



Lighting Programme 2011

Automotive lamps



SEE THE WORLD IN A NEW LIGHT

OSRAM



See the world in a new light – www.osram.com

On the OSRAM website, you can find more than just the fascinating world of light and lighting, the latest information and interesting links, you can also download various practical tools and service offerings for commercial customers and consumers.

Focusing on your needs.

To help you find what you're looking for even faster, we have reorganized the OSRAM website so it fits better with your requirements. Products for lighting professionals from the lighting professional are all together in the PROFESSIONAL section. You will find advice, costings, business services, downloads and everything to do with training and know-how in the TOOLS & SERVICES section. Consumers can experience the entire OSRAM world of lighting in the CONSUMER section – lamps, luminaires and accessories for the home and automobile, and the latest campaigns and competitions.

OSRAM automotive lamps. Just what you were looking for.



At www.osram.com/applicationguide, you can discover which of the more than 400 OSRAM automotive lamps is right for your vehicle.

1) These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

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Our ideas lead the way.

The mobility concepts for the future are based firmly on vehicles with low emissions but high performance. As the world market leader in automotive lighting, OSRAM is setting the pace in researching and developing new types of lighting systems. The result is a series of technologies that are economical yet powerful, refined yet simple, enhancing both comfort and safety on the roads.

There are numerous reasons why OSRAM leads the world in automotive lighting. Not only do we supply innovative products, we actively support retailers and workshops with high-performance sales logistics and reliable delivery service. Training courses and intensive advertising and PR activities ensure optimal consulting quality and higher sales.

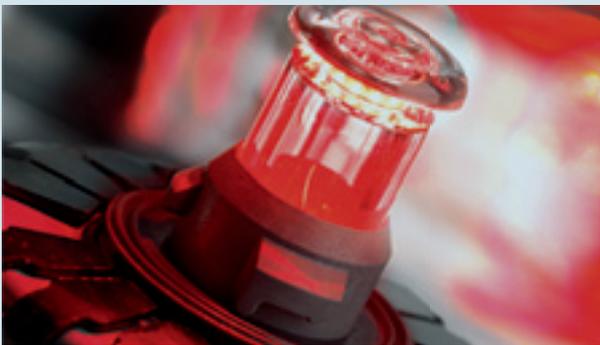
On the spare parts market too, our products meet the same high quality standards that automobile manufacturers demand for their new cars (as per Directive EU 1400/2002).





Optimum light for faster reactions.

NIGHT BREAKER® PLUS is the ideal lamp for drivers who want to drive more safely with more light and stay relaxed. With patented blue ring coating for less reflected glare, this halogen lamp produces up to 90 % more light on the road, has a beam that is up to 35 meters longer and provides light that is up to 10 % whiter. The longer beam means that drivers can spot obstacles and dangerous situations much sooner. It focuses the light 75 to 100 meters ahead of the vehicle – precisely where the driver needs it. The extra reaction time can be the difference between life and death! Now with up to 50 % longer life compared with the first-generation NIGHT BREAKER®.



LEDs are gaining in popularity. OSRAM Joule.

LED technology is already changing the face of automotive lighting. Setting high standards right from the start in this huge market of the future, OSRAM has developed Joule, the world's first standardized LED system. It will give automobile manufacturers new freedom of design, reduce costs and extend the life of the lighting system. Joule was successfully launched in 2005 and more and more manufacturers now use our LED systems for their new models.



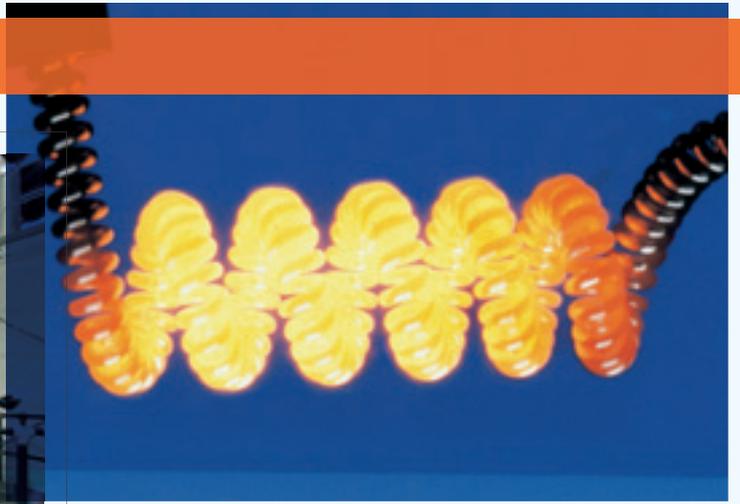
The beauty of light. XENARC®.

The fascinatingly bright xenon light continues its triumphant march. Having conquered the top-of-the-range market, it has now moved into the mid-range market. Gas discharge lamps with their innovative arc technology generate up to 100 % more light than halogen lamps at 300 % greater luminous efficacy. Modern lighting concepts from OSRAM offer far more than safe and comfortable driving. They underline personal lifestyles, demonstrate environmental awareness and stand for a new sensation in light. With the new XENARC® COOL BLUE® INTENSE lamps, OSRAM exclusively offers high-contrast blue xenon light for design-conscious drivers.



Freedom of design par excellence. OSRAM SNAP^{IN}LITE®.

In addition to LED technology, OSRAM offers its partners a series of innovations with great market opportunities. OSRAM SNAP^{IN}LITE®, which has been approved for use throughout the world, has an intelligent base design that makes changing lamps very easy. The lamp can be installed without involving any cables, separate connectors or retaining springs. The OSRAM SNAP^{IN}LITE® concept provides great freedom in the development of new, multifunctional headlight models. The low base height and particularly small reflectors save space and weight, opening up a wide range of possible applications.



Shining a light on OEM quality.

“Total Quality Management” (TQM) is the corporate principle on which OSRAM defines its quality standards. It covers the demands that we place on the finished products, components and parts, as well as on the requirements for optimizing our processes and organization. Compliance with this principle is confirmed by the fact that our quality management system has been certified to ISO 9001 and our environmental management system to ISO 14001.

OSRAM manufactures for OSRAM.

One of our principles is to develop as many of our own production facilities as possible. We manufacture major prematerials, develop our own production processes and construct complex, computer-controlled production plants. Development and manufacture of all products at OSRAM is certified to DIN EN ISO 9001.

The “Automotive Lighting” division and all the lamp manufacturing plants producing for this division are certified to TS 16949 (special quality management requirements for automotive suppliers).



Our aim is to get better and better.

To keep our strategies and activities in perfect tune with the needs of our customers, we are in close contact with all our lobby groups. What’s more, we conduct extensive and targeted opinion polls among customers in 29 different countries each year. In this way, we are able to improve the quality of our products and services and defend our number one position in the face of tough international competition.

Vehicle lamps from OSRAM are renowned for their outstanding precision, reliable operation and impressive durability. They put the ideal amount of light on the road without blinding oncoming drivers¹⁾ and therefore contribute greatly to road safety.

OEM quality.

All the lamps comply with the quality requirements of car manufacturers and therefore surpass the requirements of European standards. You can always rely on OSRAM lamps.

1) If used as specified.

Sustainable production for the sake of the environment.

Sustainability is an essential part of our corporate philosophy. OSRAM therefore uses as few hazardous substances as possible, saves energy at every opportunity and reduces the amount of packaging material wherever it can. Environmental protection is much more for us than just meeting statutory requirements. Our comprehensive environmental management system ensures that our principles are always put into practice. As a member of the United Nations Global Compact, OSRAM is committed to ecologically and socially sustainable development throughout the world.

Hazardous substances.

There are strict restrictions on the use of hazardous substances in all areas of the company – from development and production to the cleaning processes in the operational facilities. OSRAM makes use of highly developed technologies to reduce the use of hazardous substances to the absolute minimum necessary to ensure correct operation.

Energy.

In terms of energy savings, OSRAM has two claims to fame. First, the company itself saves on resources by developing and operating safe and clean plants that need less and less energy. Second, it develops energy-saving products that meet the needs of eco-conscious customers.

Packaging.

OSRAM makes use of the latest eco-friendly developments for its packaging. The majority of products are packaged in cardboard boxes or blister packs and then in corrugated cardboard cartons as packaging units. Therefore, the recycling quotas here are particularly high: 80 % for cardboard boxes and blister packs, and between 70 % and 90 % for corrugated cardboard cartons.



For more information on light and the environment, go to our homepage at www.osram.com.





OSRAM XENARC® COOL BLUE® INTENSE

Cool look for design professionals.

It is exceptionally bright, offers high contrast and is now brilliantly blue. The xenon light of the XENARC® COOL BLUE® INTENSE is an impressive demonstration of OSRAM's innovation power. With its highly efficient technology, brilliant effect and no-compromise design, it represents light for a new generation.



NEW
Now also
available
as D1

Outstanding technology.

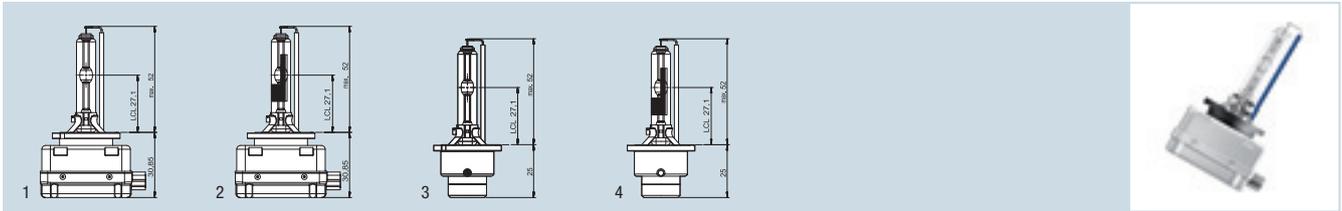
Xenon light is not just the “non plus ultra” for automobile specialists, it is also highly desirable for drivers looking for visionary technology. The new OSRAM XENARC® COOL BLUE® INTENSE produces a bluish light that offers high levels of contrast at usual HID luminous flux. The benefits of this technology provide a perfect view of the road ahead and individual styling.

Cool look. XENARC® COOL BLUE® INTENSE.

- COOL BLUE® effect at usual HID luminous flux
- Maximally uniform, high-contrast light for safe, fatigue-free driving
- ECE-approved with DOT labeling
- Long life
- Stylish, modern appearance on the road

XENARC® lamps should be replaced by a qualified mechanic.

