



# APF-15TU/APF-15TUC

## UL Listed 15 Watt Flange Mounting Voice Control Loudspeakers



**APF-15TU Series**

### Specifications (UL Rating)

<b>Models</b>	APF-15TU, APF-15TUC
<b>Power Rating</b>	15 Watts Continuous
<b>Frequency Response</b>	400 - 4000 Hz
<b>Sensitivity</b>	102dB at 15 Watts, 10ft (3dB Increment UL Rating)

### Specifications (Anechoic Measurements)

<b>Frequency Response</b>	600 - 14,000 Hz (Nominal) 700 Hz - 5500 Hz (±5dB)
<b>Sensitivity</b>	120dB at 15 Watts (Peak) 114dB at 15 Watts/1 Meter (Avg) 700 - 5500 Hz 104dB at 1 Watt/1 Meter (Avg) 700 - 5500 Hz
<b>Dispersion Angle</b>	95° (-6dB, 2000 Hz Octave Band)
<b>Weight</b>	APF-15TU: 2.5 lbs (1.1kgs) APF-15TUC: 2.75 lbs (1.2kgs)
<b>Finish</b>	Grey Baked Epoxy
<b>Dimensions</b>	Dia 5 <sup>5</sup> / <sub>8</sub> " x D 5 <sup>3</sup> / <sub>16</sub> " x Dia Flange 6 <sup>1</sup> / <sub>16</sub> "
<b>Temperature Range</b>	-40°C - 70°C

### Architect and Engineer Specifications

Loudspeaker shall be Atlas Sound Model \_\_\_\_\_ (APF-15TU, APF-15TUC) or approved equal. Unit shall be double re-entrant type with compression driver mounted within waterproof housing. Audio power capability shall be 15 watts full range and shall be able to operate within an ambient temperature environment ranging from 70° C (158° F) to -40° C (-40° F). The unit shall meet UL frequency range requirements of 400 Hz - 4 kHz and shall have a sound pressure level of 102dB at 15 Watts, 10 ft. (3dB increment UL Rating). Voice coil impedance shall be 8 Ohms with sound dispersion angle of 95°. Unit shall have impedance selection via 7-position switch of 5000, 2500, 1300, 666, 333, 89 and 45 Ohms. Power taps shall be available at 1, 2, 3.8, 7.5, 15 Watts for 70V line and .48, .94, 1.8, 7.5, 15 watts for 25V line. Provision for flange or recessed mounting shall be by means of eight, 3/16" evenly spaced holes on a 6 1/8" diameter circle. Mounting kit Model MK-2 or FAMT-6 (not furnished) shall be used to mount loudspeaker to 8" diameter baffles. A cork-rubber gasket which provides a weather-tight seal between speaker flange and mounting surface shall be provided. Wiring terminals for amplifier output shall be fully enclosed and vandal-resistant adapter cover shall provide connection facilities for cable or conduit. Dimensions shall be Dia 5 5/8" x D 5 3/16" x Dia Flange 6 1/16".

### Features

- UL Listed for Fire Protective Signalling Systems
- High-Efficiency, 15 Watt Compression Driver
- Built In Vari-Tap® Transformer for Easy Impedance Selection
- Compatible with Round or Square Decorative Baffles
- Flange and Recessed Mounting Provisions for Use on Interior/Exterior Walls and Ceilings
- Vandal and Environment-Resistant Metal Construction for Outdoor or Indoor Use
- Recommended for High Intelligibility Paging, Intercommunication, and Signaling

### Applications

Communicate voice and electronic signals clearly in industrial, commercial, recreational, transportation and service facilities with Atlas Sound's UL-Listed APF Series loudspeakers. These environment-resistant units are engineered to meet life safety and general communication requirements and are ideal for indoor or outdoor applications where high-intelligibility paging or intercommunication are necessary.

### Description

APF Series voice control loudspeakers are equipped with a compression driver to provide up to 15 Watts of continuous power handling, superior intelligibility and audio conversion efficiency for maximum sound projection and penetration.

