



**90 MM MODULES
GENERAL OVERVIEW**



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90 mm configurator: www.hella.com/90mm-modules

90 mm modules are used in almost all vehicles. They are small, but powerful. They stand for quality, practicality, safety and cost-efficiency. Their modular design allows individual front design.

This tool is aimed at original equipment manufacturers, vehicle fleet operators and end customers in the agricultural sector, sports vehicles, electric cars, mobile homes, bus companies and municipalities.

It offers the following benefits:

Original equipment

In our 90 mm configurator, you can select and design your own front lighting configuration. This process is aided by a simple menu guide. This results in a parts list which you can then send to HELLA directly from the tool.

Upgrade to LED

HELLA offers you conversion to LED light technology for all 90 mm halogen/xenon single and multifunctional modules. Existing halogen versions can easily be converted to LED modules at any time! Based on the halogen modules currently used, we show you which adaptations are necessary to convert to LED products while retaining the same lighting functions. This is simple with the compatible assembly solutions.

Illumination comparison

You can compare the lighting technologies for selected main light functions. See the difference between halogen and LED with realistic images from Europe's largest light testing facility! Compare light distribution to make the right decision for your application. You will also receive all the relevant information on the technical data. The complete range is clearly described in a PDF.



90 mm modules - Product overview

Main light functions						
	Low beam and high beam (bi-modules)	Low beam	Low beam with daytime running and position light	High beam	High beam with daytime running and position light	High beam and indicator
Halogen (conventional lighting technology)			-		 (without daytime running light)	-
Xenon			-		-	-
LED						

		Auxiliary light functions								
		Fog light	Fog light and cornering light	Fog light with daytime running light and position light	Daytime running light	Daytime running light and position light	Position light	Direction indicator and position light	Direction indicator	Indicator, daytime running light and position light
Halogen (conventional lighting technology)				 (without position light)	–					–
Xenon		–	–	–	–	–	–	–	–	–
LED							–	–	–	



Betriebsmittel-Nr.	VM 010.820-00U030
Equipment No.	
Chassis	
Part of	Montage-Kugelkopfch.

90 mm: L 4060 low beam



Uniform illumination similar to daylight. Low beam, daytime running light and position light in one module or as a separate low beam. 40 x 60 mm polycarbonate lens for a new design. Mounting points as for Performance module for 1:1 exchange. FEP or DEUTSCH connection. Hardened plastic cover lens. Integrated electronics, robust die-cast aluminum housing, multi-volt 9 - 32 V. Perfectly fitting adjustment screws for Premium and Performance attachment included in the scope of supply.

L 4060 LED low-beam headlamp*

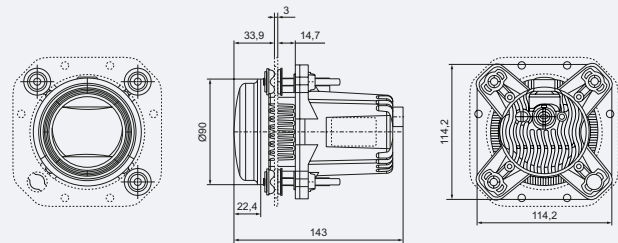
Right-hand traffic/USA version, FEP connector	1BL 012 488-001
Left-hand traffic, FEP connector	1ML 012 488-011
Right-hand traffic/USA version, DEUTSCH connector	1BL 012 488-101
Left-hand traffic, DEUTSCH connector	1ML 012 488-111

L 4060 LED low-beam headlamp with daytime running/position light*

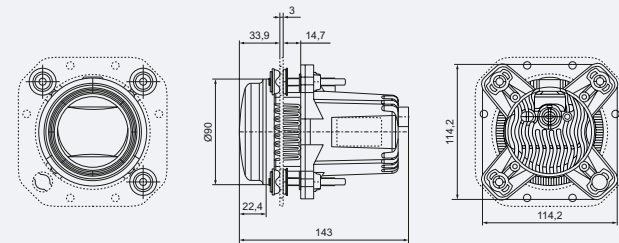
Right-hand traffic/USA version, FEP connector	1BL 012 488-021
Left-hand traffic, FEP connector	1ML 012 488-031
Right-hand traffic/USA version, DEUTSCH connector	1BL 012 488-121
Left-hand traffic, DEUTSCH connector	1ML 012 488-131

* In areas where the ECE-R48 regulation applies, vehicles registered in accordance with ECE-R48, series 05 must incorporate suitable measures to safeguard active failure monitoring of an LED headlamp in the vehicle electrical system. For vehicles that are registered in accordance with ECE-R48, series 06, the failure monitor is no longer mandatory.

Performance module mount for 1:1 conversion of existing halogen versions



Performance module mount for 1:1 conversion of existing halogen versions



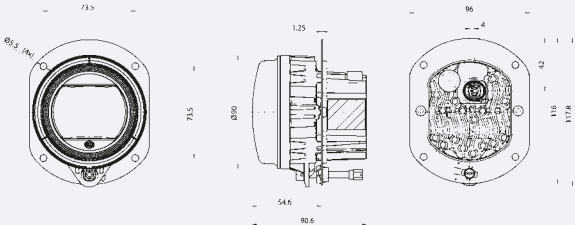
90 mm: L 4060 high beam



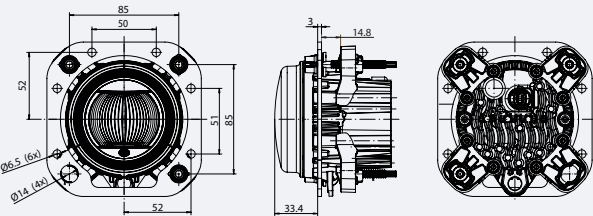
High-end illumination. High beam, daytime running and position lights in one module, one high-beam/direction indicator combination or high beam as a separate module. 40 x 60 mm polycarbonate lens for a new design. Pattern-free and hardened plastic cover lens. High-beam headlamp with either pre-mounted carrier frame or as a 90 mm Performance module mount for 1:1 conversion. Integrated FEP plug and control electronics. Sturdy die-cast aluminum housing, multi-volt 9 - 32 V.

L 4060 LED high-beam headlamp		L 4060 LED high-beam headlamp, with daytime running and position light		L 4060 LED high-beam headlamp, with direction indicator	
Preassembled carrier frame	1F0 011 988-021	Preassembled carrier frame	1F0 011 988-031	With pulse generator, preassembled carrier frame	1F0 011 988-081
Performance mount	1F0 011 988-121	Performance mount	1F0 011 988-131	With pulse generator, Performance mount	1F0 011 988-181
				Without pulse generator, preassembled carrier frame	1F0 011 988-071
				Without pulse generator, Performance mount	1F0 011 988-171

With preassembled carrier frame



Performance module mount for 1:1 conversion of existing halogen versions



Pulse generator

Malfunctions of the high beam with direction indicator module can usually be detected with the vehicle control unit. The stages of detection are as follows:
 DI: < 400 mA
 HB: < 800 mA

If your control unit cannot detect stage < 400 mA for DI, the pulse generator will increase the amperage in an interval of 100 to 120 ms to simulate the level consistent with a standard 12 V (21 W) bulb.

90 mm: L 4060 fog light



Uniform illumination similar to daylight. Fog light in various combinations or as a separate module, with daytime running light, position light and cornering light. 40 x 60 mm polycarbonate lens, pattern-free hardened cover lens made of plastic, integrated FEP connector and driver electronics. Sturdy die-cast aluminum housing, multi-volt 9 - 32 V.

L 4060 LED front fog lamp

Preassembled carrier frame

1N0 011 988-001

L 4060 LED front fog lamp, with daytime running light and position light

Preassembled carrier frame

1N0 011 988-011

L 4060 LED front fog lamp, with cornering light

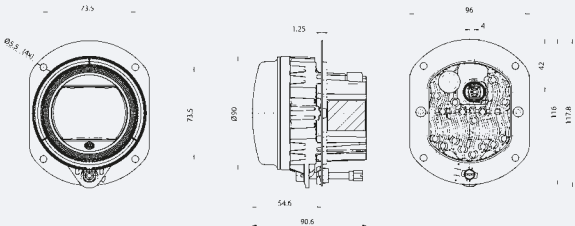
Preassembled carrier frame, left headlamp

1N0 011 988-051

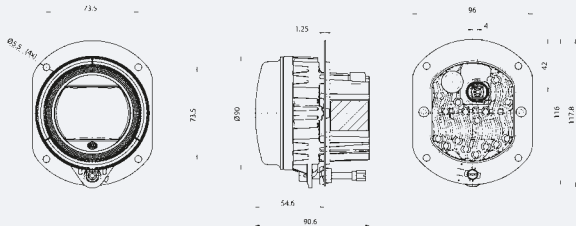
Preassembled carrier frame, right headlamp

1N0 011 988-061

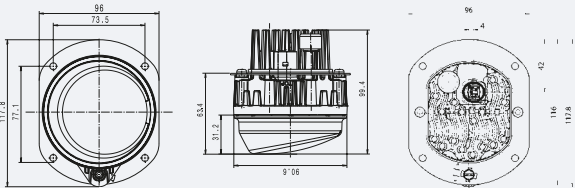
With preassembled carrier frame



With preassembled carrier frame



With preassembled carrier frame



90 mm: L 5570 and L 70 low beam and high beam



2nd-generation bi-LED module with further advanced lighting/electronics. 55 x 70 mm polycarbonate lens, pattern-free hardened cover lens made of plastic, no moving parts, passive cooling. FEP and DEUTSCH connectors; USA version available. Integrated function output for failure monitor. Multi-voltage 9- 32 V.

