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**NOTE**All information in this brochure is provided for reference use only. Subject to change. HELLA is not responsible for the final use of the products, and care must be taken to ensure that the products are suitable for the application.

# YOUR SAFETY IS OUR PRIORITY





MICROSITE: Find out about HELLA Electrics range



www.hellahd.com

Quality is extremely important in electric HELLA products such as relays, speakers, switches, flashing lights, electric vacuum pumps, plugs, sockets and much more, due to their high precision and reliability. HELLA products not only comply with the strict legal regulatory requirements but also with the much more demanding requirements made by vehicle manufacturers and the aftermarket.

HORNS APP - Online tool to compare the different acoustic signal units



www.hella.com/apps

#### **DEAR PARTNERS AND CUSTOMERS**





In this brochure, HELLA presents its complete range of Acoustic Signal Units. For HELLA safety is paramount, surely your customers will notice that our warning signals use the most modern acoustic technology. Integrating security, reliability and precision workmanship is a tradition that HELLA continues to do for more than 100 years.

#### **COMPLIANCE WITH WORLDWIDE QUALITY STANDARDS**



For more details and other applications, please consult our website.

www.hella.com/horns



HELLA's packagings include an hologram to protect against counterfeiting. This new seal gives workshops, distributors

and their customers the guarantee that they are using genuine HELLA parts."

#### **ACOUSTIC SIGNAL UNITS**



HELLA's horns, trumpet horns, and air trumpet horns are designed and manufactured with German precision technology. We work with world-class vehicle manufacturers so you can rest assured that your horns feature state-of-the-art and the best technologies.

HELLA quality isn't just seen, it's also heard: our specialized experience in developing horns and air trumpet horns complies with strict ECE and OEM requirements, both in applications for passenger cars and commercial vehicles.

Our manufacturing plant HELLA India Automotive is fully committed to research and development as well as displaying a strict adherence to quality manufacturing. Leveraging HELLA's worldwide central resources for vehicle electronics, HELLA enforces the principles of developing state-of-the-art products and ensures the delivery of world-class horns to our customers.



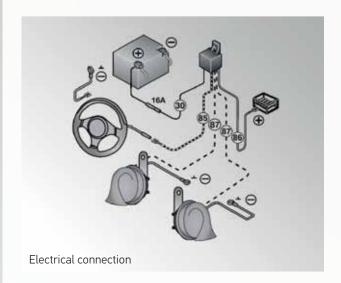
#### TYPICAL INSTALLATION INSTRUCTIONS

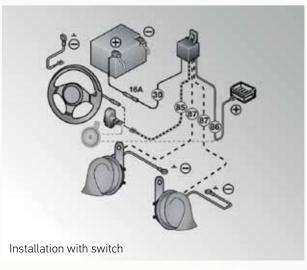
- 1) Before installation, ensure that the battery is disconnected from the vehicle wiring system.
- 2) Select a mounting location with enough space around the horns and other parts of the vehicle. The installation position must be protected against splash water.
- 3) Do NOT move, adjust, or change the bracket or nut. If you do, the electromechanical properties will be altered and cause a loss of performance.
- 4) Mount the horns/trumpets to a stable bracket.

5) Use a cable with a suitable diameter for mounting the horn, keeping in mind the amount of power needed by the horn.

#### Connection example.

Connections may differ depending on the vehicle!





# **PRODUCT INTRODUCTION**TRUMPET HORN



- 1 Bracket
- 2 Terminals
- 3 Contacts
- 4 Solenoid

- 5 Seal
- 6 Diaphragm
- 7 Base plate
- 8 Solenoid



### RECOMMENDATION FOR SELECTING A SIGNAL UNIT

The quality of horns and trumpet horns is not easy for people to gauge. HELLA has more

than 100 years of experience in manufacturing high-quality acoustic devices and guarantee a pleasant and harmonic sound.

For various vehicle applications, HELLA provides professional recommendations on how to choose the right product. You can find details in the product overview.

HELLA recommends mounting a pair of horns to replace the vehicle's horn.



#### **VOLUME**

This is one of the key performance indicators for a horn's characteristics.

HELLA has a wide product range of horns and trumpet horns in the volume range of 108 dB(A) to 118dB(A).

# **PRODUCT INTRODUCTION** DISC HORN



- 1 Bracket
- 2 Terminals
- 3 Contacts
- 4 Solenoid

- 5 Seal
- 6 Simple horn shank
- 7 Diaphragm
- 8 Cover ring



#### **FUNCTIONAL PRINCIPLE**

Horns are powered by the battery current signal, which is commonly controlled by a voltage pulse sent from the steering wheel.

The current signal is directed to a relay, which transmits the entire control current, preventing voltage drops.

As the horn is powered by the electric current, it forms a magnetic field, which attracts a metal core (shank) together with a steel diaphragm. This attraction causes vibrations, which are transformed by varying resonances in order to obtain low or high tones.



#### **NOMINAL VOLTAGE**

- → 7 12 V: for automotive vehicles, agricultural machinery, construction machinery, etc.
- → 7 24 V: for commercial vehicles, buses, municipal vehicles, etc.

# **PRODUCT INTRODUCTION**AIR TRUMPET HORNS



# **AIR TRUMPET HORNS**EFFICIENT SOUND

HELLA's air trumpet horns produce a loud, far-reaching sound. Ideal for vehicles which need to be heard in traffic.

HELLA's air trumpet horns are produced from durable materials, have a sharp sound, and include mounting materials. Their design is both striking and resistant to inclement weather.



### **PRODUCT INTRODUCTION**REVERSING AND WARNING ALARMS



### **REVERSING AND WARNING ALARM**SAFETY FIRST

In some countries, regulations require the installation of a reversing alarm when automotive vehicles have an obstructed view to the rear. The vehicle must have an audible reversing alarm that is louder than the surrounding noise level unless the vehicle is accompanied by an observer who signals when it is safe to reverse.

All bidirectional machinery, such as construction machinery, agricultural machinery, garbage trucks etc. must be equipped with a reversing alarm, which differs from surrounding noises and is triggered as required when the machinery is moving. The reversing alarm must always be fully operational. Many of the regulations require a sound level higher than 90 dB.



