001	Velocity of Propagation	85 %
		Electrical resistance	35 Ohm/Km (conductor) @ 20°C 13.5 Ohm/Km (shield) @ 20°C	Operating temperature	-20°C/+80°C
Conductors	bare copper 20 AWG = 1 x 0.80 mm (0.50 mm ²)	Electrical capacitance	53 pF/m (conductor/conductor) @ 1 KHz	Weight	44 Kg/Km
Insulation	PEE Ø 3.70 mm ± 0.1 mm	Nominal impedance	75 ± 5 Ohm	Minimum bending radius	35 mm
Shield	Aluminium-polyester-aluminium 100% Tinned copper braid 88%	Attenuation	5 MHz = 2.00 dB/100 m 50 MHz = 5.9 dB/100 m 200 MHz = 11.1 dB/100 m 470 MHz = 17.2 dB/100 m	Additional notes	Return loss: 1-470 MHz > 30 dB 470-1000 MHz > 26 dB 1000-3000 MHz > 30 dB
Jacket	LSZH compound Ø 6.0 mm ± 0.15 mm			Packaging	100 m carton reel

COAXIAL CABLES

RX75 75Ω COAXIAL VIDEO CABLE

CAVO RX75

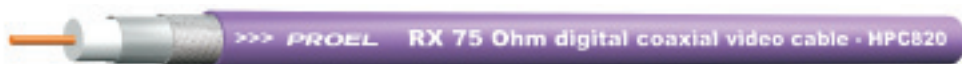
Il cavo coassiale video digitale PROEL è realizzato con una doppia schermatura, con dielettrico in PE e guaina **LSZH**. Il suo diametro estremamente ridotto lo rende idoneo per i cablaggi di apparecchiature a rack e di patch bay video. Il cavo coassiale video digitale PROEL è particolarmente indicato per le trasmissioni video ad alte frequenze.

RX75 CABLE

This PROEL coaxial digital video cable is made with a double shielding, 100% PE dielectric and **LSZH** overall jacket. Its extremely small diameter makes it suitable for rack equipment and patch bay video wiring. PROEL coaxial digital video cable is especially suggested for high-frequency video transmissions.

CABLE RX75

El cable coaxial vídeo digital PROEL está realizado con un apantallado doble, con relleno en PE dieléctrico 100% y cubierta en **LSZH**. Su diámetro extremadamente reducido hace de manera que sea adecuado para cableados de equipos de rack y de patch bay vídeo. El cable coaxial vídeo digital PROEL está especialmente indicado para las transmisiones video de altas frecuencias.



HPC820

• Cavo video digitale RG59 75 Ohm a doppia schermatura (alluminio - rame stagnato) con guaina flessibile.

• RG59 75 Ohm digital video double shielded (aluminium - tinned copper) cable with flexible jacket.

• Cable vídeo digital RG59 75 Ohm de doble apantallado (aluminio - cobre estañado) con cubierta flexible.

TECHNICAL SPECIFICATIONS

HPC820

Application fields	- Digital video transmissions - Camera, TV, DVD connections - Patch bay, rack system interconnections - BNC and RCA connections	Jacket	PVC/LSZH Ø 4.50 mm ± 0.15 mm Complying with IEC 754.1 regulations	Velocity of Propagation	80 %
		Colour	Purple	Operating temperature	-20°C/+80°C
Conductors	Electrolytic bare copper 22 AWG = 1 x 0.60 mm (0.32 mm ²)	Electrical resistance	> 63 Ohm/Km (conductor) @ 20°C	Weight	31 Kg/Km
Insulation	PEE Ø 2.30 mm ± 0.05 mm	Electrical capacitance	55 pF/m (conductor/conductor) @ 1 KHz	Minimum bending radius	25 mm
Shield	Aluminium-polyester-aluminium Tinned copper braid 90%	Nominal impedance	75 Ohm ± 3	Packaging	100 m carton reel
		Attenuation	10 MHz = 5.20 dB/100 m		

RG58 50Ω COAXIAL VIDEO/RF CABLE

CAVO RG58

Cavo Audio-Video coassiale a singola schermatura con conduttore interno interamente in rame stagnato per offrire una stabilità dell'impedenza (50 ohm), e quindi una contenuta RL (Return Loss = perdite di ritorno). La schermatura è realizzata a treccia di rame stagnato per conferire alto potere schermante, sia alle alte che basse frequenze; inoltre la calza realizza una sorta d'imbracatura che protegge il cavo, durante l'installazione, da eventuali stramenti. La guaina di rivestimento esterno è realizzata in PVC. Il cavo HPC858 è particolarmente indicato per la distribuzione per i segnali RF.

RG58 CABLE

Coaxial audio/video single shielded cable with total tinned copper inner conductor to offer impedance stability (50 Ohm) and therefore a contained RL (Return Loss). The shielding is made of tinned copper braid conferring a high shielding capacity to the cable, both at high and low frequencies; moreover, the braid makes a sort of sling, protecting the cable against possible stretchings during the installation. The overall jacket is made of PVC. The HPC858 cable is especially recommended for RF signals distribution.

CABLE RG58

Cable Audio-Vídeo coaxial de simple apantallado con conductor interior enteramente en cobre estañado para ofrecer estabilidad de la impedancia (50 Ohm), y por lo tanto una RL (Return Loss = Pérdida de retorno) moderada. El apantallado está realizado con una trenza en cobre estañado para conferir al cable un alto poder de apantallado, tanto con las altas como con las bajas frecuencias; además la malla realiza una trama que protege el cable, durante la instalación, de eventuales estirados. La cubierta exterior está realizada en PVC. El cable HPC858 está especialmente indicado para la distribución.



HPC858

• Cavo audio-video a singola schermatura RG58.

• RG58 audio/video single shielded cable.

• Cable audio-vídeo de simple apantallado RG58.

TECHNICAL SPECIFICATIONS

HPC858

Application fields	- RF signals - Ethernet signals - TV device interconnections - BNC and RCA connections	Colour	Black	Operating temperature	-20°C/+80°C
		Electrical resistance	38 Ohm/Km (conductor) @ 20°C 14 Ohm/Km (shield) @ 20°C	Weight	40 Kg/Km
Conductors	Tinned copper 21 AWG = 19 x 0.18 mm (0.41 mm ²)	Electrical capacitance	97 pF/m (conductor/conductor) @ 1KHz	Minimum bending radius	30 mm
Insulation	PE Ø 2.95 mm ± 0.05 mm	Nominal impedance	50 Ohm	Packaging	100 m carton reel
Shield	Tinned copper braid 95%	Attenuation	100 MHz = 14.70 dB/100 m 200 MHz = 20.80 dB/100 m 1000 MHz = 57 dB/100 m		
Jacket	PVC Ø 5.00 mm	Velocity of Propagation	66 %		

COAXIAL CABLES

RG6 75Ω HALOGEN FREE COAXIAL VIDEO CABLE

CAVO RG6

Cavo Audio-Video digitale a doppia schermatura con conduttore interno interamente in rame e dielettrico **Skin-Foam-Skin** atto a garantire una elevata stabilità d'impedenza (75 Ohm) ed un contenuto RL (Return Loss = perdite di ritorno). La schermatura è di tipo misto: calza in rame stagnato e Foil in alluminio per conferire al cavo un alto potere schermante, sia alle alte che basse frequenze; inoltre la calza realizza una sorta d'imbracatura che protegge il cavo, durante l'installazione, da eventuali stiramenti. La guaina di rivestimento esterno è realizzata con un compound **halogen free**, molto resistente alle alte temperature, assolutamente richiesto per le installazioni in posa fissa.



RG6 CABLE

Digital audio/video double shielded cable with total copper inner conductor and **Skin-Foam-Skin** dielectric to ensure high impedance stability (75 Ohm) and therefore a contained RL. The shielding is mixed: tinned copper braid and aluminium foil that confer a high shielding capacity to the cable, both at high and low frequencies; moreover, the braid makes a sort of sling, protecting the cable against possible stretchings during the installation. The overall jacket is made of **halogen free** compound, very resistant to high temperatures, absolutely required in fixed installations.

CABLE RG6

Cable Audio-Video digital de doble apantallado con conductor interior enteramente en cobre y dieléctrico en **Skin-Foam-Skin** para ofrecer una alta estabilidad de la impedancia (75 Ohm), y por lo tanto una RL (Return Loss = Pérdida de retorno) moderada. El apantallado es de tipo mixto: trenza en cobre estañado y lámina en aluminio para conferir al cable un alto poder de apantallado, tanto con las altas como con las bajas frecuencias; además la trenza realiza una trama que protege el cable, durante la instalación, de eventuales estirados. La cubierta exterior está realizada en **halogen free**, muy resistente a las altas temperaturas, absolutamente requerido para las instalaciones fijas.



HPC860HF

• Cavo audio-video digitale RG6 a doppia schermatura Low Loss con guaina **LSZH**.

• RG6 Digital audio-video double shielded cable - Low Loss with **LSZH** jacket.

• Cable audio-vídeo digital RG6 de doble apantallado. Con cubierta **LSZH** - Low Loss.

TECHNICAL SPECIFICATIONS

HPC860HF

Application fields	- Digital video transmissions - Camera, TV, DVD connections - Satellite device interconnections
Conductors	Bare copper 18 AWG = 1 x 1,02 mm (0.823 mm ²)
Insulation	Skin-Foam-Skin Ø 4.60 mm ± 0.10 mm
Shield	Aluminium/Pet/Aluminium 100% Tinned copper braid >96%
Jacket	LSZH Compound Ø 6.90 mm ± 0.15 mm

Colour	Green RAL6017
Electrical resistance	21,5 Ohm/Km (conductor) @ 20°C 9,0 Ohm/Km (shield) @ 20°C
Electrical capacitance	53 pF/m (conductor/conductor) @ 1KHz
Nominal impedance	75 Ohm
Attenuation	5 MHz = 1.60 dB/100 m 50 MHz = 4.60 dB/100 m 200 MHz = 8.80 dB/100 m 470 MHz = 13.80 dB/100 m

Velocity of Propagation	85 %
Operating temperature	-20°C/+80°C
Working tension	< 50 V AC < 75 V DC
Weight	57,5 Kg/Km
Minimum bending radius	35 mm
Packaging	100 m carton reel (other lengths on request)

75Ω TRAXIAL VIDEO CABLE

CAV_i TRIAX

Il cavo triassiale viene normalmente utilizzato nel settore broadcast professionale e negli studi di post produzione televisiva per le trasmissioni da e verso telecamere e banchi regia video. Il cavo RGTRIAx ha un'impedenza nominale di 75 Ohm, ed incorpora due schermature a treccia molto sottili separate fra loro da un dielettrico, in modo che il segnale video possa coprire senza alcuna attenuazione lunghe distanze.



TRIAxIAL CABLES

Triaxial cables are normally used in the professional broadcasting field and in TV post-production studios for transmissions to and from telecameras and audio/video mixers. The RGTRIAx cable features a 75 Ohm nominal impedance and includes two very thin braid shields separated by a dielectric, so that video signal is able cover very long distances without experiencing any attenuation.

CABLES TRIAXIAL

El cable triaxial normalmente se emplea en el sector broadcast profesional y en los estudios de postproducción televisiva para las transmisiones desde y hacia telecámaras y mezcladores audio/vídeo. El cable RGTRIAx tiene una impedancia nominal de 75 Ohm e incorpora dos apantallados trenzados muy delgados y separados por un dieléctrico, de manera que la señal vídeo pueda cubrir distancias largas sin que se averigüe ninguna atenuación.



RGTRIAx8 - RGTRIAx11

• Cavi video digitali 75 Ohm a tripla schermatura con guaina termoplastica antistatica.

• 75 Ohm digital video triple shielded cables with antistatic thermoplastic jacket.

• Cables vídeo digital 75 Ohm de triple apantallado con cubierta termoplástica antiestática.

TECHNICAL SPECIFICATIONS

RGTRIAx8 - RGTRIAx11

Application fields	- Digital video transmissions - Camera, TV, DVD connections - Patch bay, rack system interconnections - BNC and RCA connections
Conductors	Silver plated copper TRIAx8: 18 AWG = 1 x 1.00 mm TRIAx11: 18 AWG = 1 x 1.40 mm
Insulation	TRIAx8: PEE Ø 4.60 mm - PE Ø 6.40 mm TRIAx11: PEE Ø 6,50 mm - PE Ø 8,60 mm
Shield	1° Silver plated copper braid > 96% 2° Bare copper braid > 90%

Jacket	TRIAx8: PVC Ø 8.30 mm ± 0.15 mm TRIAx11: PVC Ø 11 mm ± 0.15 mm
Colour	Red RAL3000
Electrical resistance	25 Ohm/Km (conductor) @ 20°C
Electrical capacitance	55 pF/m (conductor/conductor) @ 1 KHz
Nominal impedance	75 Ohm ± 3
Attenuation	10 MHz = 2.60 dB/100 m 20 MHz = 3.80 dB/100 m 40 MHz = 5.60 dB/100 m 100 MHz = 9.50 dB/100 m

Velocity of Propagation	80 %
Operating temperature	-20°C/+80°C
Weight	TRIAx8: 102 Kg/Km TRIAx11: 183 Kg/Km
Minimum bending radius	80 mm
Packaging	custom length in wooden reel up to 500 m

COAXIAL CABLES

RGB 75Ω ANALOG MULTICORE COAXIAL VIDEO CABLE

CAVO RGB 75Ω

Cavo professionale speciale per la trasmissione video ad alta definizione (computer graphic, video-wall, CAD, editing video non lineare), che consente di trasmettere singolarmente i segnali video rosso, verde e blu (RGB) attraverso coassiali separati per garantire sempre immagini nitide e stabili. Ideale per la grafica ed altre applicazioni informatiche quali video-wall, workstation CAD, proiettori ad alta risoluzione, connessioni BNC, ecc. Questo cavo, grazie alle particolari caratteristiche di trasmissione del segnale, consente connessioni anche a notevole distanza.

RGB CABLE 75Ω

Professional cable for high definition video transmission (computer graphics, videowall, CAD, non-linear video editing). It allows the individual transmission of red, green and blue video signals (RGB) through separate cables in order to grant always sharp and stable images. Ideal for graphics and other computer applications such as video-wall, CAD workstations, high-resolution projectors, BNC connections, etc. Thanks to its special signal transmission features, this type of cable allows connections over long distances.

CABLE RGB 75Ω

Cable profesional especial para la transmisión vídeo de alta definición (computer graphic, video-wall, CAD, editing vídeo no lineal) que permite transmitir individualmente las señales vídeo rojo, verde y azul (RGB) por medio de coaxiales separados para garantizar siempre imágenes nítidas y estables. Ideal para gráfica y otras aplicaciones informáticas como video-wall, workstation CAD, proyectores de alta resolución, conexiones BNC, etc. Gracias a las especiales características de transmisión de la señal, este tipo de cable permite conexiones incluso sobre notables distancias.



RGBCOAX5

• Cavo multicanale video con n. 5 coassiali indipendenti 75 Ohm in grado di trasmettere il segnale RGB e il sincronismo sia verticale che orizzontale.

• 75 Ohm multichannel video cable with 5 independent coaxial channels allowing the transmission of the RGB signal and both vertical and horizontal synchronism.

• Cable multicanal vídeo con 5 coaxiales independientes 75 Ohm que permite la transmisión de la señal RGB y del sincronismo tanto vertical como horizontal.

TECHNICAL SPECIFICATIONS

RGBCOAX5			
Application fields	• RGB connections • HDTV • Monitor CAD • Computer Graphic	Colour	CONDUCTORS red-green-blue-black-white CABLE: Black
Conductors	Electrolytic tinned copper 28 AWG = 7 x 0.13 mm (0.08 mm ²)	Electrical resistance	205 Ohm/Km @ 20°C (conductor) 30 Ohm/Km (shield) >10000 MOhm/Km (insulation)
Insulation	PEE Ø 1.6 mm ± 0.05 mm	Electrical capacitance	55 pF/m @ (conductor/conductor) @ 1 KHz
Shield	CONDUCTORS Tinned copper braid 95% CABLE Cotton filler - Cotton tape	Nominal impedance	75 Ohm ± 5
Jacket	CONDUCTORS PVC Ø 2.60 mm CABLE PVC Ø 9.50 mm	Attenuation	5MHz = 4.5 dB/100 m 10MHz = 6.2 dB/100 m 50MHz = 14 dB/100 m 100MHz = 20 dB/100 m
		Velocity of Propagation	80 %
		Operating temperature	-20°C/+80°C
		Weight	97 Kg/Km
		Minimum bending radius	10 x overall diameter
		Packaging	100 m wooden reel

HIGH QUALITY INSTRUMENT CABLES



HIGH QUALITY NOISELESS INSTRUMENT CABLES O.F.C.

CAVI PER STRUMENTO

Questi cavi coassiali schermati in rame puro O.F.C. sono concepiti per le connessioni di chitarre, tastiere, amplificatori, mixer, effetti a pedale e tutti i dispositivi di elaborazione di segnali audio. Bassissima capacità, guaina esterna robusta e flessibile, doppia schermatura con materiale termoplastico conduttivo e con spirale o treccia di rame molto fitta. Un isolante in spesso PE o PEE rende questi cavi ideali per tutte le applicazioni in cui possono presentarsi tensioni meccaniche del cavo (es. collegamento chitarra/amplificatore).

INSTRUMENT CABLE

These coaxial cables featuring a very thick pure copper shield and are designed for connecting guitars, keyboards, amplifiers, mixers, effect pedals and any audio signal processing devices. Very low capacitance, strong and flexible overall jacket, double shielding with conductive thermoplastic material and very thick upper copper spiral and/or copper braiding. A thick PE or PEE insulation makes them an ideal serie of cables for all applications liable to mechanical tensions of the cable (e.g. guitar/amplifier connection).

CABLES DE INSTRUMENTOS

Serie profesional de cables coaxiales especiales apantallados con cobre puro diseñados para las conexiones de guitarras, teclados, amplificadores, mezcladores, efectos de pedal y todos los dispositivos de elaboración de señales audio. Capacidad muy baja, cubierta exterior robusta y flexible, doble apantallado con material termoplástico conduttivo y con espiral o trenza de cobre muy espesa. Un aislamiento en PE o PEE espeso hace de manera que este cable sea ideal para todas las aplicaciones en las que pueden veriguarse tensiones mecánicas del cable (ej. conexión guitarra/amplificador).



HPC110

• Cavo coassiale antirumore per strumenti/effetti con guaina esterna flessibile in PVC Ø 6.4 mm - O.F.C. (Oxygen Free Copper).

• Coaxial noiseless instrument/effects cable with Ø 6.4 mm. PVC flexible overall jacket - O.F.C. (Oxygen Free Copper).

