

QUALITY IS OUR BUSINESS

Quality Design ...

featuring original developments and advancements to provide better products to do a better job.

Quality Materials ...

employing the best currently available for the job.

Quality Performance ...

resulting from Quality Design, Quality Materials.

Quality Manufacture ...

assuring customers maximum service life, minimum maintenance and genuine satisfaction with Leslie Co. products.

Quality Service ...

provided by trained and experienced personnel to supply prompt, reliable answers to inquiries and questions — to fill orders promptly and accurately — and to render customer service in the field when and where it is needed.

Dedication ...

to these fundamental principles has built the solid reputation which Leslie Co. enjoys today — and the present organization is dedicated to maintaining these principles in the interest of its customers.

LESLIE CO. WHISTLES

Each new stride in the development of industry and commerce has meant new demands on audio-signal equipment. Greater sound output with lower air consumption has been the continuing keynote for

signal improvements in both the industrial and transportation fields. Leslie Co. engineers have designed the most modern, complete line of air whistles available anywhere.

THE DECIBEL: A LOGARITHMIC UNIT

It is important to remember that the decibel (dB) is a logarithmic measure and when comparing the sound output of whistles, a direct numerical comparison cannot be made.

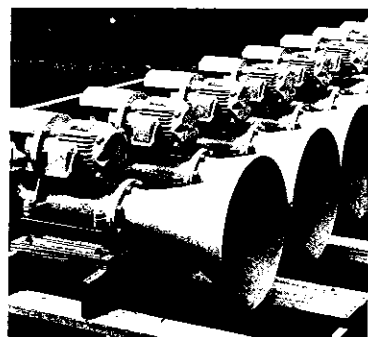
A whistle with an output of 110 dB will sound about twice as loud (93% louder) as one with an output of 100 dB. Each 10 dB increase in output increases loudness by 93%, or approximately double.

If frequency distribution, direction and air consumption remain constant, an increase of 10 dB in sound level would require the louder whistle to be twice as efficient at converting air energy into sound energy.

dB



Leslie Co.'s headquarters in Parsippany, New Jersey.



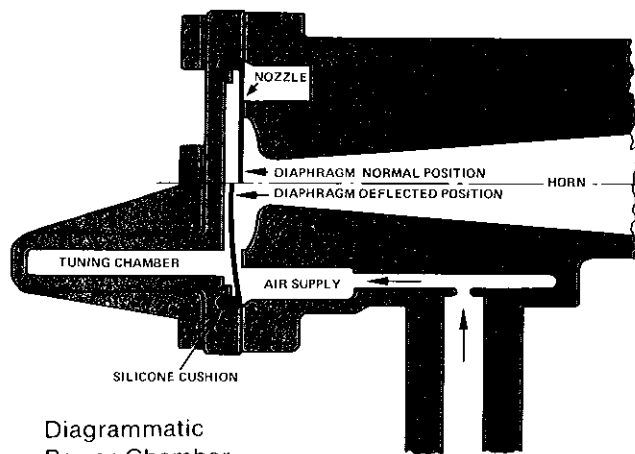
Leslie-Airchimes® ready for shipment.



R.S. SERIES Air Whistles

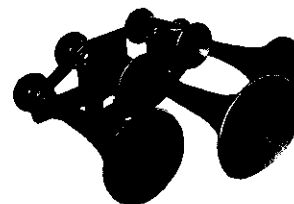
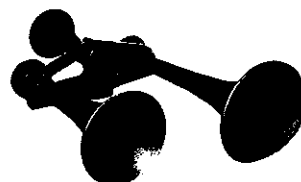
Originally designed to meet the needs of the railroads for an extremely low air consumption unit with increased sound output and a distinctive range of notes, the Leslie-Supertyfon has proved itself to be by far the most efficient of all air whistles of any design. The unmatched performance and economy of the railroad Leslie-Supertyfon is also available for industrial and marine applications.

