

TECHNICAL MANUAL

H300 Series



SINCE 1922

Den Haan Rotterdam

WARNING!

- Wear ear protection when handling air horn.



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1. TECHNICAL DATA

Application:

- Sea-going vessels with a length of less than 75 metres
- Rhine and European inland navigation vessels

Type tested by:

TNO, Dutch institute of Applied Physics

Materials:

- Housing: solid brass - chromium plated
- Membrane plate: Phosphor bronze

Sound pressure level:

- H300 120,2 dB(A)
- H310 125,0 dB(A)
- H320 130,9 dB(A)
- H330 132,6 dB(A)

Fundamental frequency

- H300 228 Hz
- H310 216 Hz
- H320 184 Hz
- H330 216 Hz

Air consumption:

1,5-2 l/s @ 1-2 Bar

Protection class:

IP X6

Operation temperature:

-25°C up to +55°C

Mounting:

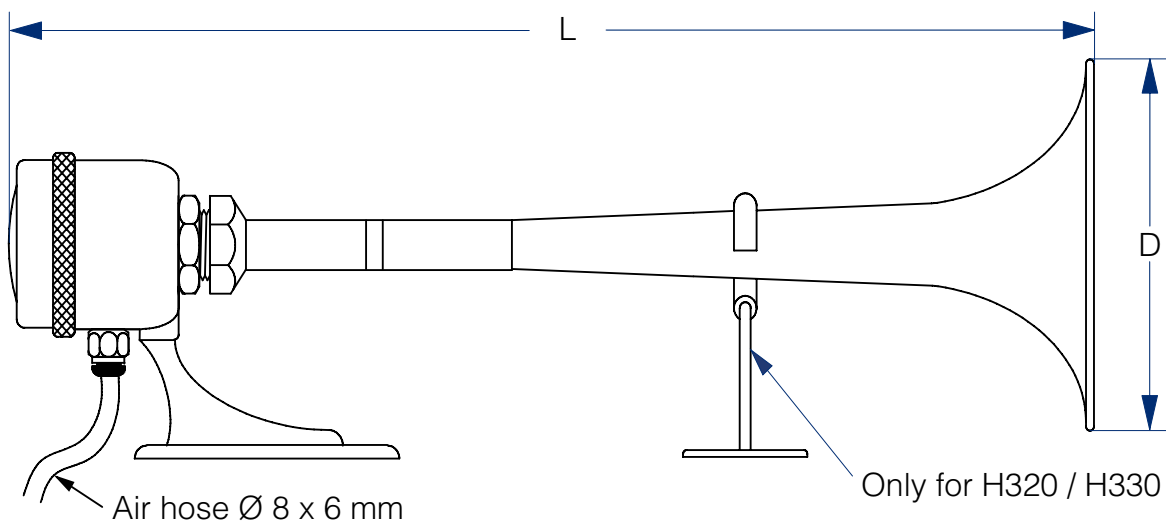
Base

Connection:

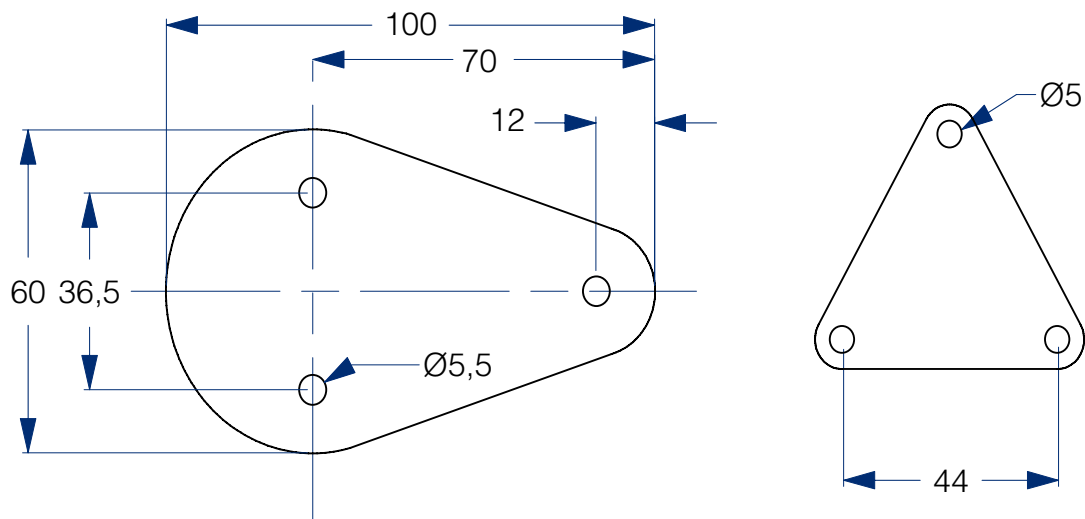
2. PRODUCT PHOTOS



3. DIMENSIONS

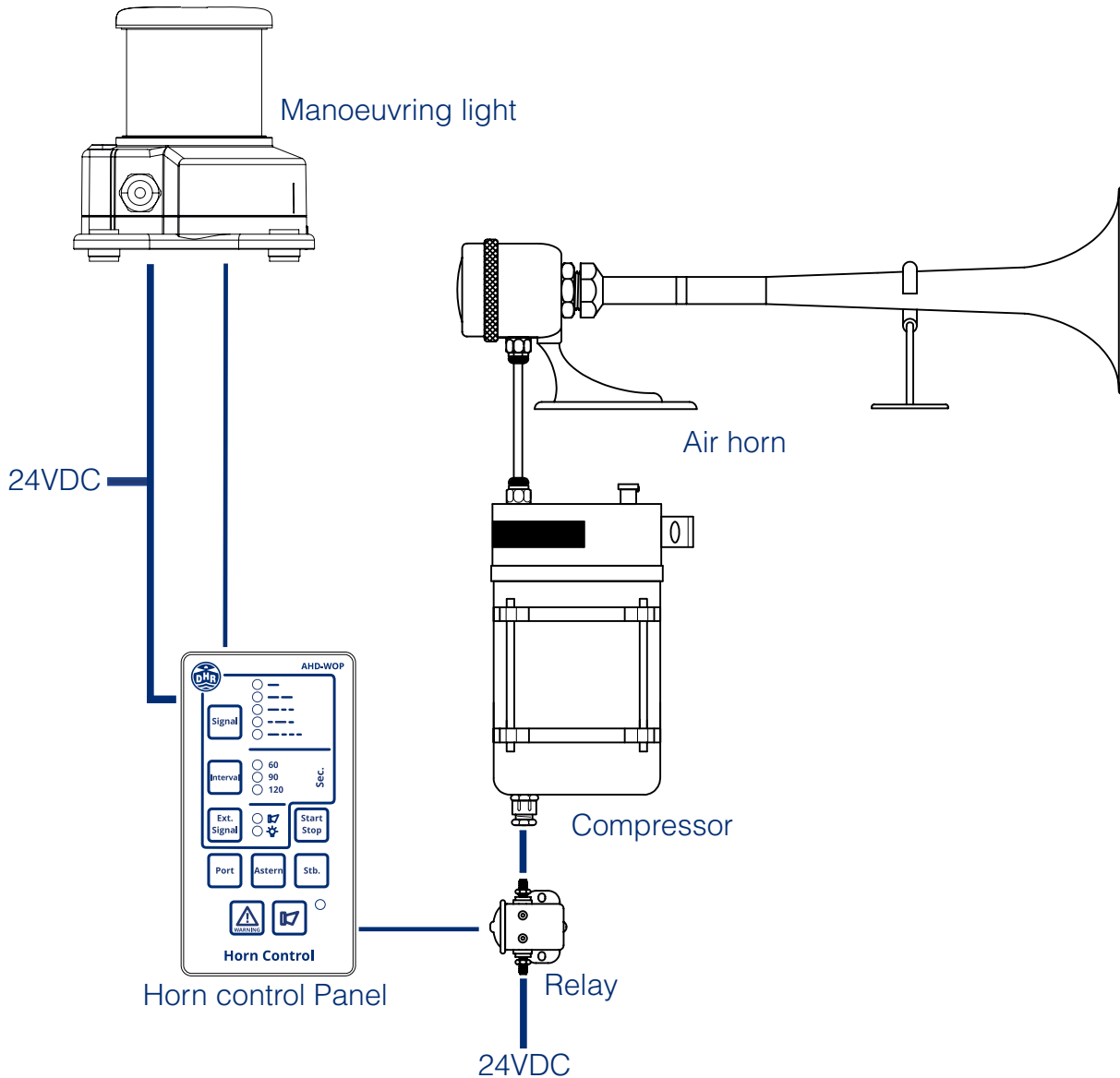