### **CONVERSION**HELLA B133 SUPER-TONE HORN



Depending on the application and conditions, you might find that your horn in not loud enough for safety purposes. In this case, it may be a good idea to install a louder horn so that a sufficient warning tone can be produced in dangerous situations. In order to demonstrate this kind of conversion and what you need to take into account, let's consider the example of the Audi TT/RS.

In most cases, the more powerful horns consume more (electrical) power, meaning that they cannot simply be installed in a vehicle without additional work. Only experienced personnel should therefore handle the conversion.



### Prior to conversion, please check and/or ensure the following:

- → Carefully read the assembly instructions enclosed with the product
- → Find out the power consumption of super-tone horns using the technical data
- → Based on this information, check the vehicle wiring and fusing of the originally installed horns to see if they can be used



#### NOTE!

Should the vehicle wiring or fusing prove to be insufficient, it is essential that they are altered to suit the new installation situation.



Remove the fuse for the "Horn" circuit from the fuse box in order to cut the power supply of the acoustic signaling units for the duration of the electric connection.

- → Switch off the ignition
- → Remove key from ignition
- → Remove bumper cover at front





# **CONVERSION**HELLA B133 SUPER-TONE HORN



- → Remove originally installed horns with bracket
- → Disconnect electrical plug connections from the horns
- → Install super-tone horns



#### NOTE!

Due to the size of the new super-tone horns, check the optimal assembly position. The housing body must have sufficient leeway for swinging into all directions and should be in contact with the adjacent body parts.



- → Prepare electric connections for the new super-tone horns
- → Connect electric connections to the super-tone horns, then plug in and fix wiring harness to the cable guides
- → Insert fuse and conduct functional test

If the functional test is successful, the bumper cover can once again be mounted with all assembly parts, thus fully restoring the vehicle.

#### NOTE!

The housing body including retaining plate determine horn's tone. Changing the retaining plate on the super-tone horn can negatively impact the acoustic pattern.





Detailed installation instructions for the Audi TT/RS and others for the Jeep Grand Cherokee can be found in the HELLA TECH WORLD.

www.hella.com/techworld





Serie	s	HELLA Part	Frequency	Acoustic	Voltage	W Energy	Diameter /	Packaging /	676		<b>6-6</b>		
		Number	. requency	Intensity	Tomago	consumption	Size	Content					
S70M		012588011	380 / 480 Hz	108 dB (A)	12 V	2 x 16 W	7 cm 7 x 9.5 cm	Box - 2 pieces	-				
		012588061	460 Hz	108 dB (A)	12 V	1 x 16 W	7 X 7.5 GIT	Box - 1 piece	-				
S77		011225802	350 / 420 Hz	111 dB (A)	12 V	2 x 42 W		Box - 2 pieces	-				
		011225881	350 / 420 Hz	111 dB (A)	12 V	2 x 42 W	7.7 cm	Box - 2 pieces		Toyota			
(		011225891	350 / 420 Hz	111 dB (A)	12 V	2 x 42 W	4.7 x 10.5 cm	Box - 2 pieces		Honda			
		012588351	430 Hz	111 dB (A)	12 V	1 x 42 W		Blister - 1 piece					
Specifi Applicat													
 S92		011225871	335 / 435 Hz	113 db (A)	12 V	2 x 60 W		Box - 2 pieces	•				
572		012588071	435 Hz	113 db (A)	12 V	1 x 60 W	9.2 cm 9.2 x 5.6 cm	Blister - 1 piece					
(									_		_		
		002768821	335 / 435 Hz	113 db (A)	24 V	2 x 72 W		Box - 2 pieces					
	D	012588141	335 Hz	113 db (A)	12 V	1 x 60 W		Blister - 1 piece	-				
S98		012588341	335 / 400 HZ	115 dB (A)	12 V	2 x 54 W	9.8 cm 8.8 x 5.4 cm	Box - 2 pieces	•				
		012588291	400HZ	115 dB (A)	12 V	1 x 54 W		Box - 1 piece					
M26		002952811	400 Hz	115 db (A)	12 V	1 x 66 W		Box - 1 piece					
6		002952861	335 Hz	115 db (A)	12 V	1 x 66 W	9.7 cm 5.4 x 12.2 cm	Box - 1 Piece					
9	0	006958901	335 Hz	115 db (A)	12 V	1 x 66 W	0.7.7.12.2.0.77	Box - 1 piece (Black)					
B36		002768082	335 Hz	116 db (A)	12 V	1 x 72 W		Box - 1 piece					
	0	002768551	400 Hz	116 db (A)	12 V	1 x 72 W	11.2 cm	Box - 1 piece					
	002768382	335 Hz	116 db (A)	24 V	1 x 72 W	5.3 x 12.9 cm	Box - 1 piece						
		002768431	400 Hz	116 db (A)	24 V	1 x 72 W		Box - 1 piece		_			
S130	5130												
		004811091	280 / 380 Hz	118 dB (A)	12 V	2 x 48 W	13 cm 13 x 8.1 cm	Box - 2 pieces					
		004811071	280 / 380 Hz	118 dB (A)	24 V	2 x 48 W		Box - 2 pieces					-
S140	00	004811101								_	_	_	_
			280 / 380 Hz	118 dB (A)	12 V	2 x 48 W	14 cm 14 x 8.2 cm	Box - 2 pieces					
		004811081	280 / 380 Hz	118 dB (A)	24 V	2 x 48 w		Box - 2 pieces					
M26S		922000731	350 / 415 Hz	115 db (A)	12 V	2 x 42 W	10.8 cm 6.65 x 12.2 cm	Box - 2 pieces		•	•	•	-
B133		003399801	300 / 500 Hz	118 db (A)	12 V	2 x 66 W	122	Box - 2 pieces + Relay					
<u> </u>		003399901	300 / 500 Hz	118 db (A)	12 V	2 x 66 W	12.3 cm 8.5 x 12.5 cm	Blister -2 pieces + Relay		_	_		
		358114051	500 Hz	118 db (A)	12 V	1 x 66 W		Box - 1 piece		_	_	_	_
B133	<b>A A</b>	003399101	375 / 500 Hz	118 db (A)	24 V	2 x 84 W		Box- 2 pieces					
6		003399061	375 Hz	118 dB (A)	24 V	1 x 84 W	12.3 cm	Box - 1 piece					
•		003399071	500 Hz	118 dB (A)	24 V	1 x 84 W	8.5 x 12.5 cm	Box - 1 piece					
DL50		004811001	310 Hz	114 dB (A)	12 V	1 x 72 W		Box - 1 piece					
		004811011	380 Hz	114 dB (A)	12 V	1 x 72 W	13 cm	Box - 1 piece					
		004811021	310 Hz	114 dB (A)	24 V	1 x 84 W	6.1 x 14.3 cm	Box - 1 piece					
	-	004811031	380 Hz	114 dB (A)	24 V	1 x 84 W		Box - 1 piece					-
TC16		011225831	400 / 500 Hz	113 dB (A)	12 V	2 x 72 W	8.6 cm	Box - 2 pieces	-		-		
		012010971	400 / 500 Hz	113 dB (A)	12 V	2 x 72 W	8.6 x 10.9 cm	Blister- 2 pieces	•				

