INSTRUCTIONS

KAHLENBERG K-380 AIR HORN

1. GENERAL DESCRIPTION OF THE HORN: The Kahlenberg K-380 Air Horn is of the diaphragm type and consists of three principal parts, the horn body assemblies, spun brass projectors, and common mounting bracket. It is manufactured entirely of corrosion resistant materials and provides a high decibel level output with extremely low air consumption.

2. INSTALLATION:

WARNING: These air horns produce extreme loudness, which can cause permanent hearing damage. All personnel involved in the operation and maintenance of this equipment must wear hearing protectors when testing near horns. Permanent hearing loss may occur if testing near the horn without hearing protection.

Unlike many marine horns, it is not necessary to mount the K-380 Air Horn at an angle to promote drainage of water. Water will not damage the interior components of the horn.

a.) Using the reference drawing 2-5502 attached, measure and drill holes as required for mounting the horn mounting bracket/manifold.

b.) Pre-fit the horn with supplied stainless steel threaded studs to verify length of the studs is adequate. Supplied studs are M6 thread x 40mm long and should be suitable for most installations. Suitable M6 fasteners can be substituted if required.

c.) 1/8" I.D. PVC tubing is used to connect the barbed air fittings under the base of the K-380 Horn to a suitable solenoid valve or compressor kit. This tubing must be connected before the horn is permanently installed on the deck. Typically these items including the PVC tubing are supplied by Kahlenberg. See compressor or valve instructions included with these items for details.

d.) Once air tubing is connected, apply a silicone sealant on the underside of the horn base, to provide a watertight seal around the base of the horn.

e.) Pass the PVC tubing through the center air hole and fasten the horn from the underside of the deck, removing excess silicone sealant after installation.

When the air horn is installed, or when the air connections are opened, or when air pipes are altered, care must be taken to thoroughly blow out all chips, water, and dirt from the lines before they are connected to the whistle valve. If air is to be supplied to the horn from an oil lubricated compressor system, a strainer/filter should be installed in the air line prior to the solenoid operating valve such as Kahlenberg model V-170. If an oil-less compressor is used such as Kahlenberg P449-20, P449-21, or P449-22, no strainer or filter is necessary for the air supply.

NOTE: Maximum air pressure for the 1/8" PVC Clear tubing if supplied by Kahlenberg is 100 p.s.i.. If an air supply other than the above Kahlenberg P449 Series is used, care must be taken not to exceed this pressure rating or the tubing may rupture or release from the barbed fittings.

IMPORTANT: To avoid a "Tail" (slow cut off) on the whistle blast, the length of pipe or tube between horn and whistle valve or air source should be as short as possible, preferably not over 36 inches, (1M).

3. CARE OF AIRHORN: The airhorn should be inspected externally at regular intervals for loose cap screws, gasket leaks, etc. Internal inspection is not required unless the horn does not blow with its normal tone. In such case, determine which of the horns, if the horn is of the multiple type, is off tone, and remove the cap screws holding the cover on the back of the horn body or chamber. Carefully remove and inspect the diaphragm and O-Rings, clean these parts and and wipe out any water and dirt which may have accumulated in the horn chamber and make sure that the air passage hole, which is small in size and through which the air enters the horn chamber, is not blocked or partially blocked by dirt or chips. If necessary, check the air passages through the bracket and other parts of the horn and blow them out with air.

If the diaphragm is bent, cracked, or otherwise damaged, it should be replaced with a new one. Inspect the narrow sounding rim in the body against which the diaphragm presses for burrs or chips embedded on this narrow and important face. Avoid any damage to this face. Do not file or scrape this surface. Inspect also the wide seat in the body against which the rim of the diaphragm fits. See that it is clean, smooth, and free from dirt and embedded chips because the diaphragm must seat against this uniform and true. To reassemble the horn, put in one O-ring, the diaphragm, and the second O-ring carefully and then put the cover on, inserting the series of cap screws around the rim of the cover and pulling these screws down carefully and evenly. Care should be taken in not overtightening the screws because they are very small and the threads strip easily.

4. CLEANING OF CHROME PLATED AIR HORNS:

Chrome plated air horns require special care of the exterior surfaces. Especially when operating in saltwater environments, the horn should be routinely washed down with fresh water once a week, or as soon as possible after salt water has been in contact with the finish. This practice will drastically improve the lifetime of the finish. Water entering the interior of the horn will not damage the unit, however, directing a stream of water directly into the sound producing diaphragm may briefly clog the horn with water.

