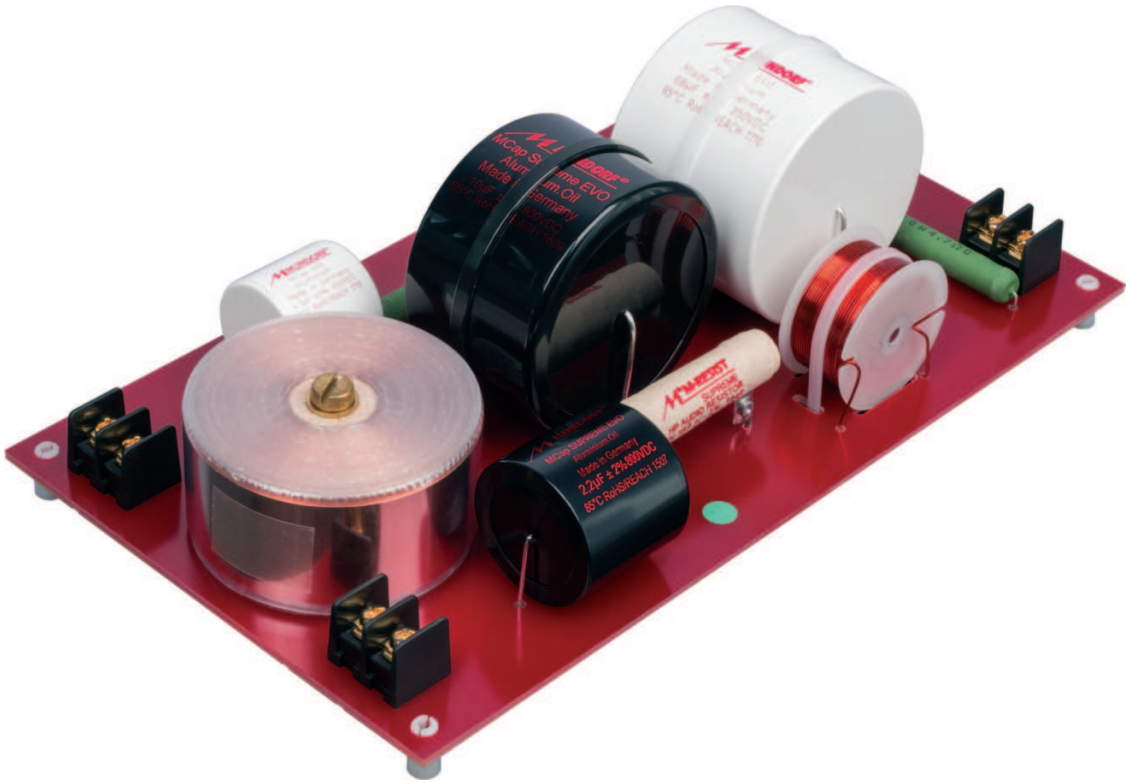
MUNDORF®



Inner Excellence.
True Music.

Fidelity Components

You can find our current retail price recommendations on our website. On request, we will be happy to provide the prices for industry and trade that are valid for you.

All prices including the applicable taxes and duties in their respective statutory amount. Prices and specifications subject to change without notice.

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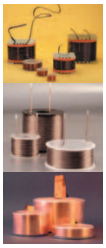
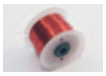
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Inner Excellence

Fidelity Components

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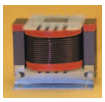
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Capacitors

Capacitors (Latin term: condensus = compressor) are capacitive, i.e. they store electric charge. The physical unit of measure for capacity [C] (Latin term: capacitas = capacity) is Farad [F] (in honour of the English physicist and chemist Michael Faraday). Capacitors consist of two electrodes (surfaces conducting electricity) which are arranged close to each other, and a dielectric (insulating layer) in between.

Capacitors (abbr. cap) are frequency-dependent resistors. This is an important property for audio applications because capacitors can filter out low frequencies (i.e. low tones) from music signals. As the filter effect decreases with increasing frequency, the reverse conclusion is: The lower the capacity, the higher the filter effect (i.e. the higher the separating frequency).

Coils

Coils (also referred to as inductors) are inductive, i.e. they influence the current flowing through them by their own magnetic field. The physical unit of measure for inductivity [L] (Latin term: inductio = induce) is Henry [H] (in honour of the US-American physicist Joseph Henry). Coils consist of a wire wound around a core (ideally air).

Similar to capacitors, coils are frequency-dependent resistors. Their filter effect increases with increasing frequency allowing for the elimination of high frequencies (= high tones), i.e. the higher the inductivity, the lower the separating frequency.

Resistors

Resistors (R) (Latin term: resistere = to resist) reduce the current flowing through them by converting part of the energy into heat. The physical unit of measure indicating electric resistance is [Ω] (according to the German physicist Georg Simon Ohm).

The effect which is important for audio applications is that resistors attenuate the entire audio signal irrespective of the frequency. The higher the resistance value, the more energy is converted.

Stereophony

Lowest tolerances of components used in the left and right signal path are fundamental for realistic and stereophonic (Greek stereos = spatial) music reproduction. Only if the characteristics of both channels are close to identical, each musician can be exactly allocated and an according spatial reproduction is possible.

Richness of detail

The conversion of mechanical into electrical vibrations is referred to as microphonic effect. This effect results in vibrations added to the electric music signal thus overlaying and alienating it. On the one hand, the transparency and stereophony of reproduction decreases, and on the other hand, distortions and tonal irritations increase significantly. Therefore, mechanically solid and vibration-damping components are a vital prerequisite for audiophile music reproduction.

Raw materials & processing

Lowest tolerances and highest mechanical stability can only be guarantied by using raw materials of highest quality and pureness, maximum accuracy regarding to controls as well as utmost precision and continuity in production. Furthermore, these characteristics which apply for all products made by MUNDORF ensure highest audio pleasure.

Dielectric and constructive structure - in addition to the electrode used (see the following section: Conductor Materials) - are crucial to the sound characteristics of a capacitor. In order to offer you the optimal capacitor for each application, we use alternative insulation materials in different - some self-developed - patented winding processes.

1.0 Electrolytic Capacitors

Aluminium oxide (Al_2O_3) forms the dielectric in all our electrolytic capacitors. It is also called clay or electrocorundum and is sometimes found as a natural mineral whose crystals are known to us as ruby or sapphire. Al_2O_3 is an extremely hard and resistant insulator with high heat conductivity. In particular, aluminium oxide is characterised by very high dielectric strength and ultra-thin layer thickness and thus allows the manufacture of extremely compact capacitors with an excellent price/performance ratio.

1.1 Polarised Electrolytic Capacitors possess the most compact of structural forms and are therefore used at very high capacities, as required for example, in the voltage supply of amplifiers. However, since they are not AC voltage-proof, polarised electrolytic capacitors cannot transmit audio signals.

1.1.1 MLytic® Power Capacitors have a whole range of special features, all of which serve one purpose: the most authentic music playback possible. A basic requirement for achieving this aim is to minimise the undesired losses (ESR) and inductivities (ESL) occurring in the capacitor that impact negatively on the original signal. The use of high-purity materials for the anode foil and the highest production precision ensure a homogeneous etching structure of the crystalline Al_2O_3 layer, the actual basis for detailed music playback with balanced sound character. The use of a special, titanium-coated cathode foil allows capacitors with unusually low ESR values characterised by ‚holographic' spatial music playback with broad and deep on-stage representation and absolutely stable focus.

Between these two foils we combine highly flowable, chloride-free and largely water-free longlife electrolytes with extremely soft special paper (mostly abaca-esparto paper) that is characterized by high mechanical stability, outstanding internal damping and electrolyte absorption capacity. Moreover, we do not use magnetisable, inflexible, poorly conducting steel for the connectors (global snap-in standard); instead we exclusively use highly conductive tin-plated copper wires for the highest currents, alongside the familiar, multiple-contact, solid aluminium screw terminals.

1.1.2 MLytic+® 4-pole Filter Capacitors also combine this outstanding technology. However, contacting takes place at the start and end of the respective foil. Although these low-current types have a comparatively reduced current capacity, they possess outstanding filter characteristics with again reduced ESR and ESL. The engineering office IB Steinbach (ib.steinbach@netcologne.de) is happy to develop corresponding circuits for and with audio manufacturers.

1.2 Bipolar Electrolytic Capacitors (also called non-polarized or NP) possess a second anode foil that makes them AC voltage-proof and thus music signal-suitable. ECap raw possess foils whose surfaces have been roughened and thus enlarged by means of a special etching process. In contrast, ECap plain are made from unetched and thus lower-loss foils.

2.0 Film Capacitors

Polypropylene (PP) is used as the dielectric in all our film capacitors. As a capacitor film PP is globally the No.1. It is a partially crystalline hydrocarbon that reliably fulfils the highest standards of safety in use, pulse handling capability, AC voltage proofness and dielectric strength. The extreme temperature and frequency stability of PP's ultra-low ESR and capacity value is absolutely unique. This is added to by fantastic mechanical features such as the very equal film thickness for the highest precision in production or the high elasticity and thermal plasticity for ultra stable and vibration-cushioned capacitor winding.

Of course, in the past decades we have regularly conducted comparative listening tests with various alternatives (paper, PTFE, polyester, PEN and polycarbonate). Although these materials were – technically and in terms of sound - equal or even superior in some individual aspects, the overall experience was always nicest and the enjoyment of the music the greatest with PP film capacitors*.

2.1 Film/foil capacitors (KP) are wound as conductors from solid metal foils. The enormous conductivity and the high inertia of the metal foil ensures a minimal loss angle and prevents resonances. This leads to very lively playback. The disadvantages of the high use of material are the costs, an increased failure rate due to the physical load of the dielectric and the lack of self-healing properties (i.e. breakdowns in the insulator lead to full signal passage). We therefore advise against use in electronics and in industrial production!

2.2 Metallised capacitors (MKP) are wound using films with a vacuum-metalised metal layer. This modern structure is more compact, more reliable and more value-for-money than film/foil capacitors and also possesses outstanding self-healing properties (i.e. the metal coat evaporates around damaged spots in the dielectric, thus insulating them).

2.2.1 MCap® EVO are metallised PP film capacitors based on the innovative EVOLUTION winding technology, which was launched in the RXF series (Radial eXtra Flat) in 2005. Its main feature is its unusually narrow and high capacitor winding. This geometry produces two acoustically clearly perceptible advantages compared to traditional, easier-to-manufacture MKPs. One advantage is that the shortest, low-loss signal routes as well as particularly large contact surfaces are ensured (and thus extremely low residual resistance ESR); the other advantage is that an extremely large number of windings are parallel-connected, minimising inductivity (ESL). In addition, they are moulded by hand according to the highly precise winding process in specially developed, compact housings. This prevents the winding from vibrating and microphony effects on a sustained basis. In the sound pattern, all these special features are perceived through sound-quality liveliness, nuanced, transparent dynamics as well as outstanding authenticity and stereophony.

2.2.2 MCap® SUPREME are metallised PP film capacitors based on the audiophile SUPREME winding technology. The special layout of the capacitor films makes it possible to interlace two interlying, counterwound capacitor windings in such a way that the inductivities of the individual windings almost cancel each other out. The two windings are connected in series; consequently, two windings, each of 2µF - i.e. in total material for a 4µF conventional structure - are processed to manufacture a 1µF SUPREME capacitor. This process - challenging in production technology terms - which has been offered since 1992 demands the greatest care in production, which is, to a large extent, manual. To rule out colouration of the music signal due to microphony, they are mechanically stabilised by hand in an additional process and moulded in special housings. This high degree of effort is absolutely justified by the fascinatingly realistic music experience, with plasticity of the on-stage representation that is fully released by the loudspeaker and is virtually holographic, with crystal-clear contours and outstanding offset in depth.

2.2.3 MCap® SUPREME EVO are the perfect liaison of the two aforementioned Mundorf MKP special structures and were specially developed for and tailored towards the heightened requirements and increased opportunities of the latest generation of loudspeaker chassis. In addition to increased effectiveness, richness of detail and transmission range, these chassis are characterised above all by a previously unknown synthesis of explosive dynamics and distortion-free silkiness. Our new top class fulfils the high standards by combining the stimulatingly authentic verve with the outstandingly three-dimensional spaciousness of EVO and SUPREME in a virtuoso manner to create brilliant, richly faceted, emotionally captivating musicality and pure listening pleasure.

2.2.4 Oil impregnation of metallised PP film capacitors in vacuo is a particular speciality of our company and was used for the first time with MCap® SUPREME Silver.Oil in 2002. In this process, even the smallest air bubbles are squeezed out of the capacitor winding and even the most subtle of hollow spaces are filled and softened with oil. Both electrical and mechanical losses in the capacitor due to vibration are thus reduced to a minimum. Mundorf oil capacitors are characterised by their extremely sophisticated and highly dynamic detail and are superior to their respective dry counterpart in presence, speed and precision.

The conductor material of the electrode - in addition to the insulator and the structural design (see preceding section: Dielectrics & Structures) - is crucial to the sound characteristics of a capacitor. In order to offer you the optimal audio capacitor for different applications and your individual standards with regard to the range and facet richness of tonality, acoustic colours and overtones, we use five conductor materials of the highest cleanliness.

3.1 Zinc as an electrode material is the specialist for the highest dielectric strength and is therefore used by us in capacitors for the voltage supply of audio electronics. Compared to electrolytic capacitors with a similar purpose and a maximum of 500 to 550VDC, with zinc-damped PP film we can produce AC voltage-proof capacitors in the kV range that have significantly fewer losses, an unlimited lifespan and outstanding self-healing properties. However, due to the acoustic properties we advise against use in audio capacitors!

3.2 Tin is characterised by its particular softness and pliability and is therefore outstandingly suitable for use as a metal foil in KP capacitors. The mechanical load of the dielectric and thus the failure rate are minimised as far as possible through the use of tin foil and internal damping is maximised. The incredible dynamics and the richness of detail that result from this structure compensate for the characteristic acoustic disadvantages of this conductor material.

3.3 Copper* harmonises better with paper than with PP film as a dielectric, in our experience, and thus forms the famous exception to the rule. The outstanding conductivity of copper leads to a dynamic and richly detailed sound pattern with outstanding tonality and naturalness in some frequency ranges; this sound pattern, however, lacks brilliance, balance and precision overall.

3.4 Aluminium is the standard and benchmark in the construction of capacitors, due to its having the highest conductivity of all non-precious metals with respect to weight and its outstanding price/performance ratio. Aluminium MKPs are characterised by richly detailed, lively and harmonious music playback. It is simply indispensable for the manufacture of aluminium electrolytic capacitors on whose anode electrode the dielectric Al2O3 is formed (also called anodic oxidation).

3.5 Silver of the highest cleanliness (typically 99.99%) is highly valued and preferred by many audio enthusiasts as a conductor material due to its outstanding ability to reproduce voices and instruments even more dynamically, with greater richness of detail and with more acoustic colours.

3.6 SilverGold 99% silver + 1% gold = 100% music. The use of this conductor material can be condensed into this simple formula. The ultrapure Gold (typically 99.99%) changes the crystalline structure of silver and maximises its very good electrical conductivity. Instruments and voices unfurl their whole range of lively acoustic colours and their character is illuminated and becomes experiencable in all nuances. ‚Crystal clear' on the one hand, the playback is lively and warm at the same time, embedded into a delicately differentiated picture and steeped in musical beauty. Delicate elegance, tonal purity and its lively dynamics make this exquisite material stand out from all others!



The **MCap® EVO** was designed in 2012 as the successor of the RXF to facilitate utmost musical enjoyment even in small spaces on a limited budget. The PP capacitor film used here is first metallised with the thickest possible aluminium layer, then wound precisely into innovative EVOLUTION winding geometry and then potted by hand into special casings.



These features are reflected in the music playback with colorful livelihood, remarkable micro dynamic alongside enhanced transparency, authenticity and stereophony. In addition, the **MCap® EVO** is characterised by low tolerances, compact dimensions, low costs and the highest standards of safety in use (self-healing).Its asymmetrical leads make it possible to assemble it in a classic, horizontal style or vertical; the shorter lead also indicates the capacitor's outer foil.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.1 • 3.4.

Thanks to its 2.2.4 Oil impregnation, the **MCap® EVO Oil** offers further developed dynamics. Its additional wrapping as well as its imprint in red-metallic impart an appropriate quality look and haptic.

ME
MCap EVO

	Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
	0,010 ±5%	650	12 * 12	0,6 * 35/35	6,99
	0,10 ±5%	650	12 * 12	0,6 * 35/35	6,99
	0,15 ±5%	450	16 * 14	0,8 * 35/50	6,99
	0,22 ±4%	450	16 * 14	0,8 * 35/50	6,99
	0,27 ±4%	450	18 * 14	0,8 * 35/50	6,99
	0,33 ±3%	450	18 * 14	0,8 * 35/50	6,99
	0,39 ±3%	450	20 * 14	0,8 * 35/50	6,99
	0,47 ±3%	450	20 * 14	0,8 * 35/50	6,99
	0,56 ±3%	450	22 * 16	0,8 * 35/50	6,99
	0,68 ±3%	450	22 * 16	0,8 * 35/50	6,99
	0,82 ±3%	450	25 * 16	0,8 * 35/50	6,99
	1,00 ±3%	450	25 * 16	0,8 * 35/50	6,99
	1,50 ±3%	450	30 * 16	0,8 * 35/50	7,09
	1,80 ±3%	450	25 * 21	0,8 * 35/50	7,19
	2,20 ±3%	450	25 * 21	0,8 * 35/50	7,19
	2,70 ±3%	450	30 * 21	0,8 * 35/50	7,29
	3,30 ±3%	450	30 * 21	0,8 * 35/50	7,39
	3,90 ±3%	450	25 * 27	0,8 * 35/50	7,49
	4,70 ±3%	450	30 * 27	1,0 * 35/60	7,99
	5,60 ±3%	450	30 * 27	1,0 * 35/60	8,99
	6,80 ±3%	450	35 * 27	1,0 * 35/60	9,99
	8,20 ±3%	450	35 * 27	1,0 * 35/60	10,90
	10 ±3%	450	40 * 27	1,0 * 35/60	11,90
	12 ±3%	450	35 * 35	1,0 * 35/65	12,90
	15 ±3%	450	40 * 35	1,0 * 35/75	14,90
	18 ±3%	450	50 * 35	1,0 * 35/75	22,90
	22 ±3%	450	50 * 35	1,0 * 35/75	24,90
	33 ±3%	450	65 * 35	1,2 * 35/90	32,90
	47 ±3%	350	50 * 50	1,2 * 35/90	34,90
	56 ±3%	350	65 * 50	1,4 * 50/105	39,90
	68 ±3%	350	65 * 50	1,4 * 50/105	44,90
	82 ±3%	350	75 * 50	1,4 * 50/105	64,90
	100 ±3%	350	75 * 50	1,4 * 50/105	69,90
NEW	150 ±3%	250	50 * 90	1,4 * 50/140	69,90
	220 ±3%	250	65 * 90	1,4 * 50/140	79,90
	270 ±3%	250	65 * 90	1,4 * 50/140	99,90
	330 ±3%	250	75 * 90	1,4 * 50/140	124,90

General Information:
Dielectric: Polypropylene (PP)
Metallisation: Aluminium
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Highly recommended for new designs.
Further voltages, capacities and custom labeling are available on request.

MEO
MCap EVO Oil

	Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
	0,010 ±5%	650	12 * 12	0,6 * 35/35	9,99
	0,10 ±5%	650	12 * 12	0,6 * 35/35	9,99
	0,15 ±5%	450	16 * 14	0,8 * 35/50	9,99
	0,22 ±4%	450	16 * 14	0,8 * 35/50	9,99
	0,33 ±3%	450	18 * 14	0,8 * 35/50	9,99
	0,47 ±3%	450	20 * 14	0,8 * 35/50	9,99
	0,68 ±3%	450	22 * 16	0,8 * 35/50	9,99
	1,00 ±3%	450	25 * 16	0,8 * 35/50	9,99
	1,50 ±3%	450	30 * 16	0,8 * 35/50	10,50
NEW	1,80 ±3%	450	25 * 21	0,8 * 35/50	10,90
	2,20 ±3%	450	25 * 21	0,8 * 35/50	10,90
	2,70 ±3%	450	30 * 21	0,8 * 35/50	11,50
	3,30 ±3%	450	30 * 21	0,8 * 35/50	11,90
	3,90 ±3%	450	25 * 27	0,8 * 35/50	12,50
	4,70 ±3%	450	30 * 27	1,0 * 35/60	12,90
	5,60 ±3%	450	30 * 27	1,0 * 35/60	13,90
	6,80 ±3%	450	35 * 27	1,0 * 35/60	14,90
	8,20 ±3%	450	35 * 27	1,0 * 35/60	15,90
	10 ±3%	450	40 * 27	1,0 * 35/60	16,90
	15 ±3%	450	40 * 35	1,0 * 35/75	19,90
	18 ±3%	450	50 * 35	1,0 * 35/75	27,90
	22 ±3%	450	50 * 35	1,0 * 35/75	29,90
	27 ±3%	450	65 * 35	1,2 * 35/90	34,90
	33 ±3%	450	65 * 35	1,2 * 35/90	37,90
	39 ±3%	350	50 * 50	1,2 * 35/90	37,90
	47 ±3%	350	50 * 50	1,2 * 35/90	39,90
	56 ±3%	350	65 * 50	1,4 * 50/105	44,90
	68 ±3%	350	65 * 50	1,4 * 50/105	49,90
	100 ±3%	350	75 * 50	1,4 * 50/105	74,90
NEW	150 ±3%	250	50 * 90	1,4 * 50/140	74,90
NEW	220 ±3%	250	65 * 90	1,4 * 50/140	89,90

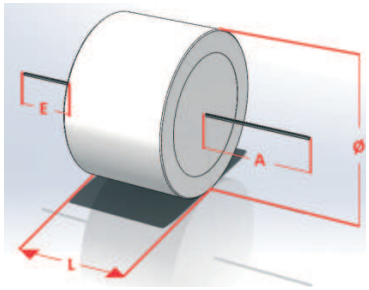
The **MCap® SUPREME EVO** is a complete new development for 2015. It combines the excellent impulse playback of the EVOLUTION winding technology with the unsurpassed holographic three-dimensionality of the SUPREME winding technology in a capacitor which is comparably cost-effective due to its aluminium metallisation.

After running through our latest and greatest winding process, the capacitors are potted by hand into aluminium tubes to minimise microphony. The asymmetrical leads make it possible to assemble it in a classic, horizontal style or vertical; the shorter lead also indicates the capacitor's outer foil.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.3 • 3.4 .

Thanks to its 2.2.4 Oil impregnation, the **MCap® SUPREME EVO Oil** offers further increased presence and dynamics.





General Information:
Dielectric: Polypropylene (PP)
Metallisation: Aluminium
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Highly recommended for new designs.
Further voltages, capacities and custom labeling are available on request.

