Loudspeakers

Fire Alarm Loudspeakers

- ✓ ABT-LA30 / ABT-LA60
- ✓ ABT-W6 / ABT-W6/AB
- ✓ ABT-W6W
- ✓ ABT-S206B
- ✓ ABT-S186
- ✓ ABT-S106 / ABT-S136
- ✓ ABT-S2010 / ABT-S2710
- ✓ ABT-S276/AB
- ✓ ABT-P10 / ABT-P10P
- ✓ ABT-P20 / ABT-P20P
- ✓ ABT-T1510 / ABT-T2215 / ABT-T2430 / ABT-T2435
- ✓ ABT-HP240EN / ABT-HP120EN

EN 54-24

Special Application Loudspeakers

- ✓ ABT-TNL100
- ✓ ABT-TNL100-1
- ✓ ABT-T2520A
- ✓ ETH20MD Loud
- ✓ ETHY20MD Loud
- ✓ ETH20MD Loud 24/48 VDC
- ✓ ETH20MD Loud 24/48 VDC Special

ambient SYSTEM

We make everyday life safer

ABT-LA30 / ABT-LA60

EN 54-24

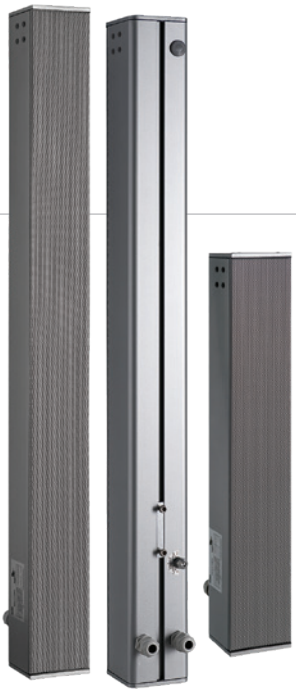
LINE ARRAY LOUDSPEAKERS COLUMNS

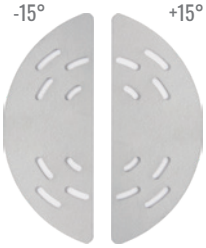
- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity issued by CNBOP: 1438-CPR-0574*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

ABT-LA fire-alarm loudspeakers mean a new quality among the facilities of the kind. ABT-LA30 and ABT-LA60 units are line-array loudspeaker columns, which means they ensure considerably farther reach than conventional units at simultaneous maintenance of high uniformity of sound level in the area of broadcasting. Being line-array acoustic sources, ABT-LA columns feature a unique high directionality in vertical plane so that the sound they generate will rather go exactly towards the controlled audio-space instead of unwanted areas, such as e.g. ceiling or floor. ABT-LA columns are mostly designed for the rooms with high reverberation time as well as for other places where the quality of speech is reduced due to unfavourable conditions.

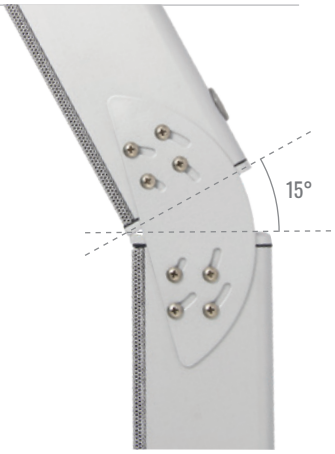
The ABT-LA design allows easy mechanical and electrical integration of the two columns into a single consistent unit which becomes a loudspeaker with higher power output and farther reach. It makes a better use of the benefits offered by the line-array source. Variable geometry of the column allows generating two sound beams to be randomly sent at various angles to the two different areas. Sound transfer band of the ABT-LA columns has been designed to achieve the highest possible fidelity of speech signal reproduction and to ensure unchallenged parameters of the quality of speech, all as required by the standards applicable to the Voice Evacuation Systems.

Solid aluminium enclosure, steel assembly jigs, and IP 65 guarantee long-term failure-free operations under any conditions, both in outdoor and indoor environments. The columns are entirely dustproof and resistant to the impact of direct water jet.





Connect angle:
-15° ÷ +15°



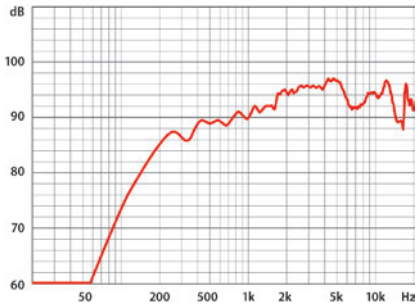
	ABT-LA30	ABT-LA60
Electrical		
Maximum power, W	48	96
Rated power, W	30	60
Tappings 100 V line according to EN 54-24, W	30 / 15 / 7,5 / 3,8	60 / 30 / 15 / 7,5
Tappings 70 V line	15 / 7,5 / 3,8 / 1,9	30 / 15 / 7,5 / 3,8
Transformer impedance, Ω 100 V	333,3 / 666,6 / 1333,3 / 2631,5	166,6 / 333,3 / 666,6 / 1333,3
Driver impedance, Ω	12	6
Effective frequency range, Hz	141 – 20 000	136 – 20 000
Sensitivity @ 4 m, 1 W, dB	77	79
SPL @ 4m, Rated power, dB	90	94
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz*	93	95
SPL @ 1 m, Rated power, db, Test signal bandwidth 300 Hz – 6 kHz*	105	109
Horizontal dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	360 / 220 / 185 / 120	360 / 215 / 185 / 115
Vertical dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	250 / 75 / 35 / 15	95 / 35 / 15 / 5
Environmental		
Environmental type / IP Rating according to EN 54-24	B / IP33C	B / IP33C
IP Rating**	65	65
Min / Max Amb Temp	-25°C / 70°C	-25°C / 70°C
Mechanical		
Dimensions H x W x D, mm	510 × 80 × 110	870 × 80 × 110
Net Weight, kg	3,1	4,9
Colour	Silver (RAL 9006)	Silver (RAL 9006)
Enclosure material	Aluminium	Aluminium
Option		
For DC line monitoring	Capacitor	Capacitor
Colour optional	RAL Palette	RAL Palette
Ease Model	✓	✓

* calculated from line-array far field measurement at 8 m

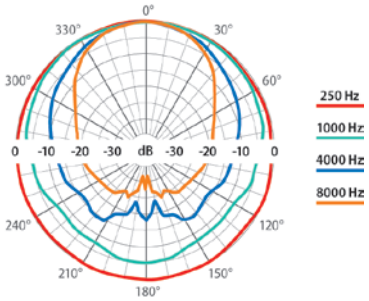
** parameters not confirmed by CNBOP-PIB

ABT-LA 30

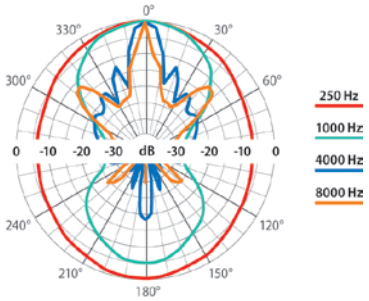
Frequency band:



Circular chart of directional characteristic – horizontal:

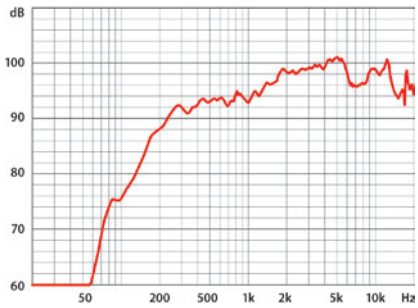


Circular chart of directional characteristic – vertical:

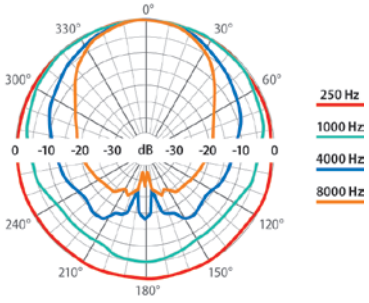


ABT-LA 60

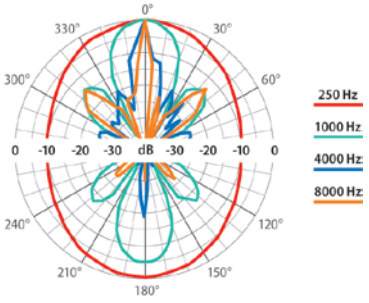
Frequency band:



Circular chart of directional characteristic – horizontal:



Circular chart of directional characteristic – vertical:



ABT-W6 / ABT-W6/AB

EN 54-24

WALL-MOUNTED LOUDSPEAKER (SINGLE/AB)

- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity issued by CNBOP: 1438-CPR-0413 and 1438-CPR-0654*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

The ABT-W6 is an elegant multi-function loudspeaker designed to guarantee the highest acoustic parameters. Its solid casing offers an effective protection against acts of vandalism. The loudspeaker can be mounted either on a wall or on a ceiling.

Additionally, the ABT-W6 loudspeaker can be fixed as an recessed speaker and therefore it is an ideal solution for rooms where aesthetic factors play a significant role.

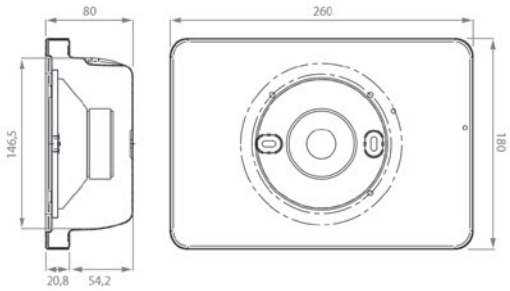
The loudspeaker offers adjustable power regulation through connectivity to applicable transformer tappings thus allowing suitable acoustic pressure (the level of sound) within areas of sound emission adequately to the acoustic conditions existing in those areas.

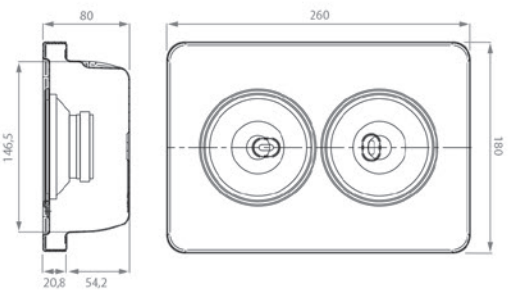
Unlike the standard wall-mounted fire alarm loudspeakers; the ABT-W6/AB is equipped with two in-built electro-acoustic transducers, two transformers and two separate sets of ceramic clamps and fuses, which allow connectivity of two independent A/B loudspeaker lines.

ABT-W6/AB has been designed for application in rooms of such size and acoustic conditions that the design proposes one wall-mounted loudspeaker of VES standard. However, in case of a single fault on the loudspeaker line, there is no loss of the sound coverage area in rooms with installed wall-mounted ABT-W6/AB loudspeakers.

CHARACTERISTICS

- » ***Easy and quick to mount***
- » ***Modern and elegant design***
- » ***High quality sound of both speech and music***
- » ***Ideal for on-wall or in-wall mounting***

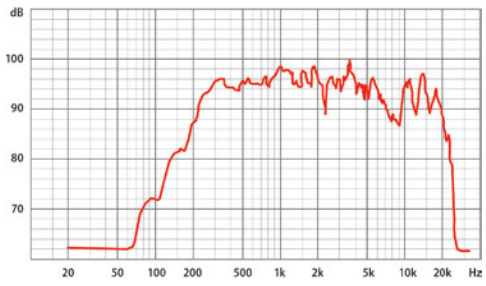




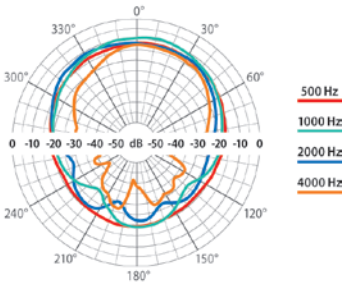
	ABT-W6	ABT-W6/AB
Electrical		
Rated power, W	6	2×6
Tappings 100 V line according to EN 54-24, W	6 / 3 / 1,5 / 0,75	2× 6 / 3 / 1,5 / 0,75
Tappings 70 V line, W	3 / 1,5 / 0,75 / 0,37	2× 3 / 1,5 / 0,75 / 0,37
Transformer impedance, Ω	1667 / 3333 / 6667 / 13333	2× 1667 / 3333 / 6667 / 13333
Driver impedance, Ω	8	8
Effective frequency range, Hz	120 – 20 000	150 – 20 000
Sensitivity @ 4 m, 1 W, dB	79	84
SPL @ 4 m, Rated power, dB	85	91
SPL @ 1 m, 1 W, dB, Test signal bandwith 300 Hz – 6 kHz	94	97
SPL @ 1 m, Rated power, dB, Test signal bandwith 300 Hz – 6 kHz	101	104
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	180 / 180 / 163 / 80	180 / 165 / 53 / 30
Environmental		
Environmental type / IP Rating according to EN 54-24	A / IP21C	A / IP21C
IP Rating	32	32
Min / Max Amb Temp	-10°C / 55°C	-10°C / 55°C
Mechanical		
Dimensions, mm	260 × 180 × 80	260 × 180 × 80
Net Weight, kg	1,75	2,25
Colour	White (RAL 9003) / Black (RAL 9011)	White (RAL 9003)
Material	Steel	Steel
Mounting	Screw	Screw
Option		
For DC line monitoring	Capacitor (ABT-W6C)	Capacitor
Colour optional	RAL Palette	RAL Palette
Ease Model	✓	✓

ABT-W6

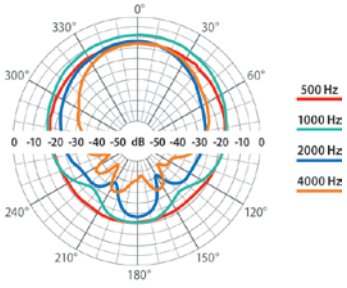
Frequency band:



Circular chart of directional characteristic – horizontal:

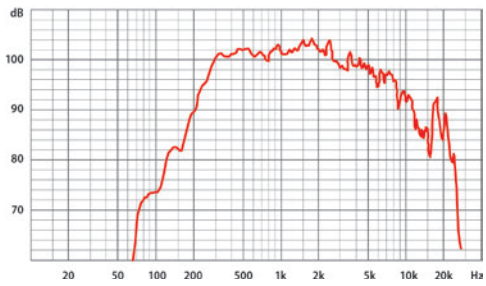


Circular chart of directional characteristic – vertical:

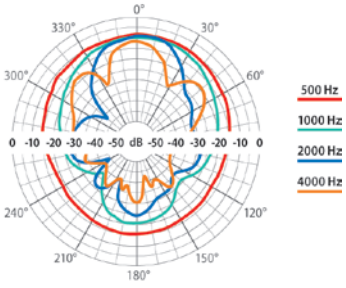


ABT-W6/AB

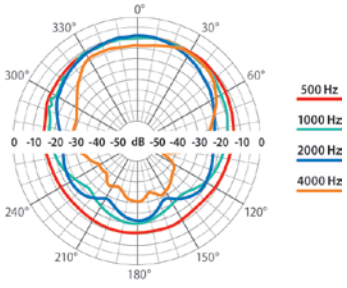
Frequency band:



Circular chart of directional characteristic – horizontal:



Circular chart of directional characteristic – vertical:



ABT-W6W

EN 54-24

WALL-MOUNTED LOUDSPEAKER

- ✓ *Compliance with EN 54-24*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

NEW!