• Cable coaxial antirruído para instrumentos o efectos con cubierta exterior flexible en PVC Ø 6.4 mm. - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC110

Application fields	• Musical instrument connection • Multieffect/mixer connection
Conductors	Bare copper 23 AWG = 30 x 0.10 mm (0.25 mm ²)
Insulation	PE Ø 1.80 mm
Shield	CABLE Spiral Flexible copper 16x3x0.10 95%
Jacket	CONDUCTOR High-conductive graphite jacket Ø 2.40 mm CABLE Flexible PVC 60 shore Ø 6.40 mm

Colour	Black (BK), Blue (BL), Bronze (BZ), Green (GN), Red (RD), White (WH)
Electrical resistance	74 Ohm/Km (conductor) @ 20°C
Electrical capacitance	120 pF/m (conductor/shield) @ 1 KHz
Velocity of Propagation	80 %
Operating temperature	-20°C/+70°C
Working tension	< 50 V AC < 75 V DC
Weight	44 Kg/Km

Minimum bending radius	20 x cable section radius
Packaging	100 m carton reel



HPC130

• Cavo coassiale professionale antirumore esotico per strumenti con guaina esterna antiscivolo ideale per tutte le connessioni strumentali - O.F.C. (Oxygen Free Copper).

• Professional noiseless esoteric coaxial instrument cable with non-slip overall jacket ideal for any instrumental connection - O.F.C. (Oxygen Free Copper).

• Cable esotérico profesional coaxial antirruído para instrumentos o efectos con cubierta exterior flexible en PVC Ø 6.5 mm. - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC130

Application fields	• Musical Instrument connection • Multieffect/mixer connection
Conductors	Tinned copper 18 AWG = 42 x 0.15 mm (0.75 mm ²)
Insulation	PEE Ø 3.10 mm
Shield	Tinned copper braid 8x16x0.10 90%
Jacket	CONDUCTOR High-conductive graphite jacket Ø 2.40 mm 100% CABLE Flexible non-slip PVC 64 shore Ø 7.00 mm

Colour	Black
Electrical resistance	37 Ohm/Km (conductor) @ 20°C 20 Ohm/Km (shield) @ 20°C
Electrical capacitance	120p F/m (conductor/shield) @ 1 KHz
Velocity of Propagation	80 %
Operating temperature	-20°C/+70°C
Working tension	< 50 V AC < 75 V DC
Weight	59 Kg/Km

Minimum bending radius	20 x cable section radius
Packaging	100 m carton reel

HIGH QUALITY NOISELESS INSTRUMENT CABLES O.F.C.



HPC140

• Nuovo cavo professionale esotérico sbilanciato per strumenti. Realizzato con 2 conduttori in rame O.F.C. (Oxygen Free Copper) twistati con riempitivi in PVC e ricoperti con calza in tessuto non tessuto.

• New unbalanced professional esoteric instrument cable with O.F.C. (Oxygen Free Copper) twisted conductors with PVC compound fillers and non woven overlapping foil.

• Nuevo cable esotérico no balanceado profesional para instrumento con OFC (Cobre libre de oxígeno) con conductores de cobre trenzados recubierto de hilado de algodón y cubierta de compuestos PVC.

TECHNICAL SPECIFICATIONS

HPC140

Application fields	• Hi-end Musical instrument connection • Multieffect / mixer connection	Jacket	CONDUCTORS PVC compound red/transparent- $\varnothing = 2,7$ mm ca. CABLE Soft PVC compound - $\varnothing = 7,2$ mm ca.	Velocity of Propagation	80 %
Conductors	Strands of tinned copper wires AWG22 = $7 \times 0,25$ mm ($0,34$ mm ²)	Colour	Black	Operating temperature	-20°C/+80°C
Insulation	Polyolefin dielectric natural $\varnothing = 1,7$ mm ca.	Electrical resistance	56 Ohm/Km (conductor) @ 20°C	Weight	58 Kg/Km
Shield (only for main conductor)	Tinned copper braid coverage > 95%	Electrical capacitance	67 pF/m (conductor/conductor) @ 1 KHz 105 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	10 x cable outer diameter
				Packaging	100 m carton reel



HPC300

• Cavo piatto a 2 conduttori singolarmente schermati con guaina esterna in PVC flessibile. Sezione: $2 \times 0,14$ mm².

• 2 individually shielded conductors ($2 \times 0,14$ mm²) flat cable with flexible PVC overall jacket.

• Cable plano de 2 conductores apantallados ($2 \times 0,14$ mm²) individualmente con cubierta exterior en PVC flexible.

TECHNICAL SPECIFICATIONS

HPC300

Application fields	• Audio connections	Colour	Black	Working tension	< 50 V AC
Conductors	Bare copper 25 AWG = $18 \times 0,10$ mm ($0,14$ mm ²)	Electrical resistance	122.80 Ohm/Km (conductor) @ 20°C	Weight	27 Kg/Km
Insulation	PVC 80 shore $\varnothing 1,00$ mm	Electrical capacitance	52.5 pF/m (conductor/conductor) @ 1 KHz 250 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	20 x cable section radius
Shield	Spiral copper $5 \times 8 \times 0,10 > 90\%$	Operating temperature	-30°C/+70°C	Packaging	100 m carton reel
Jacket	Flexible PVC 50 shore $\varnothing 3,00$ mm				



HPC305

• Cavo piatto a 2 conduttori singolarmente schermati con guaina esterna in PVC flessibile. Sezione: $2 \times 0,21$ mm².

• 2 individually shielded conductors ($2 \times 0,21$ mm²) flat cable with flexible PVC overall jacket.

• Cable plano de 2 conductores apantallados ($2 \times 0,21$ mm²) individualmente con cubierta exterior en PVC flexible.

TECHNICAL SPECIFICATIONS

HPC305

Application fields	• Audio connections	Colour	Black	Working tension	< 50 V AC
Conductors	Bare copper 23 AWG = $12 \times 0,15$ mm ($0,21$ mm ²)	Electrical resistance	73.80 Ohm/Km (conductor) @ 20°C 21.2 pF/m (conductor/conductor) @ 1 KHz	Weight	43 Kg/Km
Insulation	PE $\varnothing 1,60$ mm	Electrical capacitance	117.5 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	20 x cable section radius
Shield	Spiral copper $4 \times 16 \times 0,10 > 90\%$	Operating temperature	-30°C/+70°C	Packaging	100 m carton reel
Jacket	Flexible PVC 50 shore $\varnothing 5,00$ mm				

HIGH QUALITY MICROPHONE CABLES



HIGH-QUALITY STARQUAD MICROPHONE CABLE O.F.C.

CAVO "STARQUAD"

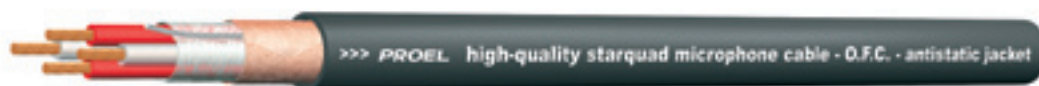
Il nuovo cavo PROEL QUAD420 è concepito principalmente per microfono, ma si adatta perfettamente a tutti gli altri tipi di segnali audio. I 4 conduttori del cavo QUAD420 eliminano le interferenze ed i ronzii generati dai campi elettrostatici indotti da dimmer, trasformatori di potenza e luci fluorescenti. L'eccellente frequenza di risposta è dovuta allo speciale rivestimento isolante in polietilene che fornisce una bassa capacità dielettrica. Il cavo QUAD420 ha una schermatura a spirale ad alta densità, proprio per eliminare qualunque ronzio ed interferenza radio. La guaina esterna, in morbido PVC speciale, consente un'estrema maneggevolezza e garantisce un'ottima tolleranza all'abrasione. Questo cavo si accoppia perfettamente con tutti i connettori audio XLR.

"STARQUAD" CABLE

New PROEL QUAD420 cable is designed mainly for microphone use, but it perfectly suits any other type of audio signal. The 4 conductors of QUAD420 cable eliminate interferences and buzzes produced by dimmer electrostatic fields, power transformers and fluorescent lights. The excellent response frequency is due to the special insulating PE jacket providing low dielectric capacitance. QUAD420 cable features a high-density spiral shielding to eliminate any buzzing and radio interference. Overall jacket is made of a special PVC, allowing an extremely easy handling and granting an excellent abrasion tolerance. This cable perfectly match with all XLR type audio connectors.

CABLE "STARQUAD"

El nuevo cable PROEL QUAD420 está diseñado principalmente para micrófono, pero se adapta perfectamente a todos los otros tipos de señales audio. Los 4 conductores de este cable eliminan las interferencias y los zumbidos producidos por los campos electroestáticos causados por dimmer, transformadores de potencia y luces fluorescentes. La excelente frecuencia de respuesta está debida a la especial cobertura aislante en polietileno que proporciona una baja capacidad dieléctrica. El cable QUAD420 tiene un apantallado de espiral de alta densidad, para eliminar cualquier zumbido e interferencia radio. La cubierta exterior, en PVC especial, permite una extrema manejabilidad y garantiza una excelente tolerancia a la abrasión. Este cable se combina perfectamente con todos los conectores audio de tipo XLR.



QUAD420

• Cavo per microfono "high-quality" STARQUAD a 4 conduttori twistati con guaina esterna antiabrasione antistatica - O.F.C. (Oxygen Free Copper).

• High-quality STARQUAD microphone cable, 4 twisted conductors with antiabrasive antistatic overall jacket - O.F.C. (Oxygen Free Copper).

• Cable para micrófono "high quality" STARQUAD de 4 conductores trenzados con cubierta exterior antiabrasión antiestática - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

QUAD420

Application fields	• Microphone connections • Audio signal connections	Drain wire	Tinned copper 24 AWG = 7 x 0.15 mm (0.22 mm ²)	Operating temperature	-20°C/+80°C
Conductors	Extra fine strands of bare copper 24 AWG = 28 x 0.10 mm (0.22 mm ²)	Colour	Black	Weight	46 Kg/Km
Insulation	Polyolefin dielectric natural, blue, red, black - Ø = 1,6 mm ca	Electrical resistance	<86 Ohm/Km (conductor) @ 20°C	Minimum bending radius	10 x cable overall diameter
Shield	Spiral bare copper wires coverage >95%	Electrical capacitance	91 pF/m (conductor/shield) @ 1 KHz 50 pF/m (conductor/ conductor) @ 1 KHz	Packaging	100 m carton reel (other lengths on request)
Jacket	Soft PVC compound - Ø = 6,2 mm ca.	Velocity of Propagation	80 %		

HIGH-QUALITY BALANCED MICROPHONE CABLES O.F.C.



HPC280

• Cavo bilanciato "high quality" - per microfono con guaina esterna flessibile - O.F.C. (Oxygen Free Copper - Sezione 2 x 0,34 mm²).

• High-quality balanced microphone cable (2 x 0,34 mm²) with flexible overall jacket - O.F.C. (Oxygen Free Copper).

• Cable balanceado "high quality" para micrófono con cubierta exterior flexible (2 x 0,34 mm²) - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC280

Application fields	• Installations • Recording studios • Microphone connections	Drain wire	Tinned copper 26 AWG = 7 x 0.15 mm (0.22 mm ²)	Operating temperature	-20°C/+70°C
Conductors	Bare copper 43 AWG = 43 x 0.10 mm (0.34 mm ²)	Colour	Black	Working tension	< 50 V AC < 75 V DC
Insulation	PE Ø 1.50 mm	Electrical resistance	56 Ohm/Km (conductor) @ 20°C 16 Ohm/Km (shield) @ 20°C	Weight	57 Kg/Km
Shield	Tinned copper braid > 90%	Electrical capacitance	40 pF/m (conductor/conductor) @ 1 KHz	Minimum bending radius	15 x cable section radius
Jacket	Super Flexible PVC 70 shore Ø 6.50 mm	Velocity of Propagation	66 %	Packaging	100 m carton reel
		Impedance	110 Ohm		



HPC250

• Cavo bilanciato "high quality" per microfono con guaina esterna flessibile - O.F.C. (Oxygen Free Copper - Sezione 2 x 0,22 mm²).

• High-quality balanced microphone cable (2 x 0,22 mm²) with flexible overall jacket - O.F.C. (Oxygen Free Copper).

• Cable balanceado "high quality" para micrófono con cubierta exterior flexible (2 x 0,22 mm²) - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC250

Application fields	• Installations • Recording studios • Microphone connections	Drain wire	Tinned copper 24 AWG = 7 x 0.20 mm (0.22 mm ²)	Working tension	< 50 V AC < 75 V DC
Conductors	Tinned copper 22 AWG = 7 x 0.20 mm (0.22 mm ²)	Colour	Black	Weight	51 Kg/Km
Insulation	PE Ø 1.36 mm	Electrical resistance	93 Ohm/Km (conductor) @ 20°C 21 Ohm/Km (shield) @ 20°C	Minimum bending radius	20 x cable section radius
Shield	Tinned copper braid 6x16x0.10 mm > 95%	Electrical capacitance	90 pF/m (conductor/conductor) @ 1 KHz	Packaging	100 m carton reel (other lengths on request)
Jacket	Flexible PVC 60 shore Ø 6.50 mm	Velocity of Propagation	80 %		
		Operating temperature	-20°C/+70°C		



HPC220

• Cavo bilanciato "high quality" - per microfono con guaina esterna robusta e flessibile - O.F.C. (Oxygen Free Copper - Sezione 2 x 0,22 mm²).

• High-quality balanced coaxial microphone cable (2 x 0,22 mm²) with strong and flexible overall jacket - O.F.C. (Oxygen Free Copper).

• Cable balanceado "high quality" para micrófono con cubierta exterior resistente y flexible (2 x 0,22 mm²) - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC220

Application fields	• Mic-Mixer connections • Microphone connections	Jacket	CONDUCTORS High-conductive PVC Ø 2.40 mm CABLE Flexible PVC 64 shore Ø 7.00 mm	Operating temperature	-20°C/+70°C
Conductors	Bare copper 24 AWG = 30 x 0.10 mm (0.22 mm ²)	Colour	Black	Working tension	< 50 V AC < 75 V DC
Insulation	PE Ø 1.80 mm	Electrical resistance	75 Ohm/Km (conductor) @ 20°C	Weight	51 Kg/Km
Shield	Aluminium foil 100% Tinned copper braid 8x16x0.10 mm 90%	Electrical capacitance	120 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	20 x cable section radius
		Velocity of Propagation	66 %	Packaging	100 m carton reel

HIGH-QUALITY BALANCED MICROPHONE CABLES O.F.C.



HPC210

• Cavo bilanciato professionale per microfono con guaina esterna flessibile - O.F.C. (Oxygen Free Copper - Sezione 2 x 0,22 mm²).

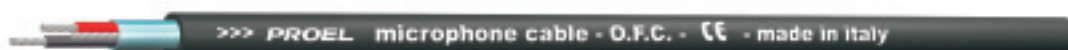
• Professional balanced microphone cable (2 x 0,22 mm²) with flexible overall jacket - O.F.C. (Oxygen Free Copper).

• Cable balanceado profesional para micrófono con cubierta exterior flexible (2 x 0,22 mm²) - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC210

Application fields	• Recording studios • Microphone connections	Jacket	Flexible PVC 60 shore Ø 6.50 mm	Operating temperature	-20°C/+70°C
Conductors	Bare copper 24 AWG = 30 x 0.10 mm (0.22 mm ²)	Colour	Black (BK), Blue (BL), Bronze (BZ), Green (GN), Purple (PU), Red (RD), White (WH), Yellow (YE)	Working tension	< 50 V AC < 75 V DC
Insulation	Superflexible PVC HT105 Ø 1.60 mm	Electrical resistance	93 Ohm/Km (conductor) @ 20°C 20 Ohm/Km (shield) @ 20°C	Weight	46 Kg/Km
Shield	CONDUCTORS Spiral cotton filler CABLE Spiral copper 16x5x0.10 mm > 90%	Electrical capacitance	46 pF/m (conductor/conductor) @ 1 KHz 90 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	20 x cable section radius
		Velocity of Propagation	80 %	Packaging	100 m carton reel 300 m wooden reel HPC210BKR 300 500 m wooden reel HPC210BKR500



HPC201BK

• Cavo bilanciato professionale per microfono con guaina esterna robusta e flessibile - O.F.C. (Oxygen Free Copper - Sezione 2 x 0,14 mm²).

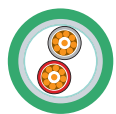
• Professional balanced coaxial microphone cable (2 x 0,14 mm²) with strong and flexible overall jacket - O.F.C. (Oxygen Free Copper).

• Cable balanceado profesional para micrófono con cubierta exterior flexible (2 x 0,14 mm²) - O.F.C. (Oxygen Free Copper).

TECHNICAL SPECIFICATIONS

HPC201BK

Application fields	• Mixer connections • Microphone connections	Drain wire	Tinned copper 24 AWG = 7 x 0.20 mm (0.22 mm ²)	Operating temperature	-20°C/+70°C
Conductors	Bare copper 26 AWG = 18 x 0.10 mm (0.14 mm ²)	Colour	Black	Working tension	< 50 V AC
Insulation	PE Ø 1.25 mm	Electrical resistance	125 Ohm/Km (conductor) @ 20°C	Weight	40 Kg/Km
Shield	Aluminium/Polyester 100%	Electrical capacitance	45 pF/m (conductor/conductor) @ 1 KHz 96 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	20 x cable section radius
Jacket	Flexible PVC 60 shore Ø 6.00 mm	Velocity of Propagation	66 %	Packaging	100 m carton reel



HPC210FR

• Cavo bilanciato per microfono con guaina esterna flessibile antifiamma particolarmente indicato per installazioni fisse. - O.F.C. (Oxygen Free Copper) - Sezione 2 x 0.34 mm².

• Balanced microphone cable (2 x 0.34 mm²) with flexible flame resistant overall jacket particularly suitable for fixed installations - O.F.C. (Oxygen Free Copper).

• Cable balanceado para micrófono con cubierta exterior flexible antillama especialmente adecuado para instalaciones fijas - O.F.C. (Oxygen Free Copper) Sección 2 x 0.34 mm².

TECHNICAL SPECIFICATIONS

HPC210FR

Application fields	• Installation • Recording studios • Microphone connections	Electrical resistance	< 62 Ohm/Km (conductor) @ 20°C	Working tension	< 50 V AC < 75 V DC
Conductors	Bare copper 24 AWG = 19 x 0.15 mm (0.34 mm ²)	Electrical capacitance	50 pF/m (conductor/conductor) @ 1 KHz 87 pF/m (conductor/shield) @ 1 KHz	Weight	44 Kg/Km
Insulation	XLPE Ø 1.60 mm natural/red	Nominal impedance	110 Ohm	Minimum bending radius	30 mm
Shield	Aluminium foil 100% Tinned copper braid 90%	Attenuation	1 MHz = 1.60 dB/100 m 3 MHz = 2.80 dB/100 m 6 MHz = 4.00 dB/100 m 8 MHz = 4.60 dB/100 m 10 MHz = 5.10 dB/100 m	Packaging	100 m carton reel 300 m wooden reel HPC210FR300
Jacket	Flexible flame resistant PVC Ø 5.60 mm Complying with IEC 332.2 regulations	Velocity of Propagation	66 %		
Colour	Green RAL6017	Operating temperature	-20°C/+80°C		

HIGH-QUALITY BALANCED MICROPHONE INSTALLATION CABLES O.F.C.



HPC80

• Cavo coassiale bilanciato per installazione con guaina esterna schermata con nastro in alluminio - O.F.C. (Oxygen Free Copper) dal diametro ridotto - Sezione 2 x 0,22 mm².

