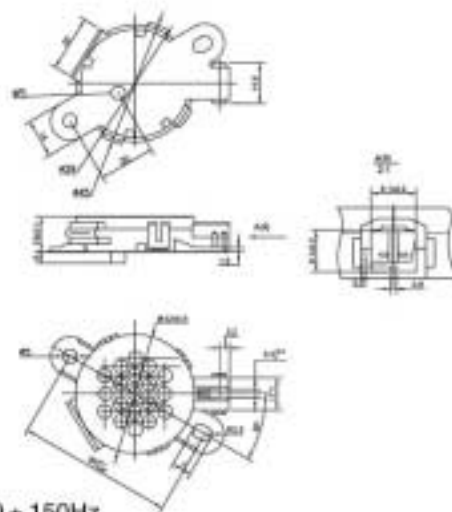
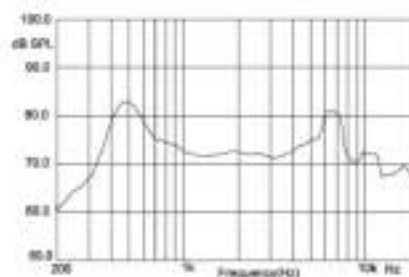


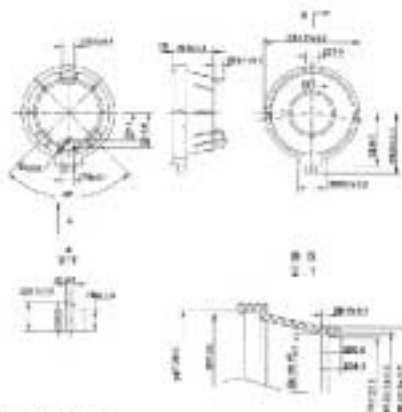
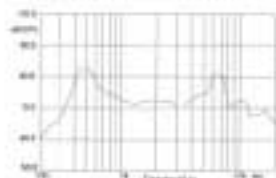


PQ3650P1  
Rated input: 0.3W  
Maximum input: 0.5W  
Resonance Frequency:  $540 \pm 150\text{Hz}$   
Impedance (at 1500HZ):  $50\text{ohm} \pm 15\%$   
Output SPL Min 79dB (12V DC Power Special Circuit 30cm)

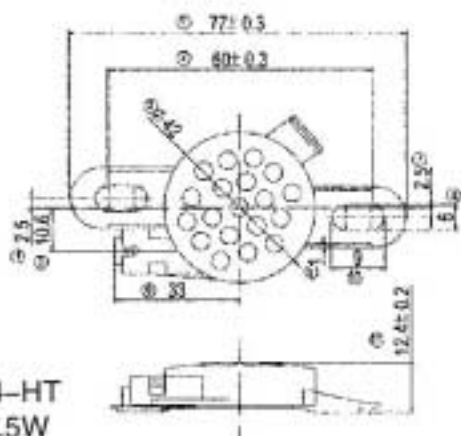


BMS3432 OLF  
Rated input: 0.3W  
Maximum input: 0.5W  
Resonance Frequency:  $400 \pm 15\%\text{Hz}$   
Impedance (at 1000HZ):  $32\text{ohm} \pm 15\%$   
Output SPL (0.1W/1m/1KHz):  $72 \pm 2\text{dB}$   
Operation temperature:  $-40^\circ\text{C} \dots +90^\circ\text{C}$   
Storage temperature:  $-40^\circ\text{C} \dots +80^\circ\text{C}$



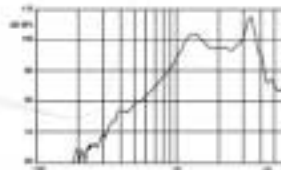
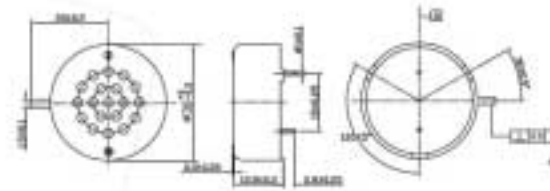


Type: BMS3432 – 01 OLF  
 Rated input: 0.3W  
 Maximum input: 0.5W  
 Resonance Frequency:  $400 \pm 15\%$  Hz  
 Frequency Response: F0...17KHz  
 Impedance(at1000Hz):  $32\text{ohm} \pm 15\%$   
 Coil resistance:  $29\text{ohm} \pm 10\%$   
 Output SPL (0.1W/1m/1KHz):  $72 \pm 2\text{dBA}$   
 Storage temperature:  $-40^{\circ}\text{C} \dots +80^{\circ}\text{C}$   
 Operation temperature:  $-40^{\circ}\text{C} \dots +90^{\circ}\text{C}$



BMS3650L-P4-HT  
 Rated input : 0.5W  
 Max Input : 1.0W  
 Resonance Frequency:  $560 \pm 170\text{Hz}$   
 Impedance (at 1500Hz):  $50\text{ohm} \pm 15\%$   
 Output SPL  $85 \pm 3\text{dB}$  (Square wave 10Vp-p,0.8KHz,0.5m)

