

FR 13 WP 4 OHM (white)

Art. No. 2113

Saltwater resistant 13 cm (5") [full-range](#) driver with moulded plastic [cone](#), plastic basket and grille. Absolutely corrosion-resistant and waterproof due to encased [magnet](#) and silicon-coated [leads](#). White colour.

Typical applications:

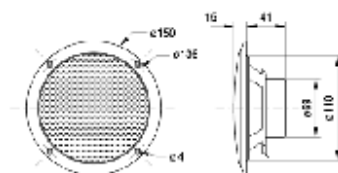
- Outdoor PA systems
- Loudspeaker for solariums and damp locations
- Boats, ships and open vehicles

Properties:

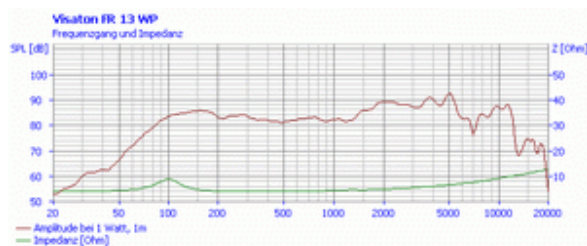
- seawater proof
- functionally at low temperature according to EN 60068-2-1 (-40 °C; 96 h)
- up to the standards of the Germanischer Lloyd (requirements for electrical equipment / low temperature)
- Plastic: ASA (UL 94: HB; UV-/weather-proof)
- ball-resistant

Used in / Accessories:

[Gasket for FR 13 WP](#)



[sketch](#)



[frequency- and impedance response](#)



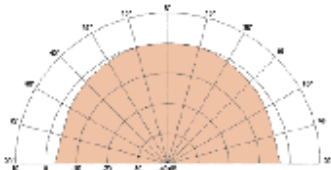
Technical Data:

Rated power	40 W
Maximum power	60 W
Nominal impedance Z	4 Ohm
Frequency response	70–16000 Hz
Mean sound pressure level	85 dB (1 W/1 m)
Resonance frequency fs	100 Hz
Magnetic induction	0,85 T
Magnetic flux	210 μWb
Height of front pole-plate	4 mm
Voice coil diameter	20 mm
Height of winding	5 mm
Cutout diameter	112 mm
Net weight	0,29 kg
D.C. resistance Rdc	3,8 Ohm
Mechanical Q factor Qms	2,49
Electrical Q factor Qes	2,19
Total Q factor Qts	1,17
Equivalent volume Vas	4,4 l
Effective piston area Sd	78 cm²

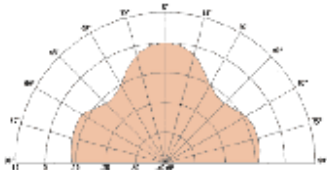


Dynamically moved mass Mms	4,8 g
Force factor Bxl	2,3 T m
Inductance of the voice coil L	0,4 mH
Protective system	IP 65
Heat resistance	−40 ... 80 °C
Colour	weiß / white

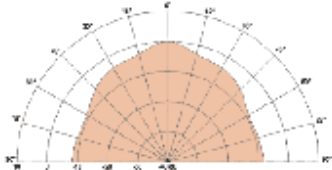
Similar Products	
FR 12 4 OHM	FR 12 8 OHM
FR 13 4 OHM	FR 13 WP 4 OHM (black)



[radiation pattern 2000 Hz](#)



[radiation pattern 5000 Hz](#)



[radiation pattern 10000 Hz](#)