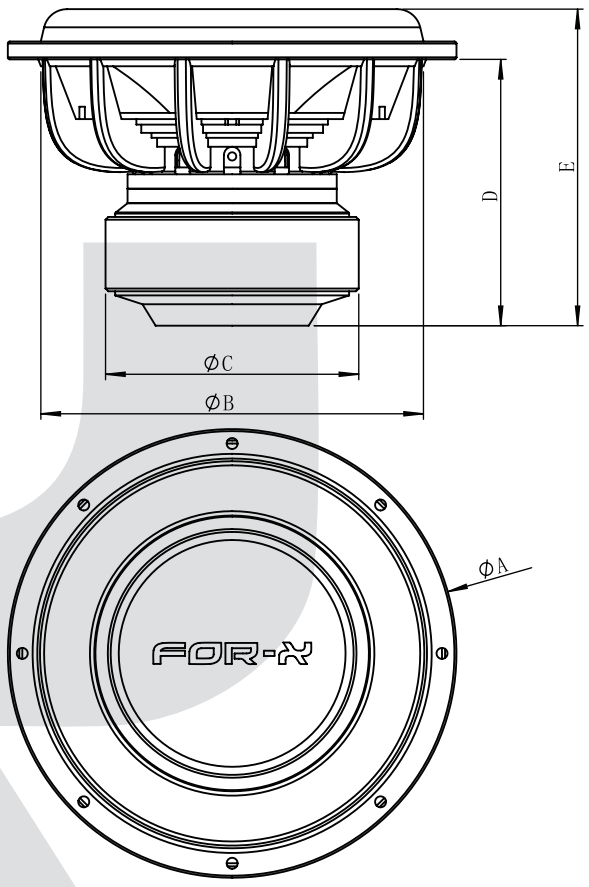
FOR-X

X-410
X-412
X-415
X-418

Owner's Manual

148*210mm

Dimensions



MODEL	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
X-410	277	240	185	188	218
X-412	321	285	185	191	228
X-415	392	355	185	216	250
X-418	467	428	185	257	295

148*210mm

Recommended sealed enclosure informations

Model	Subwoofer Displacement (cu.ft)	Enclosure Volume(cu.ft) (net enclosure volume）	Tuning Frequency (Hz)
X-410	0.15	0.85-1.83	45
X-412	0.19	1.04-2.24	40
X-415	0.27	1.64-3.51	35
X-418	0.43	2.05-4.39	37.5

Recommended vented enclosure informations

Model	Subwoofer Displacement (cu.ft)	Enclosure Volume(cu.ft) (net enclosure volume）	Port Area （sq.in）	Port Length (inch)	Tuning Frequency (Hz)
X-410	0.15	0.96-2.80	14.56	9.1	42
X-412	0.19	1.54-3.30	15.68	11	37
X-415	0.27	2.10-4.50	28.32	11.5	34
X-418	0.43	2.49-5.34	33.12	11.8	31

148*210mm

Specifications

General Data									
		X-410D2	X-410D4	X-412D2	X-412D4	X-415D2	X-415D4	X-418D2	X-418D4
Overall Dimensions	mm	277*218	277*218	321*228	321*228	392*250	392*250	467*295	467*295
Nominal Power Handling	W	1200							
Transient Power 10ms	W	2400							
Sensitivity	dB	82	82	85	85.3	86	86	88	87
Frequency Response	Hz	44-40	44-400	39-400	40-400	35-400	37-400	37-300	38-300
Cone Material		PAPER							
Net Weight	kg	12.75		13		13.4		14.1	
Electrical Data									
Nominal Impedance	Ohm	Dual 2	Dual 4	Dual 2	Dual 4	Dual 2	Dual 4	Dual 2	Dual 4.0
DC Resistance	Ohm	Dual 2	Dual 4	Dual 2	Dual 4	Dual 2	Dual 4	Dual 2	Dual 4.0
Voice Coil and Magnet Parameters									
Voice Coil Diameter	mm	76.5							
Voice Coil Height	mm	60							
HE Magnetic Gap Height	mm	12							
Max.Linear Excursion	mm	24							
Voice Coil bobbin		Black Aluminium							
Voice Coil Wire		CCAW							
Number Of Layers	layers	4							
Magnet System Type		Ferrite							
BL Product	N.A	20.89	12.3	20.2	12.8	21	13.8	20	12.68
T-S Parameters									
Suspension Compliance	Cms	0.046	0.045	0.06	0.059	0.053	0.048	0.042	0.04
Mechanical Q Factor	Qms	5.44	5.21	4.83	5	4.6	6.09	5.65	5.41
Electrical Q Factor	Qes	0.66	0.69	0.6	0.76	0.73	0.91	1	1.27
Total Q Factor	Qts	0.59	0.62	0.53	0.65	0.63	0.79	0.85	1.03
Moving Mass	Mms	243.2	241	314	302	386.6	369.3	425	429
Eq.Cas Air Load(liters)	VAS	6.8	6.5	19.1	18.2	46	41.4	81	78
Resonant Frequency	Fs	44	44	39	40	35	37	37	38
Effective Piston Area	SD	314.1	314.1	471.4	471.4	779.3	779.3	1164.1	1164.1
Connection:		Series	Parallel	Series	Parallel	Series	Parallel	Series	Parallel

CE

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