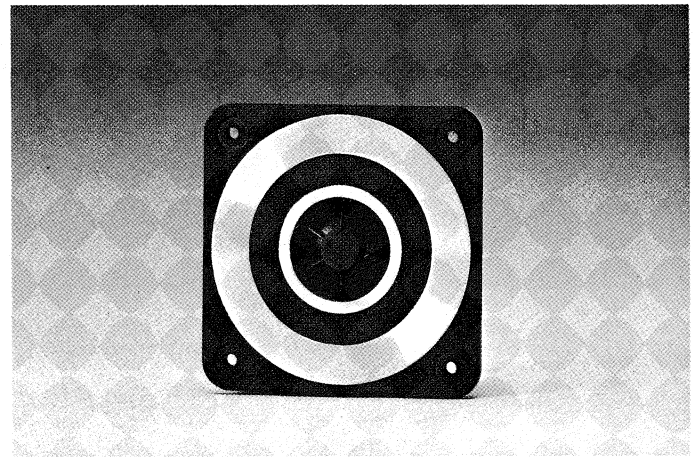


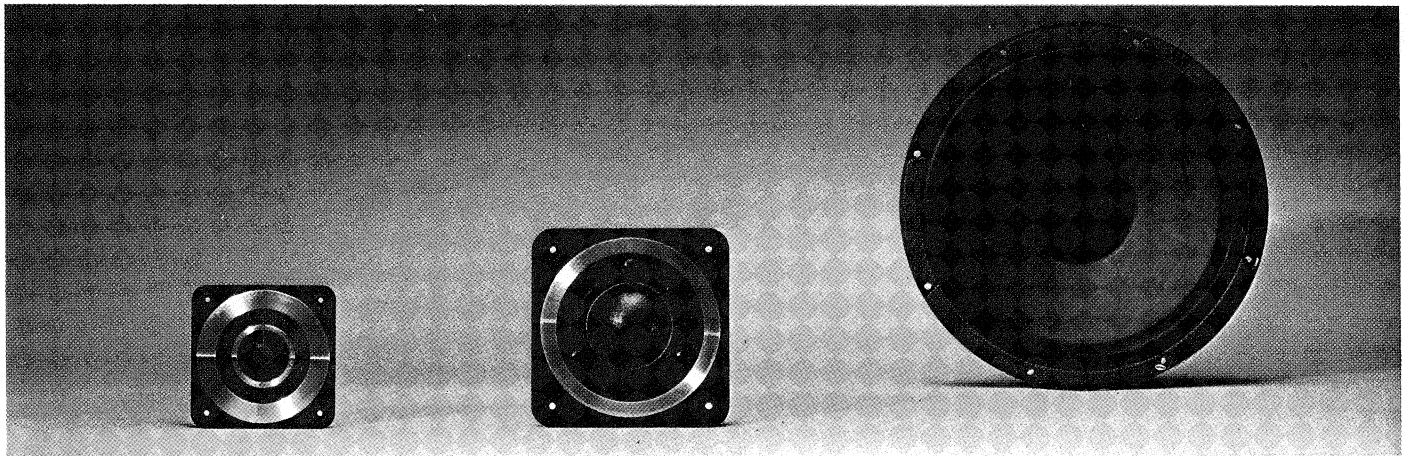
high power—high-fidelity

to DIN 45 500



System powers tabulated below are for complete two or three-way systems making use of the listed loudspeakers; corresponding cross-over networks and recommended enclosure volumes are listed on pages 4 and 5.

