According to COLREGS - International Regulations for Preventing Collisions at Sea, 1972, each vessel of 12m or more in length shall be provided with a whistle - sound signalling appliance capable of producing sound characteristic, which is in accordance with technical specification of these Regulations. The ship's whistle is used for giving manoeuvring and warning signals and signals in restricted visibility, therefore it's often called "fog horn".

Annex III of COLREGS gives detailed technical specification of the whistle - frequencies, signal intensity, range of audibility, positioning etc. depending on ship's length. Overview is given in below Table 1.1

<table>
<thead>
<tr>
<th>Length of vessel (m)</th>
<th>Fundamental frequency (Hz)</th>
<th>min. 1/3-octave Sound Pressure level at 1m (dB)</th>
<th>Audibility range (Nautical Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;200</td>
<td>70 - 200</td>
<td>143</td>
<td>2</td>
</tr>
<tr>
<td>75 - 200</td>
<td>130 - 350</td>
<td>138</td>
<td>1.5</td>
</tr>
<tr>
<td>20 - 75</td>
<td>250 - 700</td>
<td>130</td>
<td>1</td>
</tr>
<tr>
<td>&lt; 20</td>
<td>250 - 700</td>
<td>120</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Table 1.1  COLREGS 1972, Technical details of Ship's whistles

INESLEH's ship's whistle range includes electronic sirens type ITES-MS-120, used for vessels less than 20 m in length and air horn type ITAS, used for vessels 20 - 75 m in length. Both types are type approved by CRS.

Electronic sirens type ITES-MS-120

ITES-MS-120 series is specially designed for marine application. It is developed as a separate part of already proven ITES series of electronic sirens, which are used for more than 20 years, as a part of INSELTEH's signalling system. With sound pressure level of 120dB and basic frequency of 685Hz, the siren meets IMO and COLREGS requirements for ships' whistle for vessels less than 20 m. Optional features like police tone and loudheiler give it a possibility to be used in different type of vessels and make it a perfect solution in wide range of applications.

Available versions are:
- ITES-MS-120 (ship's whistle)
- ITES-MSP-120 (ship's whistle and police siren)
- ITES-MSL-120 (ship's whistle and loudheiler)
- ITES-MSPL-120 (ship's whistle, police siren and loudheiler)

For versions with loudheiler, loudheiler control panel (with microphone and siren's control buttons) is delivered additionally. Otherwise, the siren is activated by external push-buttons.

See block diagram drawing at Picture 1.1
Air horn type ITAS

Air horn type ITAS, according to COLREGS, is used as ship's whistle for vessels 20 - 75 m in length.

For ships with compressed air on board (dry and clean instrument air, 3 - 4,5 bar), set includes:
- whistle with support
- electro-magnetic valve
- push-button for siren activation

For ships without compressed air, additionally:
- air tank with accessories
- air compressor
- relay 40A, 24VDC

For generating COLREGS signals, INELTEH's Signal controller type ITSC-01 can be ordered additionally.

ORDERING INFORMATION

Inelteh's electronic siren

Basic type
- MS - 1 input - marine siren (ships' whistle)
- MSL - 1 input - marine siren (ships' whistle) with loudheiler
- MSP - 1 input - marine siren (ships' whistle) with police tone
- MSPL - 1 input - marine siren with loudheiler and police tone

Power supply
- 24VDC / 115VAC / 230VAC

Sound pressure level (dB)
- MS = 120dB (for ships LOA up to 20m)
- MSPL = 130dB (for ships LOA 20-75m)

Inelteh's air siren (air horn)

Sound pressure level (dB)
- ITAS = 130dB (for ships LOA 20-75m)

Number of air whistles
- (empty) - one air whistle
- 2 = two air whistles (two directions - mostly used on ferries)

Air supply
- K - with air preparation (compressor, tank)

Power supply
- 12VDC / 24VDC

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