SUITABLE FOR SPEECH AND MUSIC REPRODUCTION •

SIMPLE POWER SETTING •

SPLASH-WATERPROOF TYPES •

ONE BI-DIRECTIONAL TYPE •

PENDANT SPHERE TYPE •

ROBUST SELF-EXTINGUISHING ABS ENCLOSURES TO UL 94V0 •

COMPLIES WITH INTERNATIONAL INSTALLATION AND SAFETY REGULATIONS •

Philips range of loudspeaker enclosures offers a selection of units to meet most public address system requirements. They have been developed as a result of Philips' long and wide-ranging experience in all aspects of sound reinforcement, guaranteeing a high-quality product.

Two sound projectors, a bi-directional sound projector and a pendant sphere type loudspeaker are available for general purpose applications. The sound projectors and the pendant sphere are splash-waterproof and suitable for outdoor use and in environments with high humidity levels such as swimming pools.

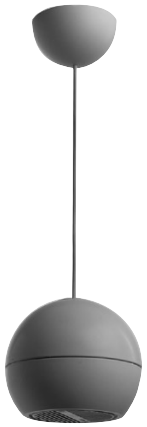
Sound projectors are intended for applications where directing the sound beam is desirable. Similiar in concept to a spotlight, a sound projector can be used to provide localized sound reproduction. Typical examples include restaurants, exhibitions, factory grounds and shopping centres.

The enclosures are made from high-impact self-extinguishing ABS (acc. to class UL 94V0). The sound projector enclosures are coloured off-white and supplied with steel mounting brackets painted in off-white. They are suitable for mounting onto walls or ceilings. The pendant sphere is designed to be suspended from its colour-matched connecting cable. A cable clamp and ceiling cover are supplied.

LBC 3092/15

LBC 3093/15

LBC 3094/15



LBC 3095/15

LBC 3092/15, LBC 3093/15, LBC 3094/15, LBC 3095/15

SOUND PROJECTORS

Bi-directional sound projector

The LBC 3092/15 is a bi-directional sound projector that contains two loudspeakers facing in opposite directions. This model is intended for use for example in long corridors and in shopping arcades.

Sound projectors

The LBC 3093/15 (6 W) and LBC 3094/15 (10 W) are sound projectors for speech and music reproduction in indoor or outdoor applications such as shopping centres, factory grounds and sports fields.

Pendant sphere loudspeaker

The LBC 3095/15 is a pendant model designed to be suspended from the ceiling via their connecting cables (easy to shorten for desired height). Their excellent sound spread makes them ideal for use in buildings with high ceilings such as hypermarkets and superstores. The pleasing shape and neutral colours make the pendant sphere models interesting architectural features in their own right. They are not recommended for use in windy environments.

Power setting

All units are supplied with a colour-coded four-core connecting cable with each colour connected to a different primary tap on the 100 V matching transformer. This allows nominal full-power, half-power or quarter-power radiation to be selected (i.e. in 3 dB steps).

LBC 3092/15, LBC 3093/15, LBC 3094/15, LBC 3095/15

SOUND PROJECTORS

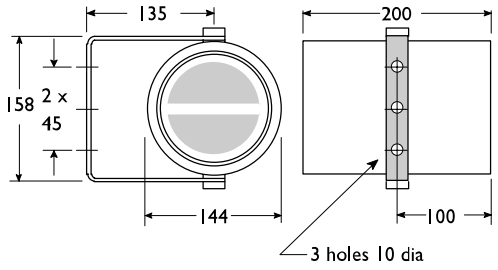
Quality assurance

All Philips loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Philips has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated power for short durations. This ensures extra reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and much less chance of failure or performance deterioration.