- **Cushioned Diaphragm**—A silicone rubber ring molded to the outside edge of the diaphragm eliminates metal-to-metal rubbing and wear.
- **Reliable Operation**—Endurance test for over 2,000 blowing hours with no significant wear or change in performance.
- **Resistant to Freezing**—The new silicone cushioned diaphragm has been tested to -65°F .
- **Lowest Air Consumption**—Lower air consumption than other air whistles for the same sound output.
- **All Parts Standard and Interchangeable**—All Leslie-Supertyfon operating parts are precision made and fully interchangeable in all whistle sizes.
- **Sharp, Clear Signals**—At start and end of blast, readily adaptable for coding.
- **Electrical and Automatic Operation**—May be fitted with solenoid operating valves or automatic whistle controls.



Diagrammatic
Power Chamber

Single, two, three and five
chime whistles



Single tone and chime whistles
are available for marine use.
Single tone and quad units are
furnished for industrial
applications.

LESLIE KM SERIES

Whistles for Land or Sea

Developed to meet the most exacting demands of industrial and marine applications, Leslie-Airchime® KM Series air whistles provide high intensity, high quality sound.

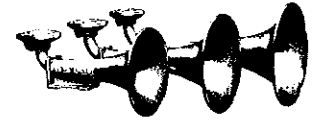
KM Series whistles are designed to permit the operating air to move the diaphragm in both directions, and require no adjustment over a wide range of varying air pressures. They feature a patented three-piece, hermetically sealed diaphragm that is designed to be in balance with all bell frequencies and to prevent freezing. The same size is used for all models. The diaphragm is made of thin, flexible stainless steel and operates within the elastic limit—assuring extended diaphragm life.

- Designed with horizontal bell and vertical diaphragm head so that moisture naturally drains away from diaphragm seat.
- Mathematically precise bell design amplifies sound while closely retaining fundamental frequency and natural harmonics.

- Clear, round notes of all whistles return sharp, concise echoes in fog conditions at sea.
- Rugged materials and long-life construction assure many years of trouble-free service.
- Interchangeable orifices permit proper operation with low air consumption at 30 to 600 psi.
- Lightweight materials and sturdy construction facilitate pole or mast installation.
- Manual, electrical or automatic operation available with Leslie whistle controls.

Leslie KM Series whistles can be supplied with heated enclosure to prevent freezing of the operating valve and whistle in extreme cold weather. These models are fitted with a combination solenoid and manual operating valve to make a complete unit and are designated as the ENC Series.

For further information, order Product Data Sheet 100/2.2.1



Leslie-Airchime KM Series Air Whistles

LESLIE ENC SERIES

Air Whistles with Heated Enclosure

A thermostatically-controlled heating element mounted on a cast aluminum junction box inside the enclosure provides the necessary heat to prevent freezing of the control valve and whistle. Electrical circuits for solenoid valve and heater element enter heater junction box through standard terminal tube connections.

The enclosure is constructed of heavy duty lightweight aluminum, primed and painted to marine

standard. It is securely attached to the whistle body flange to become a self-contained integral part of the whistle. The top half of the enclosure is insulated and hinged to allow accessibility to all parts that may require servicing.

When specified, a built-in pressure switch for operating a whistle light can be supplied. For further information, order Product Data Sheet 100/2.2.2.



Leslie ENC Series Air Whistle

LESLIE EP SERIES

Safe, Reliable Electrically Powered Whistles

- High signal power and clear distinct sound emission for unexcelled acoustic efficiency.
- Simple, solid construction with fewer moving parts for lower installation and maintenance costs.
- Self-draining cylinder and crankcase arrangement for reduced corrosion and extended trouble-free life.
- Low temperature automatic voltage compensation and anti-condensation heating of motor available for reliable operation even in extreme arctic temperatures.