OSRAM XENARC® COOL BLUE® INTENSE



Product reference	Product number	ECE	W		lm	K		No.
66144CBI ¹⁾	4008321401472	D1S ³⁾	35	PK32d-2	3200 ⁴⁾	5000	10	1
66154CBI ¹⁾	4008321401373	D1R ³⁾	35	PK32d-3	2800 ⁴⁾	5000	10	2
66240CBI ¹⁾	4008321401359	D2S ³⁾	35	P32d-2	3200 ⁴⁾	5000	10	3
66250CBI ²⁾	4008321401533	D2R ³⁾	35	P32d-3	2800 ⁴⁾	5000	10	4

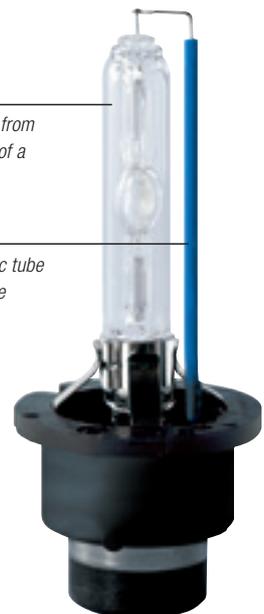
Comparison		D1S CBI	D1R CBI	D2S CBI	D2R CBI
Rated wattage	W	35	35	35	35
Luminous flux	lm	3200 ⁴⁾	2800 ⁴⁾	3200 ⁴⁾	2800 ⁴⁾
Luminous efficacy	lm/W	89	80	89	80
Color temperature	K	5000	5000	5000	5000
Lamp life	h B ₃	1500	1500	1500	1500
	T _c	2500	2500	2500	2500

COOL
Up to 5000 kelvin!
Up to 20% more light!



Now the extra blue light comes from a special filling system instead of a conventional coating.

Trademark feature: blue ceramic tube to distinguish it visually from the standard version.



1) Reduced UV emission | For projection headlights | ECE approval and DOT label.
2) Reduced UV emission | With anti-glare strip for reflection headlights | ECE approval and DOT label.
3) To be operated only with approved electronic control gear.
4) ± 450 lm.

XENARC® electronic D1S/R, XENAELECTRON® control gear and the associated connecting cables form a perfectly matched system from OSRAM.



OSRAM XENARC®

An innovation for comfort and the environment.

OSRAM has given vehicle lighting a whole new intensity with the arc technology of the XENARC® family of lamps. The D3 and D4 XENARC® systems prove that environmental concerns are very much at the forefront of OSRAM's thinking in its product development activities. They offer the full output of xenon light entirely without mercury.



The first xenon light without mercury.

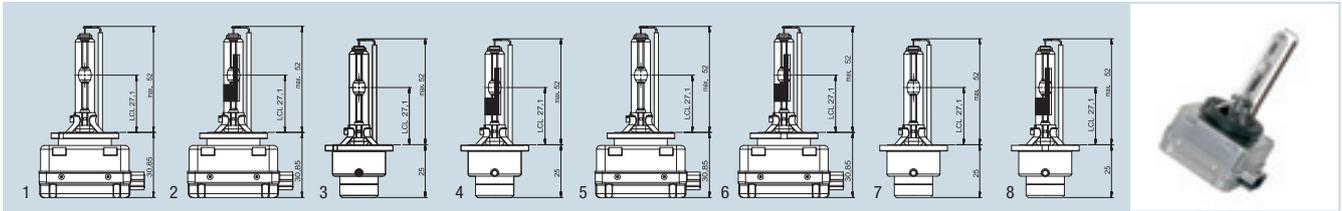
With its D3 and D4 XENARC® systems, OSRAM is taking environmental protection and efficiency to new heights. Arc technology produces an extremely bright arc of light from an electronically controlled gas discharge. This produces twice as much light as the filament in a halogen lamp. Good illumination of the road ahead is one of the factors that contribute to driver comfort, so even long journeys through the night are more relaxed than ever before. A color temperature similar to that of natural daylight also helps keep drivers relaxed.

Better visibility, greater safety.

- Very bright arc produced by an electronically controlled gas discharge
- Up to 100 % more light than halogen lamps
- At 4,150 K, it has a color temperature closer to natural daylight than conventional halogen light (3,200 K) and is therefore easier on the eyes
- Better illumination of the road reduces the risk of accidents
- The D3 and D4 XENARC® systems are mercury-free and therefore more eco-friendly
- CO₂ reduction: xenon saves 50 % energy (corresponding to 1 g CO₂/km) compared to standard halogen lamps

XENARC® lamps should be replaced by a qualified mechanic.

XENARC® electronic gas discharge headlight lamps

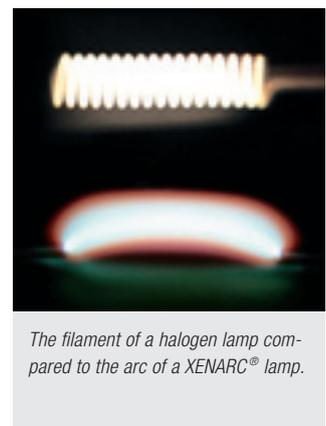


Product reference	Product number	ECE	W		lm	K		No.
66144 ¹⁾	4008321184474	D1S ³⁾	35	PK32d-2	3200 ⁴⁾	4150	10	1
66154 ²⁾	4008321184511	D1R ³⁾	35	PK32d-3	2800 ⁴⁾	4150	10	2
66240 ¹⁾	4008321184573	D2S ³⁾	35	P32d-2	3200 ⁴⁾	4150	10	3
66250 ²⁾	4008321184634	D2R ³⁾	35	P32d-3	2800 ⁴⁾	4150	10	4
66340 ¹⁾	4008321379627	D3S ³⁾	35	PK32d-5	3200 ⁴⁾	4150	10	5
66350 ²⁾	4008321129857	D3R ³⁾	35	PK32d-6	2800 ⁴⁾	4150	10	6
66440 ¹⁾	4008321349392	D4S ³⁾	35	P32d-5	3200 ⁴⁾	4150	10	7
66450 ²⁾	4008321349576	D4R ³⁾	35	P32d-6	2800 ⁴⁾	4150	10	8

Comparison		D1S	D1R	D2S	D2R	D3S	D3R	D4S	D4R
Rated wattage	W	35	35	35	35	35	35	35	35
Luminous flux	lm	3200 ⁴⁾	2800 ⁴⁾						
Luminous efficacy	lm/W	89	80	89	80	89	80	89	80
Color temperature	K	4150	4150	4150	4150	4150	4150	4150	4150
Lamp life	h B ₃	2000	2000	2000	2000	1800	1800	1800	1800
	T _c	3000	3000	3000	3000	3000	3000	3000	3000

With an average life of up to 3,000 hours, XENARC® lamps generally outlast the average automobile. In such cases, there are no costs for maintenance or replacement.

XENARC® lamps should be replaced by a qualified mechanic.

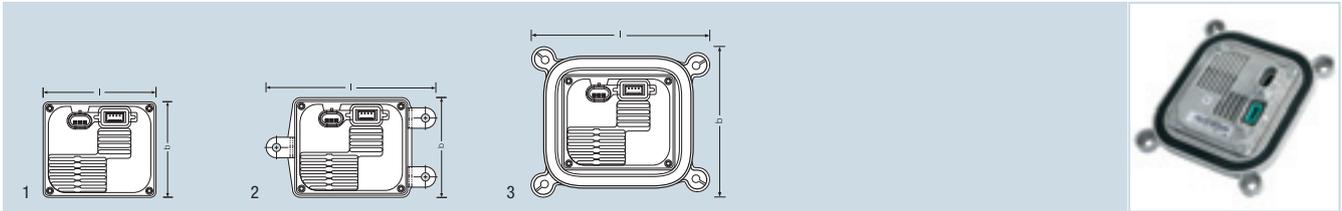


The filament of a halogen lamp compared to the arc of a XENARC® lamp.

1) Reduced UV emission | For projection headlights | ECE approval and DOT label.
 2) Reduced UV emission | With anti-glare strip for reflection headlights | ECE approval and DOT label.
 3) To be operated only with approved electronic control gear.
 4) ± 450 lm.

XENARC® electronic D1S/R or D3S/R, XENAELECTRON® control gear and the associated connecting cables form a perfectly matched system from OSRAM.

XENAELECTRON® for XENARC® electronic gas discharge headlight lamps



Product reference	Product number	ECE	V	l [mm]	b [mm]	h [mm]	°C min-max.		No.
XENAELECTRON XT-D1/12V	4008321908575	D1S & D1R	12	82	73.15	25.2	-40...+105	40	1
XENAELECTRON XT-D1/12V	4008321908582	D1S & D1R	12	125	74.11	25.2	-40...+105	40	2
XENAELECTRON XT5-2-D1/12V BH	4008321033611	D1S & D1R	12	123	105.77	25.2	-40...+105	45	3
XENAELECTRON XT5-1-D1/24V	4008321139047	D1S & D1R	24	82	73.15	25.2	-40...+105	40	1
XENAELECTRON XT5-3-D1/24V TAB	4008321139023	D1S & D1R	24	125	74.11	25.2	-40...+105	40	2
XENAELECTRON XT5-2-D3/12V BH	4008321139061	D3S & D3R	12	123	105.77	25.2	-40...+105	45	3

Systematic power.

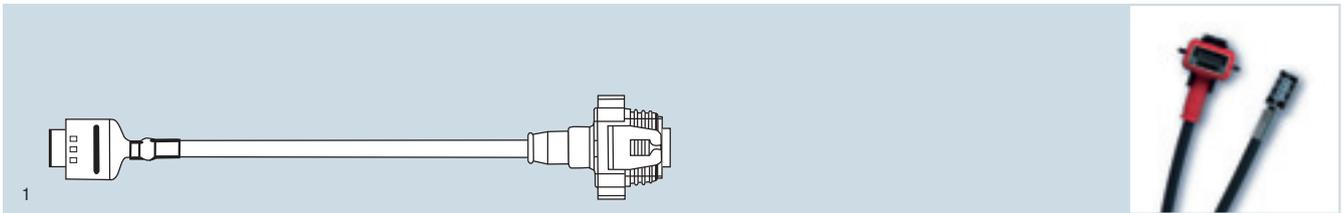
The strength of the XENARC® D1/D3 system comes from the perfect combination of individual components. The XENAELECTRON® XT5-D1/12 V/24 V or XENAELECTRON® XT5-D3/12 V control gear for mercury-free gas discharge lamps (XENARC® D3) is connected to the OSRAM XENARC® electronic D1/D3 lamp via the appropriate connecting cables.