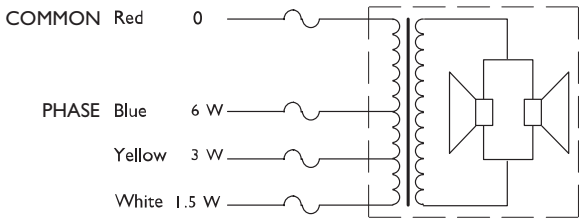
TECHNICAL PERFORMANCE DATA ACC. TO IEC 268-5

	LBC 3092/15	LBC 3093/15
Max. power	9 W	9 W
Rated power (PHC)	6 W (6 - 3 - 1.5 W)	6 W (6 - 3 - 1.5 W)
Sound pressure level at 6 W/1 W (at 1 kHz, 1 m)	95 dB/87 dB (SPL)	99 dB/91 dB (SPL)
Effective frequency range (-10 dB)	125 Hz to 20 kHz	160 Hz to 13 kHz
Opening angle (at 1 kHz/4 kHz, -6 dB)	160°/70°	180°/70°
Rated voltage	100 V	100 V
Rated impedance	1667 Ω	1667 Ω
Ambient temperature range	-25 to +55 °C	-25 to +55 °C
Safety	acc. to EN 60065	acc. to EN 60065
Water protection	acc. to EN 60529 IPx3	acc. to EN 60529 IPx3
Connection		
cable	4-wire	4-wire
length	2 m	2 m
Dimensions		
dia.	144 mm	144 mm
max. length	200 mm	200 mm
Colour	off-white (PH 90019)	off-white (PH 90019)
Weight	2.1 kg	1.75 kg

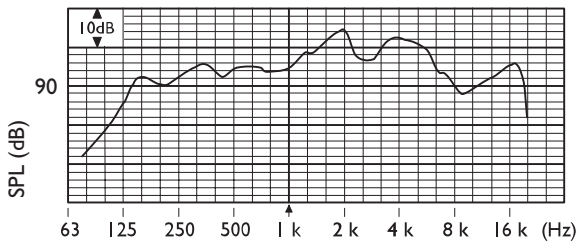
LBC 3092/15



Dimensions (in mm)

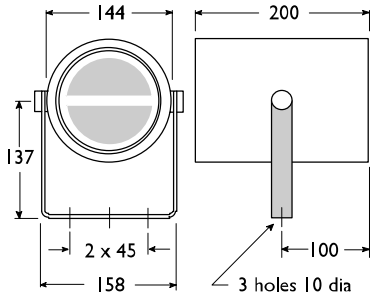


Circuit diagram

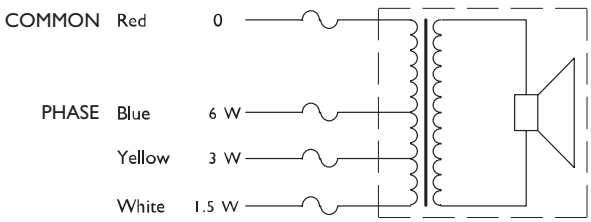


Frequency response

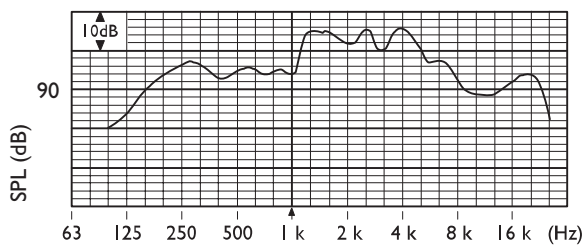
LBC 3093/15



Dimensions (in mm)



Circuit diagram



Frequency response

LBC 3092/15, LBC 3093/15, LBC 3094/15, LBC 3095/15

SOUND PROJECTORS

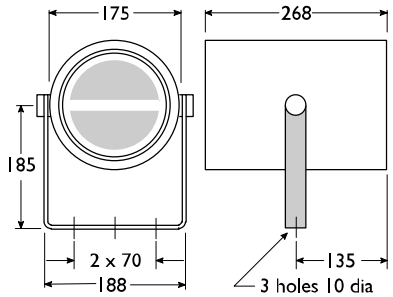
Safety aspects

All plastic parts are manufactured from self-extinguishing high-impact ABS material (according to UL 94V0). In common with all Philips products, care is taken to meet high safety standards. These sound projectors comply with all the relevant safety and installation regulations of EN 60065.