2nd generation (since 2016)
L 5570 bi-LED low-beam and high-beam headlamp

Right-hand traffic, FEP connector	1AL 012 758-001
Left-hand traffic, FEP connector	1LL 012 758-011
USA version, FEP connector	1AL 012 758-021
Right-hand traffic, DEUTSCH connector	1AL 012 758-101
Left-hand traffic, DEUTSCH connector	1LL 012 758-111
USA version, DEUTSCH connector	1AL 012 758-121

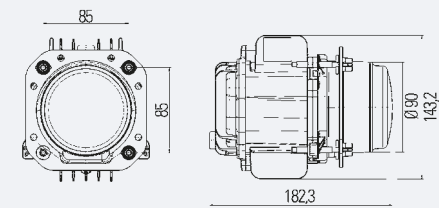
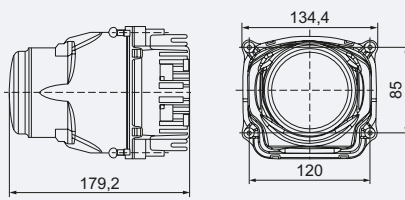
1st generation (since 2012)
L 70 bi-LED low-beam and high-beam headlamp*

Right-hand traffic	1AL 010 820-021**
Left-hand traffic	1LL 010 820-031**

1st generation (since 2011)
L 70 LED low-beam headlamp*

Right-hand traffic	1BL 010 820-001**
Left-hand traffic	1ML 010 820-011**

* In areas where the ECE-R48 regulation applies, vehicles registered in accordance with ECE-R48, series 05 must incorporate suitable measures to safeguard active failure monitoring of an LED headlamp in the vehicle electrical system.
For vehicles that are registered in accordance with ECE-R48, series 06, the failure monitor is no longer mandatory.
** Set versions comprising 1 control unit for function monitoring and 1 first-generation LED headlamp available on request.



90 mm: Premium low beam and high beam



High-end illumination. Low beam and high beam from a single headlamp module, choice of xenon or halogen technology. 70 mm DE lens. Pattern-free and hardened glass cover lens. High-quality aluminum reflector. Pre-installed adjustment screws. Including light source. For xenon variants splashwater-proof electronic ballast. Connection using 0.5 meter shielded supply cable with detachable plug connector.

Bi-xenon low-beam and high-beam headlamp*

12 V, right-hand traffic, D2S	1AL 009 997-001
12 V, left-hand traffic, D2S	1LL 009 997-011
12 V, right-hand traffic, D2S, USA version	1AL 009 997-021
24 V, right-hand traffic, D2S	1AL 009 997-041
24 V, left-hand traffic, D2S	1LL 009 997-051

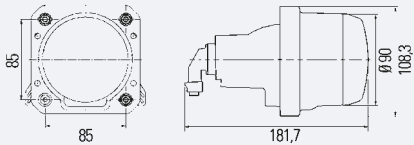
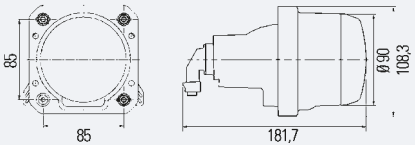
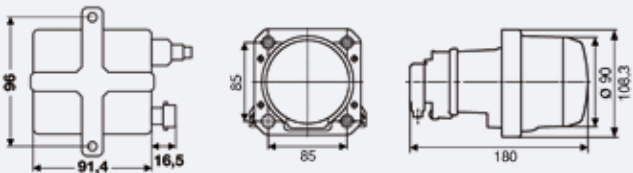
Bi-halogen low-beam and high-beam headlamp

12 V, right-hand traffic, H7	1AL 009 998-001
12 V, left-hand traffic, H7	1LL 009 998-011
12 V, right-hand traffic, H9, USA version	1AL 009 998-021
24 V, right-hand traffic, H7	1AL 009 998-041
24 V, left-hand traffic, H7	1LL 009 998-051
24 V, right-hand traffic, H7, with fording capability	1AL 009 998-201
24 V, left-hand traffic, H7, with fording capability	1LL 009 998-221

Halogen low-beam headlamp

12 V, right-hand traffic, H7	1BL 009 999-001
12 V, left-hand traffic, H7	1ML 009 999-011
12 V, right-hand traffic, H7, USA version	1BL 009 999-021
24 V, right-hand traffic, H7	1BL 009 999-041
24 V, left-hand traffic, H7	1LL 009 999-051

* Xenon low beam only permitted with headlamp range adjustment and lens cleaning system.



90 mm: Performance low beam and high beam



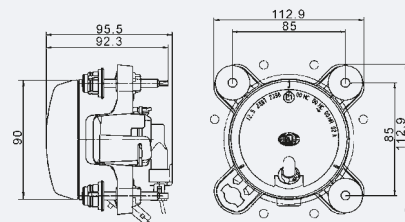
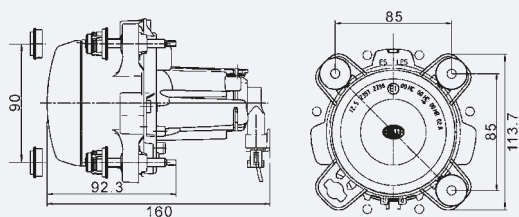
Optimised illumination. Modules in enhanced quality for use on long hauls. Pattern-free and hardened glass cover lens. High-quality aluminum reflector. With splashwater-proof plug connector. Perfectly fitting adjustment screws included in the scope of supply. Including light source. 24 V versions incl. heavy-duty longlife bulbs. Low beam with 50 mm DE lens, high beam with FF reflector.

Halogen low-beam headlamp

12 V, right-hand traffic, H1, for Performance fixing	1BL 247 042-007
12 V, left-hand traffic, H1, for Performance fixing	1ML 247 042-027
12 V, right-hand traffic, H1, for Premium fixing	1BL 247 042-177
12 V, left-hand traffic, H1, for Premium fixing	1ML 247 042-187
24 V, right-hand traffic, H1, for Premium fixing	1BL 247 042-197
24 V, left-hand traffic, H1, for Premium fixing	1ML 247 042-207
24 V, right-hand traffic, H1, for Classic fixing	1BL 247 042-157
24 V, left-hand traffic, H1, for Classic fixing	1ML 247 042-167

Halogen high-beam headlamp

12 V, with position light, H1, for Performance fixing	1K0 247 043-007
12 V, without position light, H1, for Performance fixing	1K0 247 043-017
12 V, with position light, H1, for Premium fixing	1K0 247 043-117
12 V, without position light, H1, for Premium fixing	1K0 247 043-127
24 V, with position light, H1, for Premium fixing	1K0 247 043-137
24 V, without position light, H1, for Premium fixing	1K0 247 043-147
24 V, with position light, H1, for Classic fixing	1K0 247 043-097
24 V, without position light, H1, for Classic fixing	1K0 247 043-107



90 mm: Classic low beam and high beam



Proven illumination. Low beam and high beam from one headlamp module, optionally xenon or halogen technology. Pattern-free and hardened glass cover lens. Magnesium reflector. For xenon variants splashwater-proof electronic ballast. Perfectly fitting adjustment screws included in the scope of supply. Including light source. Low beam with 50 mm DE lens, high beam with FF reflector.