type	status	system power W	resonance frequency Hz	rated frequency range kHz	overall dim. mm	baffle hole dia. mm	total depth mm	surround /dome material	magnet system
Tweeter 3/4" (dome)									
square — non exposed									
AD 00400/T4; T8	N	70	1500	3 to 22	83 □	73	26	textile	ceramic
AD 00800/T4; T8	N	70	1500	3 to 22	83 □	73	23	textile	ceramic
AD 00900/T4; T8	N	70	1900	4 to 22	58 □	55	28	textile	screened ceramic
1" dome									
round — non exposed									
AD 0140/T4; T8; T15	D	20/40	1200	2 to 22	94 ∅	75	25	polycarb.	ceramic
AD 0141/T4; T8; T15	D	20/50	1450	2 to 22	94 ∅	75	25	textile	ceramic
AD 0162/T4; T8; T15	D	20/50	1000	2 to 22	94 ∅	75	32	polycarb.	ceramic
AD 0163/T4; T8; T15	D	20/50	1300	2 to 22	94 ∅	75	32	textile	ceramic
square — non exposed									
AD 01420/T4; T8; T15	N	50/70	950	1,5 to 22	96 □	85	36	paper	ceramic with pot
AD 01430/T4; T8; T15	N	50/70	1100	1,8 to 22	96 □	85	36	textile	ceramic with pot
AD 0146/T4; T8	N	20/50	1450	2 to 22	70/80 □	63	17	textile	ceramic
AD 01630/T4; T8; T15	N	20/50	1300	2 to 22	96 □	85	33	textile	ceramic
AD 01632/T4; T8; T15	N	50/70	1300	2 to 22	96 □	85	33	paper	ceramic
square — non exposed - with aluminium trim rings									
AD 01411/T4; T8	N	20/50	1450	2 to 22	96 □	85	25	textile	ceramic
AD 01421/T4; T8	N	50/70	950	1,5 to 22	96 □	85	36	paper	ceramic with pot
AD 01431/T4; T8	N	50/70	1100	1,8 to 22	96 □	85	36	textile	ceramic with pot
AD 01631/T4; T8; T15	N	20/50	1300	2 to 22	96 □	85	33	textile	ceramic
AD 01633/T4; T8; T15	N	50/70	1300	2 to 22	96 □	85	33	paper	ceramic
square — semi exposed									
AD 01610/T4; T8; T15	N	20/50	1250	2 to 22	96 □	85	32	textile	ceramic
square — exposed									
AD 01600/T4; T8; T15	N	20/50	1250	2 to 22	96 □	85	28	textile	ceramic
square — exposed - with aluminium trim rings									
AD 01605/T4; T8; T15	N	20/50	1250	2 to 22	96 □	85	28	textile	ceramic
2" (cone)									
round									
AD 2096/T4; T8; T15	N	10	1300	3 to 17	50 ∅	43	27	paper	steel alloy
square									
AD 2296/T4; T8; T15	N	10	1300	3 to 17	50 □	43	27	paper	steel alloy
2 1/4" (cone)									
square									
AD 2273/T4; T8	N	10	1000	1,5 to 15	58 □	54	27	paper	ceramic
AD 2274/T4; T8	N	10	1000	1,5 to 15	58 □	54	38	paper	screened ceramic