Series	HELLA	ΛγΛγ	dB(A)		W	Ø		876	<b>€</b>	<b>F</b>		
	Part	Frequency	Acoustic	Voltage	Energy	Diameter /	Packaging /					
	Number		Intensity		consumption	Size	Content					
TE16	012010981	400 / 500 Hz	110 db (A)	12 V	2 x 72W	8.1 cm 8.1 x 10.9 cm	Box - 2 pieces + Relay		-	-		
	007424801	400 / 500 Hz	110 db (A)	12 V	2 x 72W	0.17.70.70.11	+ Relay Box - 2 pieces + Relay	-	-	-		
	012010851	400 / 500 Hz	110 db (A)	12 V	2 x72 W		Box - 2 pieces					
	007424811	400 / 500 Hz 400 / 500 Hz	110 db (A)	12 V	2 x72 W 2 x72 W		Box - 2 pieces Box - 2 pieces					
<u> </u>	012010801	400 / 500 Hz	110 db (A)	12 V	2 x72 W		Box - 2 pieces					
	007424001	400 Hz	110 db (A)	12 V	1 x 72 W		Box - 1 Pieces			_		
	007424011	400 Hz	110 db (A)	12 V	1 x 72 W		Box - 1 Pieces.		_			
T01/C	011225841	400 / 500 Hz	113 db (A)	12 V	2 x 72 W	8.6 cm	Box - 2 pieces		Audi, Seat VW			
TC16S	012010881	400 / 500 Hz	113 db (A)	12 V	2 x 72 W	8.6 x 10.9 cm	Box - 2 pieces		BMW			
1 1	011225921	400 / 500 Hz	113 db (A)	12 V	2 x 72 W		Box - 2 pieces		Ford			
	012010911	400 / 500 Hz	113 db (A)	12 V	2 x 72 W		Box - 2 pieces		Honda			
	011225901	400 / 500 Hz	113 db (A)	12 V	2 x 72 W		Box - 2 pieces		Hyundai			
14	012010891	400 / 500 Hz	113 db (A)	12 V	2 x 72 W		Box - 2 pieces		Peugeot			
Specific Application	012010901	400 / 500 Hz	113 db (A)	12 V	2 x 72 W		Box - 2 pieces		Toyota			
- Application	011225851	400 / 500 Hz	113 db (A)	12 V	2 x 72 W		Box - 2 pieces		VW			
TE20C	007728883	410 / 510 Hz	112 db (A)	12 V	2 x 60 W	8.6 cm 9.1 x 9.7 cm	Box - 2 pieces				•	
TE20	940800821	410 / 510 Hz	110 db (A)	24 V	2 x 72 W	8.6 cm 9.1 x 9.7 x 8.7	Box - 1 Piece				•	
Tornado	013410081	520 / 660 Hz	112 db (A)	12 V	1 x 240 W	40.4.0.44.5	Box - 1 piece					
Compressed Air Trumpet Horn	013410091	520 / 660 Hz	112 db (A)	24 V	1 x 240 W	13.6 x9 x 11.5	Box - 1 piece				•	
Highway Trumpet	005411001	300 - 350 Hz	118 dB (A)	24 V	0 - 20 W	8 cm 7.8 x 16 x 41.5	Box - 1 piece				•	
Air Compressor	004206041	400 Hz	118 dB (A)	12 V	35 W	11.9 cm	Box - 1 piece					
Trumpet	004206011	400 Hz	118 dB (A)	24 V	50 W	9.7 x 9 x 31.1	Box - 1 piece					
Double Tone Air Trumpet	003001651	780 / 840 Hz	118 dB (A)	12 V	240 W	16.3 cm 21.2 cm	Blister - 1 Set.				•	
	003001661	780 / 840 Hz	118 dB (A)	24 V	240 W	(longitudes)	Blister - 1 Set.				-	
Triple Tone	003001671	780/820/880	118 dB (A)	12 V	240 W	15.8 cm	Blister - 1 Set.					
Air Trumpet	003001981	630/795/840	118 dB (A)	12 V	240 W	16.6 cm 21.7 cm (longitudes)	Blister - 1 Set.					
Air Compressor Horn	013410001	-	115 dB (A)	12 V	312 W	9.2 x 8.4 x 38.6	Blister - 1 Set.				•	•
Chrome Double Air Horn	013410051	-	125 dB (A)	12 V	41 W	40.2x9.6 x 15.6	Box - 1 piece				•	
1	013410061	-	125 db (A)	24 V	77 W		Box - 1 piece				•	
Single-tone air horn	013410011	-	115 dB (A)	12 V 24 V	120 W	11.6x144x20.3	Box - 1 piece				•	
Backup Alarm	009148142	1200 Hz	110 dB (A)	9 - 28 V	5.5 W		Blister - 1 piece					
	009148141	1200 Hz	110 dB (A)	9 - 28 V	5.5 W	10.1 x 3.9 x 6.5	Box - 1 piece				•	
4	009148161	1200 Hz	110 dB (A)	9 - 28 V	5.5 W		Box - 1 piece					
(, )	009148221	1200 Hz	107 dB (A)	9 - 28 V	5.5 W		Box - 1 piece					
Backup	996139001	1200 Hz	87 dB (A)	12 - 36 V	0.59 A		Box - 1 piece					
Alarm	996139101	1300 Hz	107 dB (A)	12 - 36 V	0.4 A	18 x 7.8 x 10.2	Box - 1 piece					
	996139111	1250 Hz	112 dB (A)	12 - 36 V	0.4 A		Box - 1 piece				•	
Backup											-	
Alarm	009148001 009148011	1250 Hz 1250 Hz	90 dB (A) 97 dB (A)	12 - 24 V 12 - 24 V		10.1 x 6 x 7.4	Box - 1 piece Box - 1 piece					
	009148021	1250 Hz	107 dB (A)	12 - 24 V			Box - 1 piece			-		
					-					-		

Features

Approval: ECE



#### S70M Series - Horns for Motorcycles



Housing and bracket in black galvanized metal. Level of acoustic intensity at 2 m distance: 108 dB (A). Energy consumption: 16 W. M8 screw horn bracket.