Xenon low-beam headlamp

12 V, D2S, right-hand traffic	1BL 008 194-001
12 V, D2S, USA version	1BL 008 194-041
24 V, D2S, right-hand traffic	1BL 008 194-027
24 V, D2S, left-hand traffic	1LL 008 194-051

Halogen low-beam headlamp

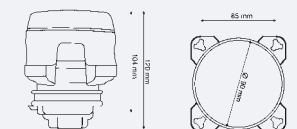
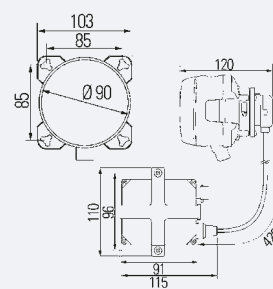
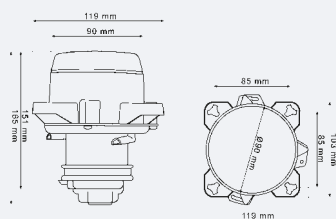
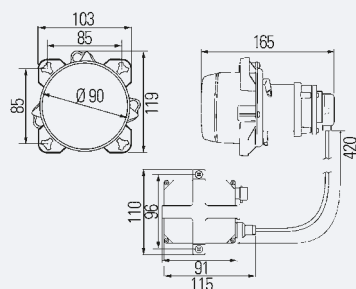
12 V, H7, right-hand traffic	1BL 008 193-001
12 V, H9, USA version	1BL 008 193-021
12 V, H7, left-hand traffic	1LL 008 193-111
24 V, H7, right-hand traffic	1BL 008 193-011
24 V, H7, left-hand traffic	1LL 008 193-121

Xenon high-beam headlamp

12 V, D2S with position light	1K0 008 192-001
12 V, D2S without position light	1K0 008 192-011
24 V, D2S with position light	1K0 008 192-027
24 V, D2S without position light	1K0 008 192-091

Halogen high-beam headlamp

12 V, H7 with position light	1K0 008 191-001
12 V, H7 without position light	1K0 008 191-011
12 V, H9 with position light, USA version	1K0 008 191-131
12 V, H9 without position light, USA version	1K0 008 191-051
24 V, H7 with position light	1K0 008 191-021
24 V, H7 without position light	1K0 008 191-041

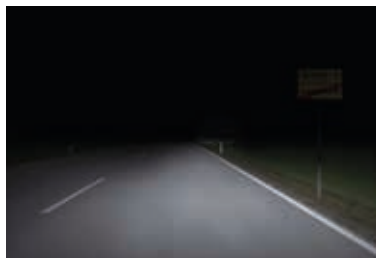


LED low beam comparison

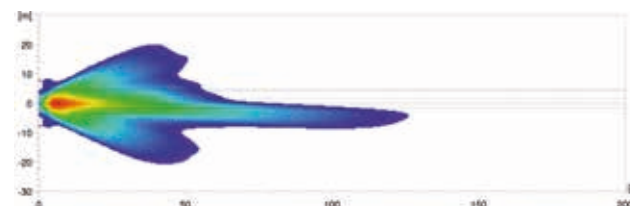
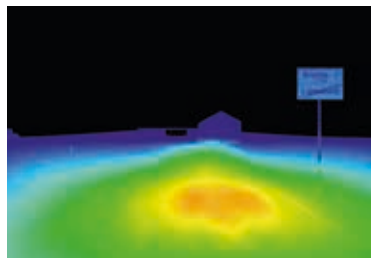
L 4060
(012 488)



Road simulation



Road simulation - colour



Legend, isolux diagram (1 - 350 lux)

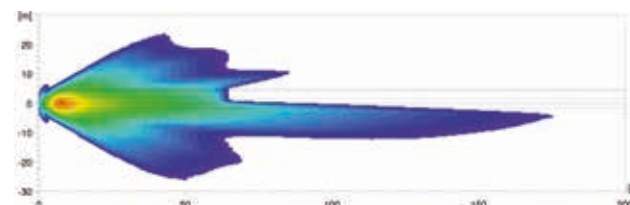
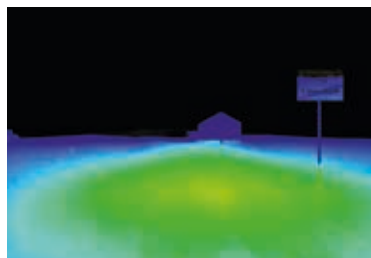
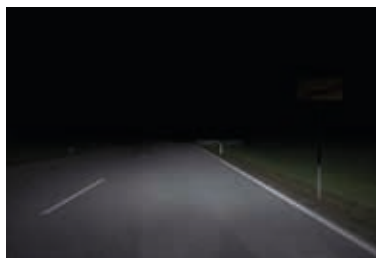


Remarks

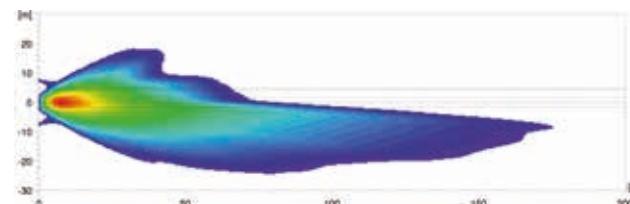
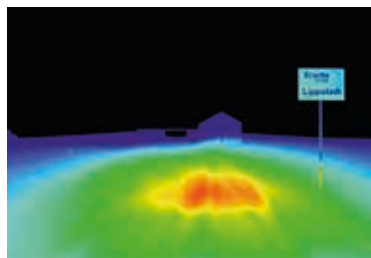
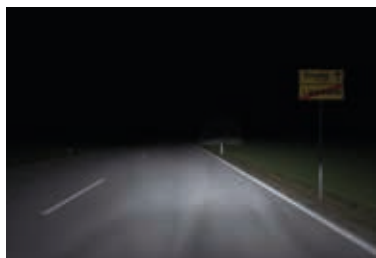
Installation height of headlamps: 0.65 m

Distance between headlamps: 1.20 m

L 5570 2nd generation (bi-module)
(012 758)



L 70 1st generation
(010 820)

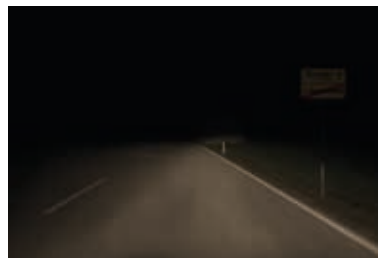


Halogen low beam comparison

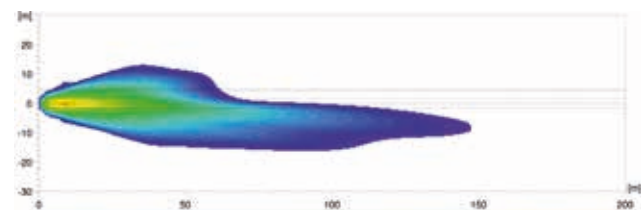
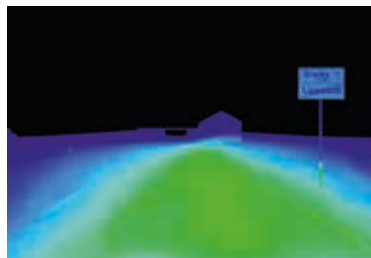
Premium halogen (009 999)
and bi-halogen (009 998)



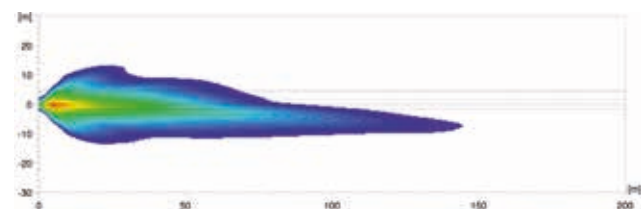
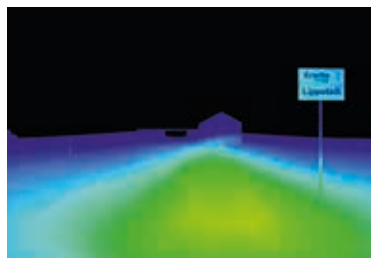
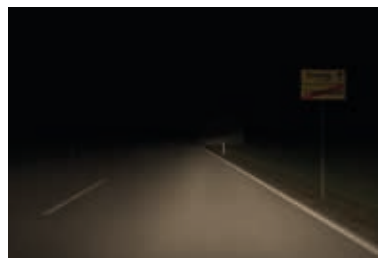
Road simulation



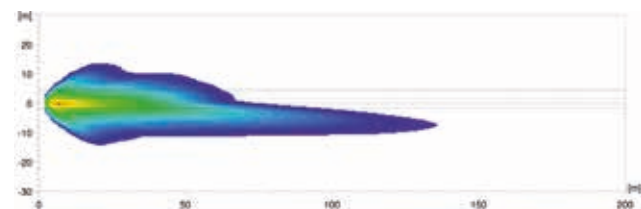
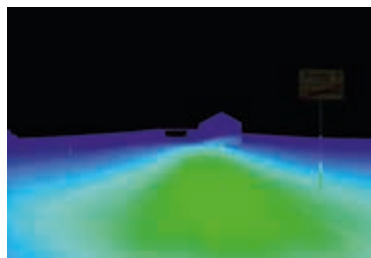
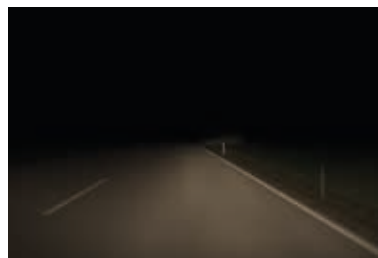
Road simulation - colour



Performance halogen
(247 042)



Classic halogen
(008 193)



