APF-15TU-USA

UL Listed 15 Watt Flange Mounting Voice Control Loudspeaker



APF-15TU-USA

Features

- 15 Watt High-Efficiency Compression Driver
- All Metal, Vandal and Environment-Resistant Construction for Indoor/ Outdoor Use
- 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
- Recommended for High-Intelligibility Paging, Intercommunication, and
- UL Certified, Safety Listed to UL1480
- UL Listed for Fire Protective Signalling Systems

Applications

Communicate voice and electronic signals clearly in industrial, commercial, recreational, transportation and service facilities with Atlas Sound's UL-Listed APF-15TU-USA loudspeaker. This environment-resistant unit is engineered to meet life safety and general communication requirements and is ideal for indoor or outdoor applications where high-intelligibility paging or intercommunication are necessary.

General Description

The APF-15TU-USA voice control loudspeaker is 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.

The APF-15TU-USA may be flush mounted or recessed directly into interior/exterior walls or ceilings. Recessed installation may be accomplished by mounting loudspeakers into a 51/2" deep opening or recessed enclosure. Units will work with 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.

The unit includes 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.

The unit is finished in grey baked epoxy. The APF-15TU-USA meets or exceeds 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. The unit is also California State Fire Marshal Listed. Additionally, the APF-15TU-USA complies with Buy American Act standards.

Specifications

Frequency

Response 600Hz - 14kHz (Nominal)

700Hz - 55kHz (±5dB)

Impedance 1, 2, 3.8, 7.5, & 15 Watts @ 70.7V

Dispersion 95° (-6dB, 2000Hz Octave Band)

Sensitivity 120dB at 15 Watts (Peak)

> 114dB at 15 Watts/1 Meter (Avg) 700Hz - 55kHz 104dB at 1 Watt/1 Meter (Avg) 700Hz - 55kHz

Operating Range -40 to 70C

Depth 5%₆" (131.78mm) Diameter 5%" (142.88mm) Weight 2.5 lbs (1.1kgs) Shipping Weight 5.00 lbs (2.27kgs) Finish Grey Baked Epoxy

Safety Listing UL 1480

Accessories

BX-3A



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

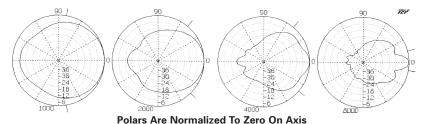


Architect and Engineer Specifications

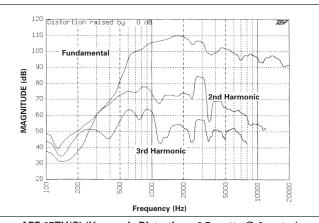
Loudspeaker shall be Atlas Sound Model APF-15TU-USA or approved equal. Unit shall be double re-entrant type with compression driver mounted within waterproof housing. Audio power capability shall be 15 watts full range and shall be able to operate within an ambient temperature environment ranging from 70° C (158° F) to -40° C (-40° F).

The unit shall meet UL frequency range requirements of 400Hz - 4kHz 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.

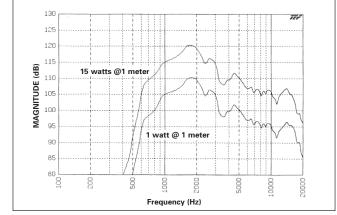
Mounting kit Model MK-2 or FAMT-6 (not furnished) shall be used to mount loudspeaker to 8" diameter baffles. A cork-rubber gasket which provides a weather-tight seal between speaker flange and mounting surface shall be provided. Wiring terminals for amplifier output shall be fully enclosed and vandal-resistant adapter cover shall provide connection facilities for cable or conduit. Dimensions shall be Dia 5 %" x D 5 %6" x Dia Flange 6 %6". Unit will comply with BAA (Buy American Act)



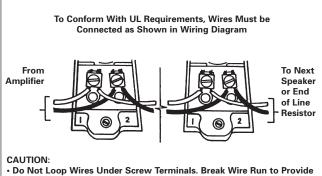
Frequency (Hz)	Lp	Q	Di	Beamwidth (Degrees)
1000	94.73	3.37	5.27	160
2000	91.37	7.30	8.63	95
4000	89.23	11.95	10.77	90
8000	83.54	44.29	16.46	25



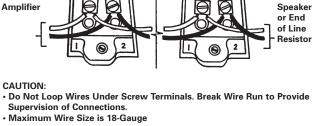
APF-15TU(C) (Harmonic Distortion - 1.5 watts @ 1 meter)



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 Tap							
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