EP Series Motor Control with cold weather feature is supplied as standard with each EP whistle. The motor controller is a drip-proof NEMA 12 design and includes terminal lugs with compression plates, eliminating turning with clamping forces. A removable shield is also included for the terminal cover which meets U.S. Coast Guard requirements.

The entire unit meets U.S. Electrical Code requirements.

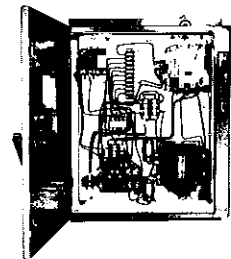
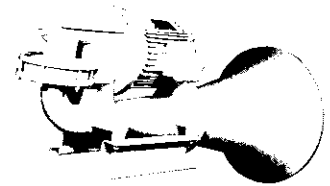
The Leslie-Airchime® EP-90 and EP-130 are high powered whistles designed and engineered to meet the demand for packaged, self-contained whistles requiring only an electric supply for operation.

Leslie-Airchime EP Series whistles are piston operated. Neither piston nor cylinder requires lubrication, and no oil is used in the crankcase. Consequently, the free-running piston is not affected by cold weather oil drag.

The EP design eliminates the need for outer bearings and all other bearings are sealed to eliminate constant servicing. Gear, crankshaft, bearings and housing form a complete assembly that can be removed from the crankcase as a unit. A one-piece crankshaft eliminates critical two-piece alignment problems.

For further information order Product Data Sheet 100/6.2.1.

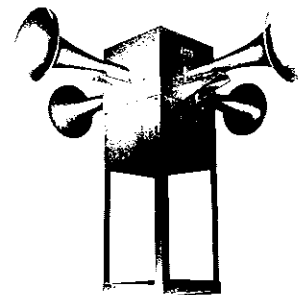
Both the EP-90 (top) and the EP-130 (middle) offer bells constructed of fine grain copper-free marine aluminum.



EP Series Motor Control

WHISTLES WITH ALL-AROUND SOUND COVERAGE

- Four-direction whistle arrangements provide all-around sound coverage.
- Self-contained enclosure assures trouble-free operation in extreme cold weather.
- Unique air cushioning reduces diaphragm fatigue and nozzle wear.
- Mathematically precise bell design amplifies sound while closely retaining frequency and natural harmonics.
- Rugged materials and long-life design provide many, many years of dependable service.



Leslie-Airchime KM-135 Whistles

AUTOMATIC WHISTLE CONTROLS

- Immediate cut-off when "at-will" signal is used.
- Operating mechanism exclusive with Leslie-Tyfon® automatic whistle control.
- Maximum convenience and safety for automatic reset.
- Designed to eliminate cams and waver, slip or bounce when contact is made or broken.
- Unique make-and-break device eliminates danger of failure.
- Available from the Leslie Quick Delivery System for fast replacement if needed.

Leslie-Tyfon Automatic Whistle Controls prevent fog warning signals from interfering with an "at-will" signal by an immediate cut-off of the timer whenever an "at-will" passing signal is given. Manual reset of automatic signalling avoids an automatic blast on the heels of an "at-will" signal — important for avoiding confusing signals. The "at-

will" switches, of course, permit single blasts at any time.

The operating mechanism of the Leslie-Tyfon automatic whistle control has proven itself in rigorous tests. Standard automatic controls placed in test service are operating after more than 16,000 hours of uninterrupted service and are still "blowing" continuously.

Starting and resetting are governed by the pushbutton switch. Stopping is accomplished from any "at-will" switch by momentarily moving the lever of the switch to neutral position. Reset for automatic can only be made at the control box, assuring maximum convenience and safety with elimination of confusion.

An automatic whistle control is also available for direct current, consisting of a timer box with gearshift type code selector and a separate junction box with "at-will" and automatic switches.

Automatic controls for repeating coded signals in fog can be furnished as follows:

VESSEL	CODES IN STANDARD TIMERS
Ocean Going	One 5-second blast every 1 or 2 minutes.
Great Lakes	1-sec. blast, 1-sec. interval; 1-sec. blast, 1-sec. interval; 1 sec. blast, 55-sec. interval.
Inland Waterway	One 5-second blast every minute.