SE
MCap SUPREME EVO

Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
0,10±2%	1000	17 * 23	0,6 * 35/45	14,90
0,15±2%	1000	21 * 23	0,8 * 35/48	15,90
0,22±2%	1000	26 * 23	0,8 * 35/50	16,90
0,33±2%	1000	31 * 23	0,8 * 35/50	17,90
0,47±2%	1000	31 * 23	0,8 * 35/50	18,90
0,68±2%	1000	36 * 23	0,8 * 35/55	19,90

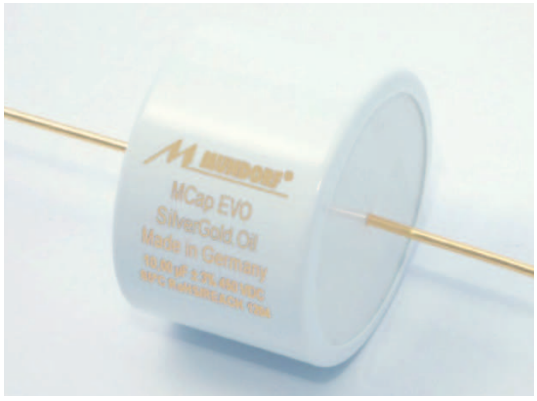
SEO
MCap SUPREME EVO Oil

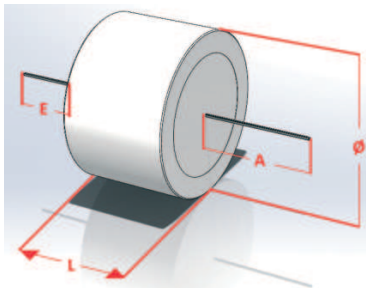
Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
1,0±2%	1000	36 * 28	1,0 * 35/60	24,90
1,5±2%	1000	41 * 28	1,0 * 35/60	26,90
2,2±2%	800	36 * 33	1,0 * 35/65	28,90
2,7±2%	800	41 * 33	1,0 * 35/70	31,90
3,3±2%	800	46 * 33	1,4 * 35/70	34,90
3,9±2%	800	46 * 33	1,4 * 35/70	39,90
4,7±2%	800	51 * 33	1,4 * 35/75	44,90
5,6±2%	800	56 * 33	1,4 * 40/75	49,90
6,8±2%	800	51 * 41	1,4 * 35/80	54,90
8,2±2%	800	56 * 41	1,4 * 40/85	59,90
10±2%	800	66 * 41	1,4 * 45/90	69,90
15±2%	800	76 * 41	1,4 * 50/95	79,90
18±2%	700	66 * 55	1,4 * 45/100	79,90
22±2%	700	66 * 55	1,4 * 45/100	84,90
27±2%	700	76 * 55	1,4 * 50/105	89,90
33±2%	600	66 * 67	1,4 * 45/115	99,90
47±2%	600	76 * 67	1,4 * 50/120	119,90

The **MCap® EVO SilverGold.Oil** was developed in 2012 to specifically create the powerful and finely nuanced acoustic colours that are typical to the SilverGold in as compact and cost-effective a format as possible. The large capacities created as a result also permit efficient use in high-quality midrange applications.

The self-healing PP capacitor film is impregnated with oil after the EVOLUTION winding process and potted by hand into special casings. Any impact on the audio signal caused by microphony is practically ruled out as a result. The directly gold-plated, asymmetrical pure copper terminals make it possible to assemble it in a classic, horizontal style or vertical; the shorter lead also indicates the capacitor's outer foil.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.1 • 2.2.4 • 3.6.





General Information:
Dielectric: Polypropylene (PP)
Metallisation: 99% Silver + 1% Gold
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Highly recommended for new designs.
Further voltages, capacities and custom labeling are available on request.

MCap EVO SilverGold.Oil

Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
0,010 ±5%	650	12 * 12	0,6 * 35/35	21,90
0,10 ±5%	650	12 * 12	0,6 * 35/35	21,90
0,15 ±5%	450	16 * 14	0,8 * 35/50	21,90
0,22 ±4%	450	16 * 14	0,8 * 35/50	21,90
0,33 ±3%	450	18 * 14	0,8 * 35/50	23,90
0,47 ±3%	450	20 * 14	0,8 * 35/50	25,90
0,68 ±3%	450	22 * 16	0,8 * 35/50	27,90
1,00 ±3%	450	25 * 16	0,8 * 35/50	29,90
1,50 ±3%	450	30 * 16	0,8 * 35/50	34,90
2,20 ±3%	450	25 * 21	0,8 * 35/50	39,90
2,70 ±3%	450	30 * 21	0,8 * 35/50	44,90
3,30 ±3%	450	30 * 21	0,8 * 35/50	49,90
3,90 ±3%	450	25 * 27	0,8 * 35/50	54,90
4,70 ±3%	450	30 * 27	1,0 * 35/60	59,90
5,60 ±3%	450	30 * 27	1,0 * 35/60	64,90
6,80 ±3%	450	35 * 27	1,0 * 35/60	69,90
8,20 ±3%	450	35 * 27	1,0 * 35/60	79,90
10 ±3%	450	40 * 27	1,0 * 35/60	89,90
15 ±3%	450	40 * 35	1,0 * 35/75	99,90
22 ±3%	450	50 * 35	1,0 * 35/75	119,90
33 ±3%	450	65 * 35	1,2 * 35/90	169,90
47 ±3%	350	50 * 49	1,2 * 35/90	219,90
68 ±3%	350	65 * 49	1,4 * 50/105	269,90
100 ±3%	350	75 * 49	1,4 * 50/105	319,90

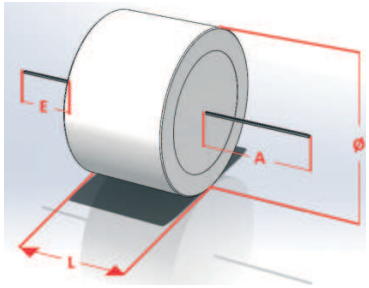
Since 2015, the **MCap® SUPREME EVO SilverGold** has been our undisputed top capacitor model. It combines all our technical highlights, such as SilverGold metallisation, SUPREME and EVOLUTION winding technology and over 30 years of experience in the manufacturing of audiophile masterpieces into a unique capacitor type of equally unique musicality: finely nuanced and lively shining acoustic colours, which combine into a breathtaking, beautiful, live-like music experience with the utmost precision, presence and three-dimensional plasticity.

Metallised polypropylene as the dielectric guarantees low tolerances and the highest standards of safety in use thanks to its self-healing properties. After running through our new top-quality winding process, the capacitor winding is potted by hand into aluminium tubes to minimise microphony. The directly gold-plated, asymmetrical pure copper wires make it possible to assemble it in a classic, horizontal style or vertical; the shorter lead also indicates the capacitor's outer foil.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.3 • 3.6.

Thanks to its 2.2.4 Oil impregnation, the **MCap® SUPREME EVO SilverGold.Oil** offers even superior presence and dynamics.





SESG
MCap SUPREME EVO SilverGold

Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
0,0010±5%	1500	14 * 16	0,6 * 35/35	34,90
0,010±3%	1500	14 * 16	0,6 * 35/35	37,90
0,10±2%	1000	17 * 23	0,6 * 35/45	39,90
0,15±2%	1000	21 * 23	0,8 * 35/48	41,90
0,22±2%	1000	26 * 23	0,8 * 35/50	44,90
0,33±2%	1000	31 * 23	0,8 * 35/50	49,90
0,47±2%	1000	31 * 23	0,8 * 35/50	54,90
0,68±2%	1000	36 * 23	0,8 * 35/55	59,90

SESGO
MCap SUPREME EVO SilverGold.Oil

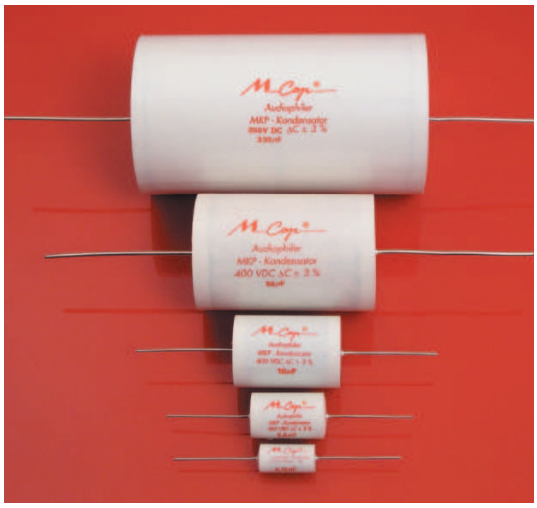
Capacity [µF]	VDC	Body Ø* L [mm]	Wire Ø* E/A [mm]	[€]
1,0±2%	1000	36 * 28	1,0 * 35/60	69,90
1,5±2%	1000	41 * 28	1,0 * 35/60	79,90
2,2±2%	800	36 * 33	1,0 * 35/65	89,90
2,7±2%	800	41 * 33	1,0 * 35/70	99,90
3,3±2%	800	46 * 33	1,4 * 35/70	109,90
3,9±2%	800	46 * 33	1,4 * 35/70	119,90
4,3±2%	800	51 * 33	1,4 * 35/75	129,90
4,7±2%	800	51 * 33	1,4 * 35/75	139,90
5,1±2%	800	56 * 33	1,4 * 40/75	149,90
5,6±2%	800	56 * 33	1,4 * 40/75	159,90
6,2±2%	800	51 * 41	1,4 * 35/80	169,90
6,8±2%	800	51 * 41	1,4 * 35/80	179,90
7,5±2%	800	56 * 41	1,4 * 40/85	189,90
8,2±2%	800	56 * 41	1,4 * 40/85	199,90
10±2%	800	66 * 41	1,4 * 45/90	249,90
15±2%	800	76 * 41	1,4 * 50/95	349,90
22±2%	700	66 * 55	1,4 * 45/100	399,90
33±2%	600	66 * 67	1,4 * 45/115	499,90
47±2%	600	76 * 67	1,4 * 50/120	599,90

General Information:
Dielectric: Polypropylene (PP)
Metallisation: 99% Silver + 1% Gold
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Highly recommended for new designs.
Further voltages, capacities and custom labeling are available on request.

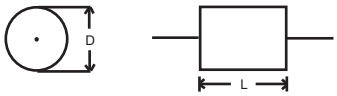
The **MCap® Classic** series has formed the basis of the Mundorf audio film capacitors since 1990. Avoiding an additional housing, the simple printing method and the classic longitudinal structure make it possible to create our most compact and cost-effective MKP-types.

True to our motto of “Inner Excellence”, the best material selection and highest production quality guarantee low tolerances and the highest standards of safety in use, even in our entry-level model. The MCap® Classic’s three-dimensional, precise sound pattern, the richly detailed, harmonic music playback and dynamics are guaranteed with aluminised PP capacitor film.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 3.4.



General Information:
Dielectric: Polypropylene (PP)
Metallisation: Aluminium
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Recommended for new designs.
Further capacities and custom labeling are available on request.



MCAP250
MCap Classic, 250 VDC

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L[mm]	[€]
1,0	11 * 23	0.8 * 30	2,99
1,5	13 * 23	0.8 * 30	3,19
2,2	13 * 28	0.8 * 30	3,39
2,7	15 * 28	0.8 * 30	3,59
3,3	16 * 28	0.8 * 30	3,79
3,9	17 * 28	0.8 * 30	3,99
4,7	16 * 33	0.8 * 30	4,19
5,6	18 * 33	1.0 * 35	4,39
6,8	20 * 33	1.0 * 35	4,79
8,2	22 * 33	1.0 * 35	5,49
10	22 * 35	1.0 * 35	6,29
12	26 * 39	1.0 * 35	7,99
15	26 * 39	1.0 * 35	9,49
18	29 * 44	1.0 * 40	10,90
22	29 * 44	1.0 * 40	12,90
33	33 * 49	1.0 * 45	16,90
47	37 * 54	1.2 * 45	21,90
68	43 * 61	1.2 * 45	27,90
82	47 * 61	1.2 * 45	34,90
100	46 * 66	1.6 * 55	44,90

MCAP400
MCap Classic, 400 VDC

Capacity [µF] ±3%	Body Ø * L [mm]	Wire Ø * L[mm]	[€]
1,0	12 * 23	0.8 * 30	3,49
1,5	14 * 28	0.8 * 30	3,69
2,2	16 * 28	0.8 * 30	3,99
2,7	18 * 29	0.8 * 30	4,29
3,3	17 * 34	0.8 * 35	4,59
3,9	18 * 34	0.8 * 35	4,99
4,7	20 * 34	1.0 * 35	5,49
5,6	22 * 34	1.0 * 35	5,99
6,8	24 * 34	1.0 * 35	6,99
8,2	24 * 39	1.0 * 35	7,99
10	26 * 39	1.0 * 35	8,99
15	28 * 46	1.0 * 40	12,90
22	34 * 46	1.0 * 40	18,90

MCAP630
MCap Classic, 630 VDC

Capacity [µF] ±3%	Body Ø * L [mm]	Wire Ø * L[mm]	[€]
0,10	10 * 19	0.8 * 30	3,19
0,15	10 * 21	0.8 * 30	3,19
0,22	10 * 23	0.8 * 30	3,19
0,33	12 * 23	0.8 * 30	3,29
0,47	12 * 25	0.8 * 30	3,49
0,68	14 * 26	0.8 * 30	3,69
1,0	16 * 26	0.8 * 30	3,99
1,5	17 * 29	0.8 * 30	4,29
2,2	18 * 34	1.0 * 35	4,79
3,3	22 * 34	1.0 * 35	5,39
4,7	24 * 39	1.0 * 35	5,99
6,8	26 * 44	1.0 * 40	7,99
10	29 * 49	1.0 * 40	9,99

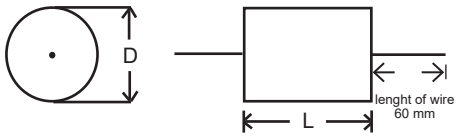
Very soon after its market launch in 1992 the **MCap® SUPREME Classic** has been internationally acclaimed as top-class capacitor. Today it is considered by many users as a milestone in the modern audiophile capacitor generation.

The self-healing PP capacitor film used here is first metallised with the thickest possible aluminium layer, then wound precisely into distinctive SUPREME winding geometry and finally potted by hand into special aluminium cans to minimise microphony.

These features are reflected in the music reproduction with their holographic three-dimensionality and outstanding tonal balance.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.2 • 3.4.





General Information:
Dielectric: Polypropylene (PP)
Metallisation: Aluminium
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Recommended for new designs.
Further capacities and custom labeling are available on request.

SUP8
MCap SUPREME Classic

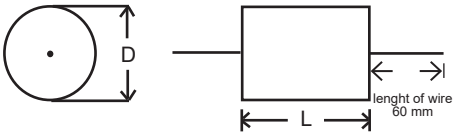
Capacity [µF] ±2%	VDC	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
1,0	800	20 * 39	1.0 * 60	15,90
1,5	800	25 * 52	1.0 * 60	16,90
1,8	800	25 * 52	1.0 * 60	17,90
2,2	800	25 * 52	1.0 * 60	19,90
2,7	800	30 * 56	1.0 * 60	21,90
3,3	800	30 * 56	1.4 * 60	23,90
3,9	800	30 * 56	1.4 * 60	26,90
4,7	800	36 * 56	1.4 * 60	29,90
5,6	800	36 * 56	1.4 * 60	34,90
6,8	800	41 * 53	1.4 * 60	39,90
8	800	36 * 106	1.4 * 60	44,90
10	800	36 * 106	1.4 * 60	49,90

For the very first time the **MCap® SUPREME Classic Silver.Oil** successfully combined the advantages of metalized PP-film capacitors with the benefits of oil impregnated capacitors and the multi-faceted detail of silver conductors in 2002.

Silver of the highest purity (typically 99.99%) is first metallised with the thickest possible layer, then wound precisely into distinguished SUPREME winding geometry, then equipped with tin-plated copper wires and finally potted by hand into aluminium cans.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.2 • 3.5.





General Information:
Dielectric: Polypropylene (PP)
Metallisation: Silver
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 60°C/140°F
Further capacities and custom labeling are available on request.

SUP.SO
MCap SUPREME Classic Silver.Oil

Capacity [µF]		VDC	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
0,10	±5%	1000	17 * 36	0.8 * 60	37,90
0,22	±5%	1000	19 * 39	0.8 * 60	38,90
0,33	±5%	1000	19 * 39	1.0 * 60	39,90
0,47	±3%	1000	26 * 41	1.0 * 60	44,90
0,68	±3%	1000	26 * 41	1.0 * 60	49,90
1,0	±3%	1000	31 * 42	1.4 * 60	59,90
1,5	±3%	1000	36 * 42	1.4 * 60	69,90
2,2	±3%	1000	41 * 57	1.4 * 60	84,90
3,3	±3%	1000	41 * 57	1.4 * 60	109,90
4,7	±2%	1000	41 * 71	1.4 * 60	139,90
5,6	±2%	1000	46 * 71	1.4 * 60	159,90
6,8	±2%	1000	50 * 71	1.4 * 60	179,90

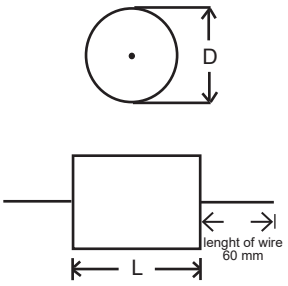
With the **MCap® SUPREME Classic SilverGold** we have once again lived up to our reputation as one of the internationally leading manufacturers of audiophile components in 2004. It combines the outstanding three-dimensionality of our SUPREME technology with the brilliant and vibrant timbres of our SilverGold-alloy.

The listening experience with **MCap® SUPREME Classic SilverGold** capacitors excels with tonal beauty and elegance, finely nuanced and colourful timbres of sound, an accurate detail reproduction and sheer joy of music.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.2 • 2.2.2 • 3.6.

Thanks to its 2.2.4 Oil impregnation, the **MCap® SUPREME Classic SilverGold.Oil** enjoys improved presence and dynamics.





General Information:
Dielectric: Polypropylene (PP)
Metallisation: 99% Silver + 1% Gold
tan ∂: = 0.0002@1kHz · 0.0001@10kHz
Max. ambient temperature: 85°C/185°F
Further capacities and custom
labeling are available on request.

SUP.SG
MCap SUPREME Classic SilverGold

Capacity [µF] ±2%	VDC	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
1,0	1000	31 * 42	1.4 * 60	59,90
1,5	1000	36 * 42	1.4 * 60	69,90
2,2	1000	36 * 56	1.4 * 60	84,90
3,3	1000	41 * 57	1.4 * 60	119,90
4,7	1000	46 * 71	1.4 * 60	159,90

SUP.SGO
MCap SUPREME Classic SilverGold.Oil

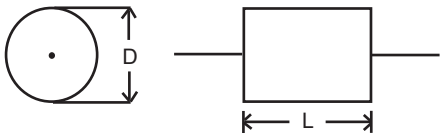
Capacity [µF]		VDC	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
0,010	±5%	1000	17 * 36	0.6 * 60	37,90
0,10	±3%	1000	17 * 36	0.6 * 60	39,90
0,15	±3%	1000	17 * 36	0.6 * 60	41,90
0,22	±3%	1000	19 * 39	0.6 * 60	44,90
0,33	±3%	1000	19 * 39	0.6 * 60	49,90
0,47	±3%	1000	26 * 41	0.6 * 60	54,90
1,0	±2%	1000	31 * 42	0.6 * 60	69,90
1,5	±2%	1000	36 * 42	0.6 * 60	79,90
2,2	±2%	1000	36 * 56	1.0 * 60	89,90
3,3	±2%	1000	41 * 57	1.0 * 60	119,90
3,9	±2%	1000	41 * 57	1.0 * 60	129,90
4,7	±2%	1000	46 * 71	1.0 * 60	159,90
5,6	±2%	1000	46 * 71	1.0 * 60	179,90
6,8	±2%	1000	51 * 71	1.0 * 60	219,90
10	±2%	1000	51 * 106	1.4 * 60	349,90

Since 2001 the **MCap® ZN Classic** enjoys with ultimate vividness and dynamics of all our capacitors that results from the enormous conductivity of the used massive tin foil. Its loss factor [tan ∂ @ 1kHZ] is ten-times lower than of metallised PP-film capacitors. Additionally the mass inertia of the tin foil prevents oscillations in the benefit of transparency and spatiality.

Lead-free tin foil means – aside from positive environmental aspects – also an improved sound characteristic as of year of manufacture 2007.

You will find extensive information about the technologies used on pages 6 to 8 in sections 2.0 • 2.1 • 3.2.





General Information:
Dielectric: Polypropylen (PP)
Electrode: Zinnfolie (6µm)
tan ∂: 0,00002@1 kHz · 0,00001@10 kHz
Max. ambient temperature: 85°C/185°F
Further capacities and custom
labeling are available on request.

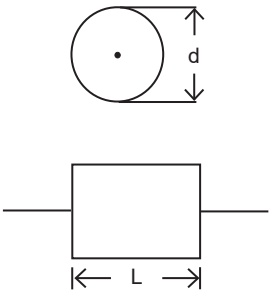
ZN
MCap ZN Classic

Capacity [µF] ±3%	VDC	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
0,10	630	12 * 25	0.8 * 30	8,99
0,22	630	14 * 30	0.8 * 30	9,99
0,33	630	15 * 30	1.0 * 30	10,90
0,47	630	17 * 30	1.0 * 30	11,90
0,68	630	19 * 38	1.0 * 35	13,90
1,0	630	21 * 38	1.0 * 35	16,90
1,5	250	21 * 38	1.0 * 35	19,90
2,2	250	25 * 40	1.0 * 35	23,90
2,7	100	21 * 40	1.0 * 35	23,90
3,3	100	25 * 40	1.0 * 35	24,90
3,9	100	26 * 40	1.0 * 35	26,90
4,7	100	26 * 40	1.0 * 35	28,90

Aluminium electrolytic capacitors are used in applications for which film capacitors are not suitable for reason of space and/or cost. Polarised electrolytic capacitors which have the most compact design and are therefore used for very high capacities (e.g. for the voltage supply of amplifiers) cannot transfer any audio signal becaus audio signals are AC signals.

