12 INCH HIGH POWER WOOFER LOUDSPEAKER

APPLICATION

For high-fidelity bass reproduction in sealed acoustic enclosure. Recommended volume of enclosure 80 litres. The loudspeaker has a very low distortion.

TECHNICAL DATA

	version W4	version W8	
Rated impedance	4	8	Ω
Voice coil resistance	3	5,9	Ω
Rated frequency range	35 to 2000		Hz
Resonance frequency	20	23	Hz
Power handling capacity, mounted in 80 l sealed enclosure, measured without filter	60		W
Maximum power on loudspeaker	100		W
Operating power	5	4	W
Sweep voltage, frequency range: 35 to 2000 Hz	6,7	7,5	V
Characteristic sensitivity	87	88	dB
Energy in air gap	220	245	mJ
Flux density	0,68	0,75	T
Force factor (B x l) at 1 A	6,9	7,9	Wb/m
Total moving mass	52×10^{-3}	49×10^{-3}	kg
Compliance, loudspeaker unmounted	$1{,}34 \times 10^{-3}$	$1{,}77 \times 10^{-3}$	m/N
Air-gap height	5		mm
Voice coil height	16		mm
Core diameter	35		mm
Magnet material	ceramic		
diameter	90		mm
mass	0,53		kg
Mass of loudspeaker	1,8		kg

The loudspeaker has a paper cone and a foam rubber surround. Connection to the loudspeaker by means of 5,1 mm (0,2 inch) or 2,8 mm (0,11 inch) tag connectors or by soldering.

Dimensions (mm)

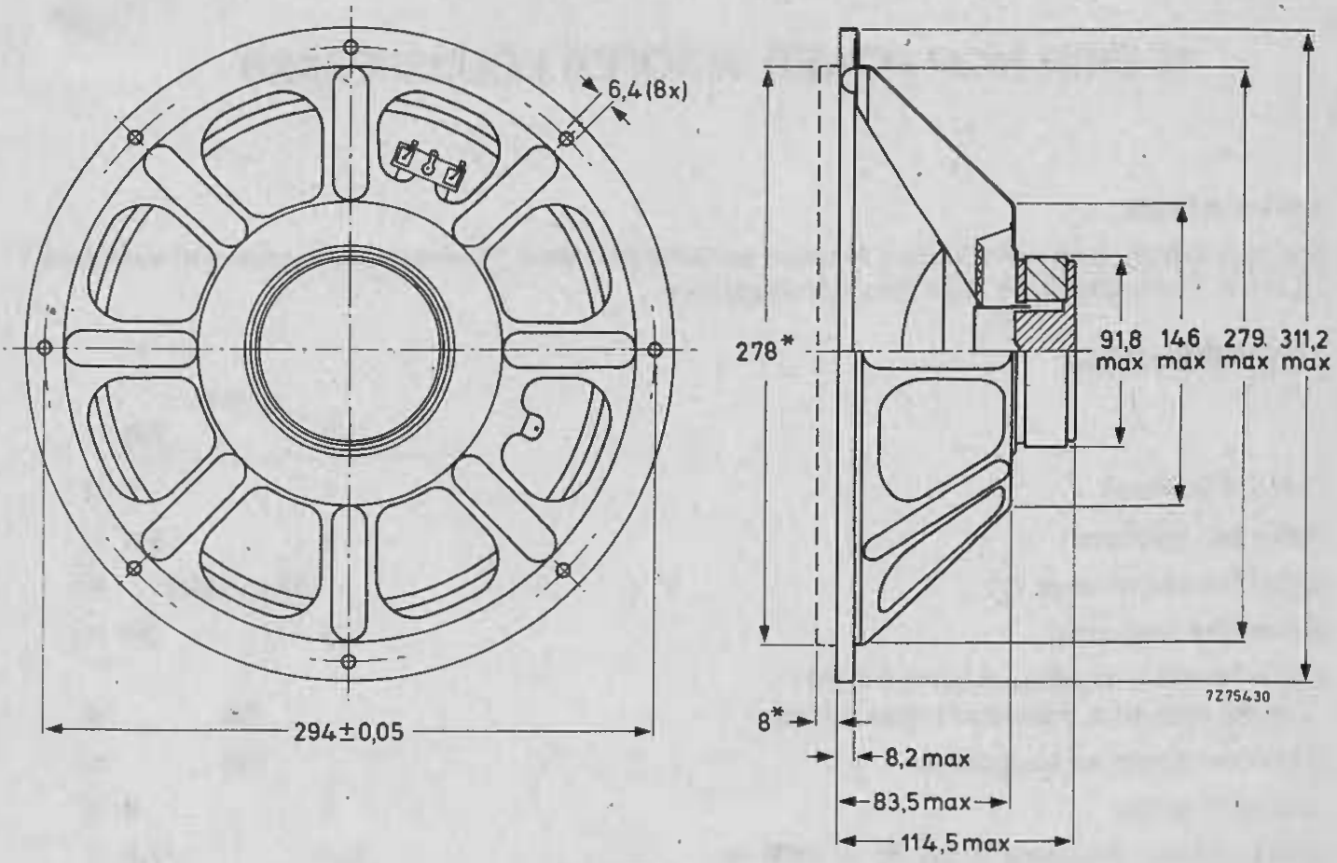

Fig.1

* Baffle hole and clearance depth required for cone movement at the specified power handling capacity.