Caution: Because of their high voltage, XENAELECTRON® control gear may only be replaced by properly trained personnel.

Professional electronics from the system expert.

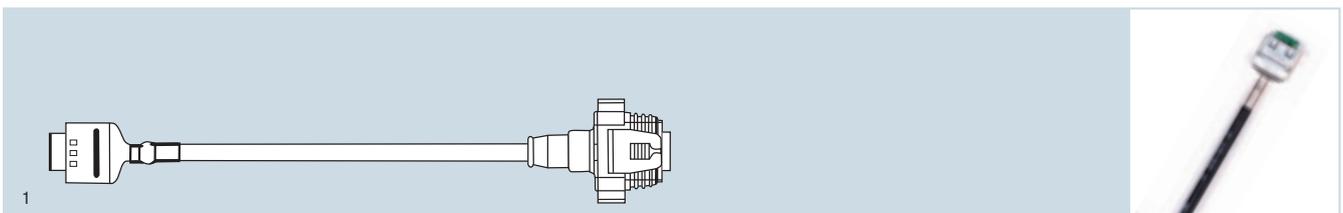
- Perfectly matched to OEM automotive requirements
- Compact design of the XENAELECTRON® control gear
- Excellent EMI performance
- Modular construction for use in different headlight designs

Cable for OSRAM D1 systems



Product reference	Product number	 Lamp	 ECG		 No.
V-J1D-240-J2A	4050300879888	J1D	J2A	40	1

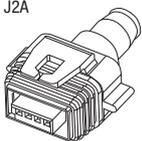
Cable for OSRAM D3 systems



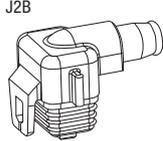
Product reference	Product number	 Lamp	 ECG		 No.
M-J1A-260-J2B VS40 OSRAM	4008321364111	J1A	J2B	40	1

The cables are available with different connector configurations and in alternative lengths.

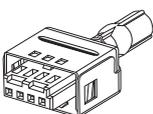
J2A



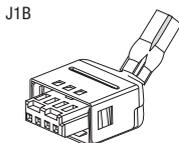
J2B



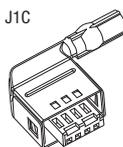
J1A



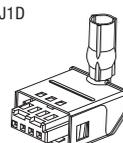
J1B



J1C



J1D



XENARC® electronic D1S/R or D3S/R, XENAELECTRON® control gear and the associated connecting cables form a perfectly matched system from OSRAM.



OSRAM NIGHT BREAKER® PLUS

The world's most powerful automotive halogen lamp.

Unrivalled brilliance has a name: OSRAM NIGHT BREAKER® PLUS! The lamp produces more light and creates a longer beam than any other halogen lamp. More technology for longer life.



Optimum light for faster reactions.

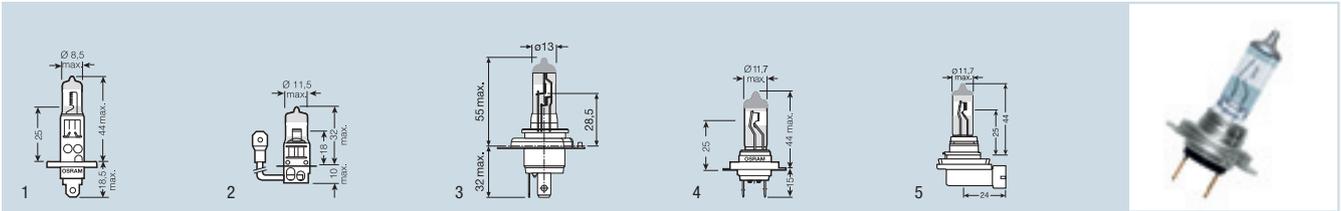
NIGHT BREAKER® PLUS is the ideal lamp for drivers who want to drive more safely with more light and stay relaxed. With patented blue ring coating for less reflected glare, this halogen lamp produces up to 90 % more light on the road, has a beam that is up to 35 meters longer and provides light that is up to 10 % whiter. The longer beam means that drivers can spot obstacles and dangerous situations much sooner. It focuses the light 75 to 100 meters ahead of the vehicle – precisely where the driver needs it. The extra reaction time can be the difference between life and death!

Fighting the dark forces – day and night.

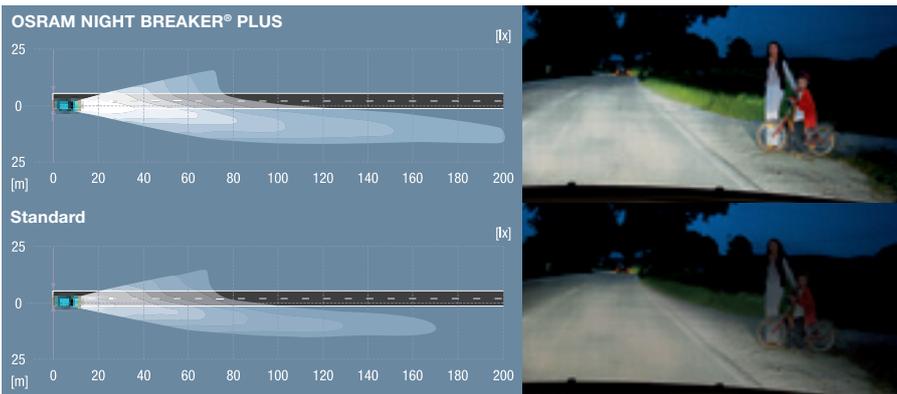
- Up to 90 % more light on the road ¹⁾ for better visibility and much longer reaction time
- Up to 35 m longer beam of light ¹⁾
- Up to 10 % whiter light ¹⁾ for comfortable, fatigue-free driving
- Up to 50 % longer life ²⁾ (Extra Lifetime)
- Eye-catching design with partial, blue coating and silver cap (H4/H7/H11)
- Gold-plated contacts (H4/H7) for excellent corrosion protection, outstanding conductivity and high-class look

1) Compared with standard lamps. 2) Compared with the first NIGHT BREAKER® generation.

OSRAM NIGHT BREAKER® PLUS



Product reference	Product number	ECE	V	W			 No.
64150NBP	4008321544506	H1	12	55	P14.5s	100	1
64151NBP	4008321544438	H3	12	55	PK22s	100	2
64193NBP	4008321550460	H4	12	60/55	P43t	100	3
64210NBP	4008321548085	H7	12	55	PX26d	100	4
64211NBP	4008321544605	H11	12	55	PGJ19-2	100	5



Now with new technology for longer life.



PLUSpoint filler gas:
improved inert gas formula for more efficient generation of light.

PLUSpoint filament:
more robust design for greater loading.

PLUSpoint gold contacts:
excellent corrosion protection,
outstanding conductivity and high-class look.

OSRAM NIGHT BREAKER® PLUS provides an impressive combination of unique design and top technology. Suitable for high beam, low beam and front fog lights for all vehicle types equipped with halogen technology. Approved for use throughout Europe.



OSRAM COOL BLUE®

Stylish and safe.

OSRAM COOL BLUE® provides stylish and powerful light on the road. Its bright bluish-white light is almost in the same league as the light from attractive xenon lamps.



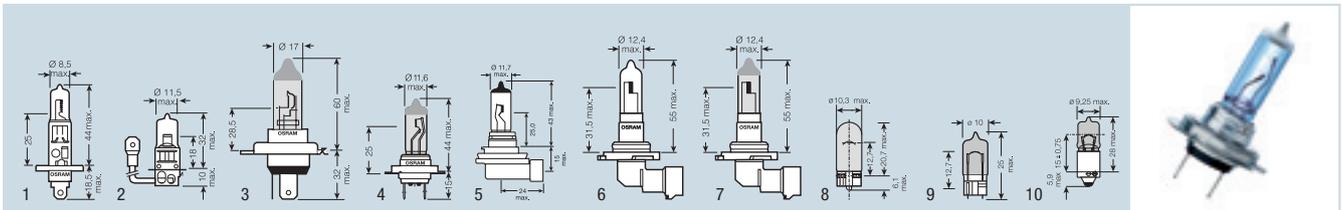
Cool light, strong effect.

COOL BLUE® produces high-contrast light similar to natural daylight and is therefore easier on the eyes than the light from conventional headlights. The bluish-white light has a color temperature of up to 4,000 K, making it an attractive lamp and putting many other “blue” lamps firmly in the shade. COOL BLUE® H7 and H4 lamps have an eye-catching design, perfect for style-conscious drivers. Behind the clear glass, the silver cap blends perfectly with the reflector.

Features at a glance.

- Modern, bright bluish-white light (up to 4,000 K, similar to light from xenon lamps)
- Up to 20 % brighter than standard lamps (subjective impression)
- High-contrast illumination of the road
- Optimized design with a silver cap (H7/H4), ideal for clear-glass headlights
- Available for all front lighting functions
- For the design-conscious driver

OSRAM COOL BLUE®



Product reference	Product number	ECE	V	W			
64150CB ¹⁾	4050300575209	H1	12	55	P14.5s	100	1
64151CB ¹⁾	4050300647920	H3	12	55	PK22s	100	2
64193CB ²⁾	4050300552255	H4	12	60/55	P43t	100	3
64210CB ³⁾	4050300580197	H7	12	55	PX26d	100	4
64211CB	4008321421296	H11	12	55	PGJ19-2	20	5
9003CB ³⁾	4050300575179	HB2 ⁴⁾	12	60/55	P43t	100	3
9005CB ¹⁾	4050300189673	HB3	12	60	P20d	100	6
9006CB ³⁾	4050300189697	HB4	12	51	P22d	100	7
2825CB	4008321094636	W5W	12	5	W2.1x9.5d	50	8
2825HCB	4008321095169	W5W	12	5	W2.1x9.5d	50	9
64132CB	4008321094957	H6W	12	6	BAX9s	50	10

The matching DIADEM® indicator lamp.



OSRAM DIADEM® – indicator lamps with interference layer



Product reference	Product number	ECE	V	W			
7507LDA ⁵⁾	4008321137418	PY21W	12	21	BAU15s	50	1
7508LDR ⁶⁾	4008321376848	PR21W	12	21	BAW15s	10	1
7538LDR ⁶⁾	4008321376862	PR21/5W	12	21/5	BAW15d	10	2

1) Lamps comply with ECE R 37 and SAE (DOT) regulations.

2) With silver cap.

3) Lamps comply with ECE R 37 and SAE (DOT) regulations | With silver cap.

