

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

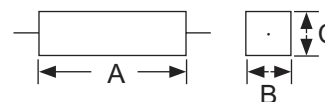
High-load resistors, 25 watt

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

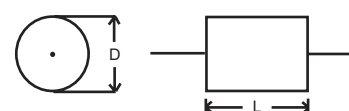
Colour codes for resistors

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 Ø * l [mm]
R25	60	15	13	0.8 * 35



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



Capacitors

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

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

Coils

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

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

Resistors

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

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

Stereophony

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

Richness of detail

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

Raw materials & processing

Lowest tolerances and highest mechanical stability can only be 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.