Bipolar electrolytic capacitors such as the ECap AC series have a second aluminium foil providing AC voltage resistance and thus making them suitable for music signals. Further special features of all **ECap AC capacitors:**

Short delivery times	Any values listed on page 18/19 are normally immediately available from stock
	Special designs are available within only 4-6 weeks and already from a quantity of 144 items
Variety of applications	RoHS-compliant · lead-free REACH-compliant All ingredients are UL listed Specifications according to DIN 41332 · IEC 60384-4 Thermal tests according to IEC 60068 40/105/56
Guarantee of origin	Manufactured in Germany



The bipolar electrolytic capacitors of the **ECap AC · Audio Coupling & Signal Cap RAW** series have foils with surfaces which are roughened by a special etching process thus enlarging the surface. As the capacity of capacitors is proportional to their surface, this process provides the smallest and cheapest Mundorf audio capacitors. Additional special features:

Capacity range	1µF to 800µF
Electric strength	AC23 DC63 · AC35 DC100
Temperature range	-40°C/-40°F to 85°C/+185°F
Service life [U_R · $I_{R\sim}$]	3,000 hours at +85°C/+185°F
Loss angle [tan α]	0.050 @ 1kHz



ECAP100
Electrolytic capacitors 100 VDC / 35 VAC, raw

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
10	10 * 30	0.8 * 40	1,69
15	10 * 30	0.8 * 40	1,79
22	12 * 30	0.8 * 40	1,89
33	12 * 30	0.8 * 40	1,99
47	14 * 37	0.8 * 40	2,49
56	14 * 38	0.8 * 40	2,99
68	16 * 39	0.8 * 40	3,49
82	18 * 39	0.8 * 40	3,99
100	18 * 39	0.8 * 40	4,49

ECAP63
Electrolytic capacitors 63 VDC / 23 VAC, raw

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
150	14 * 37	0.8 * 40	2,99
180	16 * 39	0.8 * 40	3,49
220	16 * 39	0.8 * 40	3,99
270	21 * 36	0.8 * 40	5,49
330	21 * 36	0.8 * 40	5,99
390	25 * 38	0.8 * 40	6,49
470	25 * 38	0.8 * 40	6,99
560	25 * 38	0.8 * 40	7,49
680	25 * 38	0.8 * 40	7,99



The bipolar electrolytic capacitors of the **ECap AC · Audio Coupling & Signal Cap PLAIN** series are made of smooth and thus low-loss foils. This has a positive effect on the sound characteristics. Music is reproduced in more details and nuances. Highlights:

Capacity range	1µF to 200µF
Electric strength	AC23 DC35· AC35 DC50 · AC50 DC70
Temperature range	-40°C/-40°F to 85°C/+185°F
Service life [$U_R \cdot I_{R\sim}$]	5,000 hours at +85°C/+185°F
Loss angle [tan α]	0.025 @ 1kHz

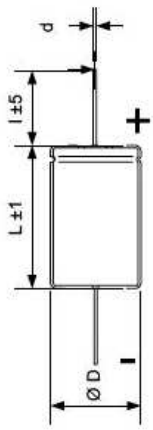
ECAP70
Electrolytic capacitors 70 VDC / 50 VAC, plain

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
1,0	10 * 20	0.8 * 40	1,59
1,5	10 * 20	0.8 * 40	1,69
2,2	10 * 30	0.8 * 40	1,79
2,7	10 * 30	0.8 * 40	1,89
3,3	10 * 30	0.8 * 40	1,99
3,9	10 * 30	0.8 * 40	2,09
4,7	10 * 30	0.8 * 40	2,19
5,6	12 * 30	0.8 * 40	2,49
6,8	12 * 30	0.8 * 40	2,99
8,2	14 * 37	0.8 * 40	3,49
10	14 * 37	0.8 * 40	3,99
15	18 * 39	0.8 * 40	4,99
22	25 * 38	0.8 * 40	5,99
33	25 * 38	0.8 * 40	6,99
47	25 * 49	0.8 * 40	7,99

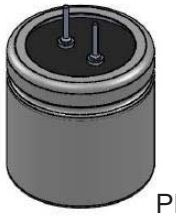
ECAP50
Electrolytic capacitors 50 VDC / 35 VAC, plain

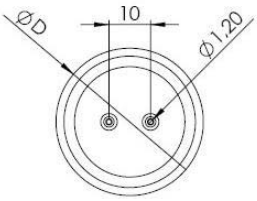
Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
47	25 * 38	0.8 * 40	6,99
56	25 * 49	0.8 * 40	7,99
68	25 * 49	0.8 * 40	8,99
82	30 * 50	0.8 * 40	9,99
100	30 * 50	0.8 * 40	10,90

The **MLytic® AG · Audio Grade Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 6 plus the following features:

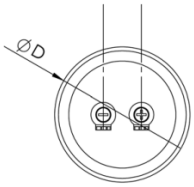


Supply availability	Typically immediately ex stock for all types listed on page 21
	4-6 weeks for your individual combination of features · from 144pcs only
Versatile applicable	RoHS-compliant · lead free REACH compliant Finest UL-listed ingredients only Sectional specification DIN 41332 · IEC 60384-4 Climatic category IEC 60068 40/105/56
Indication of origin	Made in Germany with greatest care
Capacitance range	47µF to 330 000µF
DC voltage range	16· 25 · 35 · 40 · 50 · 63 · 80 · 100 · 160
Temperature range	-40°C/-40°F to 125°C/+255°F for 16V to 63V -25°C/-13°F to 105°C/+220°F for 80V to 160V
Diverse connectors	AL · axial leaded PI · plug-in GO · glue-on SL · solder-lugs SC · screw-terminal clamp mounted SB · screw-terminal bolt mounted
Useful lifetime [U_R · $I_{R\sim}$]	3 000 hours at +125°C/+255°F for 16V to 63V 8 000 hours at +105°C/+220°F for 16V to 160V 16 000 hours at +85°C/+185°F for 16V to 160V
Rated lifetime [U_R]	1 000 hours at +125°C/+255°F for 16V to 63V 2 000 hours at +105°C/+220°F for 16V to 160V
Case diameters [mm]	10 · 12 · 14 · 16 · 18 · 20 · 25 · 30 35 · 40 · 45 · 50 · 65 · 75 · 90
Case heights [mm]	Customized from 25 to 230 [typically in 5mm steps]
Case diameters [inch]	0.39 · 0.47 · 0.55 · 0.63 · 0.71 · 0.79 · 0.98 · 1.18 1.38 · 1.57 · 1.77 · 1.97 · 2.56 · 2.95 · 3.54
Case heights [inch]	Customized from 0.98 to 9.06 [typically in 0.2inch steps]
External insulation	Lead free PVC sleeve with end disk · voltage proof ≥2500 A
Leakage current [I_L]	≤ 0,008 * C_R [µF] * U_R [V] + 6µA after 5 minutes at U_R
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V

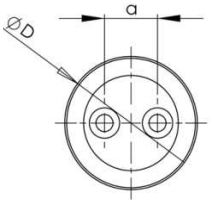

PI/GO




SL




SC/SB



The **MLytic® AG • Audio Grade Power Cap** series is especially engineered for use in small power and pre amplifiers.

MLGO • glue-on capacitors offer non-magnetic, straight, tinned copper wires Ø 1.2mm ≈ AWG17. Additionally they own a vibration-reducing, traction-relieving, self-adhesive MPSA • Mounting Pad.

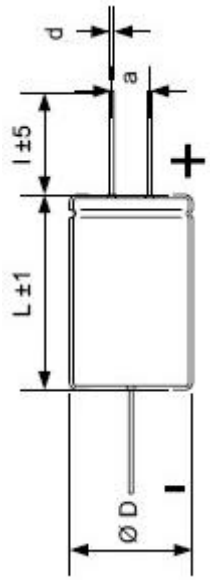
They supersede the well-known MLSI series. Drill hole spacing [pitch] of **MLGO • glue-on** remains 10mm/0.39inch. Hence they are snap-in capacitor intermateable and so particularly suitable for repairs and modifications.



MLGO
Audio Grade Power Cap, Glue-On, 2Pin

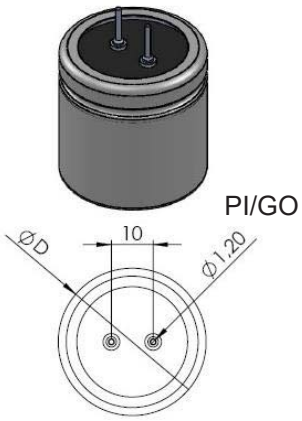
Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
100	1000	25 * 30	1,2 * 1,0	1,2	115	127	8	600	12,90
100	1500	25 * 35	1,2 * 1,0	1,5	115	85	8	900	14,90
80	10000	35 * 50	1,2 * 1,0	3,9	92	24	15	4800	29,90
63	2200	25 * 30	1,2 * 1,0	1,7	72	58	8	830	13,90
63	3300	30 * 30	1,2 * 1,0	2,1	72	48	10	1246	14,90
63	4700	30 * 35	1,2 * 1,0	2,6	72	41	12	1776	15,90
63	6800	30 * 40	1,2 * 1,0	3,0	72	28	12	2570	17,90
63	8200	30 * 45	1,2 * 1,0	3,4	72	23	12	3100	19,90
63	10000	30 * 50	1,2 * 1,0	3,5	72	24	15	3780	21,90
63	15000	35 * 60	1,2 * 1,0	5,1	72	16	15	5670	29,90
63	22000	35 * 70	1,2 * 1,0	6,0	72	13	18	8316	39,90
40	4700	25 * 30	1,2 * 1,0	1,8	46	51	15	1128	15,90
40	6800	25 * 35	1,2 * 1,0	2,1	46	42	18	1632	17,90
40	10000	30 * 40	1,2 * 1,0	2,7	46	35	22	2400	19,90
40	22000	35 * 50	1,2 * 1,0	4,4	46	18	25	5280	29,90
40	33000	35 * 60	1,2 * 1,0	5,3	46	14	30	7920	34,90
25	10000	25 * 35	1,2 * 1,0	2,4	28	32	20	1500	14,90
25	22000	30 * 40	1,2 * 1,0	3,5	29	20	28	3300	19,90
25	47000	35 * 50	1,2 * 1,0	5,9	29	10	30	7050	34,90

The **MLytic® HV · High Voltage Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 6 plus the following features:



AL

Supply availability	Typically immediately ex stock for all types listed on page 23
	4-6 weeks for your individual combination of features · from 144pcs only
Versatile applicable	RoHS-compliant · lead free REACH compliant Finest UL-listed ingredients only Sectional specification DIN 41332 · IEC 60384-4 Climatic category IEC 60068 40/105/56
Indication of origin	Made in Germany with greatest care
Capacitance range	4,7µF to 4 700µF
DC voltage range	250 · 350 · 400 · 450 · 500 · 550
Temperature range	-25°C/-13°F to 105°C/+220°F for 250V to 450V -40°C/-40°F to 85°C/+185°F for 500V to 550V
Diverse connectors	AL · axial leaded PI · plug-in GO · glue-on SL · solder-lugs
Useful lifetime [U_R · $I_{R\sim}$]	8 000 hours at +105°C/+220°F for 250V to 450V 16 000 hours at +85°C/+185°F for 250V to 450V 8 000 hours at +85°C/+185°F for 500V to 550V
Rated lifetime [U_R]	2 000 hours at +105°C/+220°F for 250V to 450V 2 000 hours at +125°C/+255°F for 500V to 550V
Case diameters [mm]	10 · 12 · 14 · 16 · 18 · 20 · 25 · 30 · 35 · 40 · 45
Case heights [mm]	Customized from 25 to 100 [typically in 5mm steps]
Case diameters [inch]	0.39 · 0.47 · 0.55 · 0.63 · 0.71 · 0.79 · 0.98 · 1.18 · 1.38 · 1.57 · 1.77
Case heights [inch]	Customized from 0.98 to 3.94 [typically in 0.2inch steps]
External insulation	Lead free PVC sleeve with end disk · voltage proof ≥2500 AC
Leakage current [I_L]	≤ 0,008 * C_R [µF] * U_R [V] + 6µA after 5 minutes at U_R
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V



PI/GO



SL

The **MLytic® HV • High Voltage Power Cap series** is especially engineered for use in tube amplifiers.Two classic double-capacity versions and two contemporary 2-pin layouts are available ex stock.

The ultra compact, axial leaded **MLAL** capacitors feature non-magnetic, tinned copper wires.

The superior **MLSL** 500V offers more powerful, non-magnetic DIN connectors for higher currents.

The snap-in intermateable **MLGO** capacitors offer non-magnetic, straight, tinned copper wires Ø 1.2mm ≈ AWG17. Additionally they own a vibration-reducing, traction-relieving, self-adhesive MPSA • Mounting Pad.





MLAL
High Voltage electrolyte Twin-Power Cap, Axial-Leaded, 3Pin

Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
450	47+47	30 * 50	1,4 * 50	0,3	495	3386	10	600	14,90
450	100+100	35 * 50	1,4 * 50	0,5	495	1592	10	270	17,90

MLAL
High Voltage Power Cap, Axial-Leaded, 2Pin

Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
500	10	16 * 39	0,8 * 40	0,1	550	9549	6	30	2,99
500	22	21 * 36	0,8 * 40	0,2	550	4341	6	66	3,99
500	33	25 * 38	0,8 * 40	0,3	550	2894	6	100	5,99
500	47	25 * 49	0,8 * 40	0,4	550	2032	6	142	7,99
500	100	30 * 49	1,0 * 40	0,6	550	955	6	300	9,99

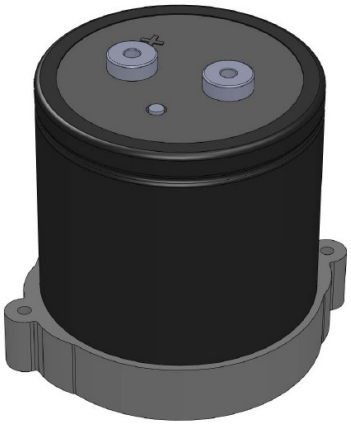
MLSL
High Voltage Electrolyte Twin-Power Cap, Solder-Lugs, 3Pin

Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
500	50+50	35 * 50	1 * 4 * 7	0,4	550	3183	10	400	17,90
500	100+100	35 * 66	1 * 4 * 7	0,5	550	1592	10	300	19,90
500	200+200	35 * 80	1 * 4 * 7	0,8	550	796	10	600	29,90

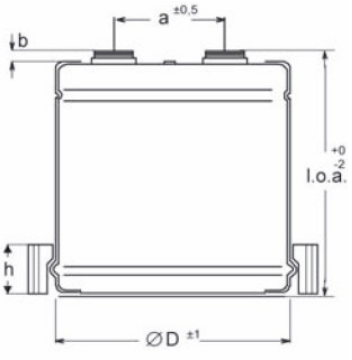
MLGO
High Voltage Power Cap, Glue-On, 2Pin

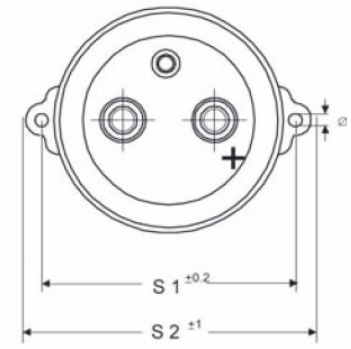
	Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
NEW	450	22	22 * 25	1,2 * 1,0	0,2	495	5064	7	180	11,90
NEW	450	47	22 * 25	1,2 * 1,0	0,3	495	2310	7	240	12,90
	450	100	25 * 30	1,2 * 1,0	0,3	495	2387	15	270	13,90
	450	150	30 * 30	1,2 * 1,0	0,5	495	1592	15	406	16,90
	450	220	30 * 40	1,2 * 1,0	0,6	495	1085	15	594	19,90
	450	330	35 * 40	1,2 * 1,0	0,8	495	723	15	892	24,90
	450	470	35 * 50	1,2 * 1,0	1,1	495	508	15	1270	29,90
	450	680	35 * 60	1,2 * 1,0	1,4	495	351	15	1836	39,90

The **MLytic® HC · High Current Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 6 plus the following features:



Supply availability	Typically immediately ex stock for all types listed on page 25
	4-6 weeks for your individual combination of features · from 18pcs only
Versatile applicable	RoHS-compliant · lead free REACH compliant Finest UL-listed ingredients only Sectional specification DIN 41332 · IEC 60384-4 Climatic category IEC 60068 40/105/56
Indication of origin	Made in Germany with greatest care
Capacitance range	1 000µF to 220 000µF
DC voltage range	40 · 50 · 63 · 80 · 100 · 160 · 250 · 350 · 450
Temperaturbereich	-25°C/-13°F to 105°C/+220°F
Useful lifetime [U_R · $I_{R\sim}$]	8 000 hours at +105°C/+220°F 16 000 hours at +85°C/+185°F
Nennlebensdauer [U_R]	2 000 hours at +105°C/+220°F
Gehäuse-Ø [mm]	50 · 75 · 90
Case heights [mm]	Customized from 70 to 100 [typically in 5mm steps]
Case diameters [inch]	1.97 · 2.95 · 3.54
Case heights [inch]	Customized from 2.76 to 3.94 [typically in 0.2inch steps]
External insulation	Lead free PVC sleeve with end disk voltage proof ≥2500 AC
Leakage current [I_L]	≤ 0,008 * C_R [µF] * U_R [V] + 6µA after 5 minutes at U_R
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V





Power Capacitors
MLytic HC

The **MLytic® HC • High Current Power Cap** offers ultra-low ESR and ESL, due to a patented internal connection technique.

These capacitors, which were originally developed for use in locomotives, are consequently optimized for audio purposes and designed for heatsink mounting.

They can handle houndreds of amperes and supply extreme pulse currents. That is why even massive bass attacks are performed absolutely authentic and punchy.

Additionally their exceptional fastness results in most dynamic and accurate low frequency as well as a revealing and vivid mid and high frequency reproduction.

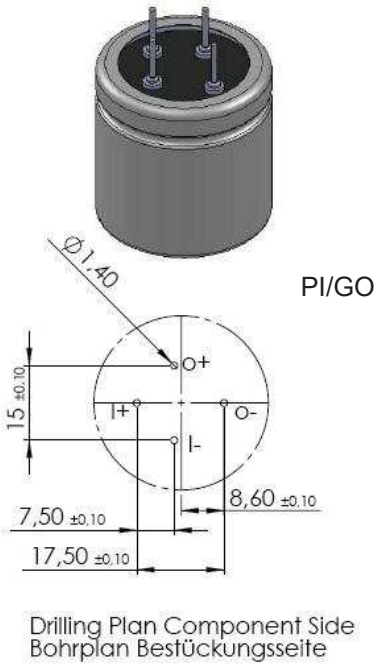


Casing	D	l.o.a	a	b	h	s1	s2	x
	[mm]	[mm]	Dimensions [mm]					
1	50	71	22.0	4	20	63	75	4.5
2	75	70	31.7	4	20	90	102	4.5
3	90	75	31.7	6	20	106	118	4.5
4	90	104	31.7	6	20	106	118	4.5

MLHC
High Current Power Cap, Screw-Terminal, 2Pin

Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
100	22000	90 * 69	M6 (3Nm)	14,9	115	7	10	13200	129,90
100	33000	90 * 69	M6 (3Nm)	18,3	115	5	10	19800	159,90
100	47000	90 * 98	M6 (3Nm)	24,4	115	3	10	28200	199,90
80	10000	50 * 67	M5 (2Nm)	9,2	92	11	7	4800	59,90
80	22000	75 * 66	M5 (2Nm)	13,0	92	7	10	10560	89,90
80	47000	90 * 69	M6 (3Nm)	21,8	92	3	10	22560	164,90

The **MLytic®+ 4-pole Filter Capacitor** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 6 plus the following features:



PI/GO

Drilling Plan Component Side
Bohrplan Bestückungsseite

Supply availability	Typically immediately ex stock for all types listed on page 27
	4-6 weeks for your individual combination of features · from 144pcs only
Versatile applicable	RoHS-compliant · lead free REACH compliant Finest UL-listed ingredients only Sectional specification DIN 41332 · IEC 60384-4 Climatic category IEC 60068 40/105/56
Indication of origin	Made in Germany with greatest care
4-Pole Technology	Separated in- and outputs for minimized ESR and ESL, no magnetic loss and exceptional filter characteristics. Note: Usable only in low-current applications*!*
Capacitance range	300µF to 3 300 000µF
DC voltage range	16 · 25 · 35 · 40 · 50 · 63 · 80 · 100 · 160 250 · 350 · 400 · 450 · 500 · 550
Temperature range	-40°C/-40°F to 125°C/+255°F [16V to 63V] -25°C/-13°F to 105°C/+220°F [80V to 450V] -40°C/-40°F to 85°C/+185°F [500V to 550V]
Useful lifetime [U_R · $I_{R\sim}$]	3 000 hours at +125°C/+255°F [16V to 63V] 8 000 hours at +105°C/+220°F [16V to 450V] 16 000 hours at +85°C/+185°F [16V to 450V] 8 000 hours at +85°C/+185°F [500V to 550V]
Rated lifetime [U_R]	1 000 hours at +125°C/+255°F [16V to 63V] 2 000 hours at +105°C/+220°F [16V to 450V] 2 000 hours at +85°C/+185°F [500V to 550V]
Case diameter [mm]	35
Case heights [mm]	Customized from 30 to 100 [typically in 5mm steps]
Case diameters [inch]	1.38
Case heights [inch]	Customized from 1.38 to 3.94 [typically in 0.2inch steps]
External insulation	Lead free PVC sleeve with end disk · voltage proof ≥2500 AC
Leakage current [I_L]	≤ 0,008 * C_R [µF] * U_R [V] + 6µA after 5 minutes at U_R
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V

The **MLytic®+ 4-pole Filter Capacitor** series is especially engineered for use in small but excellent power and pre amplifiers as well as in innovative first class tube amplifiers.

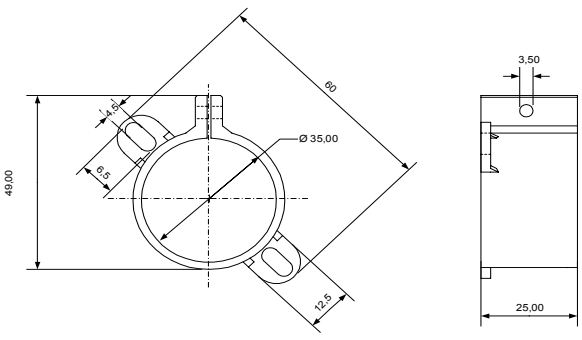
Due to their superior filter characteristics they are first choice for ambitious audio engineers. See previous page and key point 1.1.2 on page 6.

MLGO+ • glue-on capacitors offer non-magnetic, straight, tinned copper wires Ø 1.2mm ≈ AWG17. Additionally they own a vibration-reducing, traction-relieving, self-adhesive **Mounting Pad**.



MLGO+
Audio Grade Power Cap, Glue-On, 4Pin

Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
550	100	35 * 55	1,2 * 8	0,6	600	1273	8	330	24,90
550	220	35 * 55	1,2 * 8	0,8	600	579	8	724	29,90
550	470	35 * 70	1,2 * 8	1,0	600	508	10	1552	39,90
160	1000	35 * 35	1,2 * 8	1,3	184	159	10	960	19,90
160	1500	35 * 40	1,2 * 8	1,5	184	127	12	1440	24,90
100	2200	35 * 35	1,2 * 8	2,1	115	65	9	1320	21,90
100	3300	35 * 40	1,2 * 8	2,6	115	43	9	1980	24,90
100	4700	35 * 60	1,2 * 8	3,7	115	30	9	2820	29,90
80	6800	35 * 40	1,2 * 8	2,9	92	35	15	3264	21,90
80	10000	35 * 50	1,2 * 8	3,4	92	32	20	4800	24,90
63	15000	35 * 60	1,2 * 8	3,5	72	29	27	5670	34,90
63	22000	35 * 70	1,2 * 8	4,9	72	20	27	8316	44,90



MPSA
3M Mounting Pad, self-adhesive
Capacitor

Ø [mm]	pc [€]
25	1,39
30	1,49
35	1,59

MCNV
Mounting Clamp, nylon, vertical, black
Capacitor

Ø [mm]	pc [€]
35	1,49
40	1,99
50	2,49
65	2,99
75	3,99

The **TubeCap**® is made of polyprophylene film with special features. This is particularly thin and the self-healing properties are markedly pronounced due to a special coating. This leads to a very high electrical strength in the capacitor with compact dimensions.

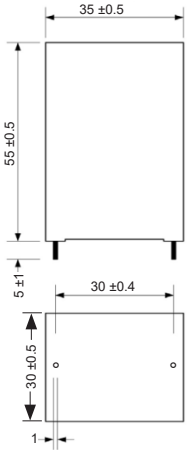
The **TubeCap**® combines a high degree of dielectric strength and low residual inductivity with a very compact form of construction. It has been developed as a high-quality technical alternative to high-voltage electrolytic capacitors and is thus ideally suited to use in tube amplifiers.

The advantages vis-à-vis electrolytic capacitors are:

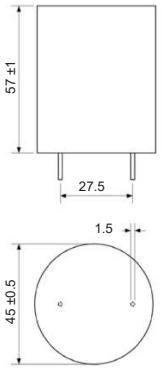
- Lower ESR and lower residual inductivity
- No drying out; therefore longer service life
- Excellent Self-healing properties
- More compact form of construction
- There is no series connection necessary for increasing the dielectric strength.



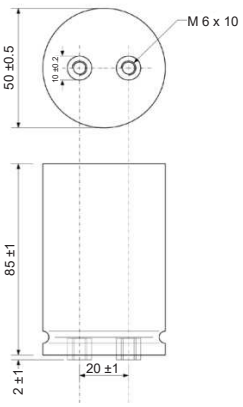
Technical specifications:
Dielectric: Polypropylen
Dielectric strengh: 550-1 000 VDC
Loss factor: tan ∂ < 0.005 bei 1 kHz
Sealing compound: PU UL 94-V0
Useful Life: 100 000 h @ hot spot 60°
Failure rate: 1 fit
Cover: 0.5 x U_N; 40°
Permissible ambient temperature 85°C/185°F



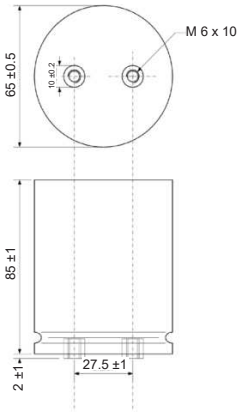
Specifications casing 1:
Bucket: Plastic bucket UL 94-V0
Terminals:
copper wire, tin-plated Ø1.0 mm
Weight: approx. 70g



Specifications casing 2:
Bucket: aluminum bucket, unshrunken UL 94-V0
Terminals:
copper wire, tin-plated Ø1,4 mm
Weight: approx. 105g



Specifications casing 3:
Bucket: aluminum bucket, unshrunken UL 94-V0
Terminals:
internal screw thread M6 x 10
Weight: approx. 215g



Specifications casing 4:
Bucket: aluminum bucket, unshrunken UL 94-V0
Terminals:
internal screw thread M6 x 10
Weight: approx. 345g

TCAP
MKP-capacitors for tubes applications

Capacity [µF] ±5%	VDC	Casing	ESR@10 Hz (typ.) [mOhm]	ESL @500kHz [nH]	[€]
10	1000	1	13	17,0	19,90
20	750	1	10	17,0	21,90
30	600	1	9	17,0	27,90
47	600	2	7	24,5	37,90
100	550	3	9	88,6	89,90
200	550	4	9	92.5	149,90

Storage capacitors are basic equipment for every high class car stereo.
Because no audio system is better than its power supply!