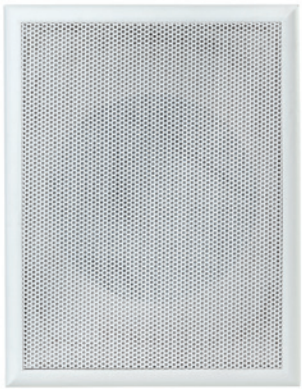
The ABT-W6W is an elegant multi-function loudspeaker designed to guarantee the highest acoustic parameters. The loudspeaker can be mounted either on a wall or on a ceiling.

Our loudspeakers are perfect on any circulation routes and in staircases located in shopping centres, offices, schools, hotels, hospitals, and industrial buildings. The loudspeaker mingles well with any interior and is virtually invisible thanks to its small dimensions and neat white finish.
The loudspeaker offers adjustable power regulation through connectivity to applicable transformer tappings thus allowing suitable acoustic pressure (the level of sound) within areas of sound emission adequately to the acoustic conditions existing in those areas.

To be quite sure our loudspeakers comply with the highest quality standards we test them thoroughly following the most meticulous procedures that warrant excellent parameters of sound emission, safety, and reliability. They are also recommended for use in any and all public address systems.

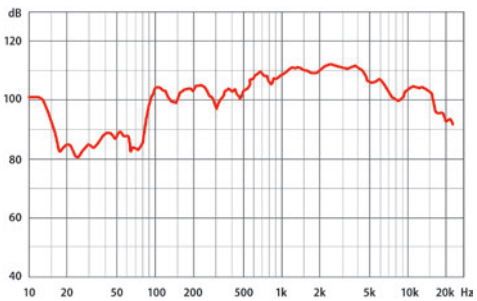
CHARACTERISTICS

- » ***Easy and quick to mount***
- » ***Modern and elegant design***
- » ***High quality sound of both speech and music***
- » ***Ideal for on-wall or in-wall mounting***
- » ***6 W transformer with multiple branches ensuring accurate selection of output power***

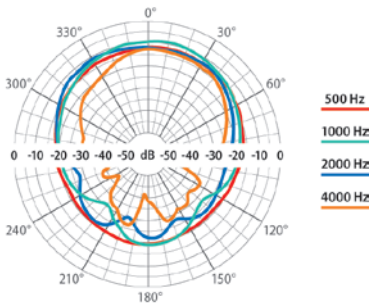


	ABT-W6W
Electrical	
Rated power, W	6
Tappings 100 V line according to EN 54-24, W	6 / 3 / 1,5 / 0,75
Tappings 70 V line, W	3 / 1,5 / 0,75 / 0,37
Transformer impedance, Ω	1667 / 3333 / 6667 / 13333
Driver impedance, Ω	8
Effective frequency range, Hz	130 – 20 000
Sensitivity @ 4 m, 1 W, dB	78
SPL @ 4 m, Rated power, dB	84
SPL @ 1 m, 1 W, dB, Test signal bandwith 300 Hz – 6 kHz	90
SPL @ 1 m, Rated power, dB, Test signal bandwith 300 Hz – 6 kHz	96
Horizontal dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	320 / 160 / 95 / 70
Vertical dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	290 / 140 / 100 / 70
Environmental	
Environmental type / IP Rating according to EN 54-24	A / IP21C
IP Rating	32
Min / Max Amb Temp	-10°C / 55°C
Mechanical	
Dimensions, mm	254 x 196 x 78
Net Weight, kg	1,8
Colour	White (RAL 9003)
Material	MDF
Mounting	Screw
Option	
For DC line monitoring	Capacitor (ABT-W6WC)
Colour optional	RAL Palette
Ease Model	✓

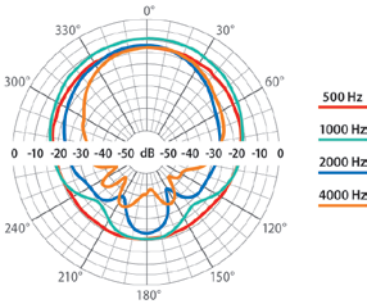
Frequency band:

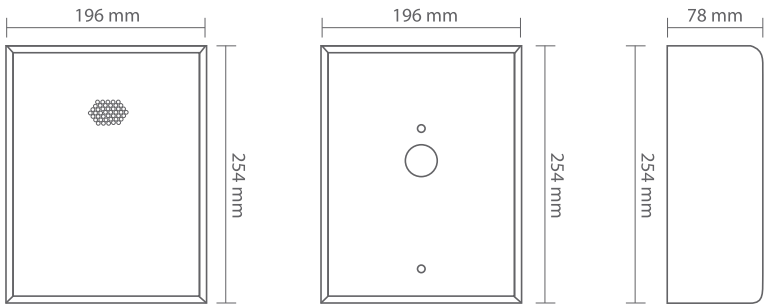


Circular chart of directional characteristic – horizontal:



Circular chart of directional characteristic – vertical:





ABT-S206B

EN 54-24

CEILING-MOUNTED LOUDSPEAKERS

- ✓ *Full compliance with EN 54-24 Standard*
- ✓ *Certificate of Conformity: 1438-CPR-0605*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

Ceiling mounted fire alarm ABT-S206B loudspeaker is designed for operations at high acoustic levels and the highest reduction in power supply. Actual wide band high efficiency ensures the best understanding of verbal messages. Its parameters have been carefully selected to comply with suspended ceiling applications, both at standard and considerably elevated ceiling-to-floor distance.

Thanks to the most advanced technologies ABT-S206B loudspeaker combines excellent acoustic parameters and high aesthetics with resistance to mechanical damages. It is distinguished by easy and quick installation.

Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing.

The ABT-S206B loudspeaker ensure a balanced sound which is extremely important in emission of highly understandable speech.

The ABT-S206B loudspeaker is noticeable thanks to its elegant looks. The loudspeaker part which becomes visible after the installation is covered by a common and aesthetic white paint coat (RAL 9003) – optionally available other colours (RAL palette).

ABT-S206B is equipped with a standardized fire dome made of soft steel and supplied with two cable penetrations with rubber glands. Special jig for sling assembling facilitates quick installation. Ceramic blocks and fireproof wiring coupled with temperature limit fuse are located inside fire dome.
The individual power rating is selected by means of connection with applicable transformer branch.

ABT-S series loudspeakers equipped with fire dome and thermal protections entirely comply with EN 54-24 Standards. In order to ensure 100% consistency with the highest quality standards we test our loudspeakers following the most meticulous procedures that warrant high parameters of sound emission, safety, and reliability.

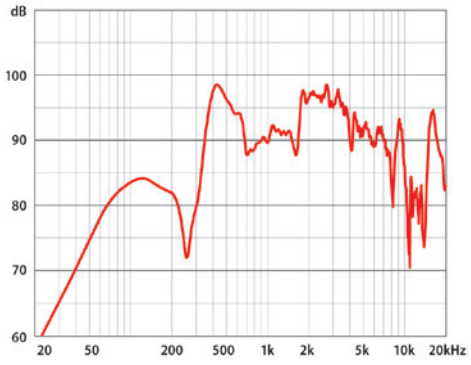
In spite of the fact our loudspeaker is designed for the highest reliability under fire conditions, their acoustic parameters and attractive low prices make them successful in any and all public address systems.

CHARACTERISTICS

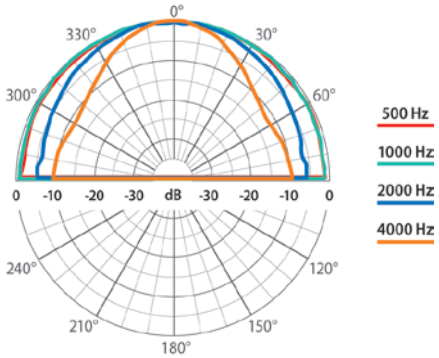
- » ***The highest level of speech intelligibility***
- » ***Elegant looks***
- » ***6 W transformer allowing a precise selection of loudspeaker output power***
- » ***100% protection of line from breaks and short-circuits***

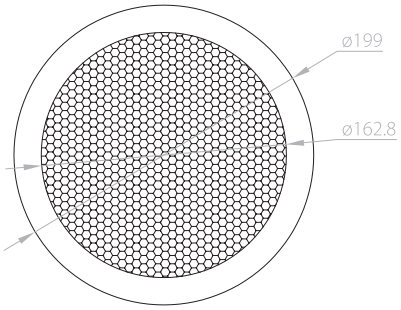
	ABT-S206B
Electrical	
Rated power, W	6
Tappings 100 V line according to EN 54-24, W	6 / 3 / 1,5 / 0,75
Tappings 70 V line, W	3 / 1,5 / 0,75 / 0,37
Transformer impedance, Ω	1667 / 3333 / 6667 / 13333
Driver impedance, Ω	8
Effective frequency range, Hz	120 – 20 000
Sensitivity @ 4 m, 1 W, dB	81
SPL @ 4 m, Rated power, dB	88
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	93
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	101
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	180 / 180 / 95 / 70
Environmental	
Environmental type / IP Rating according to EN 54-24	A / IP21C
IP Rating	32C
Min / Max Amb Temp	-10°C / 55°C
Mechanical	
Dimensions, mm	Height 115, ø 199
Net Weight, kg	1,13
Colour	White (RAL 9003) / Black (RAL 9011)
Material	Steel
Mounting	Spring clamp
Cut-out, mm	ø 175
Option	
For DC line monitoring	Capacitor (ABT-S206BC)
Colour optional	RAL Palette
Ease Model	✓

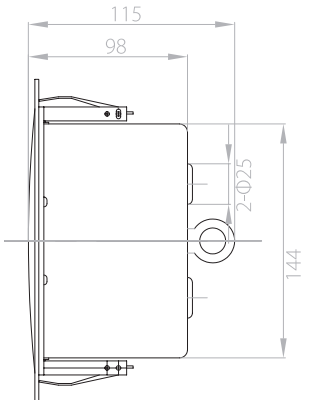
Frequency band:



Circular chart of directional characteristic:



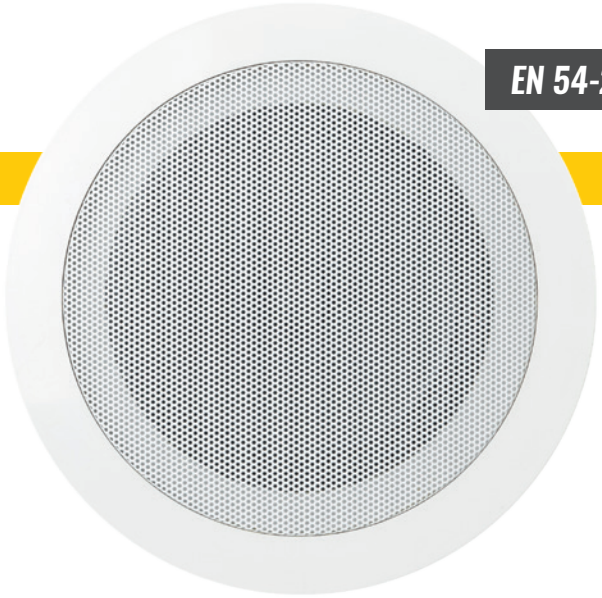




ABT-S186

EN 54-24

CEILING-MOUNTED LOUDSPEAKERS



- ✓ *Full compliance with EN 54-24 Standard*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*
- ✓ *Certificate of Conformity: 1438-CPR-0648*

Ceiling mounted fire alarm ABT-S186 loudspeaker is designed for operations at high acoustic levels. Actual wide band high efficiency ensures the best understanding of verbal messages. Its parameters have been carefully selected to comply with suspended ceiling applications.

Thanks to the most advanced technologies ABT-S186 loudspeaker combines excellent acoustic parameters and high aesthetics. It is distinguished by easy and quick installation.

Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing.

The ABT-S186 loudspeaker ensure a balanced sound which is extremely important in emission of highly understandable speech.

ABT-S186 is equipped with a standardized fire dome made of ABS and supplied with two cable penetrations with rubber glands.

The individual power rating is selected by means of connection with applicable transformer branch.

ABT-S186 loudspeaker equipped with fire dome, ceramic block and thermal protections entirely comply with EN 54-24 Standard. In order to ensure 100% consistency with the highest quality standards we test our loudspeakers following the most meticulous procedures that warrant high parameters of sound emission, safety, and reliability.