4) SAE category reference, H4 with strict geometrical tolerances.

5) Amber lamps for clear indicators.

6) Red lamp for clear reversing/brake lights.

OSRAM DIADEM® indicator lamps have the most advanced interference coating. The surface of a DIADEM® lamp therefore has an opalescent appearance. The lamp only appears amber or red when it is on. This design effect is ideal for all indicator and reversing lights with clear covers.



OSRAM ULTRA LIFE

They last and last and last ...

ULTRA LIFE lamps last up to three times longer than conventional automotive lamps. For ULTRA LIFE headlight lamps that are not in commercial use, OSRAM is the first manufacturer to offer a three-year guarantee (* for precise conditions, go to www.osram.com/am-guarantee).



Photo: Ralph Baiker/Hamburg

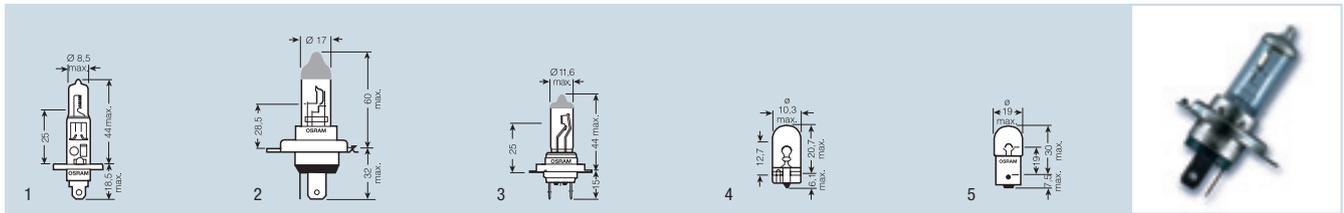
OSRAM ULTRA LIFE – now with a 3-year guarantee.

So annoying: a headlight lamp suddenly fails in the middle of the night. A replacement lamp has to be found and installed quickly because driving with one headlight is a huge safety risk. Drivers who are often on the road at night or who do not want to go without the safety of low beam light during the day are well aware of this situation. Because they are in almost constant use, the headlights of these drivers fail more often than usual. Owners of vehicles with headlight lamps that are difficult to access also save themselves time and money with the new ULTRA LIFE lamps. And the environment also benefits as fewer replacements means less waste.

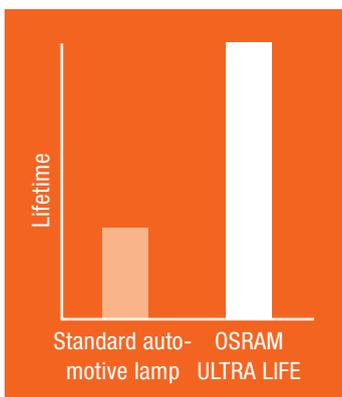
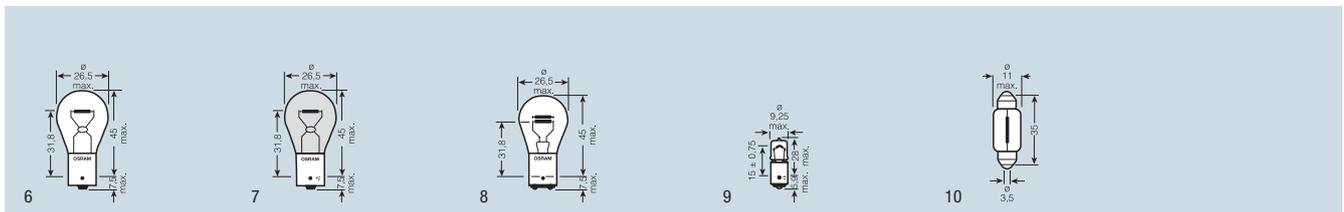
Ultra variety for any automobile.

- The first automotive brand lamp to have a 3-year guarantee
- Lasts up to three times longer than a conventional automotive lamp
- Unique reliability
- Suitable for all vehicle types
- Modern design with a silver cap (H4/H7), ideal for clear-glass headlights
- Approved for use throughout Europe

OSRAM ULTRA LIFE – up to 3 times the life

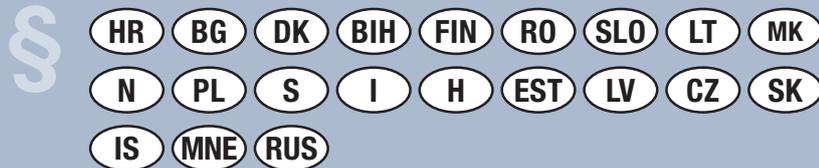


Product reference	Product number	ECE	V	W			No.
64150ULT ¹⁾	4008321416209	H1	12	55	P14.5s	100	1
64193ULT ²⁾	4008321416230	H4	12	60/55	P43t	100	2
64210ULT ³⁾	4008321416261	H7	12	55	PX26d	100	3
2825ULT	4008321413024	W5W	12	5	W2.1x9.5d	50	4
5007ULT	4008321415370	R5W	12	5	BA15s	50	5
5008ULT	4008321415400	R10W	12	10	BA15s	50	5
7506ULT	4008321415349	P21W	12	21	BA15s	50	6
7507ULT ⁴⁾	4008321413147	PY21W	12	21	BAU15s	50	7
7528ULT	4008321413116	P21/5W	12	21/5	BAY15d	50	8
64132ULT	4008321413178	H6W	12	6	BAX9s	50	9
6418ULT	4008321413086	C5W	12	5	SV8.5-8	50	10

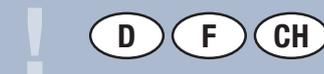


OSRAM ULTRA LIFE – the perfect daytime running lamp (DRL)

DRL compulsory:

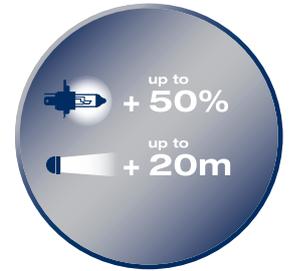


DRL recommended:



Source: ADAC 03/2010

1) Lamps comply with ECE R 37 and SAE (DOT) regulations.
 2) With silver cap.
 3) Lamps comply with ECE R 37 and SAE (DOT) regulations | With silver cap.
 4) Amber lamps for clear indicators.



OSRAM SILVERSTAR®

More power, greater safety.

Drivers can rely on OSRAM SILVERSTAR® lamps as powerful nighttime companions. When the sun goes down, light is a precious commodity – and SILVERSTAR® provides plenty of it.



Safety in the dark.

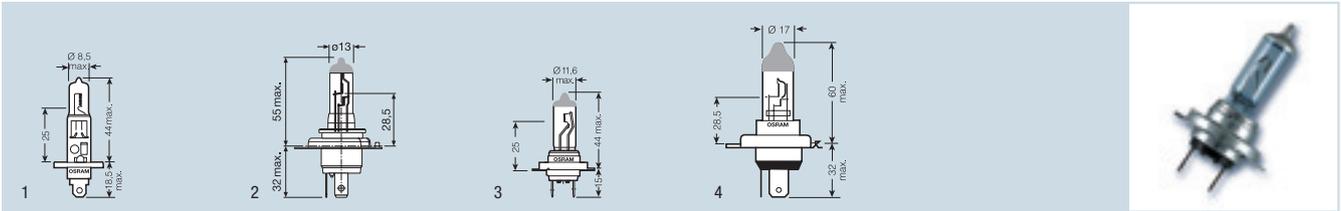
Long journeys at night call for full concentration on the part of the driver. A lamp with better illumination of the road will make driving easier and raise awareness considerably. Vehicles equipped with OSRAM SILVERSTAR® therefore have a crucial advantage in terms of safety. Up to 50 % more light on the road at 50 to 75 m in front of the vehicle enables drivers to spot road signs, obstacles and other dangers sooner so they can react in good time.

SILVERSTAR® speaks for itself.

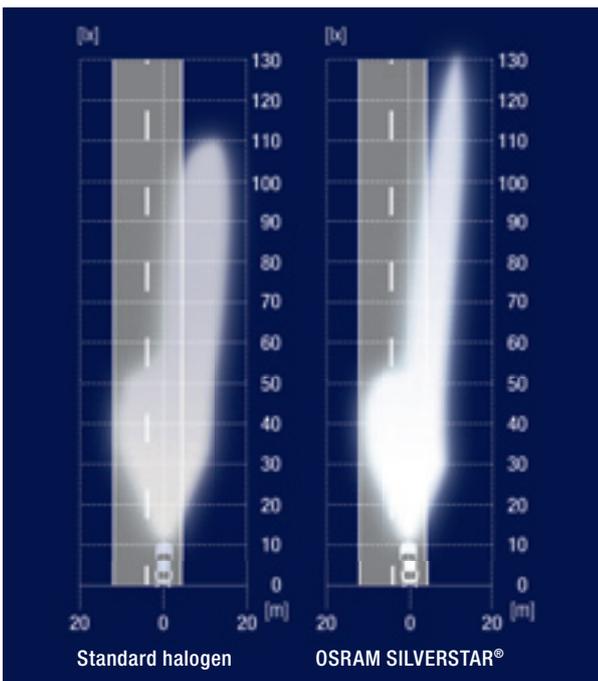
- Up to 50 % more light on the road ¹⁾ for greater safety
- Up to 20m longer beam ¹⁾
- Modern design with silver cap, ideal for all clear-glass headlights (H4/H7)
- For the performance-conscious driver

¹⁾ Compared with standard lamps.

OSRAM SILVERSTAR®



Product reference	Product number	ECE	V	W			 No.
64150SVS ¹⁾	4050300647852	H1	12	55	P14.5s	100	1
64193SVS ²⁾	4050300629711	H4	12	60/55	P43t	100	2
64210SVS ³⁾	4050300629643	H7	12	55	PX26d	100	3
64185SVS	4008321079407	HS1	12	35/55	PX43t	100	4



1) Lamps comply with ECE R 37 and SAE (DOT) regulations.
 2) With silver cap.
 3) Lamps comply with ECE R 37 and SAE (DOT) regulations | With silver cap.



OSRAM NIGHT RACER® and X-RACER® POWER and EMOTION!

See and be seen: life assurance for motorcyclists. With the NIGHT RACER® and X-RACER® high-performance lamps, OSRAM is taking freedom on two wheels to new levels – for both relaxed cruising and more sporty riding. Quality in duplicate: one lamp for instant replacement, one lamp as a spare on the move.