type	status	system power	resonance frequency	rated frequency range	overall dia.	baffle hole dia.	total depth	surround /dome material	magnet system
		W	Hz	kHz	mm	mm	mm		
Squawkers 2'' (dome)									
AD 0210/Sq4; Sq8	D	60	350	0,5 to 5	134	112	108	paper	ceramic
AD 0211/Sq4; Sq8	D	60	350	0,5 to 5	134	112	108	textile	ceramic
AD 02110/Sq4; Sq8	N	80	340	0,5 to 5	134	112	103	textile	ceramic
AD 02150/Sq4; Sq8	N	80	340	0,5 to 5	134	122	98	textile	ceramic
AD 02160/Sq4; Sq8	N	80	320	0,5 to 10	134	122	85	textile	ceramic
5'' (cone)									
AD 5060/Sq4; Sq8	D	40	210	0,4 to 5	129	96	107	textile	ceramic
AD 50600/Sq4; Sq8	N*	60	—	0,4 to 5	115	100	106	textile	ceramic
AD 50601/Sq4; Sq8	N*	80	—	1,5 to 5	115	100	48	textile	ceramic
AD 5061/Sq4; Sq8	D	80	680	1,5 to 5	129	96	50	textile	ceramic
AD 5062/Sq4; Sq8	D	60	220	0,4 to 5	129	96	107	textile	ceramic
AD 50800/Sq4; Sq8	N*	40	—	0,4 to 5	115	100	106	textile	ceramic
AD 50801/Sq4; Sq8	N*	60	—	1,5 to 5	115	100	44	textile	ceramic
Woofers 4''									
AD 4060/W4; W8	N	15/30	60	0,06 to 10	102	95	52	rubber	ceramic
AD 40900/W4; W8	N	8	80	50 to 5000	102	95	54	foam	screened ceramic
AD 40910/W4; W8	N	18	72	50 to 5000	102	95	54	rubber	screened ceramic
5''									
AD 5060/W4; W8	D	10	60	0,05 to 5	129	108	56	rubber	ceramic
7''									
AD 70601/W4; W8	N	30	45	0,04 to 3	166	142	68	rubber	ceramic
AD 70610/W4; W8	N	30	45	0,05 to 4	166	142	68	textile	ceramic
AD 70611/W4; W8	N	30	45	0,05 to 4	166	142	68	textile	ceramic
AD 70650/W4; W8	N	40	45	0,07 to 5	166	142	72	rubber	ceramic
AD 70655/W8	N	50	32	20 to 1500	166	142	88	rubber	ceramic
8''									
AD 80601/W4; W8	N	50	42	0,05 to 4	204	180	86	rubber	ceramic
AD 80602/W4; W8	N	50	42	0,05 to 4	204	180	86	foam	ceramic
AD 80603/W4; W8	N	50	38	0,05 to 2	204	180	86	foam	ceramic
AD 80604/W4; W8	N	50	38	0,05 to 2	204	180	86	rubber	ceramic
AD 80605/W6	N	30	50	40 to 3000	204	180	82	foam	ceramic
AD 80651/W4; W8	N	60	39	0,05 to 4	204	180	88	rubber	ceramic
AD 80652/W4; W8	N	60	39	0,05 to 4	204	180	88	foam	ceramic
AD 80671/W4; W8	N	70	35	0,04 to 3	204	180	88	rubber	ceramic
AD 80672/W4; W8	N	70	35	0,04 to 3	204	180	88	foam	ceramic
10''									
AD 10650/W4; W8	N	30	20	0,04 to 3	261	227	113	foam	ceramic
AD 10100/W4; W8	D	40	25	0,03 to 1	261	227	131	rubber	ceramic
12''									
AD 12600/W4; W8	N	40	28	0,04 to 2	261	227	110	foam	ceramic
AD 12650/W4; W8	N	60	22	0,03 to 2	261	227	115	rubber	ceramic
AD 12200/W4; W8	N	80	23	0,03 to 1,5	311	280	119	rubber	ceramic
AD 12250/W4; W8	N	100	26	0,04 to 2	311	280	121	rubber	ceramic

* In development.

passive radiators

recommended combinations

Passive radiators

type	status	catalogue no.	effective cone area m ²	total moving mass g	overall dia. mm	baffle hole dia. mm	surround material
AD 8001	N	2422 259 80001	2,5 x 10 ⁻²	33,9	204	180	rubber
AD 8002	N	2422 259 80002	2,5 x 10 ⁻²	33,9	204	180	foam
AD 1200	N	2422 259 12001	5 x 10 ⁻²	51,6	311	279	rubber