• Balanced coaxial installation cable (2 x 0,22 mm²) with small diameter aluminium foil shielded overall jacket - O.F.C. (Oxygen Free Copper).

• Cable coaxial balanceado para instalación con cubierta exterior apantallada en lámina de aluminio - O.F.C. (Oxygen Free Copper) con diámetro reducido - Sección 2 x 0,22 mm².

TECHNICAL SPECIFICATIONS

HPC80

Application fields	• Patch-bay connections • Multieffect connections • Rack system connections	Colour	Black	Velocity of Propagation	66%
Conductors	Tinned copper 24 AWG = 7 x 0.20 mm (0.22 mm ²)	Electrical resistance	< 87 Ohm/Km (conductor) @ 20°C	Operating temperature	-20°C/+80°C
Insulation	PE Ø 1.05 mm	Electrical capacitance	63 pF/m (conductor/conductor) @ 1 KHz 107 pF/m (conductor/shield) @ 1 KHz	Working tension	< 50 V AC < 75 V DC
Shield	Aluminium foil 100%	Nominal Impedance	80 ± 3 Ohm	Weight	20 Kg/Km
Jacket	Flexible PVC 80 shore Ø 4.00 mm	Attenuation	1 MHz = 2.10 dB/100 m 3 MHz = 3.60 dB/100 m 6 MHz = 5.00 dB/100 m 8 MHz = 5.80 dB/100 m 10 MHz = 6.50 dB/100 m	Minimum bending radius	25 mm
Drain wire	Tinned copper 24 AWG = 7 x 0.20 mm (0.22 mm ²)			Packaging	100 m carton reel 300 m carton reel HPC80R300 500 m wooden reel HPC80R500



HPC85

• Cavo coassiale bilanciato per installazione con guaina esterna schermata con nastro in alluminio e resistente alla fiamma - O.F.C. (Oxygen Free Copper) dal diametro ridotto - Sezione 2 x 0,22 mm².

• Balanced coaxial installation cable (2 x 0,22 mm²) with small diameter aluminium foil shielded flame resistant overall jacket - O.F.C. (Oxygen Free Copper).

• Cable coaxial balanceado para instalación con cubierta exterior antillama apantallada en lámina de aluminio - O.F.C. (Oxygen Free Copper) con diámetro reducido - Sección 2 x 0,22 mm².

TECHNICAL SPECIFICATIONS

HPC85

Application fields	• Patch-bay connections • Multieffect connections • Rack system connections	Colour	Black	Velocity of Propagation	66%
Conductors	Tinned copper 24 AWG = 7 x 0.20 mm (0.22 mm ²)	Electrical resistance	< 87 Ohm/Km (conductor) @ 20°C	Operating temperature	-20°C/+80°C
Insulation	XLPE Ø 1.10 mm	Electrical capacitance	63 pF/m (conductor/conductor) @ 1 KHz 107 pF/m (conductor/shield) @ 1 KHz	Working tension	< 50 V AC < 75 V DC
Shield	Aluminium foil 100%	Nominal Impedance	80 ± 3 Ohm	Weight	19 Kg/Km
Jacket	Flexible PVC 76 shore Ø 3.40 mm Complying with CEI 20-22 II regulations	Attenuation	1 MHz = 2.10 dB/100 m 3 MHz = 3.60 dB/100 m 6 MHz = 5.00 dB/100 m 8 MHz = 5.80 dB/100 m 10 MHz = 6.50 dB/100 m	Minimum bending radius	25 mm
Drain wire	Tinned copper 24 AWG = 7 x 0.20 mm (0.22 mm ²)			Packaging	100 m carton reel 300 m carton reel HPC85R300 500 m wooden reel HPC85R500



HPC90

• Cavo bilanciato digitale AES/EBU per installazione con guaina esterna schermata con nastro in alluminio e resistente alla fiamma - O.F.C. (Oxygen Free Copper) dal diametro ridotto - Sezione 2 x 0,22 mm².

• Balanced AES/EBU Audio Digital cable (2 x 0,22 mm²) small diameter aluminium foil shielded flame resistant overall jacket. - O.F.C. (Oxygen Free Copper).

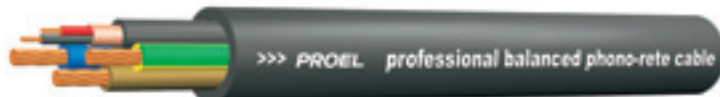
• Cable coaxial balanceado AES/EBU Audio Digital para instalación con cubierta exterior antillama apantallada en lámina de aluminio - O.F.C. (Oxygen Free Copper) con diámetro reducido - Sección 2 x 0,22 mm².

TECHNICAL SPECIFICATIONS

HPC90

Application fields	• Patch connections, gooseneck microphones • Home recording connections • Rack and console connections	Drain wire	Tinned copper 25 AWG = 7 x 0.18 mm (0.18 mm ²)	Operating temperature	-20°C/+70°C
Conductors	Bare copper 24 AWG = 28 x 0,10 mm (0.22 mm ²)	Colour	Black	Working tension	< 50 V AC < 75 V DC
Insulation	PE Ø 1.20 mm	Electrical resistance	87 Ohm/Km (conductor) @ 20°C	Weight	10 Kg/Km
Shield	Aluminium foil coverage 100%	Electrical capacitance	37 pF/m (conductor/conductor) @ 1 KHz 57 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	20 x cable section radius
Jacket	Flame resistant PVC 70 shore Ø 3.00 mm	Nominal Impedance	110 Ohm	Packaging	100 m carton reel 300 m carton reel HPC90R300
		Velocity of Propagation	80 %		

HIGH QUALITY BALANCED PHONO FEED CABLES O.F.C.



HPC501 - HPC502

• Cavo professionale combinato di tipo audio + alimentazione. Composto da una coppia audio bilanciata, twistata e individualmente isolata + cavo di alimentazione elettrica monofase. Guaina esterna in PVC flessibile antifiamma. Modelli disponibili: **HPC501** - Audio 2 x 0.35 mm² + Power 3 x 1.50 mm² / **HPC502** - Audio 2 x 0.35 mm² - Power 3 x 2.50 mm².

• Professional combined phono-feed cable. Composed by an individual insulated and twisted audio pair + single phase electric power cable. Flexible flame resistant PVC overall jacket. Available models: **HPC501**: 2 x 0.35 mm² Audio cable + 3 x 1.5 mm² power conductor / **HPC502**: 2 x 0.35 mm² Audio cable + 3 x 2.5 mm² power conductor.

• Cable profesional combinado phono-feed. Compuesto por un par audio balanceado, trenzado y aislado individualmente + cable monofásico de alimentación eléctrica. Cubierta exterior en PVC flexible antillama. Modelos disponibles: **HPC501**: 2 x 0.35 mm² cable de audio + 3 x 1.5 mm² conductor de potencia / **HPC502**: 2 x 0.35 mm² cable de audio + 3 x 2.5 mm² conductor de potencia.

TECHNICAL SPECIFICATIONS

HPC501 - HPC502

Application fields	• Audio connections			Electrical capacitance	124 pF/m (Signal) @ 1 KHz
	Bare copper			Operating temperature	-10°C/+60°C
	Power:				
Conductors	• HPC501 16 AWG = 3x29x0.25 mm (1.5 mm ²)	Jacket	CONDUCTORS		
	• HPC502 14 AWG = 3x49x0.25 mm (2.5 mm ²)		PVC 60 shore Ø 4.00 mm		
	Signal: 22 AWG = 2x11x0.20 mm (0.35 mm ²)		CABLE		
			• HPC501 - Flexible PVC 60 shore Ø 10.80 mm	Working tension	300/500 V (Power) < 50 V AC (Signal) < 75 V DC (Signal)
			• HPC502 - Flexible PVC 60 shore Ø 11.20 mm		
			Complying with CEI 20-35 (IEC 332.1)	Weight	• HPC501 - 182 Kg/Km • HPC502 - 235 Kg/Km
			regulations		
Insulation	Power:	Colour	Black	Minimum bending radius	10 x cable section radius
	• HPC501 PVC 60 shore Ø 3.0 mm			Packaging	100 m wooden or wood fiber reel
	• HPC502 PVC 60 shore Ø 3.6 mm	Electrical resistance	• HPC501 12 Ohm/Km @ 20°C (Power) • HPC502 7.4 Ohm/Km @ 20°C (Power) 54.5 Ohm/Km @ 20°C (Signal)		
	Signal: PVC HT105 Ø 1.50 mm				
Shield	Spiral red copper 4x16x0.12 90%				



HPC504

• Cavo professionale combinato di tipo audio + alimentazione. Composto da due coppie audio bilanciate, twistate e individualmente isolate + cavo di alimentazione elettrica monofase. Guaina esterna in PVC flessibile antifiamma dal diametro ridotto. Sezione: Audio 2 x 2 x 0.22 mm² - Power 3 x 1.50 mm².

• Professional combined phono-feed cable. Composed by two individual insulated and twisted audio pairs + single phase electric power cable. Flexible flame resistant PVC overall jacket. Section: 2 x 2 x 0.22 mm² Audio cable + 3 x 1.5 mm² power conductor.

• Cable profesional combinado phono-feed. Compuesto por dos pares audio balanceados, trenzados y aislados individualmente + cable monofásico de alimentación eléctrica. Cubierta exterior en PVC flexible antillama. Sección: 2 x 2 x 0.22 mm² cable de audio + 3 x 1.5 mm² conductor de potencia.

TECHNICAL SPECIFICATIONS

HPC504

Application fields	• Audio connections			Electrical capacitance	65 pF/m (Signal) @ 1 KHz
	Bare copper			Operating temperature	-10°C/+60°C
	Power:				
Conductors	16 AWG = 3x29x0.25 mm (1.5 mm ²)	Jacket	CONDUCTORS		
	Signal:		PVC 70 shore Ø 3.80 mm		
	24 AWG = 7x0.20mm (0.22 mm ²)		CABLE		
			Flexible flame resistant PVC Ø 12mm	Working tension	300/500 V (Power) < 50 V AC (Signal) < 75 V DC (Signal)
			Complying with IEC 332-1 (CEI 20-35)		
			regulations	Weight	225 Kg/Km
Insulation	Power: PVC 86 shore Ø 3.6 mm	Colour	Black	Minimum bending radius	10x cable section radius
	Signal: PVC 86 shore Ø 1.40 mm			Packaging	100 m wooden or wood fiber reel
Shield	Braided red copper 0.10 mm > 85%	Electrical resistance	7.4 Ohm/Km @ 20°C (Power) 80 Ohm/Km @ 20°C (Signal)		

PROFESSIONAL DMX CABLES



PROFESSIONAL DMX CABLES O.F.C.

SERIE DMXD

I cavi DMX sono specificamente ideati per connettere i mixer luci che utilizzano la trasmissione dati DMX a tutti quei dispositivi (cambiacolori, scanner) che utilizzano questo protocollo. I cavi sono conformi allo standard DMX512 con un'impedenza nominale di 120 Ohm. Grazie al diametro esterno ridotto, è possibile utilizzarli anche con i connettori XLR. Possono essere utilizzati per connessioni audio standard, con ottimi risultati in merito alla trasmissione e purezza del segnale.

DMXD SERIES

DMX cables are especially designed to connect lighting mixers using DMX data transmission to any device using this protocol (colour changer, scanner). Cables are made in conformity with the DMX512 standard featuring a 120 Ohm nominal impedance. Thanks to their small overall diameter, it is possible to use these cables also with XLR low profile connectors. They can also be used for standard audio connections with excellent results regarding the transmission and purity of the signal.

SERIE DMXD

Los cables DMX están especialmente diseñados para conectar los mezcladores luces que utilizan la transmisión de datos DMX a todos los dispositivos (cambiacolores, scanner) que utilizan este protocolo. Los cables están conformes al estándar DMX512 con una impedancia nominal de 120 Ohm. Gracias a su diámetro externo reducido, es posible utilizarlos también con los conectores XLR de bajo perfil. Puede ser también utilizado para conexiones de audio estándar con resultados excelentes con respecto a la transmisión y la pureza de la señal.



DMXD - DMXDBL

• Cavo professionale DMX ad impedenza costante ad una coppia audio bilanciata twistata con guaina esterna a diametro ridotto in PVC flessibile antifiama. Sezione: 2 x 0.25 mm².

• Constant impedance DMX 1 audio balanced twisted pair (2 x 0.25 mm²) cable with small diameter flexible flame resistant PVC overall Jacket.

• Cable DMX con impedancia constante de un par audio trenzado balanceado (2 x 0.25 mm²) con cubierta exterior de diámetro reducido en PVC flexible antillama.

TECHNICAL SPECIFICATIONS

DMXD-DMXDBL

Application fields	• Standard DMX connections	Jacket	Flame resistant flexible PVC Ø 5.40 mm	Nominal impedance	120 Ohm
	• Light/colour changer scanner connections		Complying with IEC 332.1 regulations		
Conductors	• Audio connections connections	Drain Wire	Tinned copper	Attenuation	66 %
			24 AWG = 7 x 0.20 mm (0.22 mm ²)	Operating temperature	-20°C/+80°C
Insulation	Bare copper 24 AWG = 14 x 0.15 mm (0.25 mm ²)	Colour	Black (DMXD), Blue (DMXDBL)	Working tension	< 50 V AC < 75 V DC
	Complying with IEC 228 Class 5 regulations	Electrical resistance	85 Ohm/Km (conductor) @ 20°C 17 Ohm/Km (shield) @ 20°C	Weight	38 Kg/Km
Shield	XLPE Ø 1.80 mm red/natural	Electrical capacitance	40 pF/m (conductor/conductor) @ 1 KHz 71 pF/m (conductor/shield) @ 1 KHz	Minimum bending radius	25 mm
	PE filler PES foil 100% Tinned copper braid > 95%			Packaging	100 m carton reel



DMXD1

• Cavo professionale DMX ad impedenza costante ad una coppia audio bilanciata twistata e cavo di potenza con guaina esterna a diametro ridotto in PVC flessibile antifiama. Sezione: Audio 2 x 0.25 mm² - Power 3 x 1.50 mm².

• Constant impedance DMX 1 audio balanced twisted pair cable (2 x 0.25 mm²) and power cable (3 x 1.5 mm²) with small diameter flexible flame resistant PVC overall Jacket.

• Cable DMX con impedancia constante de un par audio trenzado balanceado (2 x 0.25 mm²) y cable de potencia (3 x 1.5 mm²) con cubierta exterior de diámetro reducido en PVC flexible antillama.

TECHNICAL SPECIFICATIONS

DMXD1

Application fields	• Standard DMX connections	Jacket	CONDUCTORS	Operating temperature	-20°C/+80°C
	• Light/colour changer scanner connections		AUDIO:		
Conductors	Bare copper	Colour	flame resistant flexible PVC Ø 4.50 mm	Working tension	300/500 V (Power)
	AUDIO: 24 AWG = 14 x 0.15 mm (0.25 mm ²)		CABLE:		< 50 V AC (Signal)
Shield	Complying with IEC 228 Class 5 regulations	Electrical resistance	flame resistant flexible PVC Ø 9.80 mm	Weight	< 75 V DC (Signal)
	POWER: 16 AWG = 3 x 1.5 mm (1.55 mm ²)		Complying with IEC 332.1 regulations		146 Kg/Km
Insulation	CONDUCTORS	Electrical capacitance	40 pF/m (conductor/conductor) @ 1 KHz	Minimum bending radius	25 mm
	PE filler - Aluminium/Mylar foil 100% -	Nominal impedance	120 Ohm	Packaging	100 m wooden or wood fiber reel
	Tinned copper braid 90%	Attenuation	66 %		
	CABLE				
	Non wovens				
	AUDIO: PE Ø 1.80 mm red/natural				
	POWER: flame resistant PVC Ø 4.5 mm				
	Complying with IEC 332.1 regulations				

PROFESSIONAL HYBRID & LAN CABLES



PRONET

Loudspeaker Control Software

PROFESSIONAL HYBRID CABLES O.F.C.

CAVI IBRIDI

Proel ha progettato la nuova linea di cavi ibridi professionali al fine di offrire, in un solo prodotto, la trasmissione di più tipologie di segnale, quali controllo dati, audio digitale ed alimentazione. Le soluzioni proposte sono molteplici e per diversi utilizzi, garantendo affidabilità ed integrità del segnale anche nelle situazioni più gravose. Le principali applicazioni sono le nuove tecnologie introdotte nei diffusori acustici attivi e fari motorizzati intelligenti altamente professionali, dove si è avuta l'integrazione dei segnali analogico/digitale e dei sistemi di controllo in networking. Oltre a questa nuova serie di prodotti, Proel offre un'evoluzione nel settore dei cavi ethernet (LAN), realizzando due nuovi prodotti per la trasmissione dati ad alta velocità (Class D bit-rates), sia per utilizzo mobile che per installazioni fisse. Tutti i cavi sono conformi alle normative ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2.

HYBRID CABLES

Proel has developed a new range of professional hybrid cables. The principle of this product is to provide, in a single cable, the transmission of multiple signal sources, such as data control, digital audio and power. The proposed solutions are many and for different applications, ensuring reliability and signal integrity even under the most extreme conditions. The main applications are the new technologies introduced in highly professional active speakers and intelligent moving lights. Where there has been integration of an analogue/digital and networking control systems. In addition to this new series of products, Proel provides a development in the field of the Ethernet cables (LAN), creating two new products for transmitting high speed data (Class D bit-rates), both for mobile use and for fixed installations. All cables are in compliance with ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2.

CABLES HÍBRIDOS

Proel ha desarrollado una nueva gama de cables híbridos profesionales. El principio de estos productos es proporcionar, en un solo cable, la transmisión de múltiples fuentes de señal, tales como control de datos, audio digital y potencia. Las soluciones propuestas son muchas y para diferentes aplicaciones, asegurando fiabilidad e integridad de la señal incluso en las condiciones más extremas. Las principales aplicaciones son las nuevas tecnologías introducidas en altavoces activos altamente profesionales y luces móviles inteligentes, donde se han integrado los sistemas de control analógicos/digitales y de redes. Además de esta nueva serie de productos, Proel ofrece un desarrollo en el campo de los cables Ethernet (LAN), la creación de dos nuevos productos para la transmisión de datos a alta velocidad (Clase D bit-rates), tanto para el uso móvil como para instalaciones fijas. Todos los cables están en conformidad con la norma ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2.



LAN61S

• Nuovo cavo ibrido professionale, che combina una coppia audio digitale AES/EBU 110 Ohm (compatibile con il segnale analogico) schermata con nastro in alluminio-mylar ed un cavo CAT 6 con doppia schermatura realizzata con nastro di alluminio-mylar e treccia in rame stagnato. I due cavi interni sono singolarmente inguainati e la guaina esterna sul totale è realizzata in PVC ritardante la fiamma.

• New professional hybrid cable, combining an aluminum-mylar foil shielded digital audio AES/EBU 110 Ohm pair (compatible with the analog signal) and a CAT 6 cable with double shielding made of aluminum-mylar foil and a tinned copper braid. The two inner cables are individually insulated and the outer sleeve is manufactured from flame retardant PVC.