WHISTLE ACCESSORIES

Type J8210D3MO Combination Manual and Solenoid Whistle Valve provides manual or electric operation of all KM Series whistles. Furnished as standard with ENC Series units. Available in ¾" size only. To order state voltage and operating pressure. For other air whistles a standard ASCO solenoid can be furnished as an accessory item (not shown).

The Leslie "at-will" switch is a rugged unit constructed of cast bronze and is designed to provide single blasts at any time. An

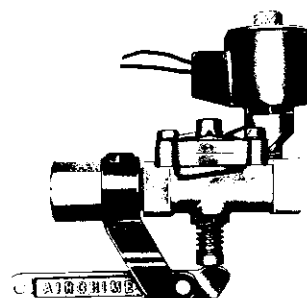
exclusive feature of the Leslie "at-will" switch provides immediate cut-off of automatic signalling whenever the "at-will" switch is employed. Manual reset of automatic signals avoids an automatic blast on the heels of an "at-will" signal. "At-will" switches are available for either bulkhead or panel mounting.

Type AW-121 Manual Whistle Valve unit provides manual or standby operation of all KM Whistles.

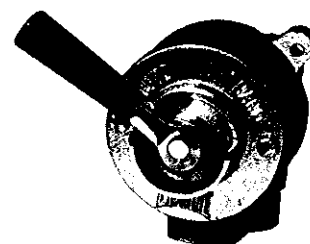
For further information, order Product Data Sheet 100/2.2.4.



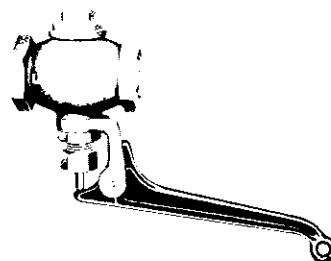
Automatic Whistle Control



Combination Manual and Solenoid Whistle Valve for KM Series Whistles.



"At Will" Switch



Manual Whistle Valve for KM Series.