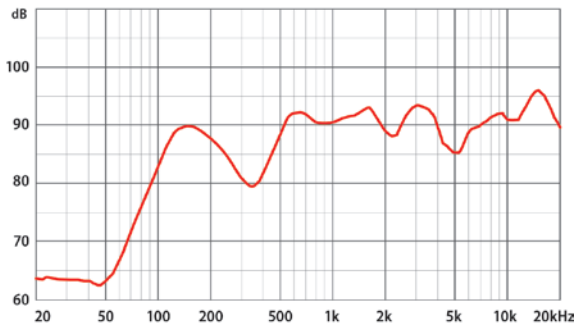
In spite of the fact our loudspeaker is designed for the highest reliability under fire conditions, their acoustic parameters and attractive low prices make them successful in any and all public address systems.

CHARACTERISTICS

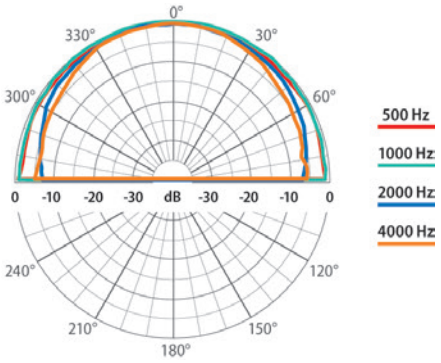
- » ***The highest level of speech intelligibility***
- » ***Elegant looks***
- » ***6 W transformer allowing a precise selection of loudspeaker output power***
- » ***100% protection of line from breaks and short-circuits***

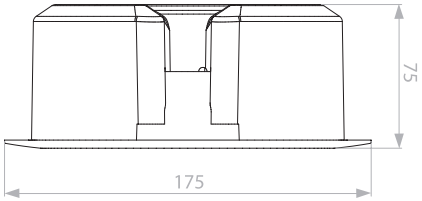
	ABT-S186
Electrical	
Rated power, W	6
Tappings 100 V line according to EN 54-24, W	6 / 3 / 1,5 / 0,75
Tappings 70 V line, W	3 / 1,5 / 0,75 / 0,37
Transformer impedance, Ω	1667 / 3333 / 6667 / 13333
Driver impedance, Ω	8
Effective frequency range, Hz	120 – 20 000
Sensitivity @ 4 m, 1 W, dB	79
SPL @ 4 m, Rated power, dB	86
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	91
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	99
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	180 / 180 / 150 / 90
Environmental	
Environmental type / IP Rating according to EN 54-24	A / IP21C
IP Rating	32C
Min / Max Amb Temp	-10°C / 55°C
Mechanical	
Dimensions, mm	Height 75, ø 175
Net Weight, kg	0,66
Colour	White (RAL 9003)
Material	ABS
Mounting	Spring clamp
Cut-out, mm	ø 150
Option	
For DC line monitoring	Capacitor (ABT-S186C)

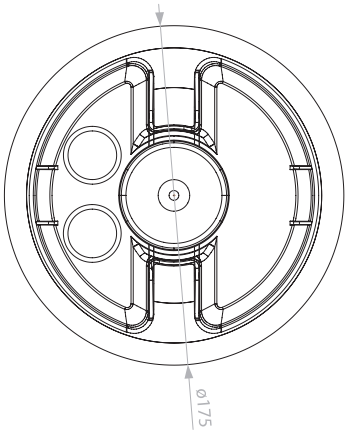
Frequency band:



Circular chart of directional characteristic:

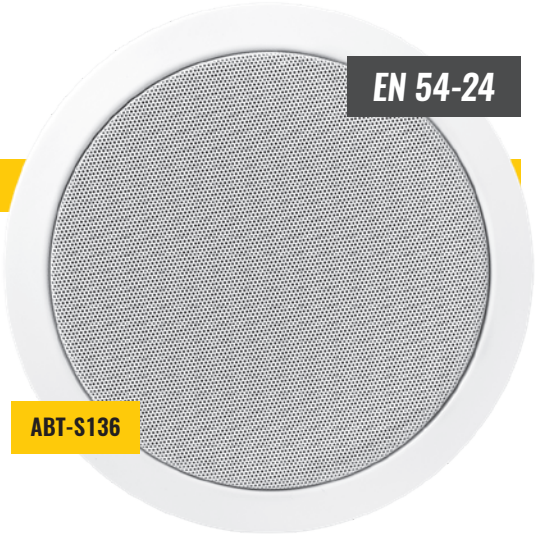






ABT-S106 / ABT-S136

CEILING-MOUNTED LOUDSPEAKERS



- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity: 1438-CPR-0635*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

Ceiling-mounted fire alarm loudspeakers ABT-S106 and ABT-S136 are designed for applications which require the minimum size at the maximum sound quality. Their parameters have been carefully selected to match the operating requirements in the rooms exposed to after-sound and high-humidity.

Thanks to the most advanced technologies the ABT-S series loudspeakers combine excellent acoustic parameters and high aesthetics with resistance to mechanical damages and varying weather conditions. They are distinguished by easy and quick installation.

Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing.

The need to maintain the best acoustic parameters, even with easily installed fire-protecting screens, was the idea underlying the design process. The ABT-S series loudspeakers ensure a balanced sound which is extremely important in emission of highly understandable speech and reliable music reproduction.

The series of ceiling-mounted ABT-S loudspeakers is noticeable thanks to its elegant looks. The loudspeaker part which becomes visible after the installation is protected by means of electroplating and covered by a common and aesthetic white paint coat (RAL 9003) – optionally available other colours (RAL palette).

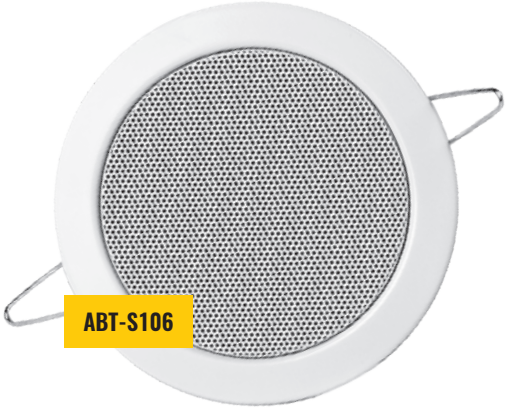
The entire ABT-S series is equipped with a standardized fire dome made of soft steel and supplied with two cable penetrations with rubber glands. Special jig for sling assembling facilitates quick installation. The delivery comprises the 1-metre long sling. Two ceramic blocks and fireproof wiring coupled with temperature limit fuse are located under the screen. This solution ensures 100% protection of the sound-transmitting line from any break or short-circuits which may be produced as a result of loudspeaker burn. The individual power rating is selected by means of connection with applicable transformer branch.

ABT-S series loudspeakers equipped with fire dome and thermal protections entirely comply with EN 54-24 Standards. In order to ensure 100% consistency with the highest quality standards we test our loudspeakers following the most meticulous procedures that warrant high parameters of sound emission, safety, and reliability.

In spite of the fact our loudspeakers are designed for the highest reliability under fire conditions, their acoustic parameters and attractive low prices make them successful in any and all public address systems.

CHARACTERISTICS

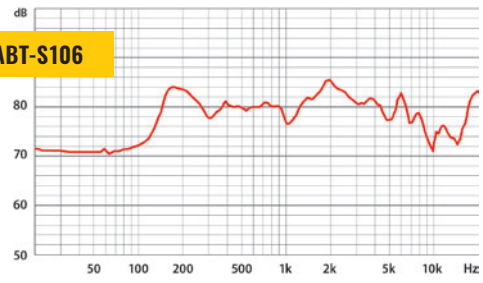
- » ***Minimum dimensions***
- » ***A and C working environment, ideal for bathrooms***
- » ***Exceptionally reliable reproduction of full band music***
- » ***The highest level of speech intelligibility***
- » ***Elegant looks***
- » ***6 W transformer allowing a precise selection of loudspeaker output power***
- » ***100% protection of line from breaks and short-circuits***



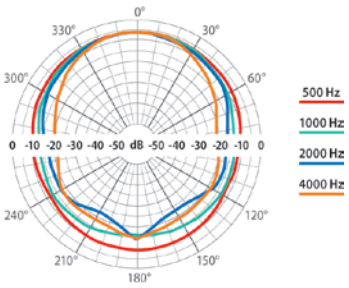
	ABT-S106	ABT-S136
Electrical		
Rated power, W	6	6
Tappings 100 V line according to EN 54-24, W	6 / 3 / 1,5 / 0,75	6 / 3 / 1,5 / 0,75
Tappings 70 V line, W	3 / 1,5 / 0,75 / 0,38	3 / 1,5 / 0,75 / 0,38
Transformer impedance, Ω 100 V	1667 / 3333 / 6667 / 13333	1667 / 3333 / 6667 / 13333
Driver impedance, Ω	8	8
Effective frequency range, Hz	100 – 20000	60 – 20000
Sensitivity @ 4 m, 1 W, dB	65	68
SPL @ 4 m, Rated power, dB	76	78
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	80	82
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	88	90
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	180 / 180 / 170 / 150	180 / 180 / 170 / 90
Environmental		
Environmental type / IP Rating according to EN 54-24	A, C / IP21C	A, C / IP21C
IP Rating	32	32
Min / Max Amb Temp	-10°C / 55°C	-10°C / 55°C
Mechanical		
Dimensions, mm	Height 111, ø 104	Height 113, ø 134
Net Weight, kg	0,72	0,82
Colour	White (RAL 9003)	
Material	Steel	
Mounting	Spring clamp	
Cut-out, mm	ø 85	ø 106
Option		
For DC line monitoring	Capacitor	
Colour optional	RAL Palette	
Ease Model	✓	

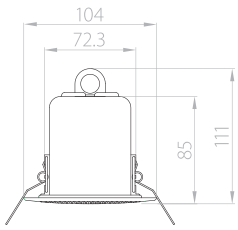
Frequency band:

ABT-S106



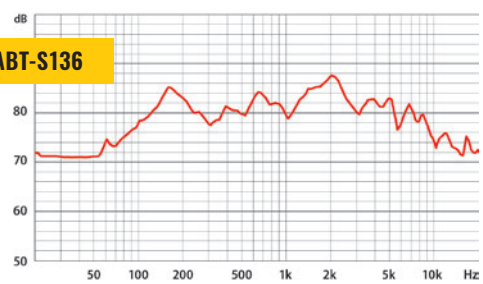
Circular chart of directional characteristic:



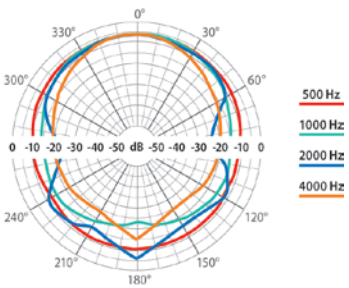


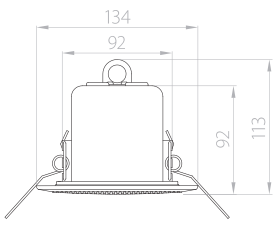
Frequency band:

ABT-S136



Circular chart of directional characteristic:



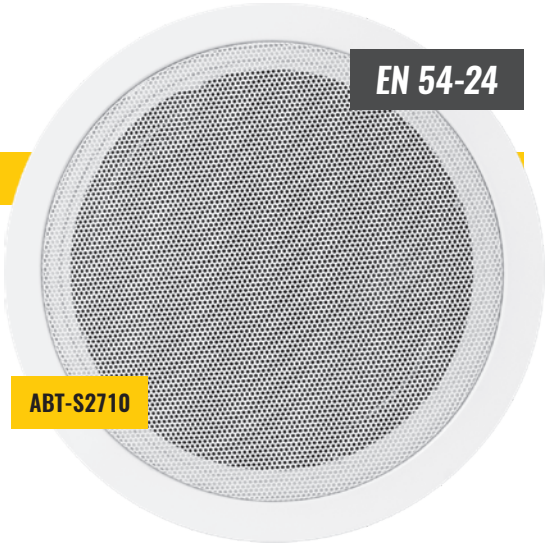


ABT-S2010 / ABT-S2710

EN 54-24

CEILING-MOUNTED LOUDSPEAKERS

- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity: 1488-CPR-0170/W*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*



Ceiling mounted fire alarm ABT-S2010 and ABT-S2710 loudspeakers are designed for operations at high acoustic levels and the highest reduction in power supply. Actual wide band high efficiency ensures the best understanding of verbal messages. Their parameters have been carefully selected to comply with false ceiling applications, both at standard and considerably elevated ceiling-to-floor distance.

Thanks to the most advanced technologies the ABT-S series loudspeakers combine excellent acoustic parameters and high aesthetics with resistance to mechanical damages and varying weather conditions. They are distinguished by easy and quick installation.

Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing.

The need to maintain the best acoustic parameters, even with easily installed fire-protecting screens, was the idea underlying the design process. The ABT-S series loudspeakers ensure a balanced sound which is extremely important in emission of highly understandable speech and reliable music reproduction.

The series of ceiling-mounted ABT-S loudspeakers is noticeable thanks to its elegant looks. The loudspeaker part which becomes visible after the installation is protected by means of electroplating and covered by a common and aesthetic white paint coat (RAL 9003) – optionally available other colours (RAL palette).