Xenon low beam comparison

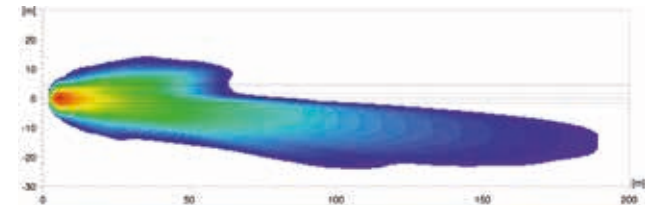
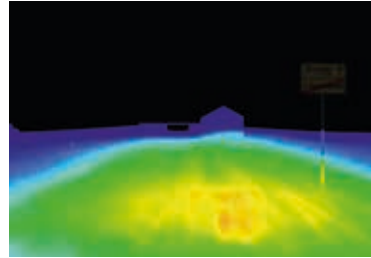
Premium bi-xenon (bi-module)
(009 997)



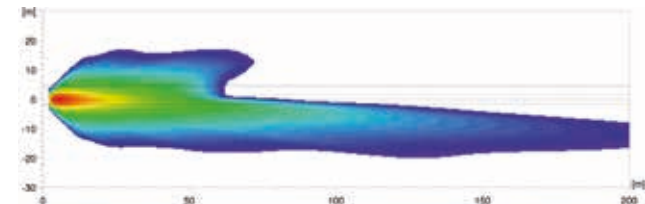
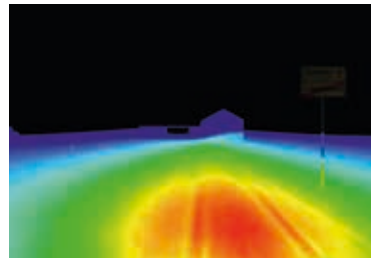
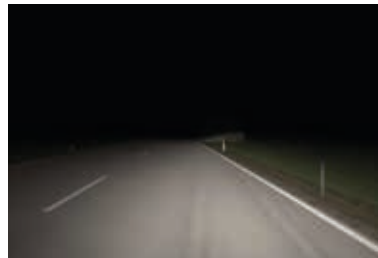
Road simulation



Road simulation - colour



Classic xenon
(008 194)



Did you know these facts about xenon?

Xenon > 2,000 lumens, resulting in a generally stronger illumination. A lens cleaning system and headlamp levelling system are required. New applications are no longer permitted for the vehicle classes M1 and N1.

High beam comparison (LED, halogen, xenon)

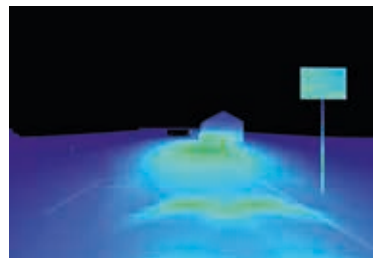
L 4060 LED (011 988)



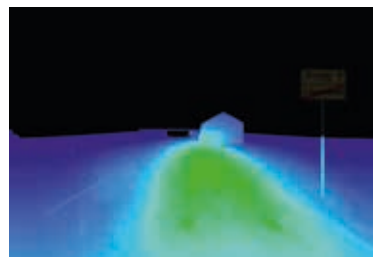
Road simulation



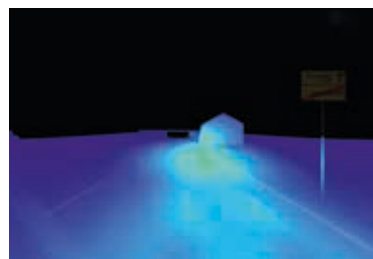
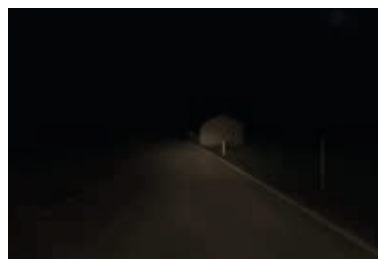
Road simulation - colour



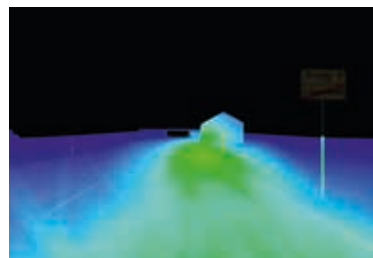
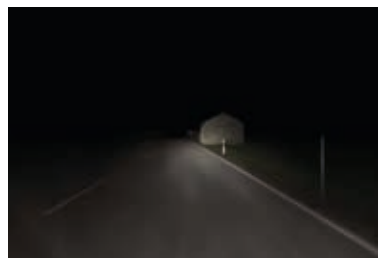
Performance halogen
(247 043)



Classic halogen
(008 191)



Classic xenon
(008 192)



Note:

Display of high beam only. When driving, the high beam is augmented by the low beam. See page 19 for combinations.

Bi-module high beam comparison

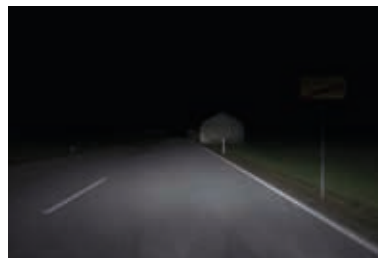
Note:

Bi-light distributions are generated when the low beams are switched on and are only available as a bi-version.

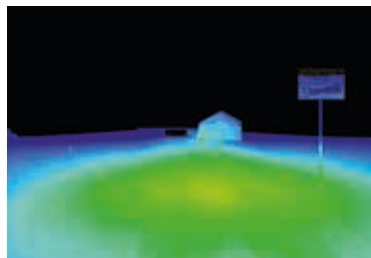
L 5570 bi-module, 2nd generation
(012 758)



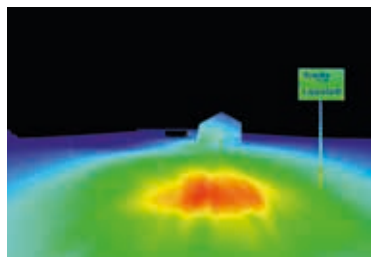
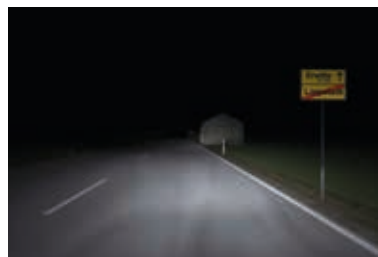
Road simulation



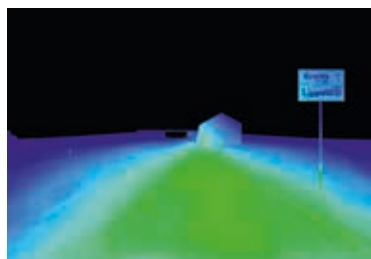
Road simulation - colour



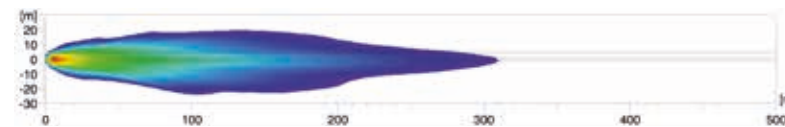
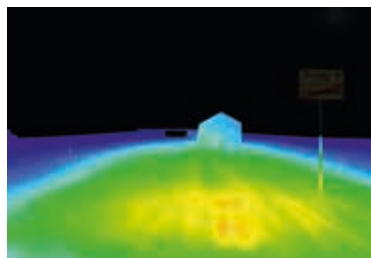
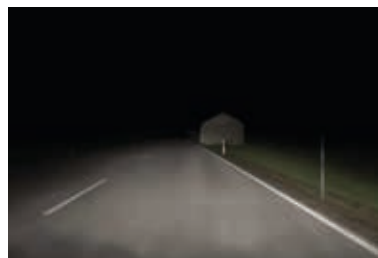
L 70 bi-LED, 1st generation
(010 820)



