

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<br>Capacity | VDC | Körper<br>Body | Draht<br>Wire | [€]    |
|-----------------------|-----|----------------|---------------|--------|
| [μF]                  |     | Ø* L [mm]      | 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<br>Capacity<br>[μF] | VDC | Körper<br>Body<br>Ø* L [mm] | Draht<br>Wire<br>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 Vorteile 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.

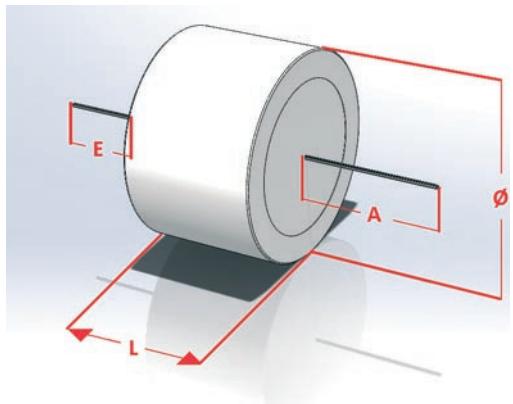


#### MESGO.A

##### MCap EVO SilverGold.Oil axial

| Kapazität<br>Capacity | VDC | Körper<br>Body | Draht<br>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 |

## 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.

## 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.