• Nuevo cable híbrido profesional, que combina un par de audio digital AES/EBU 110 Ohm (compatible con la señal analógica) apantallado con cinta de aluminio-mylar y un cable CAT 6 con doble apantallamiento de cinta de aluminio mylar y trenza de cobre estañado. Los dos cables interiores están enfundados individualmente y la cubierta exterior está hecha de PVC retardante de llama.

TECHNICAL SPECIFICATIONS

LAN61S

Application fields	• Control DMX Lighting console • Self powered loudspeaker • Mobile application	Insulation	Cat 6: PVC Ø 6.70 mm Audio pair: PVC Ø 3.50 mm	Nominal impedance	Audio pair: 110 Ohm
Conductors	Cat 6: 24 AWG = 1 x 0.52 mm (0.20 mm ²) Audio pair: 24 AWG = 28 x 0.10 mm (0.22 mm ²) Bare copper	Drain Wire (Audio pair)	24 AWG = 7 x 0.18 mm (0.22 mm ²) Tinned copper	Operating temperature	-20°C/+70°C
		Jacket	Flame retardant flexible PVC Ø 15.00 mm	Working tension	Audio pair: < 50 V AC < 75 V DC
Shield	Cat 6: Al-mylar foil 100% - Tinned copper braid Audio pair: Al-mylar foil 100%	Colour	Black	Weight	260 Kg/Km
		Electrical resistance	88 Ohm/Km (conductor) @ 20°C	Minimum bending radius	25 mm
		Electrical capacitance	48 pF/mt (conductor/conductor) @ 1 KHz	Packaging	150 m wooden reel



LAN62S

• Nuovo cavo ibrido professionale, che combina due coppie audio digitali AES/EBU 110 Ohm (compatibili con il segnale analogico) schermate con nastro in alluminio-mylar ed un cavo CAT 6 con doppia schermatura realizzata con nastro di alluminio-mylar e treccia in rame stagnato. I tre cavi interni sono singolarmente inguainati e la guaina esterna sul totale è realizzata in PVC ritardante la fiamma.

• New professional hybrid cable, combining aluminum-mylar foil shielded two digital audio AES/EBU 110 Ohm pairs (compatible with the analog signal) and a CAT 6 cable with double shielding made of aluminum-mylar foil and a tinned copper braid. The three inner cables are individually insulated and the outer sleeve is manufactured from flame retardant PVC.

• Nuevo cable híbrido profesional, que combina dos pares de audio digital AES/EBU 110 Ohm (compatible con la señal analógica) apantallado con cinta de aluminio-mylar y un cable CAT 6 con doble apantallamiento de cinta de aluminio mylar y trenza de cobre estañado. Los tres cables interiores están enfundados individualmente y la cubierta exterior está hecha de PVC retardante de llama.

TECHNICAL SPECIFICATIONS

LAN62S

Application fields	• Control DMX Lighting console • Self powered loudspeaker • Mobile application	Insulation	Cat 6: PVC Ø 6.00 mm Audio pair: PVC Ø 4.00 mm	Nominal impedance	Audio pair: 120 Ohm
Conductors	Cat 6: 24 AWG = 1 x 0.52 mm (0.20 mm ²) Audio pair: 24 AWG = 28 x 0.10 mm (0.22 mm ²) Bare copper	Drain Wire (Audio pairs)	24 AWG = 7 x 0.18 mm (0.22 mm ²) Tinned copper	Operating temperature	-20°C/+70°C
		Jacket	Flame resistant flexible PVC Ø 16.00 mm	Working tension	Audio pair: < 50 V AC < 75 V DC
Shield	Cat 6: Al-mylar foil 100% - Tinned copper braid Audio pair: Al-mylar foil 100%	Colour	Black	Weight	260 Kg/Km
		Electrical resistance	88 Ohm/Km (conductor) @ 20°C	Minimum bending radius	25 mm
		Electrical capacitance	48 pF/mt (conductor/conductor) @ 1 KHz	Packaging	150 m wooden reel

PROFESSIONAL HYBRID & LAN CABLES O.F.C.



LAN6iSPW

• Nuovo cavo ibrido professionale, che combina una coppia audio digitale AES/EBU 110 Ohm (compatibile con il segnale analogico) schermata con nastro in alluminio-mylar, un cavo CAT 6 con doppia schermatura realizzata con nastro di alluminio-mylar e treccia in rame stagnato ed un cavo di alimentazione con sezione 3 x 2.5 mm². Tutti i cavi interni sono singolarmente inguainati e la guaina esterna sul totale è realizzata in PVC ritardante la fiamma.

• New professional hybrid cable, combining an aluminum-mylar foil shielded digital audio AES/EBU 110 Ohm pair (compatible with the analog signal) and a CAT 6 cable with double shielding made of aluminum-mylar foil, a tinned copper braid and a 3x2.5 mm² power cable. The three inner cables are individually insulated and the outer sleeve is manufactured from flame retardant PVC.

• Nuevo cable híbrido profesional, que combina un par de audio digital AES/EBU 110 Ohm (compatible con la señal analógica) apantallado con cinta de aluminio-mylar, un cable CAT 6 con doble apantallamiento de cinta de aluminio mylar y trenza de cobre estañado y un cable de potencia con sección de 3x2.5 mm². Todos los cables internos están enfundados individualmente y la cubierta exterior está hecha de PVC retardante de llama.

TECHNICAL SPECIFICATIONS

LAN6iSPW

Application fields	• Control DMX Lighting console • Self powered loudspeaker • Mobile application	Shield	Cat 6: Alu-mylar foil 100% - Tinned copper braid 90% Audio pair: Al-mylar foil 100%	Electrical capacitance	Audio pair: 48 pF/mt (cond./cond.) @1 KHz
				Nominal impedance	Audio pair: 110 Ohm
Conductors	Cat 6: 24 AWG = 1 x 0.52 mm (0.20 mm²) Audio pair: 24 AWG = 28 x 0.10 mm (0.22 mm²) Bare copper Power: 16 AWG = 50 x 0.254 mm (2,50 mm²)	Insulation	Cat 6: PVC Ø 6.70 mm Audio pair: PE Ø 3.50 mm	Operating temperature	-20°C/+70°C
		Jacket	Flame resistant flexible PVC Ø 20,50 mm	Working tension	Audio pair: < 50 V AC < 75 V DC Power: 300/500V
		Colour	Black	Minimum bending radius	25 mm
		Electrical resistance	Audio pair: 88 Ohm/Km (conductor) @ 20°C	Packaging	150 m wooden reel



LAN5S

• Nuovo cavo professionale per connessioni ethernet CAT 5 Special, con doppia schermatura realizzata in nastro di alluminio-mylar e treccia di rame stagnato. Particolarmente indicato per applicazioni in uso mobile. La guaina esterna è realizzata in PVC resistente alla fiamma.

• New professional CAT 5 Special cable for Ethernet connections, featuring double shielding manufactured from aluminum-mylar foil and tinned copper braid. Particularly suitable for mobile applications. The outer sleeve is manufactured from flame-resistant PVC.

• Nuevo cable profesional CAT 5 Special, para conexiones ethernet, con doble apantallamiento de cinta de aluminio mylar y trenza de cobre estañado. Especialmente adecuado para aplicaciones en el uso móvil. La cubierta exterior está hecha de PVC resistente a la llama.

TECHNICAL SPECIFICATIONS

LAN5S

Application fields	• Patch cords and link cables for ethernet connections	Jacket	Flame resistant flexible PVC Ø 5.80 mm	Weight	55 Kg/Km
Conductors	24 AWG = 7 x 0.20mm (0.14 mm²) bare copper	Colour	Black	Minimum bending radius	15 mm x overall diameter
Insulation	Single conductor: PE Ø 1.05 mm	Electrical resistance	90 Ohm/Km (conductor) @ 20°C	Packaging	305 m wooden reel
Shield	Aluminium/Mylar foil 100% Tinned copper braid 80%	Electrical capacitance	50 pF/mt (cond./cond.) @1 KHz		
		Operating temperature	-20°C/+70°C		



LAN64

• Nuovo cavo professionale per connessioni ethernet multiple, che combina 4 cavi CAT 6, singolarmente inguainati e con schermatura sul totale per mezzo di treccia in rame stagnato. Particolarmente indicato per applicazioni in posa fissa. La guaina esterna è realizzata in PVC resistente alla fiamma.

• New professional cable for multiple ethernet connections. Combines 4 X CAT 6 cables, individually insulated with overall shielding by tinned copper braid. Particularly suitable for use in fixed installations. The outer sleeve is manufactured from flame-resistant PVC.

• Nuevo cable profesional para conexiones múltiples ethernet, que combina 4 cables CAT 6, enfundados individualmente y con apantallamiento por el total en trenza de cobre estañado. Particolarmente adecuado para el uso en instalaciones fijas. La cubierta exterior está hecha de PVC resistente a la llama.

TECHNICAL SPECIFICATIONS

LAN64

Application fields	• Digital consoles connections	Jacket	Flame resistant flexible PVC Ø 20,00 mm	Operating temperature	-20°C/+70°C
Conductors	Cat 6: 23 AWG = 1 x 0.573 mm (0.26 mm²)	Colour	Black	Weight	460 Kg/Km
Insulation	Single conductor: PE Ø 1.02 mm Single Lan 6: PVC Ø 6.40 mm	Electrical resistance	Audio pair: 88 Ohm/Km (conductor) @ 20°C	Minimum bending radius	15 mm x overall jacket
Shield	Overall cable: Tinned copper braid 84%	Electrical capacitance	Audio pair: 53 pF/mt (cond./cond.) @1 KHz	Packaging	150 m wooden reel
		Nominal impedance	Audio pair: 100 Ohm		



PROFESSIONAL LOUDSPEAKER CABLES



PROFESSIONAL TWISTED FLEXIBLE LOUDSPEAKER CABLES O.F.C.

CAVI SPEAKER

Linea professionale di cavi flessibili per diffusori acustici, proposta in una vasta gamma di configurazioni per garantire le migliori prestazioni e per adattarsi alle esigenze di ogni connessione con impianti audio dalle applicazioni standard a quelle più critiche. La guaina esterna in PVC e la composizione dei conduttori interni ultra- flessibili, garantiscono sempre un perfetto avvolgimento. Le applicazioni tipiche sono: amplificazione, sistemi di altoparlanti distribuiti e l'installazione in studi di registrazione.

SPEAKER CABLES

Professional line of flexible loudspeaker cables, feature a wide range of configurations to guarantee the best achievable performance from standard applications to the most critical ones. Suitable for amplifier to loudspeakers connections. The PVC overall jacket and the composition of the ultra-flexible inner conductors always grant a perfect winding. The typical applications are: sound reinforcement, distributed speaker systems and studio installation.

CABLE PARA COLUMNAS

Línea profesional de cables flexibles para columnas, dotada con numerosas configuraciones para garantizar el mejor rendimiento posible. Desde las aplicaciones estándar hasta las más críticas. Aptos para conexiones de amplificador a columnas. La cubierta exterior en PVC y la composición de los conductores internos muy flexibles hacen de manera que estos cables garanticen siempre un perfecto rebobinado. Las aplicaciones típicas son: reforzado del sonido, sistemas de distribución de columnas e instalación en estudios.



HPC610BK – HPC620BK – HPC624BK – HPC626BK

• Cavo ultra-flessibile a 2 conduttori twistati per diffusori acustici passivi, proposto in diverse configurazioni di sezione.

• Ultra-flexible 2 twisted conductors speaker cable for passive loudspeakers, proposed in different configurations.

• Cable flexible de 2 conductores trenzados para columnas. Propuesto en diferentes configuraciones de sección.

TECHNICAL SPECIFICATIONS

HPC610BK - HPC620BK - HPC624BK - HPC626BK

Application fields	Passive speaker connections, sound reinforcement, studio installation, live	Jacket	Ultra - Flexible PVC – 60 Shore	Additional notes	Construction & Controls complying with CEI 20-20 regulations	
Conductors	Bare copper – 0,25 mm	Colour	Black (other colours on request)	Packaging	100 m standard carton / wooden reel	
Lay up	two conductors twisted in short concentric layers	Working Temperature range	-20°C/+70°C		300 m wooden reel HPC610BK300	
		Minimum bending radius	10 x overall diameter		HPC620BK300 HPC624BK300	
Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC610BK	16 AWG = 30 x 0.25 mm (1.50 mm²)	Ø 2,70 mm	Ø 7,00 mm	12 Ohm/Km (conductor)	115 pF/m (conductor/ conductor)	136
HPC620BK	14 AWG = 48 x 0.25 mm (2.50 mm²)	Ø 3,20 mm	Ø 8,40 mm	7,40hm/Km (conductor)	131 pF/m (conductor/ conductor)	161
HPC624BK	12 AWG = 80 x 0.25 mm (4 mm²)	Ø 4,00 mm	Ø 11,00 mm	4,5 Ohm/Km (conductor)	116 pF/m (conductor/ conductor)	198
HPC626BK	10 AWG = 120 x 0.25 mm (4 mm²)	Ø 4,90 mm	Ø 12,00 mm	2,95 Ohm/Km (conductor)	125 pF/m (conductor/ conductor)	260



HPC640BK - HPC644

• Cavo ultra-flessibile a 4 conduttori twistati per diffusori acustici passivi, proposto in diverse configurazioni di sezione.

• Ultra-flexible 4 twisted conductors speaker cable for passive loudspeakers, proposed in different configurations.

• Cable flexible de 4 conductores trenzados para columnas. Propuesto en diferentes configuraciones de sección.

TECHNICAL SPECIFICATIONS

HPC640BK - HPC644

<i>Application fields</i>	Passive speaker connections, sound reinforcement, live	<i>Jacket</i>	Ultra - Flexible PVC – 60 Shore	<i>Additional notes</i>	Construction & Controls complying with CEI 20-20 regulations	
<i>Conductors</i>	Bare copper – 0,25 mm	<i>Colour</i>	Black (other colours on request)		<i>Packaging</i>	100 m standard carton / wooden reel
<i>Lay up</i>	Four conductors twisted in short concentric layers	<i>Working Temperature range</i>	-20°C/+70°C	300 m wooden reel HPC640BK300		
		<i>Minimum bending radius</i>	10 x overall diameter	(other lengths on request)		
Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC640BK	14 AWG = 48 x 0.25 mm (2.50 mm2)	Ø 3,45 mm	Ø 11,00 mm	7,4 Ohm/Km (conductor)	85 pF/m (conductor/ conductor)	204
HPC644	12 AWG = 53 x 0.25 mm (4.00 mm2)	Ø 4,20 mm	Ø 13,20 mm	4,5 Ohm/Km (conductor)	120 pF/m (conductor/ conductor)	345

PROFESSIONAL TWISTED FLEXIBLE LOUDSPEAKER CABLES O.F.C.



HPC660BK

• Cavo flessibile a 6 conduttori twistati per diffusori acustici passivi.

• Flexible 6 twisted conductors speaker cable for passive loudspeakers.

• Cable flexible de 6 conductores trenzados para columnas.

TECHNICAL SPECIFICATIONS

HPC660BK

Application fields	Passive speaker connections, sound reinforcement, live	Colour	Black	Minimum bending radius	10 x overall diameter
Conductors	Bare copper 14 AWG = 48 x 0.25 mm (2.5 mm ²)	Electrical resistance	7.4 Ohm/Km (conductor) @ 20°C	Additional notes	Construction & Controls: complying with CEI 20-20 regulations
Insulation	PVC Ø 3.45 mm	Electrical capacitance	100 pF/m (conductor/conductor) @ 1 KHz	Packaging	100 m wooden or wood fiber reel
Lay up	Six conductors twisted in short concentric layers with a central PVC filler	Operating temperature	-20°C/+70°C		
Jacket	Flexible PVC 60 shore Ø 12.90 mm	Working tension	300/500 V		
		Weight	349 Kg/Km		



HPC685BK - HPC684BK

• Cavo flessibile a 8 conduttori twistati per diffusori acustici passivi, proposto in diverse configurazioni di sezione.

• Flexible 8 twisted conductors speaker cable for passive loudspeakers, proposed in different configurations.

• Cable flexible de 8 conductores trenzados para columnas. Propuesto en diferentes configuraciones de sección

TECHNICAL SPECIFICATIONS

HPC685BK

Application fields	Passive speaker connections, sound reinforcement, live	Lay up	eight conductors twisted in short concentric layers with a central PVC filler	Working tension	300/500 V
Conductors	Bare copper 14 AWG = 48 x 0.245 mm (2.50 mm ²) HPC685BK 12 AWG = 130 x 0.193 mm (4.00 mm ²) HPC685BK	Jacket	Ultra - Flexible PVC – 60 Shore	Minimum bending radius	10 x overall diameter
		Colour	Black (other colours on request)	Additional notes	Construction & Controls: complying with CEI 20-20 regulations
		Operating temperature	-20°C/+70°C	Packaging	100 m wooden or wood fiber reel (other lengths on request)

Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC685BK	14 AWG = 48 x 0.245 mm (2.50 mm ²)	Ø 3,30 mm	Ø 13,60 mm	7,40 Ohm/Km (conductor)	100 pF/m (conductor/conductor)	365,00
HPC684BK	12 AWG = 130 x 0.193 mm (4.00 mm ²)	Ø 3,80 mm	Ø 16,60 mm	4,50 Ohm/Km (conductor)	125 pF/m (conductor/conductor)	590,00

PROFESSIONAL TWISTED FLEXIBLE FIRE RESISTANT LOUDSPEAKER CABLES O.F.C.

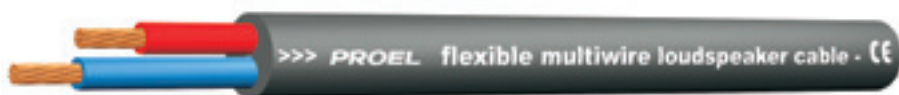
CAVI SPEAKER

Linea professionale di cavi per diffusori acustici passivi particolarmente indicati per installazioni fisse, realizzati con isolamento e guaina esterna in PVC non propagante l'incendio secondo la norma IEC 60332-3. In aggiunta alla versione standard, abbiamo disponibile anche la versione con isolamento e guaina esterna realizzati in materiale termoplastico privo di alogeni (**LSZH**), quindi utilizzabile in condizioni di installazione con norme più restrittive.



SPEAKER CABLES

Professional line of loudspeaker cables for passive speakers, particularly suitable for fixed installations. Insulation and outer jacket made of flame retardant PVC according to IEC 60332-3 regulation. In addition to the standard version, we also have those cables with insulation and outer jacket made of thermoplastic halogen-free (**LSZH**), therefore suitable for installation with more strictly requirements.



CABLE PARA COLUMNAS

Línea profesional de los cables de altavoz para altavoces pasivos, especialmente adecuado para instalaciones fijas, el aislamiento y la chaqueta externa hecha de PVC retardante de llama según IEC 60332-3 regulación. En adiciones a la versión estándar, también tenemos esos cables con aislamiento y cubierta exterior de material termoplástico libre de halógenos (**LSZH**), por lo tanto conveniente para la instalación con las normas de instalación más restrictivas.