Only if saltwater spots cannot be removed with a soft cloth, soap, and fresh water, the chrome should be polished using a non-abrasive polishing product such as "Flitz" or "Simi-chrome" chrome polish. After polishing or routine cleaning, a pure carnauba car wax or polymer can be applied also. Be sure to buff off excess wax immediately.

BE CERTAIN NOT TO USE A WAX CONTAINING ABRASIVES SUCH AS COLLINITE #850 METAL WAX. OBVIOUS ABRASIVE SCRATCHES ON CHROME FINISH WILL VOID ALL WARRANTY CLAIMS.

5. WORKING PRESSURE: For Model K-380, the working pressure range is approximately 20 to100 lbs. per square inch. However, if air pressure to the horn exceeds these working pressure ranges, a reducing valve between air tank and horn can be installed to reduce the pressure.

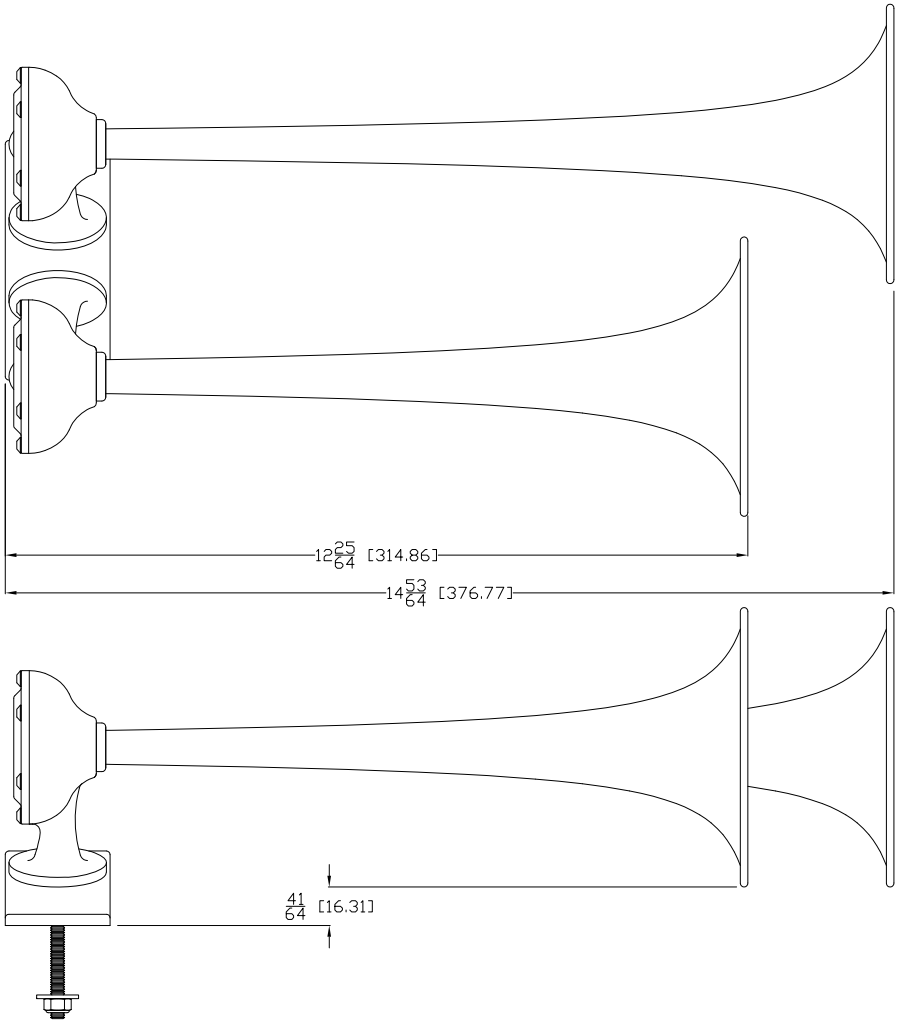
6. ORDERING REPAIR PARTS: When ordering air horn repair parts, refer to the Air Horn Parts List. Give quantity wanted, the part number, name of part and the model number of the horn. The model number is etched or printed on the stainless nameplate on the back of each horn assembly.

