

# 60 AND 30 WATT **EXPLOSION-PROOF LOUDSPEAKERS**



**HLE-1 Driver** 



HLE-1 Driver mounted to HLE/MLE-30 Horn (order separately)



**HLE-1 Driver mounted to HLE/MLE-32** Horn (order separately)

#### **FEATURES**

- Explosion-Proof Loudspeakers for Signal and Communications Systems
- Listed by UL and CSA for Use in Hazardous/Combustible Environments (noted models)
- · Available with Internally Mounted, Factory-Installed Transformer
- Choice of 60 or 30 Watt High-Intelligibility Driver in Cast Aluminum Housing
- Efficiency of Reflex-Style Projectors with Wide Angle or Circular Sound Dispersion

## **APPLICATIONS**

Install HLE or MLE Series loudspeakers to efficiently and safely communicate in combustible areas. All drivers comply with the regulations governing electrical equipment at hazardous locations as set forth by the National Electric Code. Drivers are listed by UL and CSA (HLE Series only). They are recommended for paging, signal and voice communication in chemical processing, petroleum, natural resource exploration and atmospheres as listed in the chart below.

#### GENERAL DESCRIPTION

Series HLE and MLE loudspeakers are explosion-proof compression driver/horn assemblies engineered for high-efficiency voice and electronic signal communication in hazardous areas. Drivers, which are protected within a rugged die-cast aluminum housing, are available in 60-watt (HLE Series) and 30-watt (MLE Series) power handling versions. Models with T suffix include a factory-installed, internally mounted transformer (Note: To meet UL requirements transformer must be factory installed). All models are equipped with ½" conduit access and an adjustable mounting bracket.

Projector horns are available in two styles to meet dispersion requirements. Model HLE/MLE-30 is a high-quality, polycarbonate projector that creates a 120 ° x 60 ° pattern for wide area coverage. Model HLE/MLE-32 is a spun aluminum bell providing a 95 ° circular distribution emphasis.

Drivers and projector horns are ordered and shipped separately. For performance accuracy, specifications are listed for assembled configurations.

MODEL		POWER	FREQ.	SOUND				INTERNAL	ASSEMBLY
DRIVER	HORN	RATING	RESPONSE	LEVEL*	SENSITIVITY**	DISPERSION	IMPEDANCE	XFMR ("T" versions only)	SIZE
HLE-1(T)	HLE/MLE-30	60 Watts	250 Hz-	109dB	-18dBm	120° x 60°	16 Ohms	60 Watt	Driver & Horn
HLE-3(T)	HLE/MLE-30	Cont.	12 kHz	108dB				Model T-18	14"W x 6"H x 17½"D
MLE-1(T)	HLE/MLE-30	30 Watts	300 Hz	107dB	-21dBm	120° x 60°	8 Ohms	30 Watt	(35.6 x 15.2 x
MLE-3(T)	HLE/MLE-30	Cont.	14 kHz	106dB				Model T-20	44.5cm)
HLE-1(T)	HLE/MLE-32	60 Watts	190 Hz-	112dB	-16dBm	95°	16 Ohms	60 Watt	Driver & Horn
HLE-3(T)	HLE/MLE-32	Cont.	12 kHz	111dB				Model T-18	16½"Dia. x
MLE-1(T)	HLE/MLE-32	30 Watts	200 Hz-	110dB	-20dBm	95°	8 Ohms	30 Watt	(42 x 54.6cm)
MLE-3(T)	HLE/MLE-32	Cont.	10 kHz	110dB				Model T-20	,

Measured 1 Watt / 1 Meter

<sup>\*\*</sup> As microphone; re 10 dynes / cm2

UNDERWRITERS' LABORATORY LISTINGS								
DRIVER	CLASS / GROUP	FOR ATMOSPHERE CONTAINING:						
HLE-1(T)	Class 1 / Division 1 / Group C & D	Gas Atmospheres (Including Ethyl, Ether, Gasoline Naphtha, Alcohols)						
MLE-1(T)								
HLE-3(T)	Class 1 / Division 1 / Group B, C & D	Gas Atmospheres (Including Ethyl, Ether, Gasoline Naphtha, Alcohols,						
MLE-3(T)		Butane, Propane) plus, Hydrogen, Gas and Vapor, (Manufactured Gas)						

# Specifications subject to change without notice



1601 JACK MCKAY BLVD. / ENNIS. TEXAS 75119 U.S.A. TELEPHONE: (800) 876-3333 / FAX (800) 765-3435

AtlasSound.com

SL2-1421 © 2007 Atlas Sound Printed in U.S.A. 000202

## ARCHITECT AND ENGINEER SPECIFICATIONS

Explosion proof loudspeaker shall be UL Listed for use in specified hazardous locations and/or combustible atmospheres as classified by the National Electric Code.

UL approved compression driver for 60 Watt distributed application shall be Atlas Sound Model HLE-1T or HLE-3T with internally mounted 60-watt transformer Model T-18. Transformer shall have primary impedance taps at 2000, 1000, 500, 250, 125 and 85 with a 45 Ohm tap for 45 Ohm line use only. Corresponding power taps for 70.7V line use shall be 2.5, 5, 10, 20, 40 and 60. Secondary impedance shall be 4, 8 and 16 Ohms. For voice-coil circuit applications, UL Listed 60 Watt Model HLE-1, or HLE-3 with 16 Ohm voice coil shall be specified.

UL approved compression driver for 30-watt distributed application shall be Atlas Sound Model MLE-1T or MLE-3T with internally mounted 30 Watt transformer Model T-20. Transformer shall have primary impedance taps at 2500, 1300, 666, 333, 167, 89 and 45 Ohms.

Corresponding power taps for 70.7V line use shall be 1.8, 3.7, 7.5, 15, and 30. Power taps for 25V line shall be 1.89, 3.7, 7, and 15. Secondary impedance shall be 8 Ohms. For voice-coil circuit applications, UL Listed 30 Watt Model MLE-1, or MLE-3 with 8 Ohm voice coil shall be specified.

Driver and transformer, where applicable, shall be mounted within a
heavy, cast aluminum housing. Voice coils shall be field-replaceable.
Projector horn shall be a reflex type with polycarbonate re-entrant
section. It shall be Atlas Sound Model HLE/MLE-30 for 120 x 60 sound
dispersion or HLE/MLE-32 for 95 sound coverage. Driver and horn
assembly shall have a frequency response of with sensitivity
of(measured at 10 dynes / cm <sup>2</sup> ). Sound pressure level shall
be a minimum of(measured at 1W/1M).

Specifications subject to change without notice



1601 JACK MCKAY BLVD. / ENNIS, TEXAS 75119 U.S.A. TELEPHONE: (800) 876-3333 / FAX (800) 765-3435

AtlasSound.com

© 2007 Atlas Sound Printed in U.S.A. 000202 SL2-1421