OSRAM NIGHT RACER®:

The best there is – perfect for perfectionists.

No-compromise riders who want only the best should look no further than OSRAM NIGHT RACER®. There is not a more effective and reliable halogen light for bikes. Any further questions?

- Up to 90 % more light on the road ¹⁾ for excellent visibility, more time to react and maximum safety
- Up to 35 m longer beam of light ¹⁾
- Easier on the eyes with up to 10 % whiter light ¹⁾ for comfortable, fatigue-free driving
- Approved for use throughout Europe

OSRAM X-RACER®:

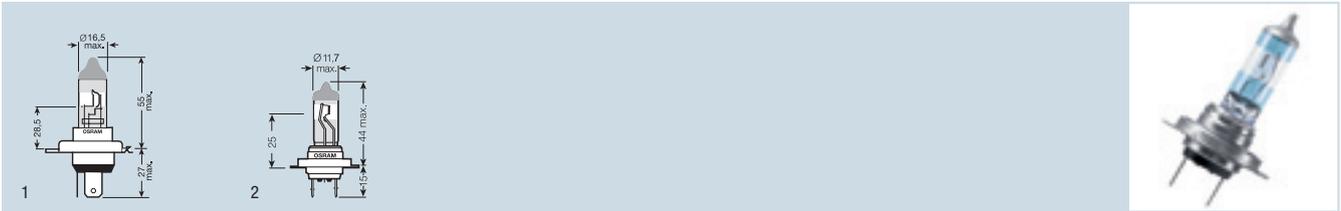
The xenon look – making a bold statement.

If you want good visibility and good looks, then choose OSRAM X-RACER®. Its cool blue light is very much in fashion and will turn heads wherever you go. It is also easy on the eyes.

- Modern, bright bluish-white light (up to 4,000 K, similar to the color temperature of xenon lamps)
- Up to 20 % brighter ¹⁾ (subjective impression)
- Brighter and therefore more comfortable for the driver
- Approved for use throughout Europe

1) Compared with standard lamps.

OSRAM NIGHT RACER®



Product reference	Product number	ECE	V	W			No.
64193NR-02B	4008321395672	H4	12	60/55	P43t	20	1
64210NR-02B	4008321395658	H7	12	55	PX26d	20	2

OSRAM X-RACER®



Product reference	Product number	ECE	V	W			No.
64193XR-02B	4008321395719	H4	12	60/55	P43t	20	1
64210XR-02B	4008321395696	H7	12	55	PX26d	20	2



Spare lamps – mandatory in many countries!

Carrying spare lamps is recommended in Germany and required by law for motorcyclists in many European countries.
Get your bikes on the right track, with NIGHT RACER® and X-RACER® in an innovative dual pack.



reddot design award
winner 2009

OSRAM has been awarded a trophy in the "Communication Design" category for its motorcycle spare lamp box.





OSRAM ORIGINAL LINE 12V

The classic.

The lamps in the OSRAM ORIGINAL LINE 12V family are highly reliable and have an excellent price-to-performance ratio. Customers who appreciate good quality will be making the right choice with the ORIGINAL LINE 12V.



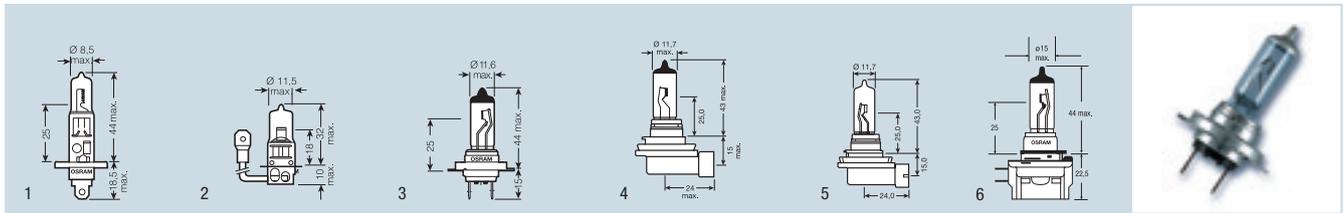
Peak performance – reliable and cost-effective.

It is certainly no coincidence that OSRAM is the world market leader in vehicle lamps. Either as standard initial equipment or as spare parts, the ORIGINAL LINE 12V family is an extremely popular and successful workhorse. With its excellent price-to-performance ratio and outstanding quality, it is the lamp of choice for a wide range of customers. Its combination of first-class quality, impressive brightness and reliable life gives it a real advantage over other products on the market. The amount of light produced does not decrease over time but remains well within the prescribed safety margins from day one until the very end.

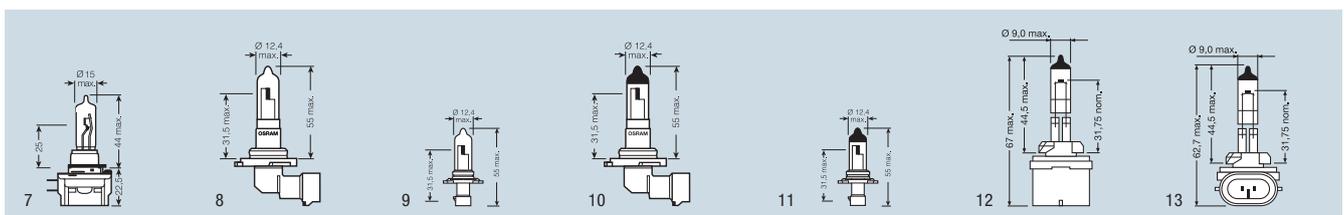
The tried and tested solution for standard requirements.

- OEM quality
- Excellent price-to-performance ratio
- Successfully used in millions of new automobiles from renowned manufacturers
- Impressive brightness and reliability

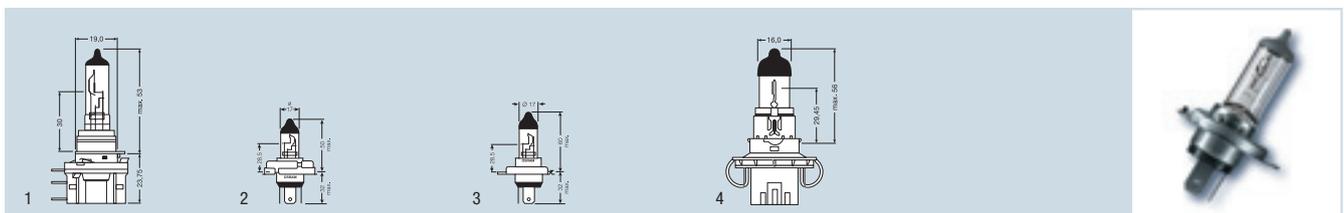
Single-coil headlight lamps for innovative dual headlight systems



Product reference	Product number	ECE	V	W			
64150 ¹⁾	4050300001487	H1	12	55	P14.5s	100	1
64151 ¹⁾	4050300001494	H3	12	55	PK22s	100	2
64210 ¹⁾	4050300332185	H7	12	55	PX26d	100	3
64211 ¹⁾	4050300524313	H11	12	55	PGJ19-2	100	4
64212 ¹⁾	4050300498751	H8	12	35	PGJ19-1	100	4
64213 ¹⁾	4050300524368	H9	12	65	PGJ19-5	100	5
64241 ¹⁾	4008321054654	H11B ²⁾	12	55	PGJY19-2	100	6
64242 ¹⁾	4008321055422	H8B ²⁾	12	35	PGJY19-1	100	6
64243 ¹⁾	4008321055477	H9B ²⁾	12	65	PGJY19-5	100	7
9005 ¹⁾	4050300137193	HB3	12	60	P20d	100	8
9005XS ¹⁾	0046135320408	HB3A	12	60	P20d	100	9
9006L ¹⁾	4050300012650	HB4	12	51	P22d	100	10
9006XS ¹⁾	4050300532400	HB4A	12	51	P22d	200	11
9145 ¹⁾	4050300186320	H10	12	42	PY20d	100	10
880	4008321542991	H27/1	12	27	PG13	100	12
881	4008321543028	H27/2	12	27	PGJ13	100	13



Dual-coil BILUX® headlight lamps for normal headlight systems



Product reference	Product number	ECE	V	W			
64176 ¹⁾	4008321218414	H15	12	15/55	PGJ23t-1	100	1
64183 ³⁾	4050300350554	R2	12	45/40	P45t	100	2
64185	4050300439969	HS1	12	35/35	PX43t	100	3
64193	4050300001470	H4	12	60/55	P43t	100	3
9003L ¹⁾	4050300308975	HB2	12	60/55	P43t	100	3
9008 ¹⁾	4008321939401	H13	12	60/55	P26.4t	10	4

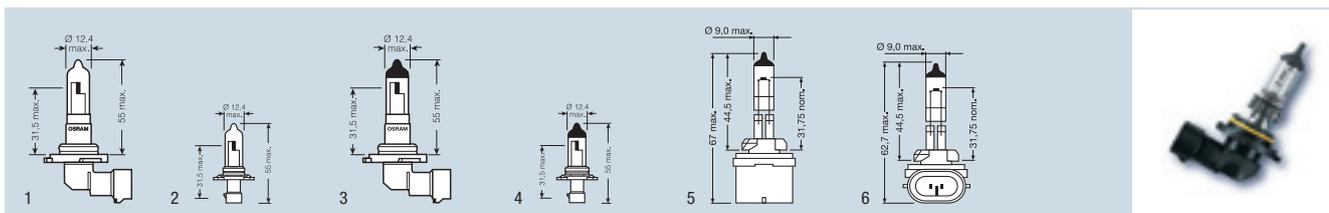
1) Lamps comply with ECE R 37 and SAE (DOT) regulations.
 2) New development for simple lamp replacement and highly efficient headlights; supplied on request.
 3) Successor to the BILUX® AS® lamp (product reference 7951).