Recommended loudspeaker combinations (4 and 8 Ω)

woofer	squawker	tweeter	cross-over frequency kHz	enclosure volume litres	power handling capacity W
AD 40910/W4(8)	—	AD 2296/T8(15)	4	5, bass reflex	15
AD 70601/W4(8)	—	AD 2296/T4(8)	2,4	9	20
AD 70601/W4(8)	—	AD 0141/T8(15)	1,6	9	25
AD 80652/W4(8)	AD 5060/Sq4(8)	AD 0140/T4(8)	0,7 and 3	25	40
AD 80652/W4(8) with AD 8002	AD 0211/Sq4(8)	AD 01630/T8(15) or AD 01631/T8(15)	0,7 and 2,4	35	50
9710/M8	—	—	—	40, bass reflex	25
AD 12650/W8	AD 5061/Sq8	AD 0141/T8	2,1 and 8	60	60
AD 12200/W8 with AD 1200	AD 0211/Sq4(8)	AD 01605/T4(8)	0,8 and 5	100	100

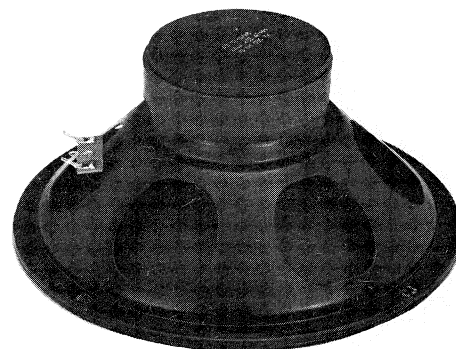
For more information our book "Building Hi-Fi speaker systems" and Technical notes TN102 to 108 and TN119 to 128 are currently available - more will follow.

cross-over networks

system	type	status	catalogue no.	cross-over frequency kHz	slope low dB/oct	slope middle dB/oct	slope high dB/oct	dimensions mm	overall height mm
2-way	ADF 1500/4 8	D	3104 207 10210 10220	1,5 1,8	6 6	– –	12 12	42,5 x 83	35
2-way	ADF 2000/4 8	D	3104 207 10130 10120	2	6 6	– –	12 12	42,5 x 83	35
2-way	ADF 2400/4 8	D	3104 207 10110 10100	2,4	6 6	– –	6 6	42,5 x 83	35
2-way	ADF 3000/4 8	D	3104 207 10230 10240	3 4	6 6	– –	12 12	42,5 x 83	35
3-way	ADF 600/5000/4 8	D	3104 207 10150 10140	0,6 to 5	6	6	12	60 x 140	36
3-way	ADF 700/2600/4 8	D	3104 207 10250 10260	0,65 to 2,8 0,7 to 2,6	6	12	12	60 x 140	36
3-way	ADF 700/3000/4 8	D	3104 207 10270 10280	0,7 to 3	6	12	12	60 x 140	36

high power - full-range

double cone

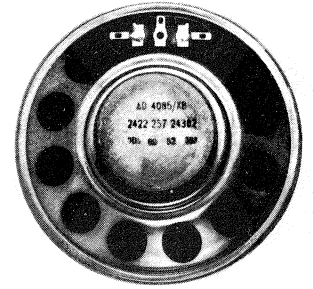


9710/M8

type	status	system	resonance	rated	overall	baffle	total	surround	magnet
		power	frequency	frequency	dia.	hole	depth	material	system
		W	Hz	range	mm	dia.	mm		
				kHz		mm			
4''									
AD 4060/M4; M8	N	13	95	0,07 to 20,	102	94	52	textile	ceramic
5''									
AD 5061/M4; M8	D	15	85	0,07 to 20	129	108	55	textile	ceramic
AD 5062/M4	N	20	85	0,07 to 20	102	94	52	textile	ceramic
7''									
AD 7062/M4; M8	D	30	45	0,04 to 18	166	141	68	rubber	ceramic
AD 7063/M4; M8	D	15	70	0,04 to 18	166	141	69	textile	ceramic
AD 7064/M4; M8	N	15	70	0,04 to 18	166	141	69	textile	ceramic
AD 70620/M4; M8	N	30	45	0,05 to 13	166	142	69	rubber	ceramic
AD 70630/M4; M8	N	15	60	0,06 to 15	166	142	69	textile	ceramic
AD 7065/M4; M8	N	20	70	0,08 to 20	155	142	72	textile	ceramic
8½''									
9710/M8	D	20	50	0,04 to 19	217	195	96	paper	ceramic
10''									
AD 1065/M4; M8; M15	D	10	55	0,06 to 18	261	227	113	paper	ceramic
12''									
AD 1265/M4; M8; M15	D	20	45	0,03 to 18	315	278	134	paper	ceramic
AD 12100/M4; M8; M15	D	25	45	0,03 to 13	315	278	152	paper	ceramic
AD 12100/HP4; HP8	D	50	60	0,04 to 12	315	278	152	textile	ceramic

