

# Acoustic alarms 110 dB (A) / 105 dB (A)



## Acoustic data:

Type	DS 5	DS 10
Sound level	105 dB(A)	110 dB(A)

## Electrical data: AC 50 Hz / 60 Hz

Nominal voltage	Electrical data	DS 5	DS 10
230V	Voltage range: Rated current: Power consumption:	195 V...253 V 0.03 A 8 VA	195 V...253 V 0.06 A 15 VA
115V	Voltage range: Rated current: Power consumption:	95 V...127 V 0.06 A 8 VA	95 V...127 V 0.12 A 15 VA
24 V	Voltage range: Rated current: Power consumption:	19 V...29 V 0.28 A 7 W	19 V...29 V 0.42 A 10.5 W

## Electrical data: DC 50 Hz / 60 Hz

Nominal voltage	Electrical data	DS 5	DS 10
12V	Voltage range: Rated current: Power consumption:	10 V...15 V 0.28 A 3.4 W	10 V...15 V 0.30 A 4 W
24V	Voltage range: Rated current: Power consumption:	19 V...29 V 0.28 A 6.7 W	19 V...29 V 0.42 A 10.1 W
48V	Voltage range: Rated current: Power consumption:	41 V...53 V 0.28 A 13.5 W	41 V...53 V 0.42 A 20.2 W

## Mechanical data:

Model	DS 5	DS 10
Duty cycle		100%
Cable entry	2 x M 20 (1x brass cable gland, chromated, 1x brass plug, chromated)	
Uninsulated connection length		8-12 mm
Size of cable connector		max. 2,5 mm <sup>2</sup>
Weight	DC: 1,95 kg / AC: 2,15 kg	
Installation	do not point the sounding horn in an upward direction	
Surface coating	hypoxy resin RAL 3000, flame-red	
Material	cast aluminium GD-Al Si12 Cu	

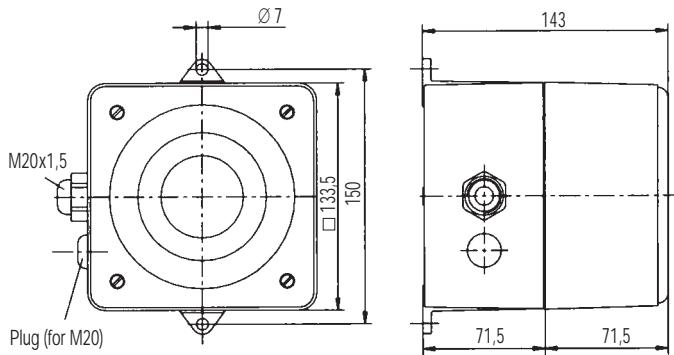
## DS 10 / DS 5

The sounders of type DS 10 / DS 5 were designed to meet industrial demands for robust operation and can be used as an all-round warning device. Suitable for both indoor and outdoor use these sounders can generate up to 31 different sounds using the on board switch inside the device. As an option 3 more sounds are available using an external controller.

In addition to the factory settings the sound combinations can be programmed at will on site. Special editions for particular jobs are also available.

IP 66	IP 67	EN 54-3
Protective system	Protective system	Approval for fire alarm
+55 °C -25 °C	+70 °C -40 °C	90%
Operational temperature	Storage temperature	Relative humidity
		VdS G28609
		Association of property insures

## Dimensions:



## Supplementary data:

Operational temperature	-25 °C ... + 55 °C
Storage temperature	-40 °C ... + 70 °C
Protective system	IP 66 / IP 67
Environmental protection class according to EN 54-3	type B
Protective class	I
Approvals	VdS: G28609, GL: 30457-83-HH, UL: 57256

## Special version:


 External sound pattern selection (2 variants) for controlling several sound patterns over long distances:  
 1. for all voltages = potential free shut-off function  
 2. for 12V/24 V = voltage connection



