

# DALESFORD SPEAKER DESIGNERS DATA CHART

DALESFORD SPEAKERS LTD., UPPER CARR LANE, CALVERLEY, PUDSEY, W. YORKSHIRE, ENGLAND LS28 5QE TELEPHONE (0532) 550577 & 564574

Dalesford Tweeter D10	Dalesford 12" D300	Dalesford 10" D100/250	Dalesford 8" D100/20 O	Dalesford 8" D50/200	Dalesford 6" D153	Dalesford 5" D30/110	Data	
3.5	12	10	8	8	6.5	5	in	Nominal Dia
90	300	254	203	203	165	127	mm	
1	2.00	1.25	1.25	1	(1)	1	in	Pole Dia
25.4	50.8	33	33	25.4	25.4	25.4	mm	
2	2	4	2	2	2	2		Coil Layers
90 at 7 KHz	90	88	86	84	87	84	dB spl	Sensitivity 1 watt @ 1KHz
20.0	3.0	3.5	6.5	5.0	4.5	6.0	KHz	Upper cutoff Frequency
1.5 K	23	25	32	29	32	32	Hz fsa	Resonance
	2.9	3.6	3.2	3.1	3.9	6.2	Qrms	Mechanical Q
	0.27	.30	.4	0.6	.36	.37	Qes	Electrical Q
	0.26	.28	.36	0.5	.36	.35	Qts	Total Q
	65	35	25	20	17	17	gm/Mms	Moving Mass
	$7 \times 10^{-4}$	$1.1 \times E^{-3}$	$10^{-3}$	$1.7 \times 10^{-3}$	$1.7 \times 10^{-3}$	$1.7E - 3$	Cms m/N	Mechanical compliance
$5 \times 10^{-4}$	$5 \times 10^{-2}$	$2.8 \times 10^{-2}$	$2 \times 10^{-2}$	$1.8 \times 10^{-2}$	$1.2 \times 10^{-2}$	$7.9E - 3$	m <sup>2</sup> /SD	Piston Area
	240	120	56	70	30	20	Lts Vas	Equivalent Compliance Vol
	1	0.55	.40	0.28	.30	0.15	%	Efficiency
	12	10	10	8.3	9.9	8	B1	Linkage
	1.8	2.2	1.8	1.2	1.6	1.6	mH LE	Voice coil Inductance
6.5	6.5	6.5	6.5	60	6.5	6.5	$\Omega$ RE	Voice coil Resistance
10	100	100	100	3560	60	50	W	Power Rating
	Reflex Labyrinth or IB	Reflex Labyrinth or IB	Reflex or IB	Reflex or IB	Reflex or IB	Reflex or IB		Suggested Loading
A HOLE DIA 75	A HOLE DIA 296	A HOLE DIA 240	A HOLE DIA 200	A HOLE DIA 200	A HOLE DIA 154	A HOLE DIA 118	Dimensions mms.	
B 90	B PCD 299	B PCD 267	B PCD 224	B PCD 224	B PCD 178	B PCD 133		
C DEPTH 25	C DEPTH 122	C DEPTH 94	C DEPTH 63	C DEPTH 83	C DEPTH 83	C DEPTH 69		

Dalesford Loudspeakers are established suppliers of plastic cone drive units. Several years of development with close attention paid to all aspects of the unit design and production has resulted in a range of cone drive units of unparalleled consistency, performance and reliability. The plastic cones which are developed from the materials used by the BBC are acoustically dead. Each Bextrene cone being formed from homogeneous material is the same as the next, and a layer of visco-elastic material is applied to ensure correct damping of the cone break-up. The PVC surround gives near perfect cone termination. Plastics are preferred to paper on the grounds of smoothness, detail, low coloration and low transmission of internal box reflections. Dalesford drivers use a two- and four-layer voice coil of high temperature wire wound on Nomex formers and baked to very high temperatures in epoxy. The resultant motor system can safely be run at 180°C and gives good power handling. The magnetic design of each unit optimises the efficiency for the correct damping factor (Q<sub>T</sub>) in the designed application, with low distortion. The manufacturers reserve the right to improve and modify details of all products at all times.