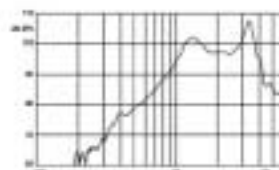
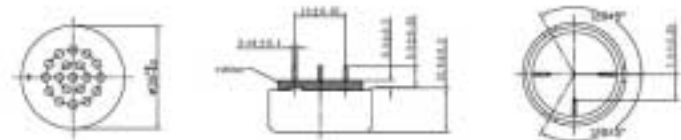




**FE23032PCW-II-SB-LF**  
 Impedance(PCW) 32ohm  $\pm$  10%  
 Rated Input Power 1.3W  
 Max. Input Power 1.5W  
 Frequency range 1000Hz to 4000Hz  
 Output SPL Values are shown in table 1.

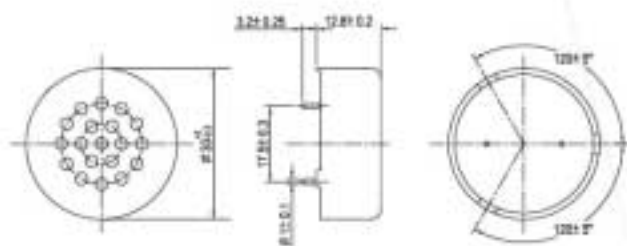
table 1

Frequency/Hz	Min SPL/dBA	Max SPL/dBA
720	88	98
750	88	98
900	88	98
1000	90	100
1600	98	108
1900	95	105
2000	95	105



**FE23032PCW-RSB-LF**  
 Impedance (2KHZ) 32 $\Omega$   $\pm$  10%  
 Rated input power: 1.3W  
 Max Input power: 1.5W  
 Frequency range:1000-4000HZ  
 Output SPL Values are shown in table 1

Table 1	Frequency /Hz	Min SPL /dBA	Max SPL /dBA
	720	88	98
	750	88	98
	900	88	98
	1000	90	100
	1600	98	108
	1900	95	105
	2000	95	105

**FE23100PCW-03**Impedance(IV 2K Hz):  $100 \Omega \pm 10\%$ 

Rated input power: 0.15 W

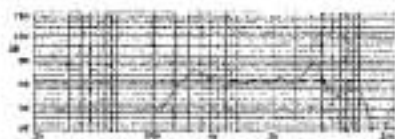
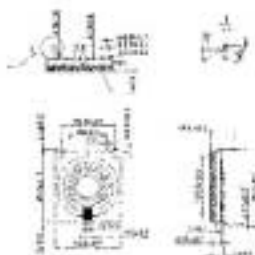
Max Input: 0.3W

Frequency response: 1000-4000Hz

Sound pressure level:  $> 90\text{dB}$  (cat 0.25w/110cm/11000Hz square wave) $> 95\text{dB}$  (cat 0.25w/110cm/12000Hz square wave)

(at 0.25w/10cm/1000Hz square wave)

(at 0.25w/10cm/2000Hz square wave)

**Type: FE36100LCF-LF-03**Impedance:  $100\Omega \pm 15\%$  at 1KHz

Rated Power: 0.25W

Maximum Power: 0.5W

Resonance frequency:  $450 \pm 100$  Hz

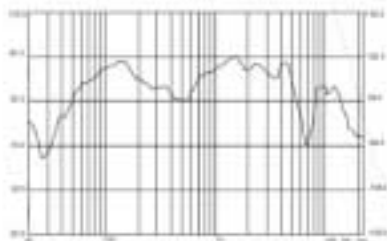
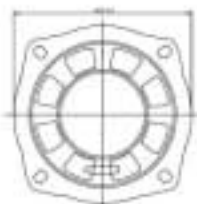
Frequency Response: fo~5000Hz

Output Sound Pressure Level :  $83 \pm 3\text{dB}$  at 1KHz 1m/1w

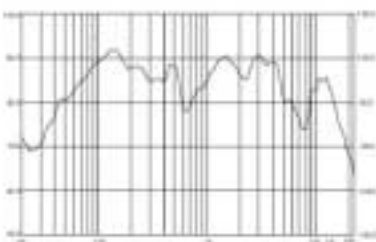
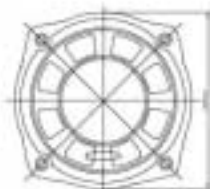
Deviation: max 20dB

Operating Temperature:  $-40 \sim +90^\circ\text{C}$ Storage Temperature:  $-40 \sim +90^\circ\text{C}$