Operating Temperature: -40° C a 90° C  $\,$  (-40°F a 194°F)







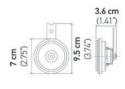




Part Number	Quantity	Description
012588011	2 Pieces	Horns Box (graphic)  12 V, 2 x 16 W, 380 / 480 Hz - Universal  Diameter   Measurements: 7 cm   7 x 9.5 cm
012588061	1 Piece	High Tone - Box (graphic) Horn 12 V, 16 W, 460 Hz - Universal Diameter   Measurements: 7 cm   7 x 9.5 cm







#### **S77 Series - Compact Horns**









Housing and bracket in black galvanized metal. Level of acoustic intensity at 2 m distance: 111 dB (A). Energy consumption: 2 x 42 W M8 screw horn bracket.

Operating Temperature: -40° C a 90° C (-40°F a 194°F) With flat connections of 6.3 mm, open, blade type With Teflon gasket as protection against moisture. Approval: ECE R28

Quantity

Description

Part Number















ECE R28





















2 Pieces

Features



#### **S92 Series**

Housing, diaphragm and bracket in black galvanized metal. Level of acoustic intensity at 2 m distance: 113 dB (A).

Energy consumption: 2 x 60 W @12 V | 2 x 72 W @ 24 V M8 screw horn bracket.

Operating Temperature: -40° C a 90° C (-40°F a 194°F). With flat connections of 6.3 mm, open, blade type. Approval: CCC















2 x 60 W @ 12V 2 x 72 W @ 24 V

8

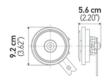
Part Number	Quantity	Description
011225871	2 Pieces	Box (graphic) Horns 12 V, 2 x 60 W, 335/435 Hz - Universal Diameter   Measurements: 9.2 cm   9.2 x 5.6 cm
002768821	2 Pieces	Box (graphic) Horns 24 V, 2 x 72 W, 335/435 Hz - Universal Diameter   Measurements: 9.2 cm   9.2 x 5.6 cm
012588071	1 Piece	High Tone - Plastic blister  Horn 12 V, 1 x 60 W, 435 Hz - Universal  Diameter   Measurements: 9.2 cm   9.2 x 5.6 cm
012588141	1 Piece	Low Tone - Plastic blister  Horn 12 V, 1 x 60 W, 335 Hz - Universal  Diameter   Measurements: 9.2 cm   9.2 x 5.6 cm



2 Piece



1 Piece



#### New

#### S98 Series

metal bracket.

Approval: ECE R2 Part Number

012588341

Energy consumption: 54 W M8 screw horn bracket.

Black housing with red with red diaphragm and galvanized

Level of acoustic intensity at 2 m distance: 115 dB(A).

Operating Temperature: -40° C a 90° C (-40°F a 194°F) With flat connections of 6.3 mm, open, blade type

Quantity

2 Pieces

















§ ECE R28



Box (graphic)
Horn12 V, 2 x 54 W, 335 / 400 Hz - Universal
Diameter   Measurements: 9.8 cm   9.8 x 12.2 cm
Box (graphic)
Low Tone
12 V, 54 W, 400 Hz - Universal
Diameter   Measurements: 9.8 cm   9.8 x 12.2 cm





2 Pieces





			Diameter   Measurements: 9.8 cm   9.8 x 12.2 cm
	012588291	1 Piece	Box (graphic)
			Low Tone
			12 V, 54 W, 400 Hz - Universal
			Diameter   Measurements: 9.8 cm   9.8 x 12.2 cm
5.4 cm			
(2.12")			
-			

Description

Features



#### **B36 Series**

Housing and bracket in galvanized metal, black diaphragm Level of acoustic intensity at 2 m distance: 116 dB (A). Energy consumption: 72 W.

M8 screw horn bracket.

Operating Temperature: -40° C a 90° C (-40°F a 194°F)

Approval: ECE R28













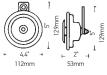




	Part Number	Quantity	Description
			Low Tone
	002768082	1 Piece	Horn 12 V, 72 W, 335 Hz - Universal
			Diameter   Measurements: 11.2 cm   5.3 x 12.9 cm
	002768551	1 Piece	High Tone
			Horn 12 V, 72 W, 400 Hz - Universal
			Diameter   Measurements: 11.2 cm   5.3 x 12.9 cm
	002768382	1 Piece	Low Tone - 24 V
			Horn 24 V, 72 W, 335 Hz - Universal
			Diameter   Measurements: 11.2 cm   5.3 x 12.9 cm
7			
4	002768431	1 Piece	High Tone - 24 V
			Horn 24 V, 72 W, 400 Hz - Universal
			Diameter   Measurements: 11.2 cm   5.3 x 12.9 cm



1 Piece



### S130 Series

Part Number

004811091

004811071

Distinctive look and heavy-duty design Level of acoustic intensity at 2 m distance: 118 dB(A). Embedded HELLA Logo on the center of the grille Black coated housing with a chromed protective grille Enhanced low bass sound Available for 12 V and 24 V

Operating Temperature: -40° C a 90° C (-40°F a 194°F)

2 Pieces

2 Pieces

Quantity Description

Box (graphic)

Box (graphic)

Diameter | Measurements: 13 cm | 13 x 8.1 cm



2 x 48 W





118 dR (Δ)







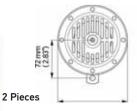
FCF-R28

Horn 12 V, 2 x 48 W, 280/380 Hz - Universal Diameter | Measurements: 13 cm | 13 x 8.1 cm Horn 24 V, 2 x 48 W, 280/380 Hz - Universal

280/380 Hz

13 cm (5.11")







#### S140 - Set of Horns

Housing and bracket in galvanized metal, black diaphragm Level of acoustic intensity at 2 m distance: 118 dB (A). Energy consumption: 2 x 48 W. M8 screw horn bracket.