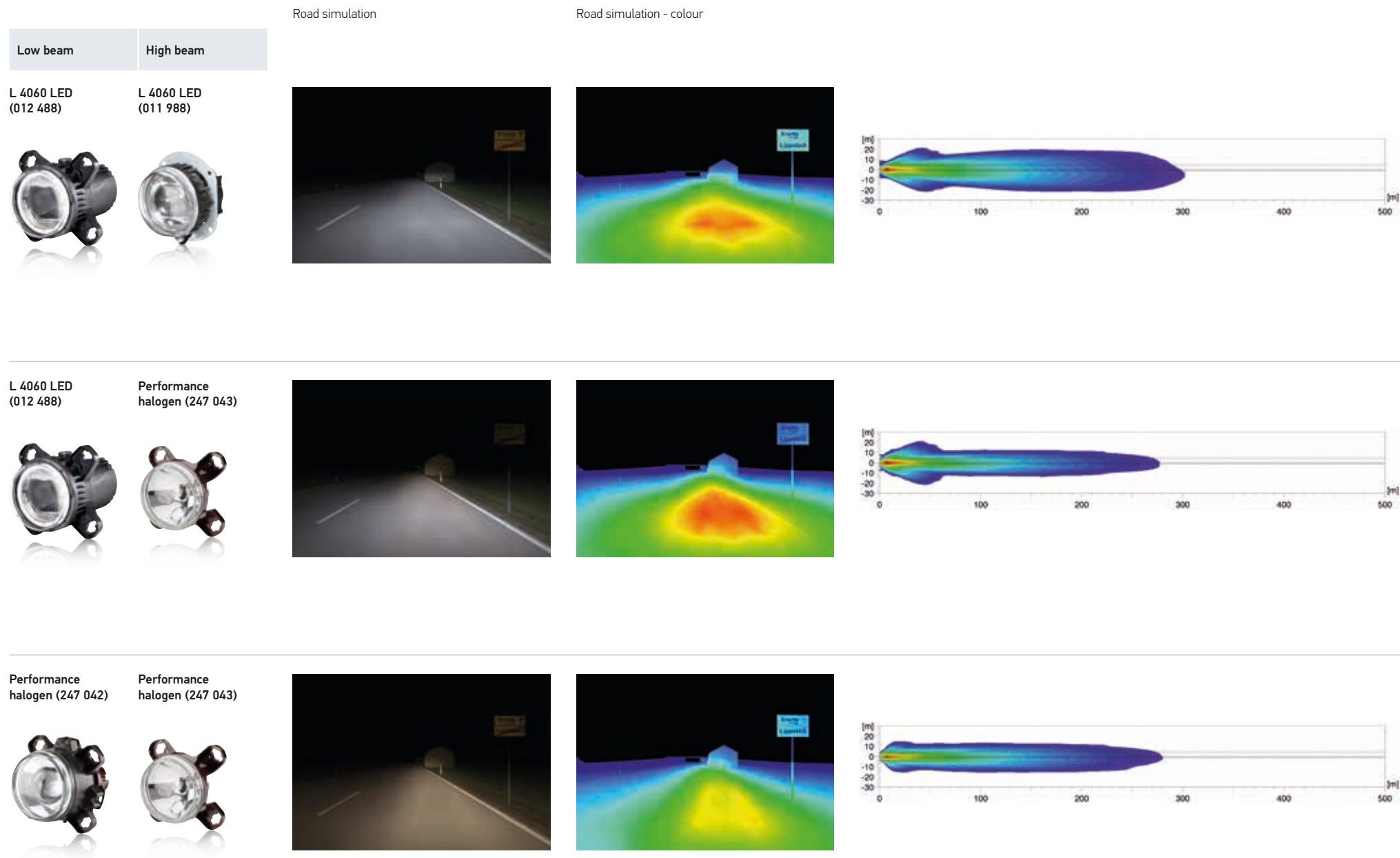
Premium bi-halogen
(009 998)



Premium bi-xenon
(009 997)



Comparison of combinations of low-beam and high-beam modules



Fog light comparison

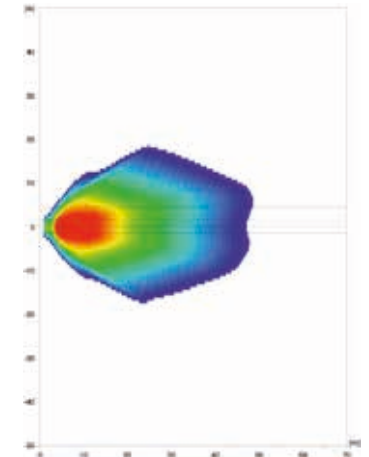
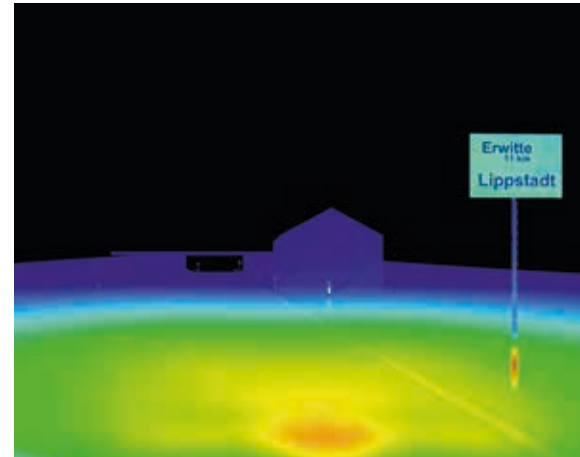
L 4060 LED
front fog lamp (011 988)



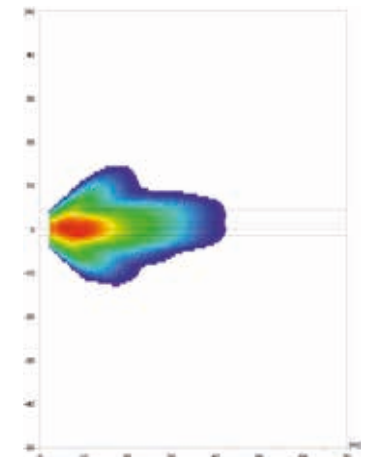
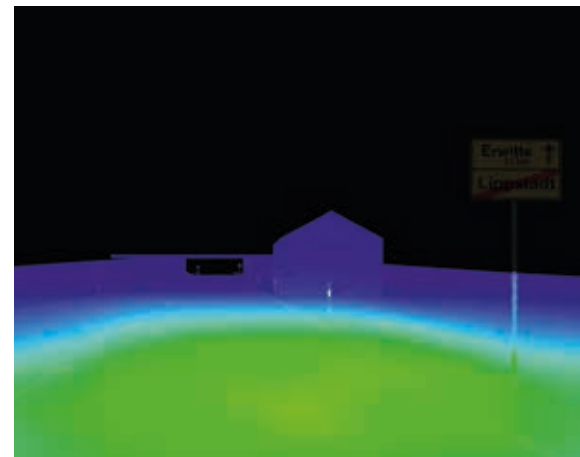
Road simulation



Road simulation - colour



H15 front fog lamp
Halogen (010 294)



Cornering light comparison

Note:

Display of cornering light only. When driving, the cornering light is augmented by the low beam.

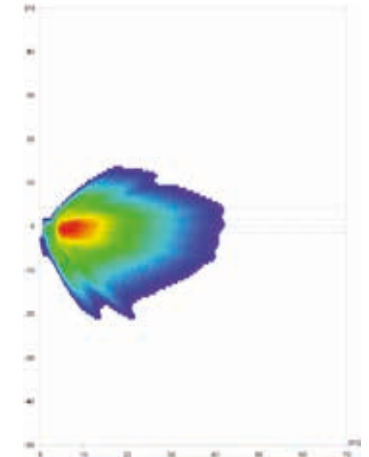
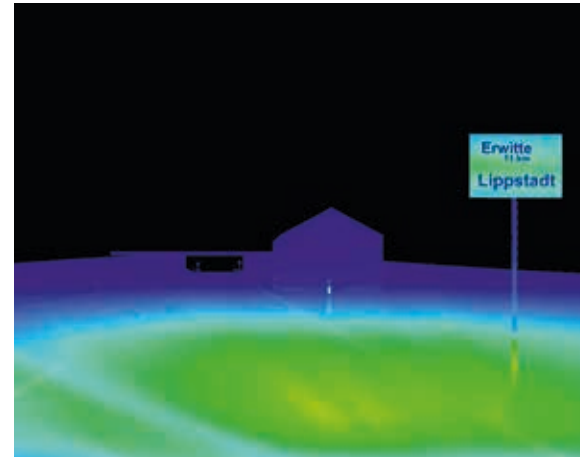
L 4060 LED
(011 988)



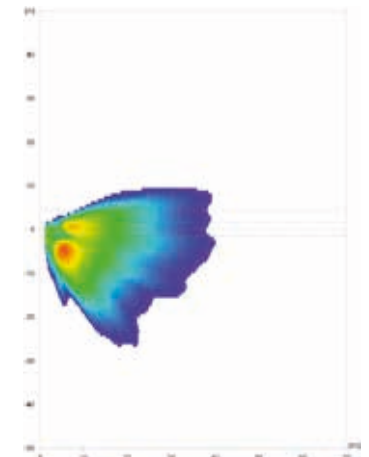
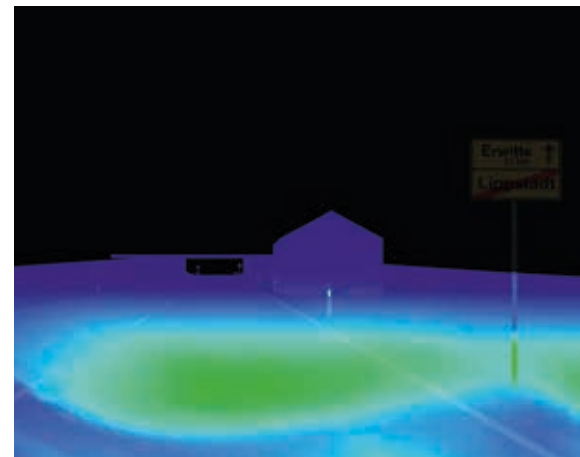
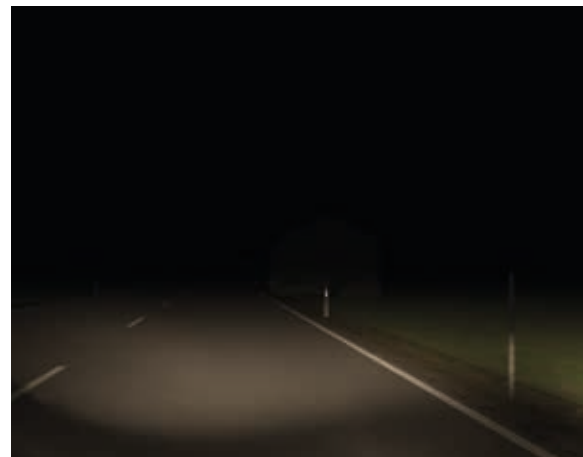
Road simulation