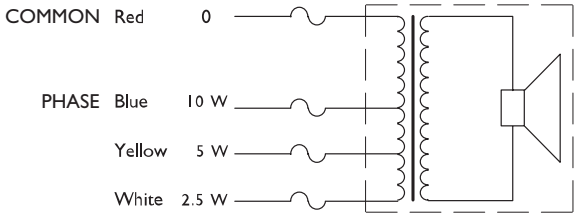
TECHNICAL PERFORMANCE DATA ACC. TO IEC 268-5

	LBC 3094/15	LBC 3095/15
Max. power	15 W	15 W
Rated power (PHC)	10 W (10 - 5 - 2.5 W)	10 W (10 - 5 - 2.5 W)
Sound pressure level at 10 W/1 W (at 1 kHz, 1 m)	102 dB/92 dB (SPL)	99 dB/89 dB (SPL)
Effective frequency range (-10 dB)	140 Hz to 13 kHz	130 Hz to 20 kHz
Opening angle (at 1 kHz/4 kHz, -6 dB)	160°/70°	180°/90°
Rated voltage	100 V	100 V
Rated impedance	1000 Ω	1000 Ω
Ambient temperature range	-25 to +55 °C	-25 to +55 °C
Safety	acc. to EN 60065	acc. to EN 60065
Water protection	acc. to EN 60529 IPx3	acc. to EN 60529 IPx3
Connection		
cable	4-wire	4-wire
length	2 m	5 m
Dimensions		
dia.	175 mm	185 mm
max. length	268 mm	157 mm
Colour	off-white (PH 90019)	off-white (PH 90019)
Weight	2.5 kg	2.5 kg

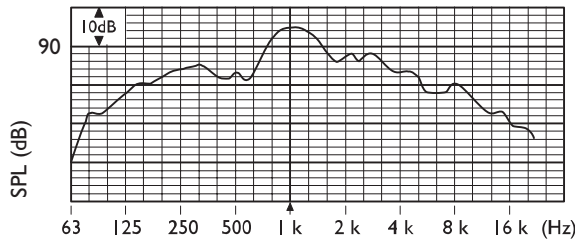
LBC 3094/15



Dimensions (in mm)

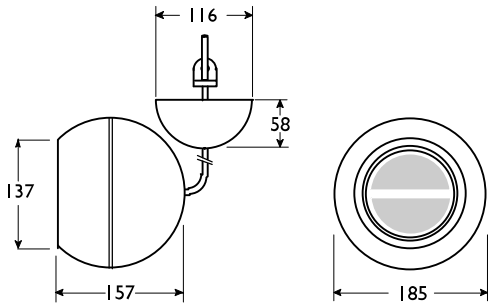


Circuit diagram

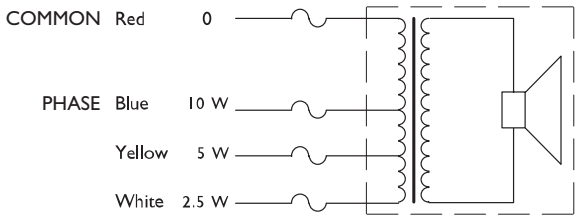


Frequency response

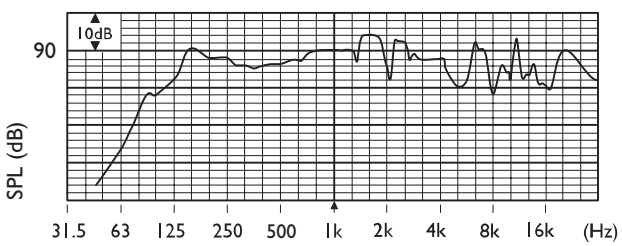
LBC 3095/15



Dimensions (in mm)