Operating Temperature: -40° C a 90° C (-40°F a 194°F) Approval: ECE R28



























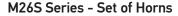


Part Number	Quantity	Description
004811101	2 Pieces	Horns 12 V, 2 x 48 W, 280 / 380 Hz - Universal  Diameter   Measurements: 14.4 cm   14.4 x 82.4 cm
004811081	2 Pieces	Horns 12 V, 2 x 48 W, 280 / 380 Hz - Universal Diameter   Measurements: 14.4 cm   14.4 x 82.4 cm

#### Features







diaphragm in galvanized metal.

Energy consumption: 2 x 42 W. M8 screw horn bracket.

Approval: ECE R28

Black housing and bracket, yellow protective grid and blue

Level of acoustic intensity at 2 m distance: 115 dB(A).

Operating Temperature: -40° C a 90° C  $(-40^{\circ}\text{F a }194^{\circ}\text{F})$ With flat connections of 6.3 mm, open, blade type









115 dB (A)











FCF R28







Part Number	Quantity	Description
922000731	2 Pieces	Horns 12 V, 2 x 42 W, 350 / 415 Hz - Universal Diameter   Measurements: 10.8 cm   6.65 x 12.2 cm







1 Piece

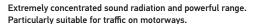
2 Pieces 1 Relav

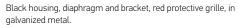






#### **B133 Series - Supertone Horns** with 12 V Relay





Level of acoustic intensity at 2 m distance: 118 dB(A).

Energy consumption: 2 x 66 W

M8 screw horn bracket

Operating Temperature: -40° C a 90° C (-40°F a 194°F)

With flat connections of 6.3 mm, open, blade type

Quantity

2 Pieces

Approval: ECE R28

Part Number

003399901















12.3 cm (4.84")

300 / 500 Hz

2 x 66 W

Horns 12 V, 2 x 66 W, 300/500 Hz - Universal Diameter | Measurements: 12.3 cm | 8.5 x 12.5 cm



Description Plastic blister



2 Pieces

1 Relay



#### **B133 Series - Set of Supertone Horns**

Black housing, protective grille and bracket, in galvanized metal. Level of acoustic intensity at 2 m distance: 118 dB(A).

Operating Temperature: -40° C a 90° C (-40°F a 194°F) With flat connections of 6.3 mm, open, blade type

Energy consumption: 2 x 84 W @ 24 V

M8 screw horn bracket.

Approval: ECE R28















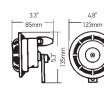




2 x 84 W @ 24 V ECE R28







Part Number	Quantity	Description
003399101	2 Pieces	Horns 24 V, 2 x 84 W, 375/500 Hz - Universal Diameter   Measurements: 12.3 mm   8.5 x 12.5 cm
003399061	1 Piece	Low Tone Horns 24 V, 1 x 84 W, 375 Hz - Universal Diameter   Measurements: 12.3 cm   8.5 x 12.5 cm
003399071	1 Piece	High Tone Horns 24 V, 1 x 84 W, 500 Hz - Universal Diameter   Measurements: 12.3 cm   8.5 x 12.5 cm

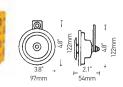
Features







0 006958901



#### M26 Series

Approval: ECE R28

Energy consumption: 66 W. M8 screw horn bracket.















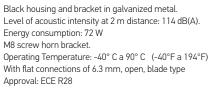
W

		(3.81")
Part Number	Quantity	Description
002952811	1 Piece	High tone Horn 12 V, 66 W, 400 Hz - Universal, silver Diameter   Measurements: 9.7 mm   5.4 x 12.2 cm
002952861	1 Piece	Low Tone Horn 12 V, 66 W, 335 Hz - Universal, silver Diameter   Measurements: 9.7 mm   5.4 x 12.2 cm
006958901	1 Piece	Low Tone Horn 12 V, 66 W, 335 Hz - Universal, black Diameter   Measurements: 9.7 mm   5.4 x 12.2 cm

#### **DL50 Series**







Level of acoustic intensity at 2 m distance: 115 dB (A).

Operating Temperature: -40° C a 90° C (-40°F a 194°F)

With flat connections of 6.3 mm, open, blade type













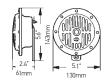
Part Number	Quantity	Description
004811001	1 Piece	Low Tone
		Horn 12 V, 72 W, 310 Hz - Universal
		Diameter   Measurements: 13 cm   6.1 x 14.3 cm
004811011	1 Piece	High Tone
		Horn 12 V, 72 W, 380 Hz - Universal
		Diameter   Measurements: 13 cm   6.1 x 14.3 cm
004811021	1 Piece	Low Tone
		Horn 24 V, 84 W, 310 Hz - Universal
		Diameter   Measurements: 13 cm   6.1 x 14.3 cm
004811031	1 Piece	High Tone
		Horn 24 V, 84 W, 380 Hz - Universal
		Diameter   Measurements: 13 cm   6.1 x 14.3 cm







1 Piece



TC16 Series















2 Pieces

2 Pieces



8.6 cm (3.38")

8.2 cm  $(3.22^{\circ})$ 

ABS plastic housing and galvanized metal bracket Level of acoustic intensity at 2 m distance: 113 dB(A). Energy consumption: 2 x 72 W.

M8 screw horn bracket. Operating Temperature: -40° C a 90° C (-40°F a 194°F) With flat connections of 6.3 mm, open, blade type Approval: CCC







Part Number	Quantity	Description
011225831	2 Pieces	Box (graphic) Trumpets 12 V, 2 x 72 W, 400 / 500 Hz - Universal Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm
012010971	2 Pieces	Plastic blister Horn 12 V, 2 x 72 W, 400 / 500 Hz - Universal Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm

#### Features







#### TE16 Series - Set of Twin Tone Trumpet Horns with 12 V Relay

Energy consumption: 2 x 72 W.

M8 screw horn bracket.