The 8½ inch type 9710/M8 unit, with a ceramic magnet of 105 mm diameter (mass 400 g), is an extremely sensitive speaker which has, over a number of years, become the most popular type for hi-fi hobbyists. It features an exceptionally smooth response in the range 45 Hz to 19 kHz. Power handling capacity of the 9710/M8 is 20 W in a sealed enclosure up to 30 litres in volume, and up to 10 W in bass-reflex enclosures of over 30 litres.

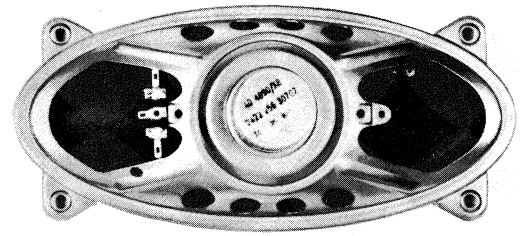
medium power - full-range



type	status	max. power W	resonance frequency Hz	rated frequency range kHz	overall dia. mm	baffle hole dia. mm	total depth mm	surround material	magnet system
3"									
AD 3080/M4	N	6	155	0,1 to 12	87	77	37	textile	ceramic
AD 3080/X4	N	10	85	0,03 to 15	87	77	37	textile	ceramic
4"									
AD 4481/X4	D	6	140	0,09 to 14	105	96	39	textile	ceramic
AD 4085/X4; X8; X15	D	3	150	0,08 to 14	104	96	36	paper	ceramic
AD 4095/X4; X8; X15; X25	N	3	150	0,08 to 15	105	96	40	paper	steel alloy
AD 4485/X4; X8; X15	N	3	150	0,1 to 13	104	96	36	paper	ceramic
AD 4495/X4; X8; X15; X25	N	3	150	0,08 to 15	105	96	40	paper	steel alloy
5"									
AD 5081/M4; M8; M15; M25	D	6	135	0,07 to 20	120	108	49	paper	ceramic
AD 5081/X4; X8; X15; X25	D	6	140	0,06 to 14	120	108	49	paper	ceramic
7"									
AD 7080/M4; M8; M15	D	6	105	0,08 to 15	166	141	58	paper	ceramic
AD 7080/X4; X8	D	6	115	0,08 to 10	166	141	58	paper	ceramic
AD 7090/M4; M8	D	4	105	0,07 to 18	166	141	63	paper	steel alloy
AD 7090/X4; X8	D	4	115	0,07 to 13	166	141	63	paper	steel alloy
8"									
AD 8081/M4; M8	D	8	75	0,05 to 14	206	176	68	paper	ceramic
AD 8081/X4; X8	D	8	95	0,07 to 11	206	176	68	paper	ceramic
AD 8082/M4; M8	N	13	95	0,07 to 11	206	176	68	paper	ceramic