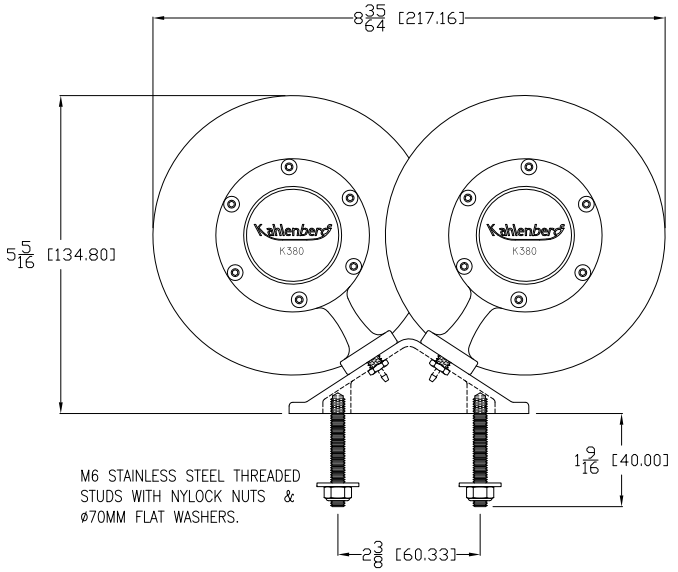
For Kahlenberg Customer Service please contact us at:

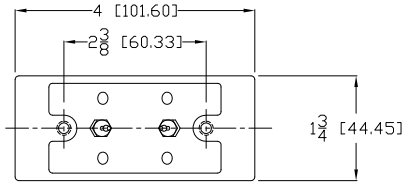
Ph: 920-793-4507
Fx: 920-793-1346
info@kahlenberg.com
www.kahlenberg.com

3–6419

REV.	BY	DATE	DESCRIPTION	APP'D.
A	ZN	02/15/08	ADDED TECHNICAL DETAILS	EMK
B	ZN	04/07/11	ADDED NEW MANIFOLD DESIGN	EMK







TECHNICAL DETAILS
Frequency: 385 & 462 Hz
S.P.L. Output: 128.4 dB (A) @ 1 meter
Air Consumption: 1.6 C.F.M.
Operating Pressure: 15 to 150 p.s.i.
Electrical Power: 12 Volt D.C. (Air Compressor)
Material: Spun Brass and Cast Bronze
Net Weight: 3.5 lbs.
Shipping Weight: 6.0 lbs.
Finish: Kahlenberg Chrome Plate Finish
Certification: NMMA Certified A–23

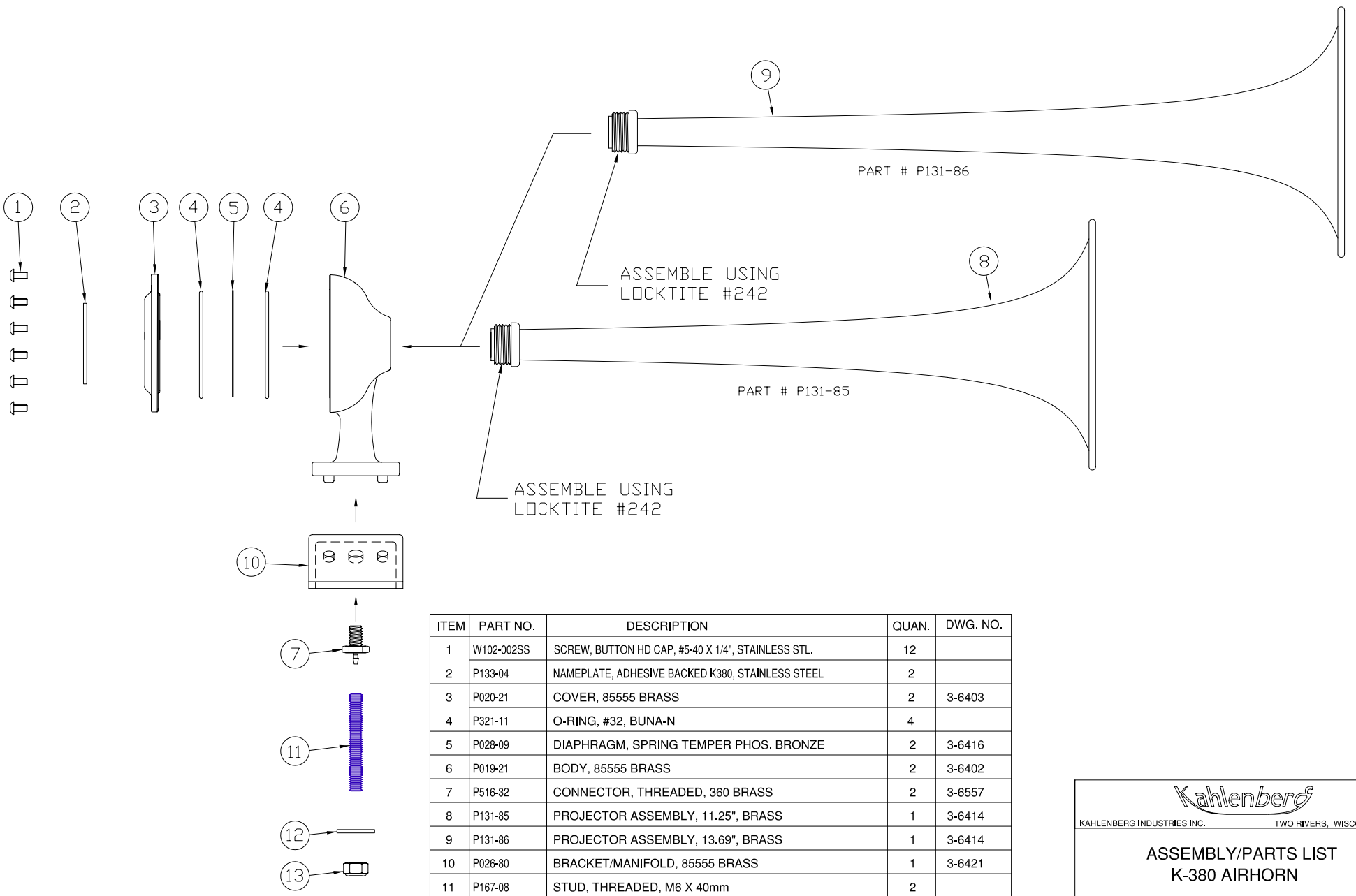
Kahlenberg
KAHLENBERG INDUSTRIES INC. TWO RIVERS, WISCONSIN 54241