HPC610FT - HPC620FT - HPC624FT - HPC626FT

• Cavo a 2 conduttori twistato con guaina esterna in PVC a tubo non propagante la fiamma per diffusori acustici passivi.

• 2 twisted conductors loudspeaker cable with flame retardant tube style PVC overall jacket.

• Cable de 2 conductores trenzados con cubierta exterior en tubo de PVC que no propaga la llama para columnas.

TECHNICAL SPECIFICATIONS

HPC610FT-HPC620FT-HPC624FT-HPC626FT

Application fields	Passive speaker for fixed installation	Insulation	Red and Blue Rz type PVC complying with EN 50363-0. Hardness (90 ± 2) Shore-A	Working Temperature range	-20°C/+70°C at fixed laying
Conductors	0,25 mm Class 5 electrolytic bare copper flexible conductor in compliance with IEC 60228 standard	Jacket	Tube extruded outer sheath with Rz type PVC complying with EN 50363-0 standard. Hardness: (90 ± 2) Shore-A	Minimum bending radius	10 x overall diameter
Lay up	two conductors twisted in short concentric layers	Colour	Black	Notes	Construction & Controls complying with IEC 60332-3 standard
				Packaging	100 m carton/wooden reel (other lengths on request)

Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Weight Kg / Km
HPC610FT	16 AWG = 28 x 0.25 mm (1.50 mm ²)	Ø 2,50 mm	Ø 6,80 mm	13,3 Ohm/Km (conductor)	83,60
HPC620FT	14 AWG = 48 x 0.25 mm (2.50 mm ²)	Ø 2,90 mm	Ø 7,60 mm	7,98 Ohm/Km (conductor)	122,40
HPC624FT	12 AWG = 52 x 0.30 mm (4.00 mm ²)	Ø 3,80 mm	Ø 9,20 mm	4,95 Ohm/Km (conductor)	83,60
HPC626FT	10 AWG = 80 x 0.30 mm (6.00 mm ²)	Ø 4,40 mm	Ø 10,60 mm	3,30 Ohm/Km (conductor)	122,40



HPC610HF - HPC620HF - HPC624HF - HPC626HF

• Cavo flessibile a 2 conduttori twistato con guaina esterna in PVC zero alogeni (**LSZH**) a tubo non propagante la fiamma per diffusori acustici passivi.

• Flexible 2 twisted conductors loudspeaker cable with halogen-free (**LSZH**) flame retardant PVC overall jacket.

• Cable flexible de 2 conductores trenzados con cubierta exterior en PVC halogen-free (**LSZH**) que no propaga la llama para columnas.

TECHNICAL SPECIFICATIONS

HPC610HF-HPC620HF-HPC624HF-HPC626HF

Application fields	Passive speaker for fixed installation	Insulation	Red and Blue thermoplastic halogen-free material. Hardness (50 ± 2) Shore-A	Working Temperature range	-20°C/+70°C at fixed laying
Conductors	0,25 mm Class 5 electrolytic bare copper flexible conductor in compliance with IEC 60228 standard	Jacket	Tube extruded outer sheath with M1 type halogen-free thermoplastic material. Hardness: (45 ± 2) Shore-A	Minimum bending radius	10 x overall diameter
Lay up	two conductors twisted in short concentric layers	Colour	Blue (RAL5010)	Notes	Construction & Controls complying with IEC 60332-3 standard
				Packaging	100 m carton/wooden reel (other lengths on request)

Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Weight Kg / Km
HPC610HF	16 AWG = 28 x 0.25 mm (1.50 mm ²)	Ø 2,50 mm	Ø 6,80 mm	13,3 Ohm/Km (conductor)	83,60
HPC620HF	14 AWG = 48 x 0.25 mm (2.50 mm ²)	Ø 2,90 mm	Ø 7,60 mm	7,98 Ohm/Km (conductor)	122,40
HPC624HF	12 AWG = 52 x 0.30 mm (4.00 mm ²)	Ø 3,80 mm	Ø 9,20 mm	4,95 Ohm/Km (conductor)	83,60
HPC626HF	10 AWG = 80 x 0.30 mm (6.00 mm ²)	Ø 4,40 mm	Ø 10,60 mm	3,30 Ohm/Km (conductor)	122,40

PROFESSIONAL TWISTED FLEXIBLE FIRE RESISTANT SPEAKER CABLE O.F.C.

CAVI SPEAKER

Fino ad oggi è stata data scarsa rilevanza alle interferenze raccolte dai cavi di potenza per diffusori acustici passivi. Infatti, le correnti indotte sui cavi, prodotte via etere dalle onde elettromagnetiche, sono di entità enormemente più bassa rispetto a quella generata dal segnale amplificato. Ciò non vale nelle installazioni in posa fissa, quando i cavi sono adiacenti per molti metri a quelli di alimentazione rete. Un problema sentito anche nelle realizzazioni di impianti a 70V e 100V in cui si possono sviluppare centinaia di metri di linea. Il disturbo indotto è ovviamente in bassa frequenza; pertanto abbiamo provveduto a realizzare una schermatura in treccia di rame stagnato. All'interno del cavo troviamo una coppia di conduttori twistati, isolati in PVC e realizzati in sottilissimo rame rosso. La guaina di rivestimento esterno è realizzata in PVC antifiamma, come previsto dalla normativa per le installazioni in posa fissa.

SPEAKER CABLES

Up till now, scarce relevance has been given to interferences accumulated by loudspeaker power cables. As a matter of fact, the entity of currents engendered on cables, produced by electromagnetic waves through the ether, is extremely lower than the entity of the current generated by the amplified signal. This is not true in fixed installations, where the cables lie next to power supply cables over many meters. The same problem arises in the realization of 70V and 100V equipment where several hundred meters of line may be needed. The interference engendered is obviously low frequency. For this reason we have realized a tinned copper braid shielding. Inside the cable we can find a pair of twisted conductors with PVC insulation, made of a very thin red copper. The overall jacket is made of flame-resistant PVC, in conformity with the regulations on fixed installations.

CABLE PARA COLUMNAS

Hasta este momento se ha dado escasa relevancia a las interferencias acumuladas por los cables de potencia para columnas. En efecto, las corrientes ocasionadas en los cables, producidas vía éter por las ondas electromagnéticas, poseen una entidad enormemente más baja en relación a la de la corriente engendradora por la señal amplificada. Esto no vale en las instalaciones fijas, cuando los cables son adyacentes por muchos metros a los de alimentación de red. Un problema que se ocasiona también en la realización de equipos de 70V y 100V en los que se pueden precisar centenares de metros de línea. La interferencia ocasionada es sin dudas en baja frecuencia. Por lo tanto, hemos realizado un apantallado en trenza de cobre estañado. Al interior del cable encontrarán un par de conductores trenzados, aislados en PVC y realizados en cobre rojo muy delgados. La cubierta de revestimiento exterior está realizada en PVC antillama, según previsto por la norma sobre las instalaciones fijas.



HPC610FRS - HPC620FRS - HPC624FRS

• Cavo ultra-flessibile a 2 conduttori twistati e schermati; con guaina esterna in PVC antifiamma per diffusori acustici passivi.

• Ultra-flexible 2 twisted and shielded conductors loudspeaker cable with flame resistant PVC overall jacket.

• Cable flexible apantallado de 2 conductores trenzados para columnas con cubierta antillama en PVC.

TECHNICAL SPECIFICATIONS

HPC610FRS – HPC620FRS – HPC624FRS

Application fields	• Fixed installation audio connections	Shield	Tinned copper braid 100%	Working Temperature range	-30°C/+80°C
Conductors	Bare copper = 0.25 mm - Complying with IEC 228 Class 5 regulations	Jacket	Flame resistant flexible PVC 60 shore - Complying with IEC 332.2 regulations	Minimum bending radius	4 x overall diameter
Lay up	two conductors twisted in short concentric layers	Colour	Green RAL6017	Packaging	100 m standard carton / wooden reel - (other lengths on request)

Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC610FRS	16 AWG = 29x0.25 mm (1.50 mm ²)	Ø 2,30 mm	Ø 6,30 mm	14 Ohm/Km (conductor)	82 pF/m (conductor/conductor)	62,00
HPC620FRS	14 AWG = 48 x 0.25 mm (2.50 mm ²)	Ø 3,20 mm	Ø 7,60 mm	8,70 Ohm/Km (conductor)	78 pF/m (conductor/conductor)	92,00
HPC624FRS	12 AWG = 80 x 0.25 mm (4.00 mm ²)	Ø 4,00 mm	Ø 11,00 mm	5,00 Ohm/Km (conductor)	80 pF/m (conductor/conductor)	203,00

PROFESSIONAL COAXIAL SPEAKER CABLE



HPC505BK

• Cavo coassiale professionale a doppia schermatura con guaina esterna a diametro ridotto in PVC flessibile ritardante la fiamma per casse acustiche.

• Professional double shielded coaxial speaker cable with small diameter flexible flame retardant PVC overall jacket.

• Cable coaxial profesional de doble apantallado con cubierta exterior con diámetro reducido en PVC flexible que no propaga la Llama para columnas.

TECHNICAL SPECIFICATIONS

HPC505BK

Application fields	• Fixed installation audio connections	Shield	Double spiral bare copper 100%	Electrical capacitance	300 pF/m @ 1 KHz
Conductors	Bare copper 14 AWG = 140x0.15 mm (2.50 mm ²) Complying with IEC 228 Class 6 regulations	Jacket	Flame retardant flexible PVC 60 shore Ø 6.40 mm Complying with IEC 332.1 regulations	Operating temperature	-25°C / +70°C
Insulation	PVC Ø 3.80 mm	Colour	Black	Weight	90 Kg/Km
		Electrical resistance	8 Ohm/Km (conductor) @ 20°C	Minimum bending radius	40 mm
				Packaging	100 m carton reel

PROFESSIONAL FLAT SPEAKER & HOME HI-FI CABLES



HPC700 - HPC710

• Cavo professionale piatto a 2 conduttori con guaina esterna in PVC flessibile trasparente per diffusori acustici passivi. Conduttori in rame stagnato e rame rosso per una facile riconoscibilità della polarizzazione.

• Professional 2- conductors flat cable with flexible PVC overall jacket in transparent colour for passive speakers. Tinned copper and red copper conductors strength for an easy polarization recognition.

• Cable profesional plano de 2 conductores con cubierta exterior en PVC flexible. Conductores en cobre estañado y cobre rojo para una fácil reconocimiento de la polarización.

TECHNICAL SPECIFICATIONS

HPC700 - HPC710						
Application fields	• Speaker connections • Home HI-FI connections	Jacket	Flexible PVC 64 shore		Minimum bending radius	10 x overall diameter
		Colour	Translucent red		Packaging	Packaging: 100 m standard carton reel
Conductors	Extra fine bare copper and tinned copper = 0.15 mm	Working Temperature range	-30°C/+70°C			
Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC700	16 AWG = 3x28x0,15 mm (1.50 mm ²)	Ø 3,50 mm	2*Ø 3,50 mm	8,70 Ohm/Km (conductor)	80 pF/m (conductor/conductor)	83,60
HPC710	12 AWG = 3x56x0,15 mm (3.00 mm ²)	Ø 4,60 mm	2*Ø 4,60 mm	3,75 Ohm/Km (conductor)	80 pF/m (conductor/conductor)	138,00



HPC752RN - HPC754RN - HPC756RN

• Cavo professionale piatto a 2 conduttori in rame rosso con guaina esterna in PVC flessibile.

• Professional bare copper 2-conductors flat cable with flexible PVC overall jacket.

• Cable plano de 2 conductores en cobre con cubierta exterior en PVC flexible.

TECHNICAL SPECIFICATIONS

HPC752RN - HPC754RN - HPC756RN						
Application fields	• Speaker connections • Home HI-FI connections	Colour	Black/Red		Minimum bending radius	4 x overall diameter
		Working Temperature range	-30°C/+70°C		Packaging	200 m standard carton reel. (Other lengths on request)
Conductors	Extra fine bare copper = 0.20 mm	Working tension	75 V			
Jacket	Flexible flame resistant PVC 60 shore					
Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC752RN	18 AWG = 24x0,20 mm (0,75 mm ²)	Ø 2,35 mm	2*Ø 2,35 mm	26,00 Ohm/Km (conductor)	100 pF/m (conductor/conductor)	23,30
HPC754RN	17 AWG = 32x0,20 mm (1,00 mm ²)	Ø 2,80 mm	2*Ø 2,80 mm	19,50 Ohm/Km (conductor)	114 pF/m (conductor/conductor)	32,40
HPC756RN	16 AWG = 28x0,25 mm (1,50 mm ²)	Ø 3,20 mm	2*Ø 3,20 mm	13,30 Ohm/Km (conductor)	115 pF/m (conductor/conductor)	44,90

PROFESSIONAL TWISTED SPEAKER CABLES



HPC610T - HPC620T - HPC624T

• Cavo professionale twistato a 2 conduttori in rame rosso con guaina esterna in PVC flessibile antifiama per diffusori acustici passivi. Particolarmente adatto per installazioni fisse..

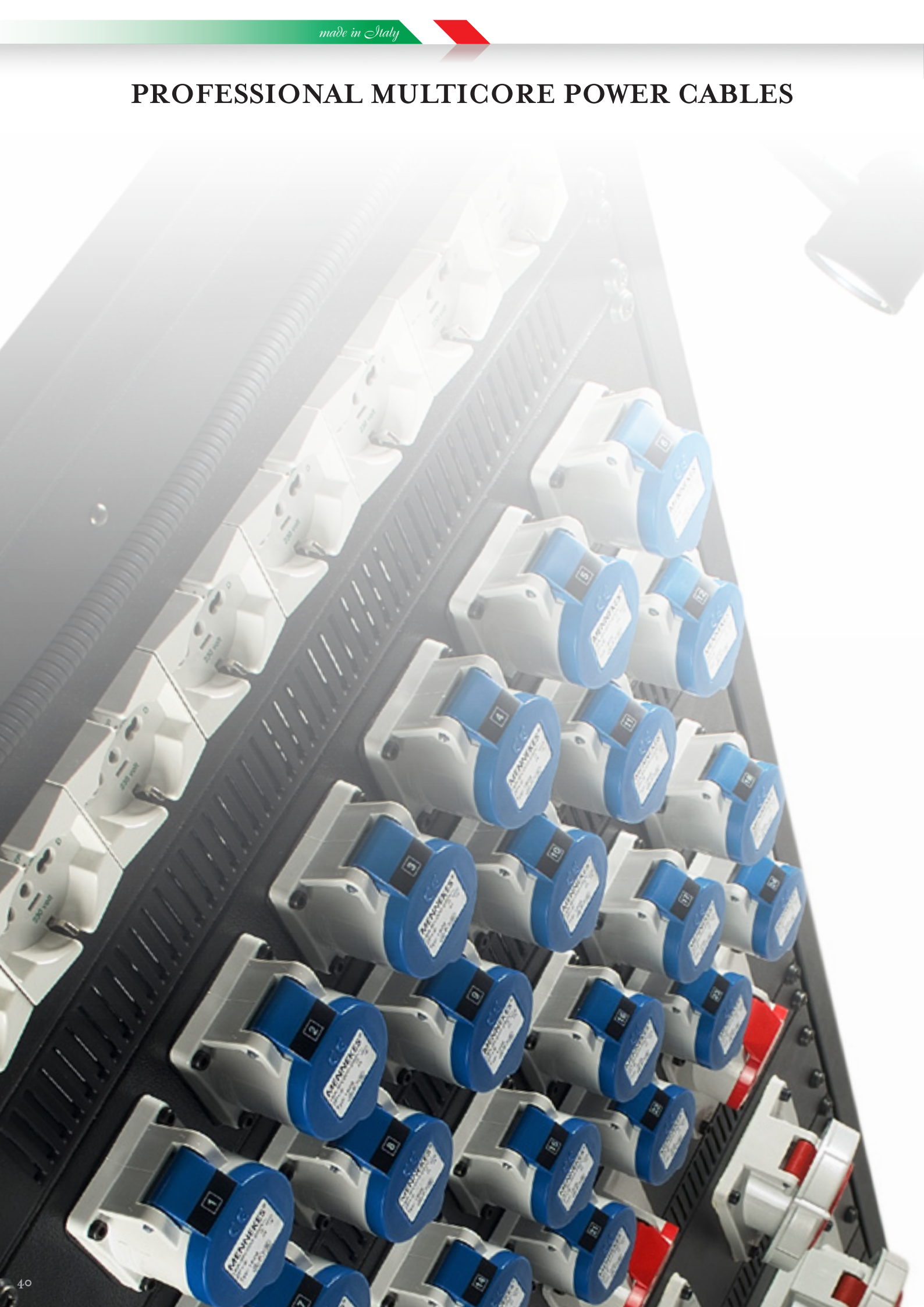
• Professional bare copper 2-conductors twisted cable with flame resistant flexible PVC jacket for passive speakers. Particularly suitable for fixed installations.

• Cable profesional trenzados de 2 conductores en cobre rojo con cubierta exterior en PVC flexible antillama. Eespecialmente indicado para instalaciones fijas.

TECHNICAL SPECIFICATIONS

HPC610T - HPC620T - HPC624T						
Application fields	• Speaker connections for fixed installation • Home HI-FI connections	Jacket	Flexible flame resistant PVC 64 shore		Minimum bending radius	4 x overall diameter
		Colour	Blue/Red		Packaging	Packaging: 200 m standard carton reel. (Other lengths on request)
Conductors	Extra fine bare copper = 0.20 mm	Working Temperature range	-30°C/+70°C			
Order Code	Conductors	Conductors Insulation	Jacket O.D.	Electrical Resistance @ 20°C	Electrical Capacitance @ 1 KHz	Weight Kg / Km
HPC610T	16 AWG = 48x0,20 mm (1.50 mm ²)	Ø 2,70 mm	Ø 6,00 mm	12,00 Ohm/Km (conductor)	120 pF/m (conductor/conductor)	44,00
HPC620T	14 AWG = 80x0,20 mm (2.50 mm ²)	Ø 3,20 mm	Ø 7,20 mm	7,40 Ohm/Km (conductor)	80 pF/m (conductor/conductor)	66,00
HPC624T	12 AWG = 128x0,20 mm (4.00 mm ²)	Ø 4,00 mm	Ø 8,60 mm	4,50 Ohm/Km (conductor)	80 pF/m (conductor/conductor)	107,00

PROFESSIONAL MULTICORE POWER CABLES



PROFESSIONAL MULTICORE POWER CABLES O.F.C.

CAVI DI POTENZA

I cavi multipolari serie FIREGUARD rispondono alla norma CEI 20-22 e CEI 20-37, sono dotati di guaina in polivinilcloruro non propagante l'incendio, a ridotta emissione di gas corrosivi, di conduttori in rame stagnato a corda flessibile isolati in polivinilcloruro e caratterizzati da alta resistenza all'abrasione. Con questa serie di cavi la divisione "Professional Cable" di PROEL risponde alla richiesta crescente di cavi non propaganti la fiamma, dotati anche di spiccate caratteristiche di flessibilità. Questo risultato è stato raggiunto grazie allo studio di una nuova miscela capace di coniugare due aspetti fondamentali per l'installazione professionale: sicurezza e maneggevolezza.