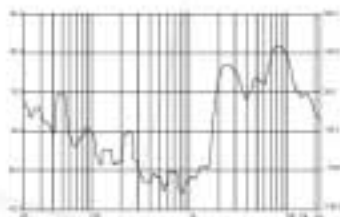




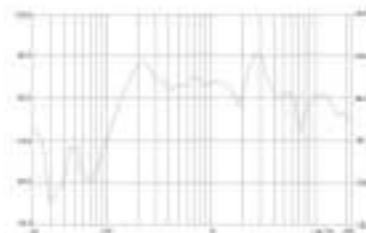
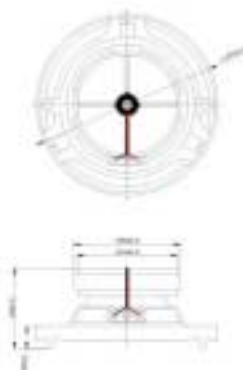
Type: BLS166-01  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 20W  
Max. Power: 40W  
Resonance Frequency:  $60 \pm 20\%$  Hz  
Frequency Response: 60-18K Hz  
S.P.L.:  $87 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



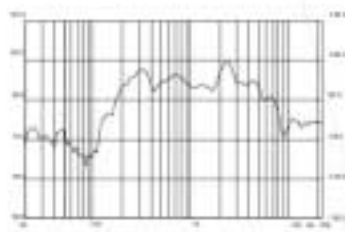
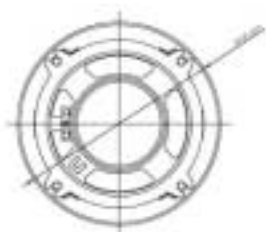
Type: BLS166-02  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 20W  
Max. Power: 40W  
Resonance Frequency:  $60 \pm 20\%$  Hz  
Frequency Response: 60-18K Hz  
S.P.L.:  $87 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



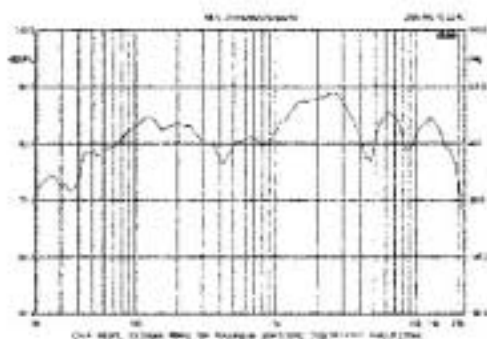
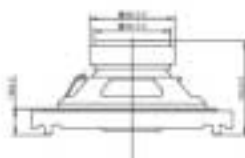
Type: BLS30-01  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 20W  
Max. Power: 40W  
Resonance Frequency:  $2000 \pm 20\%$ Hz  
Frequency Response: 50K-20K Hz  
S.P.L:  $82 \pm 3$ dB  
Operating Temperature :  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



Type: BLS87-01-1W  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 20W  
Max. Power: 40W  
Resonance Frequency:  $120 \pm 20\%$  Hz  
Frequency Response: 120-20K Hz  
SPL:  $84 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



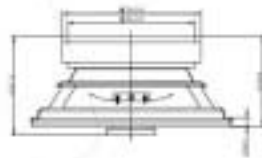
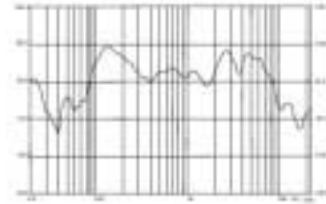
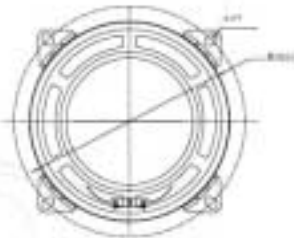
Type: BLS131-02-1W  
 Impedance:  $4\Omega \pm 15\%$   
 Rated Power: 25W  
 Max. Power: 50W  
 Resonance Frequency:  $100 \pm 20\%$ Hz  
 Frequency Response: 100-20K Hz  
 S.P.L:  $84 \pm 3$ dB  
 Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



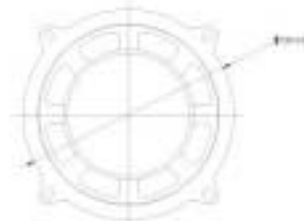
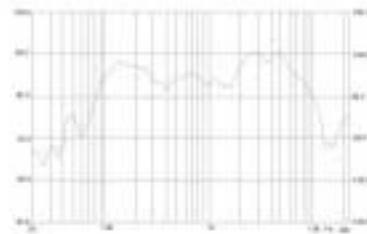
Type: BLS166-05-1W  
 Impedance:  $4\Omega \pm 15\%$   
 Rated Power: 35W  
 Max. Power: 70W  
 Resonance Frequency:  $60 \pm 20\%$ Hz  
 Frequency Response: 60-20K Hz  
 S.P.L:  $82 \pm 3$ dB  
 Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



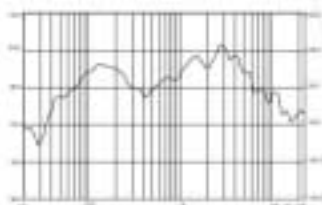
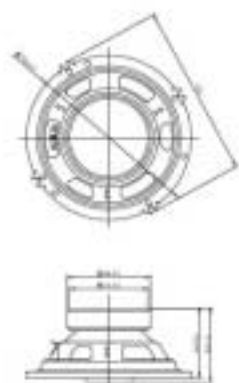