Approval: ECE R28

Includes 12 V Relay

ABS plastic housing and black bracket in galvanized metal. Level of acoustic intensity at 2 m distance: 110 dB(A).

Operating Temperature: -40° C a 90° C (-40°F a 194°F)

With flat connections of 6.3 mm, open, blade type













110 dB (A)



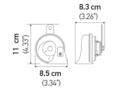




8.2 cm (3.22")



2 Pieces 1 Relay



Part Number	Quantity	Description
007424801	2 Pieces	Trumpets 12 V, 2 x 72 W, 400 / 500 Hz - Universal
		Diameter   Measurements: 8.1 cm   8 x 10.9 cm
		Red Horn
	1 Piece	Includes 12 V Relay





#### **TE16 Series - Set of Trumpets**









400 / 500 Hz















1 Piece



2 Pieces



ABS plastic housing and black bracket in galvanized metal. Level of acoustic intensity at 2 m distance: 110 dB(A). Energy consumption: 2 x 72 W. M8 screw horn bracket.

Operating Temperature: -40° C a 90° C (-40°F a 194°F) With flat connections of 6.3 mm, open, blade type Approval: ECE R28

$[\emptyset]$	
8.2 cm	
(2.22*)	



Part Number	Quantity	Description
012010801	2 Pieces	Box (graphic) Trumpets 12 V, 2 x 72 W, 400 / 500 Hz - Universal Diameter   Measurements: 8.1 cm   8 x 10.9 cm Blue Horn
012010821	2 Pieces	Box (graphic)  Trumpets 12 V, 2 x 72 W, 400 / 500 Hz - Universal  Diameter   Measurements: 8.1 cm   8 x 10.9 cm  Yellow Horn
007424001	1 Piece	Low Tone - Box (yellow)  Horn 12 V, 1 x 72 W, 400 - Universal  Diameter   Measurements: 8.1 cm   8 x 10.9 cm  Red Horn
007424011	1 Piece	High Tone - Box (yellow)  Horn 12 V, 1 x 72 W, 500 - Universal  Diameter   Measurements: 8.1 cm   8 x 10.9 cm  Red Horn

#### Features

Approval: ECE R28, CCC





#### TC16S Series - OE Connector







ABS plastic housing and black bracket in galvanized metal. Level of acoustic intensity at 2 m distance: 113 dB(A). Energy consumption: 2 x 72 W.





M8 screw horn bracket. Operating Temperature: -40° C a 80° C (-40°F a 176°F) With flat connections of 6.3 mm, open, blade type





2 x 72 W

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4	d		h	
7				
-				

































2 Pieces

		<b>8.2 cm</b> (3.22")
(4.29")		
	8.6 cm	

(3.38")

Part Number	Quantity	Description		
011225841	2 Pieces.	Horns 12 V, 2 x 72 W, 400 / 500 Hz - AUDI / VOLKSWAGEN  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		
012010881	2 Pieces.	Horns12 V, 2 x 72 W, 400 / 500 Hz - BMW / MINI Diameter   Measurements: $8.6 \text{ cm} \mid 8.6 \text{ x} \mid 10.9 \text{ cm}$ With specific connector		
011225921	2 Pieces.	Horns 12 V, 2 x 72 W, 400 / 500 Hz - FORD  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		
012010911	2 Pieces.	Horns 12 V, 2 x 72 W, 400 / 500 Hz - HONDA  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		
011225901	2 Pieces.	Horns 12 V, 2 x 72 W, 400 / 500 Hz - HYUNDAI / KIA  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		
012010891	2 Pieces.	Horns12 V, 2 x 72 W, 400 / 500 Hz - PEUGEOT  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		
012010901	2 Pieces.	Horns 12 V, 2 x 72 W, 400 / 500 Hz - TOYOTA  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		
011225851	2 Pieces.	Horns 12 V, 2 x 72 W, 400 / 500 Hz - AUDI / VOLKSWAGEN  Diameter   Measurements: 8.6 cm   8.6 x 10.9 cm  With specific connector		

#### Features

#### **TE20C Series - Chrome**

Energy consumption:  $2 \times 60 \text{ W}$ 

M8 screw horn bracket.

Chromed ABS plastic housing and galvanized metal bracket. Level of acoustic intensity at 2 m distance: 112 dB(A).

Operating Temperature: -40° C a 90° C (-40°F a 194°F). With flat connections of 6.3 mm, open, blade type.











410 / 510 Hz

112 dB (A)

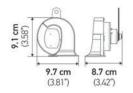
	W	
6 cm :.38")	2 x 60 W	

#### **Special Edition**

Horn chrome HELLA: Quality to the last detail





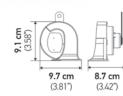












#### Series TE20

ABS plastic housing and galvanized metal bracket. Level of acoustic intensity at 2 m distance: 110 dB(A) Energy consumption: 2 x 72 W M8 screw horn bracket.

Operating Temperature: -40° C a 90° C (-40°F a 194°F) With flat connections of 6.3 mm, open, blade type









410 / 510 Hz

2 x 72 W

Part Number	Quantity	Description
940800821	2 Pieces	Trumpets 24 V, 2 x 72 W, 410 / 510 Hz - Universal
		Diameter   Measurements: 8.6 cm   9.1 x 9.7 x 8.7 cm
		Black Horn



#### Tornado Air Twin Trumpet Horn

Twin tone harmonic sounds by electropneumatic horn. The integrated compressor enables immediate sound output.

Level of acoustic intensity at 2 m distance: 112 dB(A)

Operating Temperature: -40° C a 90° C (-40°F a 194°F)

Energy consumption: 1 x 240 W

Super compact design with horn and air compressor in one module.





















Part Number	Quantity	Description
013410081	1 Piece	Electropneumatic 12 V, 1 x 240 W, 520 / 660 Hz - Universal Measurements: 13.6 x 9 x 11.5 cm Black Horn
013410091	1 Piece	Electropneumatic 24 V, 1 x 240 W, 520 / 660 Hz - Universal Measurements: 13.6 x 9 x 11.5 cm Black Horn



2 Pieces

1 Pieza



#### **ACOUSTIC SIGNAL UNITS**

Product image /

Dimensions

#### COMPRESSED AIR HORNS AND TRUMPET HORNS



#### **Twin Compressed Air Trumpet**





For vehicles with a compressed air brake system. Chromed lid and trumpet, matt black base

Pneumatic operation Level of acoustic intensity at 2 m distance: 118 dB(A).