One tag is indicated by a red mark for in-phase connection.

AVAILABLE VERSIONS

1 = stamped on loudspeaker magnet, not to be used for ordering

AD12650/W4, catalogue number 2422 257 314.1
AD12650/W8, catalogue number 2422 257 314.2

3 = for bulk packing **
7 = for single unit packing

FREQUENCY RESPONSE CURVES (see Fig.2)

Curve a: Sound pressure.

Curves d2 and d3: 2nd and 3rd harmonic distortion.

The curves are measured in anechoic room at the operating power, the loudspeaker mounted in sealed 80 l enclosure, filled with 0,5 kg of glass wool.

** Minimum packing quantity 1 per unit.

DEVELOPMENT SAMPLE DATA

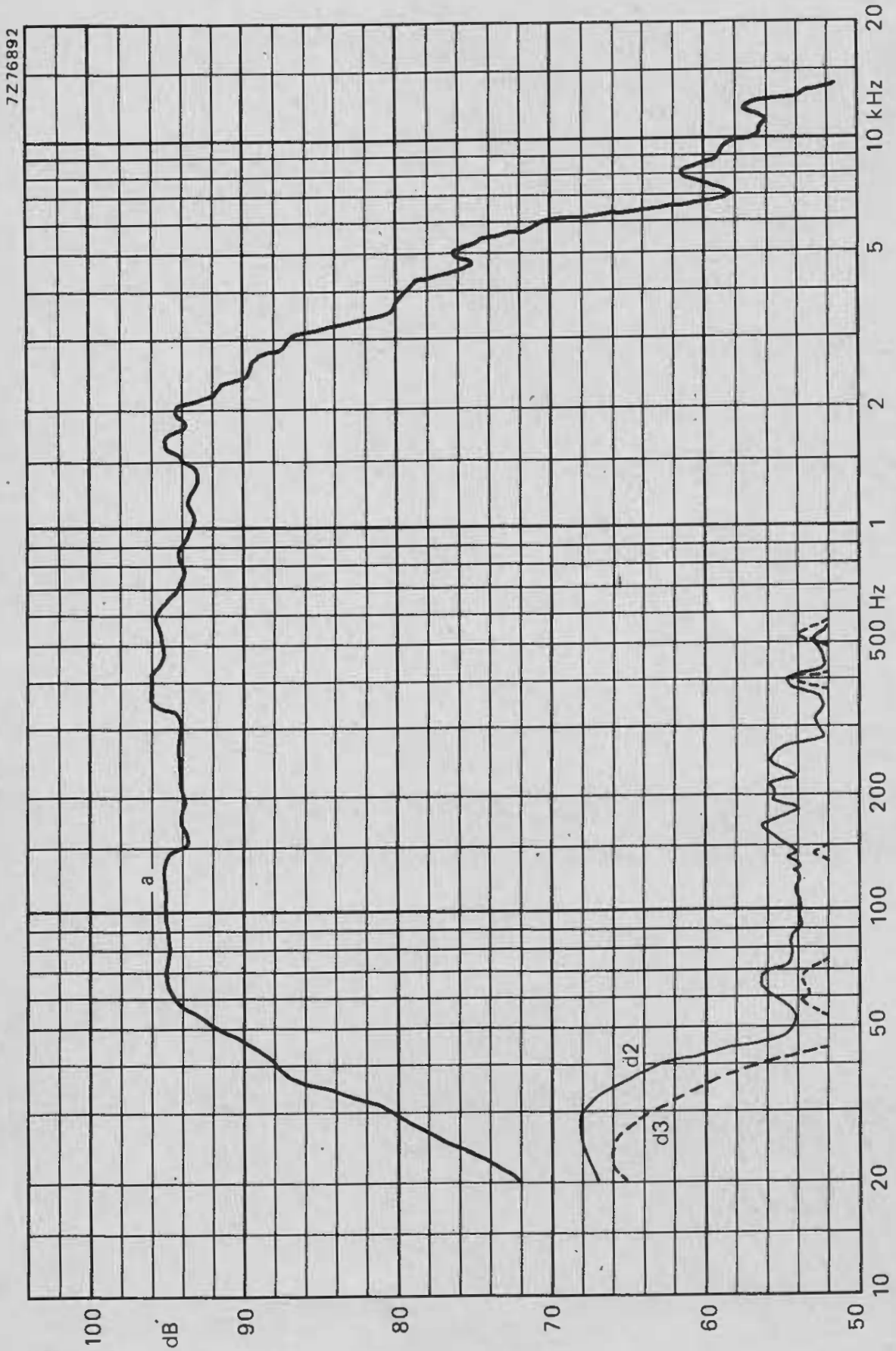

Fig. 2.