POWER CABLES

PROEL multicore power cables are fully protected by a fire retardant, anti fumes release PVC flexible and resistant jacket, in conformity with the CEI 20-22/II CEI 20-37 standards. These cables are recommended for very high current carrying capacity (450-750 volts). Moreover, featuring ease of handling and winding, even in extreme conditions, they are especially recommended for both indoor applications (discos, indoor sports arenas, theatres, etc.) and big outdoor installations (live concerts and shows, etc.).

CABLES DE POTENCIA

Los cables multipolares de potencia PROEL están completamente protegidos por una cubierta flexible y resistente en PVC que no propaga la llama y no emite gases nocivos ya que está conforme a los estándares CEI 20-22/II - CEI 20-37. Estos cables están indicados para capacidades de corriente muy elevadas (450-750 volts). Además, sus características de manejabilidad y de facilidad de rebobinado en condiciones extremas, hacen de manera que estos cables sean especialmente indicados tanto para las aplicaciones en ambientes cerrados (discotecas, polideportivos, teatros, etc.), tanto para las grandes instalaciones al aire libre (conciertos "en vivo", show, ect.).



HPC3015FG - HPC3025FG

• Cavo multipolare professionale di potenza a 3 conduttori con guaina esterna in PVC/NBR flessibile, antiabrasione, non propagante la fiamma e a bassa emissione di gas corrosivi. Sezione: HPC3015FG - 3 x 1.50 mm²/HPC3025FG - 3 x 2.50 mm².

• Professional 3-conductor multicore power cable (HPC3015FG - 3 x 1,5 mm² / HPC3025FG - 3 x 2,5 mm²) with flame retardant, flexible, antiabrasive and low corrosive gas emission PVC/NBR overall jacket.

• Cable multipolar profesional de alimentación de 3 conductores con cubierta exterior en PVC/NBR flexible, antiabrasión, que no propaga la llama y de baja emisión de gases corrosivos. Sección: HPC3015FG - 3 x 1.50 mm²/HPC3025FG - 3 x 2.50 mm².



HPC5006FG

• Cavo multipolare professionale di potenza a 5 conduttori con guaina esterna in PVC/NBR flessibile, antiabrasione, non propagante la fiamma e a bassa emissione di gas corrosivi. Sezione: HPC5006FG - 5 x 6.00 mm².

• Professional 5-conductor multicore power cable (5 x 6 mm²) with flame retardant, flexible, antiabrasive and low corrosive gas emission PVC/NBR overall jacket.

• Cable multipolar profesional de alimentación de 5 conductores con cubierta exterior en PVC/NBR flexible, antiabrasión, que no propaga la llama y de baja emisión de gases corrosivos. Sección: HPC5006FG - 5 x 6.00 mm².

TECHNICAL SPECIFICATIONS

HPC3015FG - HPC3025FG - HPC5006FG

Application fields	- Disco/theatre/stadium cabling - Outdoor installations
Conductors	Tinned copper • HPC3015FG: 16 AWG = 29 x 0.25 mm (3 conductors • 1.50 mm ²) • HPC3025FG: 14 AWG = 48 x 0.25 mm (3 conductors • 2.50 mm ²) • HPC5006FG: 10 AWG = 112 x 0.25 mm (5 conductors • 6.00 mm ²)
Insulation	PVC/NP 72 shore

Jacket	PVC/NBR • HPC3015FG: Ø 8.40 mm • HPC3025FG: Ø 10.00 mm • HPC5006FG: Ø 16.80 mm Complying with CEI 20-22 II • CEI 20-37 regulations
Colour	Black
Electrical resistance	• HPC3015FG: 12.00 Ohm/Km @ 20°C • HPC3025FG: 7.40 Ohm/Km @ 20°C • HPC5006FG: 2.90 Ohm/Km @ 20°C

Operating temperature	-35°C/+90°C
Working tension	300/500 V
Weight	• HPC3015FG: 114.8 Kg/Km • HPC3025FG: 161.8 Kg/Km • HPC5006FG: 539.2 Kg/Km
Minimum bending radius	10 x overall diameter
Packaging	custom packaging

PROFESSIONAL MULTICORE POWER CABLES O.F.C.



HPC1025FG - HPC1925FGN

• Cavi multipolarli professionali di potenza con guaina esterna in PVC/NBR flessibile, antiabrasione, non propagante la fiamma ed a bassa emissione di fumi e gas corrosivi. Particolarmente adatti per prolunghe da utilizzare con sistemi lighting e sistemi di alimentazione. Sezione: HPC1025FG - 10 x 2.50 mm² / HPC1925FGN - 19 x 2.50 mm².

• Professional multicore power cables with flame retardant, flexible, antiabrasive and low corrosive gas emission PVC/NBR overall jacket. Particularly suitable for both lighting systems and power systems extension. Section: HPC1025FG - 10 x 2.50 mm² / HPC1925FGN - 19 x 2.50 mm².

• Cables multipolares profesionales de potencia con cubierta exterior de PVC / NBR flexible, resistente a la abrasión, resistencia al fuego y baja emisión de humos y gases corrosivos. Especialmente adecuados para la extensión de los sistemas de iluminación y sistemas de energía. Sección: HPC1025FG - 10 x 2,50 mm² / HPC1925FGN - 19 x 2,50 mm².

TECHNICAL SPECIFICATIONS

HPC1025FG - HPC1925FGN

Application fields

- Disco/theatre/stadium cabling
- Outdoor installations

Conductors

- Bare copper
- HPC 1025FG: 14 AWG = 48 x 0.25 mm (10 conductors • 2.50 mm²)
- HPC1925FGN: 14 AWG = 48 x 0.25 mm (19 conductors • 2.50 mm²)

Insulation

PVC T12 NPI type Black-Yellow/Green

Jacket

- PVC TM2 NPI type
- HPC1025FG: Ø 17.00 mm
- HPC1925FGN: Ø 19.80 mm
- Complying with CEI 20-22 II regulations

Colour

Grey

Electrical resistance

- HPC1025FG: 7.4 Ohm/Km @ 20°C
- HPC1925FGN: 7.4 Ohm/Km @ 20°C

Operating temperature

-20°C/+70°C

Working tension

300/500 V

Weight

- HPC1025FG: 484 Kg/Km
- HPC1925FGN: 841 Kg/Km

Minimum bending radius

6 x overall diameter

Packaging

custom packaging



PROFESSIONAL ASSEMBLED CABLES



PROFESSIONAL ESOTERIC CABLES

PROFESSIONAL INSTRUMENT CABLES

SERIE ESOTERIC

La serie di cavi assemblati **"ESOTERIC"** rappresenta la pura essenza del suono privo di qualsiasi distorsione o disturbo, in quanto frutto di un processo tecnologico completamente automatizzato che combina cavi di altissima qualità con i migliori e più affidabili connettori professionali Neutrik. PROEL ha sviluppato la serie **"ESOTERIC"** per soddisfare le richieste dei professionisti che pretendono sempre un segnale puro, preciso ed affidabile. I cavi, infatti, sono completamente realizzati in rame stagnato puro al 100%, garantendo una capacità bassissima e quindi un segnale perfettamente puro ed integro. Inoltre, ogni cavo viene testato da speciali macchinari computerizzati, in modo da assicurare sempre qualità e performance. Già riconosciuta leader internazionale del settore, la serie **"ESOTERIC"** è di fatto il nome di riferimento per tutte le applicazioni audio professionali sia fisse che mobili e rappresenta la scelta ideale per le nuove realtà digitali.

ESOTERIC SERIES

"ESOTERIC" Series assembled cables represent the pure essence of sound free of any distortion or interference, being the result of a completely automated technological process combining the highest quality cables and Neutrik's best and most reliable professional connectors. PROEL has developed the **"ESOTERIC"** series to meet professionals requirements of a pure, accurate and reliable signal. All cables are completely realized in 100% pure copper in order to grant a very low capacitance and a perfectly sharp and intact signal. Each cable is mechanically and electronically tested in order to guarantee quality and performance. **"ESOTERIC"** series, already recognized as an international leader in its field, is the reference name for any professional audio application, both fixed and mobile, and it represents the ideal partner for the new digital realities.

SERIE ESOTERIC

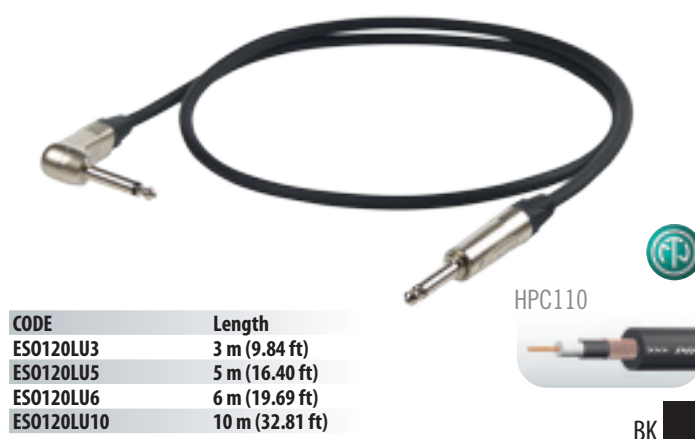
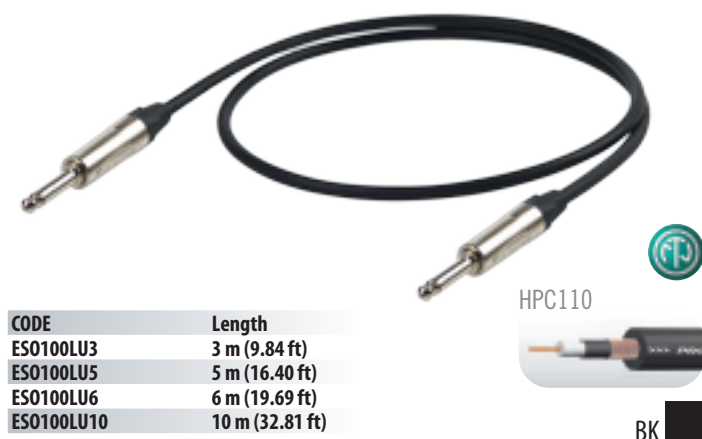
La serie de cables montados **"ESOTERIC"** representa la pura esencia del sonido sin algún tipo de distorsión o interferencia, siendo el resultado de un proceso tecnológico completamente automatizado que combina cables de excelente calidad con los mejores y más fiables conectores profesionales Neutrik. PROEL ha desarrollado la serie **"ESOTERIC"** para satisfacer las exigencias de los profesionales que exigen siempre una señal pura, precisa y fiable. Todos los cables están realizados completamente en cobre estañado puro al 100% y garantizan una capacidad extremadamente baja y una señal perfectamente nítida e íntegra. Cada cable está probado mecánica- y electrónicamente, de manera que asegure siempre calidad y rendimiento. Ya reconocida líder internacional en el sector, la serie **"ESOTERIC"** es de hecho el nombre de referencia para todas las aplicaciones audio profesionales tanto fijas como móviles, y representa la solución ideal para las nuevas realidades digitales.

ESO100

- Cavo professionale per strumenti con connessioni spina jack Mono Ø 6.3 mm Neutrik/ NP2X - HPC110 - NP2X. Colore disponibile: BK
- Professional instrument cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik Ø 6.3 mm Mono jack plug connections/NP2X - HPC110 - NP2X. Available colour: BK.
- Cable profesional con conexiones jack mono Neutrik Ø 6.3 mm/ NP2X - HPC110 - NP2X. Color disponible: negro (BK)

ESO120

- Cavo professionale per strumenti con connessioni spina jack Mono Ø 6.3 mm Neutrik - spina jack Mono Ø 6.3 mm ad angolo Neutrik/NP2X - HPC110 - NP2RX. Colore disponibile: BK
- Professional instrument cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik Ø 6.3 mm right angle Mono jack plug connections / NP2X - HPC110 - NP2RX. Available colour: BK.
- Cable profesional con conexiones jack mono Neutrik Ø 6.3 mm - jack mono acodado Neutrik Ø 6.3 mm. / NP2X - HPC110 - NP2RX. Color disponible: negro (BK)

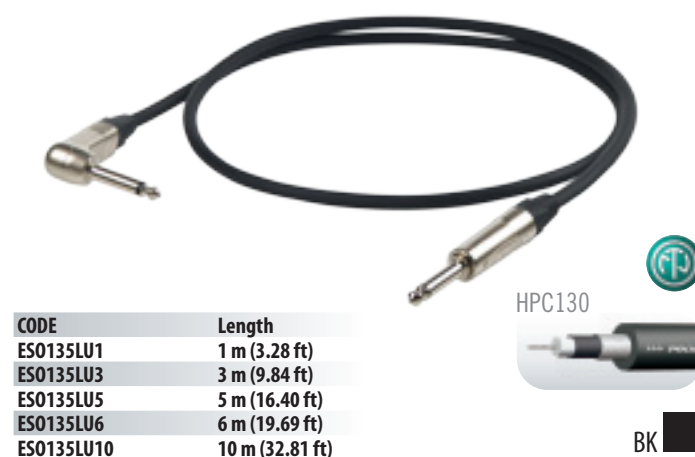


ESO130

- Cavo professionale per strumenti con connessioni spina jack Mono Ø 6.3 mm Neutrik/ NP2X - HPC130 - NP2X. Colore disponibile: BK
- Professional instrument cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik Ø 6.3 mm Mono jack plug connections/NP2X - HPC130 - NP2X. Available colour: BK.
- Cable profesional con conexiones jack mono Neutrik Ø 6.3 mm/ NP2X - HPC130 - NP2X. Color disponible: negro (BK)

ESO135

- Cavo professionale per strumenti con connessioni spina jack Mono Ø 6.3 mm Neutrik - spina jack Mono Ø 6.3 mm ad angolo Neutrik/NP2X - HPC130 - NP2RX. Colore disponibile: BK
- Professional instrument cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik Ø 6.3 mm right angle Mono jack plug connections / NP2X - HPC130 - NP2RX. Available colour: BK.
- Cable profesional con conexiones jack mono Neutrik Ø 6.3 mm - jack mono acodado Neutrik Ø 6.3 mm. / NP2X - HPC130 - NP2RX. Color disponible: negro (BK)



PROFESSIONAL ESOTERIC CABLES

PROFESSIONAL INSTRUMENT CABLES

ESO145

• Cavo professionale esoterico per strumenti con connessioni spina jack Mono Ø 6.3 mm "SILENT" ad angolo Neutrik - spina jack Mono Ø 6.3 mm Neutrik/NP2RXAU - HPC130 - NP2XB. Colore disponibile: BK.

• Esoteric professional instrument cable with Neutrik Ø 6.3 mm right angle "SILENT" Mono jack plug - Neutrik Ø 6.3 mm Mono jack plug connections/NP2RXAU - HPC130 - NP2XB. Available colour: BK.

• Cable profesional esotérico para instrumentos con jack mono acodado "SILENT" Neutrik Ø 6.3 mm - conector jack mono Neutrik Ø 6.3 mm/NP2XAU - HPC130 - NP2XB. Color disponible: negro (BK).



HPC130

CODE	Length
ES0145LU3	3 m (9.84 ft)
ES0145LU5	5 m (16.40 ft)
ES0145LU6	6 m (19.69 ft)

BK

ESO150

• Nuovo cavo professionale esoterico per strumenti con connessioni spina jack Mono Ø 6.3 mm Neutrik - spina jack Mono Ø 6.3 mm Neutrik/NP2XB - HPC140 - NP2XB. Colore disponibile: BK.

• New esoteric professional instrument cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik Ø 6.3 mm Mono jack plug connections/NP2XB - HPC140 - NP2XB. Available colour: BK.

• Nuevo cable profesional esotérico para instrumentos con conector jack mono Neutrik Ø 6.3 mm - conector jack mono Neutrik Ø 6.3 mm/NP2XB - HPC140 - NP2XB. Color disponible: negro (BK).



HPC140

CODE	Length
ES0150LU3	3 m (9.84 ft)
ES0150LU5	5 m (16.40 ft)
ES0150LU6	6 m (19.69 ft)

BK

ESO190

• Cavo professionale esoterico per strumenti con connessioni spina jack Mono Ø 6.3 mm ad angolo Neutrik /NP2RX - HPC130 - NP2RX. Colore disponibile: BK.

• Esoteric professional instrument cable with Neutrik Ø 6.3 mm right angle Mono jack plug - Neutrik Ø 6.3 mm right angle Mono jack plug connections/NP2RX - HPC130 - NP2RX. Available colour: BK.

• Cable profesional esotérico para instrumentos con jack mono acodado Neutrik Ø 6.3 mm - conector jack mono acodado Neutrik Ø 6.3 mm/NP2RX - HPC130 - NP2RX. Color disponible: negro (BK).



HPC130

CODE	Length
ES0190LU015	0,15 m (0.49 ft)
ES0190LU030	0,30 m (0.98 ft)

BK

PROFESSIONAL UNBALANCED CABLES

ESO235

• Cavo professionale esoterico sbilanciato con connessioni spina jack Mono Ø 6.3 mm Neutrik - spina volante XLR 3P Neutrik/NP2X - HPC250 - NC3MXX. Colore disponibile: BK.

• Esoteric professional unbalanced cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik XLR 3P male cable mount connections/NP2X - HPC250 - NC3MXX. Available colour: BK.

• Cable profesional esotérico no balanceado con jack mono Neutrik Ø 6.3 mm - conector macho aéreo XLR de 3 polos Neutrik/NP2X - HPC250 - NC3MXX. Color disponible: negro (BK).



HPC250

CODE	Length
ES0235LU1	1 m (3.28 ft)
ES0235LU3	3 m (9.84 ft)
ES0235LU5	5 m (16.40 ft)
ES0235LU10	10 m (32.81 ft)

BK

ESO250

• Cavo professionale esoterico sbilanciato con connessioni spina jack Mono Ø 6.3 mm Neutrik - presa volante XLR 3P Neutrik/NP2X - HPC250 - NC3FXX. Colore disponibile: BK.

• Esoteric professional unbalanced cable with Neutrik Ø 6.3 mm Mono jack plug - Neutrik XLR 3P female cable mount connections/NP2X - HPC250 - NC3FXX. Available colour: BK.

• Cable profesional esotérico no balanceado con jack mono Neutrik Ø 6.3 mm - conector hembra aéreo XLR Neutrik de 3 polos/ NP2X - HPC250 - NC3FXX. Color disponible: negro (BK).



HPC250

CODE	Length
ES0250LU1	1 m (3.28 ft)
ES0250LU3	3 m (9.84 ft)
ES0250LU5	5 m (16.40 ft)
ES0250LU10	10 m (32.81 ft)

BK

PROFESSIONAL ESOTERIC CABLES

PROFESSIONAL BALANCED CABLES

ESO240

• Cavo professionale esoterico bilanciato con connessioni spina jack Stereo Ø 6.3 mm Neutrik - spina volante XLR 3P Neutrik/NP3X - HPC250 - NC3MXX. Colore disponibile: BK.