Energy consumption: 0 - 20 W.

Suitable for tubular fittings Ø 8 mm.

2 holes for fixing screws M10.

Approval: ECE

Features

Pressure Range: 4 - 8.3 bar













ECE R28

•		Part Number	Quantity	Description
	16" 415mm 14' 370mm 80mm 3'-78mm	005411001	1 Piece	Compressed air horn 24 V, 0 -20 W, 300 - 350 Hz - Universal Measurements: 7.8 x 16 x 41.5 cm
	70mm			

#### **Accessories**

The horn can be operated in three different ways:

	Part Number	Quantity	Description
1	715989001	1 Set	Mounting on the roof of the cab. Drive pulling the pull cable coated, 120 cm long. Traction Valve.
2	715990001	1 Set	Cabin floor mounting. Actuation with the foot. Pedal valve.
3	715991001	1 Set	Mounting in the engine compartment. Drive by pressing Horn button. With flat connections of 6.3 mm, open. Power absorbed: 20W. Electric valve, 24V.







1 Piece

#### **Compressed Air Trumpet**

For vehicles with a compressed air brake system. Level of acoustic intensity at 2 m distance: 118 dB (A). Energy consumption: 35W @ 12V, 50W @ 24V. 6.3mm flat blade type terminals.

Robust diecast housing. Suitable for tubular fitting Ø 10 mm.

Pneumatic operation, 2 holes for M10 fixing screws. Operating Temperature: -40° C a 90° C (-40°F a 194°F)

Approval: ECE Pressure Range: 6 - 8.3 bar





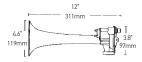






11.9 cm (máx.) 35 W @ 12 V (4.68") 50 W @ 24 V

	Part Number	Quantity	Description
	004206041	1 Piece	Trumpet 12 V, 35 W, 400 Hz - Universal  Diameter   Measurements: 11.9 cm   9.7 x 9 x 31.1 cm
)	004206011	1 Piece	Trumpet 24 V, 50 W, 400 Hz - Universal Diameter   Measurements: 11.9 cm   9.7 x 9 x 31.1 cm



#### **ACOUSTIC SIGNAL UNITS**

#### COMPRESSED AIR HORNS AND TRUMPET HORNS

Product image / Dimensions

Features



#### **Set of Twin Tone Air Horns**







Compressed air horn with ABS plastic body and support in galvanized metal

Level of acoustic intensity at 2 m distance: 118 dB(A).

Energy consumption: 240 W.

Mounting bracket included

Operating Temperature: -40° C a 90° C (-40°F a 194°F)







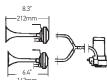




	Part Number	Quantity	Description
	003001651	1 Set	2 Electric Horns - Pneumatic 12 V, 240 W, 780 / 840 Hz - Universal Length of Trumpets: 16.3 cm   21.2 cm Includes compressor, pressure tubes, bifurcated Piece Fastening and Relay 12 V
1	003001661	1 Set	2 Electric Trumpets - Pneumatic 24 V, 240 W, 780 / 840 Hz - Universal Length of Trumpets: 16.3 mm   21.2 cm Includes compressor, pressure tubes, bifurcated Piece Fastening and Relay 24 V
]			



1 Piece 1 Relay



### Set of Triple Tone Air Horns Compressed air horns with ABS plastic body and support in



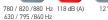










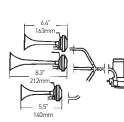


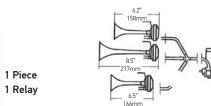






		2000.1511011
003001671	1 Set	3 Electric Horns - Pneumatic  12 V, 240 W, 780 / 820 / 880 Hz - Universal  Length of Trumpets: 14 cm   16.3 cm   21.2 cm  Includes compressor, pressure tubes, bifurcated Piece  Fastening and Relay 12 V
003001981	1 Set	3 Electric Trumpets - Pneumatic Melodic Sound 12 V, 240 W, 630 / 795 / 840 Hz - Universal Length of Trumpets: 15.8 cm   16.6 cm   21.7 cm Includes compressor, pressure tubes, bifurcated Piece Fastening and Relay 12 V







#### Features



#### Single Tone Compressed Air Horn





Pneumatic operation

Level of acoustic intensity at 2 m distance: 115 dB(A).

Energy consumption: 312 W.

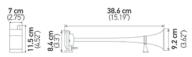
Robust housing.

With flat connections of 6.3 mm, open, blade type

2 holes for M10 fixing screws.

Pressure Range: 0.78 bar		
Part Number	Quantity	Description
013410001	1 Set	Air Horn using compressed air - Single tone 12 V, 312 W - Universal
		Measurements: 9.2 x 8.4 x 38.6 cm
		Includes compressor, pressure tubes,
		Factoning and Relay12 V





#### **Dual Tone Compressed Air Horn**





For vehicles with compressed air braking system. Level of acoustic intensity at 2 m distance: 125 dB(A). Robust housing.

With flat connections of 6.3 mm, open, blade type Pressure Range: 6 - 8 bar (87 - 116 PSI)

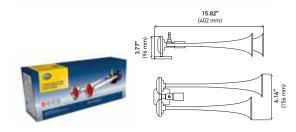






ressure Narige. 0 - 0 bar (07 - 1101 3)		
Part Number	Quantity	Description
013410051	1 Piece.	Dual tone compressed air horn - Box 12 V, 41 W - Universal Measurements: 40.2 x 9.6 x 15.6 cm
013410061	1 Piece.	Dual tone compressed air horn - Box 24 V, 77 W - Universal Measurements: 40.2 x 9.6 x 15.6 cm
715991031	1 Set	Replacement solenoid for air trumpet - 12 V
715991041	1 Set	Replacement solenoid for air trumpet - 24 V





#### Single Tone Air Horn

For vehicles with a compressed air brake system. Pneumatic operation

Level of acoustic intensity at 2 m distance: 115 dB(A).

Energy consumption: 120 W.

