

Musway MG8 + MG10 + MG12
– New top woofers in a triple test

Sound Quality Subwoofer

- ▶ Musway surprises us with a brand-new subwoofer series at the top of its product range. We test what the MG subwoofers are all about.





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SOUND AWARD
Top Class
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Musway was on the radar for their digital power amplifiers or vehicle-specific speakers. However, one would have looked for high-end subwoofers elsewhere. So far, the chassis range has consisted of flat woofers and a handy 6" woofer, so it is not necessarily the material for hard-boiled bass freaks. However, Musway has already set an exclamation mark with the MG loudspeaker series; the component kits with aluminum cones and frames have made a lasting impression. Now Musway is flanking the MG loudspeakers with the MG subwoofers, which are intended to be the perfect playing partners: Power and musicality at the same time. And the three models, MG8, MG10, and MG12, look powerful straight away. The die-cast aluminum baskets are newly developed and not off-the-peg; there is no spilling the beans here. Massive struts and large



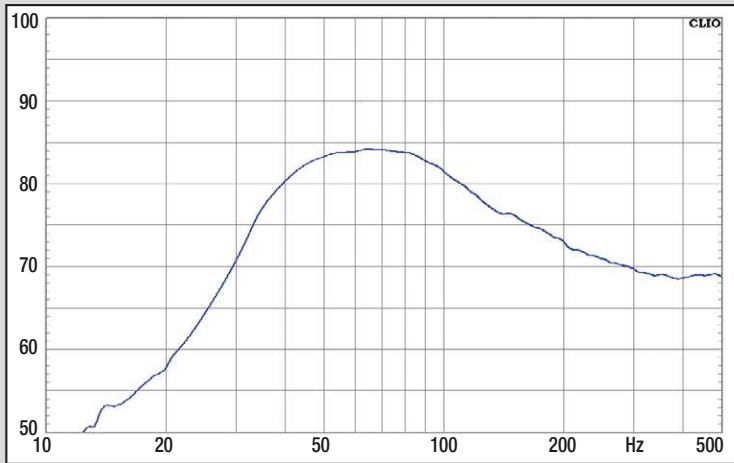
The protective grilles fulfill their purpose and look good



There is plenty of space under the double spider for ventilation and cone travel

ventilation windows look indestructible, as do the thick cones made of air-dried paper. The enclosed protective grilles are also very sturdy and create a unique look. The cones are surrounded by high-profile foam surrounds that are narrow but high to allow long cone travel without stealing too much cone area. A double spider that controls the moving masses performs the lower guide work. The motor seems oversized on all three models. Musway has yet to skim here and gave the MG woofers fat double ferrite magnets. Even the eight-inch model's back plate and pole piece are so massive that you think more of SPL than sound quality. The top plates of the MG10 and MG12 are beautifully machi-

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The MG8 plays well below 50 Hz in 17.5 liters of bass reflex and achieves 84 dB/1 W

ned and faced; only the MG8 must make do with a stamped pole plate. The voice coil diameters are nicely staggered according to size; at 2, 2.5 and 3 inches, the voice coils are very generous, namely one to two sizes more than with ordinary woofers.

Measurements and sound

The voice coils are large in diameter and provide plenty of excursion reserves; we measured 20 and 40 millimeters of mechanical excursion up to the stop and 14 millimeters of linear excursion, i.e., voice coil overhang. The measurement of the Thiele-Small parameters reveals, above all, stiff suspensions and correspondingly small equivalent volumes. The fat magnets ensure high magnetic flux densities in the air gap, but the dream of monster bass from tiny cabinets is still shattered due to the high resonance frequencies and Q_s . This does not mean the MG woofers need large cabinets; they are not space-saving woo-



The MG woofers have been fitted with new die-cast baskets and individually dimensioned motors