## Sound patterns DS 10 / DS 5

Basic tone No.	DIP-Switch						Description - basic tone (default: tone-No. 1)	Stage 2	Stage 3	Stage 4	
	1	2	3	4	5	6					
0							No tone	1	5	4	
1			x				Unified emergency signal DIN 33 404, part 3	1s 1200Hz 500Hz	3	2	4
2			x				Audible emergency evacuation signal acc. to ISO 8021	1.5s 950Hz	1	4	3
3			x	x			Alternating tone	0.5s 1025Hz 825Hz	1	2	4
4		x					Continuous tone	950Hz	1	3	5
5		x	x				Interrupted tone	2s 950Hz	1	4	3
6		x	x				Siren	1.5s 1200Hz 500Hz	1	4	9
7		x	x	x			French fire sound - NFS32-001 -	0.4s 0.1s 554Hz 440Hz	3	10	4
8		x					Swedish imminent - SS 031711 -	0.125s 0.125s 60s 700Hz	2	3	4
9	x		x				Electromechanical horn	0.8ms 8ms 4ms 800Hz	1	3	4
10	x	x					Continuous tone	500Hz	27	9	26
11	x	x	x				Continuous tone - Bayer -	725Hz	1	17	9
12	x	x					Continuous tone	825Hz	27	9	26
13	x	x	x				Continuous tone	1200Hz	1	5	3
14	x	x	x				Continuous tone	1500Hz	1	4	10
15	x	x	x	x			Interrupted tone	0.5s 0.5s 500Hz	1	24	12
16	x						Interrupted tone	0.5s 0.5s 825Hz	1	24	15
17	x			x			Interrupted tone - Bayer -	0.7s 0.3s 725Hz	1	11	9
18	x		x				Interrupted tone	0.25s 1s 800Hz	19	7	4

Basic tone No.	DIP-Switch						Description - basic tone (default: tone-No. 1))	Stage 2	Stage 3	Stage 4	
	1	2	3	4	5	6					
19	x			x	x		Alternating tone	1s 1000Hz 0.25s 800Hz	27	13	23
20	x		x				Interrupted tone IMO SOLAS III/50 + SOLAS III/6.4	2.5s 2.5s 1.7s 825Hz	9	21	26
21	x		x	x			Interrupted tone - leave ship -	1s 3s 1s 950Hz	20	9	26
22	x		x	x			Sweep up sawtooth with gap	3s 1.5s 0.5s 1200Hz 500Hz	19	14	2
23	x		x	x	x		Siren	3s 500Hz 2400Hz	27	12	2
24	x	x					Alternating tone	0.5s 1075Hz 0.5s 825Hz	1	16	12
25	x	x			x		Alternating tone	0.25s 900Hz 0.25s 500Hz	1	14	5
26	x	x		x			Alternating tone	20ms 1400Hz 20ms 1200Hz	4	9	27
27	x	x		x	x		Siren	3s 300Hz 1200Hz	13	23	19
28	x	x	x				Siren	3s 1500Hz 700Hz	7	10	4
29	x	x	x	x			Siren - Hoechst -	40s 10s 10s 1000Hz 150Hz	1	30	9
30	x	x	x	x			Interrupted tone	0.875s 0.875s 680Hz	1	4	26
31	x	x	x	x	x		Siren - NF C 48-265 -	0.5s 1.5s 1800Hz 1400Hz	3	14	4
32*	o	o	o	o	o	x	Choice of available tone combinations in stage 2, 3 and 4				

Approvals on request:



Zone 2 + 22

Sample order:	Model: DS 10	Voltage: 24 VDC	Sound level: 110 dB (A)	Colour: RED	Special version: external alarm tone selection	Approval: EN 54-3
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### Conformity to standard:

DIN EN 54-3: 2001	Fire detection and fire alarm systems – Part 3: Fire alarm devices; Sounders	DIN IEC 60 326-3: 1993	Printed boards; design and use of printed boards
EN 50130-4: 1996	Immunity requirements for components of fire, intruder and social alarm systems	DIN EN 457: 1992	Machine safety – acoustic alarm signals (ISO 7731 modified)
EN 61000-6-2: 2002	EMC, Immunity for industrial environments	DIN 33 404/3: 1982	Danger signals for work places - unified emergency signal
EN 61000-6-3: 2002	EMC, Emission standard for residential commercial and light-industrial environments	ISO 8201: 1987	Evacuation alarm
EN 55 022: 2001	Information technology equipment - Radio disturbance characteristics, class B	DIN EN 981: 1997	System of acoustic / visual alarm signals and information signals
EN 60 947-1: 2003	Low-voltage switchgear and controlgear - general rules	ISO 11429: 1996	System of acoustic / visual alarm signals and information signals
EN 60 529: 2000	Degrees of protection provides by enclosures (IP-Code)		