The installation should be performed by an expert only. Also any follow-up works at the car's electrical system have to performed with utmost caution (danger of short circuit).

Mundorf HeadCaps solving almost every car receiver problem caused by voltage issues, like:

- Flickering monitors
- Losing navigation data while start/stop processes
- Losing phone connections while start/stop processes

Additional Features:

- More detailed, subtle and powerful music reproduction
- Available as on-board computer friendly version MPC68i
- Relieves and protects batteries and alternators
- Follow-me-home-music



MPC68



MPC68i

MPowerSupply
HeadCap

	Type	Rated Voltage [VDC]	Capacitance [µF]	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
NEW	MPC68	25	68000	50 * 80	M5 (2Nm)	64,90
NEW	MPC68i	25	68000	50 * 90	M5 (2Nm)	79,90

Mundorf PowerCaps guarantee stabilized voltage directly at the amp.
Consequently optimized for highest power pulse currents, our storage capacitors ensure extra power at the decisive moment.
The result is a powerful and precise bass and a brilliant, open sound characteristics.

MPowerSupply
PowerCap

Type	Rated Voltage [VDC]	Capacitance [F]	Body Ø * L [mm]		[€]
PCC100	18	1,0	75 * 225	M5 (2Nm)	179,90
PCC150	18	1,5	75 * 225	M5 (2Nm)	229,90



PCC 1000

The sound characteristics of a coil are not only determined by the coil core (see p. 32) and the manufacturing quality but also by the wire type used. In order to be able to offer you the right coil for each application we use **three types of wires** made of **three materials** of highest purity.

OFC copper
Coils that use oxygen-free copper (99.997% purity) as conductor material are characterised by a harmonic, stereophonic reproduction of music, rich in detail, and an excellent price/performance ratio.

Pure silver
Due to their ability to reproduce voices and instruments in a more dynamic, detailed, spatial manner and with more timbres compared to copper coils, silver coils of highest purity (type 99.99%) are highly appreciated and preferred by a number of audio enthusiasts.

SilverGold
99% silver + 1% gold = 100% music.
This does not only add up for capacitors such as the MCap® SUPREME SilverGold.Oil and audio cables, but also for coils. The high-purity gold (type 99.99%) changes the crystalline structure of silver and maximises its very good electric conductivity. Instruments and voices unfold their full range of timbres and their character is illuminated and becomes perceivable in all shades. On the one hand `crystal clear,´ the reproduction is at the same time vibrant and warm, embedded in a finely differentiated, location-true image. Purity and fine elegance combined with a vibrant character distinguish this exquisite material from all others!

SolidCore wires
The reproduction of music by coils made of **solid round wires** (also referred to as SolidCore) excels by natural vibrancy and fineness as well as highest tonal neutrality. Another benefit of round wire coils are their highly compact dimensions. Like all Mundorf coils, they are wound and mounted by hand with highest accuracy and precision using special machines in Germany.

OFC standard is the most cost-efficient, audio-compatible coil wire and available in diameters from 0.50 to 3.90mm. Coils made of this material, however, do not have an additional coil fixation and thus have a disadvantage with respect to sound compared to all other coil types manufactured by Mundorf: This is because electric current passing through a coil will always cause a vibration of the entire winding. Due to the microphonic effect (the conversion of mechanical oscillations to electric oscillations) these mechanical oscillations are added to the original signal as additional information. This results in an interference with and an alienation of the details of the original signal. On the one hand, this results in a loss of spatial quality and transparency of the music and on the other hand in an increase of distortions and tonal discolorations of the signal. This physically induced unwanted effect, however, can be eliminated completely by the use of baked varnish wire or by means of vacuum impregnation.

Baked varnish coils have a special, solid OFC round wire with an additional layer of varnish. After the coil has been wound, it is heated up by means of an electric impulse causing the additional layer to melt. When cooling down, the individual windings are firmly bonded together by the baked varnish and are thus prevented from vibrating and the original signal remains uncorrupted. Unfortunately, self-bonding wires are only available in diameters from 0.50 to 1.40mm.
Vacuum impregnation is another procedure, equally effective as heat bonding, which we offer for coils with larger wire diameters (2.00 to 3.90mm). In vacuum impregnation, the coil is first impregnated with a special lacquer up to the innermost windings under vacuum. Subsequently, the impregnated coil is dried at 130° Celsius. Thus the whole coil is baked into a very solid unit.

Vacuum impregnation is another procedure, equally effective as heat bonding, which we offer for coils with larger wire diameters (2.00 to 3.90mm). In vacuum impregnation, the coil is first impregnated with a special lacquer up to the innermost windings under vacuum. Subsequently, the impregnated coil is dried at 130° Celsius. Thus the whole coil is baked into a very solid unit.

Hepta strand

The use of a strand of **seven individually isolated OFC self-bonding wires** gives the reproduction of music a fine, smooth, harmonic character, which is rich in detail at the same time. These acoustic characteristics are praised and appreciated by our customers, in particular when it comes to the musical `cultivation´ of speaker chassis with a tendency to tonal sharpness or hardness without having a negative impact on qualities such as brilliance and richness in detail.
The character is mainly formed by the use of round wires as single conductors and their special stranding. The baked winding and the reinforced PA coil body together form a winding unit of **highest mechanical stability** and tranquillity. Distortions and discolorations of the music signal are thus largely eliminated. In addition, the large surface of the seven-fold strand improves the effective conductivity for higher-frequent AC (skin effect). Our 7 x 0.6mm strand corresponds to a round wire diameter of approx. 1.60mm.

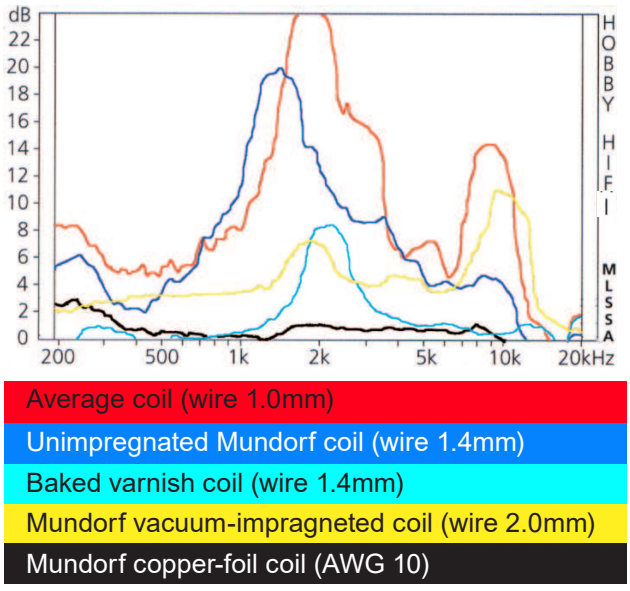
Foil coils

The reproduction of music by coils made of **solid metal foil** (also referred to as ribbon coils) excels by extraordinary dynamics, unparalleled detail and holographic spatial quality and lowest distortions and discolorations - Even finest nuances are represented in a realistic manner. Mundorf foil coils have thus become an integral part of many top-class audiophile products.

With its individual coils wound on each other, the foil coil corresponds to the **physically ideal coil** more than any other design. This is for example reflected in the quality of the coil which remains constant up to beyond 100 kilohertz. Furthermore, these coils are particularly **low-capacitive**, even though the similarity to a wound capacitor suggests the opposite so that even very high frequencies are isolated effectively. In addition, the large surface of the metal film improves the effective conductivity for higher-frequency alternating current (skin effect).

Another remarkable feature is the **high mechanical stability** of these coil types, which are carefully baked by hand: Due to the **large contact surface** between the individual windings and the viscoplastic isolation of the polypropylene foil the oscillations of the individual windings are eliminated effectively. These advantages can be seen clearly in the diagram shown below: Foil coils have the **lowest measured vibrations**. We offer copper foils in widths corresponding to round wire diameters of approx. 1.25mm • 1.60mm • 2.00mm and 2.50mm.

Vibrations of coils



The sound characteristics of a coil are not only determined by the coil wire (see p. 30) and the manufacturing quality but also by the coil core used. As the use of different cores results in coils with different advantages and disadvantages we offer **four core materials** and a total of seven core types. This enables us to manufacture exactly the right coil for each application.

In order to avoid microphonic effects, all Mundorf coils are wound on a coil body. This ensures mechanical stabilisation of the winding, decoupling of the coil from the board and, in addition, facilitates the manufacturing process.

Air coils

The ideal core material for coils is air. Air cored coils are, for physical reasons, superior to all metal core coils as far as accurate pulse reproduction and freedom from distortion are concerned. They can be used in all areas; either as highpass filter in the middle frequency range, as bass coil (with large conductor cross section) or in correcting components (with thin wire cross section).

Precision, dynamic, subtle tonal gradations, great detail and liveliness distinguish coils with air core from all others. In high-quality speakers, they are thus the basis for realistic and harmonic musical enjoyment. (from p. 33)

Core coils

Core coils have a metal core which reinforces the magnetic field. Compared to air coils, smaller, cheaper coils with higher inductivity and lower ohmic resistance can be realised. However, the metal core also affects the music signal (among other things due to unwanted distortions).

Ferrite cores are sintered from a metal-plastic-powder. The high-performance material HP3616 we use is characterised by low elementary distortions and low hysteresis losses (= rapid change in magnetization). The marginal music signal delay makes ferrite inductors perfectly suitable for equalization networks and mid-driver applications. Additionally our HP3616 is also well-suited for low-power mid-woofers. (from p. 40)

Aronit cores (also known as P cores) are made of metal-ceramics-powder, which causes only low power distortions. Due to their compact dimensions, low RDC and excellent price/performance-ratio they are perfectly suitable for woofer, subwoofer and PA applications. (from p. 40)

Feron cores consist of an iron-silicon alloy (also called electrical sheets). Our high-performance transformer plates are rolled and tampered several times using special procedures so that all crystals are oriented in the same direction (grain oriented) and a uniform crystal-lattice structure is obtained. Mundorf Feron core coils thus differ from conventional, similar looking coils in a measurable and audible way. They stand out due to minimum basic distortion, magnetic reversal losses and distortions while having a high performance and are thus suitable for flexible applications. (from p. 44)

Zero-Ohm Coils (ZOC) are a speciality of our company. In the ZOC, an air gap is calibrated and precisely adjusted by hand between two sheet metal packages made of Feron. The air gap determines the inductivity of the coil and demands great care in the manufacturing process. The high production costs of the ZOC are always justified when maximum faithfulness in pulse reproduction of the playback is required. This special form of the Feron core coil helps to realise lower internal resistances as compared to other core types. (from p. 46)

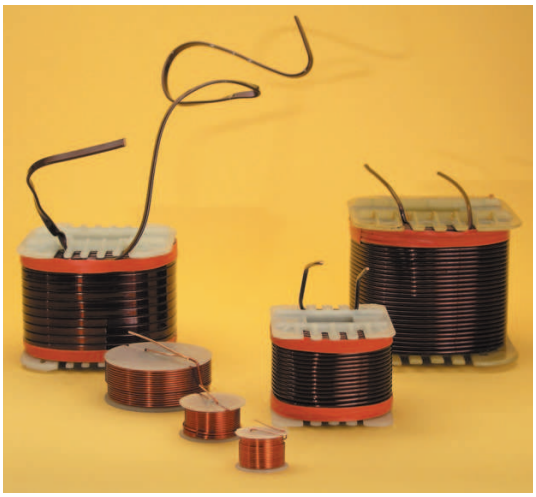
MCoil Air Coils made from massive copper round-wire have been specially developed for high quality loudspeakers, which focus on achieving an utmost natural, detailed and acoustically balanced music performance.

The acoustical properties of the **L** series can yet be significantly enhanced by applying Baked Wire Treatment - on air coils using wires with a larger cross-section - by Vacuum Impregnation.

Baked Wire Treatment coils are listed as **BL** in the following table. Vacuum impregnated coils are marked **VL**.

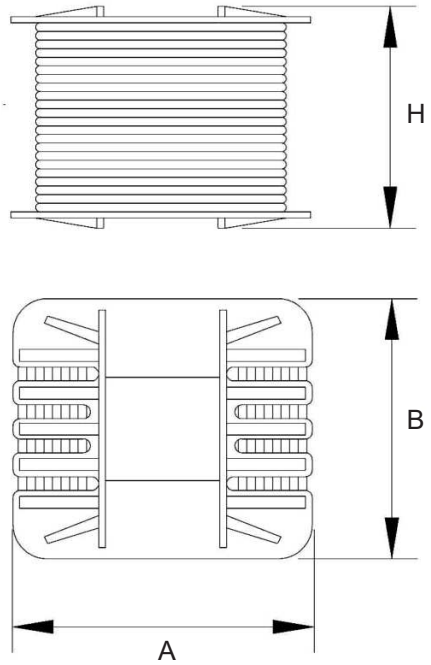
Please find detailed information on the advantages of different coil technologies on pages 30 to 32.

Key words: Air coils • OFC-Copper • Solid Core

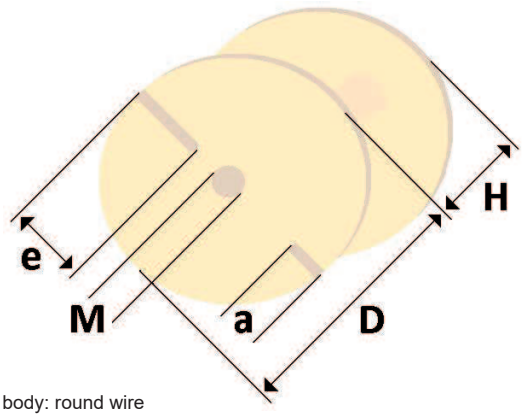


Technical specifications:
OFC-Copper 99.99%
Coil form: PA, fibre-glass reinforced
Coil body heat resistant up to max. 230°C/446°F

Body cubical	A	B	H
	Dimensions [mm]		
106	89	76	61
130	105	93	79
150	123	108	89
170	151	120	106
195	162	136	138



Body round	D	H	M	a	e
	Dimensions [mm]				
2510	25	10	5	3	6
3020	30	20	5	3	9
4020	40	20	5	5	12
5818	58	18	5	6	20
5822	58	22	5	10	20
5828	58	28	5	10	20
7029	70	29	5	10	22
7728	77	28	5	6	26
7059	70	59	22	10	22



body: round wire

Air-core coils, wire Ø 0.50 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L50 [€]
0,10	0,36	2510	3,19
0,12	0,42	2510	3,29
0,15	0,45	2510	3,29
0,18	0,52	2510	3,69
0,22	0,59	2510	3,99
0,27	0,67	2510	4,29
0,33	0,78	2510	4,59
0,39	0,85	2510	4,89
0,47	1,08	3020	5,19
0,56	1,16	3020	5,49
0,68	1,31	3020	5,79
0,82	1,40	3020	6,09
1,0	1,65	3020	6,39
1,2	1,80	3020	6,79
1,5	1,98	3020	7,19
1,8	2,26	3020	7,59
2,0	2,37	3020	7,99
2,2	2,47	3020	8,39
2,7	2,81	3020	8,79
3,0	2,98	3020	9,19
3,3	3,13	3020	9,59
3,9	3,49	4020	9,99
4,7	3,85	4020	10,90

NEW **Air-core coils, wire Ø 0.71 mm**

Inductance [mH] ±2%	RDC [Ohm]	Body	BL71 [€]
0,010	0,06	2510	4,49
0,015	0,08	2510	4,69
0,022	0,09	2510	4,89
0,033	0,11	2510	5,09
0,047	0,14	2510	5,29
0,068	0,18	2510	5,49

Air-core coils, wire Ø 1.00 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L100 [€]	BL100 [€]
0,10	0,14	3020	5,19	7,19
0,12	0,15	3020	5,49	7,49
0,15	0,17	3020	5,99	7,79
0,18	0,19	3020	6,49	8,19
0,22	0,21	3020	6,99	8,59
0,27	0,23	3020	7,49	8,99
0,33	0,26	4020	7,99	9,49
0,39	0,29	4020	8,49	9,99
0,47	0,32	4020	8,99	10,50
0,56	0,36	4020	9,49	10,90
0,68	0,39	4020	9,99	11,90
0,82	0,44	4020	10,90	12,90
1,0	0,49	5818	11,90	13,90
1,2	0,54	5818	12,90	14,90
1,5	0,62	5818	13,90	15,90
1,8	0,70	5818	14,90	16,90
2,0	0,74	5822	15,90	17,90
2,2	0,77	5822	16,90	18,90
2,7	0,90	5828	17,90	20,50
3,0	0,98	5828	18,90	21,90
3,3	1,00	5828	19,90	22,50
3,9	1,13	5828	21,90	23,90
4,7	1,22	7029	23,90	25,90
5,6	1,35	7029	26,90	28,90
6,8	1,56	7029	29,90	31,90
8,2	1,69	7029	32,90	34,90
10	1,91	7028	35,90	39,90
12	2,14	7728	38,90	46,90
15	2,41	7728	41,90	54,90

Air-core coils, wire Ø 0.71 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L71 [€]	BL71 [€]
0,10	0,23	2510	3,59	5,69
0,12	0,28	3020	3,79	5,79
0,15	0,31	3020	3,99	5,89
0,18	0,34	3020	4,19	5,99
0,22	0,38	3020	4,39	6,19
0,27	0,42	3020	4,59	6,39
0,33	0,47	3020	4,79	6,69
0,39	0,52	3020	4,99	6,99
0,47	0,58	3020	5,29	7,49
0,56	0,64	3020	5,59	7,99
0,68	0,71	3020	5,99	8,49
0,82	0,79	3020	6,49	8,99
1,0	0,88	3020	6,99	9,49
1,2	0,99	4020	7,49	9,99
1,5	1,11	4020	7,99	10,50
1,8	1,22	4020	8,49	10,90
2,0	1,31	4020	9,19	11,50
2,2	1,39	4020	9,99	11,90
2,7	1,53	4020	10,50	12,90
3,0	1,63	4020	10,90	13,90
3,3	1,76	4020	11,90	14,90
3,9	1,91	5818	12,90	15,90
4,7	2,19	5818	13,90	16,90
5,6	2,35	5818	14,90	17,90
6,8	2,61	5818	16,90	19,90
8,2	3,05	5828	18,90	23,90
10	3,38	5828	20,90	27,90
12	3,65	7029	22,90	31,90
15	4,30	7029	25,90	35,90
18	4,77	7029	28,90	39,90
22	5,26	7029	31,90	47,90
27	5,95	7029	35,90	55,90

Air-core coils, wire Ø 1.25 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L125 [€]	BL125 [€]
0,10	0,09	3020	6,99	8,99
0,12	0,10	3020	7,49	9,49
0,15	0,11	4020	7,99	9,99
0,18	0,13	4020	8,49	10,90
0,22	0,14	4020	8,99	11,90
0,27	0,15	5818	9,99	12,90
0,33	0,18	5818	10,90	13,90
0,39	0,20	5818	11,90	14,90
0,47	0,22	5818	12,90	15,90
0,56	0,24	5818	13,90	16,90
0,68	0,28	5818	14,90	17,90
0,82	0,29	5818	15,90	19,90
1,0	0,34	5822	16,90	21,90
1,2	0,44	5828	17,90	23,90
1,5	0,47	5828	18,90	25,90
1,8	0,55	5828	19,90	27,90
2,0	0,55	5828	21,90	29,90
2,2	0,57	7029	23,90	31,90
2,7	0,61	7029	25,90	33,90
3,0	0,65	7029	27,90	35,90
3,3	0,69	7029	29,90	37,90
3,9	0,75	7029	31,90	39,90
4,7	0,84	7728	34,90	44,90
5,6	0,95	7728	39,90	49,90
6,8	1,19	7059	44,90	54,90
8,2	1,34	7059	49,90	59,90
10	1,49	7059	54,90	64,90

Air-core coils, wire Ø 1.40 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L140 [€]	BL140 [€]
0,10	0,07	4020	8,49	9,90
0,12	0,08	4020	9,19	10,90
0,15	0,10	4020	9,99	11,90
0,18	0,11	5818	10,90	12,90
0,22	0,12	5818	11,90	13,90
0,27	0,13	5818	12,90	14,90
0,33	0,15	5818	13,90	15,90
0,39	0,16	5818	14,90	16,90
0,47	0,19	5818	15,90	17,90
0,56	0,20	5822	16,90	18,90
0,68	0,23	5828	17,90	19,90
0,82	0,26	5828	18,90	21,90
1,0	0,28	5828	19,90	23,90
1,2	0,31	7029	21,90	25,90
1,5	0,38	7029	23,90	27,90
1,8	0,40	7029	25,90	29,90
2,0	0,43	7029	27,90	31,90
2,2	0,46	7029	29,90	33,90
2,7	0,51	7728	31,90	36,90
3,0	0,55	7728	33,90	39,90
3,3	0,58	7728	36,90	44,90
3,9	0,65	7728	39,90	49,90
4,7	0,77	7059	44,90	54,90
5,6	0,89	7059	49,90	59,90
6,8	0,96	7059	55,90	64,90
8,2	1,10	7059	61,90	69,90

NEW **Air-core coils, wire Ø 1.80 mm**

Inductance [mH] ±2%	RDC [Ohm]	Body	BL180 [€]
0,10	0,05	5818	11,90
0,12	0,05	5818	12,90
0,15	0,06	5818	13,90
0,18	0,07	5818	14,90
0,22	0,08	5822	15,90
0,27	0,09	5828	17,90
0,33	0,10	5828	19,90
0,39	0,11	5828	21,90
0,47	0,12	7029	23,90
0,56	0,14	7029	25,90
0,68	0,15	7029	27,90
0,82	0,17	7029	29,90
1,0	0,20	7728	32,90
1,2	0,22	7728	35,90
1,5	0,28	7059	39,90
1,8	0,31	7059	43,90
2,0	0,32	7059	47,90
2,2	0,34	7059	51,90
2,7	0,39	7059	55,90
3,0	0,40	106	59,90
3,3	0,42	106	64,90
3,9	0,47	106	69,90
4,7	0,53	130	79,90
5,6	0,59	130	89,90
6,8	0,65	130	99,90
8,2	0,72	130	109,90
10	0,80	130	119,90
12	0,90	130	129,90

NEW **Air-core coils, wire Ø 2.36 mm**

Inductance [mH] ±2%	RDC [Ohm]	Body	L236 [€]	VL236 [€]
0,10	0,04	5828	17,90	24,90
0,12	0,04	5828	18,90	25,90
0,15	0,05	5828	19,90	26,90
0,18	0,05	5828	21,90	27,90
0,22	0,06	5828	23,90	29,90
0,27	0,06	7029	25,90	31,90
0,33	0,07	7728	27,90	33,90
0,39	0,08	7728	29,90	36,90
0,47	0,09	7059	32,90	39,90
0,56	0,10	7059	35,90	42,90
0,68	0,11	7059	39,90	45,90
0,82	0,12	7059	44,90	49,90
1,0	0,14	7059	49,90	54,90
1,2	0,15	106	59,90	59,90
1,5	0,17	106	64,90	64,90
1,8	0,20	130	69,90	69,90
2,0	0,21	130	74,90	75,90
2,2	0,22	130	79,90	82,90
2,7	0,25	130	84,90	89,90
3,0	0,26	130	89,90	99,90
3,3	0,28	130	99,90	109,90
3,9	0,30	130	109,90	119,90
4,7	0,34	150	119,90	129,90
5,6	0,38	150	129,90	139,90
6,8	0,42	150	139,90	149,90
8,2	0,46	150	159,90	169,90
10	0,54	170	179,90	189,90
12	0,59	170	199,90	214,90
15	0,67	170	219,90	239,90
18	0,74	170	249,90	269,90

Air-core coils, wire Ø 3.00 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L300 [€]	VL300 [€]
0,10	0,02	7029	33,90	39,90
0,12	0,03	7029	36,90	42,90
0,15	0,03	7728	39,90	45,90
0,18	0,04	7728	42,90	49,90
0,22	0,04	7059	45,90	53,90
0,27	0,04	7059	48,90	57,90
0,33	0,05	7059	51,90	61,90
0,39	0,05	7059	55,90	65,90
0,47	0,06	7059	59,90	69,90
0,56	0,06	130	69,90	79,90
0,68	0,07	130	79,90	89,90
0,82	0,08	130	89,90	99,90
1,0	0,09	130	99,90	109,90
1,2	0,10	130	109,90	119,90
1,5	0,12	130	124,90	134,90
1,8	0,13	150	139,90	149,90
2,0	0,14	150	154,90	164,90
2,2	0,15	150	169,90	179,90
2,7	0,17	150	184,90	194,90
3,0	0,18	150	199,90	209,90
3,3	0,19	150	219,90	229,90
3,9	0,21	170	239,90	249,90
4,7	0,24	170	259,90	269,90
5,6	0,25	170	289,90	299,90
6,8	0,29	170	319,90	329,90
8,2	0,32	170	349,90	369,90
10	0,38	195	399,90	429,90
12	0,42	195	459,90	489,90
15	0,46	195	519,90	549,90

Air-core coils, wire 6 * 2 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	L390 [€]	VL390 [€]
0,10	0,01	106	61,90	69,90
0,12	0,01	106	64,90	74,90
0,15	0,02	130	69,90	79,90
0,18	0,02	130	79,90	84,90
0,22	0,03	130	89,90	89,90
0,27	0,03	130	99,90	99,90
0,33	0,03	130	109,90	114,90
0,39	0,04	130	119,90	129,90
0,47	0,04	150	139,90	149,90
0,56	0,04	150	159,90	169,90
0,68	0,05	150	179,90	189,90
0,82	0,06	150	199,90	219,90
1,0	0,06	170	229,90	249,90
1,2	0,07	170	259,90	279,90
1,5	0,08	170	289,90	309,90
1,8	0,09	170	319,90	339,90
2,0	0,11	170	349,90	369,90
2,2	0,12	170	379,90	399,90
2,7	0,13	195	419,90	439,90
3,0	0,14	195	459,90	479,90
3,3	0,15	195	499,90	519,90
3,9	0,17	195	539,90	559,90
4,7	0,19	195	579,90	604,90
5,6	0,22	195	629,90	659,90

MCoil Hepta Strand coils unite the tonal clarity, beauty and distortion-free performance of air core coils with the stereophonic spaciousness of tightly-wound coils, alongside the harmonious-warmth and splendid brightness of strand copper wire.