Road simulation - colour



Dyna View EVO 02
(009 295)



90 mm: Auxiliary light functions



The 90 mm module range is expanded with round LED lights. Available as either a daytime running light function or as a 3-function light. Together with the main light functions, there are many combination possibilities that can meet all lighting requirements in the popular 90 mm lens format.

LED daytime running lights set, round design

2 lights incl. wiring harness, universal bracket, 3 high-output LEDs per light, multi-volt 9 - 33 V
12 V / max. 5.5 W, current consumption = 2.18 A

Set for surface mounting

2PT 009 599-811

Daytime running light with position light, left

2PT 009 559-131

Daytime running light with position light, right

2PT 009 599-141

Optional accessories

Universal carrier frame

9AH 165 968-001

Wiring harness, pre-assembled

8KA 165 959-001

83 mm LED 3-function light (direction indicator, position and daytime running light)

Pre-wired with 2.5 m sheathed four-core cable

Single light, 12 V

2BE 980 691-001*

Single light, 24 V

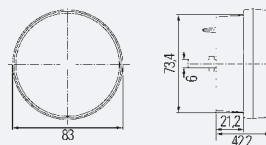
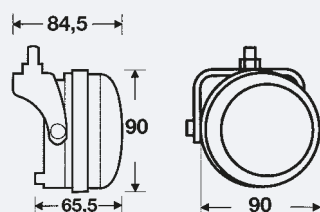
2BE 980 690-001*

Optional accessory: Adapter ring 90 mm

The adapter ring is used to replace a 90 mm light with the 83 mm light. This means that vehicles already equipped with a HELLA 90 mm light can be easily converted for the 83 mm light.

9GD 980 696-001

* No integrated pulse, deactivation of daytime running light during operation of direction indicator.



90 mm: Auxiliary light functions



The 90 mm module range is expanded with the following signal lights. Together with the main light functions, there are many combination possibilities that can meet all lighting requirements in the popular 90 mm lens format. The pattern-free real glass or plastic cover lenses are the perfect fit for the headlamps in our range.

90 mm direction indicator position light

- Direction indicator with yellow bulb, 12 V
- Direction indicator with yellow bulb, 24 V
- Position light, 12 V
- Position light, 24 V

- 2BA 965 039-061
- 2BA 965 039-141
- 2PF 965 039-071
- 2PF 965 039-151

90 mm indicator/position light combination

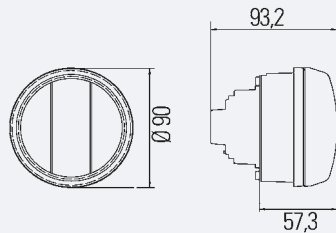
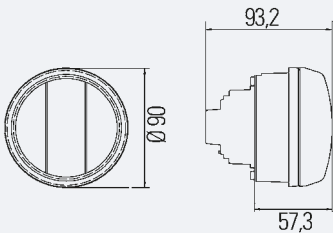
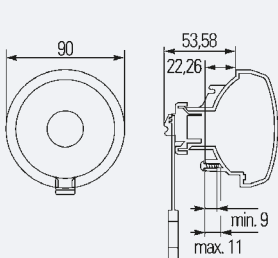
- Headlamp with pattern-free glass cover lens, with PY21W/12 V silver bulb and Kartoval LED
- Direction indicator/position light, 12 V
- Direction indicator/position light, 24 V
- Direction indicator/position light, 24 V, with fording capability for venting hose

- 2BE 010 102-001
- 2BE 010 102-011
- 2BE 010 102-201

90 mm daytime driving/position light combination

- Headlamp with pattern-free glass cover lens, with P21 W 12 V Longlife bulb and Kartoval LED
- Daytime running light/position light, 12 V
- Daytime running light/position light, 24 V
- Daytime running light/position light, 24 V, with fording capability for venting hose
- Plug set, 3-pin
- Optional carrier frame with 3 screws

- 2BE 010 102-101
- 2PT 010 102-111
- 2PT 010 102-211
- 8JD 162 581-802
- 9AH 165 968-001



90 mm: LED accessories

Legend
•) Accessory for proper connection, or mandatory accessory
••) Optional accessories

Product details on page

			L 4060												L 5570			L 70			
			Low beam 012 488-001 / -011	Low beam 012 488-101 / -111	Low beam, daytime running light and position light 012 488-021 / -031	Low beam, daytime running light and position light 012 488-121 / -131	High beam 011 988-021	High beam 011 988-121	High beam, daytime running light and position light 011 988-031	High beam, daytime running light and position light 011 988-131	High beam and direction indicator (with pulse) 011 988-081	High beam and direction indicator (with pulse) 011 988-181	High beam and direction indicator (without pulse) 011 988-071	High beam and direction indicator (without pulse) 011 988-171	Fog light 011 988-001	Fog light, daytime running light and position light 011 988-011	Fog light and cornering light 011 988-051 / -061	Bi-LED low beam and high beam 012 758-001 / -011 / -021	Bi-LED low beam and high beam 012 758-101 / -111 / -121	Bi-LED low beam and high beam 010 820-021 / -031	Low beam 010 820-001 / -011
Product details on page			07	07	07	07	08	08	08	08	08	08	08	08	09	09	09	10	10	10	10
Accessory components		Article number	Characteristics																		
Carrier frame																					
Premium carrier frame	9AH 169 580-011	Black	**	**	**	**		**		**		**		**						**	**
Performance carrier frame	9AH 254 228-012	Black	**	**	**	**		**		**		**		**							
Performance carrier frame for agricultural and truck applications	9AH 185 978-011	Black																		**	**
Premium carrier frame	9AH 205 652-011	Black																**	**		
Performance carrier frame	9AH 205 652-111	Black																**	**		
Adapter for 1:1 exchange from 009 999 bi-halogen modules to bi-LED	9AH 213 181-001	Black																**	**		
Adapter for 1:1 exchange from bi-LED to 009 999 bi-halogen modules	9AH 205 653-001	Black																**	**		
Surplus supply LED: AMP SUPERSEAL connector, 3-pin																					
Housing	8JA 746 184-032	10 pc.																		•	•
Socket connector	8KW 744 837-002	50 pc.																		•	•
Strand insulation	9GD 746 185-002	50 pc.																		•	•
Surplus supply LED: FEP 4-pin connector																					
Housing	8JA 202 231-002	10 pc.	•		•		•	•	•	•	•	•	•	•	•	•	•	•			
Flat contact	8KW 863 933-013	50 pc.	•		•		•	•	•	•	•	•	•	•	•	•	•	•			
Strand sealing 0.35 - 0.5 mm² or	9GD 863 952-022	50 pc.	•		•		•	•	•	•	•	•	•	•	•	•	•	•			
Strand sealing 0.75 mm²	9GD 863 952-012	50 pc.	•		•		•	•	•	•	•	•	•	•	•	•	•	•			
Dummy plug	9GD 863 952-002	50 pc.	•				•	•		•	•	•	•	•	•		•	•			
Surplus supply LED: DEUTSCH connector, 4-pin (together with adapter cable, see ¹⁾ , except for 012 488-1xx and 012 758-1xx)																					
Connector housing	8JA 201 022-042	10 pc. (**1 pc. in set)		•		•	•	•	•	•	•	•	•	•	•	•	•		•		
Lock/wedgelock	9NB 201 024-042	10 pc. (**1 pc. in set)		•		•	•	•	•	•	•	•	•	•	•	•	•		•		
Contact sleeve 0.5 - 1.5 mm²	8KW 201 025-112	50 pc. (**5 pc. in set)		•		•	•	•	•	•	•	•	•	•	•	•	•		•		
Dummy plug	9NB 201 026-012	50 pc. (**3 pc. in set)		•			•	•		•	•	•	•	•	•		•		•		
Set packaging	8JA 201 022-821	Number, see **		•		•	•	•	•	•	•	•	•	•	•	•	•		•		