Type	L [mm]	D [mm]
H300	560	125
H310	605	125
H320	690	150
H330	780	150



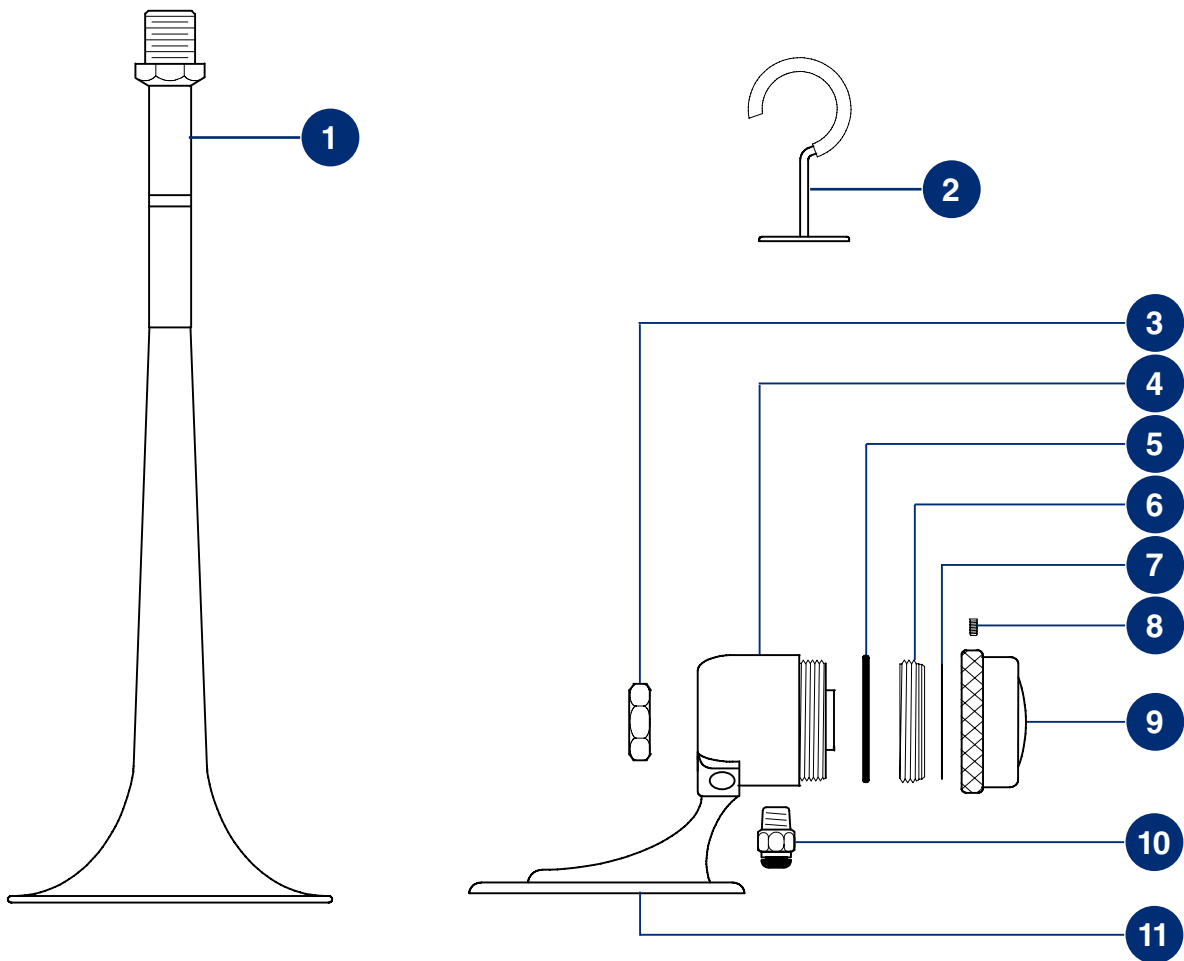
[mm]