They are therefore the first choice for high quality high and mid frequency applications which focus on a finely detailed, utmost refined musical fidelity performed within a truly holographic life-like staging.

Please find detailed information on the ad-vantages of different coil technologies on pages 30 to 32.
Key words: Air coils • OFC-Copper • Hepta Strand



Technical specifications:
OFC-Copper 99.99%
Coil form: PA, fibre-glass reinforced
Coil body heat resistant up to max. 230°C/446°F

NEW **Air-core coils, litz of wire 7 * 0.45 mm, baked varnish**
Cross-section 1,11 mm² ≙ round wire Ø 1.19 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	LL45 [€]
0,10	0,11	4020	9,99
0,12	0,12	4020	10,90
0,15	0,14	4020	11,90
0,18	0,17	4020	12,90
0,22	0,18	5818	13,90
0,27	0,20	5818	14,90
0,33	0,22	5818	15,90
0,39	0,24	5818	17,90
0,47	0,27	5822	19,90
0,56	0,30	5822	21,90
0,68	0,34	5828	23,90
0,82	0,38	5828	25,90
1,0	0,42	5828	27,90
1,2	0,46	7029	29,90
1,5	0,51	7029	31,90
1,8	0,56	7029	33,90
2,0	0,61	7029	36,90
2,2	0,66	7728	39,90
2,7	0,76	7728	44,90
3,0	0,81	7728	49,90
3,3	0,93	7059	54,90
3,9	1,01	7059	59,90
4,7	1,16	7059	64,90
5,6	1,29	7059	69,90
6,8	1,42	7059	79,90

MCoil FC foil coils are wound layer by layer and are of particularly low-capacitive, even though their similarity to our foil wound capacitors would suggest otherwise.

Their unique performance quality unites the tonal virtues of OFC Copper foil with the clarity and precision generally typical for all air core coils, alongside the authenticity of a tightly cemented reel which is practically microphonic-free.

For High-End mid and high frequency applications, they are particularly distinguished by their 3D-like staging, their harmoniously-dynamic vitality and detailed performance.

If you want truly distortion-free but multi-faceted and all-musical beauty, you may consider copper foil coils as first choice for your bass coils.

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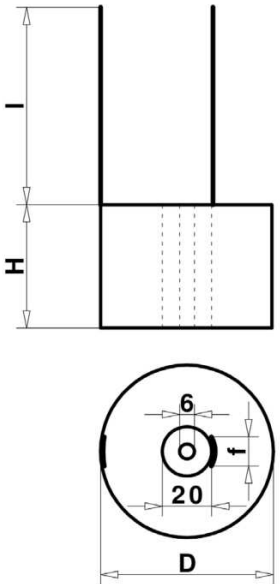
Please find detailed information on the advantages of different coil technologies on pages 30 to 32.

Key words: Air coils • OFC-copper • Foil coils



Technical specifications:
Cu-Foil: 70 µ / OFC-Copper 99,99% pure
Insulation: Polypropylen 20 µ / central bore: 6 mm
Permissible ambient temperature: 85°C/185°F

AWG	Foil W*H [mm]	Insulation [µm]	Cross section [mm^2]	≙ round wire Ø [mm]	f ±1 [mm]
…FC16	17 * 0,07	20	1,19	1,23	17
…FC14	28 * 0,07	20	1,96	1,58	15
…FC12	44 * 0,07	20	3,08	1,98	16
…FC10	70 * 0,07	20	4,90	2,50	19
…FC7	70 * 0,15	30	10,50	3,70	19





Air-core coils, foil 17 mm
Cross-section 1.19 mm² ≙ round wire Ø 1.23

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	CFC16 [€]
0,10	0,10	34 * 24	12,50
0,12	0,11	35 * 24	12,90
0,15	0,12	37 * 24	13,90
0,18	0,13	38 * 24	14,90
0,22	0,15	39 * 24	15,90
0,27	0,16	42 * 24	16,90
0,33	0,18	44 * 24	17,90
0,39	0,20	46 * 24	18,90
0,47	0,23	48 * 24	19,90
0,56	0,26	50 * 24	20,90
0,68	0,29	52 * 24	22,50
0,82	0,31	54 * 24	23,90
1,0	0,37	57 * 24	25,90
1,2	0,41	61 * 24	27,90
1,5	0,47	65 * 24	29,90
1,8	0,50	68 * 24	31,90
2,0	0,55	70 * 24	33,90
2,2	0,58	69 * 24	35,90
2,7	0,65	77 * 24	38,90
3,0	0,70	79 * 24	41,90
3,3	0,74	81 * 24	45,90
3,9	0,84	85 * 24	49,90
4,7	0,93	88 * 24	54,90
5,6	1,05	93 * 24	59,90
6,8	1,18	100 * 24	64,90
8,2	1,31	108 * 24	69,90

Air-core coils, foil 28 mm
Cross-section 1.96 mm² ≙ round wire Ø 1.58 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	CFC14 [€]
0,10	0,07	36 * 34	16,90
0,12	0,08	38 * 34	17,90
0,15	0,09	40 * 34	18,90
0,18	0,10	41 * 34	19,90
0,22	0,11	44 * 34	21,90
0,27	0,12	46 * 34	23,90
0,33	0,13	48 * 34	25,90
0,39	0,14	50 * 34	27,90
0,47	0,16	52 * 34	29,90
0,56	0,18	54 * 34	31,90
0,68	0,20	56 * 34	33,90
0,82	0,22	59 * 34	35,90
1,0	0,26	62 * 34	37,90
1,2	0,29	65 * 34	39,90
1,5	0,33	69 * 34	44,90
1,8	0,36	72 * 34	49,90
2,0	0,39	75 * 34	52,50
2,2	0,41	77 * 34	54,90
2,7	0,46	82 * 34	59,90
3,0	0,48	84 * 34	64,90
3,3	0,50	85 * 34	69,90
3,9	0,55	89 * 34	74,90
4,7	0,62	94 * 34	79,90
5,6	0,68	99 * 34	89,90
6,8	0,78	101 * 34	99,90
8,2	0,86	109 * 34	114,90
10	0,90	114 * 34	129,90
12	0,95	118 * 34	149,90
15	1,20	125 * 34	179,90

Air-core coils, foil 44 mm
Cross-section 3.08 mm² ≙ round wire Ø 1.98

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	CFC12 [€]
0,10	0,05	41 * 52	26,90
0,12	0,06	41 * 52	27,90
0,15	0,06	44 * 52	29,90
0,18	0,07	45 * 52	31,90
0,22	0,08	47 * 52	33,90
0,27	0,09	49 * 52	36,90
0,33	0,10	51 * 52	39,90
0,39	0,11	53 * 52	42,90
0,47	0,12	55 * 52	45,90
0,56	0,14	57 * 52	49,90
0,68	0,15	60 * 52	54,90
0,82	0,17	64 * 52	59,90
1,0	0,19	68 * 52	65,90
1,2	0,21	70 * 52	72,90
1,5	0,24	74 * 52	79,90
1,8	0,26	76 * 52	89,90
2,0	0,28	80 * 52	94,90
2,2	0,29	81 * 52	99,90
2,7	0,32	84 * 52	109,90
3,0	0,35	88 * 52	119,90
3,3	0,37	91 * 52	129,90
3,9	0,39	95 * 52	139,90
4,7	0,46	96 * 52	149,90
5,6	0,50	105 * 52	164,90
6,8	0,56	110 * 52	179,90
8,2	0,63	117 * 52	209,90
10	0,72	120 * 52	239,90
12	0,80	128 * 52	269,90
15	0,88	132 * 52	299,90
18	0,99	135 * 52	329,90

Air-core coils, foil 70 mm
Cross-section 4.90 mm² ≙ round wire Ø 2.50 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	CFC10 [€]
0,10	0,04	43 * 77	39,90
0,12	0,04	44 * 77	44,90
0,15	0,05	47 * 77	49,90
0,18	0,05	48 * 77	54,90
0,22	0,06	50 * 77	59,90
0,27	0,06	53 * 77	69,90
0,33	0,07	56 * 77	79,90
0,39	0,08	57 * 77	89,90
0,47	0,09	59 * 77	99,90
0,56	0,10	62 * 77	109,90
0,68	0,11	65 * 77	119,90
0,82	0,12	67 * 77	129,90
1,0	0,14	71 * 77	139,90
1,2	0,15	76 * 77	149,90
1,5	0,17	80 * 77	164,90
1,8	0,19	83 * 77	179,90
2,0	0,20	83 * 77	194,90
2,2	0,21	88 * 77	209,90
2,7	0,23	93 * 77	224,90
3,0	0,25	93 * 77	239,90
3,3	0,27	97 * 77	254,90
3,9	0,28	104 * 77	269,90
4,7	0,31	108 * 77	299,90
5,6	0,36	111 * 77	329,90
6,8	0,41	121 * 77	369,90
8,2	0,47	124 * 77	409,90
10	0,54	130 * 77	449,90
12	0,60	132 * 77	499,90
15	0,66	136 * 77	549,90

Air-core coils, foil 70 mm
Cross-section 10.50 mm² ≙ round wire Ø 3.70 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	CFC7 [€]
0,10	0,02	67 * 78	99,90
0,12	0,02	68 * 78	109,90
0,15	0,03	72 * 78	119,90
0,18	0,03	74 * 78	129,90
0,22	0,03	77 * 78	149,90
0,27	0,04	81 * 78	169,90
0,33	0,04	85 * 78	199,90
0,39	0,05	86 * 78	229,90
0,47	0,05	89 * 78	259,90
0,56	0,06	93 * 78	289,90
0,68	0,06	98 * 78	319,90
0,82	0,07	102 * 78	349,90
1,0	0,08	106 * 78	379,90
1,2	0,09	113 * 78	419,90
1,5	0,10	118 * 78	459,90
1,8	0,11	122 * 78	499,90
2,0	0,12	125 * 78	539,90
2,2	0,12	129 * 78	579,90
2,7	0,13	133 * 78	619,90
3,0	0,14	137 * 78	659,90
3,3	0,17	143 * 78	699,90

MCoil SFC silverfoil coils have been developed for uncompromising state-of-the-art audio applications focused on absolutely flawless and a holographic 3D-like performance at utmost dynamics providing a considerably increased range of vivid, subtle timbres and precision.

Their acoustic features unite the typical tonal beauty and authenticity of air core coils with the three-dimensional staging of a tightly cemented, microphonic-free reel alongside the outstanding tonal properties of silver foil in terms of multi-faceted and truly `life-like´ performance of voices and instruments.

However, the exceptional tonal quality of the **SFC** series can be further enhanced by adding 1% of the purest gold making it the **SGFC** series then.

Please find detailed information on the advantages of the different coil technologies on pages 30 to 32.
Key words: Air coils • Silver/SilverGold • Foil coils



Technical specifications:
Insulation: Polypropylene (20µm)
SFC Conductor: Silver (70µm)
SGFC Conductor: 99% Silver + 1% Gold (70µm)
Conductor's Purity: min. 99,97% typ. 99,99%
Mounting Hole Ø: 6 mm

Air-core coils, foil 17 mm, Silver/SilverGold
Cross-section 1.19 mm² ≙ round wire Ø 1.23 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	SFC16 [€]	SGFC16 [€]
0,10	0,08	34 * 24		
0,15	0,10	37 * 24	on request	
0,22	0,12	38 * 24		
0,33	0,15	44 * 24		
0,47	0,19	48 * 24		
0,68	0,24	52 * 24		
1,0	0,30	57 * 24		
1,5	0,38	65 * 24		
2,2	0,48	72 * 24		
2,7	0,52	77 * 24		
3,3	0,60	81 * 24		
3,9	0,68	85 * 24		
4,7	0,75	88 * 24		
5,6	0,84	93 * 24		

Air-core coils, foil 28 mm, Silver/SilverGold
Cross-section 1.96 mm² ≙ round wire Ø 1.58 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	SFC14 [€]	SGFC14 [€]
0,10	0,06	36 * 34		
0,15	0,08	40 * 34	on request	
0,22	0,09	44 * 34		
0,33	0,11	48 * 34		
0,47	0,13	52 * 34		
0,68	0,16	56 * 34		
1,0	0,21	62 * 34		
1,5	0,27	69 * 34		
2,2	0,33	77 * 34		
2,7	0,37	82 * 34		
3,3	0,40	85 * 34		
3,9	0,44	89 * 34		
4,7	0,50	94 * 34		
5,6	0,55	99 * 34		

Air-core coils, foil 44 mm, Silver/SilverGold
Cross-section 3.08 mm² ≙ round wire Ø 1.98 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	SFC12 [€]	SGFC12 [€]
0,22	0,07	47 * 52		
0,33	0,08	51 * 52	on request	
0,47	0,10	55 * 52		
0,68	0,12	60 * 52		
1,0	0,16	67 * 52		
1,5	0,20	74 * 52		
2,2	0,24	82 * 52		
3,3	0,30	91 * 52		
3,9	0,32	95 * 52		
4,7	0,37	100 * 52		
5,6	0,40	105 * 52		

Air-core coils, foil 70 mm, Silver/SilverGold
Cross-section 4.90 mm² ≙ round wire Ø 2.50 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø * H [mm]	SFC10 [€]	SGFC10 [€]
1,0	0,12	71 * 77		
1,5	0,14	80 * 77	on request	
2,2	0,17	88 * 77		
2,7	0,19	91 * 77		
3,3	0,22	97 * 77		
3,9	0,23	104 * 77		
4,7	0,25	108 * 77		
5,6	0,29	111 * 77		
6,8	0,33	121 * 77		
8,2	0,38	124 * 77		
10	0,47	128 * 77		
12	0,55	134 * 77		
15	0,69	141 * 77		

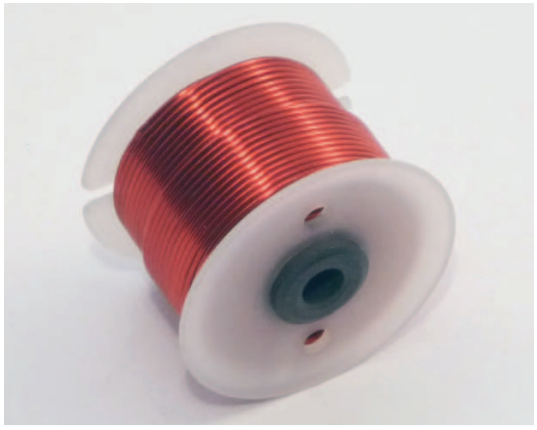
The smaller **MCoil FERRITE PipeCore Coils** made from solid core copper wire, have been specially developed for mid, low and parallel applications, for which compact dimensions and a reasonable price/performance-ratio are of essential importance as given for, e.g., adjustment devices or car audio crossovers.

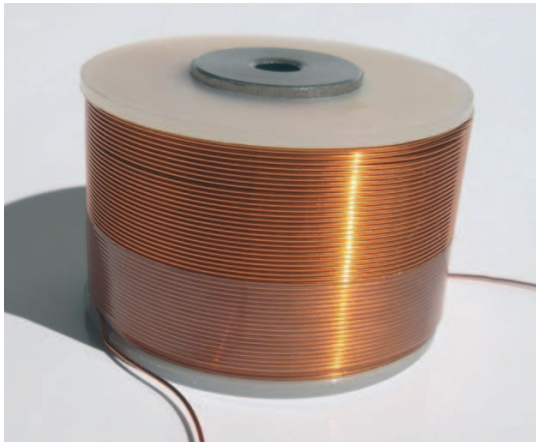
The larger **MCoil ARONIT PipeCore Coils** combine the balanced, detailed and dynamic tone colour of OFC round wire with the low output distortions and internal resistance of Aronit cores. They are therefore an excellent choice for good value and compact yet heavy-duty midwoofer, woofer and subwoofer coils, including for PA applications.

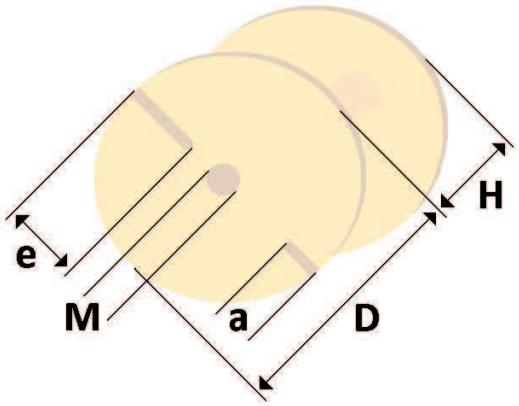
The tonal qualities of the **P** series and its much satisfying music performance can yet be enhanced by Baked Varnish as shown for the **BP** series.

Please find detailed information on the advantages of different coil technologies on pages 30 to 32. Key words:
Ferrite Core • OFC-Copper • Solid Core

Technical specifications:
OFC-Copper 99.99%
Coil form: PA, fibre-glass reinforced
Coil body heat resistant up to max. 230°C/446°F







Body	D	H	M	a	e
	Dimensions [mm]				
F3023	30	23	4	3	9
F4023	40	23	4	5	12
A4530	45	30	5	7	11

PipeCore Coils, wire Ø 0,50 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	P50 [€]
2,7	1,48	F3023	6,99
3,0	1,59	F3023	7,29
3,3	1,71	F3023	7,59
3,9	1,81	F3023	7,99
4,7	2,15	F3023	8,49
5,6	2,29	F3023	8,99
6,8	2,63	F3023	9,99
8,2	3,01	F3023	10,9
10	3,50	F4023	11,90
12	4,08	F4023	12,90
15	4,79	F4023	13,90
18	5,77	F4023	15,90
22	6,58	F4023	17,90

PipeCore Coils, wire Ø 0,71 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	P71 [€]	BP71 [€]
0,68	0,36	F3023	5,19	7,19
0,82	0,41	F3023	5,49	7,39
1,0	0,46	F3023	5,79	7,79
1,2	0,57	F3023	6,19	8,19
1,5	0,61	F3023	6,59	8,59
1,8	0,73	F3023	6,99	8,99
2,0	0,76	F3023	7,39	9,49
2,2	0,81	F3023	7,79	9,99
2,7	1,01	F4023	8,19	10,50
3,0	1,04	F4023	8,59	10,90
3,3	1,08	F4023	8,99	11,90
3,9	1,23	F4023	9,99	12,90
4,7	1,37	F4023	10,90	13,90
5,6	1,46	A4530	11,90	14,90
6,8	1,65	A4530	12,90	15,90
8,2	1,89	A4530	13,90	16,90
10	2,19	A4530	15,90	17,90
12	2,55	A4530	17,90	19,90

PipeCore Coils, wire Ø 1,00 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	P100 [€]	BP100 [€]
0,27	0,13	F3023	5,99	8,19
0,33	0,15	F3023	6,49	8,49
0,39	0,16	F3023	6,99	8,79
0,47	0,19	F3023	7,49	9,19
0,56	0,21	F3023	7,99	9,59
0,68	0,23	F4023	8,49	9,99
0,82	0,27	F4023	8,99	10,50
1,0	0,32	F4023	9,99	10,90
1,2	0,37	F4023	10,90	11,90
1,5	0,38	A4530	11,90	12,90
1,8	0,44	A4530	12,90	13,90
2,0	0,45	A4530	13,50	14,90
2,2	0,47	A4530	13,90	15,90
2,7	0,53	A4530	14,90	16,90
3,3	0,64	A4530	15,90	17,90
3,9	0,71	A4530	16,90	19,90
4,7	0,80	A4530	18,90	21,90

PipeCore Coils, wire Ø 1,25 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	P125 [€]	BP125 [€]
1,2	0,24	A4530	15,90	17,90
1,5	0,27	A4530	16,90	19,90
1,8	0,31	A4530	17,90	21,90
2,0	0,35	A4530	18,90	23,90

Pipe-core coils, wire Ø 1,40 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	P140 [€]	BP140 [€]
0,47	0,11	A4530	12,90	14,90
0,56	0,13	A4530	13,90	15,90
0,68	0,14	A4530	14,90	16,90
0,82	0,16	A4530	15,90	17,90
1,0	0,18	A4530	17,90	19,90

FERRIT Core coils
MCoil DrumCore

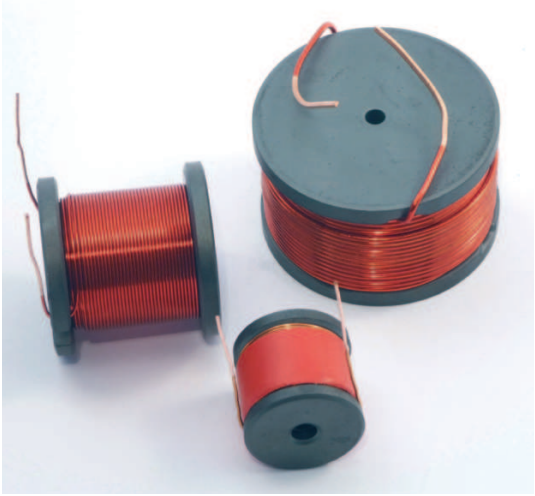
MCoil DrumCore made from oxygen-free copper (OFC) round-wire have been developed for applications for which compact dimensions, the lowest possible internal resistance and a great value for money are of key importance.