OUTLINE DIMENSIONS
K–380 AIRHORN

DR.	DATE	CKD.	SCALE	DRWG. NO.	REV.
ZJN	10/23/06	EMK	N.T.S.	3–6419	B

3-6415

REV.	BY	DATE	DESCRIPTION	APP'D.
A	ZJN	08/07/07	ADDED ITEM #10 P026-80	EMK
B	EMK	01/06/08	ADDED MATERIAL REFERENCES	EMK
C	ZJN	01/28/10	ITEM 7 WAS P516-17	EMK
D	ZJN	04/28/11	ADDED ITEMS 11-13	EMK



ITEM	PART NO.	DESCRIPTION	QUAN.	DWG. NO.
1	W102-002SS	SCREW, BUTTON HD CAP, #5-40 X 1/4", STAINLESS STL.	12	
2	P133-04	NAMEPLATE, ADHESIVE BACKED K380, STAINLESS STEEL	2	
3	P020-21	COVER, 85555 BRASS	2	3-6403
4	P321-11	O-RING, #32, BUNA-N	4	
5	P028-09	DIAPHRAGM, SPRING TEMPER PHOS. BRONZE	2	3-6416
6	P019-21	BODY, 85555 BRASS	2	3-6402
7	P516-32	CONNECTOR, THREADED, 360 BRASS	2	3-6557
8	P131-85	PROJECTOR ASSEMBLY, 11.25", BRASS	1	3-6414
9	P131-86	PROJECTOR ASSEMBLY, 13.69", BRASS	1	3-6414
10	P026-80	BRACKET/MANIFOLD, 85555 BRASS	1	3-6421
11	P167-08	STUD, THREADED, M6 X 40mm	2	
12	W078-041SS	WASHER, FLAT, 6.4mm ID X 18mm OD	2	
13	W095-006SS	NUT, HEX, NYLOCK, M6	2	