Robust Housing

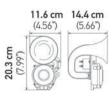
Suitable for tubular fittings 0 8 mm. 2 holes for M10 fixing screws. Pressure Range: 5.88 bar











Part Number Quantity Description 013410011 1 Piece Compressed air horn - Single tone 12 - 24 V, 120 W - Universal Measurements: 11.6 x 14.4 x 20.3 cm



### **BACKUP ALARMS**

Safety above all

In some countries, regulations require the installation of a reverse alarm when motor vehicles have obstructed eyesight to the rear. The vehicle must have an audible reverse alarm above the surrounding noise level. Unless, the vehicle is backed up when an observer indicates that it is safe to do so.

All bidirectional machines, such as rollers, compactors, front loaders, bulldozers and similar equipment, must be equipped with a reverse alarm, which will be differentiated from the surrounding noise level and which will be operated as necessary when the machine is in motion. The reverse alarm has to be maintained in operating conditions. Many of the regulations require a sound level greater than 90 dB.



#### **ELECTRICS**

#### **BACKUP ALARMS**

Product image / Dimensions

Features







1 Piece



1 Piece

#### Backup Alarm











Black plastic housing.

With integrated bracket for universal mounting.

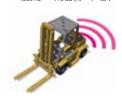
The level of sound intensity is generated by the electronics of solid

Level of acoustic intensity at 2 m distance: 110 dB (A). Multivoltage: 9 V - 48 V

Rated Continuous Current: 0.1 - 0.6 A Operating temperature: -40  $^{\circ}$  C to +85  $^{\circ}$  C.

Protection class: IP67 (Resistant to water immersions)

Approval: ECE R10 / 107 dB



Part Number	Quantity	Description
009148142	1 Piece	Backup Alarm - Plastic blister Multivolt: 9 - 48 V - Universal Protection Class: IP67K Measurements: 10.1 x 3.9 x 6.5 cm
009148141	1 Piece	Backup Alarm - Box Multivolt: 9 - 48 V - Universal Protection Class: IP67K Measurements: 10.1 x 3.9 x 6.5 cm
009148161	1 Piece	Backup Alarm - Box - with grounding strap Multivolt: 9 - 48 V - Universal Protection Class: IP67K Measurements: 10.1 x 3.9 x 6.5 cm
009148221	1 Piece	Backup Alarm - Box - with grounding strap, SAE J994 Type C, 102 dB (A) Multivolt: 9 - 48 V - Universal Protection Class: IP67K Measurements: 10.1 x 3.9 x 6.5 cm

Ask your sales representative about product availability in your region













#### **BACKUP ALARMS**

Product image / Dimensions

#### Features

#### Reverse Alarm















With integrated bracket for universal mounting.

The level of sound intensity is generated by the solid body elec-

Approved against electromagnetic tolerance and according to SAE. With protection against reverse polarity and voltage points.

Operating temperature: -40 ° C to +85 ° C.

60 signals per minute.

Protection class: IP5K9K, CE, SAE J994, E11. Part Number Quantity Description







	I di t i di libei	Qualitity	Description
	996139001	1 Piece	Reverse Alarm With automatic adaptation to the environment with variable acoustic level.  The solid body electronics is automatically set to 5 dB (A) above the ambient acoustic level.
			With connection cable of 16 cm long Voltage: 12V - 24V. Current consumption: 0.59A - 0.71A.
			Acoustic level: 87-112 dB (A) (1.2 m). Frequency: 1200 Hz ± 20%.
	996139101	1 Piece	Reverse Alarm.  With connection cable 16 cm long  Voltage: 12V - 36V.  Current consumption: 0.4A.  Acoustic level: 107 dB (A) (1.2 m).  Frequency: 1300 Hz ± 20%.
cm ")	996139111	1 Piece	Reverse Alarm.  With connection cable 16 cm long  Voltage: 12V - 36V.  Current consumption: 0.4A.  Acoustic level: 112 dB (A) (1.2 m).  Frequency: 1250 Hz ± 20%.



1 Piece



#### Reverse Alarm







1200 - 1300Hz 90 - 107 dB (A) 12 - 24 V=







With integrated bracket for universal mounting.

The level of sound intensity is generated by the electronic of solid bodies.

Approved against electromagnetic tolerance and according to SAE.

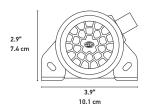
With protection against reverse polarity and voltage points.

Operating temperature: -40  $^{\circ}$  C to +85  $^{\circ}$  C.

Frequency: 60 signals per minute; 1250 Hz  $\pm$  20% .







Part Number	Quantity	Description
009148001	1 Piece	Reverse Alarm.  Voltage: 12V - 24V.  Current consumption: 0.1A - 0.2A.  Acoustic level: 90 dB (A) (1.2 m),  with integrated AMP plug.
009148011	1 Piece	Reverse Alarm.  Voltage: 12V - 24V.  Current consumption: 0.3A - 0.4A.  Acoustic level: 97 dB (A) (1.2 m),  with integrated AMP plug.
009148021	1 Piece	Reverse Alarm.  Voltage: 12V - 24V.  Current consumption: 0.6A - 0.7A.  Acoustic level: 107 dB (A) (1.2 m),  with integrated AMP plug.

#### **ELECTRICS**

#### HORNS DISPLAY

Product image / Dimensions

Features

#### New

#### Horn display



Includes power source, switches and connections  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

Includes the following products:

009148141 - Backup alarm

011225831 - TC16 (horn set)

012010851 - TE16 (horn set)

004811091 - S130 (horn set)

007728883 - TE20C (horn set)

004811101 - S140 (Horn set)

Part Number	Quantity	Description
358117521	1 Pieza.	Horn display

The exhibitor and its contents may change without notice.

Warning: The high level of sound produced by the speakers and / or bugles may cause discomfort and / or damage to the ears, take precautions

Available Now!

# **HORNS FROM HELLA** SERVICES



#### **WEBSITE & APP**

- → Website: Detailed product information incl. sound samples
- ightarrow App: Horns and trumpet horns for you to compare and test



www.hella.com/horns















www.hella.com/partnerworld/

#### **HELLA TECH WORLD**

- → Online platform for workshops
- → Vehicle-specific repair Information
- → Technical information
- → Technical videos
- → Responsive design

#### **HELLA PARTNER WORLD**

- → Online portal for wholesalers
- → Monthly list of new products for download
- → Compact information about all highlight products
- → Marketing support