APF Series loudspeakers may be flush mounted or recessed directly into interior/exterior walls or ceilings. Recessed installation may be accomplished by mounting loudspeakers into a 5/2" deep opening or recessed enclosure. Units will facilitate Atlas Sound L20 Series grilles, enclosures and mounting rings (refer to ATS003855). Accessory mounting kits Model MK-2 or FAMT-6 can be used to mount loudspeakers into 8" diameter baffles.

Models include a built-in 25/70.7V Vari-Tap® transformer featuring a screw-driver adjustable, 7-position watt/impedance selection switch. Magnet assembly is equipped with self-aligning field replaceable diaphragm. Wiring terminals are protected with a vandal-resistant adapter cover for control equipment utilizing cable or conduit.

A built-in, 5 mfd capacitor is provided on Model APF-15TUC for line supervision. Model APF-15TU is not equipped with a capacitor. All units are finished in grey baked epoxy.

All models meet or exceed UL Standard 1480 for Fire Protective Loudspeakers and are capable of operating within an ambient temperature range of 70°C (158°F) to -40°C (-40°F). The all-metal, environment-resistant construction and re-entrant acoustic path assure protection against water, humidity, vermin, physical abuse, and corrosion. Models are also California State Fire Marshal Listed. Models with special modifications to meet other safety authorities are available. Contact factory.

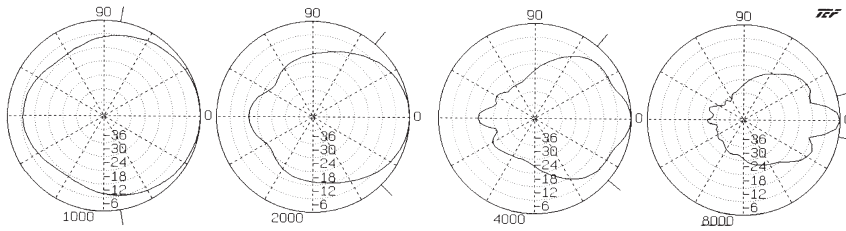
### Accessories

#### BX-3A



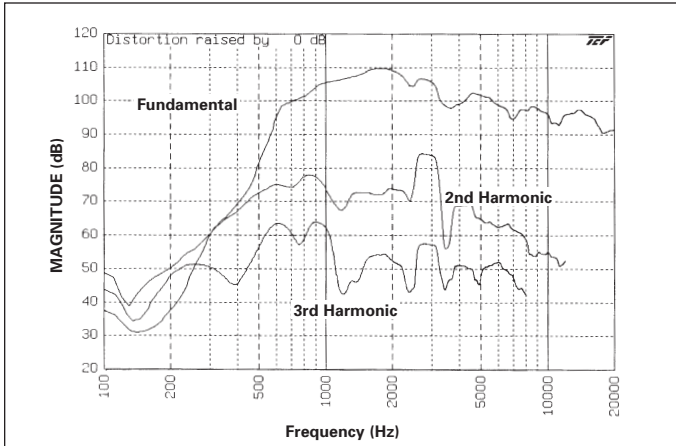
Vandal resistant cover plate for armored cable and conduit connection. Constructed of cast aluminum.

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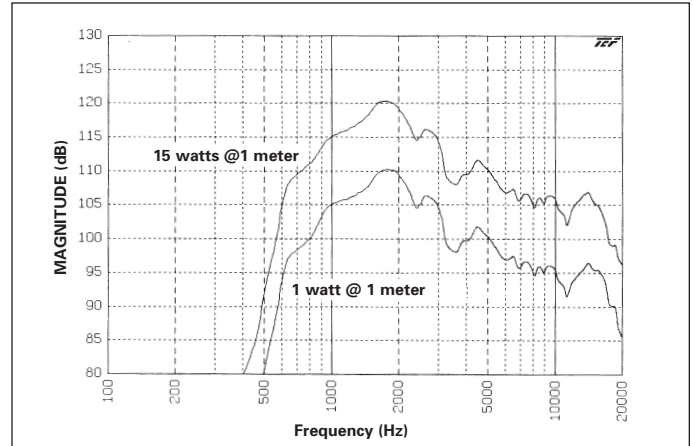