medium power - full-range

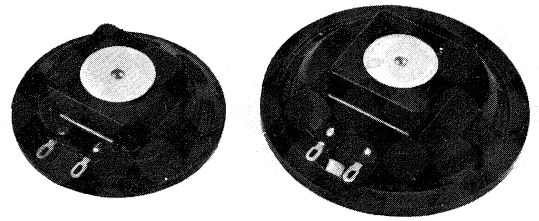
oval



type	status	max. power	resonance frequency	rated frequency range	overall size	baffle hole size	total depth	surround material	magnet system
		W	Hz	kHz	mm	mm	mm		
3" x 5"									
AD 3595/X4; X8; X15; X25; X50	N	3	180	0,09 to 15	76x131	66x121	43	paper	steel alloy
3" x 8"									
AD 3880/X4; X8; X15	D	4	120	0,09 to 15	82x205	72x195	51	paper	ceramic
AD 3890/X4; X8; X15; X25;	D	4	120	0,09 to 15	82x205	72x195	56	paper	steel alloy
3½" x 6"									
AD 4682/X4; X8; X15; X25	D	6	140	0,08 to 13	95x155	82x140	51	paper	ceramic
AD 4685/X4; X8	N	4	140	0,07 to 15	95x155	82x142	49	paper	ceramic
AD 4692/X4; X8; X15; X25	D	4	140	0,08 to 13	95x155	82x140	55	paper	steel alloy
AD 4695/X4; X8; X15; X25	N	4	140	0,08 to 12	95x155	82x140	51	paper	steel alloy
4" x 6"									
AD 4681/M4; M8; M25	D	6	135	0,1 to 20	102x154	89x141	48	paper	ceramic
AD 4681/X4; X8; X15; X25	D	6	140	0,1 to 20	102x154	89x141	48	paper	ceramic
AD 4686/X4; X8; X15; X25	N	6	140	0,1 to 20	102x154	89x141	45	paper	ceramic
AD 4691/M4; M8; M15; M25	D	6	135	0,1 to 20	102x154	89x141	52	paper	steel alloy
AD 4691/X4; X8; X15; X25	D	6	140	0,1 to 12	102x154	89x141	52	paper	steel alloy
AD 4696/X4; X8; X15; X25	N	6	140	0,1 to 12	102x154	89x141	45	paper	steel alloy
4" x 8"									
AD 4891/X4; X8; X15; X25	N	10	110	0,07 to 10	96x210	82x192	54	paper	steel alloy
5" x 7"									
AD 5780/M4; M8; M15; M25	D	6	100	0,07 to 20	133x183	110x160	57	paper	ceramic
AD 5780/X4; X8; X15; X25	D	6	115	0,08 to 10	133x183	110x160	57	paper	ceramic
AD 5790/X4	D	4	115	0,08 to 10	133x183	110x160	62	paper	steel alloy
AD 5791/M4; M8	N	10	100	0,07 to 19	133x183	110x160	62	paper	steel alloy