4. THE COMPLETE SET



Item	Part	Type	Art. code
1	Air Horn	H300 (STPK)	30001
		H310 (STP)	30002
		H320 (SBU)	30003
		H330 (SBUL)	30004
		AHD-WOP	40020
2	Horn control panel	Push button	90002
		Manoeuvring light	DHR60
3	Manoeuvring light	DHR60	60.06.10.00
4	Relay	24VDC/65A	90001
5	Compressor	DHR High air flow - 24VDC/35A	90100
		Marco - 24VDC (Relay included)	90150
6	Air hose - polyamide	Ø8x6 mm	90003

5. EXPLODED VIEW

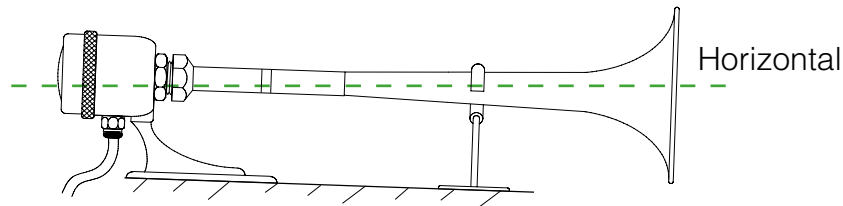


Item	Part	Material	Quantity	Art. code
1	Horn H300 - STPK		1	90011
	Horn H310 - STP	Solid brass -		90012
	Horn H320 - SBU	chromium plated and inside red		90013
	Horn H330 - SBUL			90014
2	Support H320 and H330	Stainless steel 316	1	30000
3	Nut M24 x 1	Stainless steel 316	1	30023
4	Diaphragm casing c/w mouth piece	Solid brass - chromium plated	1	30024
5	O-ring Ø52 x 3	NPR - shore 70	1	30022
6	Diaphragm ring	Bronze	1	30021
7	Diaphragm	Phosphor bronze	1	30005
8	Cup point M4 x 6	Stainless steel A4	1	
9	Lid diaphragm casing	Solid brass - chromium plated	1	30020
10	Push-in coupling 1/4" - Ø8mm	Solid brass - nickel plated	1	90005
11	Base diaphragm casing	Stainless steel 316	1	

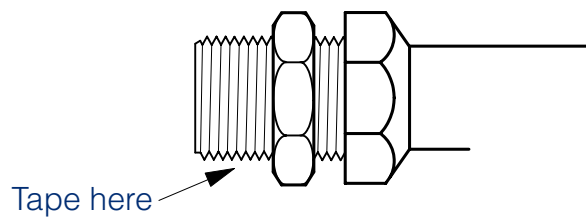
6. MOUNTING INSTRUCTIONS

The best way to ensure an optimal performance is that:

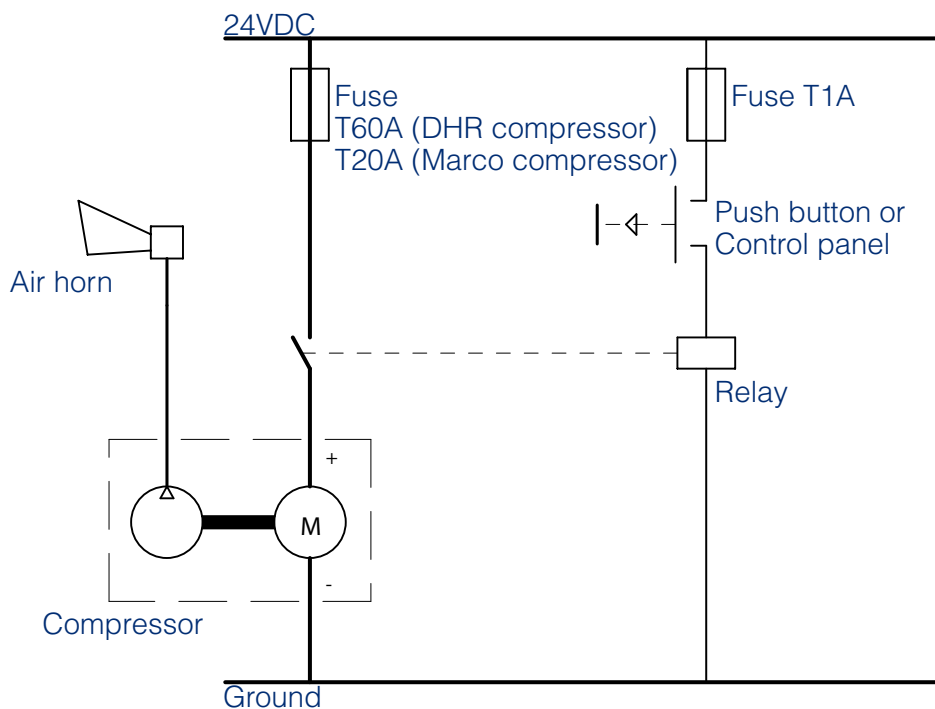
- The compressor is mounted straight-up with sufficient space for cooling.
- The compressor needs exactly 24VDC. Keep the wiring between the compressor and the power supply as short as possible.
- The air horn is mounted on a downward slope (1-2°) with no obstacles in front of the horn.
- The distance between the compressor and the air horn must be as short as possible without any sharp curves. (max. 10 metre)



If the horn is loosened from the diaphragm casing, it is recommended that the nipple of the horn is taped before tightened, see figure.



7. WIRING DIAGRAM

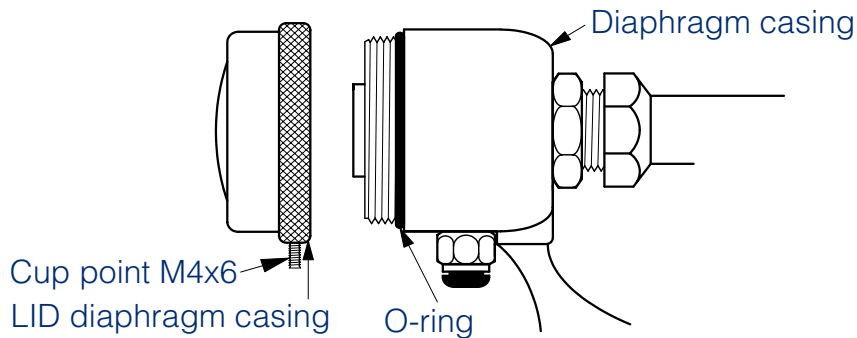


8. ADJUSTING THE AIR HORN



While adjusting the air horn it's recommended that you wear ear protection, to prevent damage to your ears.

Although the air horn is tested and adjusted before delivering, it is possible that its setting is changed. Altering its setting is possible by loosen or tighten the lid of the diaphragm casing. Be aware that if you tighten the lid to far on the diaphragm casing, the diaphragm plate in the lid will be damaged.



9. MAINTENANCE

The Single-tone set is almost maintenance free. Make sure the air horn is clean and give the compressor two drops of hydraulic oil monthly. Don't paint the air horn, because this can reduce the sound pressure level and alter its frequency.

ADVANCED MARITIME SIGNALLING SOLUTIONS



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