• Esoteric professional unbalanced cable with Neutrik Ø 6.3 mm Stereo jack plug - Neutrik XLR 3P male cable mount connections/NP3X - HPC250 - NC3MXX. Available colour: BK.

• Cable profesional esotérico balanceado con jack estéreo Neutrik Ø 6.3 mm - conector macho aéreo XLR de 3 polos Neutrik/ NP3X - HPC250 - NC3MXX. Color disponible: negro (BK).



CODE	Length
ESO240LU1	1 m (3.28 ft)
ESO240LU3	3 m (9.84 ft)
ESO240LU5	5 m (16.40 ft)
ESO240LU10	10 m (32.81 ft)

HPC250



BK

ESO245

• Cavo professionale esoterico bilanciato con connessioni spina jack Stereo Ø 6.3 mm Neutrik - presa volante XLR 3P Neutrik/NP3X - HPC250 - NC3FXX. Colore disponibile: BK.

• Esoteric professional unbalanced cable with Neutrik Ø 6.3 mm Stereo jack plug - Neutrik XLR 3P female cable mount connections/NP3X - HPC250 - NC3FXX. Available colour: BK.

• Cable profesional esotérico balanceado con jack estéreo Neutrik Ø 6.3 mm - conector hembra aéreo XLR Neutrik de 3 polos/ NP3X - HPC250 - NC3FXX. Color disponible: negro (BK).



CODE	Length
ESO245LU1	1 m (3.28 ft)
ESO245LU3	3 m (9.84 ft)
ESO245LU5	5 m (16.40 ft)
ESO245LU10	10 m (32.81 ft)

HPC250



BK

ESO230

• Cavo professionale esoterico bilanciato con connessioni spina jack Stereo Ø 6.3 mm Neutrik/NP3X - HPC250 - NP3X. Colore disponibile: BK.

• Esoteric professional balanced cable with Neutrik Ø 6.3 mm Stereo jack plug - Neutrik Ø 6.3 mm Stereo jack plug connections/NP3X - HPC250 - NP3X. Available colour: BK.

• Cable profesional esotérico balanceado con jack estéreo Neutrik Ø 6.3 mm - jack estéreo Neutrik Ø 6.3 mm/ NP3X - HPC250 - NP3X. Color disponible: negro (BK).



CODE	Length
ESO230LU05	0,5 m (1.64 ft)
ESO230LU1	1 m (3.28 ft)
ESO230LU3	3 m (9.84 ft)
ESO230LU5	5 m (16.40 ft)
ESO230LU10	10 m (32.81 ft)

HPC250



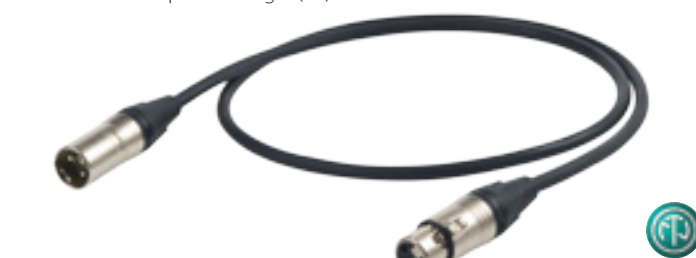
BK

ESO210

• Cavo professionale esoterico bilanciato con connessioni presa volante XLR 3P Neutrik - spina volante XLR 3P Neutrik/NC3FXX - HPC210 - NC3MXX. Colore disponibile: BK.

• Esoteric professional balanced cable with Neutrik XLR 3P female cable mount - Neutrik XLR 3P male cable mount connections/NC3FXX - HPC210 - NC3MXX. Available colour: BK.

• Cable profesional esotérico balanceado con conector hembra aéreo XLR Neutrik de 3 polos - conector macho aéreo XLR Neutrik de 3 polos /NC3FXX - HPC210 - NC3MXX. Color disponible: negro (BK).



CODE	Length
ESO210LU05	0,5 m (1.64 ft)
ESO210LU1	1 m (3.28 ft)
ESO210LU2	2 m (6.56 ft)
ESO210LU3	3 m (9.84 ft)
ESO210LU5	5 m (16.40 ft)
ESO210LU6	6 m (19.69 ft)
ESO210LU10	10 m (32.81 ft)
ESO210LU15	15 m (49.21 ft)
ESO210LU20	20 m (65.62 ft)

HPC210



BK



ESO215

• Cavo professionale esoterico bilanciato con connessioni presa volante XLR 3P Neutrik nero - spina volante XLR 3P Neutrik nera/NC3FXXBAG - HPC210 - NC3MXXBAG. Colore disponibile: BK.

• Esoteric professional balanced cable with Neutrik black XLR 3P female cable mount - Neutrik black XLR 3P male cable mount connections/NC3FXXBAG - HPC210 - NC3MXXBAG. Available colour: BK.

• Cable profesional esotérico balanceado con conector hembra aéreo XLR Neutrik de 3 polos negro - conector macho aéreo XLR Neutrik de 3 polos negro / NC3FXXBAG - HPC210 - NC3MXXBAG. Color disponible: negro (BK).

CODE	Length
ESO215LU5	5 m (16.40 ft)
ESO215LU6	6 m (19.69 ft)
ESO215LU10	10 m (32.81 ft)

HPC210



BK

PROFESSIONAL ESOTERIC CABLES

PROFESSIONAL BALANCED CABLES

ESO255

• Cavo professionale esoterico bilanciato con connessioni presa volante XLR 3P Neutrik - spina volante XLR 3P Neutrik/NC3FXX - HPC250 - NC3MXX. Colore disponibile: BK.

• Esoteric professional balanced cable with Neutrik XLR 3P female cable mount - Neutrik XLR 3P male cable mount connections/NC3FXX - HPC250 - NC3MXX. Available colour: BK

• Cable profesional esotérico balanceado con conector hembra aéreo XLR Neutrik de 3 polos - conector macho aéreo XLR Neutrik de 3 polos /NC3FXX - HPC250 - NC3MXX. Color disponible: negro (BK).



HPC250



BK

CODE	Length
ESO255LU05	0,5 m (1.64 ft)
ESO255LU1	1 m (3.28 ft)
ESO255LU2	2 m (6.56 ft)
ESO255LU3	3 m (9.84 ft)
ESO255LU5	5 m (16.40 ft)
ESO255LU6	6 m (19.69 ft)
ESO255LU10	10 m (32.81 ft)
ESO255LU15	15 m (49.21 ft)
ESO255LU20	20 m (65.62 ft)

ESO260

• Cavo professionale esoterico bilanciato con connessioni presa volante XLR 3P Neutrik con interruttore - spina volante XLR 3P Neutrik/NC3FXX - HPC250 - NC3MXX. Colore disponibile: BK.

• Esoteric professional balanced cable with Neutrik XLR 3P female cable mount with ON/OFF switch - Neutrik XLR 3P male cable mount connections/NC3FXX - HPC250 - NC3MXX. Available colour: BK

• Cable profesional esotérico balanceado con conector hembra aéreo XLR Neutrik de 3 polos con interruptor "ON/OFF" - conector macho aéreo XLR Neutrik de 3 polos / NC3FXX - HPC250 - NC3MXX. Color disponible: negro (BK).



HPC250



BK

CODE	Length
ESO260LU5	5 m (16.40 ft)
ESO260LU6	6 m (19.69 ft)
ESO260LU10	10 m (32.81 ft)

ESO280

• Cavo professionale esoterico bilanciato con connessioni presa volante XLR 3P Neutrik - spina volante XLR 3P Neutrik/NC3FXX - HPC280 - NC3MXX. Colore disponibile: BK.

• Esoteric professional balanced cable with Neutrik XLR 3P female cable mount - Neutrik XLR 3P male cable mount connections/NC3FXX - HPC280 - NC3MXX. Available colour: BK

• Cable profesional esotérico balanceado con conector hembra aéreo XLR Neutrik de 3 polos - conector macho aéreo XLR Neutrik de 3 polos /NC3FXX - HPC280 - NC3MXX. Color disponible: negro (BK).



HPC280



BK

CODE	Length
ESO280LU5	5 m (16.40 ft)
ESO280LU6	6 m (19.69 ft)
ESO280LU10	10 m (32.81 ft)

PROFESSIONAL PASSIVE SPEAKER CABLES

ESO500

• Cavo professionale per diffusori acusti passivi (sez. 2 x 1,5 mm²) con connessioni spina jack Mono Ø 6.3 mm Neutrik/NP2C - HPC610BK - NP2C. Colore disponibile: BK

• Esoteric professional assembled cable (2 x 1.5mm²) for passive speakers with Neutrik Ø 6.3 mm Mono jack plug - Neutrik Ø 6.3 mm Mono jack plug connections/ NP2C - HPC610BK - NP2C. Available colour: BK.

• Cable profesional esotérico montado (2 x 1.5mm²) para columnas pasivas con jack mono Neutrik Ø 6.3 mm - conector jack mono Neutrik Ø 6.3 mm/ NP2C - HPC610BK - NP2C. Color disponible: negro (BK).



HPC610



BK

CODE	Length
ESO500LU2	2 m (6.56 ft)
ESO500LU10	10 m (32.81 ft)
ESO500LU15	15 m (49.21 ft)
ESO500LU20	20 m (65.62 ft)

ESO800

• Cavo professionale esoterico per diffusori acustici passivi (sez. 2 x 1,5 mm²) con connessioni Speakon 2P Neutrik/NL2FC - HPC610BK - NL2FC. Colore disponibile: BK

• Esoteric professional assembled cable (2 x 1.5mm²) for passive speakers with Neutrik SPEAKON 2P cable mount female connections/ NL2FC - HPC610BK - NL2FC. Available colour: BK.

• Cable profesional esotérico montado (2 x 1.5mm²) para columnas pasivas con conector hembra aéreo Neutrik SPEAKON de 2 polos/ NL2FC - HPC610BK - NL2FC. Color disponible: negro (BK).



HPC610



BK

CODE	Length
ESO800LU1	1 m (3.28 ft)
ESO800LU5	5 m (16.40 ft)
ESO800LU10	10 m (32.81 ft)
ESO800LU15	15 m (49.21 ft)
ESO800LU20	20 m (65.62 ft)

PROFESSIONAL ESOTERIC CABLES

PROFESSIONAL PASSIVE SPEAKER CABLES

ESO1000

• Cavo professionale esoterico per diffusori acustici passivi (sez. 2 x 2,5 mm²) con connessioni Speakon 2P Neutrik/NL2FC - HPC620BK - NL2FC. Colore disponibile: BK

• Esoteric professional assembled cable (2x2.5mm²) for passive speakers with Neutrik SPEAKON 2P cable mount female connections/ NL2FC - HPC620BK - NL2FC. Available colour: BK.

• Cable profesional esotérico montado (2 x 2.5mm²) para columnas pasivas con conector hembra aéreo Neutrik SPEAKON de 2 polos/ NL2FC - HPC620BK - NL2FC. Color disponible: negro (BK).



HPC620

CODE	Length
ESO1000LU1	1 m (3.28 ft)
ESO1000LU2	2 m (6.56 ft)
ESO1000LU5	5 m (16.40 ft)
ESO1000LU10	10 m (32.81 ft)
ESO1000LU15	15 m (49.21 ft)
ESO1000LU20	20 m (65.62 ft)

BK

ESO2000

• Cavo professionale per diffusori acustici passivi (sez. 4 x 2,5 mm²) con connessioni Speakon 4P Neutrik/NL4FC - HPC640BK - NL4FC. Colore disponibile BK.

• Esoteric professional assembled cable (4 x 2.5 mm²) for passive speakers with new Neutrik SPEAKON 4P cable mount female connections/NL4FC - HPC640BK - NL4FC. Available colours: BK

• Cable profesional esotérico montado (4 x 2.5mm²) para columnas pasivas con conector hembra aéreo Neutrik SPEAKON de 4 polos/ NL4FC - HPC640BK - NL4FC. Color disponible: negro (BK).



HPC640

CODE	Length
ESO2000LU2	2 m (6.56 ft)
ESO2000LU10	10 m (32.81 ft)
ESO2000LU15	15 m (49.21 ft)
ESO2000LU20	20 m (65.62 ft)

BK



ESO2500

• Cavo professionale per diffusori acustici passivi (sez. 4 x 4 mm²) con connessioni Speakon 4P Neutrik/NL4FC - HPC644 - NL4FC. Colore disponibile: BK.

• New Esoteric professional assembled cable (4 x 4 mm²) for passive speakers with new Neutrik SPEAKON 4P cable mount female connections/NL4FC - HPC644 - NL4FC. Available colour: BK

• Nuevo cable profesional esotérico montado (4 x 4 mm²) para columnas pasivas con conector hembra aéreo Neutrik SPEAKON de 4 polos/ NL4FC - HPC644 - NL4FC. Color disponible: negro (BK).

HPC644

CODE	Length
ESO2500LU2	2 m (6.56 ft)
ESO2500LU10	10 m (32.81 ft)
ESO2500LU15	15 m (49.21 ft)

BK

PROFESSIONAL DMX CABLES

CVDMXiN

• Cavo professionale DMX per segnale DMX512 con connessioni presa volante XLR 3P Neutrik - spina volante XLR 3P Neutrik/NC3FXX - DMXD - NC3MXX. Colore disponibile: BK.

• Professional assembled DMX cable for DMX512 signal with Neutrik XLR 3P female cable mount - Neutrik XLR 3P male cable mount connections/NC3FXX - DMXD - NC3MXX. Available colour: BK

• Cable profesional esotérico montado DMX para señal DMX512 con conector hembra aéreo XLR Neutrik de 3 polos - conector macho aéreo XLR Neutrik de 3 polos / NC3FXX - DMXD - NC3MXX. Color disponible: negro (BK).



DMXD

CODE	Length
CVDMX1N05	5 m (16.40 ft)
CVDMX1N10	10 m (32.81 ft)

BK

CVDMX2N

• Cavo professionale DMX per segnale DMX512 con connessioni presa volante XLR 5P Neutrik - spina volante XLR 5P Neutrik/NC5FXX - DMXD - NC5MXX. Colore disponibile: BK.

• Professional assembled DMX cable for DMX512 signal with Neutrik XLR 5P female cable mount - Neutrik XLR 5P male cable mount connections/NC5XX - DMXD - NC5MXX. Available colour: BK

• Cable profesional esotérico montado DMX para señal DMX512 con conector hembra aéreo XLR Neutrik de 5 polos - conector macho aéreo XLR Neutrik de 5 polos / NC5FXX - DMXD - NC5MXX. Color disponible: negro (BK).



DMXD

CODE	Length
CVDMX2N05	5 m (16.40 ft)
CVDMX2N10	10 m (32.81 ft)
CVDMX2N25	25 m (82.02 ft)

BK

PROFESSIONAL "SPECIAL" CHALLENGE CABLES

PROFESSIONAL INSTRUMENT CABLES

SERIE CHALLENGE

Dopo il grande successo ottenuto con la serie di cavi professionali CHALLENGE, Proel è orgogliosa di presentare la nuova serie di cavi assemblati "CHALLENGE Special". Una serie professionale di cavi dotati di connettori Yongsheng (prodotti da Ningbo Neutrik Electronics) e cavi Made in Italy. La gamma "CHALLENGE Special" è composta da cavi per strumenti e microfono di varie lunghezze e configurazioni, assemblati manualmente in Proel. Siamo sicuri che tutti gli utenti che hanno utilizzato ed utilizzano cavi di qualità PROEL, saranno certamente soddisfatti della nuova serie "CHALLENGE Special"!

CHALLENGE SERIES

After the great success achieved with the CHALLENGE Series of Professional cables, Proel is proud to present the new "CHALLENGE Special" series of assembled cables. A professional series of premade cables featuring YONGSHENG connectors (manufactured by Ningbo Neutrik Electronics) and Made in Italy cables. The "CHALLENGE Special" range is composed of instrument and microphone cables of various lengths and configurations, assembled at Proel factory in Italy. We are sure that everybody used to the quality of Proel cables will be highly satisfied with "CHALLENGE Special" Series!

SERIE CHALLENGE

Después del gran éxito obtenido con la serie CHALLENGE de cables profesionales, Proel se enorgullece en presentar la nueva "CHALLENGE Special" serie de cables montados. Una serie de cables prefabricados profesional que ofrecen conectores Yongsheng (fabricado por Neutrik Ningbo Electronics) y Made in Italy cables. El rango "CHALLENGE Special" está compuesto de cables de instrumento y micrófono de diferentes longitudes y configuraciones, prefabricados directamente en Proel. Estamos seguros de que todo el mundo utiliza para la calidad de los cables Proel será muy satisfecho con la serie "CHALLENGE Special"!

CHLS100

- Cavo professionale per strumenti con connessioni nickelate spina jack Mono Ø 6.3 mm Yongsheng - HPC110BK - spina jack Mono Ø 6.3 mm Yongsheng. Colore disponibile: BK.
- Professional assembled instrument cable with YONGSHENG Ø 6.3 mm Mono jack plug - HPC110BK - YONGSHENG Ø 6.3 mm Mono jack plug, nickel plated housing and connections. Available colour: BK.
- Cable profesional con conexiones jack mono YONGSHENG Ø 6.3 mm - HPC110BK - jack mono YONGSHENG Ø 6.3 mm. Color disponible: negro (BK).

CHLS120

- Cavo professionale per strumenti con connessioni nickelate spina jack Mono Ø 6.3 mm Yongsheng - HPC110BK - spina jack Mono Ø 6.3 mm Yongsheng ad angolo. Colore disponibile: BK.
- Professional assembled instrument cable with YONGSHENG Ø 6.3 mm Mono jack plug - HPC110BK - YONGSHENG Ø 6.3 mm right angle Mono jack plug, nickel plated housing and connections. Available colour: BK.
- Cable profesional con conexiones jack mono YONGSHENG Ø 6.3 mm - HPC110BK - jack mono acodado YONGSHENG Ø 6.3 mm. Color disponible: negro (BK).



CHLS130

- Cavo professionale per strumenti con connessioni nickelate spina jack Mono Ø 6.3 mm Yongsheng ad angolo - HPC110BK - spina jack Mono Ø 6.3 mm Yongsheng ad angolo. Colore disponibile: BK.
- Professional assembled instrument cable with YONGSHENG Ø 6.3 mm right angle Mono jack plug - HPC110BK - YONGSHENG Ø 6.3 mm right angle Mono jack plug, nickel plated housing and connections. Available colour: BK.
- Cable profesional con conexiones jack mono acodado YONGSHENG Ø 6.3 mm - HPC110BK - jack mono acodado YONGSHENG Ø 6.3 mm. Color disponible: negro (BK).