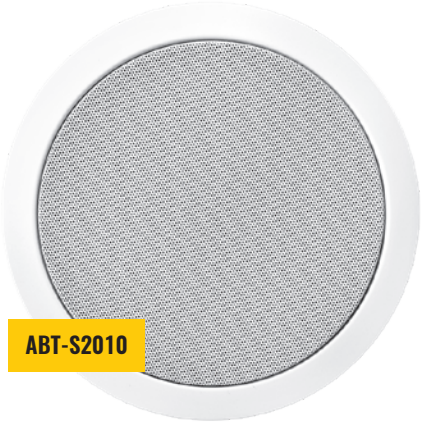
The entire ABT-S series is equipped with a standardized fire dome made of soft steel and supplied with two cable penetrations with rubber glands. Special jig for sling assembling facilitates quick installation. The delivery comprises the 1-metre long sling. Two ceramic blocks and fireproof wiring coupled with temperature limit fuse are located under the screen. This solution ensures 100% protection of the sound-transmitting line from any break or short-circuits which may be produced as a result of loudspeaker burn. The individual power rating is selected by means of connection with applicable transformer branch.

ABT-S series loudspeakers equipped with fire dome and thermal protections entirely comply with EN 54-24 Standards. In order to ensure 100% consistency with the highest quality standards we test our loudspeakers following the most meticulous procedures that warrant high parameters of sound emission, safety, and reliability.

In spite of the fact our loudspeakers are designed for the highest reliability under fire conditions, their acoustic parameters and attractive low prices make them successful in any and all public address systems.

CHARACTERISTICS

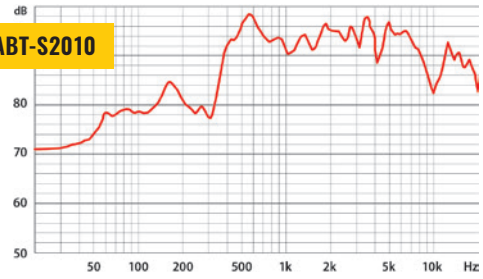
- » ***High efficiency***
- » ***High acoustic pressure level***
- » ***Exceptionally reliable full band music reproduction***
- » ***The highest level of speech intelligibility***
- » ***Elegant looks***
- » ***10 W transformer allowing precise selection of loudspeaker output power***
- » ***100% protection of line from breaks and short-circuits***



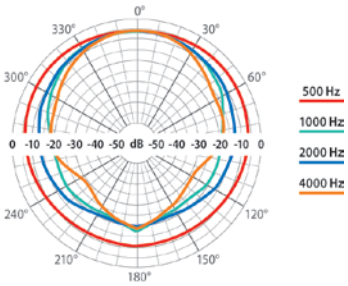
	ABT-S2010	ABT-S2710
Electrical		
Rated power, W	10	10
Tappings 100 V line according to EN 54-24, W	10 / 5 / 2,5 / 1,25	10 / 5 / 2,5 / 1,25
Tappings 70 V line, W	5 / 2,5 / 1,25 / 0,625	5 / 2,5 / 1,25 / 0,625
Transformer impedance, Ω 100 V	1000 / 2000 / 4000 / 8000	1000 / 2000 / 4000 / 8000
Driver impedance, Ω	8	8
Effective frequency range, Hz	150–20000	100–20000
Sensitivity @ 4 m, 1 W, dB	77	78
SPL @ 4 m, Rated power, dB	90	92
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz–6 kHz	94	95
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz–6 kHz	104	105
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	180 / 170 / 115 / 55	180 / 170 / 90 / 60
Environmental		
Environmental type / IP Rating according to EN 54-24	A / IP21C	A / IP21C
IP Rating	32	32
Min / Max Amb Temp	-10°C / 55°C	-10°C / 55°C
Mechanical		
Dimensions, mm	Height 110, ø 200	Height 120, ø 267
Net Weight, kg	1,4	1,75
Colour	White (RAL 9003)	
Material	Steel	
Mounting	Spring clamp	
Cut-out, mm	ø 172	ø 222
Option		
For DC line monitoring	Capacitor	
Colour optional	RAL Palette	
Ease Model	✓	

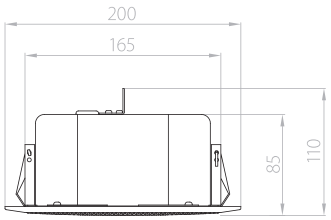
Frequency band:

ABT-S2010



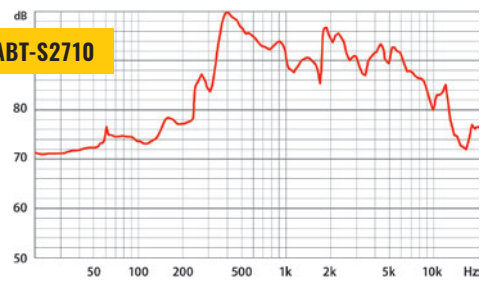
Circular chart of directional characteristic:



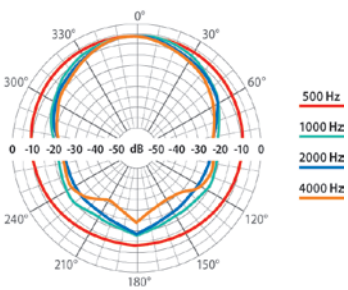


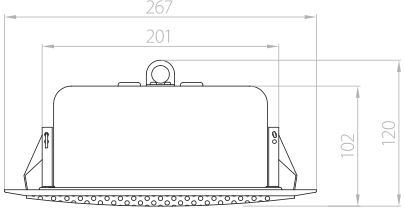
Frequency band:

ABT-S2710



Circular chart of directional characteristic:





ABT-S276/AB

EN 54-24

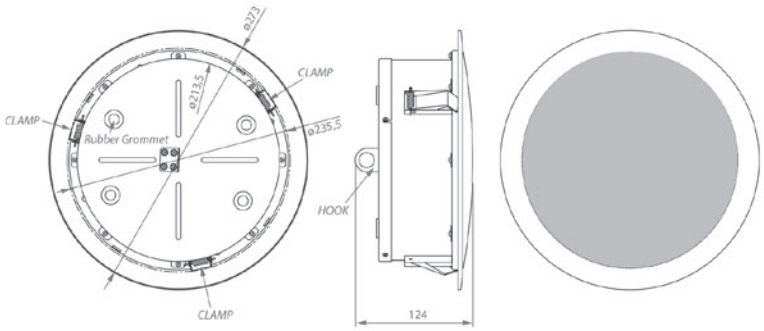
CEILING-MOUNTED AB LOUDSPEAKER

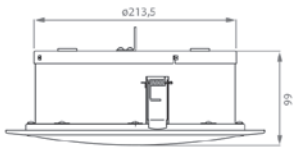
- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity issued by CNBOP: 1438-CPR-0414*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*
- ✓ *6-watt transformer enabling precise handling of loudspeaker power*
- ✓ *Optimised level of speech intelligibility*
- ✓ *Operation of two A/B loudspeaker lines*

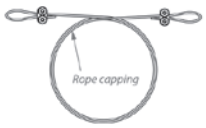
The ceiling-mounted ABT-S276/AB loudspeaker has been designed to guarantee the highest acoustic quality of speech and sound recordings even in difficult conditions. It is meant to be mounted on ceilings (incl. suspended ones).

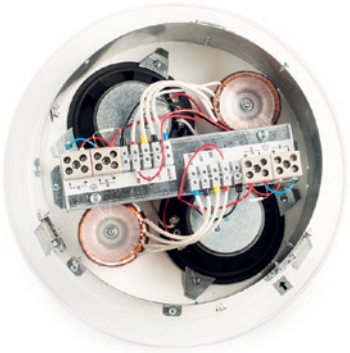
Unlike the standard ceiling fire alarm loudspeakers, the ABT-S276/AB is equipped with two in-built electro-acoustic transducers, two transformers and two separate sets of ceramic clamps and fuses, which allows connectivity of two independent A/B loudspeaker lines. ABT-S276/AB has been designed for application in rooms of such size and acoustic conditions that the design proposes one ceiling-mounted loudspeaker of VES standard. In case of a single fault on the loudspeaker line, there is no loss of the sound coverage area in rooms with installed ceiling-mounted ABT-S276/AB loudspeakers.

ABT-S276/AB is equipped with an additional mounting lug allowing attachment of a safety steel line fastened on the other side with a steel pin secured to construction elements of adequate fire-resistance e.g. the ceiling. Such a solution enables mounting the loudspeaker to surfaces of zero fire-resistance rating. The loudspeaker offers adjustable power regulation through connectivity to applicable transformer tappings thus enabling application of suitable acoustic pressure (the level of sound) within areas of sound emission adequately to the character and acoustic conditions existing in those areas.



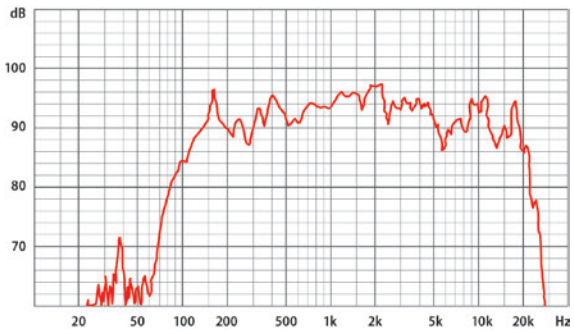




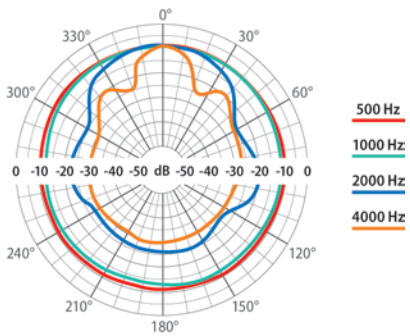


	ABT-S276/AB
Electrical	
Number of transducers	2
Rated power, W	2× 6
Tappings 100 V line according to EN 54-24, W	2× 6 / 3 / 1,5 / 0,75
Tappings 70 V line, W	2× 3 / 1,5 / 0,75 / 0,37
Transformer impedance, Ω 100 V	2× 1667 / 3333 / 6666 / 13333
Driver impedance, Ω	8
Effective frequency range, Hz	100 – 20 000
Sensitivity @ 4 m, 1 W, dB	85
SPL @ 4 m, Rated power, dB	91
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	97
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	103
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	180 / 175 / 163 / 90
Environmental	
Environmental type / IP Rating according to EN 54-24	A / IP21C
IP Rating	32
Min / Max Amb Temp	-10°C / 55°C
Mechanical	
Dimensions, mm	Height 124 mm , ø273
Net Weight, kg	2,29
Colour	White (RAL 9003)
Material	Steel
Mounting	Spring clamp
Option	
For DC line monitoring	Capacitor
Colour optional	RAL Palette
Ease Model	✓

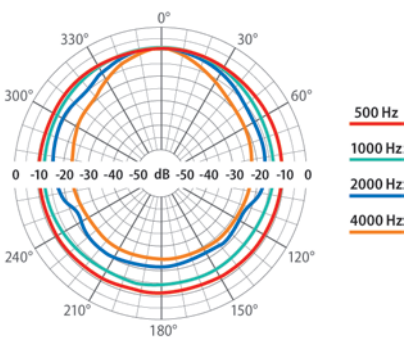
Frequency band:



Circular chart of directional characteristic – horizontal:



Circular chart of directional characteristic – vertical:



ABT-P10 / ABT-P10P

EN 54-24

SOUND PROJECTORS

- ✓ *Compliance with EN 54-24*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

NEW!

Fire alarm ABT-P10, ABT-P10P loudspeakers have been designed and manufactured for the most demanding customers as well as to meet the requirements of the most complex and sophisticated sound transmitting applications. Thanks to the contribution of advanced technologies they combine excellent acoustic parameters and high aesthetics with resistance to mechanical damages and varying weather conditions as well as low prices. Their additional quality is an exceptionally quick and simple installation.

Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing. The need to maintain the best acoustic parameters was the idea underlying the design process.

ABT-P loudspeaker models emitting the sound which features directional characteristic and high efficiency. 5-inch 2-cone wide band loudspeakers used in these series are excellent alternative solution for horn-type units due to wide frequency band. They prove excellent in both musical and verbal applications. ABT-P10 and ABT-P10P loudspeakers are enclosed in round casings made of resistant and durable ABS; they feature a high class of protection from humidity. Thanks to directional characteristic of sound propagation our loudspeakers are mostly applied on circulation routes and in wide area sound emission. Due to resistance to weather conditions the loudspeakers prove excellent in industrial halls, warehouses, as well as partly open spaces exposed to outdoor weather conditions.

Apart from high mechanical and functional resistance ABT-P loudspeakers entirely comply with global requirements for systems, including also the British Standard No. BS5839 Part 8 and EN 54-24.

All ABT-P loudspeakers have built-in a ceramic connection block and a thermal fuse. Two sound-transmission cable penetrations in the casing are insulated by means of two cable glands. Inside the fire zone the loudspeaker is isolated from the entire line, which ensures line continuity and uninterrupted broadcasting of emergency messages. The individual power rating is selected by means of connection with applicable transformer branch.

ABT-P loudspeakers are designed for continuous operations at rated parameters for at least 100 hours in compliance with the IEC-268-5 Standard.

ABT-P10P loudspeakers are designed for pendant mounting. They are equipped with an additional junction box enabling simple and quick speaker installation. They are used wherever the distance from ceiling mounted speaker is too large.

