

**Hifi/Studio Catalog 2012  
Newsletter MCAP EVO & AMT**

**For the Love of Music.**



This document is valid from 1<sup>st</sup> May 2012.  
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Liebe Kunden und Audio- Enthusiasten!

2012 gibt es eine ganze Reihe an neuen Produkten aus unserem Haus. Die wichtigsten möchten wir Ihnen hier vorstellen.

Sieben Jahre Forschung und Entwicklung im Bereich Air Motion Transformer liegen nun hinter uns. Das Model 2510C wurde schon vor geraumer Zeit in einem deutschen Testmagazin zu einem der besten Hochtöner der Welt gekürt. Trotzdem haben wir uns im letzten Jahr nochmals mit besonderer Ausdauer im Labor eingesperrt und eine ganze Reihe begonnenen Entwicklungen zu Ende geführt.

Wir denken, das Ergebnis kann sich sehen lassen und wir freuen uns, Sie nun an den Früchten dieser intensiven Arbeit teilhaben zu lassen.

Ob groß oder klein, ob Dipol oder Monopol, allen Produkten gemeinsam sind die extrem niedrigen Verzerrungen und die Mühelosigkeit mit der unsere AMT die kleinsten Details wiedergeben.

Dabei sind die hier vorgestellten Treiber nur ein Ausschnitt aus der neuen Produktpalette. Sollten Sie sich auch für PRO-Audio interessieren, finden Sie auf unserer Homepage weiterführende Informationen zu speziell für diese Anwendung entwickelte Treiber.

Auch im Bereich der Audiokondensatoren hat sich wieder einiges getan. Unser Entwicklerteam stellt Ihnen eine ganze Reihe von neuen Kondensatoren mit optimierter Wickelgeometrie vor, die unter Verwendung bester Materialien sorgfältig in Deutschland gefertigt werden.

Die Einstiegsserie ist dabei erstaunlich preiswert geraten und wir sind vom Erfolg dieser Serie fest überzeugt.

Die ebenfalls in dieser Bauform erhältlichen Silber/Gold-Kondensatoren verfügen zwar nicht über die bestens bewährte und sehr aufwendige Supreme-Wickeltechnik, bieten aber in dieser Konfiguration einen günstigen Einstieg in die Welt der Mundorf-Silber/Gold-Kondensatoren mit ihrer einzigartigen Kombination von Eleganz und Emotionalität.

Alles in allem haben unsere Entwickler und das gesamte Team sehr intensiv und extrem erfolgreich an einer ganzen Reihe audiophiler Delikatessen gearbeitet und wünschen Ihnen nun viel Freude bei der Erkundung dieser Broschüre und der Anwendung dieser Neuheiten.

Dear customers and audio enthusiasts!

Our company has a whole range of new products for 2012. We'd like to introduce you to the most important ones here.

We now have seven years of research and development in the field of air motion transformers under our belt. Quite a long time ago, the 2510C model had already been dubbed one of the best tweeters in the world by a German test magazine. Nevertheless, over the past year we have been working tirelessly and have completed a whole range of developments that had been started but not finished.

We believe that the result is clear to see and we are delighted to now be able to show you the fruits of our intensive labour. Whether big or small, dipole or monopole, what all products have in common are the extremely low distortion and the ease with which our AMT conveys the tiniest details.

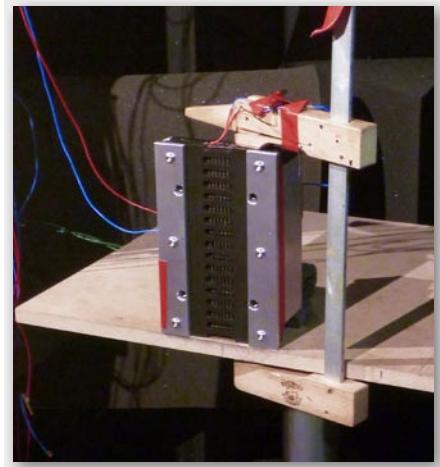
The drivers mentioned here are only an extract from the new product range. If you are also interested in PRO audio, our homepage will give you further information on drives designed especially for this type of application.

There has also been considerable progress in the field of audio capacitors. Our team of developers presents a whole range of new capacitors with optimised winding geometry, all of which are manufactured in Germany to the highest standards and using the best materials.

The entry-level series has turned out to be remarkably reasonably priced, and we are very convinced of the success of this series.

The silver/gold capacitors also available in this design do not have the extensively tried and tested and very elaborate Supreme winding technology, but in this configuration they offer a low-cost introduction into the world of Mundorf silver/gold capacitors with their individual combination of elegance and emotionality.

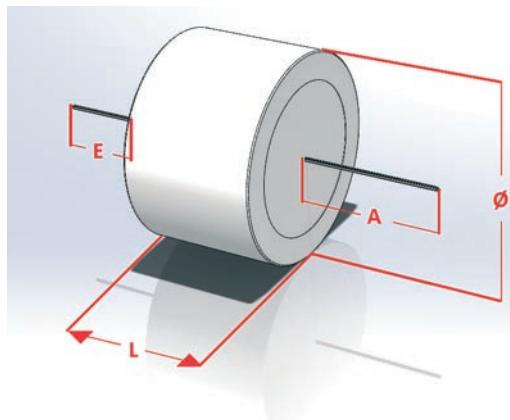
All in all, our developers and the whole team have worked very intensively and extremely successfully on a whole range of treats for audiophiles and they hope you get plenty of enjoyment out of exploring this brochure and using these new inventions.



# News 2012

**MUNDORF®**

## Über die Vorteile der innovativen EVOLUTION-Wickeltechnologie



Hauptmerkmal der **EVOLUTION-Technologie**, ist der ungewöhnlich schmale und hohe Kondensatorwickel. Aus dieser Geometrie ergeben sich zwei, akustisch deutlich wahrnehmbare Vorteile gegenüber klassischen, einfacher herzustellenden Kondensatoren: Zum einen sind kürzeste, verlustarme Signalwege sowie besonders große Kontaktflächen garantiert (und damit ein extrem niedriger Restwiderstand ESR), zum anderen sind außergewöhnlich viele Windungen parallel geschaltet, wodurch die Induktivität (ESL) minimiert wird.

Alle EVO-Kondensatoren werden nach dem hochpräzisen Wickelprozess, in speziell entwickelten, kompakten Gehäusen von Hand vergossen. Dies verhindert das Vibrieren des Wickels und Mikrofonie-Effekte nachhaltig. Darüberhinaus verwenden wir ausschließlich hochreinen Polypropylen-Film, welcher mit einer maximal dicken Metallschicht bedampft wird. Die ungewöhnlichen, asymmetrischen Anschlüsse ermöglichen sowohl die klassisch-horizontale, als auch eine senkrechte Montage der Kondensatoren.

## About the advantages of our innovative EVOLUTION winding technology

The main feature of the **EVOLUTION winding technology** comes with its unusual narrow but high capacitor reel. This geometry results in two, acoustically clearly perceptible benefits in comparison to traditional, easier to produce capacitors. Firstly, a shorter but utmost little loss signal path between huge contact areas is granted, thus an extreme low equivalent series resistance/ESR. Secondly, in order to meet capacitance the number of paralleled windings is larger than with regular caps, thus an effectively minimized equivalent series inductivity/ESL. After the utmost precise EVO winding process, these reels are spilled by hand in especially developed housings. By that, vibrations and microphonic effects on the reel are most effective avoided. Furthermore, we only employ purest Polypropylene foil vaporized with the thickest metal layer possible. Plus the unusual asymmetric wire lengths allow both mounting directions on PC boards, horizontal and vertical.

Im Klangbild des neuen **MCap® EVO**, machen sich all die obenstehenden Besonderheiten durch klangfarbige Lebendigkeit, nuanciert-transparente Dynamik sowie herausragende Authentizität und Stereofonie bemerkbar. Als direkter Nachfolger des RXF bietet er einen erstaunlich preiswerten Einstieg in die audiophile EVO-Produktfamilie.

Altogether, the new **MCap® EVO's**, above mentioned features lead to colorful livelihood, remarkable micro dynamic alongside enhanced transparency, authenticity and 3 dimensional stereophony. As the direct successor of the RXF, the **MCap® EVO** marks the surprisingly inexpensive entry into the audiophile EVO line-up.



**MEAI.A**  
**MCap EVO axial**

Kapazität Capacity [μF]	VDC	Körper Body Ø* L [mm]	Draht Wire Ø* E/A [mm]	[€]
0,010 ±3	450	5 * 12	0,6 * 35/35	2,79
0,10 ±3	450	18 * 12	0,6 * 35/35	2,79
0,15 ±3	450	16 * 14	0,8 * 35/50	2,89
0,22 ±3	450	16 * 14	0,8 * 35/50	2,99
0,27 ±3	450	18 * 14	0,8 * 35/50	3,09
0,33 ±3	450	18 * 14	0,8 * 35/50	3,19
0,39 ±3	450	20 * 14	0,8 * 35/50	3,29
0,47 ±3	450	20 * 14	0,8 * 35/50	3,39
0,56 ±3	450	22 * 16	0,8 * 35/50	3,49
0,68 ±3	450	22 * 16	0,8 * 35/50	3,59
0,82 ±3	450	25 * 16	0,8 * 35/50	3,69
1,00 ±3	450	25 * 16	0,8 * 35/50	3,79
1,50 ±3	450	30 * 16	0,8 * 35/50	3,99
1,80 ±3	450	25 * 21	0,8 * 35/50	4,19
2,20 ±3	450	25 * 21	0,8 * 35/50	4,39
2,70 ±3	450	30 * 21	0,8 * 35/50	4,59
3,30 ±3	450	30 * 21	0,8 * 35/50	4,79
3,90 ±3	450	25 * 27	0,8 * 35/50	4,99
4,70 ±3	450	30 * 27	1,0 * 35/60	5,49
5,60 ±3	450	30 * 27	1,0 * 35/60	6,19
6,80 ±3	450	35 * 27	1,0 * 35/60	6,99
8,20 ±3	450	35 * 27	1,0 * 35/60	7,99
10 ±3	450	40 * 27	1,0 * 35/60	8,99
12 ±3	450	35 * 35	1,0 * 35/65	9,99
15 ±3	450	40 * 35	1,0 * 35/75	10,90
18 ±3	450	50 * 35	1,0 * 35/75	13,90
22 ±3	450	50 * 35	1,0 * 35/75	17,90
33 ±3	450	65 * 35	1,2 * 45/90	22,90
47 ±3	350	50 * 50	1,2 * 45/90	27,90
56 ±3	350	65 * 50	1,4 * 50/105	32,90
68 ±3	350	65 * 50	1,4 * 50/105	37,90
82 ±3	350	75 * 50	1,4 * 50/105	42,90
100 ±3	350	75 * 50	1,4 * 50/105	47,90
150 ±5	250	50 * 90	1,4 * 50/140	59,90
220 ±5	250	65 * 90	1,4 * 50/140	74,90
270 ±5	250	65 * 90	1,4 * 50/140	119,90
330 ±5	250	75 * 90	1,4 * 50/140	124,90

## Innovation 2012 MCAP® EVO Oil



Der **MCAP® EVO Öl** kombiniert die klanglichen Vorteile des MCAP EVO auf gekonnte Weise, mit den akustischen Vorzügen ölgetränkter Kondensatoren. Seine zusätzliche Ummantelung sowie die Beschriftung in rot-metallic, verleihen ihm darüberhinaus, eine hochwertige Optik und Haptik.

The **MCAP® EVO Oil** combines the MCAP® EVO's sound characteristic in a perfect way with the acoustical advantages of oil impregnated capacitors. Furthermore, its additional wrapping as well as its imprint in red-metallic impart an appropriate quality look and haptic.

### MEAIO.A

#### MCAP EVO Oil axial

Kapazität Capacity [µF]	VDC	Körper Body Ø* L [mm]	Draht Wire Ø* E/A [mm]	[€]
0,010 ±5	450	5 * 12	0,6 * 35/35	5,79
0,10 ±3	450	18 * 12	0,6 * 35/35	5,99
0,15 ±3	450	16 * 14	0,8 * 35/50	6,19
0,22 ±3	450	16 * 14	0,8 * 35/50	6,49
0,33 ±3	450	18 * 14	0,8 * 35/50	6,79
0,47 ±3	450	20 * 14	0,8 * 35/50	7,09
0,68 ±3	450	22 * 16	0,8 * 35/50	7,39
1,00 ±3	450	25 * 16	0,8 * 35/50	7,69
1,50 ±3	450	30 * 16	0,8 * 35/50	7,99
2,20 ±3	450	25 * 21	0,8 * 35/50	8,29
2,70 ±3	450	30 * 21	0,8 * 35/50	8,59
3,30 ±3	450	30 * 21	0,8 * 35/50	8,89
3,90 ±3	450	25 * 27	0,8 * 35/50	9,19
4,70 ±3	450	30 * 27	1,0 * 35/60	9,59
5,60 ±3	450	30 * 27	1,0 * 35/60	9,99
6,80 ±3	450	35 * 27	1,0 * 35/60	10,90
8,20 ±3	450	35 * 27	1,0 * 35/60	11,90
10 ±3	450	40 * 27	1,0 * 35/60	13,90
15 ±3	450	40 * 35	1,0 * 35/75	16,90
22 ±3	450	50 * 35	1,0 * 35/75	21,90
33 ±3	450	65 * 35	1,2 * 45/90	27,90
47 ±3	350	50 * 50	1,2 * 45/90	33,90
68 ±3	350	65 * 50	1,4 * 50/105	43,90
100 ±3	350	75 * 50	1,4 * 50/105	54,90

Die Baureihe **MCap® EVO SilberGold.Öl** vereint die akustischen Vorzüge des MCap® EVO Öl mit den SilberGold-typischen, kraftvoll leuchtenden und fein nuancierten Klangfarben, zu einer atemberaubend schönen Musikwiedergabe. Diese wird bei Mundorf nur noch durch die Topmodelle unserer SUPREME-Baureihe übertroffen.

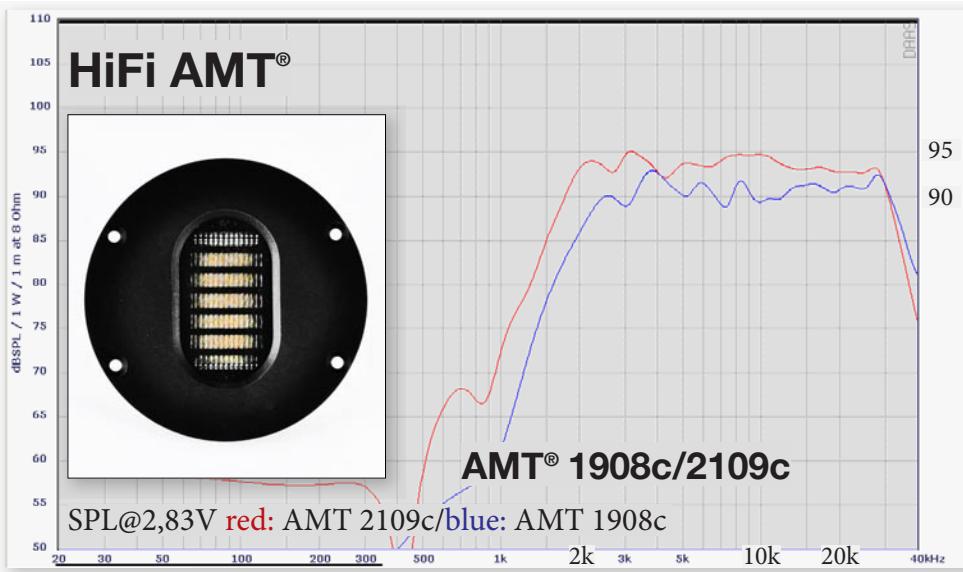
The all-new **MCap® EVO SilverGold.Oil** unites the audible features of the MCap® EVO Oil with those of a SilverGold metallization to a breathtakingly beautiful music performance. The beauty of the MCap® EVO SilverGold.Oil's music performance is only surpassed by Mundorf's top-line SUPREME capacitors.



#### MESGO.A

##### MCap EVO SilverGold.Oil axial

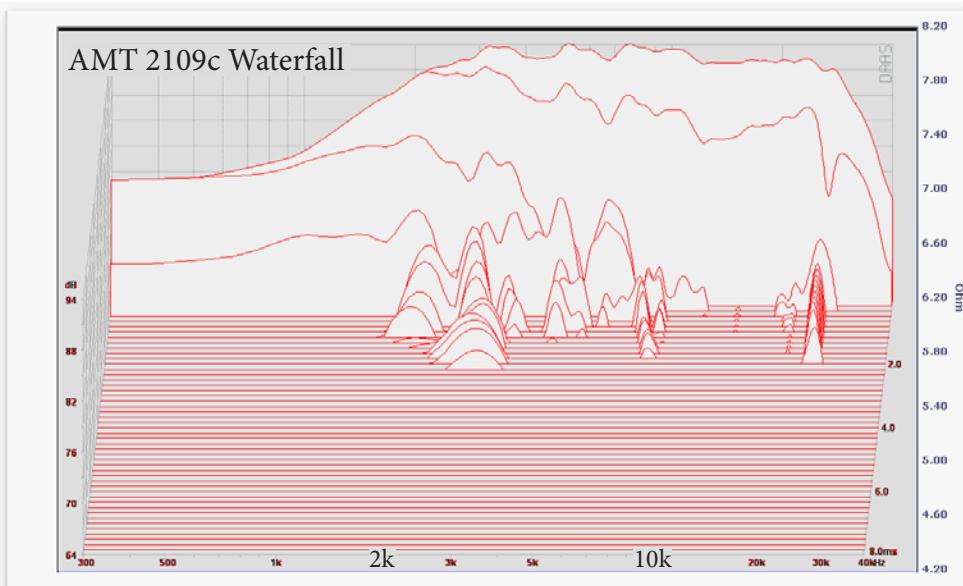
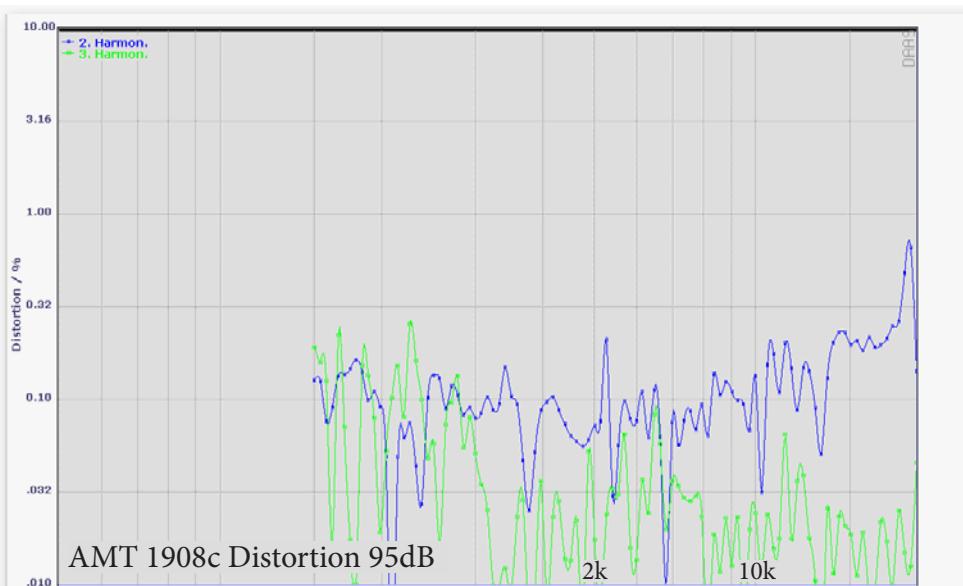
Kapazität Capacity	VDC	Körper Body	Draht Wire	[€]
[μF]		Ø* L [mm]	Ø* E/A [mm]	
0,010 ±3	450	5 * 12	0,6 * 35/35	16,90
0,10 ±3	450	18 * 12	0,6 * 35/35	17,50
0,15 ±3	450	16 * 14	0,8 * 35/50	17,90
0,22 ±3	450	16 * 14	0,8 * 35/50	18,50
0,33 ±3	450	18 * 14	0,8 * 35/50	18,90
0,47 ±3	450	20 * 14	0,8 * 35/50	19,90
0,68 ±3	450	22 * 16	0,8 * 35/50	21,90
1,00 ±3	450	25 * 16	0,8 * 35/50	24,90
1,50 ±3	450	30 * 16	0,8 * 35/50	29,90
2,20 ±3	450	25 * 21	0,8 * 35/50	34,90
2,70 ±3	450	30 * 21	0,8 * 35/50	39,90
3,30 ±3	450	30 * 21	0,8 * 35/50	44,90
3,90 ±3	450	25 * 27	0,8 * 35/50	49,90
4,30 ±3	450	30 * 27	1,0 * 35/60	52,90
4,70 ±3	450	30 * 27	1,0 * 35/60	54,90
5,10 ±3	450	30 * 27	1,0 * 35/60	57,90
5,60 ±3	450	30 * 27	1,0 * 35/60	59,90
6,20 ±3	450	35 * 27	1,0 * 35/60	62,90
6,80 ±3	450	35 * 27	1,0 * 35/60	64,90
7,50 ±3	450	35 * 27	1,0 * 35/60	67,90
8,20 ±3	450	35 * 27	1,0 * 35/60	69,90
10 ±3	450	40 * 27	1,0 * 35/60	74,90
15 ±3	450	40 * 35	1,0 * 35/75	89,90
22 ±3	450	50 * 35	1,0 * 35/75	114,90
33 ±3	450	65 * 35	1,2 * 45/90	149,90
47 ±3	350	50 * 50	1,2 * 45/90	189,90
68 ±3	350	65 * 50	1,4 * 50/105	239,90
100 ±3	350	75 * 50	1,4 * 50/105	299,90



## AMT®1908c/2109c

Der AMT® 1908c/2109c ist ein Mundorf HiFi Air Motion Transformer für hochwertige 3-Wege-Lautsprecher. Der lineare Frequenzgang, die AMT® typische Verzerrungsarmut und die hohe Empfindlichkeit bestimmen seine ausgewogene Musikwiedergabe, über die man hier viele wohlklingende Worte schreiben könnte. Und doch würde der 1908c/2109c „life“ immer noch viel besser klingen.

The AMT® 1908c/2109c is a Mundorf HiFi Air Motion Transformer for high quality 3-way systems. Linear frequency response, AMT® typical low distortions and the high sensitivity define its well-balanced music performance, on which one could write many pleasant-sounding words. And yet, ‘in the real world’ the 1908c/2109 would still sound much better.



## Specs AMT 1908c

Sensitivity 2,83V /1m: 90dB  
SPLmax: >113dB  
Peak Power Handling: 160 W  
Continious Sinus PH: 15 W  
FQ Response: 2.6kHz-31kHz  
Impedance: 8.3 Ohm

## Specs AMT 2109c

Sensitivity 2,83V /1m: 92dB  
SPLmax: >115dB  
Peak Power Handling: 160 W  
Continious Sinus PH: 15 W  
FQ Response: 2.1kHz-28kHz  
Impedance: 4.6 Ohm



## AMT® 23CM1.1

## AMT® 25CM1.1

Die hier vorgestellten Treiber ergänzen unser Programm an Hifi AMT®. Durch die schmälere Membrangeometrie zeichnen sie sich durch eine breitere horizontale Abstrahlung aus. Der Frequenzgang konnte deutlich erweitert werden. Weitere Typen folgen.

The displayed drivers complement our Hifi AMT® line-up. Their horizontal performance angle is considerably wider due their narrower diaphragm geometry. Also, their frequency range is wider at both ends. Additional models will follow.

Der AMT® 2310c ist das Universalmodell der Mundorf HiFi Air Motion Transformer, und zählt objektiv zu den absolut besten Hochtöner, die heute für hochwertige 3-Wege-Hifi Systeme angeboten werden.

The AMT® 2310c is Mundorf's universal model of the HiFi Air Motion Transformer line and certainly one of today's absolutely best tweeters available for 3-way high performance audio systems.

Der AMT® 2510c ist das Topmodell der Mundorf HiFi Air Motion Transformer, und sicherlich nicht nur messtechnisch einer der absolut besten Hochtöner, die heute für hochwertige Hifi Systeme angeboten werden.

The AMT® 2510c is Mundorf's top model of the HiFi Air Motion Transformer line and certainly not only by its specs one of today's absolutely best tweeters available for high performance audio systems.