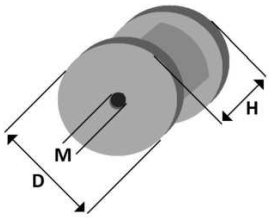
Because of their low high-load distortions, the **ARONIT** versions particularly distinguish in midwoofer, woofer and subwoofer applications.

The **FERRITE** types are highly recommended for middriver, midwoofer and parallel applications, due to their low basic distortion level. The tonal quality of these coils is a convincing blend of the typical harmoniously-neutral sound of solid core copper round-wire and the natural vitality and enhanced tonal dynamic of HP3616.

The fine properties of the **H** series can be further improved by applying Baked Varnish treatment as introduced with **BH** series. The all-new **LH** styles add the unique sound character of baked **OFC Hepta Strand wire**, which is same times very detailed and silky, to the superb core features.

Please find detailed information on the advantages of different coil technologies on pages 30 to 32. Key words:
Ferrite Cores • OFC-Copper • Solid Core





Body	D	H	M
	Dimensions [mm]		
F2625	26	25	5,2
F3025	30	25	5,3
F3525	35	25	5,3
F4037	40	37	5,6
A5151	51	51	6,4

NEW **LH45**

DrumCore Coils, litz of wire 7 * 0,45 mm, baked varnish

Cross-section 1,11 mm² ≙ round wire Ø 1,19 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
1,0	0,12	F4037	18,90
1,2	0,14	F4037	19,90
1,5	0,16	F4037	20,90
1,8	0,18	F4037	21,90
2,0	0,21	F4037	22,90
2,2	0,21	A5151	25,90
2,7	0,24	A5151	26,90
3,0	0,26	A5151	27,90
3,3	0,27	A5151	29,90
3,9	0,31	A5151	31,90
4,7	0,34	A5151	34,90
5,6	0,40	A5151	37,90
6,8	0,53	A5151	42,90

DrumCore Coils, wire Ø 0,50 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	H50 [€]
3,9	0,96	F2625	7,99
4,7	1,06	F2625	8,19
5,6	1,14	F2625	8,39
6,8	1,31	F2625	8,69
8,2	1,57	F2625	8,99
10	1,50	F3025	9,99
12	1,75	F3025	10,90
15	2,01	F3025	11,90
18	2,30	F3025	12,90
22	2,67	F3025	13,90
27	3,11	F3025	14,90

DrumCore Coils, wire Ø 0,71 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	H71 [€]	BH71 [€]
1,0	0,22	F2625	6,59	8,59
1,2	0,25	F2625	6,69	8,69
1,5	0,29	F2625	6,79	8,79
1,8	0,33	F2625	6,99	8,89
2,0	0,35	F2625	7,19	8,99
2,2	0,37	F2625	7,39	9,19
2,7	0,43	F2625	7,59	9,39
3,0	0,46	F2625	7,79	9,69
3,3	0,50	F2625	7,99	9,99
3,9	0,51	F3025	8,99	10,90
4,7	0,58	F3025	9,49	11,50
5,6	0,67	F3025	9,99	11,90
6,8	0,65	F3525	10,50	12,50
8,2	0,75	F3525	10,90	12,90
10	0,87	F3525	11,90	13,50
12	1,02	F3525	12,90	13,90
15	1,15	F4037	15,90	17,90
18	1,28	F4037	16,90	18,90
22	1,49	F4037	17,90	19,90
27	1,68	F4037	18,90	21,90
33	1,93	F4037	20,90	23,90
39	2,36	A5151	26,90	29,90
47	2,80	A5151	28,90	31,90

DrumCore Coils, wire Ø 1,00 mm

	Inductance [mH] ±3%	RDC [Ohm]	Body	H100 [€]	BH100 [€]
	1,0	0,13	F3025	8,99	10,90
	1,2	0,15	F3025	9,49	11,50
	1,5	0,17	F3025	9,99	11,90
	1,8	0,18	F3525	10,50	12,50
	2,0	0,19	F3525	10,90	12,90
	2,2	0,20	F3525	11,50	13,50
	2,7	0,24	F3525	11,90	13,90
	3,0	0,26	F3525	12,90	14,90
	3,3	0,27	F4037	15,90	17,90
	3,9	0,30	F4037	16,90	18,50
	4,7	0,34	F4037	17,90	18,90
	5,6	0,39	F4037	18,90	19,90
	6,8	0,46	F4037	19,90	21,90
	8,2	0,56	A5151	23,90	25,90
	10	0,64	A5151	24,90	26,90
	12	0,72	A5151	26,90	27,90
	15	0,81	A5151	28,90	29,90
NEW	18	0,95	A5151	30,90	31,90
NEW	22	1,10	A5151	32,90	34,90

DrumCore Coils, wire Ø 1,25 mm

	Inductance [mH] ±3%	RDC [Ohm]	Body	H125 [€]	BH125 [€]
	0,68	0,09	F3025	10,90	12,90
	0,82	0,10	F3525	12,50	13,90
	1,0	0,11	F3525	12,90	14,90
	1,2	0,12	F3525	13,50	15,90
	1,5	0,12	F4037	15,90	18,90
	1,8	0,14	F4037	16,90	19,90
	2,0	0,15	F4037	17,50	20,50
	2,2	0,17	F4037	17,90	20,90
	2,7	0,19	F4037	18,90	21,90
	3,0	0,20	F4037	19,90	22,90
	3,3	0,22	F4037	20,90	23,90
	3,9	0,24	F4037	21,90	24,90
	4,7	0,27	A5151	26,90	29,90
	5,6	0,33	A5151	27,90	31,90
	6,8	0,37	A5151	28,90	33,90
NEW	8,2	0,42	A5151	29,90	35,90
NEW	10	0,48	A5151	30,90	37,90
NEW	12	0,54	A5151	32,90	39,90

DrumCore Coils, wire Ø 1,40 mm

	Inductance [mH] ±3%	RDC [Ohm]	Body	H140 [€]	BH140 [€]
	1,0	0,08	F4037	16,90	18,90
	1,2	0,09	F4037	17,90	19,90
	1,5	0,10	F4037	18,90	20,90
	1,8	0,12	F4037	19,90	21,90
	2,0	0,13	F4037	20,90	22,90
	2,2	0,14	F4037	21,90	23,90
	2,7	0,18	A5151	25,90	27,90
	3,0	0,19	A5151	26,90	28,90
	3,3	0,20	A5151	27,90	29,90
	3,9	0,22	A5151	28,90	31,90
	4,7	0,25	A5151	29,90	33,90
NEW	5,6	0,29	A5151	31,90	35,90
NEW	6,8	0,33	A5151	33,90	37,90

NEW **DrumCore Coils, wire Ø 1,80 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	H180 [€]	BH180 [€]
0,39	0,04	A5151	19,90	21,90
0,47	0,05	A5151	20,90	22,90
0,56	0,05	A5151	21,90	23,90
0,68	0,06	A5151	22,90	24,90
0,82	0,06	A5151	23,90	25,90
1,0	0,07	A5151	24,90	26,90
1,2	0,08	A5151	25,90	27,90
1,5	0,09	A5151	26,90	29,90
1,8	0,10	A5151	27,90	30,90
2,0	0,11	A5151	28,90	32,90
2,2	0,12	A5151	29,90	34,90

FERON Core coils
MCoil iCore

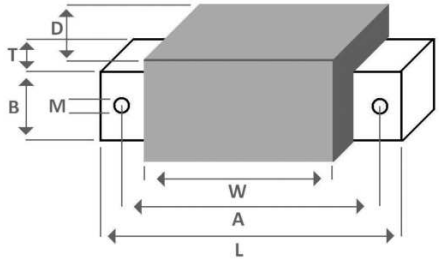
MCoil iCore Coils combine both the typical low basic output distortions and the low internal resistance of Feron core coils with the enhanced dynamic in music performance of copper wire featuring our Baked Wire Treatment.

They are highly suitable to be used for high quality mid frequency crossover within subwoofer applications. They also offer an excellent value for money ratio as well as the come at compact dimensions.

Please find detailed information on the advantages of different coil technologies on pages 30 to 32.
Key words: Feron Core • OFC-Copper • Solid Core



Technical specifications:
OFC-Copper 99.99% pure
Coil form: PA, fibre-glass reinforced
Core material: FERON
Grain-oriented silicon iron 0.35 mm



Body	L	T=B	A	W	M
	Dimensions (mm)				
S66	66	11	55	41	4
S84	84	14	72	58	4
S96	96	16	82	67	5
S106	106	14,5	94	79	5
S130	130	18	115	99	6
S150	150	20	134	118	6

iCore Coils, baked varnish wire Ø 1,00 mm

BS100

Inductance [mH] ±3%	RDC [Ohm]	Body	Body Ø [mm]	[€]
4,7	0,41	S84	27	34,50
5,6	0,46	S84	27	34,90
6,8	0,52	S84	29	35,90
8,2	0,58	S84	29	36,90
10	0,63	S84	31	37,90
12	0,71	S84	33	38,90
15	0,82	S84	33	41,90

iCore Coils, baked varnish wire Ø 1,25 mm

BS125

Inductance [mH] ±3%	RDC [Ohm]	Body	Body Ø [mm]	[€]
2,7	0,21	S84	21	36,90
3,0	0,22	S84	30	37,90
3,3	0,23	S84	30	38,90
3,9	0,25	S84	32	39,90
4,7	0,30	S96	32	43,90
5,6	0,31	S96	32	44,90
6,8	0,35	S96	32	45,90
8,2	0,39	S96	32	46,90
10	0,42	S106	34	47,90
12	0,46	S106	36	49,90
15	0,57	S106	36	54,90
18	0,59	S130	36	59,90
22	0,67	S130	38	64,90

iCore Coils, baked varnish wire Ø 1,40 mm

BS140

Inductance [mH] ±3%	RDC [Ohm]	Body	Body Ø [mm]	[€]
1,0	0,09	S84	27	32,90
1,2	0,10	S84	27	33,90
1,5	0,12	S84	27	34,90
1,8	0,13	S84	28	35,90
2,0	0,14	S84	28	36,90
2,2	0,15	S84	28	37,90
2,7	0,17	S96	29	39,90
3,0	0,18	S96	29	40,90
3,3	0,19	S96	29	41,90
3,9	0,19	S106	31	42,90
4,7	0,23	S106	32	43,90
5,6	0,25	S106	32	45,90
6,8	0,28	S106	34	47,90
8,2	0,32	S106	34	49,90
10	0,35	S130	35	52,90
12	0,39	S130	35	55,90
15	0,45	S130	37	59,90
18	0,46	S130	37	64,90
22	0,52	S130	39	69,90
27	0,67	S130	41	74,90
33	0,70	S150	43	79,90

NEW **iCore Coils, baked varnish wire Ø 1,80 mm**

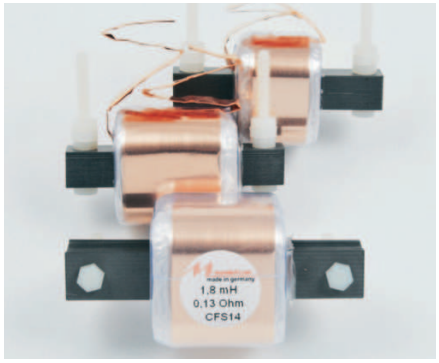
BS180

Inductance [mH] ±3%	RDC [Ohm]	Body	Body Ø [mm]	[€]
1,0	0,06	S106	33	37,90
1,2	0,07	S106	33	38,90
1,5	0,08	S106	33	39,90
1,8	0,09	S106	34	40,90
2,0	0,1	S106	34	41,90
2,2	0,10	S106	34	42,90
2,7	0,11	S106	35	44,90
3,0	0,12	S106	35	46,90
3,3	0,13	S106	36	48,90
3,9	0,14	S130	36	51,90
4,7	0,15	S130	37	53,90
5,6	0,17	S130	37	55,90
6,8	0,19	S130	39	57,90
8,2	0,21	S130	39	59,90
10	0,23	S150	41	64,90
12	0,26	S150	43	69,90
15	0,30	S150	45	74,90
18	0,34	S150	47	79,90
22	0,39	S150	49	89,90
27	0,45	S150	51	99,90
33	0,51	S150	53	109,90
39	0,57	S150	55	119,90
47	0,65	S150	58	129,90

MCoil iCore Coils made from copper foil combine both the low level output distortions and the low internal resistance of Feron core coils with the high resolution and the great dynamic properties of OFC copper foil.
They are highly suitable to be used in high quality mid frequency crossovers within subwoofer applications. Furthermore, they are distinguished by an excellent value for money ratio as well as by their compact dimensions.

With the **CFS** series we are once again complying to the very innovation and quality standards we set on day 1 for making us a leading manufacturer of state-of-the-art components for music lovers, since +30 years.

Please find detailed information on the advantages of different coil technologies on pages 30 to 32.
Key words: Feron Core • OFC-Copper • Foil coils



Technical specifications:
Cu-foil: 70 µ / OFC-Copper 99.99% pure
Insulation: Polypropylen 20 µ
Core material: FERON
Grain-oriented silicon iron 0.35 mm
Permissible ambient temperature 105°C/221°F

iCore Coils, foil 28 mm
Cross-section = 1.96 mm², ≙ round wire Ø 1,58mm

Inductance [mH] ±3%	RDC [Ohm]	Body	Ø Body [mm]	**CFS14** [€]
0,47	0,05	S84	31	35,90
0,56	0,06	S84	32	36,90
0,68	0,07	S84	34	37,90
0,82	0,08	S84	35	38,90
1,0	0,09	S84	37	39,90
1,2	0,10	S84	38	41,90
1,5	0,11	S84	40	43,90
1,8	0,13	S84	43	45,90
2,0	0,14	S96	44	47,90
2,2	0,14	S96	45	49,90
2,7	0,16	S106	46	51,90
3,0	0,17	S106	47	53,90
3,3	0,17	S106	48	55,90
3,9	0,21	S106	51	57,90
4,7	0,24	S106	54	59,90
5,6	0,28	S106	58	64,90
6,8	0,30	S106	62	69,90
8,2	0,34	S106	67	74,90
10	0,40	S106	73	79,90

iCore Coils, foil 70 mm
Cross-section 4.90 mm² ≙ round wire Ø 2.50 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	Ø Body [mm]	**CFS10** [€]
1,0	0,04	S150	41	59,90
1,2	0,04	S150	42	64,90
1,5	0,05	S150	44	69,90
1,8	0,05	S150	46	74,90
2,0	0,06	S150	47	79,90
2,2	0,06	S150	48	89,90
2,7	0,07	S150	50	99,90
3,0	0,08	S150	52	109,00
3,3	0,09	S150	54	119,90
3,9	0,10	S150	56	129,90
4,7	0,11	S150	59	139,90
5,6	0,12	S150	63	149,90
6,8	0,13	S150	67	159,90
8,2	0,15	S150	71	179,90
10	0,18	S150	77	199,90
12	0,20	S150	82	219,90
15	0,24	S150	89	259,90
18	0,27	S150	95	299,90
22	0,33	S150	103	339,90
27	0,41	S150	114	389,90
33	0,50	S150	128	439,90

iCore Coils, foil 44 mm
Cross-section 3.08 mm² ≙ round wire Ø 1.96

Inductance [mH] ±3%	RDC [Ohm]	Body	Ø Body [mm]	**CFS12** [€]
1,0	0,06	S130	37	49,90
1,2	0,06	S130	39	51,90
1,5	0,07	S130	41	53,90
1,8	0,07	S130	43	55,90
2,0	0,08	S130	44	57,90
2,2	0,09	S130	45	59,90
2,7	0,10	S130	47	62,90
3,0	0,11	S130	49	65,90
3,3	0,12	S130	50	68,90
3,9	0,12	S130	53	73,90
4,7	0,14	S130	56	79,90
5,6	0,16	S130	59	85,90
6,8	0,19	S130	63	92,90
8,2	0,22	S130	67	99,90
10	0,26	S130	74	114,90
12	0,32	S130	78	129,90
15	0,37	S130	82	149,90
18	0,43	S130	87	169,90
22	0,49	S130	94	189,90

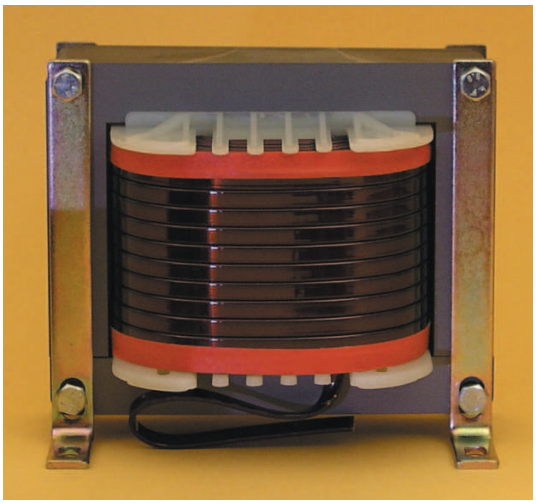
Our **Zero-Ohm Coil (ZOC)** not only is a remarkable milestone in our +30 years lasting company history but certainly a true milestone within the field of audiophile coil technology in general, too. As back then, today, the ZOC is still to set the standards for the utmost musical fidelity in all respects considering a convincingly performed low frequency spectrum in subtle coloration.

They were specially developed for low frequency applications for which maximum performance fidelity, tonal neutrality and the smallest possible internal resistance are of primary importance. That way, these coils also enable the high efficiency of today's High End loudspeakers to be optimally enhanced, even with low-output single-ended tube applications.

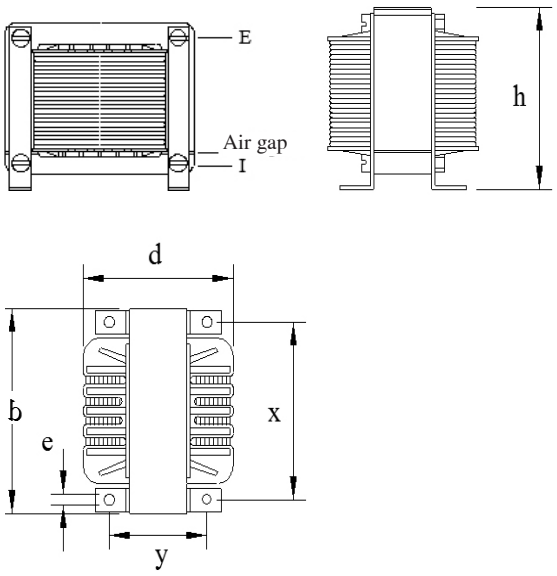
Moreover, we are pleased to present a completely revised and expanded model series, which now meets numerous customer requests for smaller dimensions, too.

The excellent qualities of the **N** series with its transparency and musical authenticity can yet be further enhanced by applying Baked Wire Treatment. Same applies for vacuum impregnated ZOCs made from copper round wires with larger conductor cross sections.

Baked Wire Treatment featuring coils are listed as **BN** in the following table, vacuum impregnated coils are marked **VN**.
Please find detailed information on the advantages of different coil technologies on pages 30 to 32. Key words:
Feron Core ZOC • OFC-Copper • Solid Core



Technical specifications:
Core material: FERON
Grain-oriented silicon iron 0.35 mm
OFC-Copper 99.99% pure



Body	b	h	d	x	y	e
	Dimensions (mm)					
N66	66	61	63	54	48	4,8
N84	84	76	70	72	57	4,8
N96	96	86	84	80	69	5,8
N106	106	93	87	95	67	5,8
N130	130	115	97	78	114	5,8
N150	150	131	121	135	86	7

Zero-Ohm Coils, baked varnish wire Ø 1,25 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	BN125 [€]
15	0,36	N84	99,90
18	0,44	N84	104,90
22	0,47	N84	109,90
27	0,53	N96	139,90
33	0,60	N96	149,90

Zero-Ohm Coils, baked varnish wire Ø 1,40 mm NEW

Inductance [mH] ±5%	RDC [Ohm]	Body	BN140 [€]
1,0	0,07	N66	62,90
1,2	0,08	N66	63,90
1,5	0,08	N66	64,90
1,8	0,10	N66	65,90
2,0	0,11	N66	66,90
2,2	0,12	N66	67,90
2,7	0,12	N66	68,90
3,0	0,14	N66	69,90
3,3	0,14	N84	95,90
3,9	0,16	N84	96,90
4,7	0,17	N84	97,90
5,6	0,19	N84	98,90
6,8	0,21	N84	99,90
8,2	0,23	N84	101,90
10	0,26	N84	103,90
12	0,29	N84	105,90

Zero-Ohm Coils, baked varnish wire Ø 1,80 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	BN180 [€]
2,2	0,07	N84	95,90
2,7	0,08	N84	96,90
3,0	0,09	N84	97,90
3,3	0,09	N84	98,90
3,9	0,10	N84	99,90
4,7	0,11	N96	129,90
5,6	0,12	N96	131,90
6,8	0,13	N96	133,90
8,2	0,15	N96	135,90
10	0,16	N96	137,90
12	0,17	N96	139,90
15	0,22	N106	159,90
18	0,25	N106	164,90
22	0,29	N106	169,90
27	0,32	N106	174,90
33	0,34	N106	179,90

NEW **Zero-Ohm Coils, wire Ø 2,36 mm**

Inductance [mH] ±5%	RDC [Ohm]	Body	N236 [€]	VN236 [€]
2,7	0,05	N96	131,90	136,90
3,0	0,06	N96	133,90	137,90
3,3	0,06	N96	135,90	138,90
3,9	0,06	N96	137,90	139,90
4,7	0,06	N96	139,90	141,90
5,6	0,08	N106	159,90	164,90
6,8	0,09	N106	164,90	166,90
8,2	0,10	N106	169,90	169,90
10	0,12	N106	174,90	172,90
12	0,13	N106	179,90	175,90
15	0,15	N130	239,90	229,90
18	0,17	N130	244,90	239,90
22	0,19	N130	249,90	249,90
27	0,21	N130	254,90	259,90
33	0,24	N130	259,90	269,90

Zero-Ohm Coils, wire Ø 3,00 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	N300 [€]	VN300 [€]
1,0	0,02	N96	144,90	154,90
1,2	0,02	N96	145,90	155,90
1,5	0,02	N96	146,90	156,90
1,8	0,03	N96	147,90	157,90
2,0	0,03	N96	148,90	158,90
2,2	0,03	N96	149,90	159,90
2,7	0,03	N106	169,90	179,90
3,0	0,04	N106	171,90	181,90
3,3	0,04	N106	173,90	183,90
3,9	0,04	N106	176,90	186,90
4,7	0,05	N106	179,90	189,90
5,6	0,05	N130	229,90	239,90
6,8	0,06	N130	239,90	249,90
8,2	0,07	N130	249,90	259,90
10	0,08	N130	259,90	269,90
12	0,09	N130	269,90	279,90
15	0,1	N130	279,90	289,90
18	0,11	N130	289,90	299,90
22	0,11	N150	379,90	389,90
27	0,13	N150	389,90	404,90
33	0,14	N150	399,90	419,90

Zero-Ohm Coils, wire 6 * 2 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	N390 [€]	VN390 [€]
1,0	0,02	N106	203,90	213,90
1,2	0,02	N106	204,90	214,90
1,5	0,02	N106	205,90	215,90
1,8	0,02	N106	206,90	216,90
2,0	0,02	N106	207,90	217,90
2,2	0,02	N106	208,90	218,90
2,7	0,02	N106	209,90	219,90
3,0	0,02	N130	259,90	269,90
3,3	0,03	N130	269,90	279,90
3,9	0,03	N130	279,90	289,90
4,7	0,03	N130	289,90	299,90
5,6	0,04	N130	299,90	309,90
6,8	0,04	N150	359,90	369,90
8,2	0,04	N150	369,90	379,90
10	0,05	N150	379,90	389,90
12	0,05	N150	389,90	399,90
15	0,05	N150	399,90	409,90
18	0,05	N150	409,90	419,90
22	0,05	N150	419,90	429,90

Our **Zero-Ohm Coil (ZOC)** made from copper foil impressively combines the outstanding natural music performance of extremely low ohm Feron ZOC cores with the finely detailed musical texture and multifaceted richness of OFC copper foil.