Specifications

Basket diameter	22,1 cm
Mounting diameter	18,5 cm
Mounting depth	13,8 cm
Magnet diameter	15,0 cm
Weight	5,6 cm
Nominal impedance	2 x 2 Ohm
DC resistance R_{dc}	3,70 Ohm
Voice coil inductance L_e	2,08 mH
Voice coil diameter	50 mm
Diaphragm area	255 cm ²
Resonant frequency f_s	58 Hz
Mechanical quality Q_{ms}	9,28
Electrical quality Q_{es}	0,88
Total quality Q_{ts}	0,80
Equivalent volume V_{as}	7,0 l
Moving mass M_{ms}	97 g
R_{ms}	3,82 kg/s
C_{ms}	0,08 mm/N
B x l	12,21 Tm
Sound pressure 1 W, 1 m	84 dB
Recommended power	200 – 400 W
Test enclosure	BR 17,5 l
Port dimensions (d x l)	7 x 22 cm

Musway MG8

Price	250 Euro
Contact	Audio Design, Germany
Internet	www.musway.de

Rating

▶ Sound	50 %	★★★★★
Bass	12,5 %	★★★★★
Pressure	12,5 %	★★★★★
Purity	12,5 %	★★★★★
Dynamics	12,5 %	★★★★★
▶ Lab	30 %	★★★★☆
Frequency response	10 %	★★★★★
Efficiency	10 %	★★★☆☆
Maximum level	10 %	★★★★☆
▶ Processing	20 %	★★★★★

Upper Class

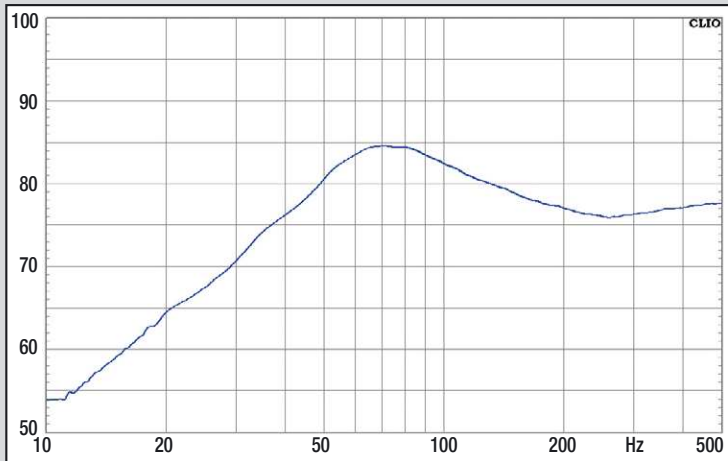


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Price/performance: very good

„Power and sound
– the MG woofers offer both.“

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The MG12, with a good 30 liters of closed volume, offers a great compromise between space usage and bass yield



fers anyway due to their mounting depths. MG10 and MG12 work best in closed or vented boxes. We put the MG12 in a 32-liter closed cabinet, where it feels right at home with 45 Hz resonance and 0.8 In-box Q. The MG10 works well in a „standard cabinet“ (30-liter bass reflex, port 10 x 30 cm), but it also works well in a 19-liter closed cabinet. We have only given the small MG8 an adequate reflex cabinet, precisely 17.5 liters. Incidentally, this makes the MG woofers a prime example of the rule of thumb that the bass reflex volume of the smaller woofer is roughly equal to the closed volume of the one size larger. The MG8 then conjures up a picture-book frequency response right down to the low bass, and that is exactly how it sounds. The MG8 is much larger than the visual impression suggests, but its sound is fat and powerful. Thanks to its solid construction and long excursion, even the small MG can produce high SPLs. And just as it should be for a small

The MG woofers are equipped with 2 x 2 ohm double voice coils

Specifications

Basket diameter	27,6 cm
Mounting diameter	14,0 cm
Mounting depth	16,2 cm
Magnet diameter	15,5 cm
Weight	7,3 cm
Nominal impedance	2 x 2 Ohm
DC resistance R _{dc}	3,64 Ohm
Voice coil inductance L _e	2,29 mH
Voice coil diameter	64 mm
Diaphragm area	333 cm ²
Resonant frequency f _s	39 Hz
Mechanical quality Q _{ms}	8,20
Electrical quality Q _{es}	0,76
Total quality Q _{ts}	0,70
Equivalent volume V _{as}	16,9 l
Moving mass M _{ms}	153 g
R _{ms}	4,58 kg/s
C _{ms}	0,11 mm/N
B x l	13,40 Tm
Sound pressure 1 W, 1 m	84 dB
Recommended power	300 – 500 W
Test enclosure	g 19 l
Port dimensions (d x l)	-