### Specs AMT 23CM1.1

Sensitivity 1W/1m: 90dB

SPLmax: 121dB

Peak Power Handling: 250 W

Continious Sinus PH: 25 W

FQ Response: 1.5kHz-32kHz

Impedance: 4,7 Ohm

### Specs AMT 25CM1.1

Sensitivity 1W/1m: 91dB

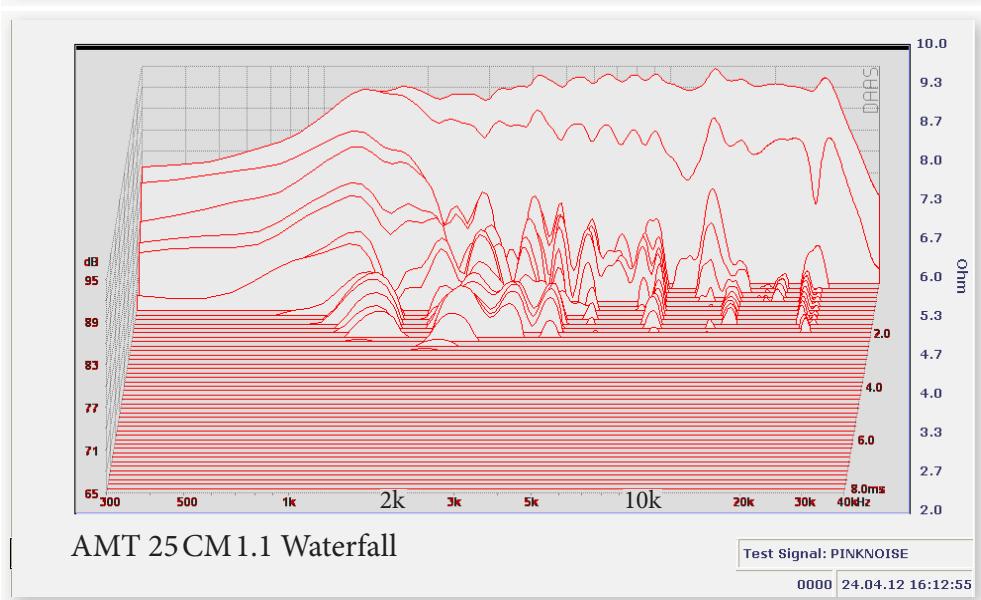
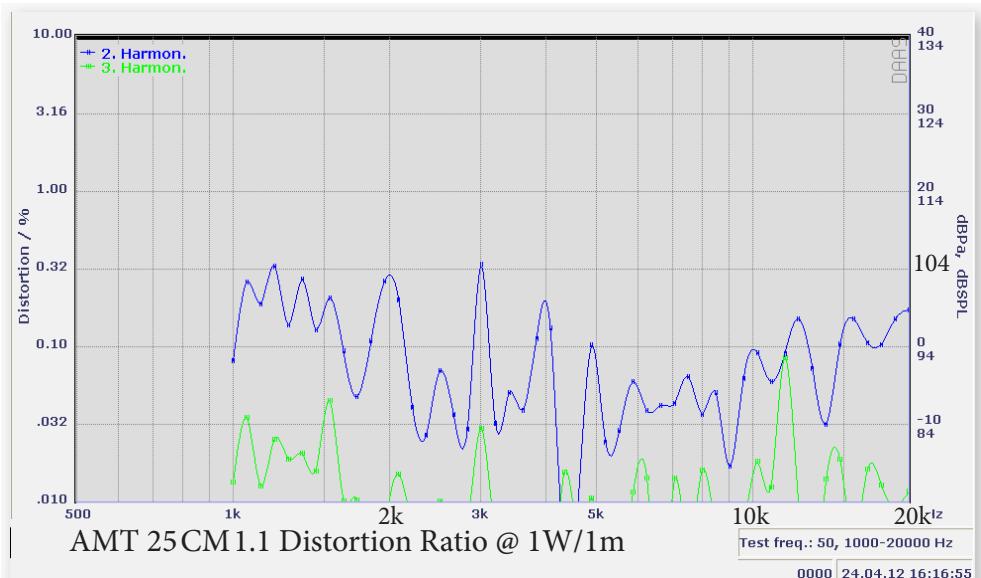
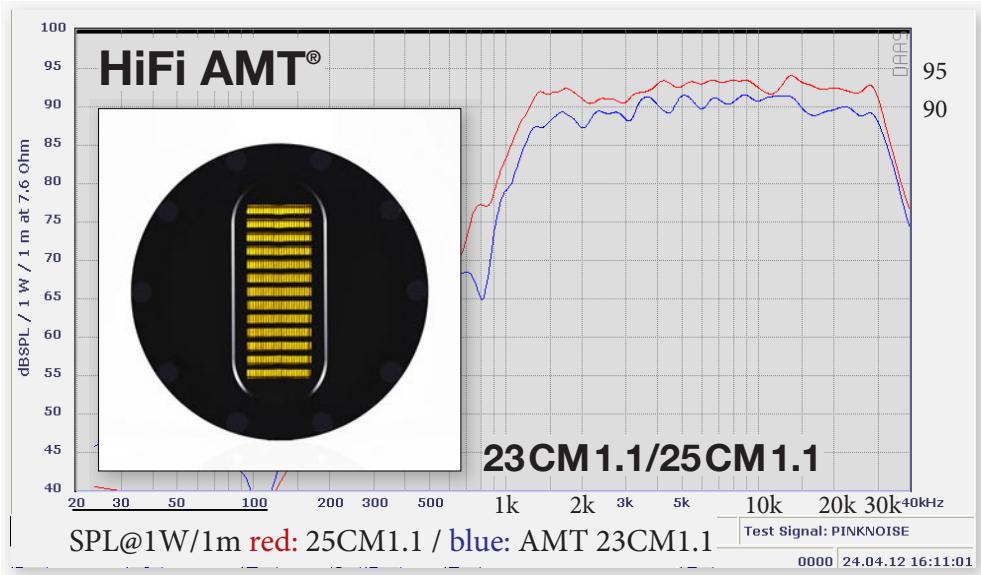
SPLmax: >123dB

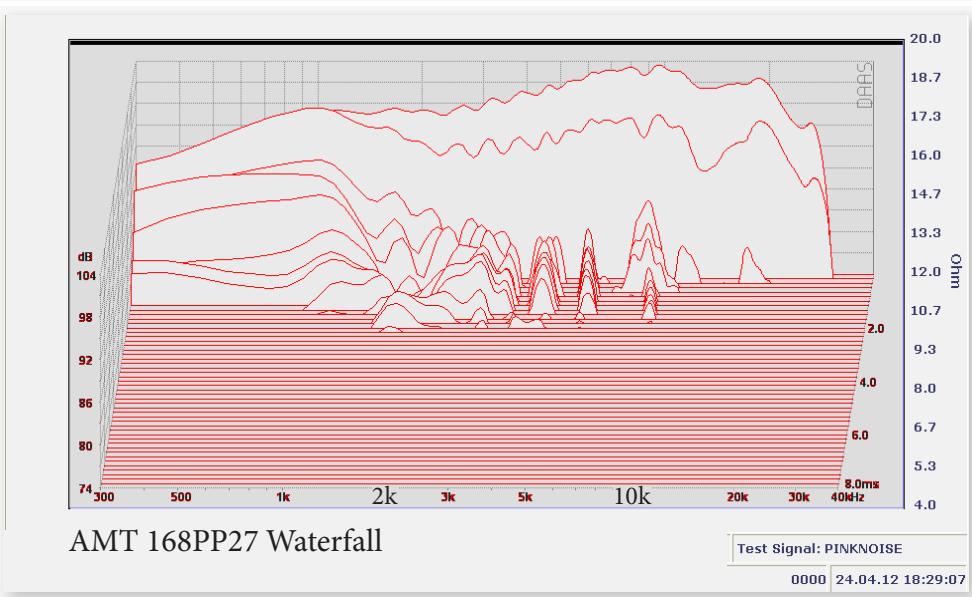
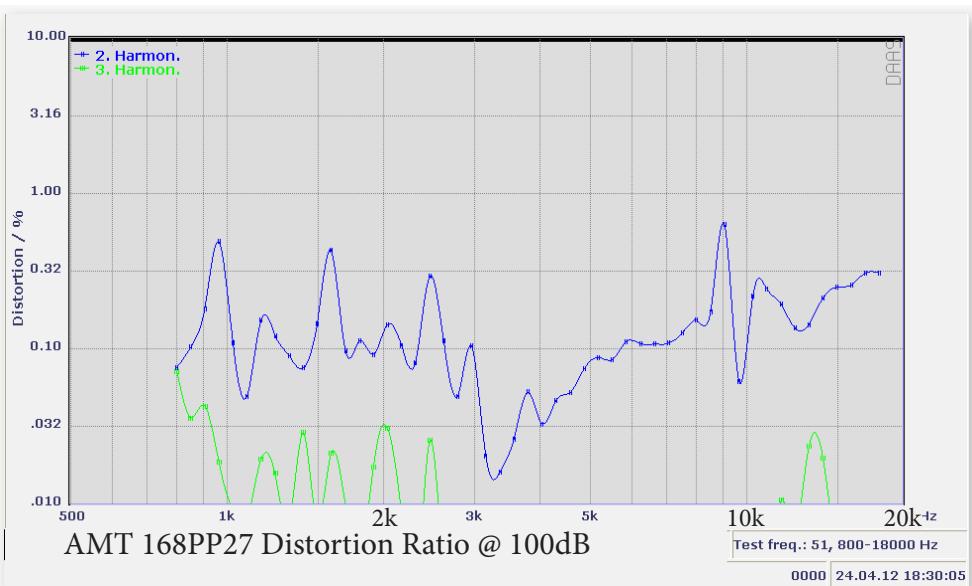
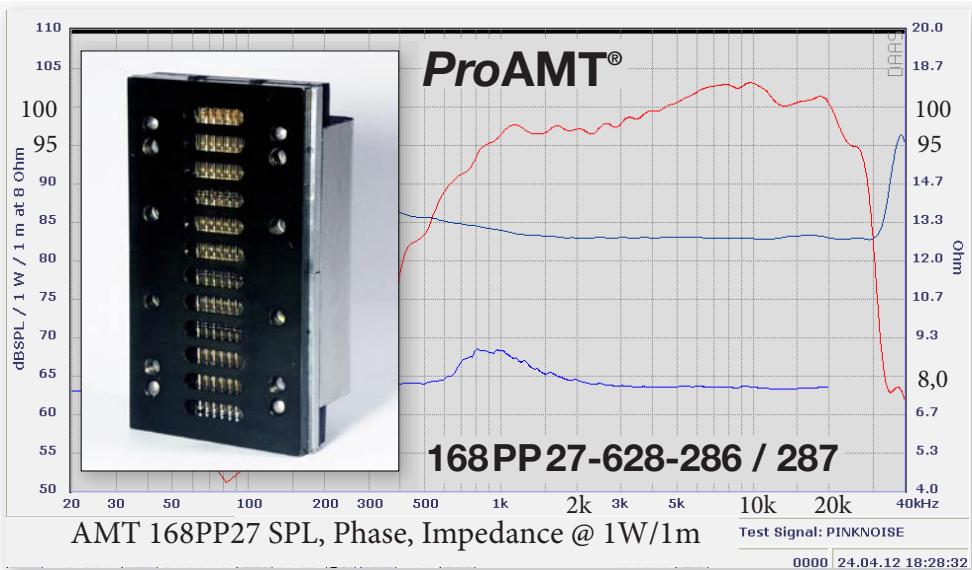
Peak Power Handling: 250 W

Continious Sinus PH: 25 W

FQ Response: 1.1kHz-32kHz

Impedance: 7 Ohm





## ProAMT® 168PP27

Allen Freunden von Hochwirkungsgrad Hifi stellen wir mit diesen Treiber extrem klirrarme und pegelfeste Treiber zur Verfügung.

With those AMTs we provide extreme distortion less but truly level stable drivers to all supporters of high efficiency audio applications.

## Specs AMT 168PP27-628-286 / 287

Sensitivity 1W/1m: 100dB  
SPLmax: >127dB  
Continious Sinus PH: 40 W  
FQ Response: 1kHz-20kHz  
Impedance: 7 Ohm

## Specs AMT 168PP27-628-287

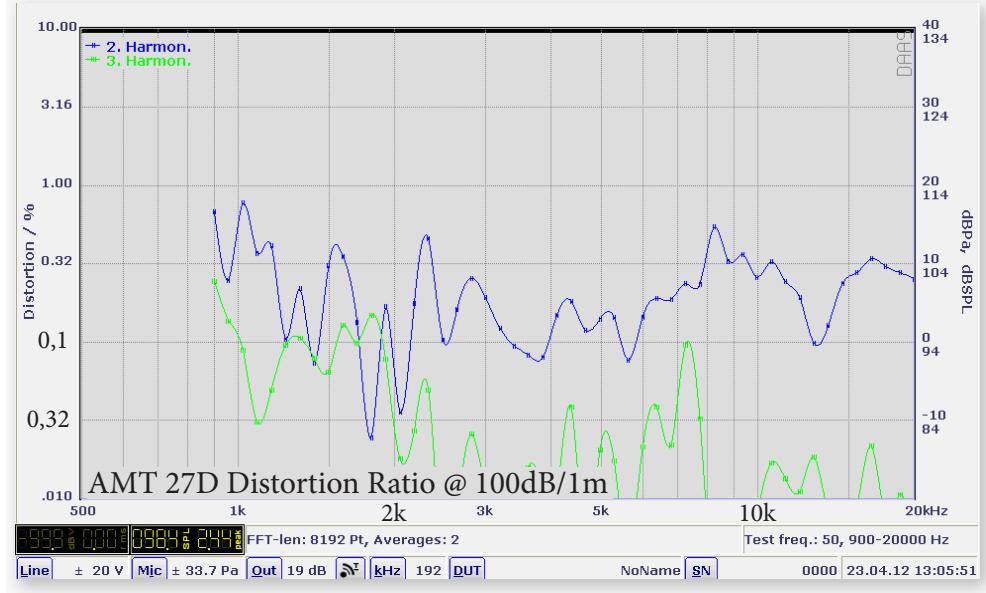
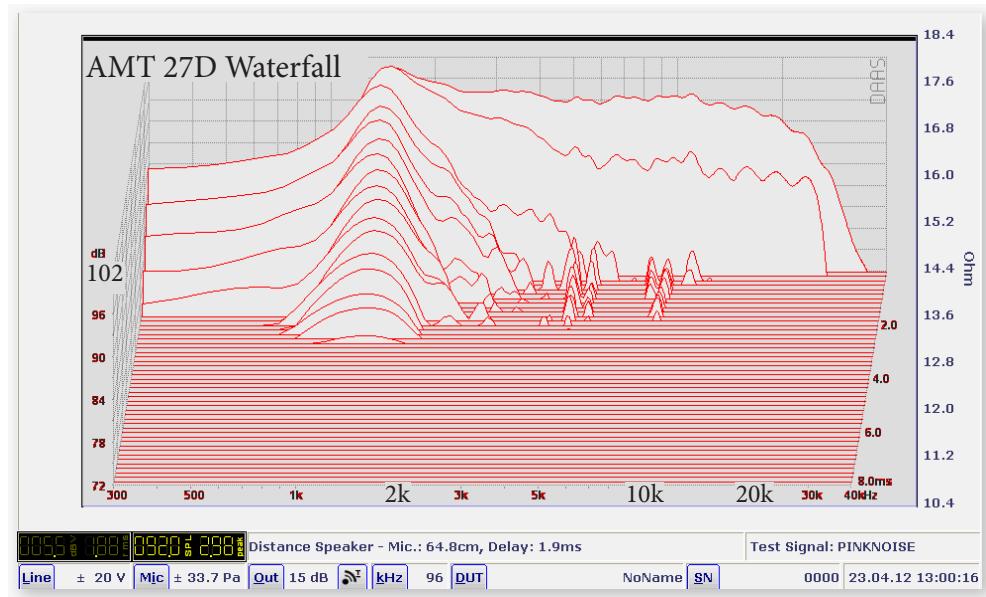
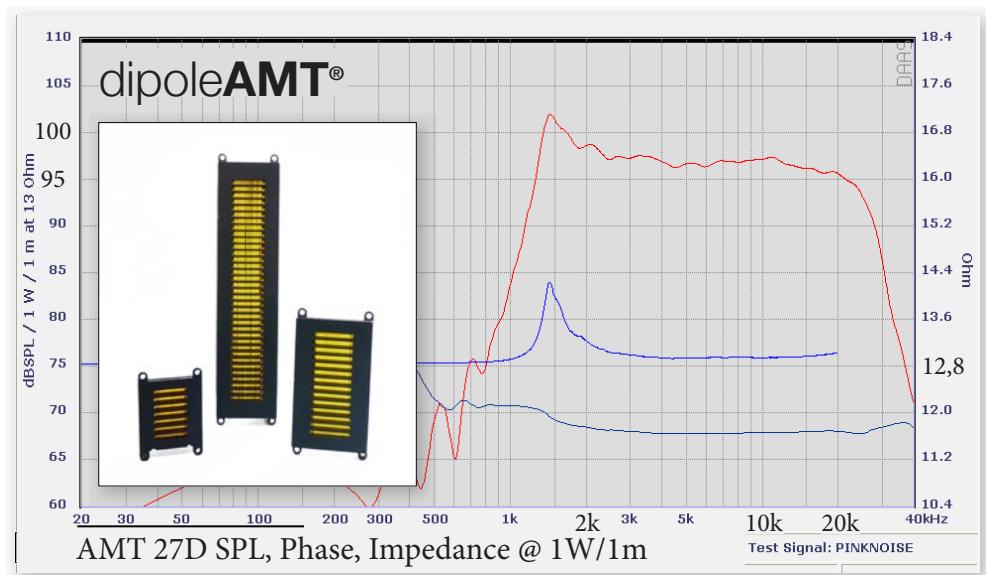
Sensitivity 1W/1m: 100dB  
SPLmax: >127dB  
Continious Sinus PH: 40 W  
FQ Response: 1kHz-20kHz  
Impedance: 3,5 Ohm



dipoleAMT®

Mit dieser Baureihe stellt Mundorf den Freunden von Dipol-Konzepten eine eigens auf diesen Anwendungsfall hin optimierte Serie zur Verfügung. Sie zeichnete sich durch eine ganze Reihe von konstruktiven Details aus, die in ihrer Summe optimale Voraussetzungen für eine extrem lebendige und natürliche Musikwiedergabe schaffen. Mundorf stellt hierzu mehrere echte Dipol-Treiber in unterschiedlichen Größen zur Verfügung.

The **dipoleAMT®** series is Mundorf's contribution to all friends of this particular driver concept. Especially developed and optimized for dipole applications it features numerous constructive details which sum up in ultimate preconditions for an outstandingly vivid and naturally 3D music performance. The **dipoleAMT®** series consists of various drivers in different sizes.



Specs dipoleAMT 27D10.1

Sensitivity 1W/1m: 97dB

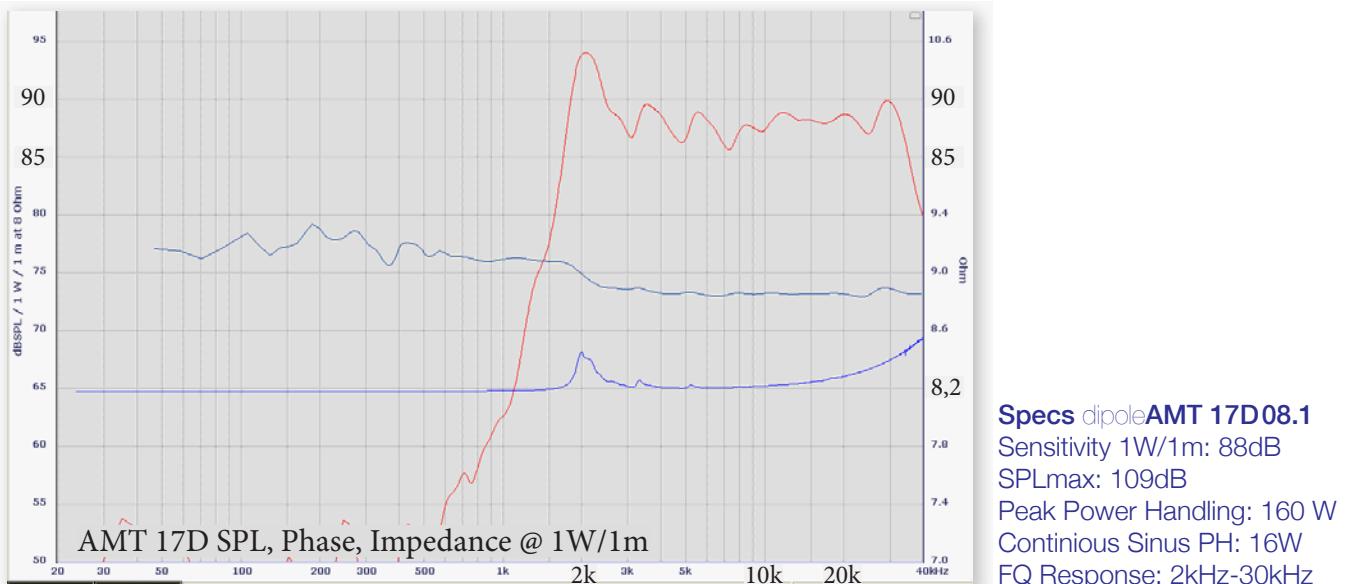
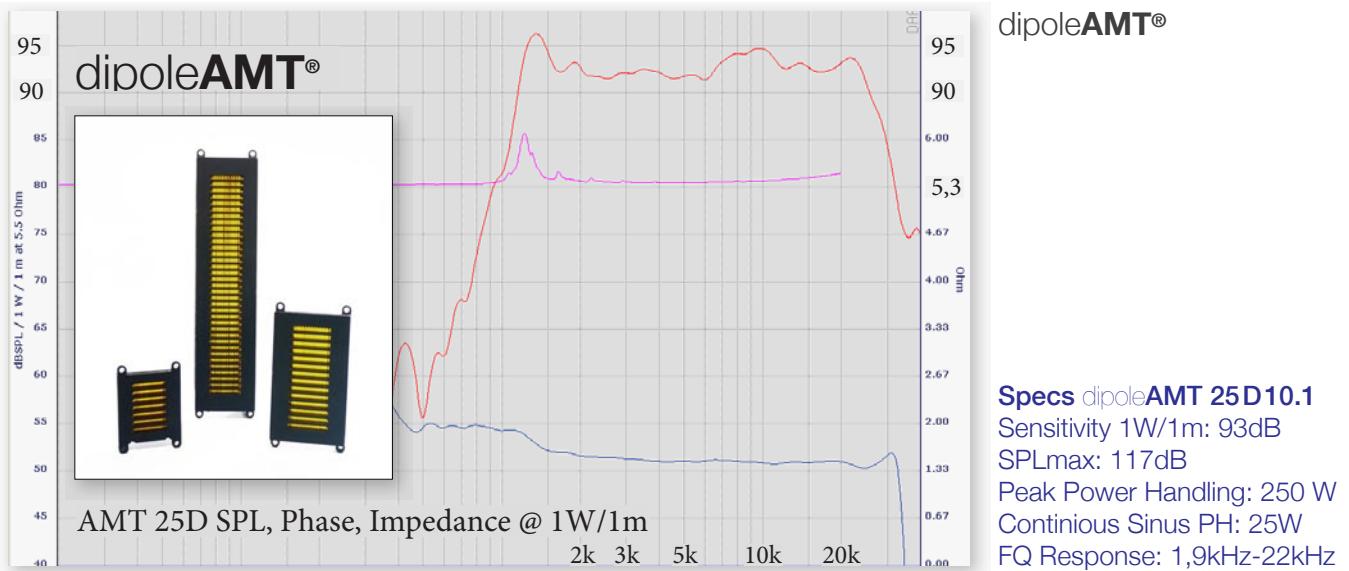
SPLmax: 124dB

Peak Power Handling: 500 W

Continuous Sinus PH: 50W

FQ Response: 2kHz-22kHz

[www.mundorf.com/amtnews](http://www.mundorf.com/amtnews)



### MUNDORF AMT Preisliste (UVP) Pricelist (RRP) in € (Euro)

AMT 19C.....	€ 179,00
AMT 21C.....	€ 219,00
AMT 23C.....	€ 279,00
AMT 25C.....	€ 329,00
AMT 17D.....	€ 149,00
AMT 23D.....	€ 279,00
AMT 25D.....	€ 329,00
AMT 27D.....	€ 549,00
proAMT 164UM1.1/1.2.....	€ 549,00
proAMT 168PP27.....	€ 449,00



## ProAMT®164UM-6“

Der ProAMT®164UM ist ein gezielt entwickelter Monitor-Hochtöner. Hohe Empfindlichkeit, weiter Frequenzbereich und hohe Belastbarkeit vereint er mit hohem Schalldruck in äußerst kompakten Maßen. Damit sind seine Einsatzmöglichkeiten in modernen Abhörlausprechern nahezu unbegrenzt. Zweifellos setzt dieser Treiber mit seiner ProAudio-Perfomance in HighEnd Audio Qualität neue Maßstäbe.

Der dargestellte Treiber steht als Beispiel dieser kompakten Bauform, die in verschiedenen Höhen, Impedanzen und mit unterschiedlichen Abstrahlwinkeln zur Verfügung steht, und sowohl mit als auch ohne Zwangskühlung angeboten wird.

ProAMT®164UM is a specifically developed tweeter for monitor speakers. It combines high sensitivity, wide frequency response and high power handling with equally high SPL. All together in a rather small enclosure. Thus, its application in modern monitors is virtually unlimited. Unquestionably, by its pro-audio performance in high end audio quality this driver sets a new benchmark.

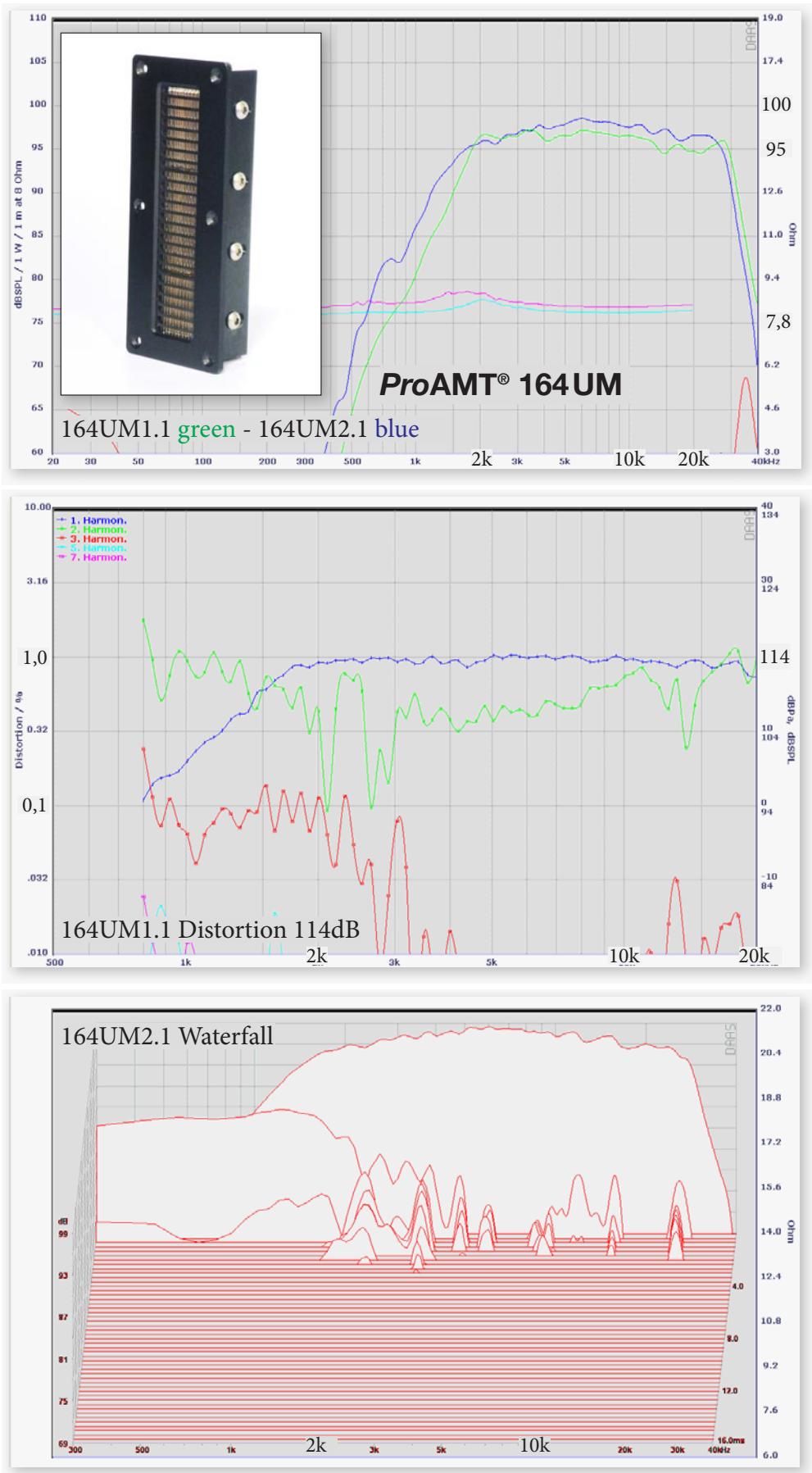
The presented driver is an example for compact design, which is available in various heights, impedances and with different radiation angles, and is provided both with and without forced-air cooling.

