

Helix Q 10W + Q 12W – new premium class subwoofers

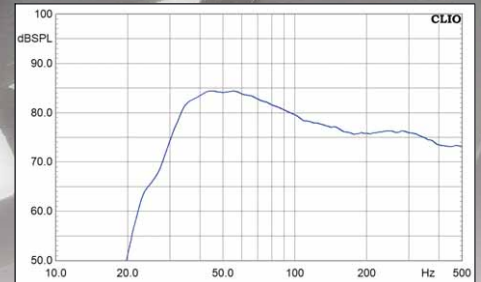
Sound and SPL



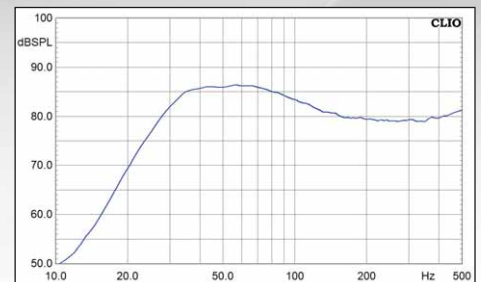
► For a long time there had been no new subwoofers from Helix. Fortunately, this is just about to change: Here are the Q-subwoofers.

Helix in general is not a brand with short product cycles – that would be beneath the Sauerland manufacturers. But especially in the field of subwoofers, we extremely rarely get to enjoy the benefits of new types. The most recent doozie of a sub, the SPXL, which like a flagship is still leading among the Helix woofers, was presented in 2007. This is why we are particularly pleased with the new Q woofer series with its three members in the popular formats of 10, 12, and 15 inches. The two smaller ones, duly wobbled

in, are waiting for their cue. And already the first contact reveals that these woofers mean business. They are no mere SPL growlers, but no filigree sound quality subs either. Instead of reaching into the shelf and equipping the Q-woofers with old-fashioned four-spoke frames, the Q-woofer producers provided them with new die cast baskets, which Helix even treated to generous ventilation holes and equally generous duty strokes. The maximum excursion of the cone assembly amounts to respectable 45 or 50 millimeters, which is



The Q 10W easily goes beyond 40 Hz and thus offers sufficient low bass for the most common music styles



The Q 12W delivers dark bass sounds as low as 30 Hz, even at an acceptable sensitivity of 86 dB

enough to make a real racket. The drives are also well-dimensioned: a two and a half-inch coil in the Q 10W and a three-inch coil in the Q 12W ensure that there is no need to worry about power handling at all. With a winding height of 40 mm and a top plate thickness of 11 mm, both woofers have an impressive overhang – and thus also linear stroke – of 14 mm. The cones consist of thick paper with a stabilizing synthetic layer; they appear to have turned out rock-hard. Both motors operate with triple ferrite rings and the lower top plates have not only been bored through the pole piece for cooling, but have also been provided with a ring of holes leading to the air gap. The voice coil formers are perforated, too, so that the ventilation of the Q-woofers can be called complete.

In the measuring lab, the two disclose having extremely powerful motors and very practice-oriented parameters. No expense has been spared and the woofers have been perfectly equipped to work in decent sized housings. Theoretically, the Qs also work in sealed boxes, but the ventilated enclosures can be designed so compact that they will probably be the number one choice for most users. The Q 10W runs at its best in a 30-liters box while tuned to 38 Hz and the Q 12W wants about 50 liters and 33 Hz.

Sound

It has been quite a long time since we last were that impressed by a subwoofer series. The Qs work really well. From the very beginning, you experience the perfect symbiosis of sound and SPL. Furthermore, it is anything but self-evident that subwoofers already run fairly well at low volumes. If you pump up



The Q-woofers have not only turned out pretty, they also offer a massive structure with generous displacement reserves and the appropriate installation depth

the volume, there are endless reserves. Even the smaller Q 10W plays compression-free up to high levels, whereas the Q 12W then proves its strengths going the extra mile by virtue of its surplus of cone area. Both woofers pinpoint the sound output, so that bass drums come with a slam, but without any softening. The contours are still precise with low synthesizer frequencies. You can hear subtleties where other woofers end up bubbling. This matching of sound and level is so good that it does not seem to involve any compromise.

Conclusion

With the Q-woofers, Helix stages an impressive return to the domain of subwoofers. The woofers are perfectly tuned and sheer fun.

Elmar Michels



The Q-woofers have been given new, ultra-stable aluminum frames



Sub-woofer

		Helix Q 10W	Helix Q 12W
Distributor		Audiotec Fischer	Audiotec Fischer
Hotline		02972 9788 0	02972 9788 0
Internet		audiotec-fischer.com	audiotec-fischer.com
▶ Sound	50 %	1,0	1,1
Low frequency extension	12,5 %	1,0	1,0
Sound pressure	12,5 %	0,5	0,5
Sound purity	12,5 %	1,5	1,5
Dynamics	12,5 %	1,0	1,5
▶ Lab	30 %	1,7	1,2
Frequency response	10 %	1,0	0,5
Efficiency	10 %	3,0	2,5
Max. SPL	10 %	1,0	0,5
▶ Build quality	20 %	1,0	1,0

Specifications

	Helix Q 10W	Helix Q 12W
Basket diameter	17,4 cm	32,5 cm
Mounting diameter	23,4 cm	28,5 cm
Mounting depth	17,0 cm	18,6 cm
Magnet diameter	17,2 cm	19,0 cm
Weight	11,9 kg	15,9 kg
Nominal impedance	2x2 Ohm	2x2 Ohm
DC resistance R _{dc}	4,18 Ohm	4,14 Ohm
Coil inductivity L _e	2,99 mH	3,31 mH
Coil diameter	64 mm	76 mm
Membrane surface	337 cm ²	531 cm ²
Resonance frequency f _s	36,0 Hz	33,1 Hz
Mechanical Q-Factor Q _{ms}	4,69	4,35
Electrical Q-factor Q _{es}	0,54	0,43
Overall Q-factor Q _{ts}	0,48	0,39
Equivalent volume V _{as}	14,3 l	30,9 l
Moved mass M _m	216,2 g	294,4 g
Rms	10,42 kg/s	14,06 kg/s
Cms	0,09 mm/N	0,08 mm/N
B x l	19,44 Tm	24,19 Tm
SPL 1W, 1m	84 dB	86 dB
Recommended power	300 – 1000 W	300 – 1000 W
Test cabinet	BR 42 l	BR 48 l
Reflex tunnel (d x l)	8,5 x 23 cm	10 x 28 cm

Rating

		320 Euro	400 Euro
Price			
Sound	50 %	1,0	1,1
Lab	30 %	1,7	1,2
Build quality	20 %	1,0	1,0
Price Performance		very good	very good

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Absolute Top Class	Absolute Top Class
Top Class	Top Class
Upper Class	Upper Class
Middle Class	Middle Class
Entry Level	Entry Level

Rating

1,2

1,1

„Highly felicitous subwoofer for sound and SPL.“