CODE	Length
CHLS130LU015	0.15 m (0.49 ft)
CHLS130LU030	0.30 m (0.98 ft)



PROFESSIONAL "SPECIAL" CHALLENGE CABLES

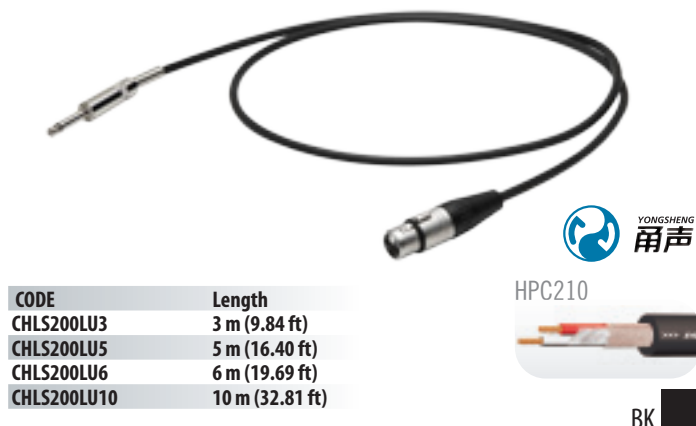
PROFESSIONAL UNBALANCED/BALANCED CABLES

CHLS200

• Cavo professionale sbilanciato con connessioni nickelate spina jack Mono Ø 6.3 mm Yongsheng - HPC210BK - presa volante XLR 3P Yongsheng . Colore disponibile: BK

• Professional assembled unbalanced cable with YONGSHENG Ø 6.3 mm Mono jack plug – HPC210BK - YONGSHENG XLR 3P female cable mount connector, nickel plated housing and connections. Available colour: BK.

• Cable profesional con conexiones jack mono YONGSHENG Ø 6.3 mm – HPC210BK - conector hembra aéreo XLR YONGSHENG de 3 polos. Color disponible: negro (BK).

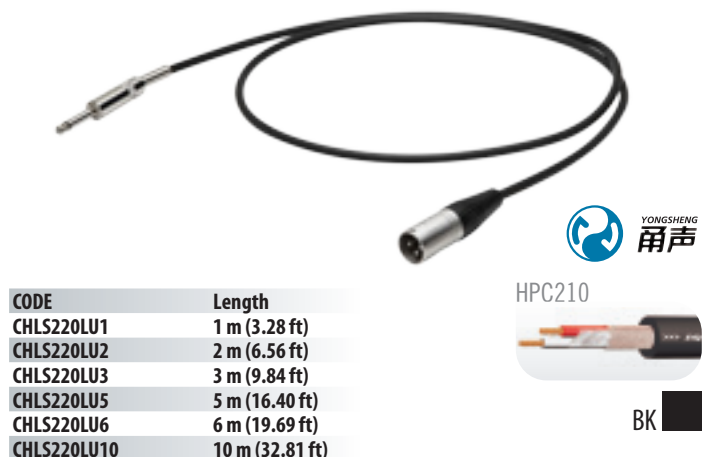


CHLS220

• Cavo professionale sbilanciato con connessioni nickelate spina jack Mono Ø 6.3 mm Yongsheng - HPC210BK - spina volante XLR 3P Yongsheng . Colore disponibile: BK

• Professional assembled unbalanced cable with YONGSHENG Ø 6.3 mm Mono jack plug – HPC210BK - YONGSHENG XLR 3P male cable mount connector, nickel plated housing and connections. Available colour: BK.

• Cable profesional con conexiones jack mono YONGSHENG Ø 6.3 mm – HPC210BK - conector macho aéreo XLR YONGSHENG de 3 polos. Color disponible: negro (BK).

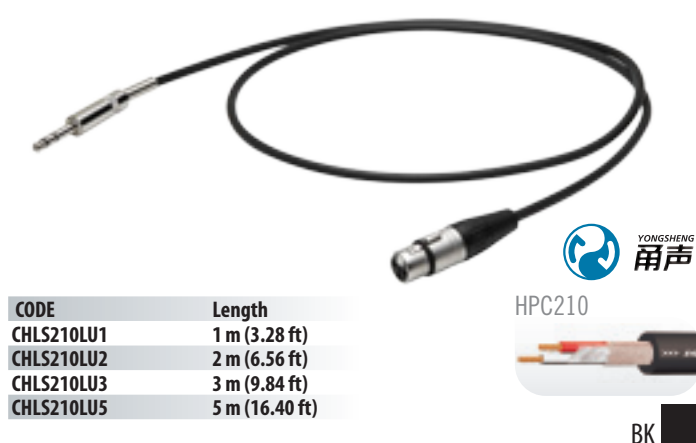


CHLS210

• Cavo professionale bilanciato con connessioni nickelate spina jack Stereo Ø 6.3 mm Yongsheng - HPC210BK - presa volante XLR 3P Yongsheng . Colore disponibile: BK

• Professional assembled balanced cable with YONGSHENG Ø 6.3 mm Stereo jack plug – HPC210BK - YONGSHENG XLR 3P female cable mount connector , nickel plated housing and connections. Available colour: BK.

• Cable profesional balanceado con conexiones jack stereo YONGSHENG Ø 6.3 mm – HPC210 - conector hembra aéreo XLR YONGSHENG de 3 polos. Color disponible: negro (BK).

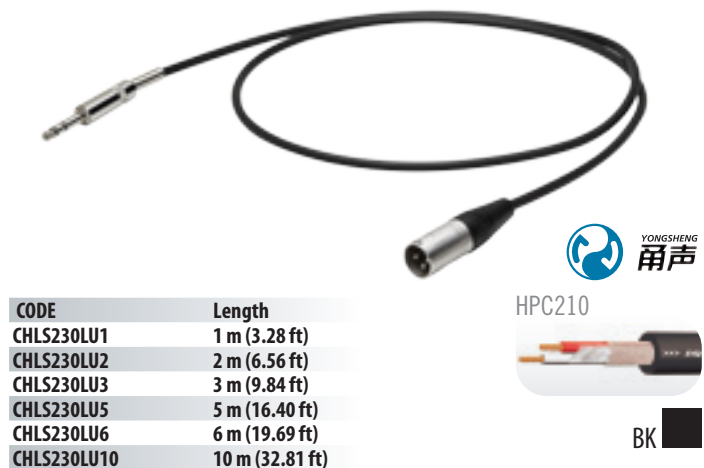


CHLS230

• Cavo professionale bilanciato con connessioni nickelate spina jack Stereo Ø 6.3 mm Yongsheng - HPC210BK – spina volante XLR 3P Yongsheng . Colore disponibile: BK

• Professional assembled instrument cable with YONGSHENG Ø 6.3 mm Stereo jack plug – HPC210BK - YONGSHENG XLR 3P male cable mount connector, nickel plated housing and connections. Available colour: BK.

• Cable profesional balanceado con conexiones jack stereo YONGSHENG Ø 6.3 mm – HPC210 - conector macho aéreo XLR YONGSHENG de 3 polos. Color disponible: negro (BK).

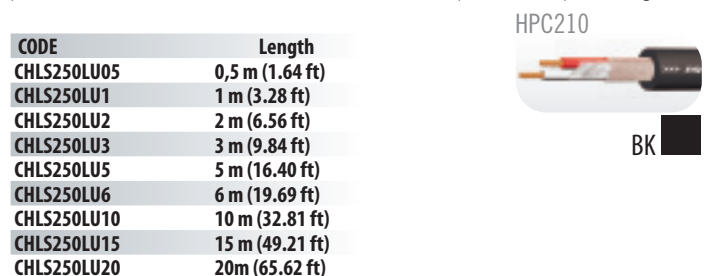


CHLS250

• Cavo professionale bilanciato con connessioni nickelate presa volante XLR 3P Yongsheng - HPC210BK – spina volante XLR 3P Yongsheng . Colore disponibile: BK

• Professional assembled instrument cable with YONGSHENG XLR 3P female cable mount connector – HPC210BK - YONGSHENG XLR 3P male cable mount connector, nickel plated housing and connections. Available colour: BK.

• Cable profesional balanceado con conexiones conector macho aéreo XLR YONGSHENG de 3 polos – HPC210 - conector hembra aéreo XLR YONGSHENG de 3 polos. Color disponible: negro (BK).



CONNECTORS
manufactured by
Ningbo Neutrik Electronics

PROEL PROFESSIONAL CABLE DISPLAYS

ESPOSITORI PER CAVI

Nuova serie di espositori professionali realizzati da Proel in collaborazione con un importante studio di progettazione, che coniugano la costante ricerca delle forme, la versatilità e lo stile italiano. La serie si compone di due espositori modulari, un espositore da parete e di alcuni accessori.

CABLE DISPLAYS

New series of professional displays made by Proel in collaboration with a leading design studio, combining the constant search of forms, versatility and Italian style. The series consists of two modular displays, one wall mount display and some accessories.

EXPOSITORES PARA CABLES

Nueva serie de expositores profesionales realizados por Proel en colaboración con un estudio de diseño líder, combinando la búsqueda constante de formas, versatilidad y estilo Italiano. La serie consta de dos expositores modulares, un expositor de pared y algunos accesorios.

PRDISPLAYDX - PRDISPLAYSX

• Esositore modulare – lato destro/lato sinistro – per cavi assemblati e cavi in bobina, realizzato in lamiera forata. Dotato di 5 tubi a sbalzo per il posizionamento dei cavi in bobina. E' possibile utilizzarlo nelle seguenti combinazioni: da solo poggandolo ad una parete (PRDISPLAYDX o PRDISPLAYSX); ad isola (PRDISPLAYDX + PRDISPLAYSX) o aperto a parete (PRDISPLAYDX + PRDISACC01 + PRDISPLAYSX).

I ganci in metallo non sono inclusi.

• Modular display - right side/left side - for both assembled cables and cable reels, made of perforated metal sheet. Equipped with 5 tubes for positioning the cable reels. It is possible to use them into the following combinations: alone against the wall (PRDISPLAYDX or PRDISPLAYSX) island style (PRDISPLAYDX + PRDISPLAYSX) or opened on the wall (PRDISPLAYDX + PRDISACC01 + PRDISPLAYSX).

Metal hooks not included

• Expositore modulare – lado derecho/lado izquierdo - para cables montados y para bobinas de cable, construido en metal perforado. Equipado con 5 tubos para el posicionamiento de las bobinas de cable. Se puede utilizar en las siguientes combinaciones: sólo contra una pared (PRDISPLAYDX o PRDISPLAYSX); isla (PRDISPLAYDX + PRDISPLAYSX) abierto en la pared (PRDISPLAYDX + PRDISACC021 + PRDISPLAYSX).

los ganchos de metal no están incluidos



PRDISPLAYDX



PRDISPLAYDX - example

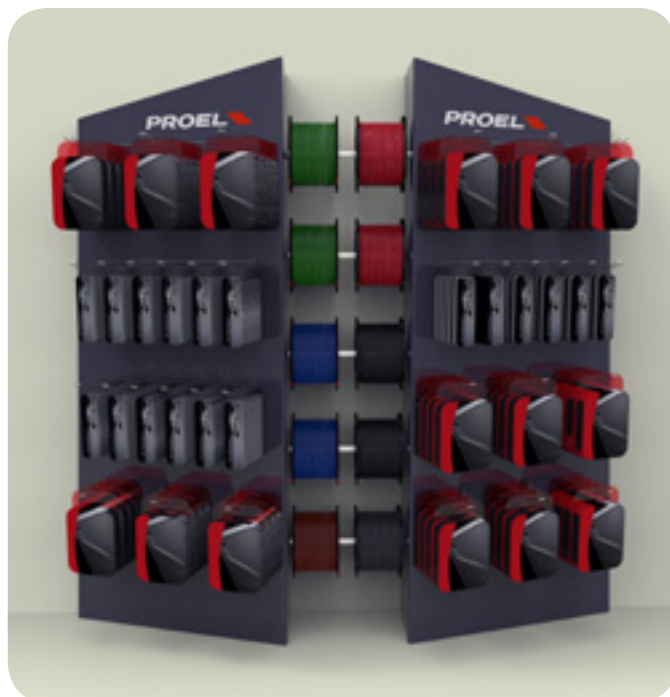


PRDISPLAYDX - example

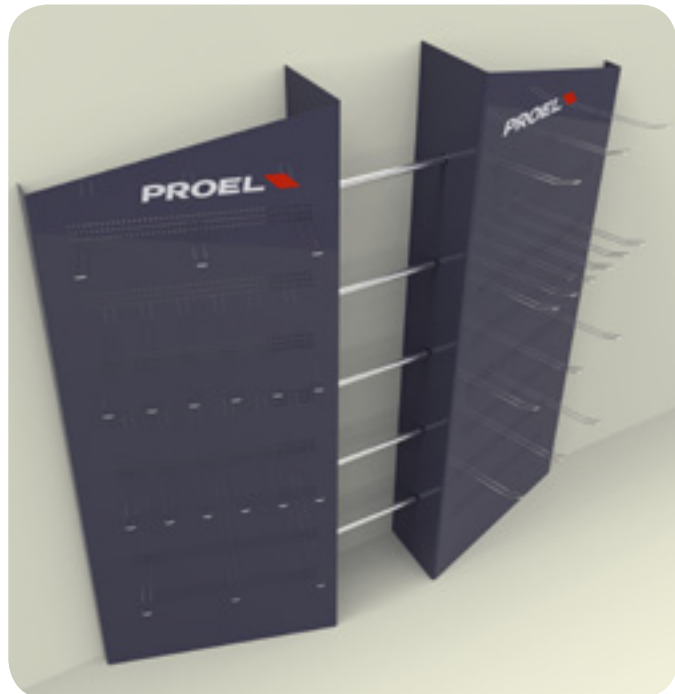
PROEL PROFESSIONAL CABLE DISPLAYS



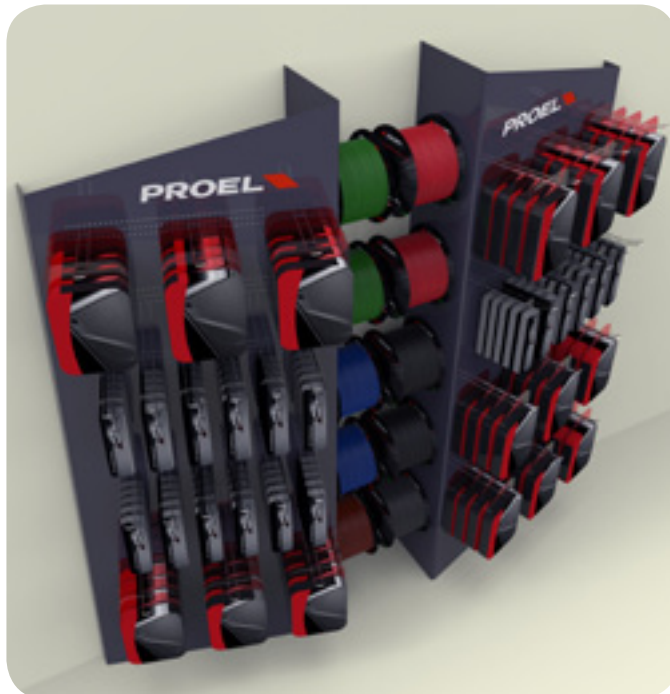
PRDISPLAYSX + PRDISACCoi + PRDISPLAYDX



PRDISPLAYSX + PRDISACCoi + PRDISPLAYDX- example



PRDISPLAYSX + PRDISACCoi + PRDISPLAYDX



PRDISPLAYSX + PRDISACCoi + PRDISPLAYDX- example

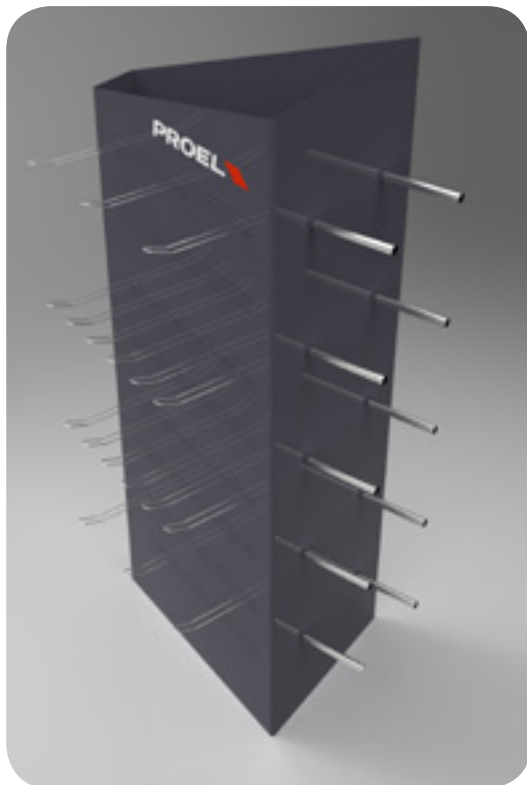
PRDISACCoi

• Set di accessori e tubi per il montaggio di due espositori (PRDISPLAYDX+PRDISPLAYSX) a parete.

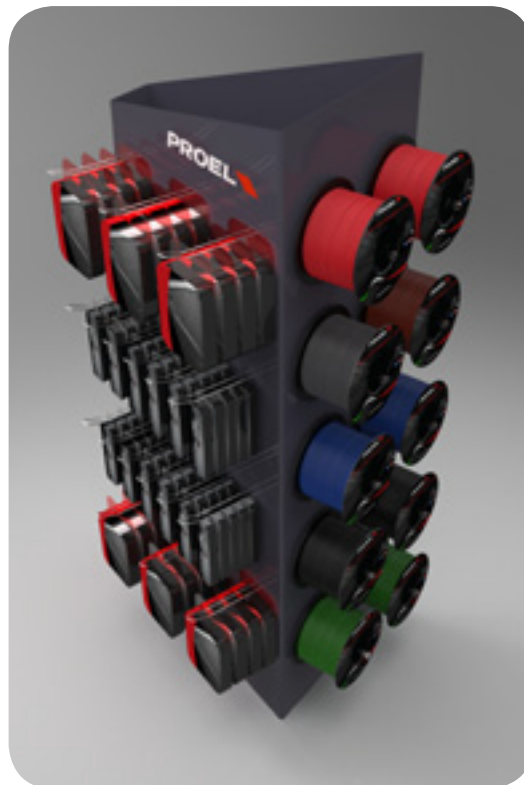
• Set of accessories and pipes for the mounting of two exhibitors (PRDISPLAYDX+PRDISPLAYSX) opened on the wall.

• Conjunto de accesorios y tuberías para el montaje de dos expositores (PRDISPLAYDX+PRDISPLAYSX) a pared abierta

PROEL PROFESSIONAL CABLE DISPLAYS



PRDISPLAYSX + PRDISPLAYDX



PRDISPLAYSX + PRDISPLAYDX - example

PRDISPLAYW

• Piccolo display da parete per cavi assemblati, realizzato in lamiera forata. **I ganci in metallo non sono inclusi.**

• Small wall mount display for assembled cables, made of perforated metal sheet. **The metal hooks are not included.**

• Pequeño expositor de pared por cables montados, construido en metal perforado. **Los ganchos de metal no están incluidos.**



PRDISPLAYW

DHHOOK - DHHOOK01

• Gancio in acciaio per espositori. DHHOOK: Lunghezza: 20 cm / DHHOOK01: Lunghezza: 15 cm. Confezione standard: 25 pezzi.

• Steel hook for cable displays. DHHOOK: Length: 20 cm / DHHOOK01: Length: 15 cm. Master pack: 25 pcs.

• Gancho en acero para expositor de cables. DHHOOK: Largo: 20 cm / DHHOOK01: Largo: 15 cm. Paquete de: 25 piezas.



DHHOOK01



DHHOOK

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