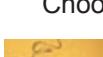
### Specs 164UM1.1

Sensitivity 2,83V 1/m: 96dB  
SPLmax: >125dB  
Peak Power Handling: 300 W  
Continious Sinus PH: 30 W  
FQ Response: 2.5kHz-30kHz  
Impedance: 8 Ohm

### Specs 164UM2.1

Sensitivity 2,83V 1/m: 97dB  
SPLmax: >126dB  
Peak Power Handling: 300 W  
Continious Sinus PH: 30 W  
FQ Response: 1.5kHz-28kHz  
Impedance: 8 Ohm



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## General explanations with regard to capacitors, coils & resistors

### 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 [ $\Omega$ ] (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 guaranteed 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.

# Fidelity Components

## Filmcapacitors Audio

**M Cap®**



### MCAP250 (replaced MKT)

#### MKP-capacitors, 250 VDC

Capacity [µF] ±5%	Body Ø * l [mm]	Wire Ø * l [mm]	[€]
1,0	11 * 23	0,8 * 30	2,39
1,5	13 * 23	0,8 * 30	2,59
2,2	13 * 28	0,8 * 30	2,79
2,7	15 * 28	0,8 * 30	2,99
3,3	16 * 28	0,8 * 30	3,19
3,9	17 * 28	0,8 * 30	3,39
4,7	19 * 28	1,0 * 35	3,59
5,6	18 * 33	1,0 * 35	3,79
6,8	20 * 33	1,0 * 35	3,99
8,2	22 * 33	1,0 * 35	4,49
10	24 * 33	1,0 * 35	4,99
12	24 * 39	1,0 * 35	5,99
15	26 * 39	1,0 * 35	6,99
22	29 * 44	1,0 * 40	9,99
33	33 * 49	1,0 * 45	13,99
47	37 * 54	1,2 * 45	17,99
68	43 * 61	1,2 * 45	21,99
82	47 * 61	1,2 * 45	26,99
100	49 * 66	1,6 * 55	34,90
150	56 * 66	1,6 * 55	49,90
220	51 * 110	1,6 * 55	59,90
330	63 * 117	1,6 * 55	109,90

### MCAP400

#### MKP-capacitors, 400 VDC

Capacity [µF] ±3%	Body Ø * l [mm]	Wire Ø * l [mm]	[€]
1,0	12 * 23	0,8 * 30	2,59
1,5	14 * 28	0,8 * 30	2,79
1,8	15 * 28	0,8 * 30	2,99
2,2	16 * 28	0,8 * 30	3,19
2,7	18 * 29	0,8 * 30	3,39
3,3	17 * 34	0,8 * 35	3,59
3,9	18 * 34	0,8 * 35	3,79
4,7	20 * 34	1,0 * 35	3,99
5,6	22 * 34	1,0 * 35	4,49
6,8	24 * 34	1,0 * 35	4,99
8,2	24 * 39	1,0 * 35	5,99
10	26 * 39	1,0 * 35	6,99
15	28 * 46	1,0 * 40	8,49
18	31 * 46	1,0 * 40	9,99
22	34 * 46	1,0 * 40	11,90
33	38 * 54	1,2 * 45	15,90
47	44 * 61	1,2 * 45	19,90
56	44 * 66	1,6 * 55	23,90
68	49 * 66	1,6 * 55	27,90
82	54 * 66	1,6 * 55	32,90
100	56 * 73	1,6 * 55	37,90

The **MCap®** is an audiophile metallized polypropylene capacitor. In selection of the materials used, special attention was given to the sound properties.

The practically induction-free type of construction and the low loss factor of the **MCap®** results in a very „quick“ capacitor.

The **MCap®** forms the basis for vivid music reproduction rich in nuance.

The **MCap®** series of audiophile MKP condensers has been expanded by a complete 250 VDC line-up in order to avoid any loss of sonically quality caused by lack of space or a tightened budget.

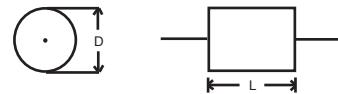
#### Technical specifications:

Dielectric: Polypropylene

Dielectric strength: 250 - 630 VDC

Loss factor:  $\tan \delta = 0.0002 @ 1\text{kHz} @ 1\mu\text{F}$

Permissible ambient temperature 85°C/185°F



### MCAP630

#### MKP-capacitors, 630 VDC

Capacity [µF] ±3%	Body Ø * l [mm]	Wire Ø * l [mm]	[€]
0,10	10 * 19	0,8 * 30	2,49
0,15	10 * 21	0,8 * 30	2,59
0,22	10 * 23	0,8 * 30	2,59
0,27	11 * 23	0,8 * 30	2,69
0,33	12 * 23	0,8 * 30	2,69
0,39	43 * 23	0,8 * 30	2,79
0,47	12 * 25	0,8 * 30	2,79
0,56	13 * 25	0,8 * 30	2,89
0,68	14 * 26	0,8 * 30	2,89
0,82	15 * 26	0,8 * 30	2,99
1,0	16 * 26	0,8 * 30	3,19
1,5	17 * 29	0,8 * 30	3,39
2,2	18 * 34	1,0 * 35	3,59
2,7	20 * 34	1,0 * 35	3,79
3,3	22 * 34	1,0 * 35	3,99
3,9	22 * 39	1,0 * 35	4,49
4,7	24 * 39	1,0 * 35	4,99
5,6	26 * 39	1,0 * 35	5,49
6,8	26 * 44	1,0 * 40	5,99
8,2	29 * 44	1,0 * 40	6,99
10	29 * 49	1,0 * 40	7,99
15	34 * 54	1,2 * 45	9,99
22	39 * 59	1,2 * 45	12,90

### MCAP1000

#### MKP-capacitors, 1000 VDC

Capacity [µF] ±3%	Body Ø * l [mm]	Wire Ø * l [mm]	[€]
0,010	10 * 19	0,8 * 30	2,49

## About the advantages of our innovative EVOLUTION winding technology



The main feature of the EVOLUTION winding technology comes with its unusual narrow but high capacitor reel. This geometry results in two, acoustically clearly perceptible benefits in comparison to traditional, easier to produce capacitors. Firstly, a shorter but utmost little loss signal path between huge contact areas is granted, thus an extreme low equivalent series resistance/ESR. Secondly, in order to meet capacitance the number of paralleled windings is larger than with regular caps, thus an effectively minimized equivalent series inductivity/ESL.

The launch for this special winding technology took already place in the year 2005 with the **MCap® RXF** (Radial eXtra Flat). Labelled as **MCap® EVO** professional this line is being continued for industrial PA- and HiFi manufacturers. In order to ease the employment of this extraordinary winding technology for HighEnd audio manufacturers and ambitious hobbyists, we will introduce three new **axial MCap® EVO** series and, shortly.



After the utmost precise winding process, these reels are spilled by hand in especially developed housings. By that, vibrations and microphonic effects on the reel are most effective avoided. Furthermore, we only employ purest Polypropylene foil vaporized with the thickest metal layer possible.

Altogether, the new **MCap® EVO's**, special features lead to colorful livelihood, remarkable micro dynamic alongside enhanced transparency, authenticity and 3 dimensional stereophony. As the direct successor of the RXF, the **MCap® EVO** marks the surprisingly inexpensive entry into the audiophile **MCap® EVO** line-up.

The **MCap® EVO Oil** combines the described sound characteristic in a perfect way with the acoustical advantages of oil impregnated capacitors. Furthermore, its additional wrapping as well as its imprint in red-metallic impart an appropriate quality look and haptic.



The top-of-the-line **MCap® EVO SilverGold.Oil** series unites the audible features of a SilverGold metallization with those of an Oil impregnation to a breathtakingly beautiful music performance. The beauty of the **MCap® EVO SilverGold.Oil's** music performance is only surpassed by Mundorf's top-line SUPREME. (see also page 9 ff.)

Thanks to the latest winding technology we are able to manufacture the **MCap® ZN** from ultrapure, RoHS-compliant tin foil now.

In the past, it was necessary to add lead in order to gain the required softness of the foil for winding capacitors. But lead used to have a tonal influence on the music signal, too.

Lead-free tin foil means – aside from positive environmental aspects – also an improved sound characteristic of the 2007 **MCap® ZN**: Advanced neutrality.

As hitherto the enormous conductivity (The loss factor [ $\tan \delta @ 1\text{kHz}$ ] is ten-times lower than of standard MKP capacitors!) of the massive tin layer insures a lively music reproduction.

And last but not least the mass inertia of the tin foil prevents oscillations in the benefit of transparency and spatiality.

**Technical specifications:**

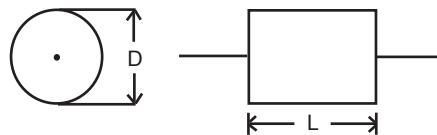
Dielectric: Polypropylen

Dielectric strength: 100-630 VDC

Metall-foil: 6  $\mu\text{m}$  Tin

Loss factor:  $\tan \delta = 0.0002 @ 1\text{kHz}; 0.0001 @ 10\text{kHz}$

Permissible ambient temperature 85°C/185°F



**ZN630**

**Tin-foil capacitors, 630 VDC**

Capacity [ $\mu\text{F}$ ] ±3%	Body $\varnothing * l$ [mm]	Wire $\varnothing * l$ [mm]	[€]
0.10	10 * 32	1,0 * 30	5.99
0.22	14 * 32	1,0 * 30	6.99
0.33	17 * 32	1,0 * 30	7.99
0.47	20 * 32	1,0 * 30	8.99
0.68	19 * 45	1,0 * 35	9.99
1.0	22 * 45	1,0 * 35	11.90

**ZN250**

**Tin-foil capacitors, 250 VDC**

Capacity [ $\mu\text{F}$ ] ±3%	Body $\varnothing * l$ [mm]	Wire $\varnothing * l$ [mm]	[€]
1.5	23 * 45	1,0 * 35	13.90
2.2	27 * 45	1,0 * 35	15.90

**ZN100**

**Tin-foil capacitors, 100 VDC**

Capacity [ $\mu\text{F}$ ] ±3%	Body $\varnothing * l$ [mm]	Wire $\varnothing * l$ [mm]	[€]
2.7	20 * 39	1,0 * 35	17.90
3.3	24 * 39	1,0 * 35	18.90
3.9	26 * 39	1,0 * 35	19.90
4.7	26 * 39	1,0 * 35	20.90

## About the advantage of induction-free SUPREME winding technology

The special design of our capacitor foil makes it possible to fit together two capacitor windings, wound in opposite directions, in such a way that the inductivity of the individual winding is increased! Both windings are connected in series, which therefore means that for the manufacture of a 1 $\mu$ F **MCap® SUPREME**, two conventional models windings of 2  $\mu$ F each would be required - in total, therefore, 4  $\mu$ F of material would need to be processed.

This demanding production process requires a huge amount of care in production, mostly manual, as well as subsequent quality control measures. Production costs and an increase in the material used are nevertheless absolutely justified by the audible results.

This capacitor mobilises such unbelievable reserves in your sound system that it is justified to speak of a new dimension of music reproduction. Be it the resolution, dynamic or tone of the music signal, Supreme impresses with its natural liveliness and tonal coherence like no conventional capacitor can. And it is not only for use with extremely expensive hi-fi components.

Use of the capacitor in cheaper design concepts is, however, a good idea and often incredibly effective.

Thorough quality controls before, during and after the costly manufacture of **MCap® SUPREME** ensure the user extremely low tolerance values and an exceptionally high long-term stability. The lowest tolerances that are used in the right and left signal path are the decisive basis for stereophonic-spatial music reproduction that is extremely close to the original. The exact localizability of musicians and a corresponding spatial imaging is only possible if the properties of the left and right canal are almost identical.

In order to eliminate microphonic effect, which can lead to an alienation of the music signal, the **MCap® SUPREME** capacitor is in addition mechanically stabilised in a special process.

The **M Cap® SUPREME** has been internationally acclaimed as the ultimate high-end capacitor. It is considered today by many users as a milestone in the modern audiophile capacitor generation. Its outstanding sound performance is achieved with a unique combination of advanced technologies: Special induction-free SUPREME winding technology. (see also page 9)

Its subtle fine gradation of the high tone range invigorates the entire sound production; voices and instruments take shape and become extremely diverse.

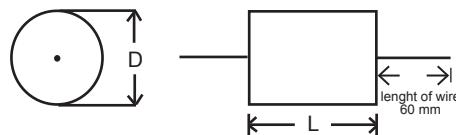
**Technical specifications:**

Dielectric: Polypropylene

Dielectric strength: 600 - 1400 VDC

Loss factor:  $\tan \delta = 0.0002 @ 1 \text{ kHz}$ ;  $0.0001 @ 10 \text{ kHz}$

Permissible ambient temperature  $85^\circ\text{C}/185^\circ\text{F}$



**SUP8**

**Supreme capacitors**

Capacity [μF] ±2%	VDC	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
0,10	1400	17 * 36	0,8 * 60	7,99
0,22	1400	20 * 38	1,0 * 60	8,99
0,33	1400	25 * 56	1,0 * 60	9,99
0,47	600	20 * 39	1,0 * 60	10,90
0,68	600	20 * 39	1,0 * 60	11,90
1,0	600	20 * 39	1,0 * 60	13,50
1,5	600	25 * 52	1,0 * 60	14,90
1,8	600	25 * 52	1,0 * 60	16,50
2,2	600	25 * 52	1,0 * 60	16,50
2,7	600	30 * 56	1,0 * 60	17,90
3,3	600	30 * 56	1,4 * 60	19,50
3,9	600	30 * 56	1,4 * 60	20,90
4,7	600	36 * 56	1,4 * 60	22,90
5,6	600	36 * 56	1,4 * 60	25,90
6,8	600	41 * 53	1,4 * 60	28,90
8,2	600	36 * 106	1,4 * 60	31,90
10	600	36 * 106	1,4 * 60	35,90
15	600	41 * 106	1,4 * 60	47,90
18	600	41 * 106	1,4 * 60	59,90
22	600	50 * 106	1,4 * 60	59,90

The **M Cap® SUPREME Silver.Oil** is an oil impregnated metallised polypropylene dielectric capacitor. As the name indicates, high-purity silver is used for the capacitor coating, and the winding is impregnated with a special oil developed in an exhaustive series of experiments and listening tests. Both these features contribute to an even fuller and smoother tonal richness and diversity. Our state-of-the-art metallised polypropylene foils make it possible to maintain extremely low production tolerances that cannot be achieved with traditional oil/paper capacitor designs. This is also the first time that the benefits of oil-impregnated capacitor design have been successfully combined with the well-known long-term stability of polypropylene foil and internal series wiring for induction-free SUPREME performance. (see also page 9)

Its lively reproduction of music impresses in particular with its subtly dynamic speed, precision and marked fine detail.

#### Technical specifications:

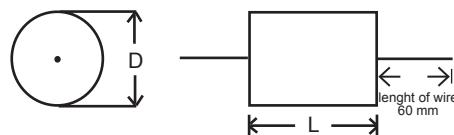
Dielectric: Polypropylene

Dielectric strength: 1 000 VDC

Loss factor:  $\tan \delta = 0.0002$  @1 kHz

Loss factor:  $\tan \delta = 0.0001$  @10 kHz

Permissible ambient temperature 70°C/158°F



#### SUP.SO

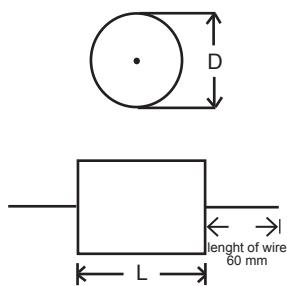
##### Supreme capacitors, Silver.Oil

Capacity [µF]	VDC	Body Ø * L [mm]	Wire Ø [mm]	[€]
0,010 ±5%	1000	13 * 36	0,6 * 60	21,90
0,10 ±5%	1000	17 * 36	0,8 * 60	23,90
0,22 ±5%	1000	19 * 39	0,8 * 60	25,90
0,33 ±5%	1000	19 * 39	1,0 * 60	27,90
0,47 ±3%	1000	26 * 41	1,0 * 60	29,90
0,68 ±3%	1000	26 * 41	1,0 * 60	34,90
1,0 ±3%	1000	31 * 42	1,4 * 60	39,90
1,5 ±3%	1000	36 * 42	1,4 * 60	44,90
2,2 ±3%	1000	41 * 57	1,4 * 60	49,90
2,7 ±3%	1000	41 * 57	1,4 * 60	54,90
3,3 ±3%	1000	41 * 57	1,4 * 60	59,90
3,9 ±3%	1000	41 * 57	1,4 * 60	69,90
4,7 ±2%	1000	41 * 71	1,4 * 60	79,90
5,6 ±2%	1000	46 * 71	1,4 * 60	89,90
6,8 ±2%	1000	46 * 71	1,4 * 60	99,90
8,2 ±2%	1000	51 * 71	1,4 * 60	109,90
10 ±2%	1000	46 * 110	1,4 * 60	129,90

The metallization of the capacitor foil for our **M Cap® SUPREME SilverGold** consists of pure silver with an admixture of 1% pure gold. Gold alters the crystalline structure of silver and maximises its very good electrical conductivity. The outstanding properties of the **M Cap® SUPREME** - high definition and auditory ambience of the music playback - are once again audibly enhanced and substantially enriched in finely nuanced timbres through the utilisation of silver/gold. (see also p. 9, about the advantage of induction-free SUPREME winding technology)

We are convinced that with this capacitor we have once again lived up to our reputation for innovation and quality as one of the internationally leading manufacturers of audiophile components.

In this capacitor **M Cap® SUPREME SilverGold** speed and precision combine harmonically with beauty and elegance.



#### Technical specifications:

Capacitance: 0.01µF-10µF  
Dielectric: Polypropylene  
Metallisation: 99.99% silver, 1% gold  
Purity of silver: min. 99.97% typ. 99.99%  
Purity of gold: min. 99.97% typ. 99.99%  
Dielectric strength: 1 000V DC  
Loss factor tan δ: 0.0002@1 kHz, 0.0001@10 kHz  
Permissible ambient temperature 85°C/185°F

#### SUP.SG

##### Supreme capacitors, SilverGold

Capacity [µF] ±2%	VDC	Body Ø * L [mm]	Wire Ø [mm]	[€]
0,0010	1000	17 * 36	0,6 * 60	26,90
0,010	1000	17 * 36	0,6 * 60	27,90
0,10	1000	17 * 36	1,0 * 60	28,90
0,15	1000	17 * 36	1,0 * 60	29,90
0,22	1000	19 * 39	1,0 * 60	31,90
0,33	1000	19 * 39	1,0 * 60	34,90
0,47	1000	26 * 41	1,4 * 60	39,90
0,68	1000	26 * 41	1,4 * 60	44,90
1,0	1000	31 * 42	1,4 * 60	49,90
1,5	1000	36 * 42	1,4 * 60	59,90
2,2	1000	36 * 56	1,4 * 60	69,90
2,7	1000	36 * 56	1,4 * 60	79,90
3,3	1000	41 * 57	1,4 * 60	89,90
3,9	1000	41 * 57	1,4 * 60	99,90
4,7	1000	46 * 71	1,4 * 60	109,90
5,6	1000	46 * 71	1,4 * 60	119,90
6,8	1000	51 * 71	1,4 * 60	129,90
8,2	1000	51 * 71	1,4 * 60	149,90
10	1000	51 * 106	1,4 * 60	179,90

The **M Cap® SUPREME Classic Silver-Gold.Oil** is definitely the top-of-the line model of our oil impregnated capacitors. In comparison with the Silver.Oil version, it technically features a further extended lifetime. More importantly, sonically the SilverGold.Oil version stands out due to its wonderful natural singing and exceptional micro dynamic, same time

**Technical specifications:**

Capacitance: 0.010µF-10µF

Dielectric: Polypropylene

Metallisation: 99.99% silver, 1% gold

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

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

Dielectric strength: 1 200V DC

Loss factor tan  $\delta$ : 0.0002@1 kHz, 0.0001@10 kHz

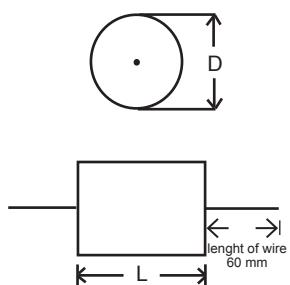
Permissible ambient temperature 85°C/185°F



**SUP.SGO**

**Supreme capacitors, SilverGold.Oil**

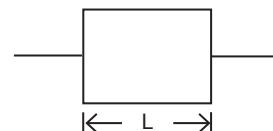
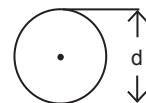
Capacity [µF]	VDC	Body Ø * L [mm]	Wire Ø [mm]	[€]
0,010 ±5%	1000	17 * 36	0,6 * 60	34,90
0,10 ±3%	1000	17 * 36	1,0 * 60	37,90
0,22 ±3%	1000	19 * 39	1,0 * 60	39,90
0,33 ±3%	1000	19 * 39	1,0 * 60	44,90
0,47 ±3%	1000	26 * 41	1,4 * 60	49,90
0,68 ±3%	1000	26 * 41	1,4 * 60	54,90
1,0 ±2%	1000	31 * 42	1,4 * 60	59,90
1,5 ±2%	1000	36 * 42	1,4 * 60	69,90
2,2 ±2%	1000	36 * 56	1,4 * 60	79,90
2,7 ±2%	1000	36 * 56	1,4 * 60	89,90
3,3 ±2%	1000	41 * 57	1,4 * 60	99,90
3,9 ±2%	1000	41 * 57	1,4 * 60	109,90
4,7 ±2%	1000	46 * 71	1,4 * 60	124,90
5,6 ±2%	1000	46 * 71	1,4 * 60	139,90
6,8 ±2%	1000	51 * 71	1,4 * 60	149,90
8,2 ±2%	1000	51 * 71	1,4 * 60	169,90
10 ±2%	1000	51 * 106	1,4 * 60	199,90



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 because 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 14/15 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 <sub>R</sub> · I <sub>R~</sub> ]	3,000 hours at +85°C/+185°F
Loss angle [tan α]	0.050 @ 1kHz



**ECAP100** (formerly br100)

**Electrolytic capacitors 100 VDC / 35 VAC, raw**

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
10	10 * 30	0,8 * 60	0.89
15	10 * 30	0,8 * 60	0.99
22	12 * 30	0,8 * 60	1.19
33	12 * 30	0,8 * 60	1.39
47	14 * 37	0,8 * 60	1.69
56	14 * 38	0,8 * 60	1.89
68	16 * 39	0,8 * 60	2.09
82	18 * 39	0,8 * 60	2.29
100	18 * 39	0,8 * 60	2.49

**ECAP63** (formerly br63)

**Electrolytic capacitors 63 VDC / 23 VAC, raw**

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
150	14 * 37	0,8 * 60	1.99
220	16 * 39	0,8 * 60	2.49
270	21 * 36	0,8 * 60	2.99
330	21 * 36	0,8 * 60	3.49
390	25 * 38	0,8 * 60	3.99
470	25 * 38	0,8 * 60	4.49
680	25 * 38	0,8 * 60	4.99



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 <sub>R</sub> · I <sub>R~</sub> ]	5,000 hours at +85°C/+185°F
Loss angle [tan α]	0.025 @ 1kHz

**ECAP70** (formerly bg50)

**Electrolytic capacitors 70 VDC / 50 VAC, plain**

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
1.0	10 * 20	0,8 * 60	0.69
1.5	10 * 20	0,8 * 60	0.79
2.2	10 * 30	0,8 * 60	0.89
2.7	10 * 30	0,8 * 60	0.99
3.3	10 * 30	0,8 * 60	1.09
3.9	10 * 30	0,8 * 60	1.19
4.7	10 * 30	0,8 * 60	1.29
5.6	12 * 30	0,8 * 60	1.39
6.8	12 * 30	0,8 * 60	1.49
8.2	14 * 37	0,8 * 60	1.69
10	14 * 37	0,8 * 60	1.99
15	18 * 39	0,8 * 60	2.29
22	25 * 38	0,8 * 60	2.89
33	25 * 38	0,8 * 60	3.79
47	25 * 49	0,8 * 60	4.69

**ECAP50** (formerly bg35)

**Electrolytic capacitors 50 VDC / 35 VAC, plain**

Capacity [µF] ±5%	Body Ø * L [mm]	Wire Ø * L [mm]	[€]
47	25 * 38	0,8 * 60	3.79
56	25 * 49	0,8 * 60	4.49
68	25 * 49	0,8 * 60	4.99
82	30 * 50	0,8 * 60	5.99
100	30 * 50	0,8 * 60	6.99

The newest generation of our electrolytic capacitors features a range of distinctive features, which all have one sole objective: **the most authentic music performance possible**. The basic requirement for achieving this goal is the minimisation of unwanted losses [ESR] and inductances [ESL] that occur in the capacitor and affect the signal.

To this end, we have given careful consideration to even the smallest details and have scrutinised and radically reconsidered all existing solutions. You will find the results of our extensive developments below.