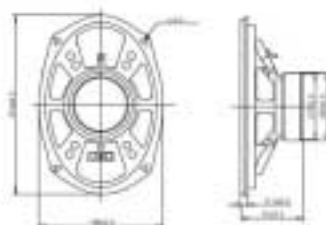
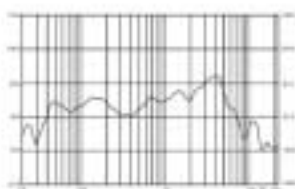
Type: BLS103-01-1W  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 30W  
Max. Power: 60W  
Resonance Frequency:  $100 \pm 20\%$ Hz  
Frequency Response: 100-20K Hz  
S.P.L:  $82 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



Type: BLS131-03-1W  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 25W  
Max. Power: 50W  
Resonance Frequency:  $60 \pm 20\%$  Hz  
Frequency Response: 60-20K Hz  
S.P.L:  $83 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$

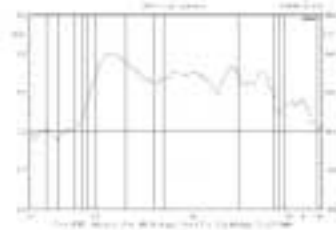
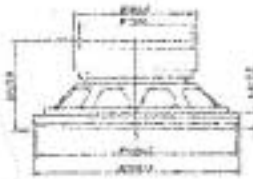


Type: BLS158-01-1W  
 Impedance:  $4\Omega \pm 15\%$   
 Rated Power: 20W  
 Max. Power: 40W  
 Resonance Frequency:  $60 \pm 20\%$  Hz  
 Frequency Response: 60-20K Hz  
 S.P.L:  $84 \pm 3$ dB  
 Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$

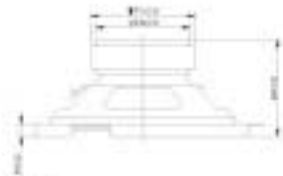
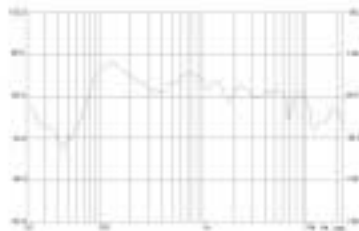


Type: BLS1623-03-1W  
 Impedance:  $4\Omega \pm 15\%$   
 Rated Power: 35W  
 Max. Power: 70W  
 Resonance Frequency:  $40 \pm 20\%$  Hz  
 Frequency Response: 40-20K Hz  
 S.P.L:  $84 \pm 3$ dB  
 Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$

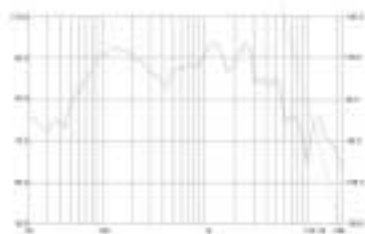
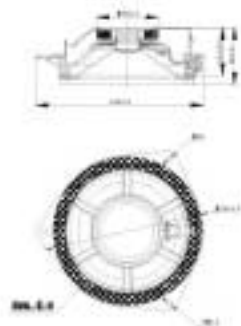




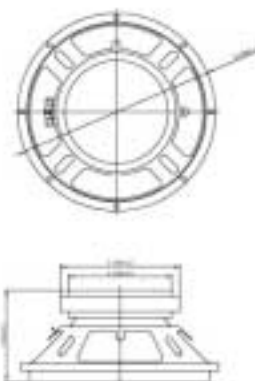
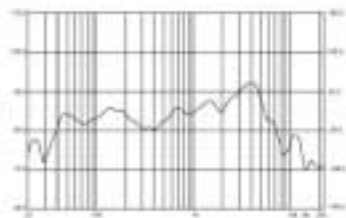
Type: BLS131-01  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 35W  
Max. Power: 70W  
Resonance Frequency:  $92 \pm 20\%$ Hz  
Frequency Response: 90-18K Hz  
S.P.L:  $86 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}$ - $85^{\circ}\text{C}$



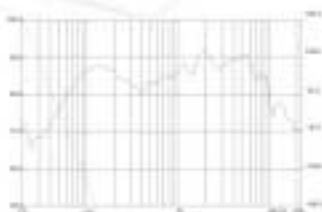
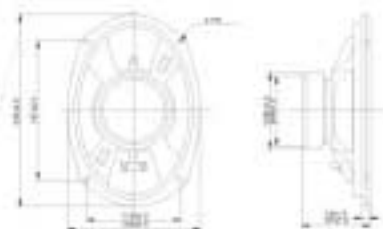
Type: BLS145-01-1W  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 30W  
Max. Power: 60W  
Resonance Frequency:  $90 \pm 20\%$  Hz  
Frequency Response: 90-20K Hz  
S.P.L:  $84 \pm 3$ dB  
Operating Temperature:  $-40^{\circ}\text{C}$ - $85^{\circ}\text{C}$