These coils were specially developed for low frequency applications which do not focus on maximum capacity, but rather exceptional performance quality, micro-dynamics and outstanding technical properties such as matching perfectly with highly-efficient loudspeakers specially designed for low-power, single-ended tube-amplifiers.

Please find detailed information on the advantagesof the different coils technologies on pages 30 to 32.
Key words: Feron Core ZOC • OFC-Copper • Foil coils

Technical specifications:
Core material: FERON
Grain-oriented silicon iron 0.35 mm
OFC-Copper 99.99% pure

Zero-Ohm Coils, foil 28 mm
Cross-section = 1.96 mm², ≙ round wire Ø 1.58 mm

			CFN14
Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
2,7	0,10	N84	99,90
3,0	0,11	N84	101,90
3,3	0,12	N84	103,90
3,9	0,13	N84	105,90
4,7	0,15	N84	107,90
5,6	0,17	N84	109,90
6,8	0,19	N84	111,90

Zero-Ohm Coils, foil 44 mm
Cross-section = 3.08 mm², ≙ round wire Ø 1.98 mm

			CFN12
Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
8,2	0,14	N106	184,90
10	0,15	N106	189,90
12	0,17	N106	194,90
15	0,19	N106	199,90
18	0,22	N106	205,90
22	0,25	N106	212,90

MCoil TransformerCore Coils combine both lowest distortion rate and precise pulse signal with low internal resistance, even under highest output levels.Therefore they have been the benchmark for extremely precise and powerful but deep bass performance for more than 25 years!

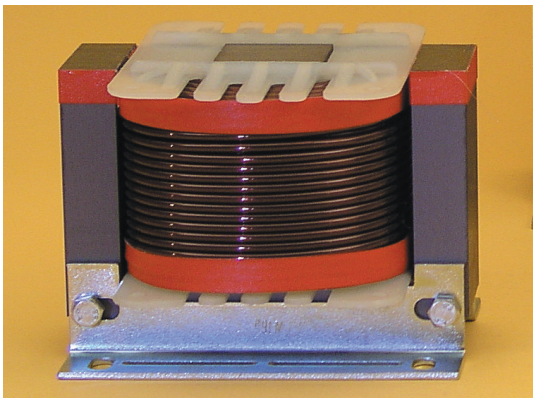
We are very pleased to present a completely revised and expanded model series, now meeting frequent customer requests for smaller dimensions, too.

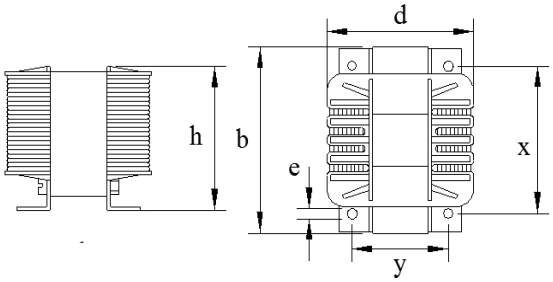
The outstanding features of this series can be considerably enhanced yet by the appliance of Baked Wiring Treatment or Vacuum Impregnation.

Baked Wiring Treatment is marked **BT** in the following table. Vacuum impregnated coils are marked **VT**.

Please find detailed information on the ad-vantages of different coil technologies on pages 30 to 32. Key words are:
Feron Core • OFC-Copper• Solid Core

Technical specifications:
Core material: FERON
Grain-oriented silicon iron 0.35 mm
OFC-Copper 99.99% pure





Body	b	h	d	x	y	e
	Dimensions (mm)					
T84	84	60	59,5	65	48	4,8
T96	96	69	76,1	85	62	5,8
T106	106	81	88	84	56	5,8
T130	130	100	106	104	73	5,8
T150	150	115	121	130	87	7

TransformerCore Coils, baked varnish wire Ø 1,25 mm
BT125

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
3,9	0,28	T84	79,90
4,7	0,31	T84	80,90
5,6	0,34	T84	81,90
6,8	0,37	T84	82,90
8,2	0,43	T84	83,90

NEW **TransformerCore Coils, baked varnish wire Ø 1,80 mm**
BT180

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
1,0	0,08	T84	74,90
1,2	0,08	T84	75,90
1,5	0,09	T84	76,90
1,8	0,10	T84	77,90
2,0	0,11	T84	79,90
2,2	0,11	T96	92,90
2,7	0,12	T96	94,90
3,0	0,13	T96	96,90
3,3	0,14	T96	99,90
3,9	0,15	T96	102,90
4,7	0,17	T96	105,90
5,6	0,19	T106	119,90
6,8	0,21	T106	124,90
8,2	0,25	T106	129,90
10	0,27	T106	134,90
12	0,31	T106	139,90
15	0,36	T106	144,90
18	0,39	T130	184,90
22	0,45	T130	189,90
27	0,50	T130	199,90
33	0,57	T130	209,90
39	0,63	T130	224,90
47	0,71	T130	239,90

TransformerCore Coils, baked varnish wire Ø 1,40 mm
BT140

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
1,0	0,10	T66	57,90
1,2	0,11	T66	58,90
1,5	0,12	T66	59,90
1,8	0,11	T84	69,90
2,0	0,13	T84	71,90
2,2	0,15	T84	73,90
2,7	0,17	T84	75,90
3,0	0,19	T84	77,90
3,3	0,21	T84	79,90
3,9	0,23	T96	95,90
4,7	0,25	T96	97,90
5,6	0,28	T96	99,90
6,8	0,32	T96	101,90
8,2	0,35	T96	103,90
10	0,38	T96	106,90
12	0,45	T96	109,90

NEW **TransformerCore Coils, wire Ø 2,36 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	T236 [€]	VT236 [€]
1,0	0,05	T96	93,90	99,90
1,2	0,05	T96	95,90	101,90
1,5	0,06	T96	97,90	103,90
1,8	0,06	T96	99,90	105,90
2,0	0,07	T106	117,90	123,90
2,2	0,08	T106	119,90	126,90
2,7	0,09	T106	121,90	129,90
3,0	0,09	T106	123,90	132,90
3,3	0,10	T106	126,90	135,90
3,9	0,11	T106	129,90	138,90
4,7	0,12	T106	134,90	141,90
5,6	0,13	T106	139,90	144,90
6,8	0,14	T130	179,90	184,90
8,2	0,16	T130	184,90	189,90
10	0,18	T130	189,90	199,90
12	0,21	T130	199,90	209,90
15	0,24	T130	209,90	219,90
18	0,26	T130	219,90	229,90
22	0,28	T150	284,90	299,90
27	0,32	T150	299,90	314,90
33	0,36	T150	314,90	329,90

TransformerCore Coils, wire Ø 3,00 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	T300 [€]	VT300 [€]
1,0	0,03	T106	125,90	129,90
1,2	0,03	T106	128,90	132,90
1,5	0,04	T106	131,90	135,90
1,8	0,04	T106	134,90	139,90
2,0	0,05	T130	179,90	189,90
2,2	0,05	T130	184,90	194,90
2,7	0,06	T130	189,90	199,90
3,0	0,06	T130	194,90	204,90
3,3	0,07	T130	199,90	209,90
3,9	0,07	T130	205,90	219,90
4,7	0,08	T130	212,90	229,90
5,6	0,09	T130	219,90	239,90
6,8	0,10	T150	289,90	299,90
8,2	0,10	T150	299,90	309,90
10	0,12	T150	309,90	319,90
12	0,13	T150	329,90	339,90
15	0,15	T150	359,90	369,90

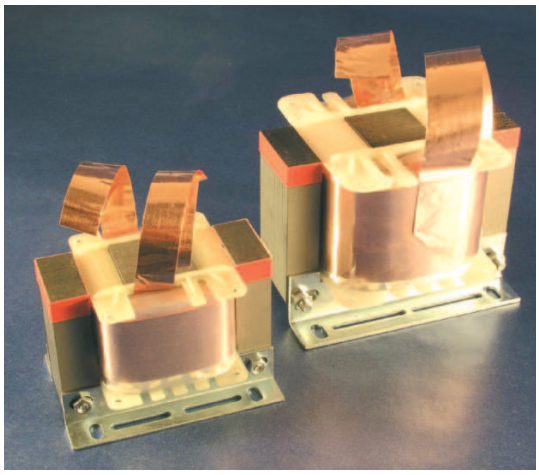
TransformerCore Coils, wire 6 * 2 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	T390 [€]	VT390 [€]
1,0	0,03	T130	219,90	229,00
1,2	0,03	T130	229,90	239,00
1,5	0,03	T130	239,90	249,00
1,8	0,04	T130	249,90	259,00
2,0	0,04	T130	259,90	269,00
2,2	0,04	T150	299,90	309,90
2,7	0,04	T150	319,90	329,90
3,0	0,05	T150	339,90	354,90
3,3	0,05	T150	359,90	379,90
3,9	0,06	T150	389,90	409,90

MCoil TransformerCore Coils from copper foil combine both the natural dynamic fidelity and typical tonal transparency of OFC foil with the remarkable performance precision of Feron core coils, particularly, at the lowest frequency range.

They are specially developed for an extended ultra-low bass performance at the highest perfomance level with incredible precision and pulse signal fidelity. Altogether with its low internal resistance rate this coil type is most definitely first choice for high quality subwoofer applications.

Please find detailed information on the advantages of different coil technologies on pages 30 to 32. Key words are:
Feron Core • OFC-Copper • Foil coils



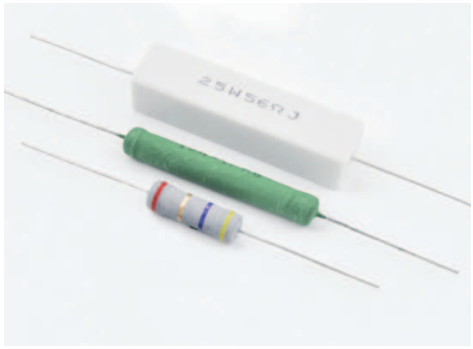
Technical specifications:
Core material: FERON
Corroded silicon iron 0.35mm
Cu foil: 70 µ / OFC copper with 99.997% pureness
Insulation: polypropylene 20 µ

TransformerCore Coils, foil 44 mm
cross-section = 3,30 mm², ≙ round wire Ø 2,05 mm

			CFT12
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
2,7	0,13	T106	139,90
3,0	0,14	T106	144,90
3,3	0,15	T106	149,90
3,9	0,17	T106	154,90
4,7	0,18	T106	159,90
5,6	0,21	T106	164,90
6,8	0,23	T106	169,90

For high-load applications, wire-wound **cement resistors** with a continuous load capacity of 25 watt are a good option.

In comparison, **metal-oxide film resistors** do not have any residual inductivity. This is the reason why metal oxide film resistors should be favoured whenever impulse speed is required, e.g. in the medium/high frequency range. The versions we offer have a continuous load capacity of two and a half, five or ten watt. In the impulse range, however, they have a much higher continuous load capacity.



MR5
Metal-oxide film resistors, 5 watt

Ohm [Ω] ±2%	[€]
0,10	0,99
0,22	0,99
0,33	0,99
0,47	0,99
0,68	0,99
0,82	0,99
1,0	0,99
1,2	0,99
1,5	0,99
1,8	0,99
2,2	0,99
2,7	0,99
3,3	0,99
3,9	0,99
4,7	0,99
5,6	0,99
6,8	0,99
8,2	0,99
10	0,99
12	0,99
15	0,99
18	0,99
22	0,99
27	0,99
33	0,99
39	0,99
47	0,99
56	0,99

MR10
Metal-oxide film resistors, 10 watt

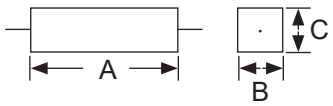
Ohm [Ω] ±2%	[€]
0,10	1,49
0,15	1,49
0,22	1,49
0,27	1,49
0,33	1,49
0,39	1,49
0,47	1,49
0,56	1,49
0,68	1,49
0,82	1,49
1,0	1,49
1,2	1,49
1,5	1,49
1,8	1,49
2,2	1,49
2,7	1,49
3,3	1,49
3,9	1,49
4,7	1,49
5,6	1,49
6,8	1,49
8,2	1,49
10	1,49
12	1,49
15	1,49
18	1,49
22	1,49
27	1,49
33	1,49
39	1,49
47	1,49
56	1,49

R25
High-load resitors, 25 watt

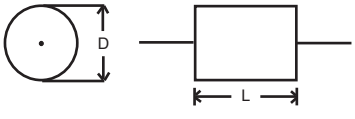
Ohm [Ω] ±5%	[€]
1,0	1,89
1,2	1,89
1,5	1,89
1,8	1,89
2,2	1,89
2,7	1,89
3,3	1,89
3,9	1,89
4,7	1,89
5,6	1,89
6,8	1,89
8,2	1,89
10	1,89
12	1,89
15	1,89
18	1,89
22	1,89
27	1,89
33	1,89
39	1,89
47	1,89
56	1,89

Colour codes for resistors

Color	1. ring 1. numeral	2. ring 2. numeral	3. ring multiplier	4. ring tolerance
without				20%
silver			0.01	10%
gold			0.1	5%
black		0	1	
brown	1	1	10	1%
red	2	2	100	2%
orange	3	3	1.000	
yellow	4	4	10.000	
green	5	5	100.000	0.50%
blue	6	6	1.000.000	0.25%
purple	7	7	10.000.000	0.10%
grey	8	8	100.000.000	0.05%
white	9	9	1.000.000.000	



Typ	A	B	C	Wire	Bulk pack
	Dimensions [mm]			Ø * l [mm]	[pc]
R25	60	15	13	0.8 * 35	36



Type	L [mm]	D [mm]	Wire Ø * l [mm]	Bulk pack [pc]
MR5	24	8	0.8 * 35	12/567
MR10	52	8	0.8 * 35	12/288

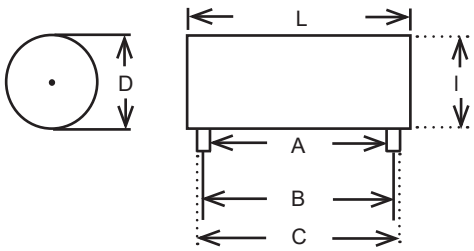
With our **MResist SUPREME** you can enjoy even finest details and spatial information which normally get lost. Due to the complex bifilar structure from 1Ω with two wires being wound around the high-temperature-resistant cement element simultaneously the inductance is always blow 0,075µH

In addition, the **MResist SUPREME** series features acoustic neutrality and music reproduction close to reality. This is due to a special manually applied fire-resistant casting compound which optimally fixes and stabilises the resistor winding thus protecting it against microphony effects.

In order to maintain high sound quality even at high load, we apply a special copper-nickel alloy as conducting material featuring a positive and extremely low temperature coefficient of only **50ppm/°C**.

Further details which guarantee that **MResist SUPREME** resistors are hardly noticeable anymore are the of use non-magnetic materials and welded contacts.





Type	D	L	Wire	A	B	C
	[mm]		Ø * l [mm]		[mm]	
MRES20	11	51	1.0 * 30	32	39	45

MRES20
Audiophile-resitors, non-magnetic, non-inductive, 50ppm/°C, 20 watt

Ohm [Ω] ±2%	[€]
1,0	12,90
1,2	12,90
1,5	12,90
1,8	12,90
2,2	12,90
2,7	12,90
3,3	12,90
3,9	12,90
4,7	12,90
5,6	12,90
6,8	12,90
8,2	12,90
10	12,90
12	12,90
15	12,90
18	12,90
22	12,90
27	12,90
33	12,90
39	12,90
47	12,90

We offer tin-solder from 2 alloys used as materials that show a considerably higher purity than is required by DIN standards:

MSolder SilverGold boosts the advantages of silver solder by adding purest Gold which also lowers the melting point and ensures the outstanding sound properties of our silver/gold components.

The **MSolder SUPREME SilverGold** is our second to none solder for tube applications as well as for assembling our SilverGold wires, foils and cables due to its surpassing conductivity combined with a high liquidus.



Technical specifications:
- 1.00 mm diameter
- Amine, diamine, urea and lead free
- Low odour
- Optimum processing temperature
- Special NO-CLEAN liquid
  2.5% liquid content - Type 2.2.3 B - DIN EN 29 454.1
- Copper compatible
- Gentle on components
- Time saving
- User and environmental friendly

Purity of silver: min. 99.97% typ. 99.99%
Purity of gold: min. 99.97% typ. 99.99%

MSOL.SG
Tin solder MSolder SilverGold
Liquidus 217°C/422°F, Sn95,5Cu0,7Ag3,8Au, Ø 1,00 mm

Weight [g]	Lenght [m]	[€]
10	1,7	6,99
50	8,5	29,90
100	17,0	49,90
330	56	139,90

MSOL.SUP
Tin solder MSolder SUPREME SilverGold
Liquidus 290°C/554°F, Sn88,6Cu1,8Ag9,5Au0,1, Ø 1,0 mm

Weight [g]	Lenght [m]	[€]
10	1,7	11,90
50	8,5	54,90
100	17,0	89,90
330	56,0	249,90

TWARON® Unicorn‘s Tail is a speaker cabinet filler for acoustic damping purpose which is produced by Thüringisches Institut für Textil- und Kunststoff-Forschung (TITK), Germany, exclusively for MUNDORF company, Germany.

Unicorn‘s Tail is predominantly made from cleaned and karded TWARON® fibres as user-friendly “endless” strings. It was especially developed to absorb and damp the lower audio frequency range (<1 kHz) in subwoofers, transmission line tubes, insulation panels, etc. The material is easy to work with and does not age. The damping performance of TWARON® compares so favourably with that of all other known damping materials that it is today a “must” for many well-known developers and manufacturers of high-end speakers.

The extremely thin TWARON® fibres are karded into an extremely soft and dense so-called Horsetail Hair we named Unicorn Hair. In contrast to fibreglass and other plastic fibres, TWARON® conducts heat generated vibrations away very well and absorbs this type of acoustic motion energy in an entirely different manner than all conventional materials which are commonly used for damping purpose. Owing to the endless fibre tapes used in Unicorn Hair, the effective functional frequency-range is lower in comparison with the Angel Hair described below. It constitutes a significantly better alternative to the damping materials which are otherwise used in transmission line systems. In short, Unicorn Hair results in a very direct and dry bass reproduction in (sub-) bass cabinets, and in transmission-line tubes. The low-frequency vibrations are attenuated so efficiently that an extremely deep and clean bass reproduction “like by itself” is achieved.

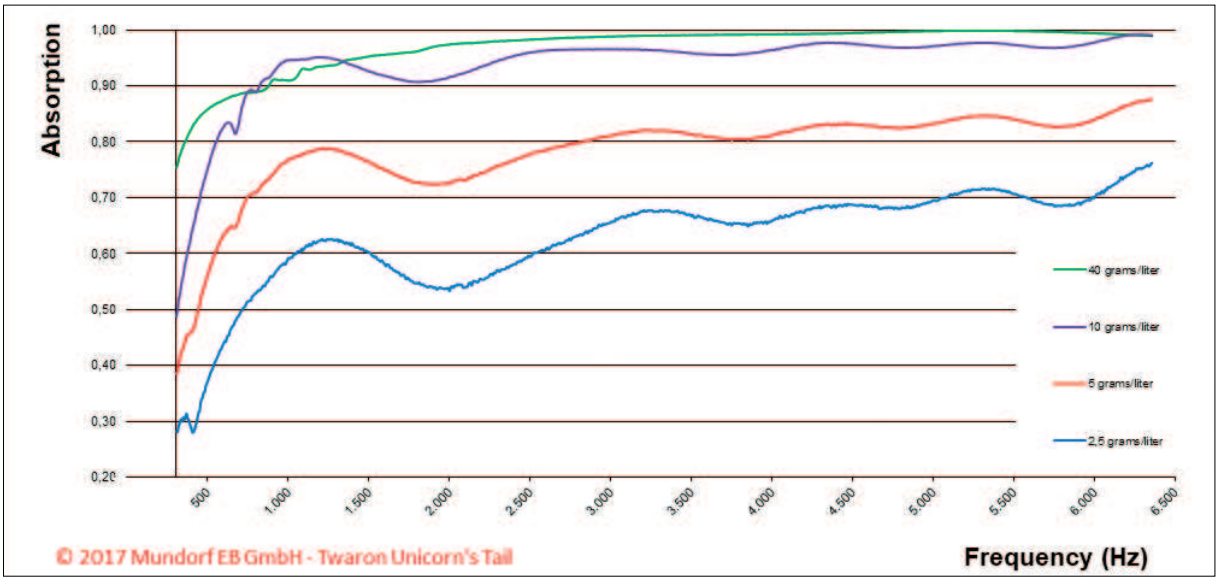


Unicorn`s Tail

UNICORN
MSilence TWARON® Unicorn´s Tail

Order number	Packing unit	weight [kg]	[€]
UNICORN-200G	1	0,2	59,90
UNICORN-200G	5	1	189,90
UNICORN-200G	60	12	on request
UNICORN-200G	720	144	on request

The frequency/damping performance diagram show how the low and medium audio frequency range can be adjusted very easily with the correct quantity of Unicorn´s Tail filling.




Angel Hair

TWARON® Angel Hair is a speaker cabinet filler for acoustic damping purpose which is produced by Thüringische Institut für Textil- und Kunststoff-Forschung (TITK), Germany, exclusively for MUNDORF company, Germany

For to make Mundorf Angel Hair, the TWARON® base fibres are processed several times: The TWARON® fibres with their immense number of hairs are first cut into 60 mm long sections, herafter karded, mixed and finally carefully pressed into a mass. In contrast to fibreglass and other plastic fibres, TWARON® conducts heat generated vibrations away very well and absorbs this type of acoustic motion energy in a fundamentally different manner than other known materials which are commonly used for this purpose.

The choice of the right fibre lengths and the right process for combing them into a workable mass leads to remarkable acoustic results which were first discovered by audio professionals. The improvement in the sound quality (fine dynamics in the midrange, “more airy” reproduction of voices and instruments, better 3D properties, etc.) is absolutely comparable with replacing cheaper standard connections with high-end cables. With the difference that Angel Hair is much less expensive.

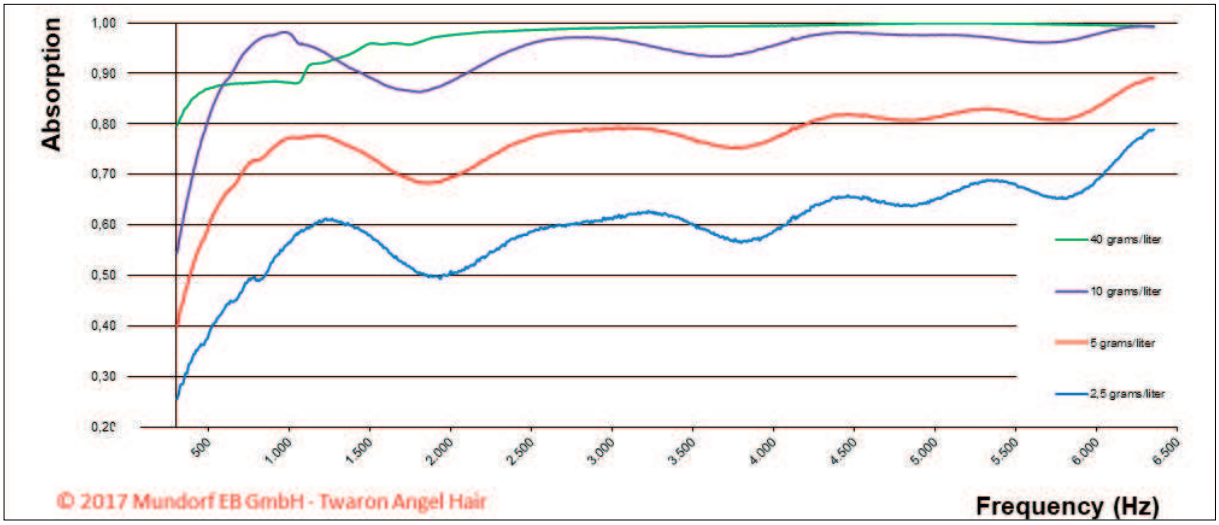
Comparisons with the kg price for conventional fibres can make Angel Hair look expensive at first glance, but you only need approx. 10-20% of the weight of other materials. More importantly: the sound quality improves significantly; this can particularly be heard in the signal definition in the midrange and in bass reproduction. In comparison with the costs for high quality cables or equipment such as absorbers etc., Angel Hair is an extremely cost-effective way of improving the sound quality.