Frequency (Hz)	Lp	Q	Di	Beamwidth (Degrees)
1000	94.73	3.37	5.27	160
2000	91.37	7.30	8.63	95
4000	89.23	11.95	10.77	90
8000	83.54	44.29	16.46	25

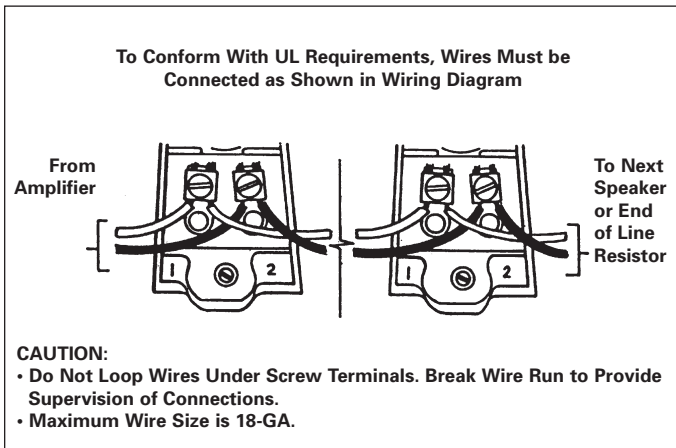
Polars Are Normalized To Zero On Axis



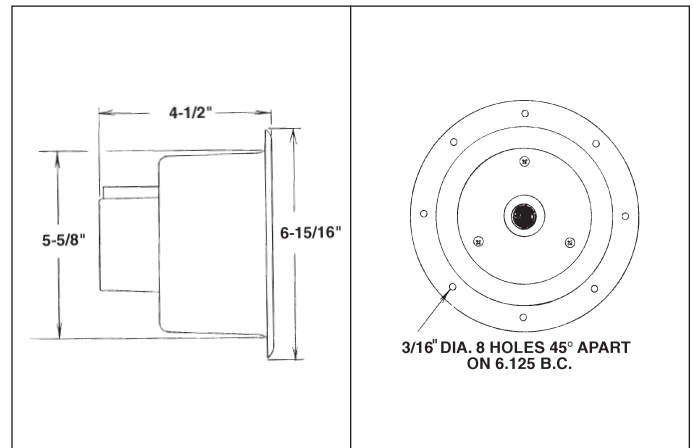
APF-15TU(C) (Harmonic Distortion - 1.5 watts @ 1 meter)



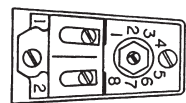
APF-15TU(C) Frequency Response



APF-15TU(C) Wiring Diagram



**CAUTION:** Amplifier output line connection is made to the screw terminals which are designed with wire retainers for insured reliability. Input terminals are numbered (#1 and #2) to maintain system phasing (#2 is the positive terminal). The wide and narrow slots adjacent to #1 and #2 are used for cable strain relief.



Vari-Tap® Selector Switch

AP-15TU(C) Vari-Tap® Control Connect Center Xfmr. Power Taps					
Switch Position	Impedance (Ohms)	Watts @ 25V	*dB 10ft	Watts @ 70.7V	*dB 10ft
1	5000	–	–	1	93
2	2500	–	–	2	96
3	1300	.48	90	3.8	96
4	666	.94	90	7.5	99
5	333	1.8	93	15	102
6	89	7.5	99	X**	X**
7	45	15	102	X**	X**

\* UL 3dB Increment Rating \*\* Do Not Use

Atlas Sound products are designed and tested in our well-equipped research laboratory which contains a fully anechoic chamber, complete analog Bruel & Kjaer measurement equipment and Techron® TEF 20® audio analyzer. Atlas Sound is proud to be a beta site for TEF software.