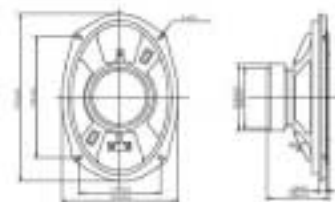
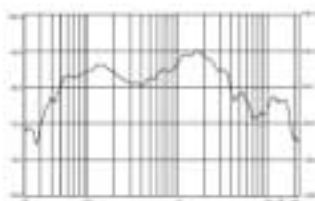
Type: BLS166-03  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 35W  
Max. Power: 70W  
Resonance Frequency:  $80 \pm 20\%$  Hz  
Frequency Response: 50-20K Hz  
SPL:  $90 \pm 3$  dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



Type: BLS300-01  
Impedance:  $4\Omega \pm 15\%$   
Rated Power: 100W  
Max. Power: 200W  
Resonance Frequency:  $30 \pm 20\%$  Hz  
Frequency Response: 30-12K Hz  
S.P.L:  $83 \pm 3$  dB  
Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$

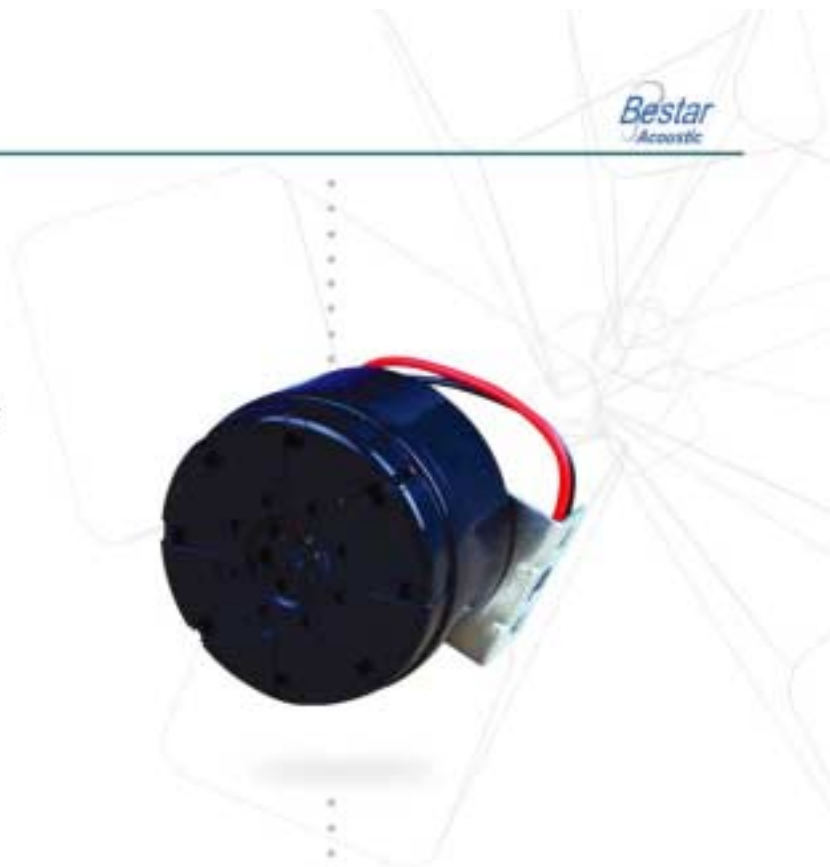


Type: BLS1623-01-2W  
 Impedance:  $4\Omega \pm 15\%$   
 Rated Power: 40W  
 Max. Power: 80W  
 Resonance Frequency:  $70 \pm 20\%$  Hz  
 Frequency Response: 70-20K Hz  
 S.P.L:  $87 \pm 3$ dB  
 Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$



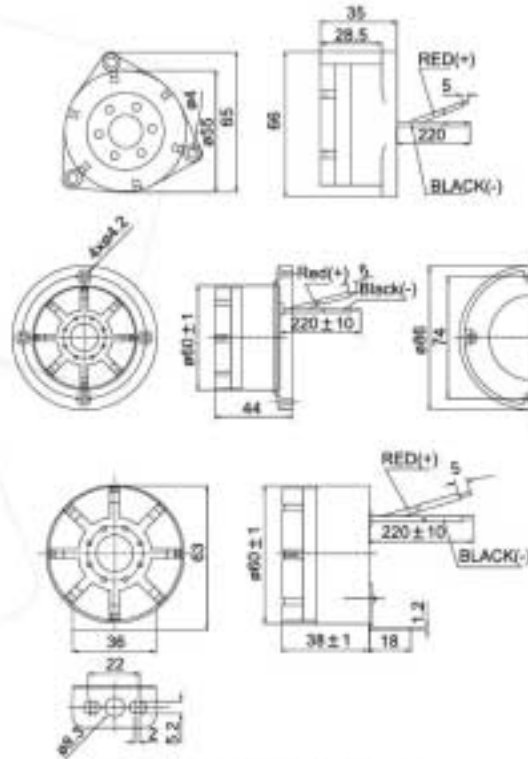
Type: BLS1623-02-3W  
 Impedance:  $4\Omega \pm 15\%$   
 Rated Power: 40W  
 Max. Power: 80W  
 Resonance Frequency:  $50 \pm 20\%$  Hz  
 Frequency Response: 50-20K Hz  
 SPL:  $87 \pm 3$ dB  
 Operating Temperature:  $-40^{\circ}\text{C}-85^{\circ}\text{C}$