Circuit diagram

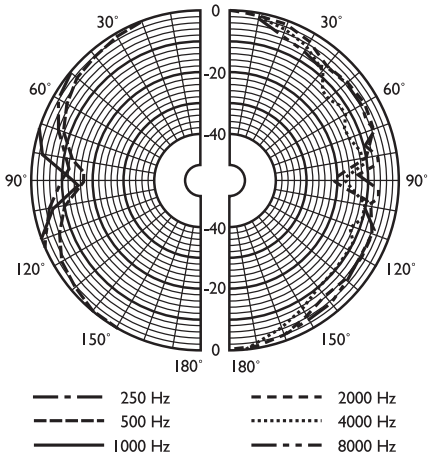


Frequency response

LBC 3092/15, LBC 3093/15, LBC 3094/15, LBC 3095/15

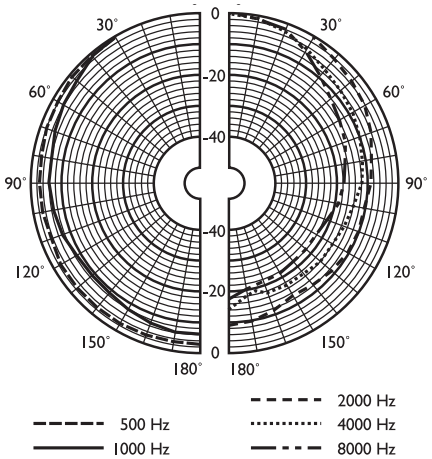
SOUND PROJECTORS

LBC 3092/15



Polar diagram (measured with pink noise)

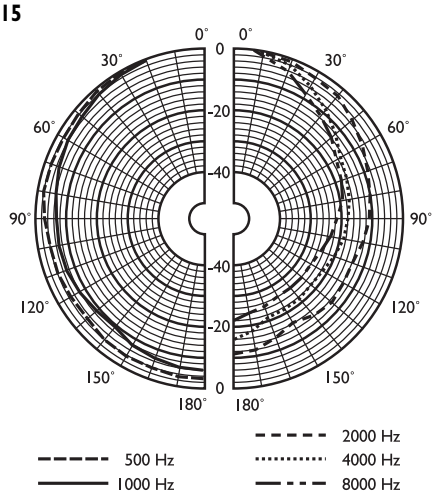
LBC 3093/15



Polar diagram (measured with pink noise)

Octave band (Hz)	125	250	500	1 k	2 k	4 k	8 k
SPL 1.1	73	86	84	91	91	87	81
SPL max.	81	94	92	99	99	95	89
Q-factor	1.2	1.3	1.8	2.7	3.4	13.2	11.5
Efficiency	0.02	0.4	0.2	0.6	0.5	0.05	0.01
Hor. angle	360	360	360	180	130	70	60
Vert. angle	360	360	360	180	130	70	60

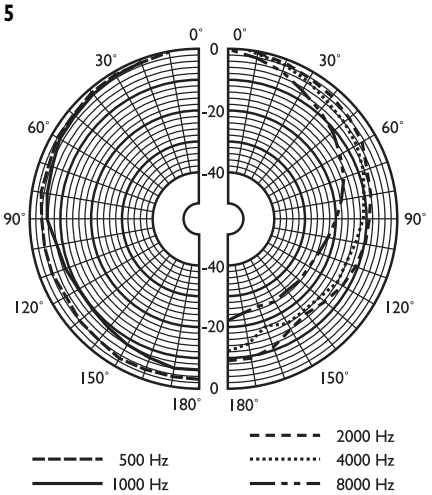
LBC 3094/15



Polar diagram (measured with pink noise)

Octave band (Hz)	125	250	500	1 k	2 k	4 k	8 k
SPL 1.1	81	82	85	92	89	87	79
SPL max.	91	92	95	102	99	97	89
Q-factor	1.2	1.3	1.8	3.1	5.9	20	32
Efficiency	0.1	0.1	0.2	0.6	0.2	0.03	0.01
Hor. angle	360	360	360	160	105	70	40
Vert. angle	360	360	360	160	105	70	40

LBC 3095/15



Polar diagram (measured with pink noise)

Octave band (Hz)	125	250	500	1 k	2 k	4 k	8 k
SPL 1.1	80	85	84	89	89	85	85
SPL max.	90	95	94	99	99	95	95
Q-factor	1.2	1.3	1.8	3.1	5.2	8.5	18
Efficiency	0.1	0.3	0.2	0.3	0.2	0.05	0.02
Hor. angle	360	360	360	180	125	90	55
Vert. angle	360	360	360	180	125	90	55

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