In contrast to other insulating materials, the insulating properties of Angel Hair are almost linear from 700 Hz. As shown in the diagrams, 3-10 grams/litre of volume in speaker systems is an appropriate quantity, depending on the damped frequency range and the size and design of the speaker cabinet. It is certainly never necessary to fill large speakers and bass reflex boxes completely! At best, this would have a negative effect on the acoustics of your speaker system. For such cases, we recommend just filling the space behind the woofer. And another tip: by exchanging the standard BAF filler for Angel Hair, you generally achieve a further increase in the precision of the bass reproduction for existing speakers.

The diagrams below show how absorption-specific room reflections in the midrange/ upper range can be achieved through filling of absorption boards or insulation backdrops with Angel Hair.

MSilence TWARON® Angel hair

Order number	Packing unit	weight [kg]	[€]
ANGEL-200G	1	0,2	59,90
ANGEL-200G	5	1	189,90
ANGEL-200G	60	12	on request
ANGEL-200G	720	144	on request



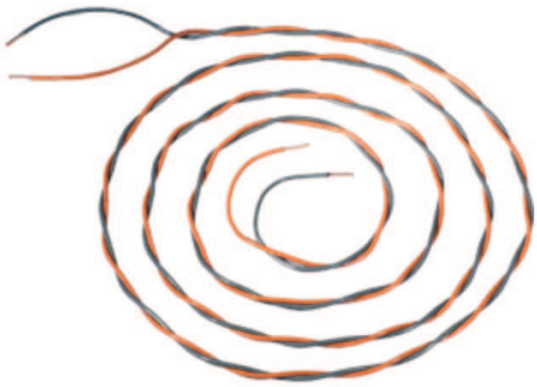
The reproduction of music by PTFE-insulated SolidCore Copper wires **CUW** excels by natural vibrancy and fineness as well as highest tonal neutrality, and an excellent price/performance ratio.

Initial listening test with regular stranded wires quickly showed that our coil wires, used as internal cabling for loudspeakers impress by their detailed and acoustically balanced music performance.

An additional PTFE sheath prevents the oxygen-free copper conductor (99.997% purity) from abrasion and tonal influences by unwanted microphonics.

The following, individually isolated and twisted versions are particularly appropriate:

2 * 1.0mm for tweeters
2 * 1,5mm for mid-drivers and mid-woofers
6 * 1,5mm for complete audio signals
2 * 2,0mm for woofers and sub-woofers



* Insulation test voltage 2 500V DC,
Max. operating voltage 250V AC
Strength of PTFE insulation: min. 0.25 mm

CUW210GY/OG
Copper wire 2 * 0,8 mm^2, PTFE-insulated, grey/orange *

	[€]
price á meter	19,90

CUW215GY/OG
Copper wire 2 * 1,8 mm^2, PTFE-insulated, grey/orange *

	[€]
price á meter	24,90

CUW615GY/OG
Copper wire 6 * 1,8 mm^2, PTFE-insulated, grey/orange *

	[€]
price á meter	79,80

CUW220GY/OG
Copper wire 2 * 3,1 mm^2, PTFE-insulated, grey/orange *

	[€]
price á meter	29,90

The mixture of **silver plus 1% gold** has proven itself excellently as capacitor film for the MCap® SUPREME SilverGold series. The resulting sound is so impressive that it was only natural to think of using this alloy for the internal wiring of electronic devices.

Listening tests with individually isolated conductors quickly proved that SilverGold shows its superior strengths every bit as convincingly in this application as well. Purity and elegance are the terms that automatically lend themselves to this exquisite material.

We offer the SilverGold wire in various diameters and insulated in PTFE.
The following, individually isolated and twisted versions are particularly appropriate:

2 * 0,5mm for tweeters
6 * 0,5mm for tweeters
6 * 0,5mm (shielded) for LF-Signals
2 * 1,0mm for mid-drivers
2 * 1,5mm for mid-woofers and woofers
4 * 1,5mm for woofers and sub-woofers
4 * 1,5mm for complete audio signals
6 * 1,5mm for complete audio signals
8 * 1,5mm for complete audio signals



Purity of silver: min. 99.97% typ. 99.99%
Purity of gold: min. 99.97% typ. 99.99%

* Insulation test voltage 2 500V DC,
Max. operating voltage 250V AC
Strength of PTFE insulation: min. 0.25 mm

SGW105
SilverGold-wire 0,5 mm, non-insulated

	[€]
price/meter	

SGW105WH
SilverGold-wire 0,5 mm, PTFE-insulated, white *

	[€]
price/meter	on request

SGW105YE
SilverGold-wire 0,5 mm, PTFE-insulated, yellow *

	[€]
price/meter	

SGW205WH/YE
SilverGold-wire 2 * 0,5 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	

NEW **SGW605WH/YE**
SilverGold-wire 6 * 0,5 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	

SGW605SHLD
SilverGold-wire 6 * 0,5 mm, PTFE-insulated, shielded *

	[€]
price/meter	

SGW110
SilverGold-wire 1,0 mm, non-insulated

	[€]
price/meter	

SGW110WH
SilverGold-wire 1,0 mm, PTFE-insulated, white *

	[€]
price/meter	on request

SGW110YE
SilverGold-wire 1,0 mm, PTFE-insulated, yellow *

	[€]
price/meter	

SGW210WH/YE
SilverGold-wire 2 * 1,0 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	

SGW115
SilverGold-wire 1,5 mm, non-insulated

	[€]
price/meter	

SGW115WH
SilverGold-wire 1,5 mm, PTFE-insulated, white *

	[€]
price/meter	

SGW115YE
SilverGold-wire 1,5 mm, PTFE-insulated, yellow *

	[€]
price/meter	

SGW215WH/YE
SilverGold-wire 2 * 1,5 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	

SGW415WH/YE
SilverGold-wire 4 * 1,5 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	

SGW615WH/YE
SilverGold-wire 6 * 1,5 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	

SGW815WH/YE
SilverGold-wire 8 * 1,5 mm, PTFE-insulated, white/yellow *

	[€]
price/meter	



Our **cable lugs** are made from the purest OFC-copper. The acoustic advantages are described in the chapter on pole terminals. Even large cable cross-sections can be processed. Because soft copper is unsuitable for the use of threads, we have decided to use a crimp connection between the lug and the cable.

MCONCL
Cable lugs, Beryllium-copper, gold-plated, to crimp

properly for	2 pair [€]	Bulk pack [€]
Fork, M6, 4,0-6,0mm² cable	14,90	
Ring, M6, 0,5-1,0mm² cable	11,90	500
Ring, M6, 1,5-2,5mm² cable	11,90	500
Ring, M6, 4,0-6,0mm² cable	11,90	500
Ring, M8, 1,5-2,5mm² cable	11,90	500
Ring, M8, 4,0-6,0mm² cable	11,90	500

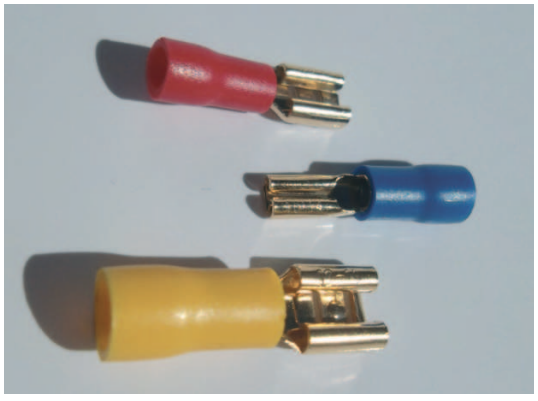


Our **banana plugs** are manufactured using a special byrillium copper sheet and subsequently gold plated. The byrillium gives the copper the necessary spring tension that is needed in order to ensure a high contact pressure when in contact with a socket and therefore guaranteeing security. The acoustic advantages of copper remain largely unaffected.

MCONBP
Banana plugs, Beryllium-copper, gold-plated

Insulation	2 pair [€]	Bulk pack [€]
non insulated	11,90	100

Insulation	1 pc. [€]	Bulk pack [€]
BK, black	1,49	100
RD, red	1,49	100



BLADE8.RDD
Blade receptacles, 0,5-1,5mm² cable, red

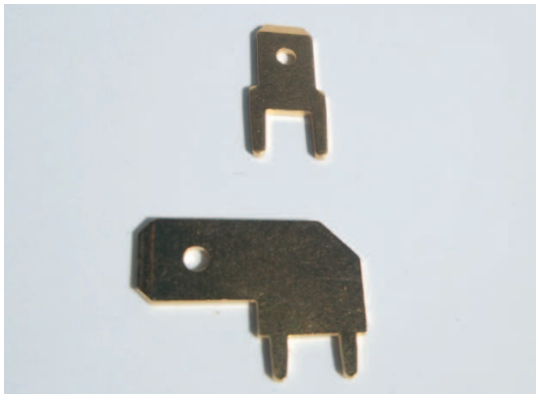
	10 pcs [€]
2,8G gold-plated	3,99
4,8G gold-plated	3,99

BLADE8.RBL
Blade receptacles, 1,5-2,5mm² cable, blue

	10 pcs [€]
2,8G gold-plated	3,99
4,8G gold-plated	3,99
6,3G gold-plated	3,99

BLADE8.RYE
Blade receptacles, 4,0-6,0mm² cable, yellow

	10 pcs [€]
6,3G gold-plated	6,99



BLADE.TS
Contact pin, straight

	10 pcs [€]
2,8G gold-plated	7,99
4,8G gold-plated	8,99
6,3G gold-plated	9,99

BLADE.TA
Contact pin, angle form

	10 pcs [€]
6,3G gold-plated	9,99

The **TPCU Terminal Posts** from **OFC-copper** are designed to meet the highest demands on mechanical precision, acoustical performance and aesthetics. Made in Germany from the solid our TPCU series combines maximum conductor cross-section with lowest transfer resistances. Thus they unite tonal clarity, beauty and stereo-phonic spaciousness with harmonious-warmth and splendid brightness.

Pure copper terminals should be cleaned periodically with copper-polish or a mixture of vinegar and water to prevent oxidation. Alternatively we offer `maintance-free´ versions plated with **silver** or **gold**.

The scope of delivery includes two nuts, one washer and a spring washer for safe assembly. Standard insulation material furthermore acts as rotation protection and polarity marking.

We offer red and black coloured markings ex stock and spot colours upon request.

Mundorf recommends non-metallic mounting plates. Else the terminal posts induce a charge via counter-rotating magnetic fields into the mounting plate that distorts the music signal by absorbing energy from it. So more electric power is transmitted, the higher is the inductance and hence the loss of energy and fine details (see diagram).

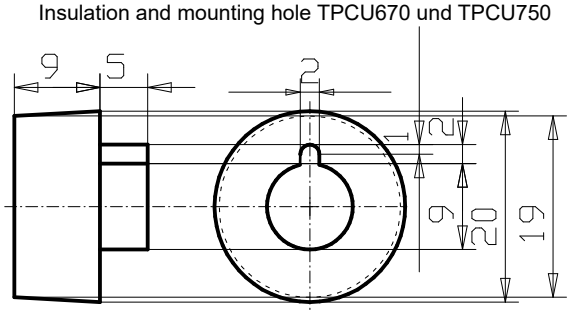
TPCU670 Connections
External:
6mm cable lugs (spades),
1x 4mm banana plug
Internal:
6mm cable lugs (spades), Solder Terminal

TPCU750 Connections
External:
6mm cable lugs, 8mm cables lugs (spades),
2x 4mm banana plugs, bare cable ends
Internal:
6mm cable lugs (spades), Solder Terminal

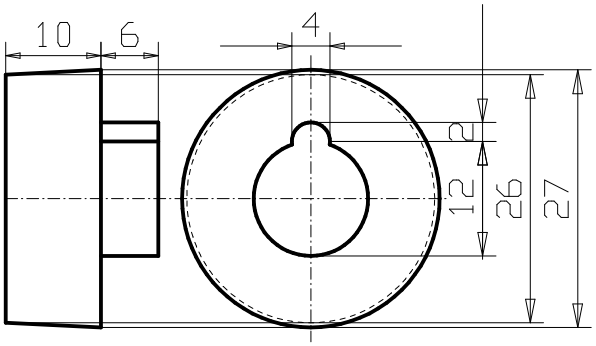
TPCU870 Connections
External:
6mm cable lugs, 8mm cable lugs (spades)
2x 4mm banana plugs, bare cable ends
Internal:
8mm cable lugs (spades), 4mm banana plugs
Solder Terminal (see also highly recommended MSolder on page 54)

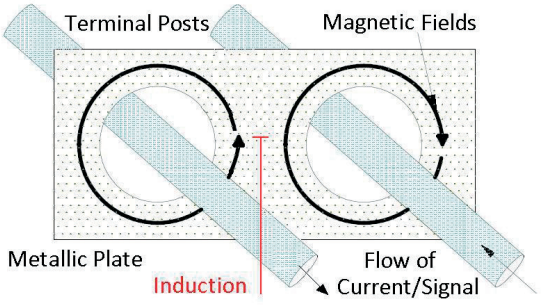


Insulation and mounting hole TPCU670 und TPCU750



Insulation and mounting hole TPCU870



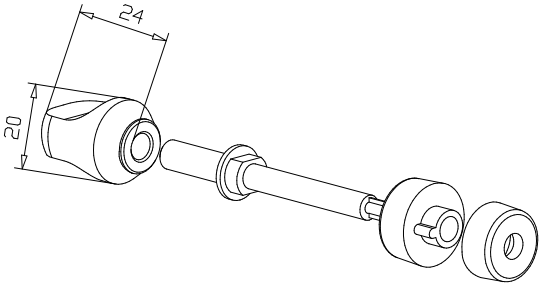




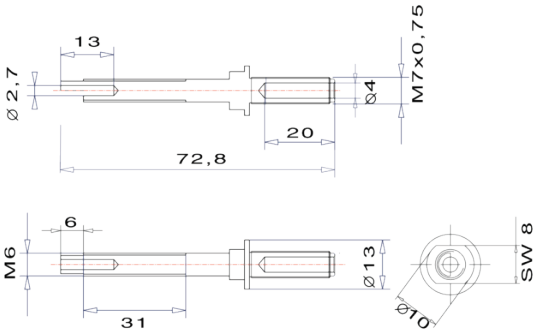
Binding posts 670



Binding posts 670 Evo



Copper terminal M6 isometric representation



Binding posts 670, 2 red + 2 black

		2 pair [€]
TPCU670C	Pure copper Classic	139,90
TPCU670E	Pure copper EVO	139,90
TPCU670GC	Copper gold-plated Classic	169,90
TPCU670GE	Copper gold-plated EVO	169,90

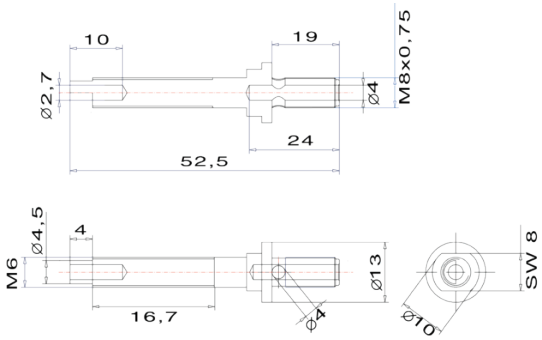
All terminal posts are also offered un-assembled as TPCU-OEM for efficient construction.



Binding posts 750 EVO

The Terminal Posts **TPCU750** were designed in 2015 for the use in audio applications with low wall thicknesses, like for example amplifiers and loudspeaker terminals.

These combine the superior connectivity of TPCU870 with the lean appearance of TPCU670.
Though their diameter is 20mm only, they own a cross hole to accommodate bare cable ends or a second 4mm banana plug.



Binding posts 750, 2 red + 2 black

		2 pair [€]
TPCU750E	Pure copper EVO	139,90
TPCU750GE	Copper gold-plated EVO	169,90

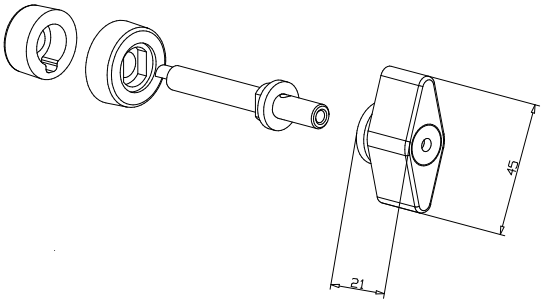
All terminal posts are also offered un-assembled as TPCU-OEM for efficient construction.



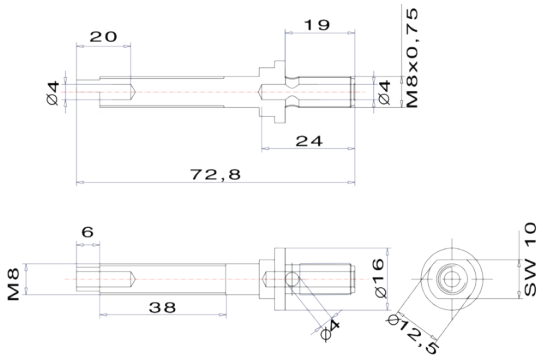
Polklemmen 870 Classic



Polklemmen 870 EVO



Copper terminal M8 isometric representation



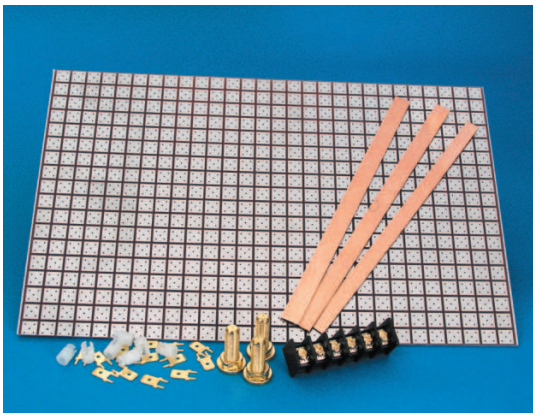
Binding posts 870, 2 red + 2 black

		2 pair [€]
TPCU870C	Pure copper Classic	169,90
TPCU870E	Pure copper EVO	169,90
TPCU870GC	Copper gold-plated Classic	199,90
TPCU870GE	Copper gold-plated EVO	199,90

All terminal posts are also offered un-assembled as TPCU-OEM for efficient construction.

The **multiboard** that we offer is a circuit board developed for quick and uncomplicated construction using individual parts and prototypes. The soldered side is divided into many copper areas, each measuring approx. 10 * 10 mm.

The components are glued directly onto the solder side and the connection wires are soldered to the copper surface



UNIP
Universal circuit boards

	[mm]	[€]
18	91 * 70	7,99
14	141 * 91	14,90
13	94 * 182	19,90
12	182 x 141	24,90
11	283 * 182	44,90

CUB300
Copper strips approx. 300mm

h*w [mm]	[€]
1 * 6	1,99
1 * 10	2,49
1 * 15	2,99

NIET.AL/AL
TriGo Aluminium Rivets for M5 coil assembly

D*L [mm]	500 pcs. [€]
4,8*15,3	42,90

FQW.TAPE
3M double-sided adhesive tape for components assembly

	W*H [mm]	Colour	66m [€]
BK09	9*0,8	black	39,90
WH09	9*0,8	white	39,90
WH19	19*0,8	white	49,90

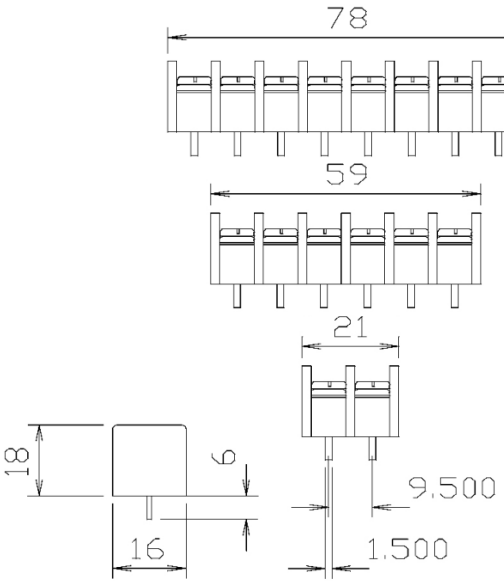


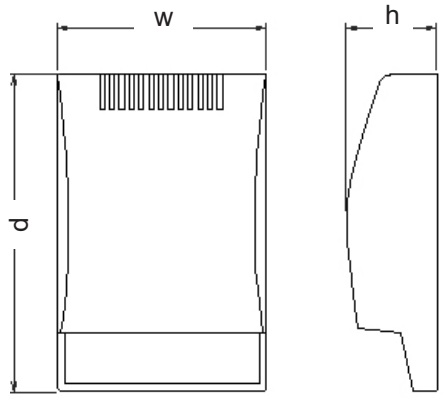
These **circuit board terminals** make a simple screw connection between the circuit board and the cabling possible. They are particularly well suited for use in connection with our crossover component casings.



Crossover casing (without components)

Our beautifully shaped casings can be used for the support of individual crossovers, particularly in Cars.



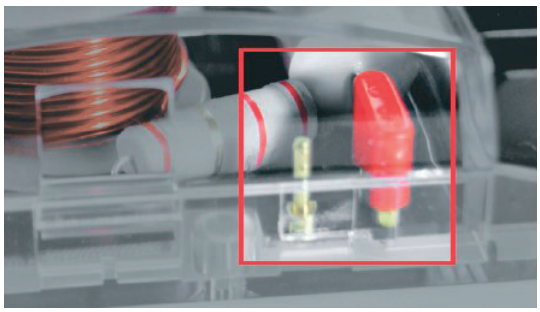


CBST92
Circuit board posts, 9,2mm grid dimension

Description		[€]	Bulk pack [pcs]
2G	2-pin, gold-plated	2,49	400
6G	6-pin, gold-plated	4,99	100
8G	8-pin, gold-plated	5,99	100

Crossover casings
W*D*H = 85*130*37mm

		[€]	Bulk pack [pc]
CAR2.BP-U	Bottom Plate	2,49	200
CAR2.TC-U	Top Case	2,49	200



Additonal Services

MATCH
Pair of capacitors up to < 0.2%

pair	[€]
	15,10

Additional coil tabs
(zero-ohm coils excepted)

[€]
15,00

MCONCBR-05
Mconnect connection bridge, red

[€]
2,49

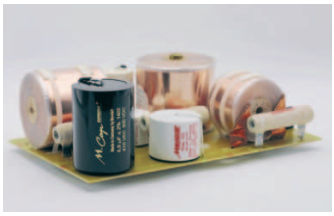
MCONSPG-1
MConnect solder pin, gold-plated

[€]
0,49



MUNDORF *hifi*AMT®

Discover our innovative AMT loudspeaker drivers functioning accordingly the Air Motion Transformer principle invented by Oskar Heil. Those drivers, which can also be altered an manufactured to your requirements, are developed and manufactured in our Cologne headquarter.



MUNDORF Services & Solutions for industrial clients

In-house turnkey crossover network manufacturing from best budget quality to audiophile top-level at competition adequate manufacturing costs and competitive prices.



MUNDORF *pro*AMT®

Line source by principle.
135db at crystal clear.
1000W cool and safe.
Think AMT!


MUNDORF®