**The black cathode:** The use of special titanium-coated cathode foil has brought about metrologically impressive and tonally spectacular benefits. The matte black polished vacuum-deposited titanium layer thereby substitutes the usual aluminium oxide layer and this then works as an insulator [dielectric] between the aluminium contact foil and the electrolyte, thus forming a second capacitor that negatively influences the overall performance within the capacitor. In this way, the black cathode stops the electrolyte acting simultaneously as a cathode [negative pole] towards the anode foil and as an anode [positive pole] towards the aluminium contact foil.

**MUNDORF electrolytic capacitors** with black cathodes feature a real cathode foil! This enables extremely fast and almost lossless ion movements, reducing the ESR, distortions and noises it produces itself to an absolute minimum. The positive effects are comparable to when modified electrolytes are used, which are produced for example with the addition of graphite, although the effects of the former are more pronounced. The result is a holographic music playback with a wide and deep on-stage representation and a completely stable focus.

**High purity anode foil:** Utmost precision during the manufacture and use of high purity materials guarantees a homogeneous etch pattern, as well as a crystalline aluminium oxide layer. Due to this  $\text{Al}_2\text{O}_3$  layer being the dielectric of the capacitor, it is this balance and precision that also characterises the tone quality of the whole capacitor.

**Abaca-esparto paper:** The introduction of esparto grass [aka alfa grass] and abaca [also known as Manila hemp or *musa textilis*] into the capacitor paper simultaneously ensures a high mechanical stability and an extremely soft, open structure. The high internal damping of this special paper has a mechanically-appeasing effect on the capacitor and gives the music playback a high degree of neutrality.

**Electrolytes:** For capacitors of up to 100VDC we only use GBL [also known as butyro-1,4-lactone or *gamma-butyrolactone*], for higher electrical strengths, however, MEG [also known as ethane-1,2-diol or ethylene glycol] is used. The use of this high purity electrolyte, which is chloride-free and largely free from water, considerably improves the long-term stability and thereby also the lifecycle. These electrolytes also feature a low viscosity [that is, a high flow], which has a positive effect on the electrical conductivity. This results in a fast and precise music playback.

**Strong together:** Thanks to its large surface area, the open structure of abaca-esparto paper possesses an outstanding electrolyte absorption capacity and in combination with its good formability and the outstanding flow of the used electrolytes, guarantees the best possible contact between the electrolyte and the titanium-coated cathode foil. Together, they form the highly-efficient negative pole of the electrolytic capacitor and ensure the smallest possible physical dimensions and optimal performance.

**The renouncement of steel:** From now on, steel attachments are a thing of the past at MUNDORF! The use of steel as a material for attachments [worldwide standard for snap-ins] brings about a number of disadvantages. Amongst other things, steel attachments cause unwanted eddy currents as a result of their magnetisability, possess a poor electrical conductivity [ $\sigma_{25^\circ\text{C}} 6,2\text{MS/m} = 10,7\% \text{ IACS} = 160\text{m}\Omega^*\text{mm}^2/\text{m}$ ] and a low thermal conductivity [ $\lambda_{25^\circ\text{C}} 50\text{W}/(\text{m}^*\text{K})$ ]. Furthermore, the high elasticity [200 GPa] and rigidity [7 Mohs] of the steel snap-in claw fasteners put permanent pressure on the soldered joints, which can impair their joining quality.

**Highly-conductive contacts:** Alongside the familiar, solid aluminium screw terminals [ $\sigma_{25^\circ\text{C}} 36,5\text{MS/m} = 63\% \text{ IACS} = 27,5\text{m}\Omega^*\text{mm}^2/\text{m} \cdot \lambda_{25^\circ\text{C}} 235\text{W}/(\text{m}^*\text{K})$ ] for the highest currents, all MLytic® with the most compact design possible possess tin-plated copper attachments [ $\sigma_{25^\circ\text{C}} 58,0\text{MS/m} = 100\% \text{ IACS} = 17,2\text{m}\Omega^*\text{mm}^2/\text{m} \lambda_{25^\circ\text{C}} 400\text{W}/(\text{m}^*\text{K}) 120 \text{ GPa} 3 \text{ Mohs}$ ]. In order to establish the best possible electrical connection between the individual components, all contacts are welded together.

All of the remarkable technologies mentioned above come together in the new **MLytic®** series to bring about the least losses and maximum high fidelity. Capacitors with **MLytic®** technology: the best MUNDORF electrolytic capacitors of all time!

# Fidelity Components

## Electrolytecapacitors Power Supply

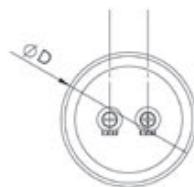
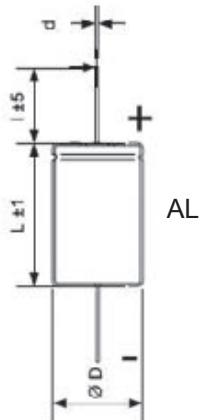


The MLytic® AG · Audio Grade Power Cap series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:

Supply availability	Typically immediately ex stock for all types listed on page 18  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 <sub>R</sub> · I <sub>R~</sub> ]	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 <sub>R</sub> ]	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 VAC
Leakage current [I <sub>L</sub> ]	≤ 0,008 * C <sub>R</sub> [µF] * U <sub>R</sub> [V] + 6µA after 5 minutes at U <sub>R</sub>
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V

Smooth transition to the following Mundorf® product-lines:

Superior series	<b>MLytic® AG+ · Audio Grade Power Cap</b> [see page 19]
Differentiating factors	4-Pole technology
Superior series	<b>MLytic® HV · High Voltage Power Cap</b> [see page 21]
Differentiating factors	Available DC voltages 250 · 350 · 400 · 450 · 500 · 550



# Fidelity Components

## Electrolytecapacitors Power Supply



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.

Please find recommendable accessory such as **MCNV • Mounting Clamps** on page 24, suitable solder on page 57, technical data and descriptions on pages 16 and 17.



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

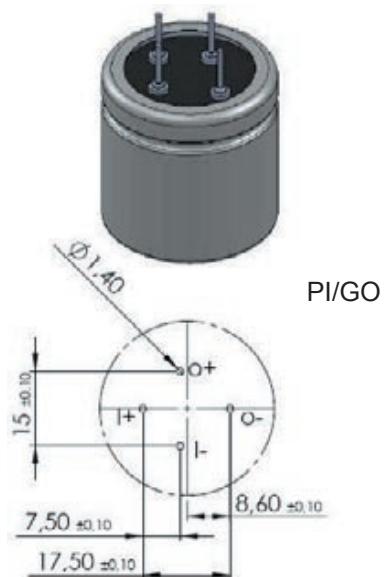
Rated Voltage [VDC]	Capacitance [µF] ±20%	Case Size Ø * L [mm]	Wire Size Ø * L [mm]	Rated Ripple Current IR~ at Tmax and 100Hz [A]	Surge Voltage [VDC]	ESR at 100 Hz [mOhm]	Tan δ @ 100Hz	Nominal Current IR for 5 Min. [µA]	[€]
100	1000	25 * 30	1,2 * 9	1,3	115	90	10	600	9,99
100	1500	25 * 35	1,2 * 9	1,8	115	77	10	600	10,90
80	10000	35 * 50	1,2 * 9	7,1	92	14	9	3780	22,90
63	2200	25 * 30	1,2 * 9	2,1	72	65	9	830	9,99
63	3300	30 * 30	1,2 * 9	2,9	72	43	9	1246	11,90
63	4700	30 * 35	1,2 * 9	3,6	72	30	9	1776	13,90
63	6800	30 * 40	1,2 * 9	4,6	72	21	9	2570	15,90
63	8200	30 * 45	1,2 * 9	5,2	72	18	9	3100	17,90
63	10000	30 * 50	1,2 * 9	6,0	72	14	9	3780	19,90
63	15000	35 * 60	1,2 * 9	8,7	72	10	9	5670	24,90
63	22000	35 * 70	1,2 * 9	11,2	72	7	9	8316	29,90
40	4700	25 * 30	1,2 * 9	2,6	46	41	12	1120	11,90
40	6800	25 * 35	1,2 * 9	3,5	46	29	12	1620	12,90
40	10000	30 * 40	1,2 * 9	4,8	46	19	12	2400	14,90
40	22000	35 * 50	1,2 * 9	8,5	46	9	12	4800	19,90
40	33000	35 * 60	1,2 * 9	11,2	46	6	12	7920	24,90
25	10000	25 * 35	1,2 * 9	3,2	29	32	20	1500	11,90
25	22000	30 * 40	1,2 * 9	5,4	29	14	20	3300	14,90
25	47000	35 * 50	1,2 * 9	9,7	29	7	20	4800	21,90

The **MLytic® AG+ · Audio Grade Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:

Supply availability	Typically immediately ex stock for all types listed on page 20
	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 optimal contacting and pull-out strength, supreme pulse fidelity, no magnetic loss and exceptional filtering features.
Capacitance range	470µF to 3 300 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	PI · plug-in GO · glue-on SC · screw-terminal clamp mounted SB · screw-terminal bolt mounted
Useful lifetime [ $U_R$ · $I_R$ ]	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 diameter [mm]	35 · 75 · 90
Case heights [mm]	Customized from 30 to 100 [typically in 5mm steps]
Case diameters [inch]	1.38 · 2.95 · 3.54
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 [ $I_L$ ]	$\leq 0,008 * C_R [\mu F] * U_R [V] + 6\mu A$ after 5 minutes at $U_R$
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V

Smooth transition to the following Mundorf® product-lines:

Minor series	<b>MLytic® AG · Audio Grade Power Cap</b> [see page 17]
Differentiating factors	Snap-In intermeatable · wider variety
Superior series	<b>MLytic® HV+ · High Voltage Power Cap</b> [see page 23]
Differentiating factors	Available DC voltages 250 · 350 · 400 · 450 · 500 · 550



Drilling Plan Component Side  
Bohrplan Bestückungsselte



SC/SB

# Fidelity Components

## Electrolytecapacitors Power Supply



The **MLytic® AG+ • Audio Grade Power Cap** series is especially engineered for use in small but excellent power and pre amplifiers. Due to their advantages over 2 pin electrolytics they are first choice for ambitious audio engineers.

**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**.

Please find recommendable accessory such as **MCNV • Mounting Clamps** on page 24, suitable solder on page 57, technical data and descriptions on pages 16 and 19.



### 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]	[€]
160	1000	35 * 35	1,2 * 9	2,1	184	111	10	1246	16,90
160	1500	35 * 40	1,2 * 9	2,7	184	74	10	1978	19,90
100	2200	35 * 35	1,2 * 9	2,6	115	72	9	1246	16,90
100	3300	35 * 40	1,2 * 9	3,3	115	48	9	1978	19,90
100	4700	35 * 60	1,2 * 9	4,6	115	34	9	2820	22,90
80	6800	35 * 40	1,2 * 9	5,1	92	21	9	2570	25,90
80	10000	35 * 50	1,2 * 9	7,1	92	14	9	3780	29,90
63	15000	35 * 60	1,2 * 9	8,7	72	10	9	5670	34,90
63	22000	35 * 70	1,2 * 9	10,5	72	7	9	8316	39,90

# Fidelity Components

## Electrolytecapacitors Power Supply

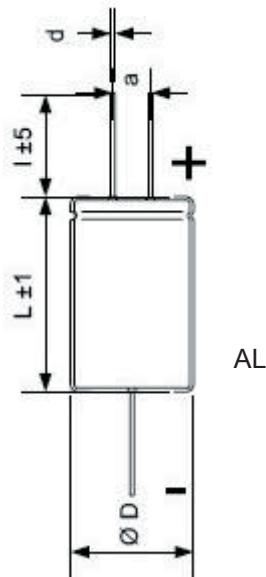


The **MLytic® HV · High Voltage Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:

Supply availability	Typically immediately ex stock for all types listed on page 22  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 [ $U_R \cdot I_{R-}$ ]	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 [ $I_L$ ]	$\leq 0,008 * C_R [\mu F] * U_R [V] + 6\mu A$ after 5 minutes at $U_R$
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V

Smooth transition to the following Mundorf® product-lines:

Minor series	<b>MLytic® AG · Audio Grade Power Cap</b> [see page 17]
Differentiating factors	DC voltages 16 · 25 · 35 · 40 · 50 · 63 · 80 · 100 · 160
Superior series	<b>MLytic® HV+ · High Voltage Power Cap</b> [see page 23]
Differentiating factors	4-Pole Technology
Superior series	<b>MLytic® HP · High Performance Power Cap</b> [see page 25]
Differentiating factors	larger capacitances · screw-terminals



# Fidelity Components

## Electrolytecapacitors Power Supply



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

The ultra compact, axial leaded **MLAL** capacitors feature 450V and non-magnetic, tinned copper wires.

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

Please find recommendable accessory such as **MPSA • Mounting Pads and MCNV • Mounting Clamps** on page 24, suitable solder on page 57, technical data and descriptions on pages 16 and 21.



### MLAL

#### High Voltage Power Cap, Axial-Leaded, 3Pin

Rated Voltage [VDC]	Capacitance [ $\mu\text{F}$ ] ±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. [ $\mu\text{A}$ ]	[€]
450	15+15	25 * 38	1,4 * 50	0,2	495	10610	10	40	6,99
450	33+33	25 * 49	1,4 * 50	0,3	495	4823	10	400	8,99
450	47+47	30 * 50	1,4 * 50	0,3	495	3386	10	1500	12,90
450	100+100	35 * 50	1,4 * 50	0,5	495	1592	10	270	21,90

### MLSL

#### High Voltage Power Cap, Solder-Lugs, 3Pin

Rated Voltage [VDC]	Capacitance [ $\mu\text{F}$ ] ±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. [ $\mu\text{A}$ ]	[€]
500	16+16	35 * 50	1 * 4 * 7	0,2	550	9947	10	48	14,90
500	32+32	35 * 50	1 * 4 * 7	0,3	550	4974	10	420	15,90
500	50+50	35 * 50	1 * 4 * 7	0,4	550	3183	10	420	16,90
500	100+100	35 * 66	1 * 4 * 7	0,6	550	1592	10	140	19,90
500	200+200	35 * 80	1 * 4 * 7	0,9	550	796	10	300	34,90
500	300+300	35 * 80	1 * 4 * 7	1,1	550	531	10	900	44,90

# Fidelity Components

## Electrolytecapacitors Power Supply

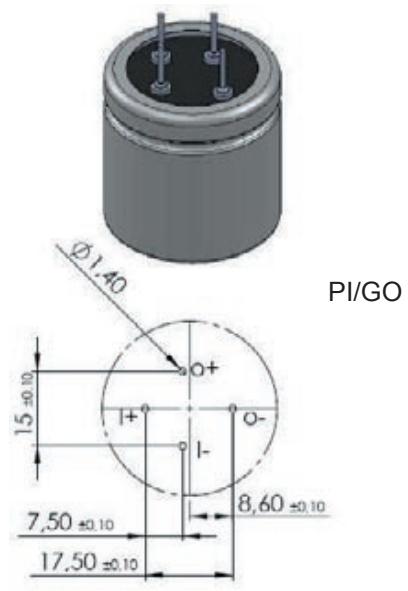


The **MLytic® HV+ · High Voltage Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:

Supply availability	Typically immediately ex stock for all types listed on page 24
	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 optimal contacting and pull-out strength, supreme pulse fidelity, no magnetic loss and exceptional filtering features.
Capacitance range	30µF to 2 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
Useful lifetime [ $U_R \cdot I_{R\sim}$ ]	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 diameter [mm]	35
Case heights [mm]	Customized from 35 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 [ $I_L$ ]	$\leq 0,008 * C_R [\mu F] * U_R [V] + 6\mu A$ after 5 minutes at $U_R$
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V

Smooth transition to the following Mundorf® product-lines:

Minor series	<b>MLytic® AG+ · Audio Grade Power Cap</b> [see page 19]
Differentiating factors	Available DC voltages 16 · 25 · 35 · 40 · 50 · 63 · 80 · 100 · 160
Minor series	<b>MLytic® HV · High Voltage Power Cap</b> [see page 21]
Differentiating factors	wider variety · double-capacities available ex stock
Superior series	<b>MLytic® HP+ · High Performance Power Cap</b> [see page 25]
Differentiating factors	larger capacitances · screw-terminals



The **MLytic® HV+ • High Voltage Power Cap** series is especially engineered for use in small but excellent power and pre amplifiers. Due to their advantages over 2 pin electrolytics they are first choice for ambitious audio engineers.

**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**.

Please find recommendable accessory such as **MCNV • Mounting Clamps** on this page, suitable solder on page 57, technical data and descriptions on pages 16 and 23.

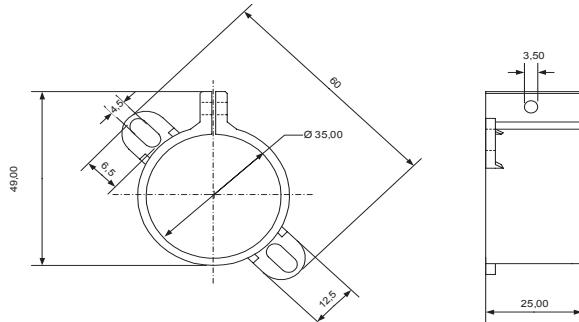


**MLGO+**  
**High Voltage Power Cap, Glue-On, 4Pin**

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 * 9	0,8	605	955	6	330	27,90
550	150	35 * 55	1,2 * 9	1,0	605	637	6	300	32,90
550	220	35 * 55	1,2 * 9	1,2	605	434	6	724	37,90
550	330	35 * 70	1,2 * 9	1,7	605	290	6	1088	42,90
550	470	35 * 70	1,2 * 9	2,0	605	203	6	1410	47,90
500	680	35 * 100	1,2 * 9	3,2	550	141	6	2040	52,90



**M-LYTIC® MCN**  
*Mounting clamps*



**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	0,99
40	1,09
50	1,19
65	1,29
75	1,39

**MCNH**  
**Mounting Clamp, nylon, horizontal, black**

Capacitor Ø [mm]	set [€ ]
75	1,99

# Fidelity Components

## Electrolytecapacitors Power Supply



The **MLytic® HP · High Performance Power Cap** series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:

Supply availability	Typically immediately ex stock for all types listed on page 26
	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 bis 39 000µF
DC- DC voltage range	250 · 350 · 400 · 450 · 500 · 550
Temperature range	-25°C/-13°F bis 105°C/+220°F [250V · 450V] -40°C/-40°F bis 85°C/+185°F [500V · 550V]
Connectors	SC · screw-terminal clamp mounted SB · screw-terminal bolt mounted
Useful lifetime [ $U_R \cdot I_{R\sim}$ ]	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 +85°C/+185°F for 500V to 550V
Case diameters [mm]	35 · 40 · 45 · 50 · 65 · 75 · 90
Case heights [mm]	Customized from 55 bis 230 [typically in 5mm steps]
Case diameters [inch]	1.38 · 1.57 · 1.77 · 1.97 · 2.56 · 2.95 · 3.54
Case heights [inch]	Customized from 2.16 to 9.06 [typically in 0.2inch stepss]
External insulation	Lead free PVC sleeve with end disk · voltage proof ≥2500 AC
Leakage current [ $I_L$ ]	$\leq 0,008 * C_R [\mu F] * U_R [V] + 6\mu A$ after 5 minutes at $U_R$
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V



Additionally the **MLytic® HP + · High Current Power Cap** series features:

4-Pole Technology	Separated inputs and outputs for optimal connection, perfect impulse, no hysteresis losses and exceptional filter characteristics
-------------------	---

*Note: available case diameters 75mm/2.95" and 90mm/3.54"*



# Fidelity Components

## Electrolytecapacitors Power Supply



The all-new series **MLytic® HP** and **MLytic® HP +** **High Performance Power Cap** are specially manufactured for applications, that require large quantities of electricity.

These capacitors, which were originally developed for use in lasers and inverters, are consequently optimized for audio purposes now.

They combine low ESR and high ripple currents with high voltage, large capacitance and superb power pulse, due to rock-solid aluminium screw-terminals.

Because of its outstanding combination of features and the advantages of 4-Pole technology the **MLytic® HP +** is particularly of interest wherever highest electric charges and innovative circuits are in focus.



### MLSC+ High Performance Power Cap, Screw-In, 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]	[€]
500	1000	75 * 66	M5 (2Nm)	3,6	550	95	6	3000	69,90
500	1500	75 * 66	M5 (2Nm)	4,8	550	53	6	4500	89,90
500	2200	75 * 100	M5 (2Nm)	6,7	550	36	7	6600	119,90
500	3300	75 * 100	M5 (2Nm)	6,9	550	24	7	10890	169,90
500	4700	75 * 115	M5 (2Nm)	8,7	550	24	7	14098	219,90
500	6800	75 * 165	M5 (2Nm)	13,2	550	16	7	20400	299,90

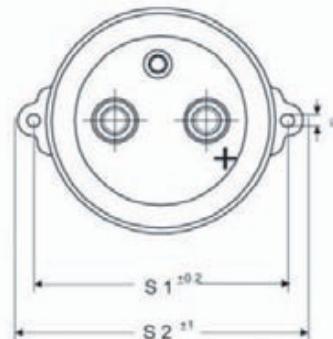
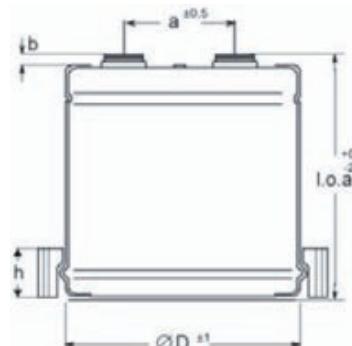
# Fidelity Components

## Electrolytecapacitors Power Supply



The MLytic® HC · High Current Power Cap series offers all benefits of Mundorf's unique MLytic® technology as described in detail on page 16 plus the following features:

Supply availability	Typically immediately ex stock for all types listed on page 28
	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 [ $U_R \cdot I_{R^2}$ ]	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 $\geq 2500$ AC
Leakage current [ $I_L$ ]	$\leq 0,008 * C_R [\mu F] * U_R [V] + 6\mu A$ after 5 minutes at $U_R$
[ESL]	20nH equivalent series inductance
Maximal reverse voltage	2V



Additionally the MLytic® HC + · High Current Power Cap series features:

4-Pole Technology	Separated inputs and outputs for optimal connection, perfect impulse, no hysteresis losses and exceptional filter characteristics
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*Note: available case diameters  
75mm/2.95" and 90mm/3.54"*



# Fidelity Components

## Electrolytecapacitors Power Supply



The series **MLytic® HC** and **MLytic® HC+** **High Current Power Cap** offer 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 hundreds 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.

Whenever a power capacitor is needed for a first class transistor amplifier, the **MLytic® HC+** is first choice due to its superior 4-Pole Technology, as described on page 27.



Casing	D [mm]	l.o.a [mm]	Dimensions [mm]					
			a	b	h	s1	s2	x
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]	[€]
80	10000	1	M5 (2Nm)	8,1	92	11	7	4800	39,90
80	22000	2	M5 (2Nm)	11,5	92	7	10	10560	59,90
80	47000	3	M6 (3Nm)	20,2	92	3	10	22560	79,90
100	22000	3	M6 (3Nm)	13,2	115	7	10	13200	69,90
100	33000	3	M6 (3Nm)	15,7	115	5	10	13200	84,90
100	47000	4	M6 (3Nm)	20,2	115	3	10	28200	99,90

### MLHC+

#### High Current Power Cap, Screw-Terminal, 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]	[€]
100	22000	3	M6 (3Nm)	13,8	115	7	10	13500	79,90
100	33000	3	M6 (3Nm)	16,5	115	5	10	18700	94,90
100	47000	4	M6 (3Nm)	21,1	115	3	10	29000	109,90

# Fidelity Components

## Filmcapacitors Power Supply



The **TubeCap®** is made of polypropylene 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.

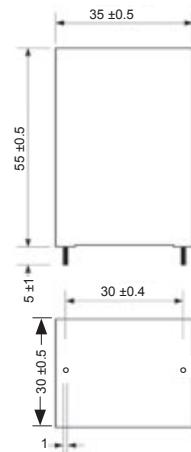
**The advantages vis-à-vis electrolytic capacitors are:**

- 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.

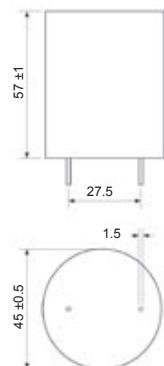


### Technical specifications:

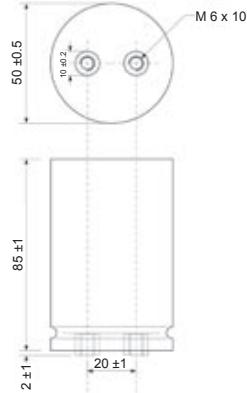
Dielectric: Polypropylen  
Dielectric strength: 550-1 000 VDC  
Loss factor:  $\tan \delta < 0.005$  bei 1 kHz  
Sealing compound: PU UL 94-V0  
Useful Life: 100 000 h @ hot spot 60°  
Failure rate: 1 fit  
Cover: 0.5 x  $U_n$ ; 40°  
Permissible ambient temperature 85°C/185°F



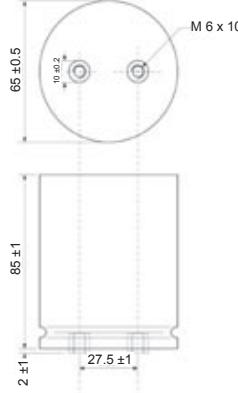
**Specifications casing 1:**  
Bucket: Plastic bucket UL 94-V0  
Terminals:  
copper wire, tin-plated Ø1.0 mm  
Weight: approx. 70g



**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	12,90
20	750	1	10	17,0	15,90
30	600	1	9	17,0	19,90
47	600	2	7	24,5	24,90
100	550	3	9	88,6	39,90
200	550	4	9	92,5	59,90

## Choosing the right coil wire

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.