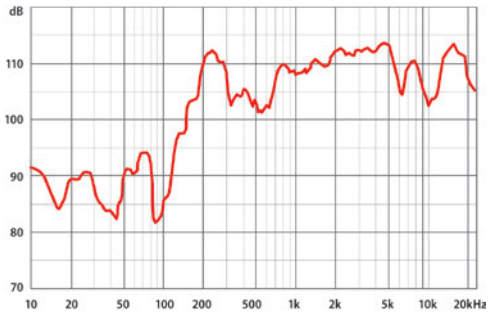
CHARACTERISTICS

- » ***Designed to achieve directional characteristic of sound emission***
- » ***10 W transformer with multiple branches ensuring accurate selection of output power***
- » ***Enclosed in an advance and functional cylindrical casing made of resistant and durable ABS***
- » ***Ideal for either ceiling or wall installation***
- » ***Durable casing with ceramic block and thermal fuse***
- » ***High sound quality in music and speech emission***

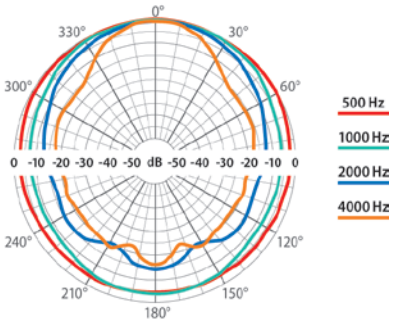
	ABT-P10 / ABT-P10P
Electrical	
Rated power, W	10
Tappings 100 V line according to EN 54-24, W	10 / 5 / 2,5 / 1,25
Tappings 70 V line, W	5 / 2,5 / 1,25 / 0,625
Transformer impedance, Ω 100 V	1000 / 2000 / 4000 / 8000
Driver impedance, Ω	8
Effective frequency range, Hz	130 – 20000
Sensitivity @ 4 m, 1 W, dB	80
SPL @ 4 m, Rated power, dB	88
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	92
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	100
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	360 / 210 / 120 / 65
Environmental	
Environmental type / IP Rating according to EN 54-24	B / IP33C
IP Rating*	66
Min / Max Amb Temp	-25°C / 70°C
Mechanical	
Dimensions, mm	Length 205, ø 135
Net Weight, kg	1,6
Colour	White (RAL 9003)
Material	ABS
Mounting	Screw, U Type bracket
Option	
For DC line monitoring	Capacitor (ABT-P10C / ABT-P10PC)
Colour optional	RAL Palette
Ease Model	✓

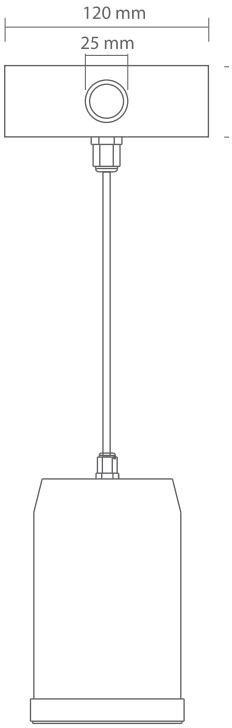
* not confirmed by CNBOP-PIB

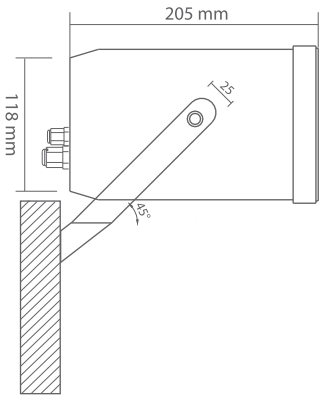
Frequency band:

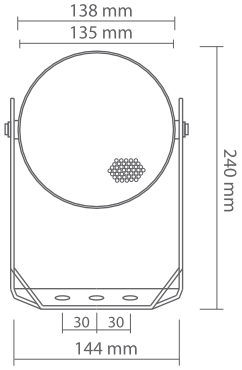


Circular chart of directional characteristic:









ABT-P20 / ABT-P20P

EN 54-24

SOUND PROJECTORS

- ✓ *Compliance with EN 54-24*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

NEW!

Fire alarm ABT-P20, ABT-P20P loudspeakers have been designed and manufactured for the most demanding customers as well as to meet the requirements of the most complex and sophisticated sound transmitting applications. Thanks to the contribution of advanced technologies they combine excellent acoustic parameters and high aesthetics with resistance to mechanical damages and varying weather conditions as well as low prices. Their additional quality is an exceptionally quick and simple installation.

Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing. The need to maintain the best acoustic parameters was the idea underlying the design process.

ABT-P loudspeaker models emitting the sound which features directional characteristic and high efficiency. 5-inch 2-cone wide band loudspeakers used in these series are excellent alternative solution for horn-type units due to wide frequency band. They prove excellent in both musical and verbal applications. ABT-P20 and ABT-P20P loudspeakers are enclosed in round casings made of extruded aluminium; they feature a high class of protection from humidity. Thanks to directional characteristic of sound propagation our loudspeakers are mostly applied on circulation routes and in wide area sound emission. Due to resistance to weather conditions the loudspeakers prove excellent in industrial halls, warehouses, as well as partly open spaces exposed to outdoor weather conditions.

Apart from high mechanical and functional resistance ABT-P loudspeakers entirely comply with global requirements for systems, including also the British Standard No. BS5839 Part 8 and EN 54-24.

Technical solutions applied in the design ensure continuous operations of sound-transmitting line connected with the loudspeaker even in the case the latter is damaged or burnt as a result of fire. The said protection is composed of ceramic blocks installed inside the loudspeaker, internal fireproof wiring, and temperature limit fuse. Two sound-transmission cable penetrations in the casing are insulated by means of two cable glands. Inside the fire zone the loudspeaker is isolated from the entire line, which ensures line continuity and uninterrupted broadcasting of emergency messages. The individual power rating is selected by means of connection with applicable transformer branch.

ABT-P loudspeakers are designed for continuous operations at rated parameters for at least 100 hours in compliance with the IEC-268-5 Standard.

ABT-P20P loudspeakers are designed for pendant mounting. They are equipped with an additional junction box enabling simple and quick speaker installation. They are used wherever the distance from ceiling mounted speaker is too large.

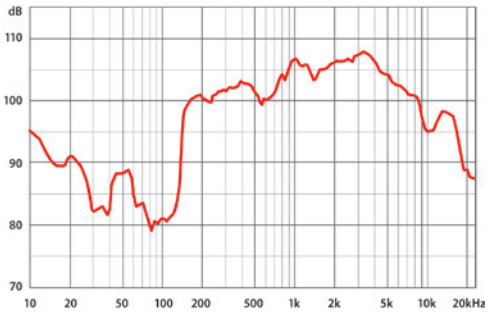
CHARACTERISTICS

- » ***Designed to achieve directional characteristic of sound emission***
- » ***20 W transformer with multiple branches ensuring accurate selection of output power***
- » ***Enclosed in an advance and functional cylindrical casing made of extruded aluminium***
- » ***Ideal for either ceiling or wall installation***
- » ***Fireproof casing with ceramic block and thermal fuse***
- » ***High sound quality in music and speech emission***

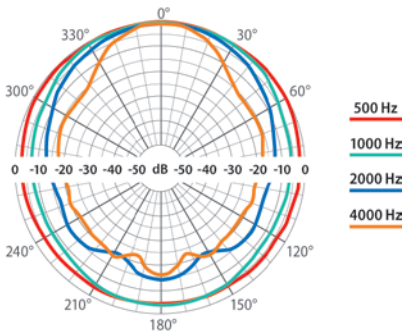
	ABT-P20 / ABT-P20P
Electrical	
Rated power, W	20
Tappings 100 V line according to EN 54-24, W	20 / 10 / 5 / 2,5
Tappings 70 V line, W	10 / 5 / 2,5 / 1,25
Transformer impedance, Ω 100 V	500 / 1000 / 2000 / 4000
Driver impedance, Ω	8
Effective frequency range, Hz	130 – 20000
Sensitivity @ 4 m, 1 W, dB	79
SPL @ 4 m, Rated power, dB	90
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	91
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	102
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	360 / 230 / 110 / 65
Environmental	
Environmental type / IP Rating according to EN 54-24	B / IP33C
IP Rating*	66
Min / Max Amb Temp	-25°C / 70°C
Mechanical	
Dimensions, mm	Length 210, ø 143
Net Weight, kg	2,4
Colour	White (RAL 9003)
Material	Aluminium
Mounting	Screw, U Type bracket
Option	
For DC line monitoring	Capacitor (ABT-P20C / ABT-P20PC)
Colour optional	RAL Palette
Model Ease	✓

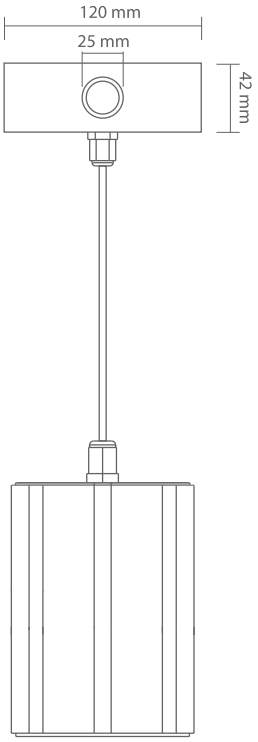
* not confirmed by CNBOP-PIB

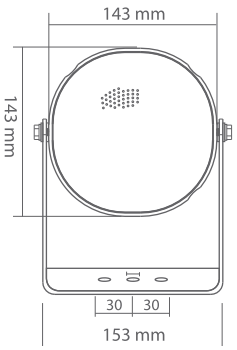
Frequency band:

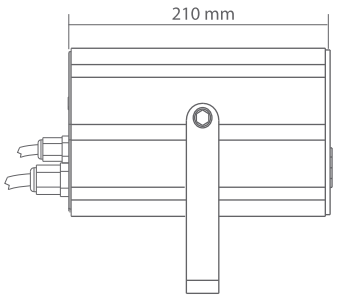


Circular chart of directional characteristic:









ABT-T1510/T2215/T2430/T2435

EN 54-24

HORN-TYPE LOUDSPEAKERS

- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity issued by CNBOP: 1438-CPR-0640*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

Horn-type fire alarm ABT-T loudspeakers are designed for either simple or most complex and sophisticated sound-transmitting applications. They combine excellent acoustic parameters and high aesthetics with resistance to mechanical damages and varying weather conditions as well as simple assembling and low price. Quality standards and audio characteristics have been confirmed through tests and trials in an anechoic chamber, resistance and integrity testing equipment, as well as chambers for resistance to weather and air humidity testing.
The ABT-T series comprises highly efficient loudspeakers which produce sounds featuring directional characteristics and operate in any atmospheric conditions (A, B, C environmental type). Thanks to their balanced frequency band they guarantee high understanding of verbal communication. Their casings are made of ABS UL94V0, a synthetic material featuring high resistance to mechanical damages and self-extinguishing properties. Loudspeakers are perfectly protected from dust and humidity (IP66). The assembling jig ensures adjusting the inclination for the optimum coverage of the area of communications.

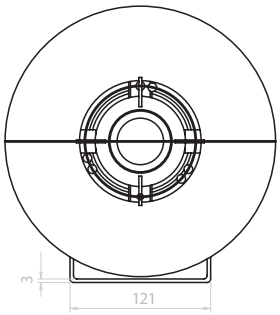
ABT-T loudspeakers are applied on circulation routes and inside the rooms with high reverberation time as well as in widespread outdoor area broadcasting. They are perfect for sport sites, at swimming pools, in expo and industrial halls, warehouses, open and underground car parks, and in open areas such as stadiums, parks, etc.
ABT-T loudspeakers entirely comply with global requirements concerning evacuation systems, including the standards such as BS5839 Part 8 and EN 54-24. They have been certified for product compliance and acceptance by CNBOP. Ceramic blocks, internal flame-resistant wiring, and temperature limit fuses protect the broadcasting line from short-circuits or breaks and ensure continuous operations even in case of fire-produced damages or burns. The loudspeaker located in the zone of fire is isolated from the sound-transmitting line. A special design eliminates the risk of fall of any of its burnt components, which ensures safe fire escape process.

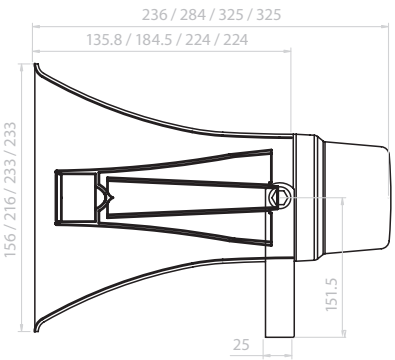
Our ABT-T loudspeaker offer comprises four power rating models, i.e. 10 W, 15 W, 30 W and 35 W. The individual rated power is selected by means of connection with applicable transformer branch. All the ABT-T loudspeakers are designed so as to ensure continuous operations at rated parameters for at least 100 hours (consistent with IEC-268-5 Standard).

In spite of the fact our loudspeakers are designed for the highest reliability under fire conditions, they can be also used in any and all public address systems.