GIGANT® HEAVY-DUTY BILUX® lamps – vibration-resistant design



Product reference	Product number	ECE	V	W			
94193	4050300019161	H4	12	60/55	P43t	100	1

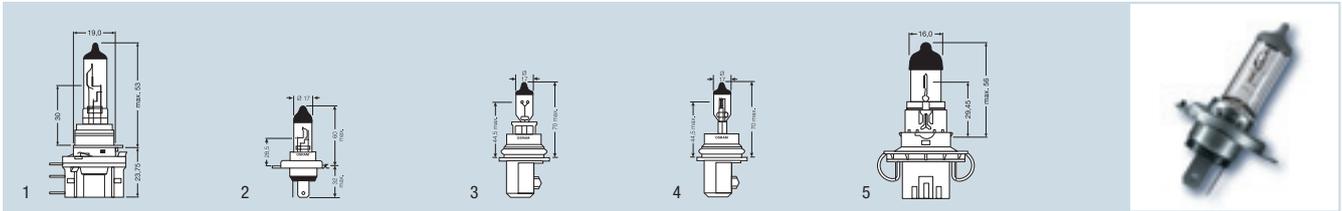
Single-coil headlight lamps with SAE approval



Product reference	Product number	ECE	V	W			
9005 ¹⁾	4050300137193	HB3	12	60	P20d	100	1
9005XS ¹⁾	0046135320408	HB3A	12	60	P20d	100	2
9006L ¹⁾	4050300012650	HB4	12	51	P22d	100	3
9006XS ¹⁾	4050300532400	HB4A	12	51	P22d	200	4
9145 ¹⁾	4050300186320	H10	12	42	PY20d	100	3
880	4008321542991	H27/1	12	27	PG13	100	5
881	4008321543028	H27/2	12	27	PGJ13	100	6

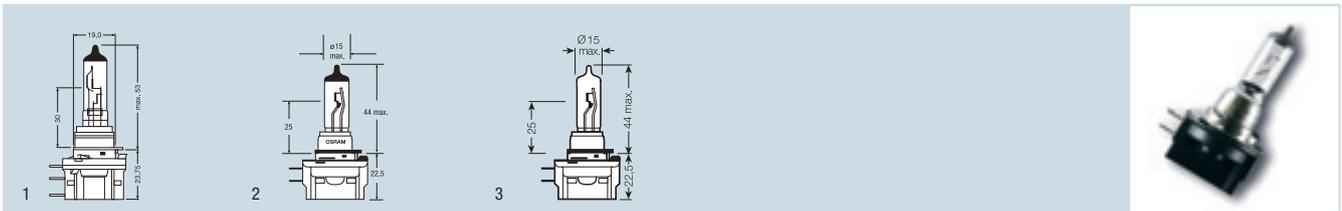
1) Lamps comply with ECE R 37 and SAE (DOT) regulations.
 2) New development for simple lamp replacement and highly efficient headlights; supplied on request.

Dual-coil BILUX® headlight lamps with SAE approval



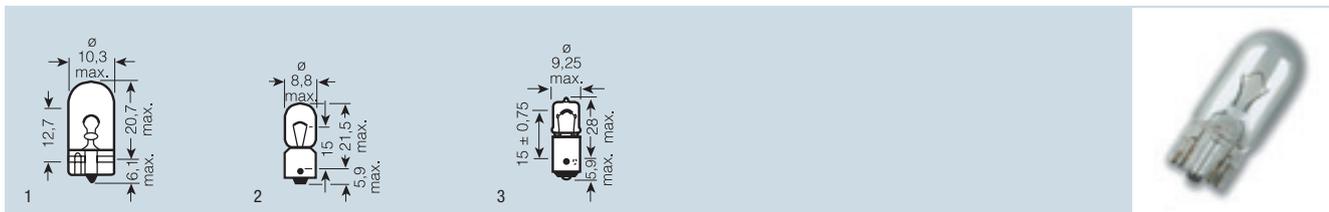
Product reference	Product number	ECE	V	W			
64176 ¹⁾	4008321218414	H15	12	15/55	PGJ23t-1	100	1
9003L ¹⁾	4050300308975	HB2	12	60/55	P43t	100	2
9004	4050300239866		12	65/45	P29t	200	3
9007	4050300148816		12	65/55	PX29t	200	4
9008 ¹⁾	4008321939401	H13	12	60/55	P26.4t	10	5

OSRAM SNAP^{IN}LITE® lamps for new headlight systems



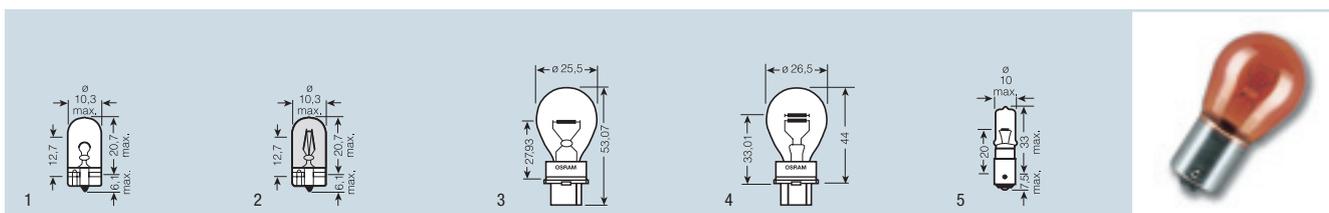
Product reference	Product number	ECE	V	W			
64176 ¹⁾	4008321218414	H15	12	15/55	PGJ23t-1	100	1
64241 ¹⁾	4008321054654	H11B ²⁾	12	55	PGJY19-2	100	2
64242 ¹⁾	4008321055422	H8B ²⁾	12	35	PGJY19-1	100	2
64243 ¹⁾	4008321055477	H9B ²⁾	12	65	PGJY19-5	100	3

Position and parking lamps

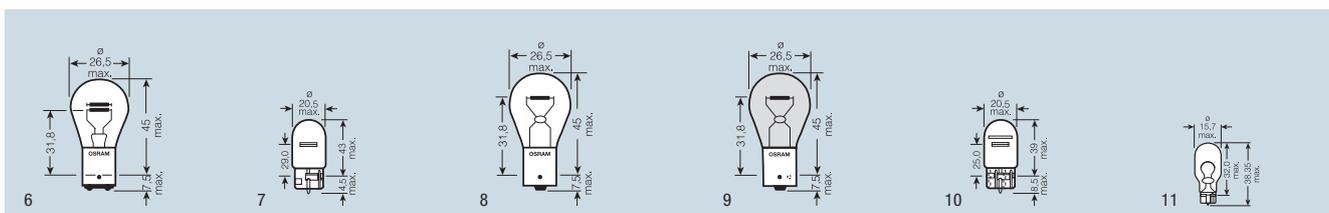


Product reference	Product number	ECE	V	W			
2825	4050300838632	W5W	12	5	W2.1x9.5d	50	1
3893	4050300838489	T4W	12	4	BA9s	50	2
64132	4008321094896	H6W	12	6	BAX9s	50	3

Indicators, brake, fog and reversing lamps

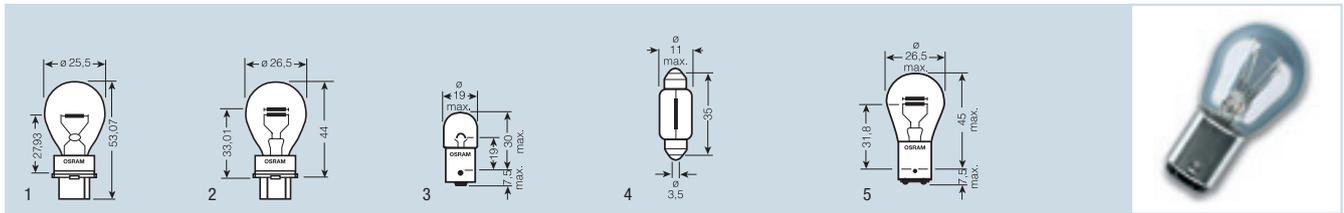


Product reference	Product number	ECE	V	W			
2825	4050300838632	W5W	12	5	W2.1x9.5d	50	1
2827 ¹⁾	4050300891200	WY5W	12	5	W2.1x9.5d	50	2
3156	4008321090621	P27W	12	27	W2.5x16d	50	3
3157	4008321090683	P27/7W	12	27/7	W2.5x16q	50	4
64136	4008321095190	H21W	12	21	BAY9s	50	5
7225	4050300891514	P21/4W	12	21/4	BAZ15d	50	6
7504 ¹⁾	4008321165473	WY21W	12	21	WX3x16d	50	7
7505	4008321090652	W21W	12	21	W3x16d	50	7
7506	4050300838120	P21W	12	21	BA15s	50	8
7507 ¹⁾	4050300891477	PY21W	12	21	BAU15s	50	9
7515	4008321090713	W21/5W	12	21/5	W3x16q	50	10
7528	4050300838069	P21/5W	12	21/5	BAY15d	50	6
921	4008321100948	W16W	12	16	W2.1x9.5d	50	11



1) Amber lamps for clear indicators.

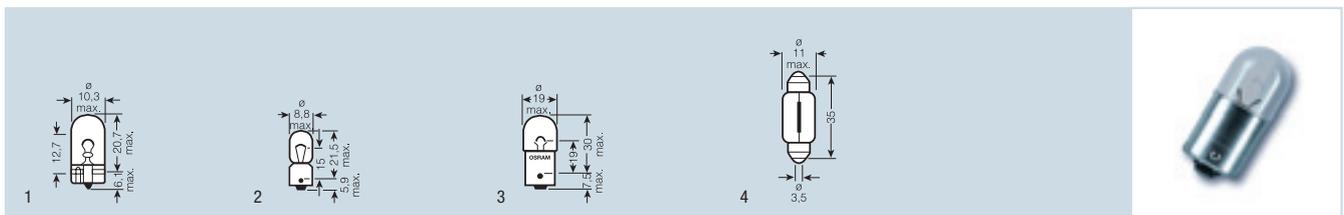
Reversing, brake and fog lamps



Product reference	Product number	ECE	V	W			
3156	4008321090621	P27W	12	27	W2.5x16d	50	1
3157	4008321090683	P27/7W	12	27/7	W2.5x16q	50	2
5007	4050300838427	R5W	12	5	BA15s	50	3
5008	4050300838212	R10W	12	10	BA15s	50	3
6418	4050300838397	C5W	12	5	SV8.5-8	50	4
7225	4050300891514	P21/4W	12	21/4	BAZ15d	50	5
7506	4050300838120	P21W	12	21	BA15s	50	6
7515	4008321090713	W21/5W	12	21/5	W3x16q	50	7
7528	4050300838069	P21/5W	12	21/5	BAY15d	50	5
921	4008321100948	W16W	12	16	W2.1x9.5d	50	8