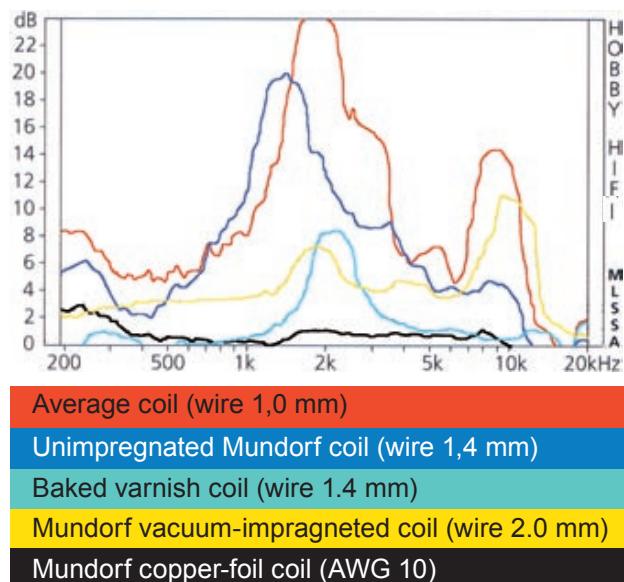
### Foil coils

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 visco-plastic 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



## Choosing the right coil core

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 German-made ferrite material HP3616 used by us offers a significantly higher performance than the Asian cores used in many other products. It is characterised by low basic distortions and rapid magnetic reversibility (= change of field direction). The music signal is hardly delayed so that coils with ferrite cores are perfect for use in correcting components (as so-called peaking coils) and in the middle frequency range. So far the only ferrite material tested by us HP3616 meets our high demands regarding resilience and distortion making it suitable even for use in the middle-low frequency and bass range for lower amplifier performance. (from p. 41)

**Aronit cores** (also known as P cores) consist of high-density metal-ceramics-powder. The German-made Wicon ferrite rods produce extremely low distortion, even at very high loadings. Due to their highly compact dimensions, their low internal resistance and their excellent price/performance ratio they are particularly suitable as bass and subwoofer coils and for PA applications. (from p. 44)

**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. 46)

**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. 48)

**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:**

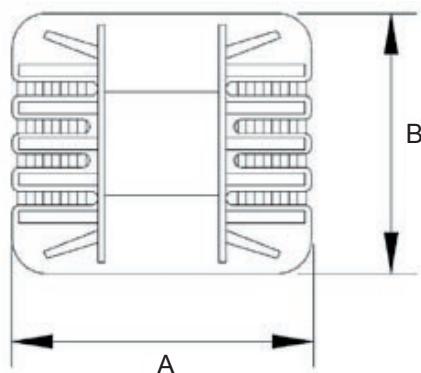
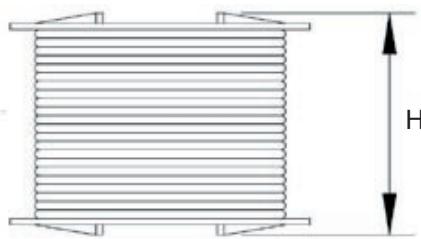
OFC-Copper 99.99%

Coil form: PA, fibre-glass reinforced

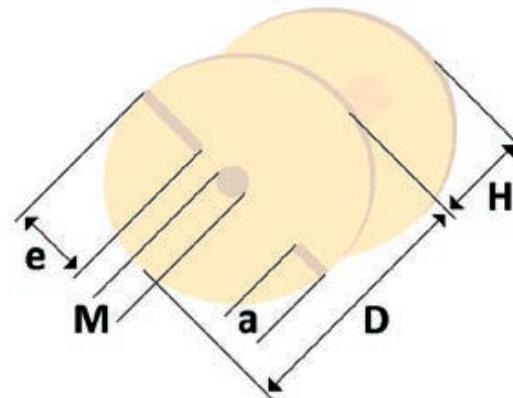
Coil body heat resistant up to max. 230°C/446°F



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	
3610	36	10	5	5	12	
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

L50			
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,38	2510	2,75
0,12	0,42	2510	2,80
0,15	0,47	2510	2,85
0,18	0,53	2510	2,90
0,22	0,59	2510	2,95
0,27	0,67	2510	3,00
0,33	0,75	2510	3,05
0,39	0,84	2510	3,10
0,47	0,93	3610	3,15
0,56	1,02	3610	3,19
0,68	1,16	3610	3,29
0,82	1,29	3610	3,39
1,0	1,47	3610	3,59
1,2	1,62	3610	3,79
1,5	1,85	3610	3,99
1,8	2,07	3610	4,19
2,0	2,38	3020	4,39
2,2	2,50	3020	4,59
2,7	2,81	3020	4,79
3,0	2,96	3020	4,99
3,3	3,13	3020	5,19
3,9	3,39	4020	5,39
4,7	3,77	4020	5,59

Air-core coils, wire Ø 0.71 mm

L71				BL71	
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]	[€]	[€]
0,10	0,23	2510	3,19	4,89	
0,12	0,25	3610	3,25	4,99	
0,15	0,28	3610	3,29	5,09	
0,18	0,31	3610	3,39	5,19	
0,22	0,34	3610	3,49	5,29	
0,27	0,39	3610	3,59	5,39	
0,33	0,43	3610	3,69	5,59	
0,39	0,51	3610	3,79	5,79	
0,47	0,58	3020	3,89	5,99	
0,56	0,64	3020	3,99	6,19	
0,68	0,71	3020	4,19	6,39	
0,82	0,81	3020	4,39	6,69	
1,0	0,91	3020	4,59	6,99	
1,2	1,01	4020	4,79	7,29	
1,5	1,13	4020	5,09	7,59	
1,8	1,22	4020	5,39	7,89	
2,0	1,31	4020	5,69	8,19	
2,2	1,39	4020	5,99	8,49	
2,7	1,53	4020	6,29	8,99	
3,0	1,64	4020	6,59	9,99	
3,3	1,75	4020	6,89	10,90	
3,9	2,04	5818	7,29	11,90	
4,7	2,19	5818	7,79	12,90	
5,6	2,42	5818	8,29	13,90	
6,8	2,68	5818	8,99	14,90	
8,2	3,05	5828	9,99	15,90	
10	3,62	5828	10,90	16,90	
12	3,90	7029	11,90	17,90	
15	4,45	7029	12,90	18,90	
18	4,97	7029	13,90	19,90	
22	5,66	7029	15,90	20,90	
27	6,44	7029	16,90	21,90	

Air-core coils, wire Ø 1.00 mm

L100				BL100	
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]	[€]	[€]
0,10	0,14	3020	3,79	5,49	
0,12	0,15	3020	3,89	5,69	
0,15	0,17	3020	3,99	5,89	
0,18	0,19	3020	4,19	6,19	
0,22	0,21	3020	4,39	6,49	
0,27	0,23	3020	4,59	6,79	
0,33	0,26	4020	4,79	7,19	
0,39	0,29	4020	4,99	7,59	
0,47	0,32	4020	5,19	7,99	
0,56	0,36	4020	5,39	8,49	
0,68	0,39	4020	5,69	8,99	
0,82	0,44	4020	5,99	9,49	
1,0	0,49	5818	6,49	9,99	
1,2	0,54	5818	6,99	10,50	
1,5	0,62	5818	7,49	10,90	
1,8	0,70	5818	7,99	11,50	
2,0	0,74	5822	8,49	11,90	
2,2	0,83	5822	8,99	12,90	
2,7	0,90	5828	9,49	13,90	
3,0	0,98	5828	9,99	14,90	
3,3	1,05	5828	10,90	15,90	
3,9	1,13	5828	11,90	16,90	
4,7	1,25	7029	12,90	17,90	
5,6	1,39	7029	13,90	18,90	
6,8	1,56	7029	15,90	19,90	
8,2	1,72	7029	17,90	21,90	
10	1,91	7029	19,90	23,90	
12	2,26	7728	21,90	25,90	
15	2,61	7728	24,90	28,90	

Air-core coils, wire Ø 1.25 mm

L125				BL125	
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]	[€]	[€]
0,10	0,10	3020	4,19	5,99	
0,12	0,11	3020	4,59	6,49	
0,15	0,12	4020	4,99	6,99	
0,18	0,14	4020	5,29	7,49	
0,22	0,15	4020	5,79	7,99	
0,27	0,16	5818	6,19	8,49	
0,33	0,18	5818	6,49	8,99	
0,39	0,20	5818	6,99	9,49	
0,47	0,23	5818	7,49	9,99	
0,56	0,26	5818	7,99	10,90	
0,68	0,28	5818	8,49	11,90	
0,82	0,31	5818	8,99	12,90	
1,0	0,36	5822	9,99	13,90	
1,2	0,40	5828	10,90	14,90	
1,5	0,45	5828	11,90	15,90	
1,8	0,50	5828	12,90	16,90	
2,0	0,54	7029	13,50	17,90	
2,2	0,57	7029	13,90	18,90	
2,7	0,64	7029	14,90	19,90	
3,0	0,68	7029	15,90	21,90	
3,3	0,72	7029	16,90	23,90	
3,9	0,82	7728	18,90	25,90	
4,7	0,92	7728	20,90	27,90	
5,6	1,05	7728	22,90	29,90	
6,8	1,17	7059	25,90	32,90	
8,2	1,32	7059	28,90	35,90	
10	1,49	7059	31,90	38,90	

Air-core coils, wire Ø 1.40 mm

		L140	BL140
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,07	4020	4,99
0,12	0,08	4020	5,49
0,15	0,10	4020	5,99
0,18	0,11	5818	6,49
0,22	0,12	5818	6,99
0,27	0,13	5818	7,49
0,33	0,15	5818	7,99
0,39	0,16	5818	8,49
0,47	0,19	5818	8,99
0,56	0,20	5822	9,49
0,68	0,23	5828	9,99
0,82	0,26	5828	10,90
1,0	0,30	5828	11,90
1,2	0,34	7029	12,90
1,5	0,38	7029	13,90
1,8	0,43	7029	14,90
2,0	0,45	7029	15,90
2,2	0,46	7029	16,90
2,7	0,51	7728	17,90
3,0	0,55	7728	18,90
3,3	0,58	7728	19,90
3,9	0,65	7728	21,90
4,7	0,80	7059	24,90
5,6	0,89	7059	27,90
6,8	1,07	7059	30,90
8,2	1,10	7059	33,90
10	1,24	106	37,90
12	1,37	106	42,90
15	1,60	130	47,90
			59,90

Air-core coils, wire Ø 2.00 mm

		L200	VL200
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,04	5822	9,99
0,12	0,04	5822	10,90
0,15	0,05	5822	11,90
0,18	0,06	5828	12,90
0,22	0,07	5828	13,90
0,27	0,07	5828	15,90
0,33	0,09	7029	17,90
0,39	0,09	7029	19,90
0,47	0,11	7029	21,90
0,56	0,11	7029	23,90
0,68	0,14	7728	26,90
0,82	0,16	7728	29,90
1,0	0,18	7059	32,90
1,2	0,20	7059	35,90
1,5	0,22	7059	38,90
1,8	0,25	7059	41,90
2,0	0,27	106	44,90
2,2	0,28	106	47,90
2,7	0,33	130	51,90
3,0	0,35	130	55,90
3,3	0,37	130	59,90
3,9	0,38	130	64,90
4,7	0,45	130	69,90
5,6	0,47	130	74,90
6,8	0,55	130	81,90
8,2	0,61	150	89,90
10	0,68	150	99,90
12	0,73	150	109,90
15	0,89	150	119,90
			134,90

Air-core coils, wire Ø 2.50 mm

		L250	VL250
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,04	106	24,90
0,12	0,04	106	25,90
0,15	0,04	106	26,90
0,18	0,04	106	27,90
0,22	0,05	106	29,90
0,27	0,05	106	31,90
0,33	0,06	106	33,90
0,39	0,07	106	35,90
0,47	0,08	106	38,90
0,56	0,08	106	41,90
0,68	0,09	106	44,90
0,8	0,10	106	47,90
1,0	0,12	106	51,90
1,2	0,13	106	55,90
1,5	0,17	130	63,90
1,8	0,18	130	66,90
2,0	0,19	130	69,90
2,2	0,20	130	73,90
2,7	0,23	130	78,90
3,0	0,24	130	82,90
3,3	0,25	150	87,90
3,9	0,27	150	91,90
4,7	0,30	150	99,90
5,6	0,33	150	109,90
6,8	0,37	150	119,90
8,2	0,42	150	139,90
10	0,48	170	149,90
12	0,54	170	169,90
			184,90

Air-core coils, wire Ø 3.00 mm

		L300	VL300
Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,02	106	34,90
0,12	0,03	106	37,90
0,15	0,03	106	40,90
0,18	0,03	106	43,90
0,22	0,04	106	46,90
0,27	0,04	106	49,90
0,33	0,05	106	51,90
0,39	0,05	106	55,90
0,47	0,06	106	59,90
0,56	0,06	130	67,90
0,68	0,07	130	72,90
0,82	0,08	130	78,90
1,0	0,09	130	87,90
1,2	0,10	130	93,90
1,5	0,12	130	99,90
1,8	0,13	150	104,90
2,0	0,14	150	109,90
2,2	0,15	150	119,90
2,7	0,17	150	129,90
3,0	0,18	150	139,90
3,3	0,19	150	144,90
3,9	0,20	170	149,90
4,7	0,22	170	159,90
5,6	0,25	170	169,90
6,8	0,28	170	179,90
8,2	0,32	170	199,90
10	0,38	195	234,90
12	0,46	195	269,90
15	0,46	195	289,90
			304,90

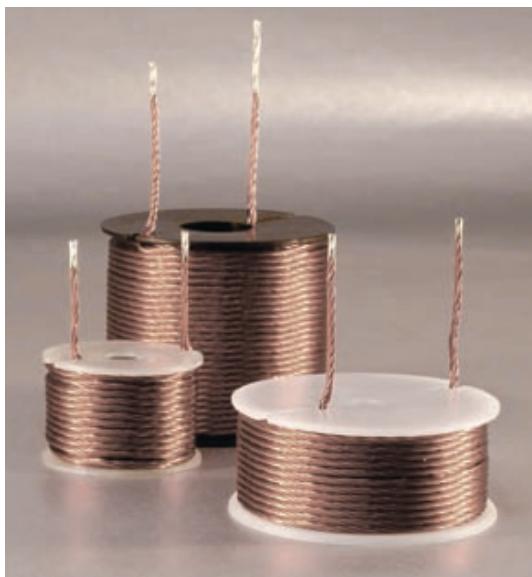
**Air-core coils, wire 6 \* 2 mm**

Inductance [mH] ±2%	RDC [Ohm]	Body	L390	VL390
			[€]	[€]
0,10	0,01	106	54,90	69,90
0,12	0,01	106	59,90	74,90
0,15	0,02	130	69,90	84,90
0,18	0,02	130	74,90	89,90
0,22	0,02	130	79,90	94,90
0,27	0,03	130	84,90	99,90
0,33	0,03	130	89,90	104,90
0,39	0,03	130	94,90	109,90
0,47	0,04	130	99,90	114,90
0,56	0,04	150	119,90	134,90
0,68	0,05	150	129,90	144,90
0,82	0,05	150	139,90	154,90
1,0	0,06	170	159,90	174,90
1,2	0,07	170	169,90	184,90
1,5	0,08	170	179,90	194,90
1,8	0,09	170	189,90	204,90
2,0	0,10	170	199,90	214,90
2,2	0,12	170	209,90	224,90
2,7	0,13	195	239,90	254,90
3,0	0,14	195	249,90	264,90
3,3	0,15	195	259,90	274,90
3,9	0,17	195	269,90	284,90
4,7	0,19	195	284,90	299,90
5,6	0,22	195	299,90	314,90

**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**



**LL60**

**Air-core coils, litz of wire 7 \* 0.60 mm, baked varnish**

Cross-section 1,98 mm<sup>2</sup> △ round wire Ø 1.59 mm

Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,07	5818	12,90
0,12	0,07	5818	13,90
0,15	0,08	5818	14,90
0,18	0,10	5822	15,90
0,22	0,11	5828	16,90
0,27	0,13	5828	17,90
0,33	0,14	5828	18,90
0,39	0,15	5828	19,90
0,47	0,17	7029	21,90
0,56	0,19	7029	23,90
0,68	0,21	7029	25,90
0,82	0,23	7029	27,90
1,0	0,27	7728	29,90
1,2	0,33	7059	32,90
1,5	0,37	7059	35,90
1,8	0,42	7059	38,90
2,0	0,44	7059	41,90
2,2	0,47	7059	44,90
2,7	0,52	7059	49,90
3,0	0,55	7059	54,90

**Technical specifications:**

OFC-Copper 99.99%

Coil form: PA, fibre-glass reinforced

Coil body heat resistant up to max. 230°C/446°F

**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.

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

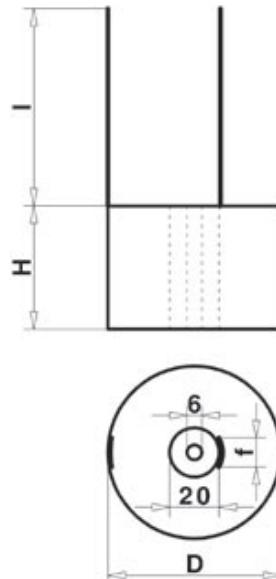
**Air coils • OFC-copper • Foil coils**



#### Technical specifications:

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

Type	foil height	conductor cross-section [mm <sup>2</sup> ]	△ round wire-Ø [mm]	H [mm]	f [mm]	I [mm]
...fc16	17 mm	1,19	1,23	24±2	9±1	<10 mH : 100 >8,2 mH : 140
...fc14	28 mm	1,96	1,58	34±2	14±2	<1,5 mH : 100 >1,2 mH : 140
...fc12	44 mm	3,08	1,98	52±2	13±2	<1,2 mH : 100 <2,4 mH : 170 >2,4 mH : 190
...fc10	70 mm	4,90	2,50	77±2	18±2	<0,82 mH : 100 <2,70 mH : 170 >2,20 mH : 190





**CFC16**

**Air-core coils, foil 17 mm**

Cross-section 1.19 mm<sup>2</sup>  $\triangleq$  round wire Ø 1.23

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,10	34	8,99
0,12	0,10	35	9,49
0,15	0,12	37	9,99
0,18	0,13	38	10,90
0,22	0,15	38	11,90
0,27	0,16	42	12,90
0,33	0,18	44	13,90
0,39	0,20	46	14,90
0,47	0,23	48	15,90
0,56	0,26	50	16,90
0,68	0,29	52	17,90
0,82	0,32	54	18,90
1,0	0,37	57	19,90
1,2	0,41	61	21,90
1,5	0,47	65	23,90
1,8	0,50	70	25,90
2,0	0,55	72	27,90
2,2	0,59	72	29,90
2,7	0,66	77	31,90
3,0	0,70	81	33,90
3,3	0,74	81	35,90
3,9	0,84	85	38,90
4,7	0,93	91	42,90
5,6	1,05	95	46,90
6,8	1,18	102	51,90
8,2	1,31	108	57,90
10	1,50	115	64,90

**CFC12**

**Air-core coils, foil 44 mm**

Cross-section 3.08 mm<sup>2</sup>  $\triangleq$  round wire Ø 1.98

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,05	38	17,90
0,12	0,06	40	19,90
0,15	0,06	42	21,90
0,18	0,06	43	23,90
0,22	0,08	47	25,90
0,27	0,09	49	27,90
0,33	0,10	50	29,90
0,39	0,11	52	32,90
0,47	0,12	54	35,90
0,56	0,14	55	39,90
0,68	0,15	60	43,90
0,82	0,17	65	48,90
1,0	0,19	69	53,90
1,2	0,21	73	58,90
1,5	0,24	76	63,90
1,8	0,26	81	69,90
2,0	0,28	81	75,90
2,2	0,29	86	81,90
2,7	0,33	92	87,90
3,0	0,35	92	93,90
3,3	0,37	98	99,90
3,9	0,39	103	109,90
4,7	0,46	108	119,90
5,6	0,50	113	134,90
6,8	0,56	118	149,90
8,2	0,63	125	164,90
10	0,72	140	179,90
12	0,85	140	199,90

**CFC14**

**Air-core coils, foil 28 mm**

Cross-section 1.96 mm<sup>2</sup>  $\triangleq$  round wire Ø 1.58 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,07	36	11,90
0,12	0,08	37	12,90
0,15	0,09	39	13,90
0,18	0,09	42	14,90
0,22	0,11	43	15,90
0,27	0,12	44	16,90
0,33	0,13	47	17,90
0,39	0,15	49	19,90
0,47	0,17	52	21,90
0,56	0,18	54	23,90
0,68	0,20	60	26,90
0,82	0,22	63	29,90
1,0	0,26	64	32,90
1,2	0,29	68	35,90
1,5	0,33	70	38,90
1,8	0,36	71	41,90
2,0	0,39	75	44,90
2,2	0,41	78	47,90
2,7	0,46	81	51,90
3,0	0,48	83	55,90
3,3	0,50	85	59,90
3,9	0,53	90	64,90
4,7	0,64	95	69,90
5,6	0,68	99	79,90
6,8	0,74	105	89,90
8,2	0,81	109	99,90
10	0,88	120	109,90
12	0,95	121	119,90
15	1,02	125	129,90

**CFC10**

**Air-core coils, foil 70 mm**

Cross-section 4.90 mm<sup>2</sup>  $\triangleq$  round wire Ø 2.50 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,04	44	27,90
0,12	0,04	44	29,90
0,15	0,05	45	32,90
0,18	0,05	48	36,90
0,22	0,06	49	41,90
0,27	0,06	52	47,90
0,33	0,07	54	54,90
0,39	0,08	56	61,90
0,47	0,09	58	69,90
0,56	0,10	61	79,90
0,68	0,11	65	89,90
0,82	0,12	69	99,90
1,0	0,14	74	109,90
1,2	0,15	77	119,90
1,5	0,17	80	129,90
1,8	0,19	83	139,90
2,0	0,20	83	149,90
2,2	0,21	88	164,90
2,7	0,23	92	179,90
3,0	0,25	94	194,90
3,3	0,27	99	209,90
3,9	0,28	104	229,90
4,7	0,31	109	249,90
5,6	0,36	114	269,90
6,8	0,41	121	299,90
8,2	0,47	125	329,90

**MCcoil 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

##### SFC16

###### Air-core coils, foil 17 mm, Silver

Cross-section 1.19 mm<sup>2</sup> ± round wire Ø 1.23 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,09	35	
0,12	0,09	36	on request
0,15	0,10	38	
0,18	0,11	39	
0,22	0,12	40	
0,27	0,14	42	
0,33	0,16	44	
0,39	0,18	46	
0,47	0,20	48	
0,68	0,23	52	
0,82	0,26	54	
1,0	0,30	58	
1,2	0,34	61	
1,5	0,39	65	
1,8	0,45	70	
2,2	0,49	72	

##### SFC14

###### Air-core coils, foil 28 mm, Silver

Cross-section 1.96 mm<sup>2</sup> ± round wire Ø 1.58 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,06	39	
0,12	0,07	40	on request
0,15	0,08	40	
0,18	0,09	41	
0,22	0,11	43	
0,27	0,12	46	
0,33	0,13	49	
0,39	0,14	51	
0,47	0,15	56	
0,68	0,18	60	
0,82	0,20	63	
1,0	0,23	66	
1,2	0,25	68	
1,5	0,27	70	
1,8	0,29	74	
2,2	0,32	78	



##### Technical specifications MCcoil Silver:

Ag-foil: 70 µ  
Purity of silver: min. 99.97% typ. 99.99%  
Insulation: Polypropylen 20 µ  
Central bore: 6 mm  
Permissible ambient temperature 85°C/185°F

##### Technical specifications MCcoil SilverGold:

AgAu-foil: 70 µ / proportion of gold 1%  
Purity of silver: min. 99.97% typ. 99.99%  
Purity of gold: min. 99.97% typ. 99.99%  
Insulation: Polypropylen 20 µ  
Central bore: 6 mm  
Permissible ambient temperature 85°C/185°F

##### SGFC16

###### Air-core coils, foil 17 mm, SilverGold

Cross-section 1.19 mm<sup>2</sup> ± round wire Ø 1.23 mm

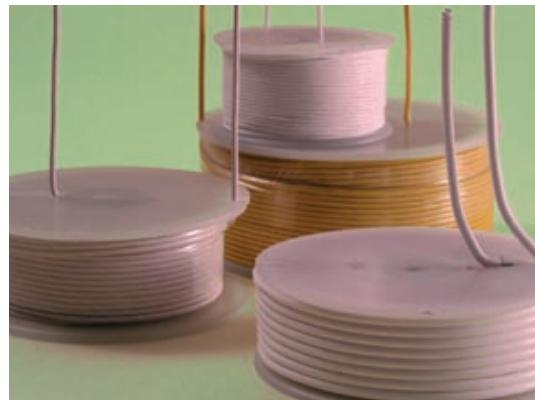
Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,09	34	
0,12	0,09	35	on request
0,15	0,10	36	
0,18	0,11	37	
0,22	0,12	39	
0,27	0,14	42	
0,33	0,17	45	
0,39	0,18	46	
0,47	0,20	48	
0,68	0,23	52	
0,82	0,26	56	
1,0	0,30	58	
1,2	0,34	61	
1,5	0,39	65	
1,8	0,45	70	
2,2	0,49	72	

##### SGFC14

###### Air-core coils, foil 28 mm, SilverGold

Cross-section 1.96 mm<sup>2</sup> ± round wire Ø 1.58 mm

Inductance [mH] ±2%	RDC [Ohm]	Ø [mm]	[€]
0,10	0,06	39	
0,12	0,07	40	on request
0,15	0,08	40	
0,18	0,09	41	
0,22	0,11	43	
0,27	0,12	46	
0,33	0,13	49	
0,39	0,14	51	
0,47	0,15	56	
0,56	0,18	60	
0,68	0,20	63	
0,82	0,23	66	
1,0	0,25	68	
1,5	0,27	70	
1,8	0,29	74	
2,2	0,32	78	



#### LSG50

Air-core coils, wire Ø 0.50 mm, SilverGold

Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,23	3610	
0,12	0,25	3610	on request
0,15	0,28	3610	
0,18	0,31	3610	
0,22	0,34	3610	
0,27	0,39	3610	
0,33	0,43	3020	
0,39	0,85	3020	
0,47	0,58	4020	
0,56	0,64	4020	
0,68	0,71	4020	
0,82	0,81	4020	
1,0	0,91	4020	

#### LSG100

Air-core coils, wire Ø 1.00 mm, SilverGold

Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,10	0,20	3020	
0,12	0,22	3020	on request
0,15	0,24	3020	
0,18	0,28	4020	
0,22	0,30	4020	
0,27	0,34	4020	
0,33	0,37	4020	
0,39	0,42	4020	
0,47	0,46	5818	
0,56	0,52	5818	
0,68	0,56	5818	
0,82	0,65	5818	
1,0	0,71	5818	

#### LSG150

Air-core coils, wire Ø 1.50 mm, SilverGold

Inductance [mH] ±2%	RDC [Ohm]	Body	[€]
0,18	0,11	5822	
0,22	0,12	5822	on request
0,33	0,17	5828	
0,39	0,22	5828	
0,47	0,22	5828	
0,56	0,24	5828	
0,68	0,26	5828	
1,0	0,35	7029	
1,2	0,37	7029	
1,5	0,38	7029	
2,5	0,49	106	
3,5	0,61	106	

**MCoil SilverGold** were specially developed for truly uncompromising audio applications desperate for an absolutely flawless, holographic music performance with maximum neutrality and an unequalled range of vivid, subtle timbres and signal details.

