



## BRIEF INFORMATION

### Backup and warning alarm BM20 and BM40

- Penetrating, long-range alarm sound
- White noise technology, which reduces noise pollution (BM20)
- Insulated electronics with epoxy to protect against rust, moisture and vibrations
- Various options of sound pressure level for urban and construction environment

## PRODUCT FEATURES

### Application

The backup alarm is an indispensable element in high-risk work environments and can actively prevent accidents with its high frequency alarm. It gives commercial vehicles additional safety when maneuvering and reversing.

In some countries, regulations require the installation of a backup alarm when motor vehicles are obstructed to the rear. The vehicle must have an audible backup alarm above the surrounding noise level. Many of the regulations require a sound level higher than 90 dB.

### Design and function

The backup warning emits a warning tone as soon as reverse gear is engaged. This is how it warns other road users about the reversing vehicle.

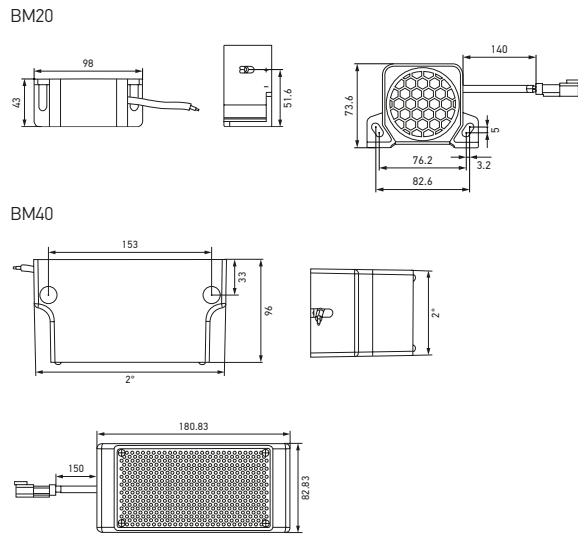
Backup alarms are available in different volume levels depending on the application. For example, backup alarms with a signal volume of approx. 90 dB are used on typical city delivery vehicles and back alarms with a volume of more than 100 dB are used on construction sites where there is very high ambient noise. A backup alarm that is 3 dB louder than another one already has twice the volume.

# TECHNICAL DETAILS

## Technical data

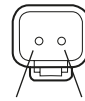
Nominal voltage	12–32 V
Sound pressure level @ 1.2 m	87–112 dB (A)
Frequency range	80–140 Hz 140 ± 200 Hz (-551 and -571)
Power consumption	BM20: 12 W BM40: 18 W
Current consumption	BM20: ≤ 1.5 A BM40: ≤ 1.6 A
Operating temperature	-40 °C to +85 °C
Protection class	BM20: IP 6K7 BM40: IP 65
Service life	100 hrs
Housing material	BM20: PA66+15% GA BM40: PA60
Type approval and Standards	ECE-R10 SAE J994

## Technical Drawing





## Pin Assignment

DEUTSCH connector DT 04-2P



Plus (+) Minus (-)

# OVERVIEW OF VARIANTS

Product	Noise	Connector	Sound pressure level @ 1.2 m	Part number	Packaging unit
<b>BM20: Ideal for light commercial vehicles</b>					
	White noise	140 mm cable with DEUTSCH connector	92 dB(A)	<b>3SL 996 139-501</b>	1
	White noise	140 mm cable with DEUTSCH connector	97 dB(A)	<b>3SL 996 139-511</b>	1
	White noise	140 mm cable with DEUTSCH connector	102 dB(A)	<b>3SL 996 139-521</b>	1
	White noise	140 mm cable with DEUTSCH connector	92–102 dB(A)	<b>3SL 996 139-531</b>	1
<b>BM40: Ideal for heavy duty commercial vehicles, automatic adjustment to environmental sound levels</b>					
	Standard	150 mm cable with DEUTSCH connector	low: 97 dB(A) med: 107 dB(A) high: 112 dB(A)	<b>3SL 996 139-551</b>	1
	White noise + Standard	150 mm cable with DEUTSCH connector	low: 92 dB(A) med: 102 dB(A) high: 107 dB(A)	<b>3SL 996 139-561</b>	1
	Smart	150 mm cable with DEUTSCH connector	112 dB(A)	<b>3SL 996 139-571</b>	1
	Smart + White noise	150 mm cable with DEUTSCH connector	92–107 dB(A)	<b>3SL 996 139-581</b>	1