Type: F/HU-2SPL-Speaker-IP67B/AMP LF  
Rated Voltage: 12/24VDC  
Operating Voltage: 11-28VDC  
Current Consumption:  $\leq 300\text{mA}$   
High SPL Level at 1m:  $96 \pm 3\text{dB}$   
Low SPL Level at 1m:  $80 \pm 3\text{dB}$   
Resonant Frequency:  $1000 \pm 300\text{HZ}$   
Tone Red(+) & Black(-) Pulse  
ON/OFF Cycles:  $80\text{C/M} \pm 20$



Type: F/BP4024NR LF  
Rated Voltage: 24V  
Operating Voltage: 18-32V  
Current Consumption: max 200mA  
High SPL1 at 24V/1m distance:  $93 \pm 3\text{dB}$   
                  at 24V/7.5m distance:  $73 \pm 5\text{dB}$   
Low SPL2 at 24V/1m distance:  $83 \pm 3\text{dB}$   
                  at 24V/7.5m distance:  $55 \pm 3\text{dB}$   
Tone: Pulse  
ON/OFF Cycles:  $80 \pm 10\text{c/m}$





Type	Rated Voltage	Operating Voltage	SPL	Frequency	Wire	Tone
F1HU100MC6-30VIP67W	12/24Vdc	6...30Vdc	min.87dB min.97dB	3000±200Hz	220mm	C
F1HU100MP6-30VIP67W	12/24Vdc	6...30Vdc	min.87dB min.97dB	3000±200Hz	220mm	P
Type	Rated Voltage	Operating Voltage	SPL	Frequency	Wire	Tone
F1HU110MP12VIP67B	12Vdc	8...15Vdc	min.110dB	3000±200Hz	220mm	P
F1HU110MP24VIP67B	24Vdc	15...30Vdc	min.110dB	3000±200Hz	220mm	P
F1HU110MC12VIP67B	12Vdc	8...15Vdc	min.110dB	3000±200Hz	220mm	C
F1HU110MC24VIP67B	24Vdc	15...30Vdc	min.110dB	3000±200Hz	220mm	C
F1HU110MS12VIP67B/W	12Vdc	8...15Vdc	min.110dB	3000±200Hz	220mm	S
F1HU110MS24VIP67B/W	24Vdc	15...30Vdc	min.110dB	3000±200Hz	220mm	S
Type	Rated Voltage	Operating Voltage	SPL	Frequency	Wire	Tone
F1HU110P24V-IP67G/B	24Vdc	15...30Vdc	min.110dB	3000±200Hz	220mm	P
F1HU110P12VIP67G-01	12Vdc	8...15Vdc	min.110dB	3000±200Hz	190mm	P
F1HU97P12VIP67B	12Vdc	8...15Vdc	min.97dB	3000±200Hz	220mm	P
HU 2SPL'SIP67	12/24Vdc	8...30Vdc	90±5.73±5 dB	3000±200Hz	220mm	P
F1HU110C12VIP67G/B	12Vdc	8...15Vdc	min.110dB	3000±200Hz	220mm	C
F1HU105S12VIP67W-01	12Vdc	8...15Vdc	105+3/-2dB	3000±200Hz	190mm	S
F1HU-2SPLIP67B-T	12/24Vdc	9...28Vdc	95±5.78±5dB	1000±200Hz	220mm	P