They unite the air coil typical beauty and authenticity in Performance with the 3D-like staging and the virtually microphonic-free properties of a coil reel alongside the utmost precise detailing and unprecedented range of vivid timbres performed by the massive PTFE insulated silver gold wire.

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

**Air coils • SilverGold • Solid Core**

#### Technical specifications:

Coil form: PA, fibre-glass reinforced  
Coil body heat resistant up to max. 230°C/446°F  
Insulation: PTFE  
Purity of silver: min. 99.97% typ. 99.99%  
Purity of gold: min. 99.97% typ. 99.99%  
Mixture ratio: 99% Silber / 1% Gold

**MCcoil Pin Core** coils are made from solid core copper wire. They 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 tonal qualities of the **F** series and its much satisfying music performance can yet be enhanced by Baked Wire Treatment as shown for the **BF** series.

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

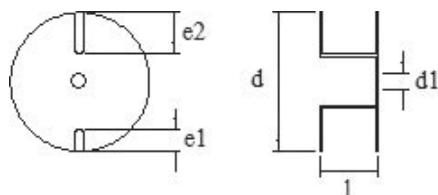
**Ferrite Core • OFC-Copper • Solid Core**

**Technical specifications:**

OFC-Copper 99.99%

Coil form: PA, fibre-glass reinforced

Coil body heat resistant up to max. 230°C/446°F



Coil-form	d	l	d1	e1	e2	Dimensions [mm]	
						3020	4020
	30	20	4,2	3	9		
	40	20	4,2	5	12		

**Pin-core coils, wire Ø 0,50 mm**

<b>F50</b>				
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	
1,0	0,79	3020	4,49	
1,2	0,90	3020	4,59	
1,5	1,07	3020	4,69	
1,8	1,15	3020	4,79	
2,0	1,23	3020	4,89	
2,2	1,31	3020	4,99	
2,7	1,48	3020	5,09	
3,0	1,59	3020	5,19	
3,3	1,71	3020	5,29	
3,9	1,81	3020	5,49	
4,7	2,15	3020	5,69	
5,6	2,41	3020	5,99	
6,8	2,75	3020	6,29	
8,2	3,14	3020	6,59	
10	3,49	4020	6,99	

**Pin-core coils, wire Ø 0,71 mm**

<b>F71</b>				
<b>BF71</b>				
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
1,00	0,46	3020	5,19	6,99
1,20	0,54	3020	5,29	7,29
1,50	0,61	3020	5,49	7,69
1,80	0,73	3020	5,69	7,89
2,00	0,85	3020	5,89	8,19
2,20	0,91	3020	6,09	8,49
2,70	1,01	4020	6,29	8,79
3,00	1,06	4020	6,49	8,99
3,30	1,11	4020	6,79	9,29
3,90	1,28	4020	7,19	9,69
4,70	1,43	4020	7,49	9,99
5,60	1,53	4020	7,79	10,50

**Pin-core coils, wire Ø 1,00 mm**

<b>F100</b>				
<b>BF100</b>				
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
0,47	0,21	3020	5,89	7,99
0,56	0,23	4020	6,09	8,29
0,68	0,26	4020	6,29	8,69
0,82	0,29	4020	6,49	9,19
1,0	0,33	4020	6,79	9,79
1,2	0,39	4020	7,19	10,50

# Fidelity Components

## FERRIT-Core coils



**MCoil Drum-Core** coils made from oxygen-free copper (OFC) round-wire have been developed for mid, low and parallel applications for which compact dimensions, a low basic distortion level as well as the lowest possible internal resistance and a reasonable value for money ratio are of key importance.

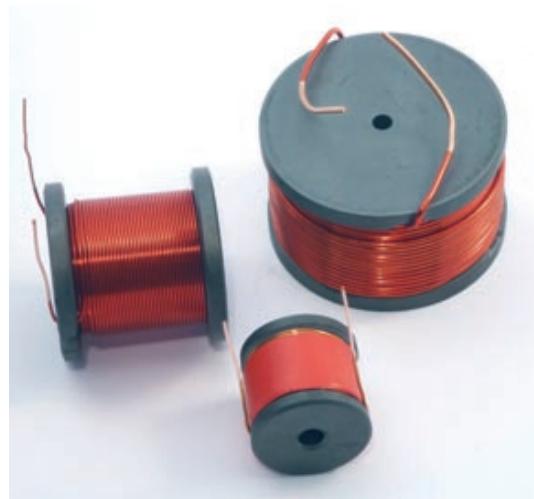
The tonal quality of these coils is a convincing blend of the typical harmoniously-neutral sound of solid core copper round-wire and the natural vitality and enhanced tonal dynamic of HP3616.

The fine properties of the **H** series can be further improved by applying Baked Wire Treatment as introduced with **BH** series.

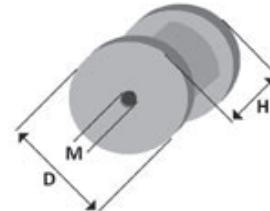
Please find detailed information on the advantages of different coil technologies on pages 30 to 32. Key words:  
**Ferrite Cores • OFC-Copper • Solid Core**

### Technical specifications:

Core material: HP 3616  
 OFC-Copper 99.99%



Body	D	H	M
	Dimensions [mm]		
2625	26	25	5,2
3525	35	25	5,2
4038	40	38	4,8
5635	56	35	4,2



### Drum-core coils, wire Ø 0,50 mm

H50			
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
4,7	1,08	2625	5,49
5,6	1,22	2625	5,69
6,8	1,36	2625	5,99
8,2	1,54	2625	6,29
10	1,78	3525	8,49
12	1,98	3525	8,69
15	2,32	3525	8,89
18	2,62	3525	9,19
22	3,03	3525	9,49
27	3,38	3525	9,79

### Drum-core coils, wire Ø 0,71 mm

H71 BH71				
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
1,0	0,24	2625	5,59	7,29
1,2	0,26	2625	5,69	7,39
1,5	0,30	2625	5,79	7,59
1,8	0,33	2625	5,89	7,69
2,0	0,35	2625	5,99	7,79
2,2	0,38	2625	6,09	7,89
2,7	0,44	2625	6,19	8,09
3,0	0,47	2625	6,29	8,29
3,3	0,50	2625	6,39	8,49
3,9	0,56	2625	6,49	8,69
4,7	0,68	3525	8,59	10,50
5,6	0,76	3525	8,79	10,90
6,8	0,85	3525	8,99	11,50
8,2	0,97	3525	9,19	11,90
10	0,87	4038	10,90	13,50
12	0,98	4038	11,50	13,90
15	1,15	4038	11,90	14,50
18	1,28	4038	12,50	14,90
22	1,49	4038	12,90	15,90
27	1,68	4038	13,50	17,50
33	1,93	4038	13,90	18,90

**Drum-core coils, wire Ø 1,00 mm**

		H100	BH100		
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]	
1,0	0,15	2625	6,49	8,49	
1,2	0,18	3525	8,49	10,50	
1,5	0,20	3525	8,79	10,70	
1,8	0,23	3525	9,09	10,90	
2,0	0,20	4038	10,50	12,50	
2,2	0,21	4038	10,90	12,90	
2,7	0,24	4038	11,50	13,50	
3,0	0,25	4038	11,90	13,90	
3,3	0,27	4038	12,50	14,50	
3,9	0,30	4038	12,90	14,90	
4,7	0,34	4038	13,50	15,50	
5,6	0,39	4038	13,90	15,90	
6,8	0,46	4038	14,50	16,50	
8,2	0,54	4038	14,90	17,50	
10	0,64	5635	17,90	20,90	
12	0,71	5635	18,90	21,90	
15	0,83	5635	19,90	22,90	

**Drum-core coils, wire Ø 1,12 mm**

		H112	BH112	
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
8,2	0,49	5635	19,90	23,90

**Drum-core coils, wire Ø 1,25 mm**

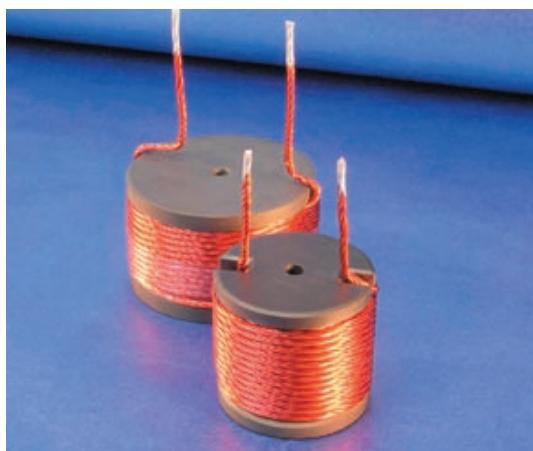
		H125	H125	
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
6,8	0,37	5635	19,90	23,90

**Drum-core coils, wire Ø 1,32 mm**

		H132	BH132	
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
5,6	0,31	5635	19,90	23,90

**Drum-core coils, wire Ø 1,40 mm**

		H140	BH140	
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
1,0	0,08	4038	11,50	13,90
1,2	0,09	4038	11,90	14,50
1,5	0,11	4038	12,50	14,90
1,8	0,12	4038	12,90	15,50
2,0	0,13	4038	13,50	15,90
2,2	0,14	4038	13,90	16,50
2,7	0,17	5635	17,90	20,50
3,0	0,18	5635	18,50	20,90
3,3	0,19	5635	18,90	21,90
3,9	0,22	5635	19,50	22,90
4,7	0,25	5635	19,90	23,90



**LH60**

**Drum-core coils, litz of wire 7 \* 0,60 mm, baked varnish**

Cross-section 1,98 mm<sup>2</sup> Δ round wire Ø 1,59 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
0,10	0,02	4038	10,90
0,12	0,02	4038	10,90
0,15	0,03	4038	11,50
0,18	0,03	4038	11,50
0,22	0,03	4038	11,90
0,27	0,04	4038	11,90
0,33	0,04	4038	12,50
0,39	0,04	4038	12,50
0,47	0,05	4038	12,90
0,56	0,06	4038	12,90
0,68	0,06	4038	15,90
0,82	0,07	4038	18,90
1,0	0,09	5635	23,90
1,2	0,10	5635	25,90

**Drum-core coils made from baked varnish litz-wire**

**MCoil Drum Core** hepta strand coils combine both the low level basic distortion and the low internal resistance of Ferrite core coils with the great stereophonic space of a tightly cemented reel, alongside the typical tonal warmth, fluidity and brightness of OFC copper strands.

They are therefore first choice for high quality mid frequency applications which require a detailed, utmost refined and smooth music performance at compact dimensions and low internal resistance.

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

**Ferrite Cores • OFC-Copper • Hepta Strand**

**Technical specifications:**

OFC-Copper 99,99%

Core material: HP3616

**Rod-core coils, wire Ø 0,71 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	A71 [€]	BA71 [€]
4,7	1,40	4530	8,99	10,90
5,6	1,56	4530	9,29	11,90
6,8	1,65	4530	9,59	12,90
8,2	1,89	4530	9,99	13,90
10	2,19	4530	10,50	14,90
12	2,55	4530	11,50	15,90
15	2,82	7029	12,50	16,90
18	3,16	7029	13,50	17,90
22	3,68	7029	14,50	18,90
27	4,44	7029	15,90	20,50
33	5,07	7029	17,50	22,90

**Rod-core coils, wire Ø 1,00 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	A100 [€]	BA100 [€]
1,0	0,30	4530	7,99	10,90
1,2	0,33	4530	8,29	11,50
1,5	0,38	4530	8,59	11,90
1,8	0,44	4530	8,99	12,50
2,2	0,49	4530	9,49	12,90
2,7	0,57	4530	9,99	13,50
3,3	0,64	4530	10,50	13,90
3,9	0,71	4530	10,90	14,90
4,7	0,80	4530	12,50	16,50
5,6	0,99	7029	13,90	17,90
6,8	1,10	7029	14,50	19,50
8,2	1,26	7029	15,90	20,90
10	1,44	7029	17,90	22,50
12	1,66	7029	19,90	23,90

**Rod-core coils, wire Ø 1,40 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	A140 [€]	BA140 [€]
0,10	0,05	4530	7,19	8,99
0,12	0,05	4530	7,39	9,29
0,15	0,06	4530	7,59	9,59
0,18	0,06	4530	7,89	9,99
0,22	0,07	4530	8,29	10,50
0,27	0,08	4530	8,59	10,90
0,33	0,09	4530	8,99	11,50
0,39	0,10	4530	9,49	11,90
0,47	0,11	4530	9,99	12,50
0,56	0,13	4530	10,50	12,90
0,68	0,14	4530	10,90	13,50
0,82	0,16	4530	11,50	13,90
1,0	0,18	4530	11,90	14,90
1,2	0,23	7029	12,50	15,90
1,5	0,25	7029	12,90	16,90
1,8	0,29	7029	13,50	17,90
2,0	0,31	7029	13,90	18,90
2,2	0,34	7029	14,90	19,90
2,7	0,38	7029	15,90	20,90
3,0	0,39	7029	16,90	21,90
3,3	0,40	7029	17,90	22,90
3,9	0,50	7728	18,90	23,90
4,7	0,57	7728	19,90	24,90
5,6	0,42	7059	19,90	24,90
6,8	0,49	7059	21,90	26,90
8,2	0,55	7059	23,90	29,90
10	0,62	7059	25,90	33,90
12	0,73	7059	27,90	35,90
15	0,84	7059	30,90	37,90



**MCoil's rod core 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 high-capacity middle-low and low frequency coils, including for PA applications.

The great features of line **A** as well as the transparent and undistorted music reproduction can be enhanced even further in line **BA** by using **self-bonding wire**.

Detailed information on the advantages of different coil technologies can be found on pages 30 to 32. Key words:

**Aronit Cores • OFC-Copper • SolidCore**

**Technical specifications:**

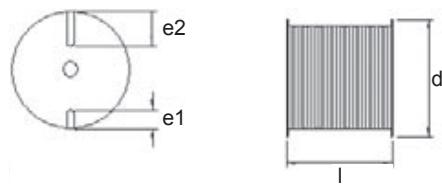
Core material: ARONIT

OFC-Copper 99.99%

Coil form: PA, fibre-glass reinforced

Coil body heat resistant up to max. 230°C/446°F

Aronit coil-forms	d	l	e1	e2
			Dimensions [mm]	
4530	45	30	7	11.0
7029	70	29	10	22.5
7728	77	28	6	26.0
7059	70	59	10	22.5



In their tone colour, **MCoil's rod-core coils made of Hepta-Litz** combine the low output distortions and internal resistance of Aronit core coils with the transparency of tightly wound spools, and the warm and harmonic smoothness and brilliance of copper strands.

They are therefore the first choice for top-quality medium-low and low frequency applications where detailed, sophisticated and smooth reproduction of music even under high electrical loads is key.

Using Aronit cores gives this coil type a higher inductive reactance than all other Hepta-Litz coils.

Detailed information on the advantages of different coil technologies can be found on pages 30 to 32. Key words:

**Aronit Cores • OFC-Copper • Hepta Strand**

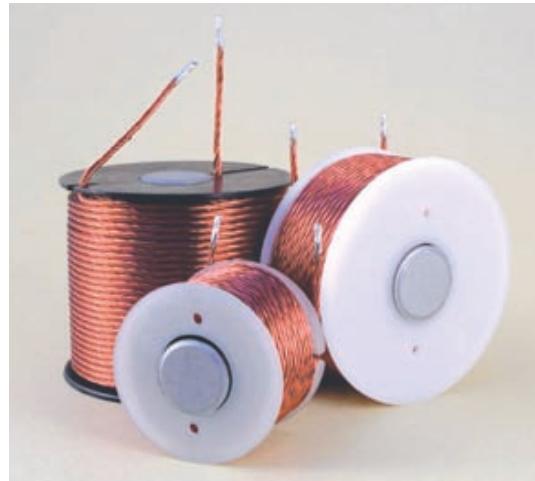
**Technical specifications:**

Core material: ARONIT

OFC-Copper 99.99% pure

Coil form: PA, fibre-glass reinforced

Coil body heat resistant up to max. 230°C/446°F



**LA60**

**Rod-core coils, litz of wire 7 \* 0,60 mm, baked varnish**

Cross-section 1,98 mm<sup>2</sup> △ round wire Ø 1,59 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
0,10	0,04	4530	9,99
0,12	0,05	4530	10,90
0,15	0,05	4530	11,90
0,18	0,06	4530	12,90
0,22	0,07	4530	13,90
0,27	0,08	4530	14,90
0,33	0,09	4530	15,90
0,39	0,10	7029	16,90
0,47	0,12	7029	17,90
0,56	0,13	7029	18,90
0,68	0,16	7029	19,90
0,82	0,18	7029	21,90
1,0	0,20	7029	23,90
1,2	0,15	7059	25,90
1,5	0,17	7059	27,90
1,8	0,19	7059	29,90
2,0	0,21	7059	31,90
2,2	0,22	7059	33,90
2,7	0,25	7059	35,90
3,0	0,27	7059	37,90
3,3	0,28	7059	39,90
3,9	0,32	7059	41,90
4,7	0,36	7059	43,90
5,6	0,40	7059	45,90
6,8	0,47	7059	47,90
8,2	0,54	7059	49,90

# Fidelity Components

## FERON-Core coils



**MCoil Laminated Core 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.

The **BS** series which was entirely re-developed in 2010, has replaced the well-known i and Bi series.

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

Key words: **Feron Core • OFC-Copper • Solid Core**

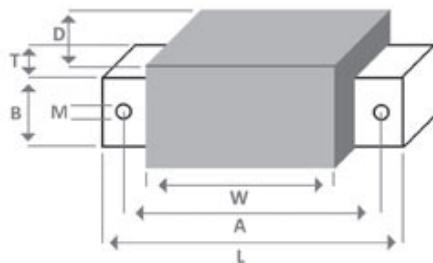
### Technical specifications:

OFC-Copper 99.99% pure

Coil form: PA, fibre-glass reinforced

Core material: FERON

Grain-oriented silicon iron 0.35 mm



### BS71 (replaced i71 and bi71)

#### I-core coils, baked varnish wire Ø 0,71 mm

Inductance [mH] ±3%	RDC [Ohm]	Body S66	Ø Body [mm]	[€]
3,3	0,57	S66	23	14,90
3,9	0,60	S66	23	15,50
4,7	0,70	S66	23	15,90
5,6	0,82	S66	24	16,50
6,8	0,94	S66	24	16,90
8,2	1,08	S66	24	17,50
10	1,15	S84	26	19,90

### BS125

#### I-core coils, baked varnish wire Ø 1,25 mm

Inductance [mH] ±3%	RDC [Ohm]	Body S96	Ø Body [mm]	[€]
4,7	0,30	S96	32	26,90
5,6	0,33	S96	32	27,90
6,8	0,37	S96	34	28,90
8,2	0,41	S96	34	29,90
10	0,45	S106	34	30,90
12	0,51	S106	34	32,50
15	0,59	S106	36	33,90
18	0,66	S106	36	35,50
22	0,75	S130	38	37,90



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

### BS100 (replaced i100 and bi100)

#### I-core coils, baked varnish wire Ø 1,00 mm

Inductance [mH] ±3%	RDC [Ohm]	Body S66	Ø Body [mm]	[€]
1,0	0,17	S66	19	14,90
1,2	0,19	S66	21	15,10
1,5	0,21	S66	21	15,30
1,8	0,24	S66	21	15,60
2,0	0,26	S66	23	15,90
2,2	0,27	S66	23	16,20
2,7	0,30	S66	23	16,50
3,0	0,33	S66	25	16,90
3,3	0,34	S84	27	20,50
3,9	0,37	S84	27	20,90
4,7	0,41	S84	27	21,50
5,6	0,46	S84	27	21,90
6,8	0,51	S84	29	22,50
8,2	0,56	S84	29	22,90
10	0,65	S96	29	24,90
12	0,73	S96	31	25,90
15	0,82	S96	31	26,90

### BS140 (replaced i140 and bi140)

#### I-core coils, baked varnish wire Ø 1,40 mm

Inductance [mH] ±3%	RDC [Ohm]	Body S84	Ø Body [mm]	[€]
1,0	0,09	S84	27	19,90
1,2	0,10	S84	27	20,50
1,5	0,12	S84	27	20,90
1,8	0,14	S84	28	21,50
2,0	0,15	S84	28	21,90
2,2	0,16	S96	28	24,50
2,7	0,17	S96	29	24,90
3,0	0,18	S96	29	25,50
3,3	0,19	S96	29	25,90
3,9	0,21	S96	29	26,90
4,7	0,24	S106	32	27,90
5,6	0,26	S106	32	28,90
6,8	0,30	S106	34	30,90
8,2	0,33	S106	34	32,90
10	0,38	S130	35	34,90
12	0,42	S130	35	36,90
15	0,48	S130	37	38,90
18	0,54	S130	37	40,90
22	0,56	S150	42	43,90
27	0,64	S150	42	45,90
33	0,74	S150	43	47,90

# Fidelity Components

## FERON-Core coils



**MCoil Laminated Core 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 +25 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

### CFS16

#### I-core coils, foil 17 mm

Cross-section 1.19 mm<sup>2</sup> △ round wire Ø 1.23

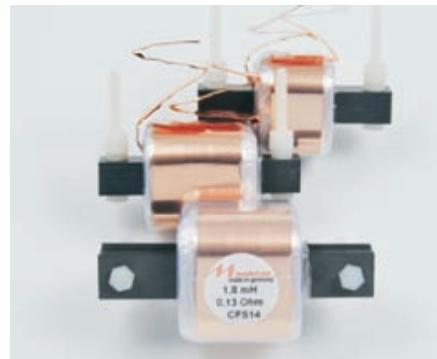
Inductance [mH] ±3%	RDC [Ohm]	Body [mm]	Ø Body [mm]	[€]
0,10	0,05	S66	21	17,90
0,12	0,05	S66	21	18,50
0,15	0,06	S66	22	18,90
0,18	0,06	S66	22	19,50
0,22	0,06	S66	23	19,90
0,27	0,07	S66	23	20,50
0,33	0,07	S66	24	20,90
0,39	0,08	S66	25	21,50
0,47	0,08	S66	26	21,90
0,56	0,09	S66	27	22,50
0,68	0,10	S66	29	22,90
0,82	0,13	S66	30	23,50
1,0	0,15	S66	33	23,90
1,2	0,17	S66	35	24,50
1,5	0,19	S66	37	24,90
1,8	0,19	S84	39	26,90
2,0	0,21	S84	40	27,90
2,2	0,23	S84	41	28,90
2,7	0,26	S84	44	29,90
3,0	0,28	S84	46	30,90
3,3	0,30	S84	47	31,90
3,9	0,34	S84	50	32,90
4,7	0,40	S84	53	33,90

### CFS12

#### I-core coils, foil 44 mm

Cross-section 3.08 mm<sup>2</sup> △ round wire Ø 1.96

Inductance [mH] ±3%	RDC [Ohm]	Body [mm]	Ø Body [mm]	[€]
1,0	0,06	S130	37	39,90
1,2	0,06	S130	39	40,50
1,5	0,07	S130	41	40,90
1,8	0,08	S130	43	41,50
2,0	0,08	S130	44	41,90
2,2	0,09	S130	45	42,50
2,7	0,10	S130	47	43,50
3,0	0,11	S130	49	45,90
3,3	0,12	S130	50	47,90
3,9	0,13	S130	53	49,90
4,7	0,15	S130	56	52,90
5,6	0,17	S130	59	55,90
6,8	0,19	S130	63	58,90
8,2	0,22	S130	67	63,90
10	0,27	S130	74	69,90
12	0,31	S130	78	79,90
15	0,36	S130	82	89,90
18	0,42	S130	87	104,90
22	0,49	S130	94	124,90



### Technical specifications:

Cu-foil: 70 µ / OFC-Copper 99.99% pure

Insulation: Polypropylen 20 µ

Coil form: PA, fibre-glass reinforced

Core material: FERON

Grain-oriented silicon iron 0.35 mm

Permissible ambient temperature 105°C/221°F

### CFS14 (replaced cfi14)

#### I-core coils, foil 28 mm

Cross-section = 1.96 mm<sup>2</sup>, △ round wire Ø 1,58mm

Inductance [mH] ±3%	RDC [Ohm]	Body [mm]	Ø Body [mm]	[€]
0,47	0,05	S96	31	28,50
0,56	0,06	S96	42	28,90
0,68	0,07	S96	34	29,50
0,82	0,09	S96	35	29,90
1,0	0,11	S96	37	30,50
1,2	0,12	S96	38	30,90
1,5	0,13	S96	40	31,50
1,8	0,14	S96	43	31,90
2,0	0,15	S96	44	32,90
2,2	0,16	S96	45	33,90
2,7	0,16	S106	46	34,90
3,0	0,17	S106	47	35,90
3,3	0,18	S106	48	36,90
3,9	0,20	S106	51	37,90
4,7	0,23	S106	54	39,90
5,6	0,26	S106	58	41,90
6,8	0,31	S106	62	44,90
8,2	0,35	S106	67	48,90
10	0,43	S106	73	52,90

### CFS10

#### I-core coils, foil 70 mm

Cross-section 4.90 mm<sup>2</sup> △ round wire Ø 2.50 mm

Inductance [mH] ±3%	RDC [Ohm]	Body [mm]	Ø Body [mm]	[€]
1,0	0,04	S150	41	52,90
1,2	0,04	S150	42	53,90
1,5	0,05	S150	44	54,90
1,8	0,05	S150	46	56,50
2,0	0,06	S150	47	59,90
2,2	0,06	S150	48	62,90
2,7	0,07	S150	50	65,90
3,0	0,08	S150	52	69,90
3,3	0,08	S150	54	73,90
3,9	0,09	S150	56	77,90
4,7	0,10	S150	59	81,90
5,6	0,12	S150	63	92,90
6,8	0,13	S150	67	99,90
8,2	0,15	S150	71	105,90
10	0,18	S150	77	119,90
12	0,20	S150	82	135,90
15	0,24	S150	89	159,90
18	0,27	S150	95	179,90
22	0,33	S150	103	209,90
27	0,41	S150	114	249,90
33	0,50	S150	128	299,90

## Fidelity Components

### FERON-Core coils



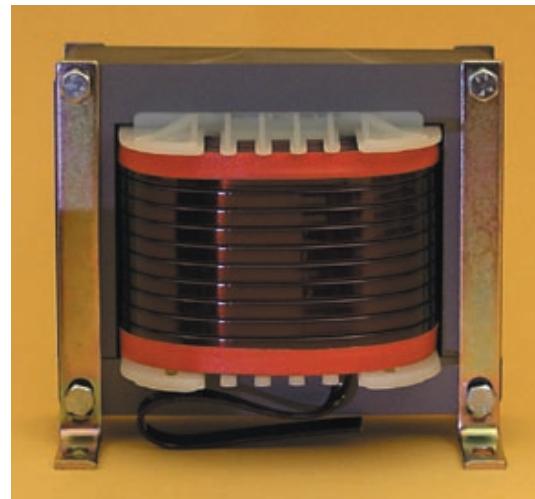
Our **Zero Ohm Coil (ZOC)** not only is a remarkable milestone in our +25 years lasting company history but certainly a true milestone within the field of audiophile coil technology in general, too. As back then, today, the ZOC is still to set the standards for the utmost musical fidelity in all respects 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.