WHISTLE SELECTION CHART ¹

9

RAILROAD				MARINE		INDUSTRIAL			WHISTLE CONSTRUCTION			SPECIFICATIONS													
OPERATING MEDIUM	WHISTLE DESIGNATION	TRAINS	PASSENGER TRAINS	FREIGHT TRAINS	YARD & SWITCHING TRAINS	VESSEL SIZE IN METERS	MAIN PLANT SIGNAL	FIRE ALARM	CALL OR DEPT. SIGNAL	INTRA-PLANT SIGNAL	Bronze Bell	ALUMINUM BELL	BRONZE DIAPHRAGM HOUSING	ALUMINUM DIAPHR. HOUSING	MAY BE FITTED WITH LESLIE TYFON SOL.	MAY BE FITTED W/ASCO SOLENOID	FREQUENCY CYCLES PER SEC.	* DECIBEL RATING 100 FT. WITH 100 PSI SUPPLY	DECIBEL RATING 1 METER WITH 100 PSI SUPPLY	AUDIBLE DISTANCE CALM WEATHER 100 PSI SUPPLY	STATUTE MILES	OPERATING MEDIUM CONSUMPTION	MAXIMUM PRESSURE	MINIMUM PRESSURE	DIAPHRAGM DIAMETER INCHES
AIR	RS-55				●							●		●		●	●	554	110.9	140.9	1½ to 2	19.5 SCFM	140	40	3
AIR	RSM-55					Less than 75		●	●	●		●		●		●	●	554	113.2	143.2	1½ to 2	37 SCFM	100	40	3
AIR	RS-48				●							●		●		●	●	480	110.9	140.9	2-2½	19.5 SCFM	140	40	3
AIR	RSM-48					Less than 75		●	●	●		●		●		●	●	480	113.2	143.2	2-2½	37 SCFM	100	40	3
AIR	RS-44				●							●		●		●	●	440	110.9	140.9	2-2½	19.5 SCFM	140	40	3
AIR	RSM-44					Less than 75		●	●	●		●		●		●	●	440	113.2	143.2	2-2½	37 SCFM	100	40	3
AIR	RS-37				●							●		●		●	●	370	110.9	140.9	2½-3	19.5 SCFM	140	40	3
AIR	RSM-37					Less than 75		●	●	●		●		●		●	●	370	113.2	143.2	2½-3	37 SCFM	100	40	3
AIR	RS-31				●							●		●		●	●	311	110.9	140.9	3-3½	19.5 SCFM	140	40	3
AIR	RSM-31					Less than 200		●	●	●		●		●		●	●	311	113.2	143.2	3-3½	37 SCFM	100	40	3
AIR	RS-25				●							●		●		●	●	255	110.9	140.9	4-5	19.5 SCFM	140	40	3
AIR	RSM-25					Less than 200		●	●	●		●		●		●	●	255	113.2	143.2	4-5	37 SCFM	100	40	3
AIR	RS-2 CHIME			●	●							●		●		●	●	NOTE 2	112.5	142.5	2½-3	32 SCFM	140	40	3
AIR	RS-3 CHIME			●	●							●		●		●	●	NOTE 2	114	144	3-3½	49 SCFM	140	40	3
AIR	RS-4 CHIME			●	●							●		●		●	●	NOTE 2	114.5	144.5	3½-4	55 SCFM	140	40	3
AIR	RS-5 CHIME			●	●							●		●		●	●	NOTE 2	115	145	4-4½	60 SCFM	140	40	3
AIR	RSM-25-4						●					●		●		●	●	255	118.5	148.5	4-5	105 SCFM	100	40	3
AIR	RSM-55-4						●					●		●		●	●	554	118.5	148.5	1½-2	105 SCFM	100	40	3

TO SELECT

Whistle designation is indicated by letters A for air, E for optional electrical solenoid and numbers indicating diaphragm diameter in millimeters. Air whistles have a second number to indicate

frequency. For example: AE-200-156 is an air whistle with an electrical solenoid, a 200 mm diaphragm diameter and a frequency of 156 cps.

TO SPECIFY

RS Series Air Whistles, indicate Leslie-Supertyfon or specify: "Diaphragm type utilizing a single leaf stainless steel diaphragm with molded-on silicone cushion ring."

Large Open Air Whistles, indicate Leslie-Airchime KM series or specify: "Diaphragm type with an electrical and/or manual operating valve, designed so that moisture naturally drains away from diaphragm seat. Bell cast in Marine Aluminum, diaphragm head cast bronze."

Large Enclosed Air Whistles, indicate Leslie-Airchime ENC series or add to the above specification: "designed with a thermostatically

controlled electrical heater and enclosure and designed so that diaphragm is air cushioned on both sides."

Electric Piston Whistles, indicate Leslie-Airchime EP-90 or EP-130, or specify: "Electrically powered piston type with unlubricated piston and cylinder, and oil-free crankcase. No outer bearings and all other bearings to be sealed. Motor windings thermistor protected against overheating and two external thermostats to provide control for motor heating and speed control. The motor control must have built-in disconnect and locking facility."

TO ORDER

When ordering, be sure to specify Leslie whistles and to include the following:

- Model and size of whistle (see whistle designation on chart), service or application.
- Operating medium — Air or Electric.
- Minimum and maximum operating pressures.
- Type of operation — Manual, Manual/Electric, Electric.
- For electrical operation, specify

voltage available, A.C. or D.C., frequency and manual or automatic control requirements.

- When ordering for industrial plants, include a sketch showing buildings, surrounding obstructions, area to be covered, general weather conditions and prevailing winds.
- When ordering parts always use part reference number from the applicable engineering drawing of the equipment, and quantity of each part.