CHARACTERISTICS

- » ***Directional characteristic of sound emission and the highest verbal communication understanding***
- » ***All the working environments – A, B and C***
- » ***Wall and ceiling installation***
- » ***Protection from dust and humidity: IP66 rating***
- » ***Casing made of self-extinguishing ABS UL94V0 plastic, with steel assembling jig***
- » ***100% line protection from short-circuit and break in fire conditions***

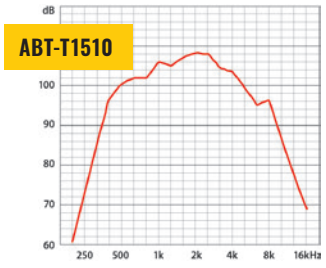




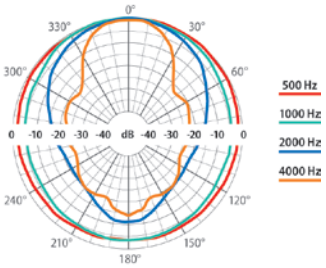
	ABT-T1510	ABT-T2215	ABT-T2430	ABT-T2435
Electrical				
Rated power, W	10	15	30	35
Tappings 100 V line according to EN 54-24, W	10 / 5 / 2,5 / 1,25	15 / 7,5 / 3,75 / 1,87	30 / 15 / 7,5 / 3,75	35 / 17,5 / 8,75 / 4,38
Tappings 70 V line, W	5 / 2,5 / 1,25 / 0,62	7,5 / 3,75 / 1,87 / 0,94	15 / 7,5 / 3,75 / 1,87	17,5 / 8,75 / 4,38 / 2,19
Transformer impedance, Ω 100 V	1000 / 2000 / 4000 / 8000	667 / 1330 / 2770 / 5330	333 / 666 / 1330 / 2660	285 / 571 / 1142 / 2284
Driver impedance, Ω	8	8	8	8
Effective frequency range, Hz	340 – 9000	460 – 9000	400 – 7500	400 – 7500
Sensitivity @ 4 m, 1 W, dB	86	87	88	88
SPL @ 4 m, Rated power, dB	96	100	103	103
SPL @ 1 m, 1 W, dB, Test signal bandwidth 300 Hz – 6 kHz	103	104	105	105
SPL @ 1 m, Rated power, dB, Test signal bandwidth 300 Hz – 6 kHz	113	116	120	120
Dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	240 / 200 / 88 / 45	180 / 121 / 68 / 36	180 / 120 / 75 / 41	180 / 120 / 75 / 41
Environmental				
Environmental type / IP Rating according to EN 54-24	B / IP33C			
IP Rating	66			
Min / Max Amb Temp	-25 °C / 70 °C			
Mechanical				
Dimensions, mm	Length 236, ø 156	Length 284, ø 216	Length 325, ø 233	Length 325, ø 233
Net Weight, kg	1,75	1,95	2,20	2,20
Colour	Light Grey (RAL 7035)			
Material	ABS UL94V0			
Mounting	Screw, U Type Bracket			
Option				
For DC line monitoring	Capacitor			
Colour optional	RAL Palette			
Ease Model	✓			

Frekvenční pásmo:

ABT-T1510

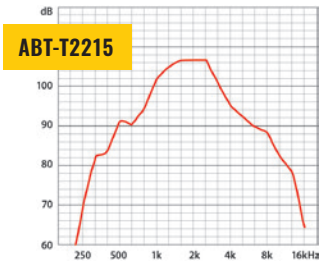


Kruhový diagram směrové charakteristiky:

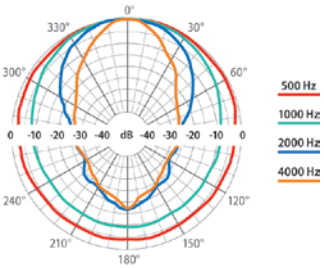


Frekvenční pásmo:

ABT-T2215

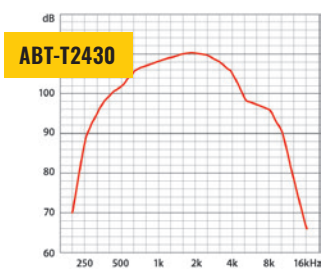


Kruhový diagram směrové charakteristiky:

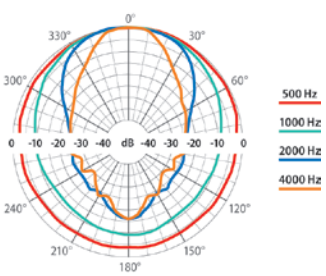


Frekvenční pásmo:

ABT-T2430

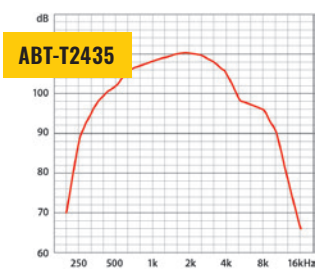


Kruhový diagram směrové charakteristiky:

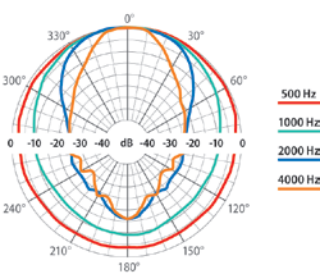


Frekvenční pásmo:

ABT-T2435



Kruhový diagram směrové charakteristiky:



ABT-HP240EN
ABT-HP120EN

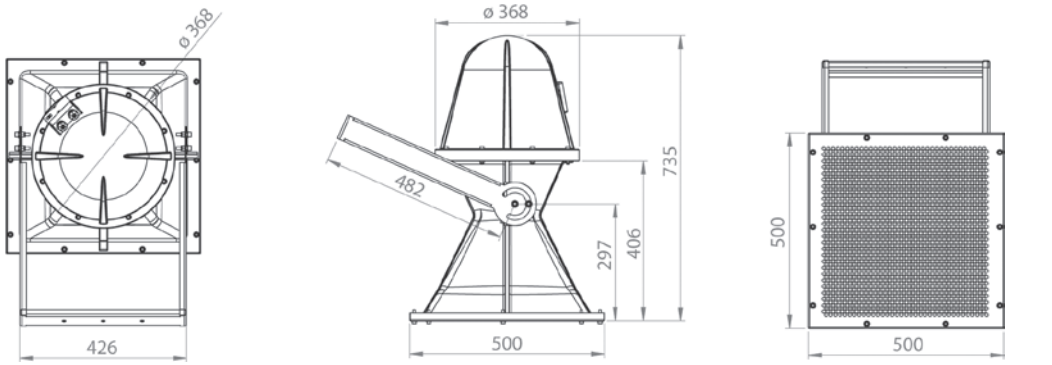
EN 54-24

HIGH POWER LOUDSPEAKER

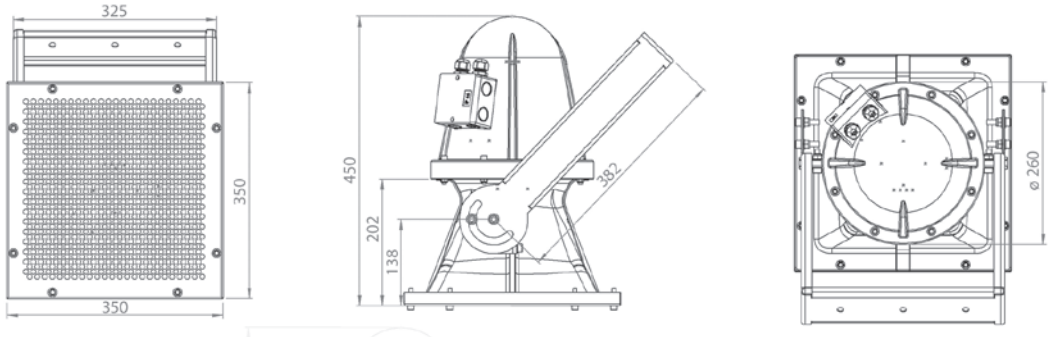
- ✓ *Compliance with EN 54-24*
- ✓ *Certificate of Conformity issued by CNBOP: 1438-CPR-0482*
- ✓ *240 W and 120 W transformers 100 V*
- ✓ *Highest level of speech intelligibility*
- ✓ *Waterproof housing IP65*
- ✓ *Wide frequency range suitable for music*
- ✓ *Compliance with BS5839-8 standard (Thermal protection)*

ABT-HP240EN and ABT-HP120HP are powerful loudspeakers designed for sport venues. They are two-way loudspeaker equipped with electroacoustic transducers 12" + 1,75" and 8" + 1,3".
These speakers sets have a wide effective frequency band, which is perfect for the transmission of verbal and musical communication.
Universal mounting method allows to mount the speakers in a simple manner. Waterproof housing makes that it can be successfully used outdoors (stadiums, halls, etc.).
ABT-HP240EN and ABT-HP120EN are equipped with the necessary instrumentation required to connect them to the voice evacuation system. Between the ceramic block and speaker transformer there is installed thermal fuse isolating transformer from a loudspeaker line.

ABT-HP240EN



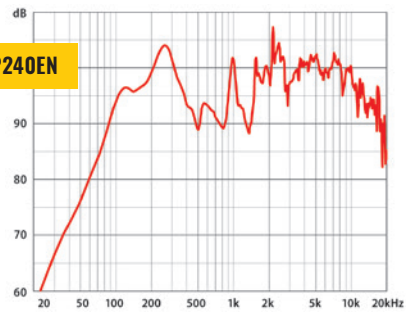
ABT-HP120EN



	ABT-HP240EN66	ABT-HP240EN94	ABT-HP120EN66	ABT-HP120EN94
Electrical				
Number of transducers	2	2	2	2
Rated power, W	240	240	120	120
Tappings 100 V line according to EN 54-24, W	240 / 120 / 60	240 / 120 / 60	120 / 60 / 30	120 / 60 / 30
Tappings 70 V line, W	120 / 60 / 30	120 / 60 / 30	60 / 30 / 15	60 / 30 / 15
Transformer impedance @100 V, Ω	42 / 84 / 167	42 / 84 / 167	84 / 167 / 333	84 / 167 / 333
Driver impedance, Ω	8	8	8	8
Effective frequency range, Hz	65 – 20 000	65 – 20 000	85 – 20 000	85 – 20 000
Sensitivity @4 m, 1 W, dB	84	84	81	81
SPL @4 m, Rated power, dB	108	108	105	105
SPL @1 m, 1 W, dB	96	96	93	93
SPL @1 m, Rated power, dB	120	120	117	117
Horizontal dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	110 / 60 / 65 / 55	110 / 60 / 85 / 55	160 / 90 / 45 / 35	165 / 120 / 80 / 60
Vertical dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	105 / 60 / 65 / 55	105 / 65 / 80 / 65	160 / 90 / 45 / 35	160 / 100 / 65 / 45
Environmental				
Environmental type / IP Rating according to EN 54-24	B / IP33C			
IP Rating	IP65			
Min / Max Amb Temp	-25°C / 70°C			
Mechanical				
Dimensions, mm	500 × 500 × 735	500 × 500 × 735	350 × 350 × 450	350 × 350 × 450
Net Weight, kg	29	29	16	16
Colour	Black (RAL 9005)			
Material	Glass fiber			
Mounting	U Type Bracket			
Option				
Colour optional	RAL Palette			
Ease Model	✓			

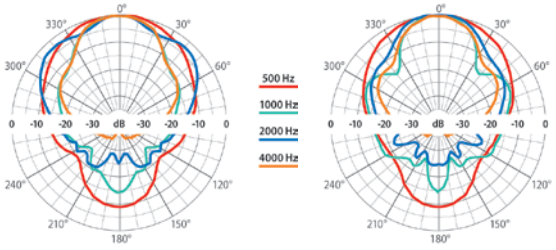
Frequency band:

ABT-HP240EN

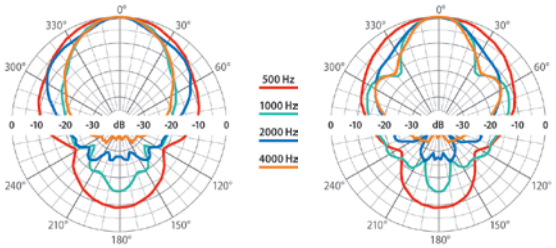


horizontal << circular chart of directional characteristic >> vertical

ABT-HP240EN66

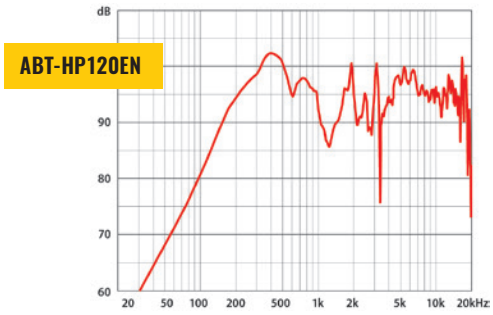


ABT-HP240EN94



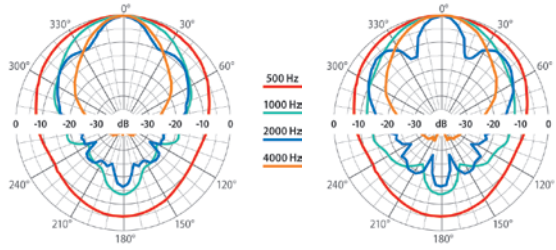
Frequency band:

ABT-HP120EN

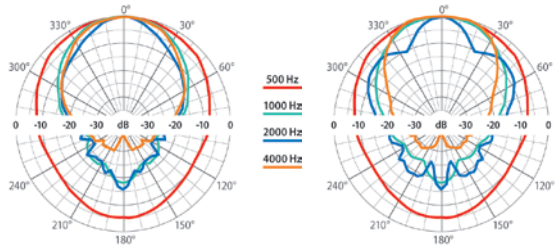


horizontal << circular chart of directional characteristic >> vertical

ABT-HP120EN66



ABT-HP120EN94



ABT-TNL100 / ABT-TNL100-1

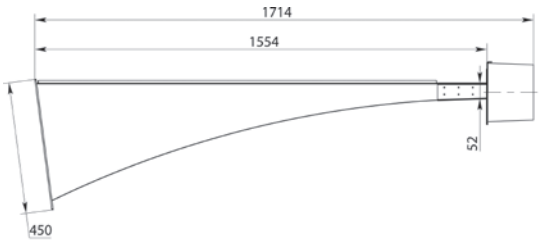
HIGHLY DIRECTIONAL TUNNEL LOUDSPEAKER

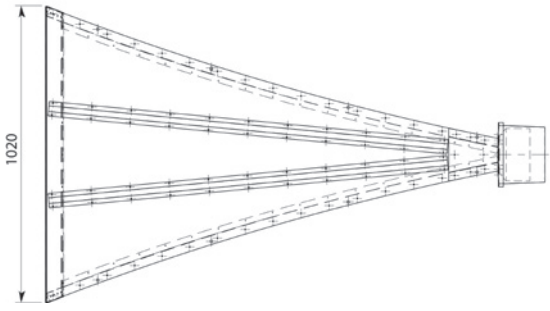
- ✓ *Specially designed for tunnel applications*
- ✓ *Highly directional asymmetric horn*
- ✓ *Excellent speech intelligibility*
- ✓ *Stainless steel construction*
- ✓ *Waterproof housing IP66*
- ✓ *High power output 100 / 50 W*
- ✓ *Thermal protection*

In case of an emergency, the Voice Evacuation System needs to guide people in the tunnel to safety so the audio transmission should be as clear as possible. In general, due to high levels of reverberation and noise, a tunnel is not an ideal environment for Voice Evacuation System and therefore speech intelligibility becomes a critical parameter for any voice alarm application. To establish a sufficient level of speech intelligibility, a highly directional speakers system is required. By reducing the energy emitted to other surfaces, reflective sound energy can be minimized which results in a better direct to reverberant ratio. This will improve the maximum feasible speech intelligibility. To minimize disturbing echo effects, resulting in a loss of speech intelligibility, each horn speaker is driven by an individual signal channel in a 100 V installation, which is equipped with audio DSP including EQ and delay. Our product S4T (Safety For Tunnel) offers the most effective solution which seamlessly combines a dedicated Voice Evacuation System with tailored Tunnel Loudspeakers.