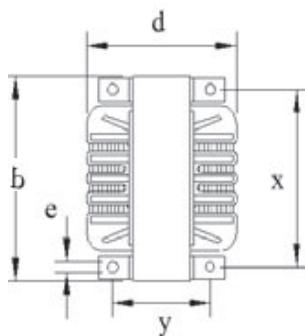
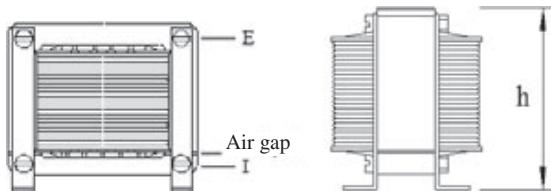
Baked Wire Treatment featuring coils are listed as **BN** in the following table, vacuum impregnated coils are marked **VN**.



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)					
N42	42	38	30	35		4,8
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

# Fidelity Components

## FERON-Core coils



### BN100

#### Zero-ohm coils, baked varnish wire Ø 1,00 mm

Inductance [mH] ±5%	RDC [Ω]	Body	[€]
0,56	0,10	N42	29,90
0,68	0,11	N42	29,90
0,82	0,12	N42	29,90
1,0	0,14	N42	29,90
1,2	0,16	N42	29,90
5,6	0,35	N66	41,90
6,8	0,39	N66	42,50
8,2	0,43	N66	42,90
10	0,48	N66	43,50
12	0,53	N66	43,90
15	0,61	N66	44,50
27	0,87	N84	66,90
33	0,94	N84	67,90

### BN125

#### Zero-ohm coils, baked varnish wire Ø 1,25 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
0,22	0,05	N42	29,90
0,27	0,06	N42	29,90
0,33	0,06	N42	29,90
0,39	0,07	N42	29,90
0,47	0,07	N42	29,90
3,3	0,18	N66	43,50
3,9	0,20	N66	43,90
4,7	0,23	N66	44,50
15	0,41	N84	69,90
18	0,46	N84	71,50
22	0,51	N84	72,90
27	0,57	N96	83,50
33	0,64	N96	84,90

### BN140

#### Zero-ohm coils, baked varnish wire Ø 1,40 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
0,10	0,03	N42	29,90
0,12	0,03	N42	29,90
0,15	0,04	N42	29,90
0,18	0,04	N42	29,90
0,22	0,05	N66	39,90
0,27	0,05	N66	39,90
0,33	0,06	N66	40,50
0,39	0,06	N66	40,50
0,47	0,06	N66	40,50
0,56	0,07	N66	40,90
0,68	0,07	N66	40,90
0,82	0,07	N66	40,90
1,0	0,08	N66	41,50
1,2	0,08	N66	41,50
1,5	0,09	N66	41,50
1,8	0,10	N66	41,90
2,0	0,11	N66	42,50
2,2	0,12	N66	42,90
2,7	0,13	N66	43,50
3,0	0,14	N66	43,90
3,3	0,15	N84	62,90
3,9	0,16	N84	63,90
4,7	0,17	N84	64,90
5,6	0,19	N84	65,90
6,8	0,22	N84	66,90
8,2	0,24	N84	67,90
10	0,28	N84	68,90
12	0,30	N84	69,90
15	0,33	N96	78,90
18	0,37	N96	80,90
22	0,46	N96	83,90

#### Zero-ohm coils, wire Ø 2,50 mm

	N250 VN250			
Inductance [mH] ±5%	RDC [Ohm]	Body	[€]	[€]
3,9	0,04	N96	89,90	104,90
4,7	0,04	N96	89,90	104,90
5,6	0,04	N96	89,90	104,90
6,8	0,09	N106	99,90	114,90
8,2	0,09	N106	99,90	114,90
10	0,09	N106	99,90	114,90
12	0,15	N130	159,90	174,90
15	0,15	N130	159,90	174,90
18	0,15	N130	159,90	174,90
22	0,21	N130	159,90	174,90
27	0,21	N130	159,90	174,90
33	0,22	N130	159,90	174,90

#### Zero-ohm coils, wire Ø 3,00 mm

	N300 VN300			
Inductance [mH] ±5%	RDC [Ohm]	Body	[€]	[€]
1,0	0,03	N96	89,90	104,90
1,2	0,03	N96	89,90	104,90
1,5	0,03	N96	89,90	104,90
1,8	0,03	N96	89,90	104,90
2,0	0,03	N96	89,90	104,90
2,2	0,03	N96	89,90	104,90
2,7	0,03	N96	89,90	104,90
3,0	0,03	N96	89,90	104,90
3,3	0,03	N96	89,90	104,90
3,9	0,05	N106	99,90	114,90
4,7	0,05	N106	99,90	114,90
5,6	0,05	N106	99,90	114,90
6,8	0,06	N130	159,90	174,90
8,2	0,06	N130	159,90	174,90
10	0,09	N130	159,90	174,90
12	0,09	N130	159,90	174,90
15	0,09	N130	159,90	174,90
18	0,09	N130	159,90	174,90
22	0,14	N150	219,90	234,90
27	0,14	N150	219,90	234,90
33	0,14	N150	219,90	234,90

#### Zero-ohm coils, wire 6 \* 2 mm

	N390 VN390			
Inductance [mH] ±5%	RDC [Ohm]	Body	[€]	[€]
1,0	0,02	N106	109,90	124,90
1,2	0,02	N106	109,90	124,90
1,5	0,02	N106	99,90	114,90
1,8	0,02	N106	99,90	114,90
2,0	0,02	N106	99,90	114,90
2,2	0,02	N106	99,90	114,90
2,7	0,02	N106	99,90	114,90
3,0	0,02	N106	99,90	114,90
3,3	0,02	N106	99,90	114,90
3,9	0,04	N130	159,90	174,90
4,7	0,04	N130	159,90	174,90
5,6	0,04	N130	159,90	174,90
6,8	0,04	N130	159,90	174,90
8,2	0,04	N130	159,90	174,90
10	0,05	N150	219,90	234,90
12	0,05	N150	219,90	234,90
15	0,05	N150	219,90	234,90
18	0,05	N150	219,90	234,90
22	0,05	N150	219,90	234,90

# Fidelity Components

## FERON-Core coils



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 advantages of 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



### CFN14

#### Zero-ohm coils, foil 28 mm

Cross-section = 1.96 mm<sup>2</sup>, △ round wire Ø 1.58 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
2,7	0,15	N84	72,90
3,0	0,15	N84	72,90
3,3	0,15	N84	72,90
3,9	0,18	N84	74,90
4,7	0,18	N84	74,90
5,6	0,18	N84	74,90
6,8	0,18	N84	74,90

### CFN12

#### Zero-ohm coils, foil 44 mm

Cross-section = 3.08 mm<sup>2</sup>, △ round wire Ø 1.98 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
8,2	0,21	N106	129,90
10	0,21	N106	129,90
12	0,25	N106	134,90
15	0,25	N106	134,90
18	0,25	N106	134,90
22	0,25	N106	134,90
27	0,25	N106	134,90

Our **Zero Ohm Coil (ZOC)** made from silver foil combines the exceptional conductivity of silverfoil with the minimal internal resistance of Feron ZOC cores as described on page 48.

The exceptional acoustic qualities of the SFN series can yet be further enhanced by adding 1% of the purest gold to making in the ultimate SGFN series.

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

### SFN14

#### Zero-ohm coils, silver-foil 28 mm

Cross-section = 1.96 mm<sup>2</sup>, △ round wire Ø 1.58 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
2,7	0,14	N84	
3,0	0,14	N84	on request
3,3	0,14	N84	
3,9	0,17	N84	
4,7	0,17	N84	
5,6	0,17	N84	
6,8	0,17	N84	

### SGFN14

#### Zero-ohm coils, silver/gold-foil 28 mm

Cross-section = 1.96 mm<sup>2</sup>, △ round wire Ø 1.58 mm

Inductance [mH] ±5%	RDC [Ohm]	Body	[€]
2,7	0,14	N84	
3,0	0,14	N84	on request
3,3	0,14	N84	
3,9	0,17	N84	
4,7	0,17	N84	
5,6	0,17	N84	
6,8	0,17	N84	

**MCoil's transformer-core 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.

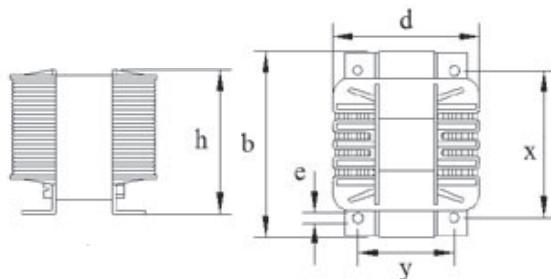
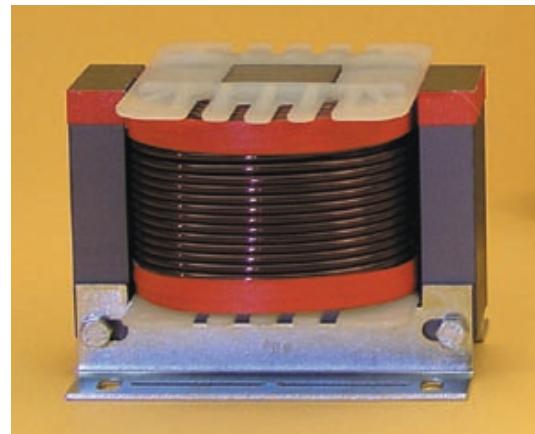
Baked Wiring Treatment is marked **BT** in the following table. Vacuum impregnated coils are marked **VT**.

Please find detailed information on the advantages 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	Dimensions (mm)		
				x	y	e
T66	66	52	56	51	45	4,8
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

**BT100**

**Transformer-core coils, baked varnish wire Ø 1,00 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
10	0,74	T84	50,90
12	0,81	T84	51,90
15	0,90	T84	52,90
18	1,04	T84	53,90
22	1,14	T84	54,90

**BT140**

**Transformer-core coils, baked varnish wire Ø 1,40 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
1,0	0,11	T66	34,90
1,2	0,12	T66	35,50
1,5	0,13	T66	35,90
1,8	0,14	T66	36,50
2,0	0,11	T84	47,90
2,2	0,12	T84	48,90
2,7	0,17	T84	49,90
3,0	0,19	T84	50,90
3,3	0,22	T84	51,90
3,9	0,25	T96	61,90
4,7	0,27	T96	62,90
5,6	0,30	T96	63,90
6,8	0,32	T96	64,90
8,2	0,35	T96	65,90
10	0,39	T96	67,50
12	0,45	T96	68,90

**BT125**

**Transformer-core coils, baked varnish wire Ø 1,25 mm**

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
2,0	0,19	T66	35,90
2,2	0,21	T66	36,50
2,7	0,23	T66	36,90
3,0	0,24	T66	37,50
3,3	0,27	T84	49,90
3,9	0,29	T84	50,90
4,7	0,31	T84	51,90
5,6	0,34	T84	52,90
6,8	0,39	T84	53,90
8,2	0,43	T84	54,90
10	0,49	T96	65,90
12	0,55	T96	66,90
15	0,61	T96	68,50
18	0,67	T96	69,90
22	0,76	T96	71,90

# Fidelity Components

## FERON-Core coils



Transformer-core coils, wire Ø 2,00 mm

		T200		VT200
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
0,47	0,05	T84	49,50	64,50
0,56	0,05	T84	49,90	64,90
0,68	0,06	T84	50,50	65,50
0,82	0,06	T84	50,90	65,90
1,0	0,07	T84	51,90	66,90
1,2	0,08	T84	52,90	67,90
1,5	0,09	T84	53,90	68,90
1,8	0,08	T96	61,90	76,90
2,0	0,09	T96	63,50	78,50
2,2	0,09	T96	64,90	79,90
2,7	0,10	T96	66,50	81,50
3,0	0,11	T96	67,90	82,90
3,3	0,10	T106	71,50	86,50
3,9	0,11	T106	73,50	88,50
4,7	0,14	T106	75,90	90,90
5,6	0,15	T106	78,50	93,50
6,8	0,18	T106	80,90	95,90
8,2	0,20	T106	83,50	98,50
10	0,22	T106	85,90	100,90
12	0,23	T130	95,90	110,90
15	0,28	T130	99,90	114,90
18	0,33	T130	104,90	119,90
22	0,37	T130	109,90	124,90
27	0,41	T130	116,90	131,90
33	0,48	T130	123,90	138,90
39	0,48	T150	151,90	166,90
47	0,58	T150	162,90	177,90

Transformer-core coils, wire Ø 2,50 mm

		T250		VT250
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
1,0	0,04	T96	74,90	89,90
1,2	0,04	T96	76,90	91,90
1,5	0,05	T96	78,90	93,90
1,8	0,05	T96	80,90	95,90
2,0	0,06	T106	87,90	102,90
2,2	0,07	T106	89,90	104,90
2,7	0,07	T106	91,90	106,90
3,0	0,08	T106	93,90	108,90
3,3	0,08	T106	95,90	110,90
3,9	0,09	T106	98,90	113,90
4,7	0,08	T130	103,90	118,90
5,6	0,09	T130	107,90	122,90
6,8	0,12	T130	112,90	127,90
8,2	0,14	T130	117,90	132,90
10	0,16	T130	124,90	139,90
12	0,19	T130	131,90	146,90
15	0,17	T150	154,90	169,90
18	0,22	T150	167,50	182,50
22	0,25	T150	179,90	194,90

Transformer-core coils, wire Ø 3,00 mm

		T300		VT300
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
1,0	0,03	T106	84,90	104,90
1,2	0,03	T106	88,90	109,90
1,5	0,04	T106	91,50	114,90
1,8	0,04	T106	93,90	119,90
2,0	0,05	T130	104,90	129,90
2,2	0,05	T130	106,90	134,90
2,7	0,06	T130	109,50	139,90
3,0	0,06	T130	111,90	144,90
3,3	0,07	T130	114,90	149,90
3,9	0,07	T130	117,90	154,90
4,7	0,08	T130	121,90	159,90
5,6	0,09	T130	126,90	164,90
6,8	0,10	T150	159,90	194,90
8,2	0,11	T150	167,60	199,90
10	0,12	T150	174,90	204,90
12	0,13	T150	182,50	214,90
15	0,15	T150	189,90	224,90

Transformer-core coils, wire 6 \* 2 mm

		T390		VT390
Inductance [mH] ±3%	RDC [Ohm]	Body	[€]	[€]
1,0	0,03	T130	149,90	164,90
1,2	0,03	T130	152,50	167,50
1,5	0,03	T130	154,90	169,90
1,8	0,04	T130	157,50	172,50
2,0	0,04	T130	159,90	174,90
2,2	0,04	T150	179,90	194,90
2,7	0,05	T150	184,90	199,90
3,0	0,05	T150	189,90	204,90
3,3	0,05	T150	194,90	209,90
3,9	0,06	T150	199,90	214,90

## Fidelity Components

### FERON-Core coils



**MCcoil transformer-core 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 performance 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

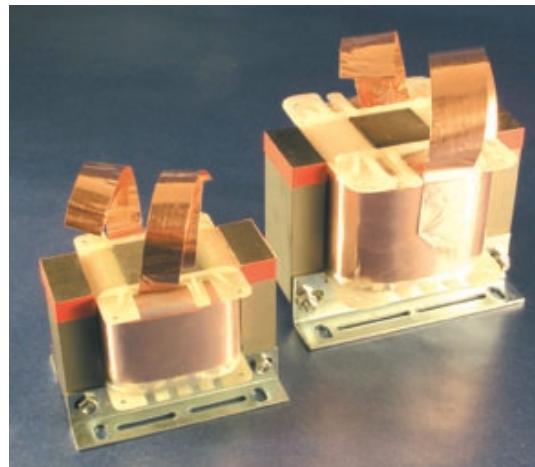
#### Technical specifications:

Core material: FERON

Corroded silicon iron 0.35mm

Cu foil: 70 µ / OFC copper with 99.997% pureness

Insulation: polypropylene 20 µ



#### CFT14

##### Transformer-core coils, foil 28 mm

cross-section = 2,08 mm<sup>2</sup>, △ round wire Ø 1,63 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
1,0	0,10	T84	54,90
1,2	0,12	T84	55,90
1,5	0,13	T84	56,90
1,8	0,15	T84	57,90
2,0	0,16	T84	58,90
2,2	0,17	T84	59,90

#### CFT12

##### Transformer-core coils, foil 44 mm

cross-section = 3,30 mm<sup>2</sup>, △ round wire Ø 2,05 mm

Inductance [mH] ±3%	RDC [Ohm]	Body	[€]
2,7	0,13	T106	84,90
3,0	0,15	T106	86,90
3,3	0,17	T106	88,90
3,9	0,19	T106	91,90
4,7	0,21	T106	94,90
5,6	0,22	T106	98,90
6,8	0,25	T106	102,90

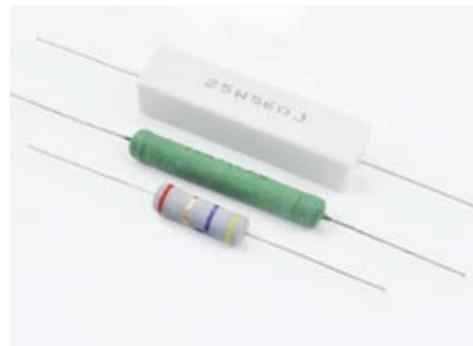
# Fidelity Components

## Resistors



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	0,79
0,22	0,79
0,33	0,79
0,47	0,79
0,68	0,79
0,82	0,79
1,0	0,79
1,2	0,79
1,5	0,79
1,8	0,79
2,2	0,79
2,7	0,79
3,3	0,79
3,9	0,79
4,7	0,79
5,6	0,79
6,8	0,79
8,2	0,79
10	0,79
12	0,79
15	0,79
18	0,79
22	0,79
27	0,79
33	0,79
39	0,79
47	0,79

### MR10

#### Metal-oxide film resistors, 10 watt

Ohm [Ω] ±2%	[€]
0,10	1,29
0,15	1,29
0,22	1,29
0,27	1,29
0,33	1,29
0,39	1,29
0,47	1,29
0,56	1,29
0,68	1,29
0,82	1,29
1,0	1,29
1,2	1,29
1,5	1,29
1,8	1,29
2,2	1,29
2,7	1,29
3,3	1,29
3,9	1,29
4,7	1,29
5,6	1,29
6,8	1,29
8,2	1,29
10	1,29
12	1,29
15	1,29
18	1,29
22	1,29
27	1,29
33	1,29
39	1,29
47	1,29
56	1,29

### R25

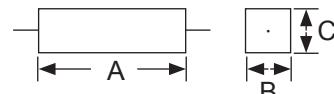
#### High-load resistors, 25 watt

Ohm [Ω] ±5%	[€]
1,0	1,79
1,2	1,79
1,5	1,79
1,8	1,79
2,2	1,79
2,7	1,79
3,3	1,79
3,9	1,79
4,7	1,79
5,6	1,79
6,8	1,79
8,2	1,79
10	1,79
12	1,79
15	1,79
18	1,79
22	1,79
27	1,79
33	1,79
39	1,79
47	1,79
56	1,79

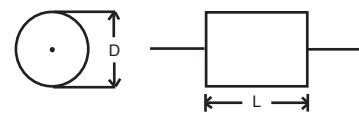
#### Colour codes for resistors

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	

Type	A	B	C	Wire Dimensions [mm]	Ø * l [mm]
R25	60	15	13	60	0.8 * 35



Type	L	D	Wire Dimensions [mm]	Ø * l [mm]
MR5	24	8	24	0.8 * 35
MR10	52	8	52	0.8 * 35



## Fidelity Components Resistors

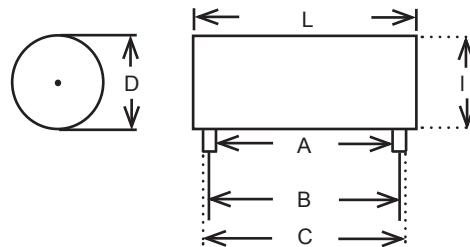
**M<sup>®</sup> RESIST SUPREME**

With our **MResist SUPREME** you can enjoy even finest details and spatial information which normally get lost. Due to the complex bifilar structure from  $1\Omega$  with two wires being wound around the high-temperature-resistant cement element simultaneously the inductance is always below  $75\mu\text{H}$ .

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/ $^{\circ}\text{C}$** .

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



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

**MRES20**  
Audiophile-resistors, non-magnetic,  
non-inductive, 50ppm/ $^{\circ}\text{C}$ , 20 watt

Ohm [ $\Omega$ ] ±2%	[€]
0,10	8,99
0,22	8,99
0,33	8,99
0,47	8,99
0,68	8,99
1,0	10,90
1,2	10,90
1,5	10,90
1,8	10,90
2,2	10,90
2,7	10,90
3,3	10,90
3,9	10,90
4,7	10,90
5,6	10,90
6,8	10,90
8,2	10,90
10	10,90
12	10,90
15	10,90
18	10,90
22	10,90
27	10,90
33	10,90



**RECOFUSE**

**PTC-elements, 60VDC/40A**

Holding-current [A]	Release-current [A]	RDC [Ω] ±5%	Dimensions l * d * w	[€]
0,10	2,50	2,50	7*13*3	1,29
0,20	1,83	1,83	7*13*3	1,29
0,25	1,25	1,25	7*13*3	1,29
0,30	0,88	0,88	7*13*3	1,29
0,40	0,55	0,55	8*14*3	1,29
0,50	0,50	0,50	8*14*3	1,29
0,65	0,31	0,31	10*15*3	1,29
0,75	0,25	0,25	11*15*3	1,29
0,90	0,20	0,20	12*16*3	1,29
1,10	0,15	0,15	13*18*3	1,79
1,35	0,12	0,12	15*20*3	1,79
1,60	0,09	0,09	16*21*3	1,79
1,85	0,08	0,08	18*23*3	1,79
2,50	0,05	0,05	21*26*3	1,79
3,00	0,04	0,04	25*30*3	1,79
3,75	0,03	0,03	29*34*3	1,79

**FESTOON**

Soffitt, 12V / 25W, 4µH

[€]
3,99

**FESTOON performance data**

U-bulb [V]	IV [A]	[Ω]
1.0348	0.662	1.56
2.0038	0.860	2.33
3.0053	1.035	2.90
4.0049	1.190	3.37
5.0024	1.332	3.76
6.0070	1.464	4.10
7.0260	1.587	4.43
8.0140	1.699	4.72
9.0190	1.807	4.99
10.008	1.907	5.25
11.021	2.005	5.50
0.00	0.00	0.50
0.4770	0.1	0.95
2.8048	1.0	2.80
6.3660	1.5	4.24
10.982	2.0	5.49

We offer tin-solder from 4 alloys used as materials that show a considerably higher purity than is required by DIN standards:

The **MSolder** as a pure tin-copper mixture for the connection of copper-based components.

The **MSolder Silver** provides a superior conductivity by virtue of 4.5% precious metal and guarantees the excellent sound characteristics of components containing silver.

**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:

- 100g, 250g or 1 000g coils
- 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

Tin solder MSolder

**Liquidus 240°C/464°F, Sn99,0Cu1,0, Ø 1,00 mm**

Weight [kg]	Lenght [m]	[€]
0,01	1,7	3,99
0,05	8,5	11,90
0,10	17,0	19,90
0,25	43,0	45,90
1,00	170,0	174,90

#### MSOL.S

Tin solder MSolder Silver

**Liquidus 220°C/428°F, Sn95,5Cu0,7Ag3,8, Ø 1,00 mm**

Weight [kg]	Lenght [m]	[€]
0,01	1,7	6,99
0,05	8,5	19,90
0,10	17,0	32,90
0,25	43,0	77,90
1,00	170,0	299,90

#### MSOL.SG

Tin solder MSolder SilverGold

**Liquidus 217°C/422°F, Sn95,5Cu0,7Ag3,8Au, Ø 1,00 mm**

Weight [kg]	Lenght [m]	[€]
0,01	1,7	7,99
0,05	8,5	23,90
0,10	17,0	39,90
0,25	43,0	92,90
1,00	170,0	349,90

#### MSOL.SUP

Tin solder MSolder SUPREME SilverGold

**Liquidus 290°C/554°F, Sn88,6Cu1,8Ag9,5Au0,1, Ø 1,0 mm**

Weight [kg]	Lenght [m]	[€]
0,01	1,7	14,90
0,05	8,5	44,90
0,10	17,0	74,90
0,25	43,0	174,90
1,00	170,0	659,90

**TWARON®** is an aramide fibre which is especially suited for the acoustic vaporisation of amplifier housings. Its excellent damping properties significantly increase the auditory spaciousness of music reproduction. TWARON® is a registered trademark of Taijin Aramid B.V. Arnhem (NL). Its inorganic origin prevents deterioration and mould formation.