**Notes:**

Siren size: 60x45mm

Tone Nature : p: Pulse tone C: Continuous S: siren

Housing Colour : B: black G: green W: white

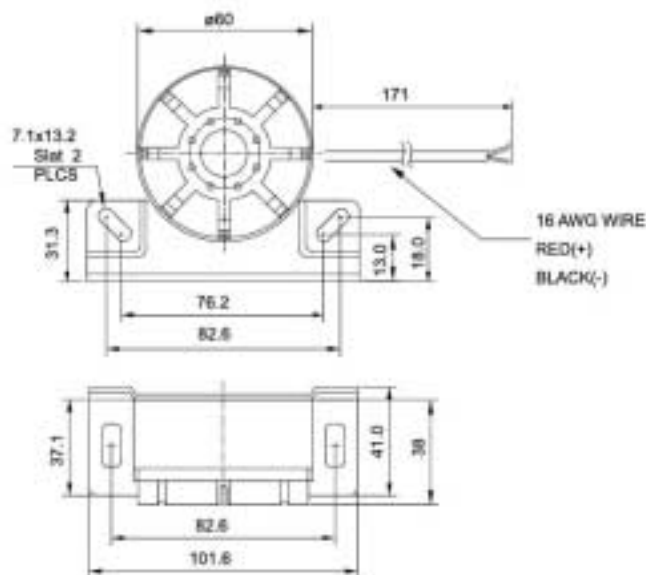
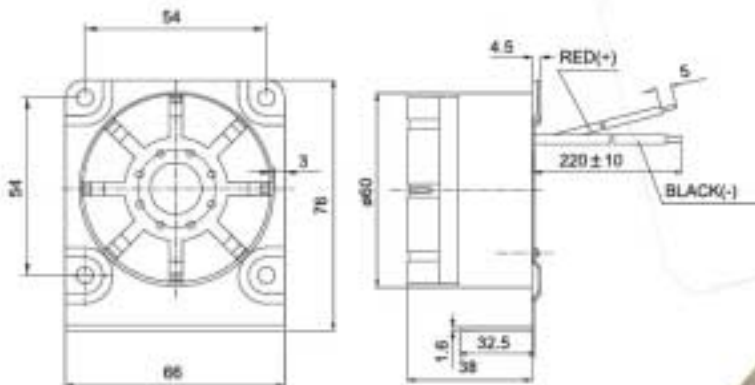
F1HU100P12VIP67B-01/-02: -01 With 2way connector -02 with 5way connector

F1HU100PC10V-100VIP67B: Yellow "+" Pulse tone Red "+" Constant tone

F1HU-2SPLIP67B-T: Yellow "+" Low SPL Red "+" High SPL s.p.l. at 1m

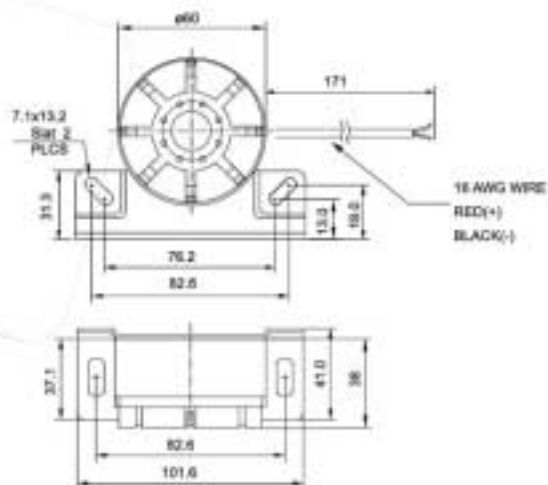
With AMP connector: F1HU97P 12V B /W220AMP, F1HU105S12V-IP67W-01,

F1HU87S12VIP67W-01, F1HU110P 12VIP67G-01

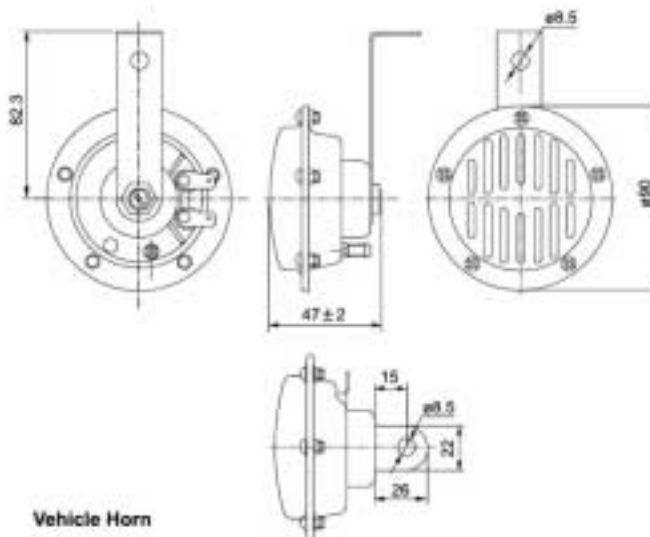


Type	Rated Voltage	Operating Voltage	SPL	Frequency	Wire	Tone
FIHU110P12V-IP67B-02	12Vdc	8...15Vdc	min.110dB	3000±200Hz	220	P
FIHU110P24V-IP67B-02	24Vdc	15...30Vdc	min.110dB	3000±200Hz	220	P
FIHU110C12V-IP67B-02	12Vdc	8...15Vdc	min.110dB	3000±200Hz	220	C
Type	Rated Voltage	Operating Voltage	SPL	Frequency	Wire	Tone
FIHU100P12V/IP67B-01	12Vdc	9...28Vdc	min.102dB	2500...2800Hz	171	P
FIHU100P12V/IP67B-02	12Vdc	9...28Vdc	min.102dB	2500...2800Hz	171	P
FIHU97P-B-IP67-1.5KHz	14/100V	14...100V	min.94dB	1300...1700Hz	171	P
FIHU100P12V/IP67B	12Vdc	9...28Vdc	min.102dB	2500...2800Hz	171	P