Musway MG10

Price	300 Euro
Contact	Audio Design, Germany
Internet	www.musway.de

Rating

▶ Sound	50 %	★★★★★
Bass	12,5 %	★★★★★
Pressure	12,5 %	★★★★★
Purity	12,5 %	★★★★★
Dynamics	12,5 %	★★★★★
▶ Lab	30 %	★★★★☆
Frequency response	10 %	★★★★★
Efficiency	10 %	★★★☆☆
Maximum level	10 %	★★★★☆
▶ Processing	20 %	★★★★★

Top Class



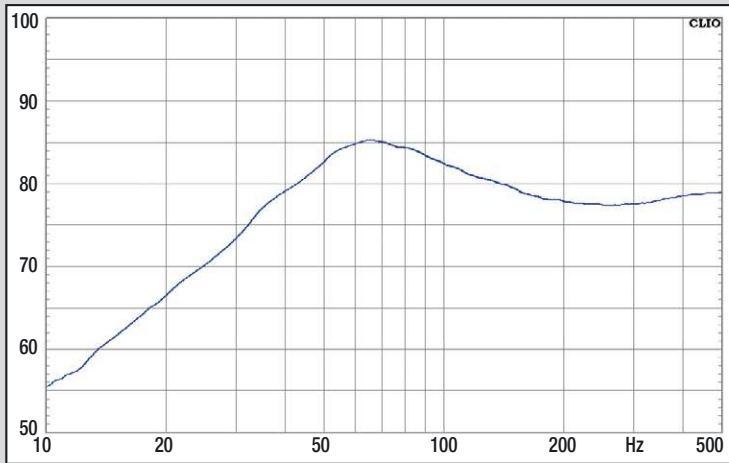
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Price/performance: very good

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The amplitude response of the MG10 looks lean but works excellent in the car



The MG 12 proudly features a 3 inch voice coil

woofer, the MG8 also plays exceptionally precisely. When switching to the closed MG10, we are torn as to which sounds crisper and pushes more. Both play excellently and will make SQ fans happy, that is for sure. Our decision falls in favor of the MG10, which goes a little more confidently and, at the same time, sounds drier than the small reflex woofer. But when the MG12 plays, it becomes clear that there is more to it regarding pressure and SPL. Without sounding impure, the MG12's cone area adds another shovelful of SPL. Spontaneously, you could say that the MG10 is the golden middle, but everyone must decide for themselves at their Musway dealer.

Conclusion

Musway's MG subwoofers are really well-made. The prices of 250 to 350 EUR are reasonable for the quality impression and the performance.

Elmar Michels

Specifications

Basket diameter	32,4 cm
Mounting diameter	28,5 cm
Mounting depth	18,1 cm
Magnet diameter	17,0 cm
Weight	9,3 cm
Nominal impedance	2 x 2 Ohm
DC resistance Rdc	3,70 Ohm
Voice coil inductance Le	2,52 mH
Voice coil diameter	76 mm
Diaphragm area	491 cm ²
Resonant frequency fs	33 Hz
Mechanical quality Qms	7,74
Electrical quality Qes	0,65
Total quality Qts	0,60
Equivalent volume Vas	34,5 l
Moving mass Mms	228 g
Rms	6,10 kg/s
Cms	0,10 mm/N
B x l	16,41 Tm
Sound pressure 1 W, 1 m	85 dB
Recommended power	300 – 700 W
Test enclosure	g 31 l
Port dimensions (d x l)	-

Musway MG12

Price	350 Euro
Contact	Audio Design, Germany
Internet	www.musway.de

Rating

▶ Sound	50 %	★★★★★
Bass	12,5 %	★★★★★
Pressure	12,5 %	★★★★★
Purity	12,5 %	★★★★★
Dynamics	12,5 %	★★★★★
▶ Lab	30 %	★★★★☆
Frequency response	10 %	★★★★★
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