Comprehensive listening tests show that already 3 to 10 grams per litre are sufficient.

#### ELVES

##### MSilence TWARON® Elves` Hair

Weight

[kg]	[€]
0,010	3,49
0,025	5,29
0,050	7,99
0,100	12,90
0,250	29,90
0,500	57,90
1,000	109,90



Elves` Hair

#### UNICORN

##### MSilence TWARON® Unicorn`s Tail

Weight

[kg]	[€]
0,010	3,99
0,025	6,29
0,050	9,99
0,100	17,90
0,250	41,90
0,500	82,90
1,000	159,90



Unicorn`s Tail

#### ANGEL

##### MSilence TWARON® Angel Hair

Weight

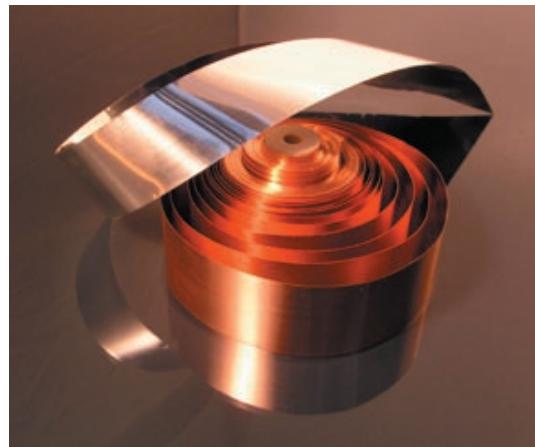
[kg]	[€]
0,010	4,19
0,025	6,79
0,050	10,90
0,100	19,90
0,250	45,90
0,500	89,90
1,000	174,90



Angel Hair

We offer **metal foils** in various widths and qualities for all customers who require these foils for manufacture of their own cable.

Below is an overview of the deliverable versions.



foil	gram /Meter	minimum
OFC-copper 17 mm	10,63	10 meter
OFC-copper 28 mm	17,5	10 meter
OFC-copper 44 mm	27,5	10 meter
OFC-copper 70 mm	44,0	10 meter
pure silver 17 mm	10,79	1 meter
pure silver 28 mm	17,7	1 meter
SilverGold-foil 17 mm*	10,81	1 meter
SilverGold-foil 28 mm*	17,73	1 meter

\*(1% proportion gold )

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

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

**CF17**  
**Copper foil , cross-section 1,19 mm<sup>2</sup>**

	[€]
price/meter	2,90

**CF28**  
**Copper foil , cross-section 1,96 mm<sup>2</sup>**

	[€]
price/meter	3,90

**CF44**  
**Copper foil , cross-section 3,08 mm<sup>2</sup>**

	[€]
price/meter	4,90

**CF70**  
**Copper foil , cross-section 4,90 mm<sup>2</sup>**

	[€]
price/meter	5,90

**SF17**  
**Silver foil, cross-section 1,19 mm<sup>2</sup>**

	[€]
price/meter	

**SF28**  
**Silver foil, cross-section 1,96 mm<sup>2</sup>**

	[€]
price/meter	on request

**SGF17**  
**SilverGold foil, cross-section 1,19 mm<sup>2</sup>**

	[€]
price/meter	

**SGF28**  
**SilverGold foil, cross-section 1,96 mm<sup>2</sup>**

	[€]
price/meter	

The mixture of **silver plus 1% gold** has proven itself excellently as capacitor film for the MCAP<sup>®</sup> 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.

For preparation we recommend MSolder soldering tin. (see p. 57)



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

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

[€]

price/meter

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

[€]

price/meter all prices 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

**SGW305WH**  
SilverGold-wire 3 \* 0,5 mm, PTFE-insulated, white \*

[€]

price/meter

**SGW305YE**  
SilverGold-wire 3 \* 0,5 mm, PTFE-insulated, yellow \*

[€]

price/meter

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

[€]

price/meter

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

[€]

price/meter all prices 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

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

Since spring 2010, we have offered WBT's Premium RCA plugs nextgenTM 0110 Signature in an exclusive MCAP® variant with contacts made of the same highly purified silver-gold alloy which is also used for the metallization of our Supreme SilverGold capacitors.

Thus, this recognised high-quality plug is not only an supplement for SilverGold cables such as Mundorf's Ai605 but also increases the transmission qualities of high-quality audio cables to come to perfection without impairing neutrality; even in small details, pure SilverGold filters out more musical substance from electrical audio signals than any other conductor materials known to us.

Reason enough to refer again to our well-proven MSolder Supreme SilverGold solder at this point - quasi as perfect match for a perfect plug.



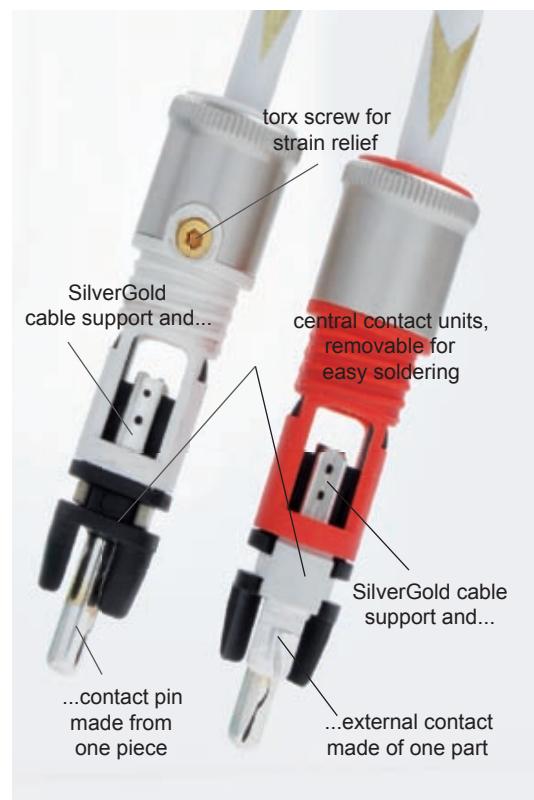
After mounting, the external contact is firmly clamped to the RCA connector applying the WBT chuck mechanism which has the same function as the chuck of a drilling machine. The high contact pressure does not only provide secure connection but also minimises the transition resistance.

As the clamping sleeve is designed in two parts, the front part does not rotate when tightening the sleeve. Thus the contact elements are not subjected to any rotational stress. The contact pressure element between contact and sleeve is made of plastic so that the sleeve is completely insulated and cannot influence the signal. Moreover, dimensional inaccuracies of the external contacts are compensated by the RCA connectors.

As from spring 2012, we offer the aboved described plug alternatively with OFC copper contacts.



The **RCA plug nextgenTM 0110 AgAu SilverGold** is exclusively produced by WBT for Mundorf



**Internal values:** the aluminium clamp sleeve is screwed on from the outside

**General data:**

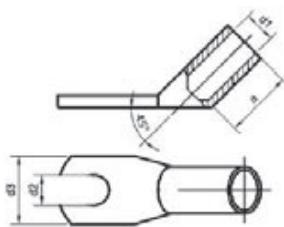
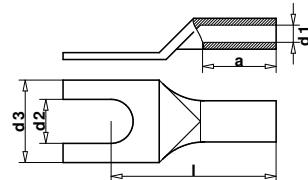
Cable diameter: up to 9mm  
Characteristic impedance: 75 Ohm  
Transmission bandwidth: 1 GHz  
Alloy/contacting elements: 99% silver, 1% gold  
Purity of silver: min. 99,97%, typ. 99,99%  
Purity of gold: min. 99,97%, typ. 99,99%  
Strain relief: torx screw (T .6)

<b>MCON0110</b>		
<b>Nextgen RCA-plugs</b>		
Conductor	Colour	1 pair [€]
CU (Copper)	black	59,90
SG (SilverGold)	red	124,90



Our **fork 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 soldered connection between the lug and the cable.

Version: straight form					
Typ	d1	d2	d3	l	a
M6	5,4	6,4	12	24,5	11
M8	5,4	8,4	15	26,5	11



Version: angle form					
Typ	d1	d2	d3	a	
M6	5,9	6,4	14,3	19	
M8	5,9	8,1	15,4	19	

#### MCONCL Cable lugs, straight form

[mm]	1 pair [€]
6T tin-plated	6.99
8T tin-plated	6.99

#### MCONCL Cable lugs, angel form

[mm]	1 pair [€]
6T pure copper	6.99
8T pure copper	6.99

#### MCONCL (replaced mconcl6p/8p - platinised)

[mm]	1 pair [€]
6S silver-plated	9.99
8S silver-plated	9.99

#### MCONCL Cable lugs, angel form

[mm]	1 pair [€]
6G gold-plated	13.90
8G gold-plated	13.90



Our **banana plugs** are manufactured using a special beryllium copper sheet and subsequently gold plated. The beryllium 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.

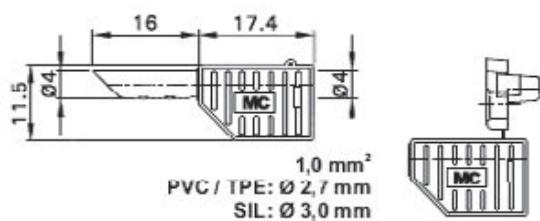
#### Technical specifications:

Stackable terminals with receptacles for setting up audio cables.

Versions: Ø 4 mm gold-plated with solder posts

Rated voltage: 30VAC ~ 60VDC

Rated current: max. 19A



#### MCONBPG Banana plugs, beryllium-copper, gold-plated

Insulation	1 pair [€]
non insulated	3.99
BK black	5.79
RD red	5.79
WH white	5.79
YE yellow	5.79

For preparation we recommend  
MSolder SUPREME. (see p. 57)

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-phonics 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 'maintenance-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

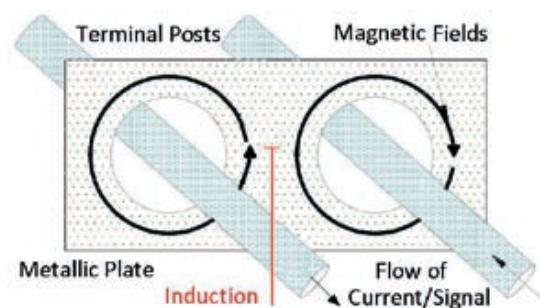
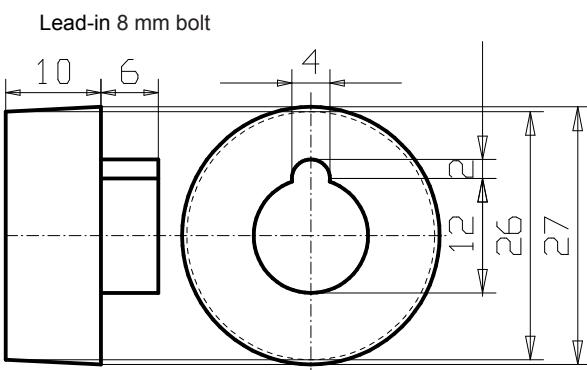
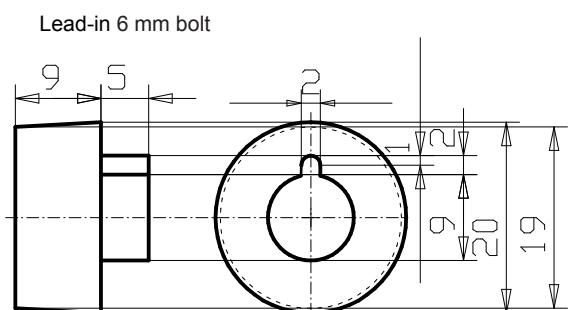
#### **TPCU870 Connections**

External:

6 and 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 57)

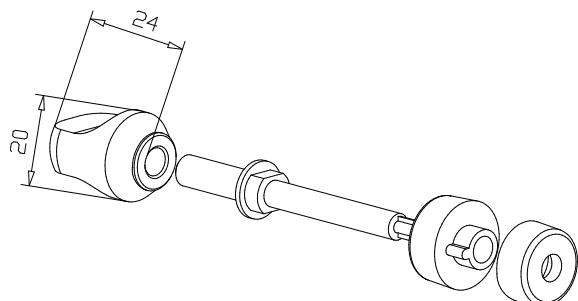




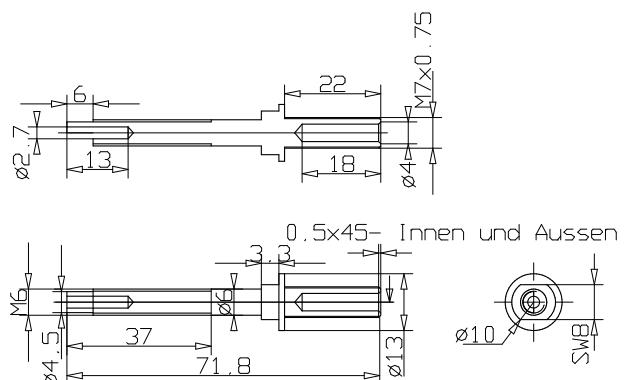
Binding posts Classic, 6 \* 70mm



Binding posts Evo, 6 \* 70mm



Copper terminal M6 isometric representation



**TPCU670C** (formerly polcu6)

**Binding posts Classic, 6\*70mm, pure copper**

Colour	[€]
BK (black)	24,90
RD (red)	24,90

**TPCU670SC** (replaced polcu6p - platinised)

**Binding posts Classic, 6\*70mm, copper silver-plated**

Colour	[€]
BK (black)	27,90
RD (red)	27,90

**TPCU670GC** (formerly polcu6g)

**Binding posts Classic, 6\*70mm, copper gold-plated**

Colour	[€]
BK (black)	29,90
RD (red)	29,90

**TPCU670E**

**Binding posts Evo, 6\*70mm, pure copper**

Colour	[€]
BK (black)	24,90
RD (red)	24,90

**TPCU670SE**

**Binding posts Evo, 6\*70mm, copper silver-plated**

Colour	[€]
BK (black)	27,90
RD (red)	27,90

**TPCU670GE**

**Binding posts Evo, 6\*70mm, copper gold-plated**

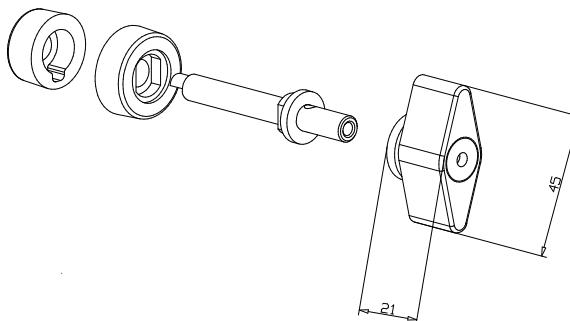
Colour	[€]
BK (black)	29,90
RD (red)	29,90



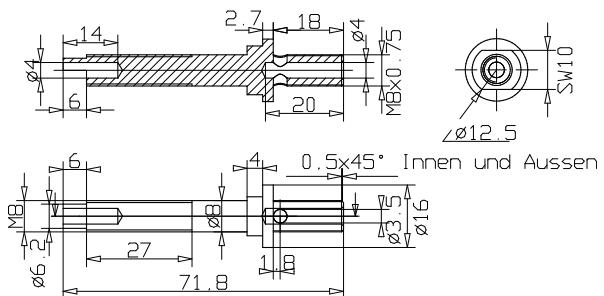
Binding posts Classic, 8 \* 70mm



Binding posts Evo, 8 \* 70mm



Copper terminal M8 isometric representation



**TPCU870C** (formerly polcu8)

**Binding posts Classic, 8\*70mm, pure copper**

Colour	[€]
BK (black)	29,90
RD (red)	29,90

**TPCU870SC** (replaced polcu8p - platinised)

**Binding posts Classic, 8\*70mm, copper silver-plated**

Colour	[€]
BK (black)	32,90
RD (red)	32,90

**TPCU870GC** (formerly polcu8g)

**Binding posts Classic, 8\*70mm, copper gold-plated**

Colour	[€]
BK (black)	34,90
RD (red)	34,90

**TPCU870E**

**Binding posts Evo, 6\*70mm, pure copper**

Colour	[€]
BK (black)	29,90
RD (red)	29,90

**TPCU870SE**

**Binding posts Evo, 6\*70mm, copper silver-plated**

Colour	[€]
BK (black)	32,90
RD (red)	32,90

**TPCU870GE**

**Binding posts Evo, 6\*70mm, copper gold-plated**

Colour	[€]
BK (black)	34,90
RD (red)	34,90

**Hexagon socket head screws M4x30mm,** with flat heads and wooden thread made from black galvanized or gold-coated steel, fit into our mounting plates.

**ISK430BK**

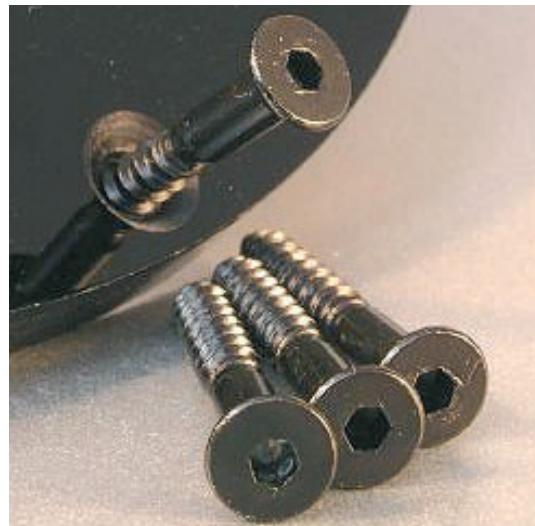
Hexagon socket head screws M4 \* 30 mm, black

12 pcs [€]	120 pcs [€]
1.99	11.90

**ISK430GD**

Hexagon socket head screws M4 \* 30 mm, gold-plated

12 pcs [€]	120 pcs [€]
19.90	119.90



Durably resilient **sealing compounds** made of butyl rubber (isobutane-isoprene rubber) are excellent for effectively preventing tonal influences from unwanted vibrations thanks to their unique damping properties against vibrational energy and shock energy, their high air content as well as their elasticity even at very low temperatures.

This strong adhesive, double-sided sealing tape is universally replaceable and suitable for all well-known surfaces (metal, wood, concrete, acrylic glass, painted surfaces etc.).

With its high UV, ozone, and water resistance it is age-resistant and durably resilient.

Butyl tape is included in the package contents of the acrylic mounting plates. (see also p. 63)



**SCBR212**

Sealing compound from butyl rubber, 2x12mm

[€]
price/meter 4,99

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



#### **BLADE8.RDD**

Blade receptacles, 0,5-1,5mm<sup>2</sup> cable, red

12 pcs [€] 144 pcs [€]

2,8G gold-plated	2,99	19,90
4,8G gold-plated	2,99	19,90
6,3G gold-plated	2,99	19,90

#### **BLADE8.RBL**

Blade receptacles, 1,5-2,5mm<sup>2</sup> cable, blue

12 pcs [€] 144 pcs [€]

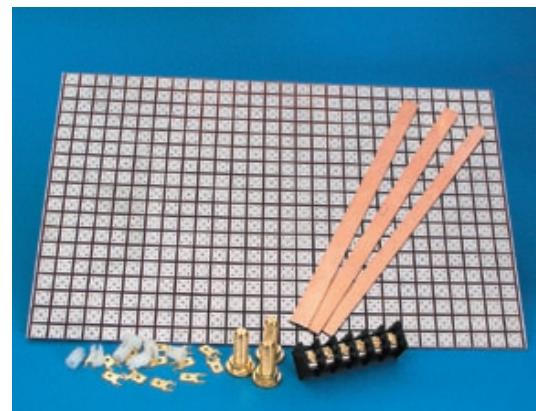
2,8G gold-plated	2,99	19,90
4,8G gold-plated	2,99	19,90
6,3G gold-plated	2,99	19,90

#### **BLADE8.RYE**

Blade receptacles, 4,0-6,0mm<sup>2</sup> cable, yellow

12 pcs [€] 144 pcs [€]

6,3G gold-plated	5,99	39,90
------------------	------	-------



Available accessories include:

- Gold-plated connection terminals (see also p. 68) for the connection of the cable.
- Gold-plated solder posts for the connection of the cable. (see also p. 68)
- SilverGold wire for inner wiring (see also p. 60)
- Copper strips for the production of connections.

#### **UNIP11**

Universal circuit boards, 283 \* 182 mm

[€]

32,90

#### **UNIP12**

Universal circuit boards, 182 x 141 mm

[€]

18,90

#### **UNIP13**

Universal circuit boards, 94 \* 182 mm

[€]

13,90

#### **UNIP14**

Universal circuit boards, 141 \* 91 mm

[€]

9,49

#### **UNIP18**

Universal circuit boards, 91 \* 70 mm

[€]

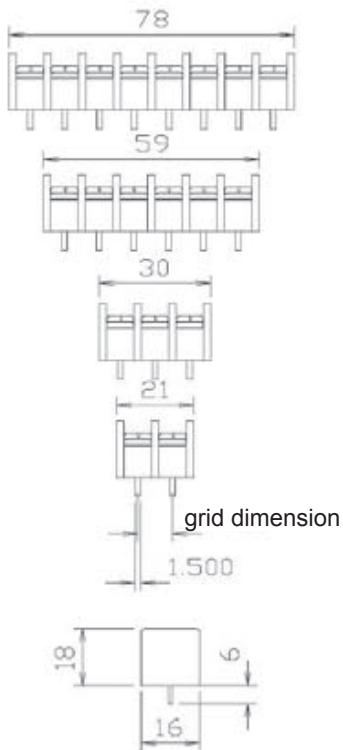
4,99

#### **CU300**

Copper strips approx. 300mm

h*w [mm]	[€]
1-5	1,19
1-10	1,49
1-15	1,99

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.



#### CBST82

Circuit board posts, 8,2mm grid dimension

Description	[€]
2N 2-pin, nickel-plated	1,99
3N 3-pin, nickel-plated	2,49

#### CBST92

Circuit board posts, 9,2mm grid dimension

Description	[€]
2G 2-pin, gold-plated	1,99
3G 3-pin, gold-plated	2,49
6N 6-pin, nickel-plated	3,49
6G 6-pin, gold-plated	3,49
8N 8-pin, nickel-plated	3,99
8G 8-pin, gold-plated	3,99

#### MCONCBR

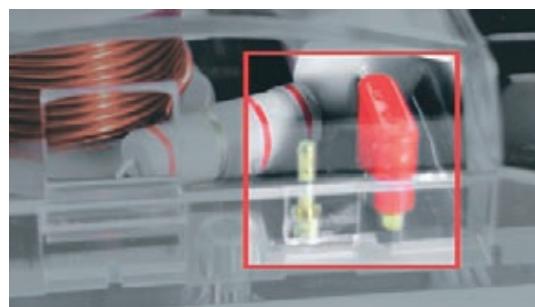
Mconnect connection bridge, red

[€]
2,49

#### MCONSPG

MConnect solder pin, gold-plated

[€]
0,79



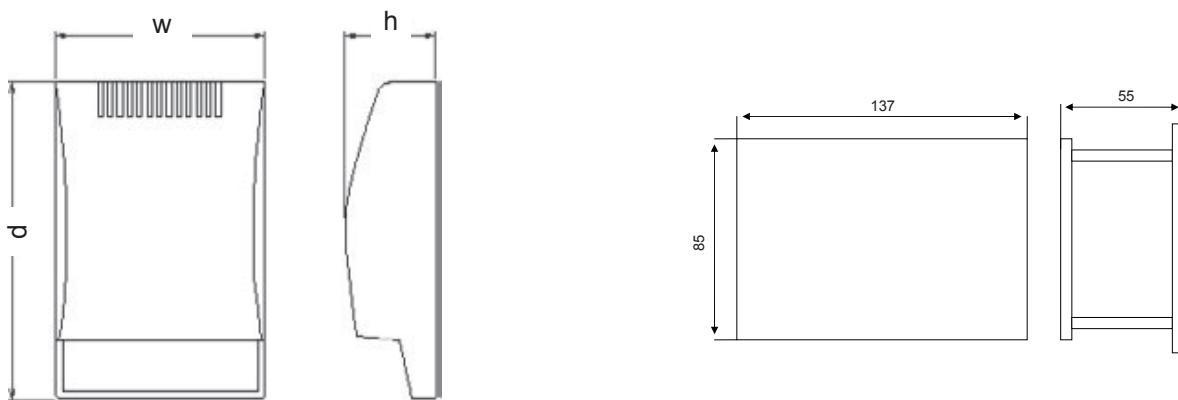


carg2 (without components)



cargind

Our beautifully shaped casings can be used for the support of individual frequency separating filters, in particular for CarAudio applications.



Casing	w [mm]	h [mm]	d [mm]
CARG2	85	37	130

**CARG2**  
cross-over casings

[€]  
4,99

**CARGIND**  
cross-over casings

[€]  
9,99

Our transparent **shrink tubes** can also be used for the protection of high-quality frequency separating filters. Moreover, they add a professional look to self-made cables and increase their operating safety.

**HSTT**

PU-shrink tubes, transparent, thickness 0,15mm

Width [mm] 1 meter [€]

106	4.99
118	5.49
130	5.99
150	6.49
170	6.99
195	7.99
220	8.99
243	9.99

**Additional Services**

**MATCH**

Pair of capacitors up to < 0.2%

Paar	[€]
	15,10

Additional coil tabs, zero-ohm coils excepted

[€]
15,00



#### MUNDORF hifiAMT®

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



#### MUNDORF AudioCable

From our popular wires and quality plugs we produce high performance interconnect (XLR, RCA) and loudspeaker cables for demanding music lovers.



#### MUNDORF MobileFidelity

Discover our storage capacitors providing stable voltage for radio/navigation system (also in engine 'start-stopp modus') and 'clean' current for amplifiers (essential for high quality music performance whilst driving).



#### MUNDORF OEM Services and Solutions

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



#### MUNDORF proAMT®

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