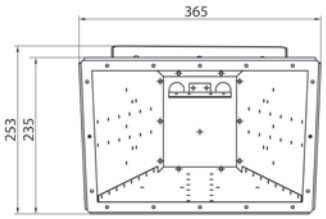
ABT-TNL100-1

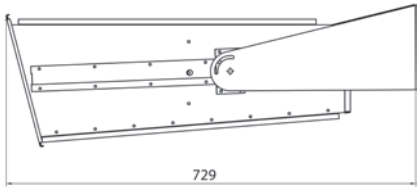
ABT-TNL100

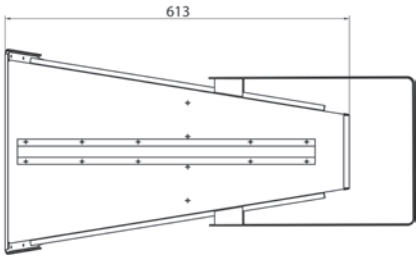




ABT-TNL100-1



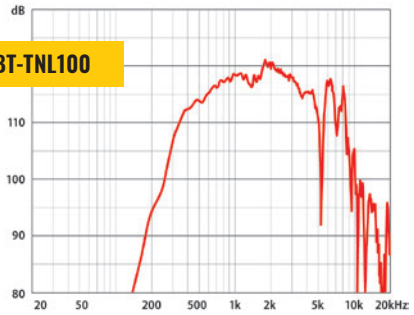




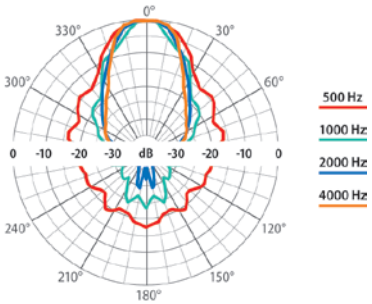
	ABT-TNL100	ABT-TNL100-1
Electrical		
Rated power, W	100	
Tappings 100 V line, W	100 / 50	
Tappings 70 V line, W	50 / 25	
Transformer impedance, Ω 100 V	100 / 200	
Driver impedance, Ω	6	8
Effective frequency range, Hz	250 – 8000	
Sensitivity @ 4 m, 1 W, dB	99	96
SPL @ 4 m, Rated power, dB	119	116
SPL @ 1 m, 1 W, dB	111	108
SPL @ 1 m, Rated power, dB	131	128
Horizontal dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	39 / 24 / 29 / 32	141 / 66 / 29 / 49
Vertical dispersion at 500 Hz / 1 kHz / 2 kHz / 4 kHz, [°]	77 / 42 / 26 / 19	192 / 117 / 59 / 47
Environmental		
Environmental type	B	
IP Rating	IP66	
Min / Max Amb Temp	-25°C / 70°C	
Mechanical		
Dimensions, mm	1714 × 1020 × 450	729 × 365 × 253
Net Weight, kg	32	14,5
Colour	Grey (RAL 7035)	Grey (RAL 7035)
Material	Stainless steel	
Mounting	Anchor for concrete	
Option		
For DC line monitoring	Capacitor	
Colour optional	RAL Palette	
Ease Model	✓	

Frequency band:

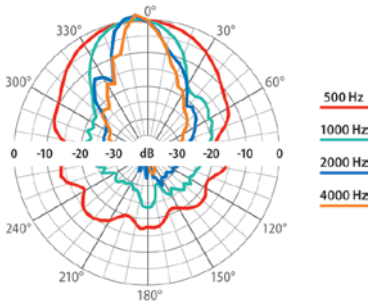
ABT-TNL100



Circular chart of directional characteristic – horizontal:

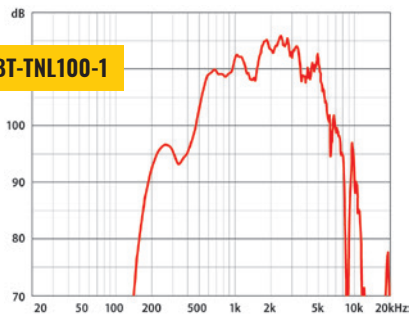


Circular chart of directional characteristic – vertical:

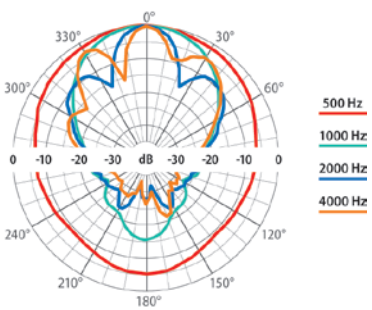


Frequency band:

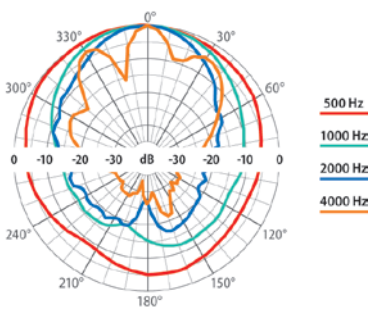
ABT-TNL100-1



Circular chart of directional characteristic – horizontal:



Circular chart of directional characteristic – vertical:



ABT-T2520A

ACTIVE HORN LOUDSPEAKER with built-in 20 W amplifier

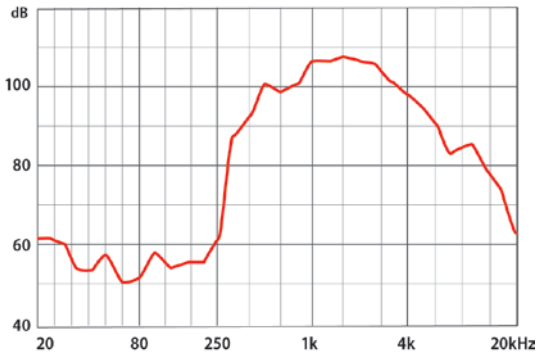
- ✓ *High sound pressure level*
- ✓ *Aluminum housing*
- ✓ *Protection from dust and humidity: IP65 rating*
- ✓ *Internal volume control*

NEW!

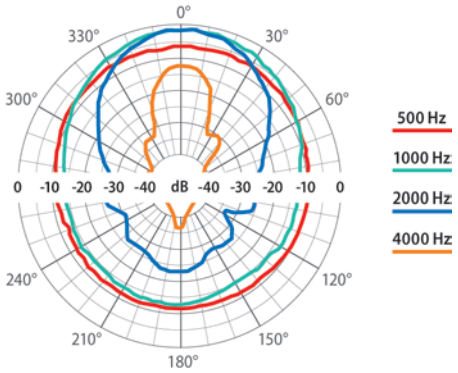
ABT-T2520A is an active horn loudspeaker with a built-in 20 W amplifier designed to work with security systems.
It is an ideal choice for applications in security systems, industrial and commercial systems in both outdoor and indoor areas such as train stations, airports, parking lots, parks, gardens, corridors and much more.
Built-in 20 W amplifier powered with 12 V voltage has an audio line-in input. It allows to connect the speaker directly to CCTV camera. Built-in internal volume control of gain allows you to choose the appropriate volume level of the broadcast message.
The high efficiency and directionality of the loudspeaker allow broadcasting voice messages directly to even distant places, while ensuring a high sound pressure level. The aluminum housing guarantees increased resistance to adverse weather conditions provided by the IP65 rating.

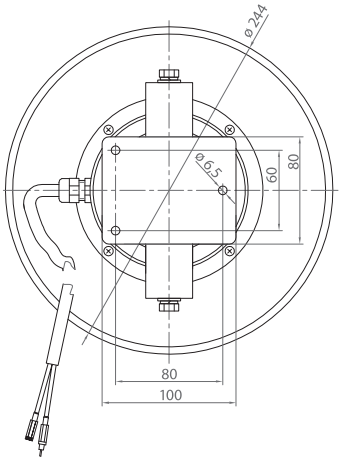
	ABT-T2520A
Electrical	
Rated power of amplifier	20 W
Input impedance	10 kΩ
Power supply	DC 12 V / 2 A
Signal gain	8 dB, 16 dB, 24 dB, 32 dB
Volume adjustment	internal volume control
Effective frequency range	350 Hz – 9 kHz
Dispersion at 1 kHz	110°
SPL (20 W @ 1 m)	112 dB
Environmental	
IP Rating	IP65
Min / Max Amb Temp	-20°C / 55°C
Mechanical	
Dimensions	250 x 320 mm
Net Weight	2,3 kg
Colour	Light Grey (RAL 7035)
Material	Aluminium
Mounting	U Type Bracket

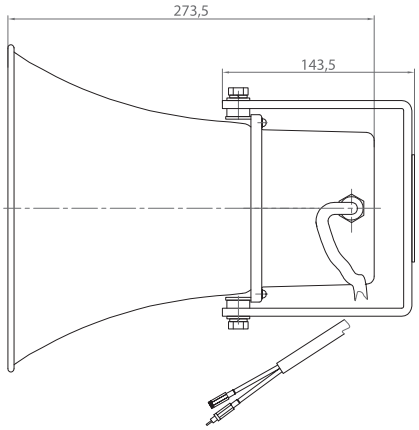
Frequency band:



Circular chart of directional characteristic:







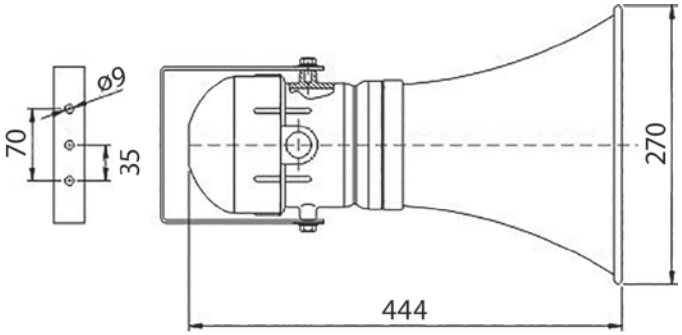
ETH20MD Loud

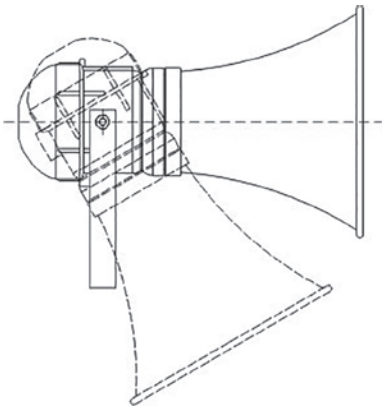
EXPLOSION PROOF LOUDSPEAKER

- ✓ *Full compliance with directive 2014/34/UE*
- ✓ *Full compliance with:*
  EN 60079-0:2012/A11:2013,
  EN 60079-1:2014, EN 60079-31:2014
- ✓ *Ex db IIB+H2 Gb Ex tb IIIC Db II2GD T6 T5*
- ✓ *Ex db IIC Gb Ex tb IIIC Db II2GD T6 T5*
- ✓ *zone 1, zone 2, zone 21, zone 22*

The explosion-proof loudspeakers ETH20MD LOUD series have been designed for use in potentially explosive atmospheres in presence of explosive gases and dusts. They have a high degree of protection (IP66) to withstand the harsh off-shore and on-shore plants environmental conditions. They are suitable for connection to standard amplification system with output 100 V, to alarm systems and for public address. The chamber of acoustic compression is separated from the outer atmosphere through a special filter of sintering. They are equipped with a transformer offering the possibility to adapt and select the sound level according to the real needs of the installation point.

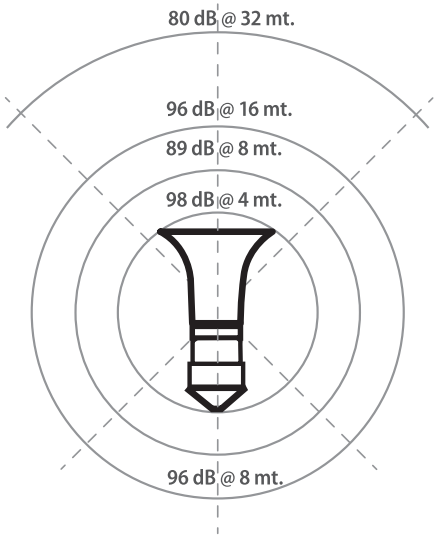
Materials:
Body, cover and horn cone in aluminium alloy. Adjustable galvanized steel bracket. Bolts and screws in stainless steel. Epoxy coating RAL 7000. Selectable power.