low power

round

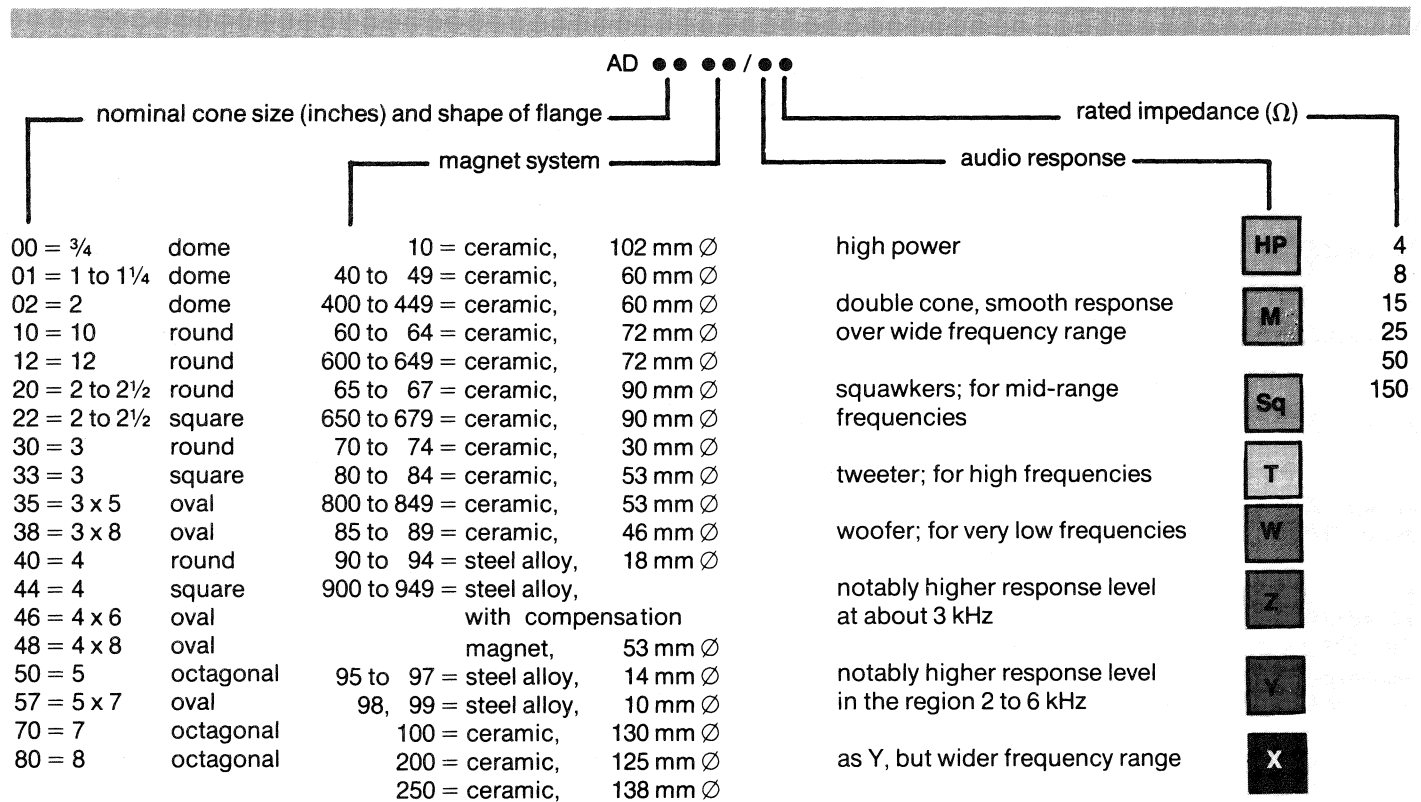


type	status	max power W	resonance frequency Hz	rated frequency range kHz	overall dia. mm	baffle hole dia. mm	total depth mm	magnet system
1 1/4" AD 0198/Z8; Z15; Z25	D	0,3	500	0,3 to 7	31	26,5	14,3	steel alloy
2" AD 2099/Z8; Z15; Z25	D	0,5	420	0,3 to 4	50	46	18	steel alloy
2 1/2" AD 2071/Z4; Z8; Z15; Z25; Z50; Z150	D	1	360	0,2 to 4	64	59	20	ceramic
3" AD 3071/Y4; Y8; Y15; Y25; Y50; Y150	D	2	250	0,1 to 6	81	72	23	ceramic
AD 3371/Y4; Y8; Y15; Y25; Y50; Y150	D	2	250	0,1 to 6	81	72	28	ceramic
4" AD 4072/X4; X8; X15; X25	D	3	170	0,08 to 15	105	96	30,5	ceramic
AD 4074/X4; X8; X15; X25	N	3	170	0,08 to 15	105	96	44	scr. ceramic
AD 4472/X4; X8; X15; X25	D	3	170	0,08 to 15	105	96	30,5	ceramic
AD 4474/X4; X8; X15; X25	N	3	170	0,08 to 15	105	96	44	scr. ceramic

The status code letters in this catalogue indicate the status of the products at 1 February 1980.

- N = New design type.** Recommended for new equipment design; production quantities available *after date of publication*.
- D = Design type.** Recommended for equipment design; production quantities available *at date of publication*.
- C = Current type.** No longer recommended for equipment design; available for equipment production and for use in existing equipment.
- M = Maintenance type.** No longer recommended for equipment production; available for maintenance of existing equipment.
- O = Obsolete type.** No longer available.

coding system



Approximated response curves and their relationship.