- Legend
-) Accessory for proper connection, or mandatory accessory
 -) Optional accessories

Product details on page

			L 4060												L 5570			L 70			
			Low beam 012 488-001 / -011	Low beam 012 488-101 / -111	Low beam, daytime running light and position light 012 488-021 / -031	Low beam, daytime running light and position light 012 488-121 / -131	High beam 011 988-021	High beam 011 988-121	High beam, daytime running light and position light 011 988-031	High beam, daytime running light and position light 011 988-131	High beam and direction indicator (with pulse) 011 988-081	High beam and direction indicator (with pulse) 011 988-181	High beam and direction indicator (without pulse) 011 988-071	High beam and direction indicator (without pulse) 011 988-171	Fog light 011 988-001	Fog light, daytime running light and position light 011 988-011	Fog light and cornering light 011 988-051 / -061	Bi-LED low beam and high beam 012 758-001 / -011 / -021	Bi-LED low beam and high beam 012 758-101 / -111 / -121	Bi-LED low beam and high beam 010 820-021 / -031	Low beam 010 820-001 / -011
Product details on page			07	07	07	07	08	08	08	08	08	08	08	08	09	09	09	10	10	10	10
Accessory components	Article number	Characteristics																			
Illumination range adjustment systems																					
Headlamp levelling system, 12 V	6NM 007 282-221		•	•	•	•												•	•	•	•
Headlamp levelling system, 24 V	6NM 008 299-501		•	•	•	•												•	•	•	•
Bracket for right-side mounting of actuator	8HG 138 619-007		•	•	•	•												•	•	•	•
Bracket for left-side mounting of actuator	8HG 138 620-007		•	•	•	•												•	•	•	•
Mounting set for levelling actuators (bracket and articulated element)	8HG 183 586-001		•	•	•	•												•	•	•	•
Left bracket/interface for headlamp levelling actuator for connecting to the module	8HG 208 791-011																	•	•		
Right bracket/interface for headlamp leveling actuator for connecting to the module	8HG 208 791-001																	•	•		
Bend lighting accessories																					
LED module connection cable - cornering light control unit	8KB 163-160-811	1 pc.															••				
Bend lighting control unit	5DF 009 244-007	24 pc.															••				
Adapter cable																					
¹⁾ Adapter from FEP connector to DEUTSCH connector (4-pin)	8KA 202 117-001	1 pc.	••		••		••	••	••	••	••	••	••	••	••	••	••	••			
Adapter from FEP connector to Performance module (247 043) or DynaView (009 295)	8KA 202 117-011	1 pc.					••	••	••	••											
Other accessories (only if the vehicle was registered i.a.w. ECE-R48, series 05. As of ECE-R48, series 06, no more mandatory accessories)																					
Function monitoring device, 12 V	5DS 011 630-001	1 pc.	•	•	•	•														•	•
Function monitoring device, 24 V	5DS 011 630-011	1 pc.																		•	•
Function monitoring device, 24 V	5DS 011 630-211	1 pc.	•	•	•	•														•	•

90 mm: Halogen/xenon accessories

- Legend
-) Accessory for proper connection, or mandatory accessory
 -) Optional accessories
 - *) Required for xenon low-beam headlamps, optional for halogen and LED.
 - ▲) Required for xenon low-beam headlamps and, in certain countries, in accordance with local approval regulations. Permitted as an option for halogen and LED.

Product details on page

Accessory components		Article number	Characteristics																
Carrier frame																			
Premium carrier frame	9AH 169 580-011	Black	••	••	••	••	••	••	••	••	••	••	••	••	••	••	••	••	••
Classic carrier frame	9AH 157 659-007	Silver											••	••	••	••	••	••	••
Performance carrier frame	9AH 254 228-012	Black								••	••	••							
Caps																			
Flat version for angled connectors																			
Ventilated	9GH 152 654-007																•	•	
Non-ventilated	9GH 152 654-012															•			
Deep version for female connector housing																			
Ventilated	9GH 145 943-001																•	•	
Non-ventilated	9GH 145 943-012															•			
Connector (vehicle side)																			
Surplus supply H1/H7/xenon	8JD 156 151-807	20 systems	•	•	•		•	•	•	•	•	•	•	•					
Surplus supply H9	8JD 158 175-807	20 systems				•										•		•	•
Parking light	8JD 156 150-807	20 systems									•			•				•	•
High-beam switchover - AMP SUPERSEAL, 2-pin																			
Housing	8JA 746 184-022	10 pc.	•	•	•	•	•												
Socket connector	8KW 744 837-002	50 pc.	•	•	•	•	•												
Strand insulation	9GD 746 185-002	50 pc.	•	•	•	•	•												
Version with fording capability																			
Venting hose	9GS 190 794-002	50 m				•													
10 T units for venting hose	9XL 190 733-002	10 pc.				•													

Legend

-) Accessory for proper connection, or mandatory accessory
-) Optional accessories
- **) Required for xenon low-beam headlamps, optional for halogen and LED.
- ▲) Required for xenon low-beam headlamps and, in certain countries, in accordance with local approval regulations. Permitted as an option for halogen and LED.

Product details on page

Accessory components	Article number	Characteristics																	
Illumination range adjustment systems																			
For halogen, 12 V	6NM 007 282-221			••	••	••	••	••							••	••			
For xenon versions, 12 V	6NM 007 282-231		••								••								
For halogen, 24 V	6NM 008 299-501			••	••	••	••	••			•**				••	••			
Mounting set for actuator	8HG 183 586-001	1 set		••	••	••	••	•			••				•	•			
Bracket for right-side mounting of actuator	8HG 138 619-007		•	•	•	•	•	•											
Bracket for left-side mounting of actuator	8HG 138 620-007		•	•	•	•	•	•											
Automatic headlight range adjustment •**)	8XX 010 315-001	1 sensor	•**								•**								
Lens wiper systems ▲)																			
Headlight cleaning system set with fixed nozzles, 12 V	8WS 008 549-001	4 nozzles	▲	▲	▲	▲	▲	▲			▲				▲	▲			
Headlight cleaning system set with fixed nozzles, 24 V	8WS 008 549-501	4 nozzles	▲	▲	▲	▲	▲	▲			▲				▲	▲			
Headlight cleaning system set with telescoping single nozzles, 12 V	8WT 008 549-101	2 single nozzles	▲	▲	▲	▲	▲	▲			▲				▲	▲			
Headlight cleaning system set with telescoping single nozzles, 24 V	8WT 008 549-601	2 single nozzles	▲	▲	▲	▲	▲	▲			▲				▲	▲			
Headlight cleaning system set with telescoping double nozzles, 12 V	8WT 008 549-201	2 double nozzles	▲	▲	▲	▲	▲	▲			▲				▲	▲			
Headlight cleaning system set with telescoping double nozzles, 24 V	8WT 008 549-701	2 double nozzles	▲	▲	▲	▲	▲	▲			▲				▲	▲			

Type approvals

	Article number	Main light functions	Auxiliary light functions	Variant	Weight	Volt	Light source	Inspection tag	Approval	
									ECE	SAE (USA)
L 4060	1BL 012 488-001	LB	–	ES / SAE	763 g	Multi	LED	(E1) 3831	×	×
	1ML 012 488-011	LB	–	LES	763 g	Multi	LED	(E1) 4090	×	
	1BL 012 488-101	LB	–	ES / SAE	764 g	Multi	LED	(E1) 3881	×	×
	1ML 012 488-111	LB	–	LES	764 g	Multi	LED	(E1) 4090	×	
	1BL 012 488-021	LB	DRL / PO	ES / SAE	782 g	Multi	LED	(E1) 3831	×	×
	1ML 012 488-031	LB	DRL / PO	LES	780 g	Multi	LED	(E1) 4090	×	
	1BL 012 488-121	LB	DRL / PO	ES / SAE	783 g	Multi	LED	(E1) 3881	×	×
	1ML 012 488-131	LB	DRL / PO	LES	781 g	Multi	LED	(E1) 4090	×	
	1FO 011 988-021	HB	–	–	519 g	Multi	LED	(E1) 3831	×	×
	1FO 011 988-121	HB	–	–	552 g	Multi	LED	(E1) 3831	×	×
	1FO 011 988-031	HB	DRL / PO	–	524 g	Multi	LED	(E1) 3831	×	×
	1FO 011 988-131	HB	DRL / PO	–	556 g	Multi	LED	(E1) 3831	×	×
	1FO 011 988-081	HB	DI	–	584 g	Multi	LED	(E1) 3831	×	×
	1FO 011 988-181	HB	DI	–	616 g	Multi	LED	(E1) 3831	×	×
	1FO 011 988-071	HB	DI	–	524 g	Multi	LED	(E1) 3831	×	×
	1NO 011 988-171	HB	DI	–	556 g	Multi	LED	(E1) 3831	×	×
	1NO 011 988-001	FL	–	–	521 g	Multi	LED	(E1) 3831	×	×
	1NO 011 988-011	FL	DRL / PO	–	527 g	Multi	LED	(E1) 3831	×	×
	1NO 011 988-051	FL	Co L	–	516 g	Multi	LED	(E1) 3832	×	×
	1NO 011 988-061	FL	Co R	–	516 g	Multi	LED	(E1) 3832	×	×
Bi-LED, 2nd gen.	1AL 012 758-001	Bi	–	ES	1,280 g	Multi	LED	(E1) 4208	×	
	1LL 012 758-011	Bi	–	LES	1,280 g	Multi	LED	(E1) 4209	×	
	1AL 012 758-021	Bi	–	SAE	1,280 g	Multi	LED			×
	1AL 012 758-101	Bi	–	ES	1,280 g	Multi	LED	(E1) 4208	×	
	1LL 012 758-111	Bi	–	LES	1,280 g	Multi	LED	(E1) 4209	×	
	1AL 012 758-121	Bi	–	SAE	1,280 g	Multi	LED			×
Bi-LED, 1st gen.	1AL 010 820-021	Bi	–	ES	1,172 g	Multi	LED	(E1) 3351 / (E1) 6189	×	
	1LL 010 820-031	Bi	–	LES	1,172 g	Multi	LED	(E1) 3352 / (E1) 6189	×	
	1BL 010 820-001	LB	–	ES	1,170 g	Multi	LED	(E1) 3159 / (E1) 6189	×	
	1ML 010 820-011	LB	–	LES	1,172 g	Multi	LED	(E1) 3160 / (E1) 6189	×	