	ETH20MD LOUD
Electrical features	
Selectable power,	6 W – 12 W – 20 W – 25 W
Rated voltage	100 V
Audio line	16 Ω
Output	100 ÷ 102 dB @ 6 W 104 ÷ 106 dB @ 12 W 107 ÷ 108 dB @ 20 W 109 ÷ 112 dB @ 25 W
Frequency range	650 ÷ 10 000 Hz @ 6 W 450 ÷ 9000 Hz @ 12 W 400 ÷ 9000 Hz @ 20 W 350 ÷ 10 000 Hz @ 25 W
Environmental	
IP Rating	IP66
Min / Max Amb Temp	-20°C / 60°C
Mechanical	
Material	Light alloy body, cover and horn cone
Installation	Adjustable galvanized steel lugs
Hardware	Stainless steel
Gaskets	EPDM
Cable entry	N° 1 Ø 3/4"
Weight	3,5 kg

Outdoor loudness distribution polar diagram:



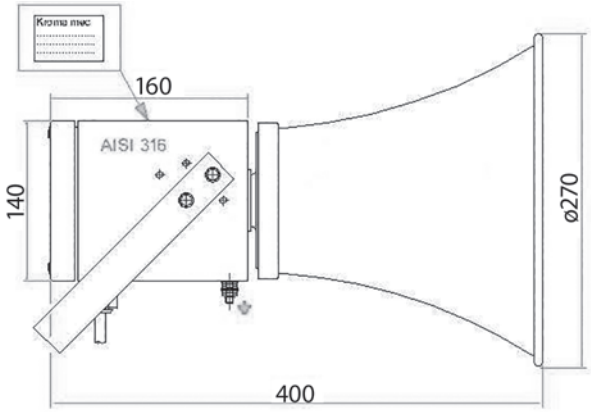
ETHY20MD Loud

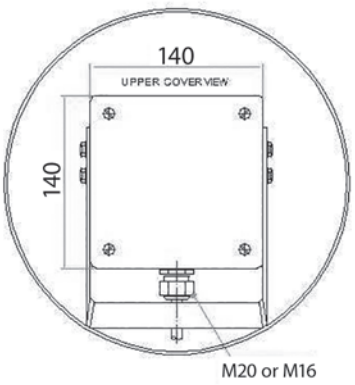
EXPLOSION PROOF LOUDSPEAKER STAINLESS STEEL 316

- ✓ *Full compliance with directive 2014/34/UE*
- ✓ *Full compliance with:*
  EN 60079-0:2012/A11:2013,
  EN 60079-1:2014, EN 60079-31:2014
- ✓ *Ex de mb IIB+H2 Gb Ex mb tb IIIC Db II2GD T6 T5*
- ✓ *Ex de mb IIC Gb Ex mb tb IIIC Db II2GD T6 T5*
- ✓ *zone 1, zone 2, zone 21, zone 22*

The explosion-proof loudspeakers ETHY20MD LOUD series have been designed for use in potentially explosive atmospheres in presence of explosive gases and dusts. They have a high degree of protection (IP66) to withstand the harsh off-shore and on-shore plants environmental conditions. They are suitable for connection to standard amplification system with output 100 V, to alarm systems and for public address. The chamber of acoustic compression is separated from the outer atmosphere through a special filter of sintering. They are equipped with a transformer offering the possibility to adapt and select the sound level according to the real needs of the installation point.

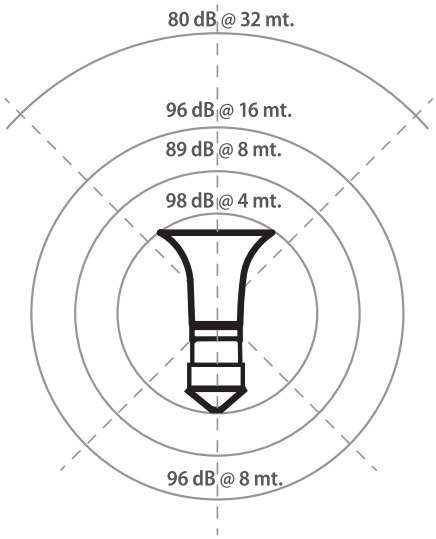
Materials:
Body, cover and horn cone in stainless steel 316. Adjustable stainless steel 316 bracket. Bolts and screws in stainless steel 316. Epoxy coating RAL 7000. Selectable power.





	ETHY20MD LOUD
Electrical features	
Selectable power	6 W – 12 W – 20 W – 25 W
Rated voltage	100 V
Audio line	16 Ω
Output	100 ÷ 102 dB @ 6 W 104 ÷ 106 dB @ 12 W 107 ÷ 108 dB @ 20 W 109 ÷ 112 dB @ 25 W
Frequency range	650 ÷ 10 000 Hz @ 6 W 450 ÷ 9000 Hz @ 12 W 400 ÷ 9000 Hz @ 20 W 350 ÷ 10 000 Hz @ 25 W
Environmental	
IP Rating	IP66
Min / Max Amb Temp	-20°C / 60°C
Mechanical	
Material	Body, cover and horn cone in stainless steel 316
Installation	Adjustable stainless steel 316 bracket
Hardware	Stainless steel
Gaskets	SILICONE
Cable entry	N° 2 Ø M20
Weight	7 Kg

Outdoor loudness distribution polar diagram:



ETH20MD Loud 24/48 VDC

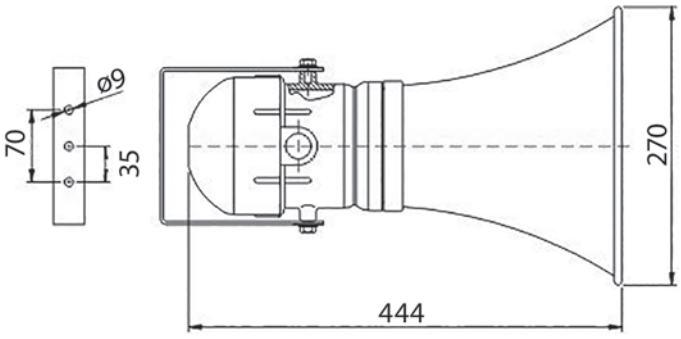
EXPLOSION PROOF LOUDSPEAKER with 24/48 VDC AMPLIFIER

- ✓ *Full compliance with directive 2014/34/UE*
- ✓ *Full compliance with:*
  EN 60079-0:2012/A11:2013,
  EN 60079-1:2014, EN 60079-31:2014
- ✓ *Incorporate amplifier 24/48 VDC*
- ✓ *Acoustic pressure a 1 m*
  maximum power 112 dB
- ✓ *Ex db IIB+H2 Gb Ex tb IIIC Db II2GD T6 T5*
- ✓ *Ex db IIC Gb Ex tb IIIC Db II2GD T6 T5*
- ✓ *zone 1, zone 2, zone 21, zone 22*

NEW!

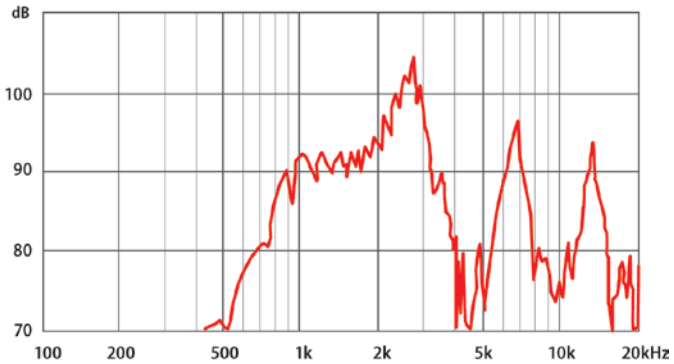
The explosion-proof loudspeakers ETH20MD LOUD 24/48 VDC series have been designed for use in potentially explosive atmospheres in presence of explosive gases and dusts. They have a high degree of protection (IP66) to withstand the harsh off-shore and on-shore plants environmental conditions. They are equipped with a class D audio amplifier powered at 24/48 VDC, to alarm systems and for public address. The chamber of acoustic compression is separated from the outer atmosphere through a special filter of sintering.
Possibility to select the sound level according to the real needs of the installation site. (4 power steps are available).

Materials:
Body, cover and horn cone in aluminium alloy. Adjustable galvanized steel bracket. Bolts and screws in stainless steel. Epoxy coating RAL 7000. Selectable power.



	ETH20MD LOUD 24/48 VDC
Features transducer	
Work power	25 W
Maximum power	40 W
Impedance 1 kHz	8 Ω
Environmental	
IP Rating	IP66
Min / Max Amb Temp	-20°C / 60°C
Class D audio amplifier	
Input signal	0 dB at 600 8 Ω
Input sensitivity	40 mV / 150 kΩ
Power supply	from 24 VDC to 48 VDC
Absorption at maximum power	0.8 A @ 48 V - 1.2 A @ 24 VDC
Piloting	8 Ω loudspeakers
Output power	30 W
Total harmonic distortion + noise	(f = 1 kHz, PO = 20 W) 0.2%
Signal report / noise	(f = 1 kHz, Gain = 20 dB) 102 dB
Power regulation	adjustable with trimmer from zero to maximum power of the set step
Power Step	4 power steps are available, selectable by SW1 dip-switch Step 1 (gain 20 db) = 1.57 W Step 2 (gain 26 db) = 5.4 W Step 3 (gain 32 db) = 21.5 W Step 4 (gain 36 db) = 30.4 W
Frequency response	from 20 Hz to 20 kHz

Frequency band:



ETH20MD Loud 24/48 VDC Special

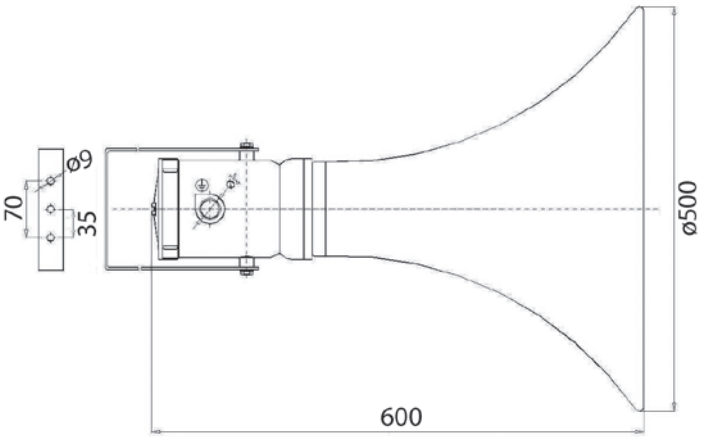
LOUDSPEAKER EXPLOSION PROOF with 24/48 VDC AMPLIFIER

- ✓ *Full compliance with directive 2014/34/UE*
- ✓ *Full compliance with:*
  EN 60079-0:2012/A11:2013,
  EN 60079-1:2014, EN 60079-31:2014
- ✓ *Incorporate amplifier 24 / 48 VDC*
- ✓ *Acoustic pressure a 1 m*
  maximum power 112 dB
- ✓ *Ex db IIB+H2Gb Ex tb IIIC Db II2GD T6 T5*
- ✓ *Ex db IIC Gb Ex tb IIIC Db II2GD T6 T5*
- ✓ *zone 1, zone 2, zone 21, zone 22*

NEW!

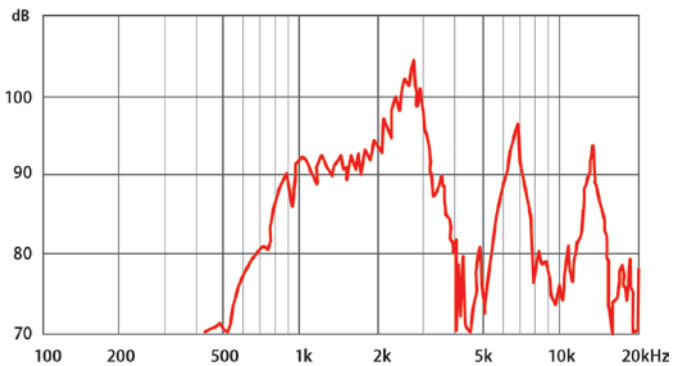
The explosion-proof loudspeakers ETH20MD LOUD 24/48 VDC series have been designed for use in potentially explosive atmospheres in presence of explosive gases and dusts. They have a high degree of protection (IP66) to withstand the harsh off-shore and on-shore plants environmental conditions. They are equipped with a class D audio amplifier powered at 24/48 VDC, to alarm systems and for public address. The chamber of acoustic compression is separated from the outer atmosphere through a special filter of sintering.
Possibility to select the sound level according to the real needs of the installation site. (4 power steps are available).

Materials:
Body, cover and horn cone in aluminium alloy. Adjustable galvanized steel bracket. Bolts and screws in stainless steel. Epoxy coating RAL 9005. Selectable power.



	ETH20MD LOUD 24/48 VDC
Features transducer	
Work power	25 W
Maximum power	40 W
Impedance 1 kHz	8 Ω
Environmental	
IP Rating	IP66
Min / Max Amb Temp	-20°C / 60°C
Class D audio amplifier	
Input signal	0 dB at 600 8 Ω
Input sensitivity	40 mV / 150 kΩ
Power supply	from 24 VDC to 48 VDC
Absorption at maximum power	0.8 A @ 48 V - 1.2 A @ 24 VDC
Piloting	8 Ω loudspeakers
Output power	30 W
Total harmonic distortion + noise	(f = 1 kHz, PO = 20 W) 0.2%
Signal report / noise	(f = 1 kHz, Gain = 20 dB) 102 dB
Power regulation	adjustable with trimmer from zero to maximum power of the set step
Power Step	4 power steps are available, selectable by SW1 dip-switch Step 1 (gain 20 db) = 1.57 W Step 2 (gain 26 db) = 5.4 W Step 3 (gain 32 db) = 21.5 W Step 4 (gain 36 db) = 30.4 W
Frequency response	from 20 Hz to 20 kHz

Frequency band:



We make everyday life safer

Ambient System products are continually improved. All specifications are therefore subject to change without prior notice.

01.2020

AMBIENT SYSTEM Sp. z o.o. | ul. Bysewska 27, 80-298 Gdańsk, Poland | T: +48 58 345 51 95 | F: +48 58 343 18 77 | ambient@ambientsystem.eu | www.ambientsystem.eu