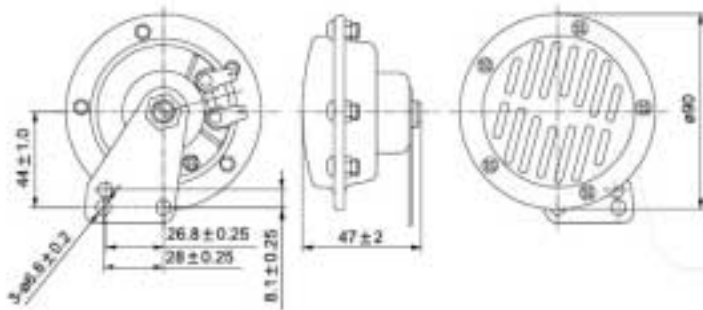


Type	Rated Voltage	Operating Voltage	SPL	Frequency	Wire	Tone
F/HU100P12VIP67B-01	12Vdc	9...28Vdc	min.102dB	2500...2800Hz	171	P
F/HU100P12VIP67B-02	12Vdc	9...28Vdc	min.102dB	2500...2800Hz	171	P
F/HU97P-B-IP67-1.5KHz	14/100V	14...100V	min.94dB	1300...1700Hz	171	P
F/HU100P12VIP67B	12Vdc	9...28Vdc	min.102dB	2500...2800Hz	171	P



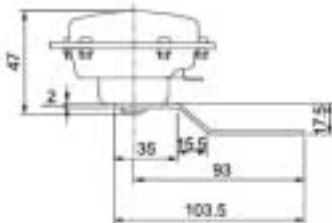
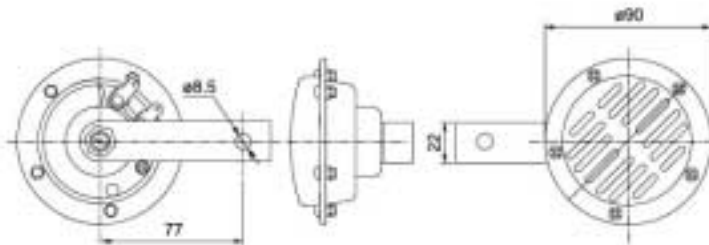
**Vehicle Horn**

Type	F/HU110-90-12VDC
Size	φ90
Rated Voltage	12Vdc
Current Consumption	max. 3A
Sound Pressure Level	110dB
Resonant Frequency	390Hz



**Vehicle Horn**

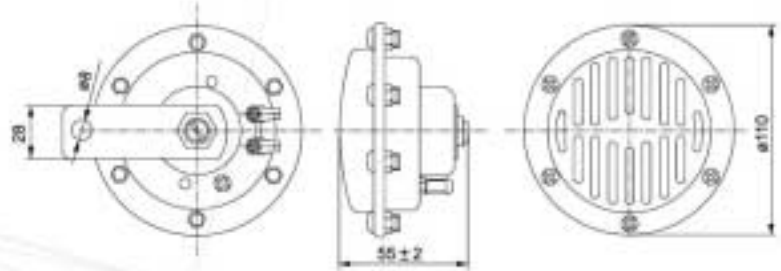
Type	FHU110-90-12VDC-01
Size	$\phi 90$
Rated Voltage	12Vdc
Current Consumption	max. 3A
Sound Pressure Level	110dB
Resonant Frequency	390Hz



**Vehicle Horn**

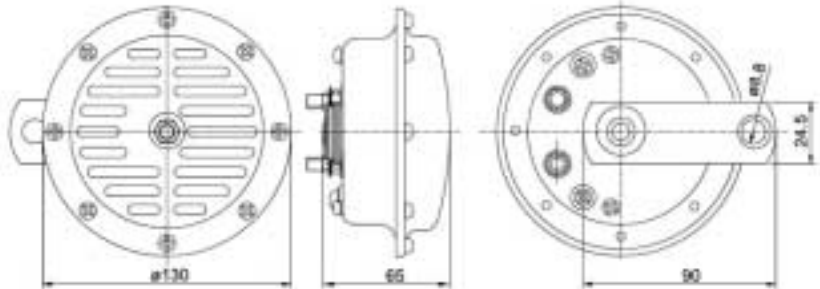
Type	FHU110-90-12VDC-03
Size	$\phi 90$
Rated Voltage	12Vdc
Current Consumption	max. 3A
Sound Pressure Level	110dB
Resonant Frequency	390Hz





**Vehicle Horn**

Type	FHU110-110-12VDC
Size	ø110
Rated Voltage	12Vdc
Current Consumption	max. 3A
Sound Pressure Level	105dB
Resonant Frequency	390Hz



**Vehicle Horn**

Type	FHU110-130-24VDC-01
Rated Voltage	24Vdc
Operating Voltage	36/48Vdc
Current Consumption	max. 4A
Sound Pressure Level	110dB
Resonant Frequency	370Hz ± 20%

Type: AM80S  
Rate Voltage: 12VDC  
Operating Voltage: 9–15V  
Current Consumption(at 12V):  $\leq 6A$   
SPL at 1m 12V:  $\geq 100dB$   
Resonant Frequency: 410–510HZ