LB: Low beam | HB: High beam | Bi: Low beam and high beam
 PO: Position light | DRL: Daytime running light | DI: Direction indicator
 ES: Right-hand traffic | LES: Left-hand traffic | SAE: USA
 FL: Fog light | CL: Cornering light

	Article number	Main light functions	Auxiliary light functions	Variant	Weight	Volt	Light source	Inspection tag	Approval	
									ECE	SAE (USA)
Premium	1AL 009 997-001	Bi	–	ES	1,320 g	12 V	D2S xenon	(E1) 2484	×	
	1LL 009 997-011	Bi	–	LES	1,288 g	12V	D2S xenon	(E1) 2484 / (E1) 2485	×	
	1AL 009 997-021	Bi	–	SAE	1,363 g	12 V	D2S xenon			×
	1AL 009 997-041	Bi	–	ES	1,306 g	24 V	D2S xenon	(E1) 2484	×	
	1LL 009 997-051	Bi	–	LES	1,288 g	24 V	D2S xenon	(E1) 2485	×	
	1BL 009 998-001	Bi	–	ES	783 g	12 V	Halogen H7	(E1) 2484 / (E1) 2485	×	
	1ML 009 998-011	Bi	–	LES	820 g	12 V	Halogen H7	(E1) 2484 / (E1) 2485	×	
	1BL 009 998-021	Bi	–	SAE	794 g	12 V	Halogen H9			×
	1AL 009 998-041	Bi	–	ES	820 g	24 V	Halogen H7	(E1) 2484	×	
	1LL 009 998-051	Bi	–	LES	820 g	24 V	Halogen H7	(E1) 2485	×	
	1AL 009 998-201	Bi	–	ES	820 g	24 V	Halogen H7	(E1) 2484	×	
	1LL 009 998-221	Bi	–	LES	820 g	24 V	Halogen H7	(E1) 2485	×	
	1BL 009 999-001	LB	–	ES	687 g	12 V	Halogen H7	(E1) 2486	×	
	1ML 009 999-011	LB	–	LES	687 g	12 V	Halogen H7	(E1) 2487	×	
	1BL 009 999-021	LB	–	SAE	687 g	12 V	Halogen H7			×
	1BL 009 999-041	LB	–	ES	705 g	24 V	Halogen H7	(E1) 2486	×	
	1ML 009 999-051	LB	–	LES	687 g	24 V	Halogen H7	(E1) 2487	×	
Performance	1BL 247 042-007	LB	–	ES	513 g	12 V	Halogen H1	(E1) 2397	×	
	1ML 247 042-027	LB	–	LES	513 g	12 V	Halogen H1	(E1) 12397 / (E1) 2398	×	
	1BL 247 042-177	LB	–	ES	513 g	12 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1ML 247 042-187	LB	–	LES	513 g	12 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1BL 247 042-197	LB	–	ES	513 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1ML 247 042-207	LB	–	LES	513 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1BL 247 042-157	LB	–	ES	513 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1ML 247 042-167	LB	–	LES	513 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1K0 247 043-007	HB	PO	–	360 g	12 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1K0 247 043-017	HB	–	–	335 g	12 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1K0 247 043-117	HB	PO	–	288 g	12 V	Halogen H1	(E1) 2397	×	
	1K0 247 043-127	HB	–	–	340 g	12 V	Halogen H1	(E1) 2397	×	
	1K0 247 043-137	HB	PO	–	288 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1K0 247 043-147	HB	–	–	281 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1K0 247 043-097	HB	PO	–	288 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	
	1K0 247 043-107	HB	–	–	281 g	24 V	Halogen H1	(E1) 2397 / (E1) 2398	×	

LB: Low beam | HB: High beam | Bi: Low beam and high beam
PO: Position light | DRL: Daytime running light | DI: Direction indicator
ES: Right-hand traffic | LES: Left-hand traffic | SAE: USA
FL: Fog light | CL: Cornering light

Type approvals

	Article number	Main light functions	Auxiliary light functions	Variant	Weight	Volt	Light source	Inspection tag	Approval	
									ECE	SAE (USA)
Classic	1BL 008 194-001	LB	–	ES	960 g	12 V	D2S xenon	E1 917	×	
	1BL 008 194-041	LB	–	SAE	952 g	12 V	D2S xenon			×
	1BL 008 194-027	LB	–	ES	953 g	24 V	D2S xenon	E1 917	×	
	1LL 008 194-051	LB	–	LES	1,010 g	24 V	D2S xenon	E1 917	×	
	1BL 008 193-001	LB	–	ES	475 g	12 V	Halogen H7	E1 917	×	
	1BL 008 193-021	LB	–	SAE	448 g	12 V	Halogen H9			×
	1LL 008 193-111	LB	–	LES	475 g	12 V	Halogen H7	E1 917	×	
	1BL 008 193-011	LB	–	ES	479 g	24 V	Halogen H7	E1 917	×	
	1LL 008 193-121	LB	–	LES	393 g	24 V	Halogen H7	E1 917	×	
	1K0 008 192-001	HB	PO	–	803 g	12 V	D2S xenon	E1 917	×	
	1K0 008 192-011	HB	–	–	794 g	12 V	D2S xenon	E1 917	×	
	1K0 008 192-027	HB	PO	–	794 g	24 V	D2S xenon	E1 917	×	
	1K0 008 192-091	HB	–	–	794 g	24 V	D2S xenon	E1 917	×	
	1K0 008 191-001	HB	PO	–	264 g	12 V	Halogen H7	E1 917	×	
	1K0 008 191-011	HB	–	–	278 g	12 V	Halogen H7	E1 917	×	
	1K0 008 191-131	HB	PO	–	311 g	12 V	Halogen H9	E1 917	×	×
	1K0 008 191-051	HB	–	–	291 g	12 V	Halogen H9	E1 917	×	×
	1K0 008 191-021	HB	PO	–	291 g	24 V	Halogen H7	E1 917	×	
	1K0 008 191-041	HB	–	–	287 g	24 V	Halogen H7	E1 917	×	
Ancillary light functions	2PT 009 599-811	DRL	–	–	1,050 g	Multi	LED	E1 2372	×	
	2BE 980 690-001	DRL / DI / PO	PO	–	245 g	24 V	LED	E1 5854	×	
	2BE 980 691-001	DRL / DI / PO	PO	–	285 g	12 V	LED	E1 5854	×	
	2BA 965 039-061	DI	–	–	106 g	12 V	Bulb	E4 10215	×	×
	2BA 965 039-141	DI	–	–	106 g	24 V	Bulb	E4 10215	×	×
	2PF 965 039-071	PO	PO	–	106 g	12 V	Bulb	E4 10215	×	×
	2PF 965 039-151	PO	PO	–	106 g	24 V	Bulb	E4 10215	×	×
	2BE 010 102-001	DI / PO	–	–	217 g	12 V	PY21W	E1 2586	×	×
	2BE 010 102-011	DI / PO	–	–	205 g	24 V	PY21W	E1 2586	×	×
	2BE 011 102-201	DI / PO	–	–	205 g	24 V	PY21W	E1 2586	×	×
	2BE 010 102-101	DRL / PO	PO	–	217 g	12 V	PY21W	E1 2586	×	
	2PT 010 102-111	DRL / PO	PO	–	205 g	24 V	PY21W	E1 2586	×	
	2PT 010 102-211	DRL / PO	PO	–	205 g	24 V	PY21W	E1 2586	×	

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