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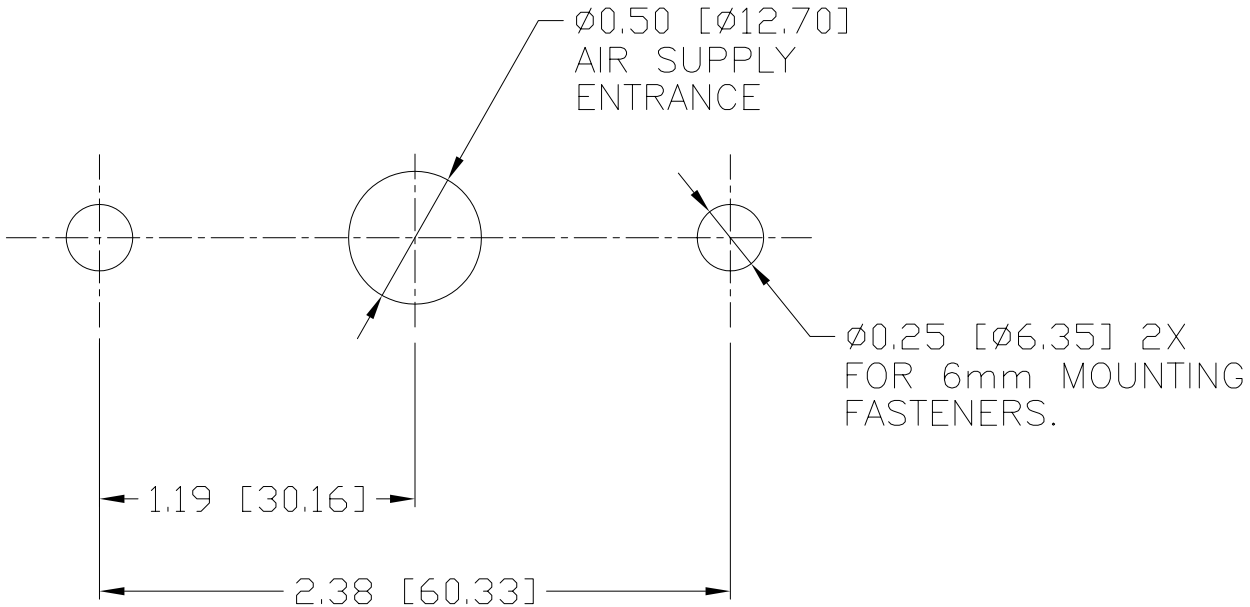
ASSEMBLY/PARTS LIST
K-380 AIRHORN

DR.	DATE	CKD.	SCALE	DRWG. NO.	REV.
ZJN	09/26/06	EMK	N.T.S.	3-6415	D

2-5502

REV.	BY	DATE	DESCRIPTION	APP'D.



NOT TO SCALE

TOLERANCES UNLESS OTHERWISE SPECIFIED			
DECIMAL	FRACTIONAL	ANGULAR	FINISH
.X ±.015" .XX ±.010" .XXX ±.005"	±1/32"	± 1 DEGREE	√ = 32 RMS

Kahlenberg

KAHLENBERG INUSTRIES INC. TWO RIVERS, WI. U.S.A.

DETAILS
DIMENSIONS FOR MOUNTING K-380 AIRHORN

DR.	DATE	CKD.	SCALE	DRWG. NO.	REV.
ZJN	09/27/11	EMK	N.T.S.	2-5502	

Confirmation of Product Type Approval

Company Name: KAHLENBERG INDUSTRIES, INC.

Address: 1700 12TH STREETP.O. BOX 358 WI 54241 United States

Product: Ship Sound Signal, Horn

Model(s): K-460, K-380, S-0A/S-0A-T, D-0A & T-0A

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	19-HS1910115-PDA	10-OCT-2019	08-OCT-2024
Manufacturing Assessment (MA)	19-SB3743433	15-OCT-2019	14-OCT-2024
Product Quality Assurance (PQA)	NA	NA	NA

Tier
3

Intended Service
Marine Applications - For use Onboard Marine Vessels of all Types of Less Than 20m (65ft) LOA

Description
Air Operated Sound Signaling Device.

Ratings
Frequency: 250-700 Hz;

Sound Pressure Level: (1/3) octave at 1m): > 120 dB;

See attached "pdf" for Technical Data.

Service Restrictions
Marine Vessels of all Types of Less Than 20m (65ft) LOA.

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined..

Comments
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Satisfies the International Regulations for Preventing Collisions at Sea, 1972, Rules 32, including Annex III paragraphs a through d.

Notes, Drawings and Documentation

14-HS127 MULTIPLE PDAs, Request for PDA Revalidations

Declaration of Conformity

Supporting Data (previous task):

Dwg No. 3-6456 Rev. A, 3-6419 Rev. B, 3-6236 Rev. A, 3-6751, 3-6237 Rev. A, 3-6242 Rev. A;

Term of Validity
This Product Design Assessment (PDA) Certificate remains valid until 08/Oct/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules
Rules for Conditions of Classification, Part 1 2019: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2019 Marine Vessels Rules: 4-8-3/Table 2

2019 Steel Vessels Under 90 Meters (295 feet) in Length: 4-6-3/Table 1;

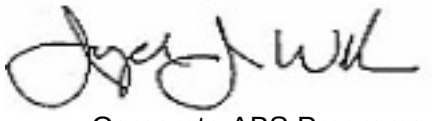
International Standards
International Regulations for Preventing Collisions at Sea, 1972, (Consolidated 2003)

EU-MED Standards
NA

National Standards
NA

Government Standards
UK Maritime and Coastguard Agency (MCA)

Other Standards
NA



Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 02-Dec-2019 11:07

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the “Intended Service” details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.