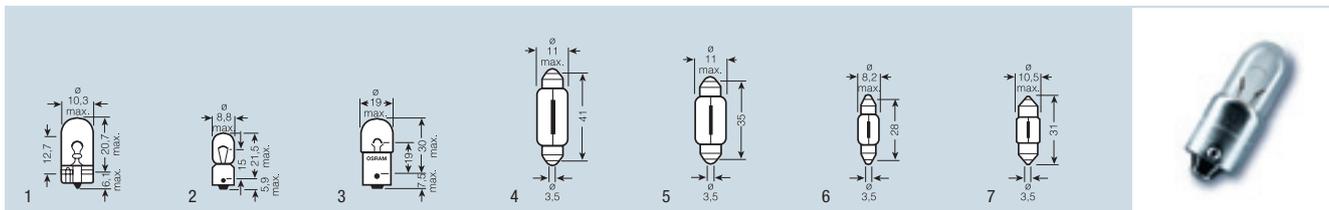


Number plate and side position lamps



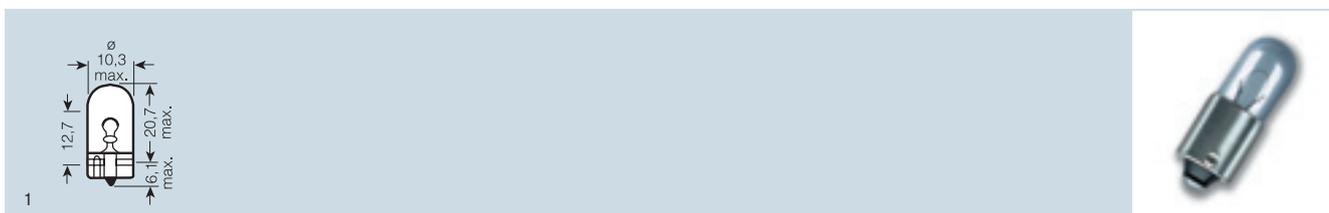
Product reference	Product number	ECE	V	W			
2825	4050300838632	W5W	12	5	W2.1x9.5d	50	1
3893	4050300838489	T4W	12	4	BA9s	50	2
5007	4050300838427	R5W	12	5	BA15s	50	3
5008	4050300838212	R10W	12	10	BA15s	50	3
6418	4050300838397	C5W	12	5	SV8.5-8	50	4

Interior lighting and reading lamps



Product reference	Product number	ECE	V	W			
2825	4050300838632	W5W	12	5	W2.1x9.5d	50	1
3860	4008321095756		12	5	BA9s	50	2
3893	4050300838489	T4W	12	4	BA9s	50	2
5007	4050300838427	R5W	12	5	BA15s	50	3
5008	4050300838212	R10W	12	10	BA15s	50	3
6411	4050300891354		12	10	SV8.5-8	50	4
6413	4050300891439		12	5	SV8.5-8	50	4
6418	4050300838397	C5W	12	5	SV8.5-8	50	5
6428	4008321094384		12	3	SV7-8	50	6
6438	4008321094353		12	10	SV8.5-8	50	7
6461	4008321094261		12	10	SV8.5-8	50	5

MINIXEN® lamps with increased luminous flux for brilliant reading light



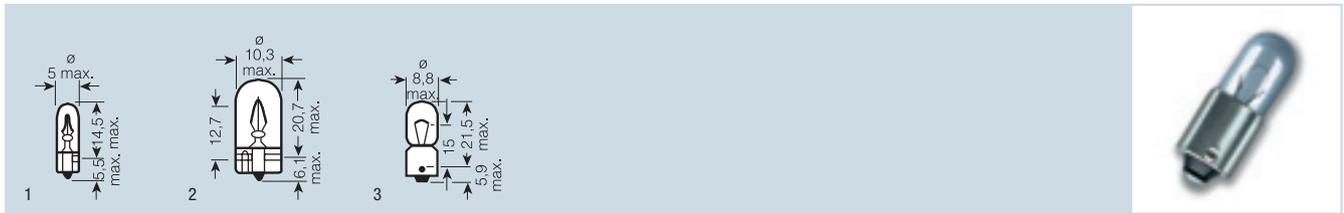
Product reference	Product number	V	W			
2886X	4008321094667	12	6	W2.1x9.5d	50	1

MINIWATT® halogen lamps for brilliant white reading light



Product reference	Product number	V	W			
64111 ¹⁾	4008321095015	12	5	BA9s	50	1
64113 ¹⁾	4008321095046	12	10	BA9s	50	1
64115	4008321095077	12	20	BA9s	50	1

Instrument lighting and switches



Product reference	Product number	ECE	V	W			 No.
2721	4050300838540		12	1.2	W2x4.6d	50	1
2722	4008321094803		12	2	W2x4.6d	50	1
2723	4008321094834	W2,3W	12	2.3	W2x4.6d	50	1
2820	4008321094094		12	2	W2.1x9.5d	50	2
2821	4050300838663	W3W	12	3	W2.1x9.5d	50	2
3860	4008321095756		12	5	BA9s	50	3
3893	4050300838489	T4W	12	4	BA9s	50	3

Instrument lighting with holders for use in printed circuit boards



Product reference	Product number	V	W			 No.
2351MFX6	4008321096852	12	1.2	BX8.4d	50	1
2352MFX6	4008321097149	12	2	BX8.4d	50	1
2431MFX6	4008321298713	12	1.3	BX8.4d	50	1
2452MFX6	4008321097118	12	1.5	BX8.4d	50	1
2473MFX6	4008321096821	12	1.12	BX8.4d	50	1
2721MF	4050300891255	12	1.2	B8.5d	50	2
2721MFX	4008321297150	12	1.2	BX8.5d	50	2
2722MF	4008321096791	12	2	B8.5d	50	2
2722MFX	4008321297181	12	2	BX8.5d	50	2
2723MFX6	4008321297242	12	2.3	BX8.4d	50	1
2752MF	4008321096760	12	1.5	B8.5d	50	2
2752MFX	4008321298782	12	1.5	BX8.5d	50	2

The suffix on the product reference indicates the board thickness:

- MFX6: 1.5 mm
- MF: 2.0 mm
- MFX: 1.5 mm



OSRAM TRUCKSTAR®

Three requirements, one solution.

At night, truck drivers need the best possible light on the road ahead. OSRAM TRUCKSTAR® is far ahead of conventional 24V lamps, allowing drivers to concentrate on the essential. With its extremely long life and robust construction, it also saves on replacements, downtime and fleet costs.



Twice as bright, more than twice as long.

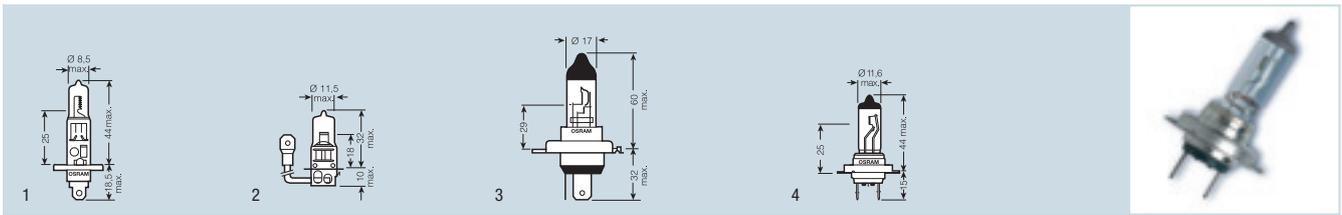
Compared with conventional 24 V lamps, OSRAM TRUCKSTAR® has a distinct advantage thanks to its patented single-coil technology. This technology results in up to 100 % more light on the road¹⁾, making it much easier for truck drivers to concentrate – a massive benefit in terms of road safety. The uniform and up to 40m longer¹⁾ light beam enables dangers to be seen much sooner and gives drivers valuable extra time in which to react. OSRAM TRUCKSTAR® is capable of withstanding strong vibrations, which saves time and money thanks to more than double the life¹⁾.

Robust power packs for enhanced safety.

- Up to 100 % more light on the road¹⁾ thanks to patented single-coil technology (SC)
- More than twice the life of conventional 24 V lamps
- Greater safety thanks to better illumination of the road
- Lower costs thanks to reduced failure rates as a result of improved vibration resistance
- Cost/benefit calculator on the OSRAM homepage, www.osram.com/truckstar-tool
- For drivers looking for heavy-duty/longlife lamps

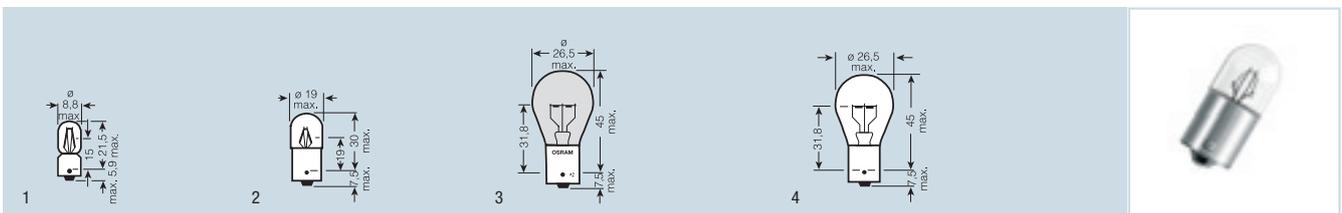
1) Compared with standard lamps (depending on the headlight system).

