

Q Subwoofers



Q 15W

15" / 380 mm subwoofer



Q 12W

12" / 300 mm subwoofer



Q 10W

10" / 250 mm subwoofer

Elemental force with sensitivity

At the very first glance, it appears what the new Q subwoofers are designed for. The solid aluminum diecast baskets with diamond cut as well as the massive triple ferrite magnet systems clearly signalize that these subwoofers really mean it. The extremely stiff, hand-scooped cones and oversized voice coils with enormous winding height are literally predestinated to turn incredible volumes of air into deep bass sounds.

Yet sheer power alone is not sufficient – numerous sophisticated technical details together with a smart mix of materials assure highest precision and detailed bass reproduction which will satisfy even most demanding music enthusiasts.

These subwoofers form a perfect symbiosis of maximum sound pressure and state-of-the-art sound quality in a new dimension.

Features

- Extremely rigid non-pressed paper cone for maximum stiffness
- Wide low-loss foam surround for maximum cone excursions
- Concave PP dustcap with embossed HELIX logo
- 2 x 2 Ohms impedance allows most flexible configuration
- High-temperature dual voice coil with enormous winding height for outstanding linear excursion
- Rock-solid diecast basket with diamond cut
- Removable rubber gasket
- Rugged butyl magnet cover with HELIX lettering for perfect magnet protection
- Solid push terminals for large wire gauge
- Extremely powerful, 9 x ventilated triple ferrite magnet system for highest magnetic flux linearity

Technical data		Q 15W	Q 12W	Q 10W
Power handling RMS / max.		1000 W / 2000 Watts	1000 W / 2000 Watts	750 W / 1500 Watts
Impedance	<i>Z</i>	2 x 2 Ohms	2 x 2 Ohms	2 x 2 Ohms
DC resistance	<i>Re</i>	2 x 1.95 Ohms	2 x 1.95 Ohms	2 x 1.95 Ohms
Voice coil diameter	\varnothing	76 mm	76 mm	63.5 mm
Voice coil winding height		40 mm	40 mm	40 mm
Max. linear excursion	<i>X_{max}</i>	+/- 14.0 mm	+/- 14.0 mm	+/- 14.0 mm
Cone area	<i>S_d</i>	819 cm ²	539 cm ²	333 cm ²
Moving mass	<i>M_{ms}</i>	366 g	330 g	220 g
Mechanical resistance	<i>R_{ms}</i>	15.0 kg/s	16.0 kg/s	11.9 kg/s
Resonance frequency	<i>F_s</i>	33 Hz	35 Hz	35 Hz
Mechanical Q factor	<i>Q_{ms}</i>	4.62	4.61	4.17
Electrical Q factor	<i>Q_{es}</i>	0.44	0.41	0.42
Total Q factor	<i>Q_{ts}</i>	0.41	0.37	0.38
Compliance	<i>C_{ms}</i>	68 μ m/N	70 μ m/N	99 μ m/N
Equivalent air volume	<i>V_{as}</i>	65.2 L	24.7 L	13.8 L
Force factor	<i>B*l</i>	24.8 Tm	26.8 Tm	21.5 Tm
Efficiency 1 W / 1 m	<i>SPL</i>	90.0 dB	87.0 dB	85.0 dB
Outer diameter		396 mm / 15.60"	326 mm / 12.84"	274 mm / 10.79"
Cutout diameter		348 mm / 13.70"	284 mm / 11.19"	234 mm / 9.22"
Mounting depth		198 mm / 7.80"	188 mm / 7.41"	163 mm / 6.42"

Recommended enclosure volumes		Q 15W	Q 12W	Q 10W
Sealed box				
Net volume		60 L	30 L	15 L
Lower limiting frequency (-3 dB)		45 Hz	49 Hz	52 Hz
Vented box				
Net volume		100 L	50 L	30 L
Port diameter	\varnothing	100 mm	100 mm	80 mm
Port area		78 cm ²	78 cm ²	50 cm ²
Port length		14 cm	28 cm	25 cm
Port tuning frequency	<i>F_b</i>	30 Hz	34 Hz	38 Hz
Lower limiting frequency (-3 dB)		29 Hz	33 Hz	39 Hz