OSRAM TRUCKSTAR® – brighter light, better visibility, longer life



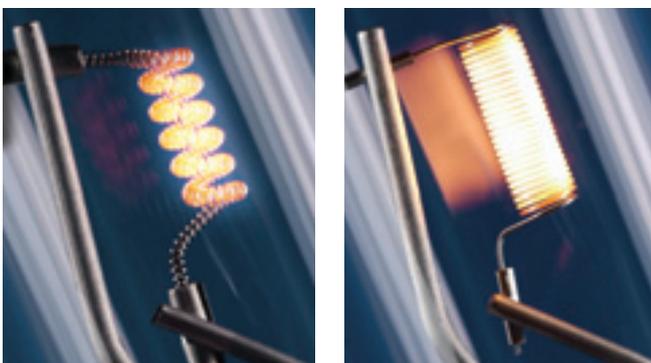
Product reference	Product number	ECE	V	W			
64155LTS	4008321004093	H1	24	70	P14.5s	100	1
64156LTS	4008321004123	H3	24	70	PK22s	100	2
64196LTS	4008321133571	H4	24	75/70	P43t	100	3
64215LTS	4008321004246	H7	24	70	PX26d	100	4

OSRAM TRUCKSTAR® – robust longlife auxiliary lamps

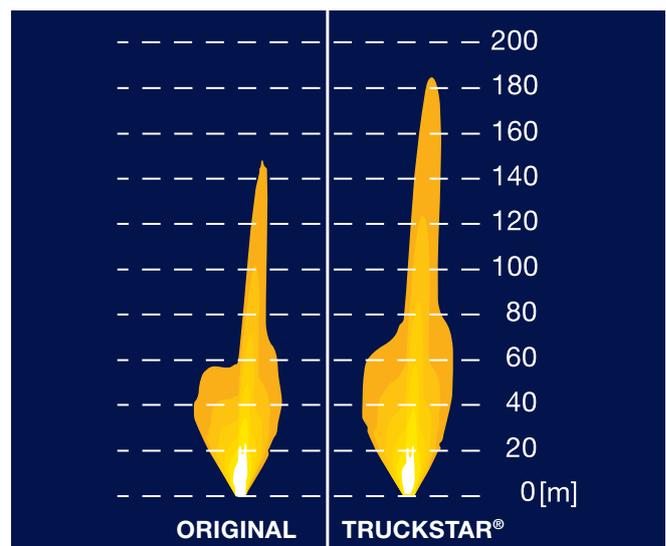


Product reference	Product number	ECE	V	W			
3930LTS	4008321130846	T4W	24	4	BA9s	50	1
5627LTS	4008321130877	R5W	24	5	BA15s	50	2
5637LTS	4008321130907	R10W	24	10	BA15s	50	2
7510LTS	4008321130969	PY21W	24	21	BAU15s	50	3
7511LTS	4008321130938	P21W	24	21	BA15s	50	4

OSRAM TRUCKSTAR® headlight lamps – brighter light, better visibility, longer life and increased safety.



Innovation made by OSRAM: Thanks to the new and patented single-coil technology (above right), the OSRAM TRUCKSTAR® will last more than twice as long¹⁾ as lamps with conventional double coils (above left).



Compared with a conventional 24 V lamp (left), the OSRAM TRUCKSTAR® shines up to 100 % more light¹⁾ on the road.

1) Compared with standard lamps (depending on the headlight system).



OSRAM ORIGINAL LINE 24V

A quality concept.

The materials used in the construction of trucks are often pushed to the very limits. Truck drivers therefore have to rely totally on the quality of the various components. The reliable performance of OSRAM ORIGINAL LINE 24V lamps is the first choice for truckers.



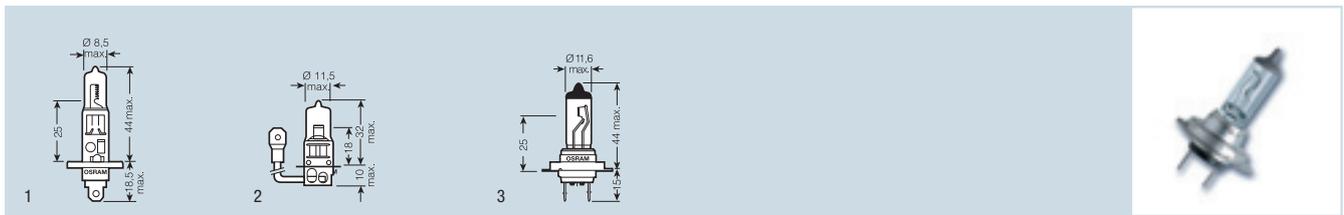
Safe and reliable.

Customers throughout the world place their trust in the performance of OSRAM ORIGINAL LINE 24V lamps, as they combine absolutely reliable quality with a fair price. The performance of inferior-quality lamps decreases over time, jeopardizing the safety of the driver, possibly without the driver being aware of this. OSRAM ORIGINAL LINE 24V lamps continue to provide safe light throughout their lives, making them a balanced and economical solution for all standard requirements in the 24V sector.

All-round quality.

- OEM quality
- Excellent price-to-performance ratio
- Successfully used in millions of new vehicles from renowned manufacturers
- Impressive brightness and reliability

Single-coil headlight lamps for innovative dual headlight systems



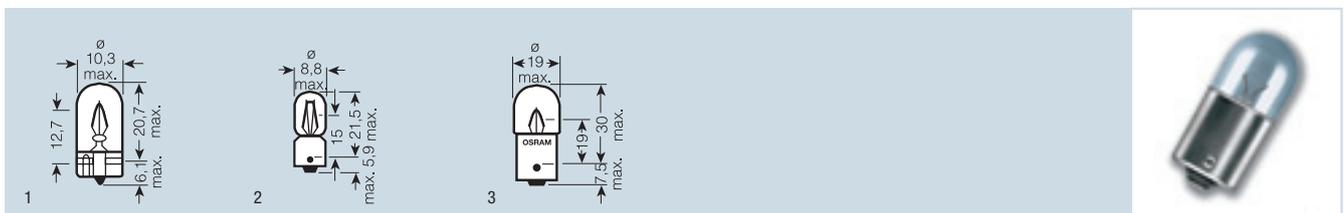
Product reference	Product number	ECE	V	W			No.
64155	4050300016498	H1	24	70	P14.5s	100	1
64156	4050300016535	H3	24	70	PK22s	100	2
64215	4050300386522	H7	24	70	PX26d	100	3

Dual-coil headlight lamps for normal headlight systems



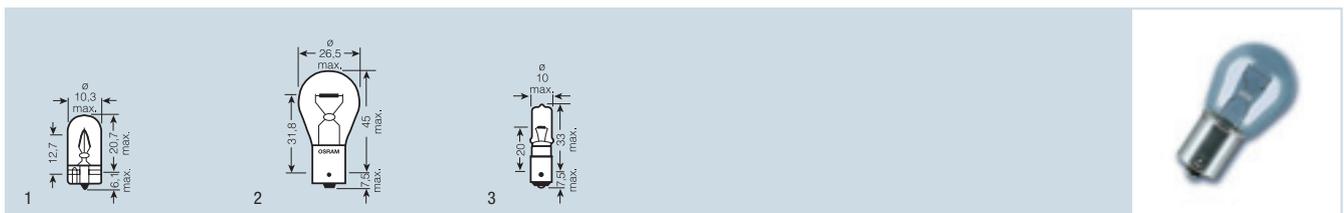
Product reference	Product number	ECE	V	W			No.
64177	4008321536556	H15	24	20/60	PGJ23t-1	100	1
64196	4050300016542	H4	24	75/70	P43t	100	2
94196	4050300250632	H4	24	75/70	P43t	100	2

Position and parking lamps



Product reference	Product number	ECE	V	W			No.
2845	4050300891552	W5W	24	5	W2.1x9.5d	50	1
3930	4050300838366	T4W	24	4	BA9s	50	2
5627	4050300838335	R5W	24	5	BA15s	50	3

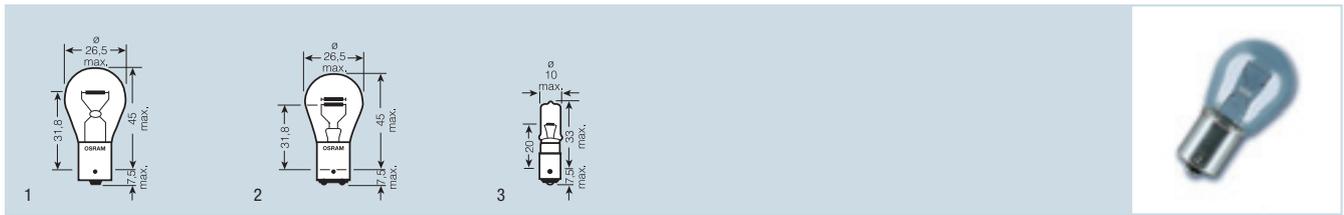
Indicators (flashers)



Product reference	Product number	ECE	V	W			No.
2845	4050300891552	W5W	24	5	W2.1x9.5d	50	1
7511	4050300838090	P21W	24	21	BA15s	50	2
64138	4008321094988	H21W	24	21	BAY9s	50	3

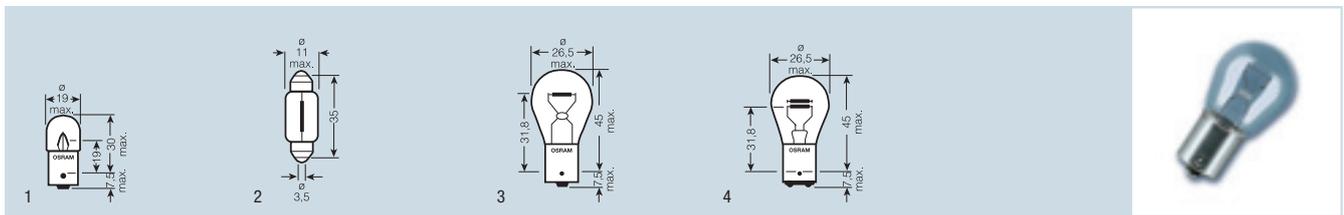
OSRAM ORIGINAL LINE 24V

Indicator, brake, fog and reversing lamps



Product reference	Product number	ECE	V	W			No.
7511	4050300838090	P21W	24	21	BA15s	50	1
7537	4050300838038	P21/5W	24	21/5	BAY15d	50	2
64138	4008321094988	H21W	24	21	BAY9s	50	3

Reversing, brake and fog lamps



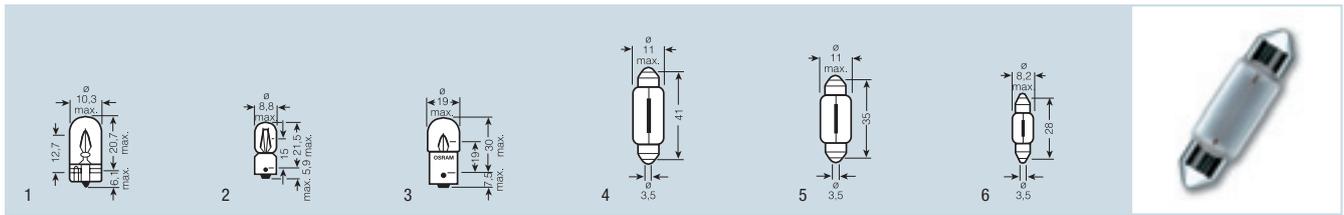
Product reference	Product number	ECE	V	W			No.
5627	4050300838335	R5W	24	5	BA15s	50	1
5637	4050300831459	R10W	24	10	BA15s	50	1
6423	4050300831435	C5W	24	5	SV8.5-8	50	2
7511	4050300838090	P21W	24	21	BA15s	50	3
7537	4050300838038	P21/5W	24	21/5	BAY15d	50	4

Number plate and side position lamps



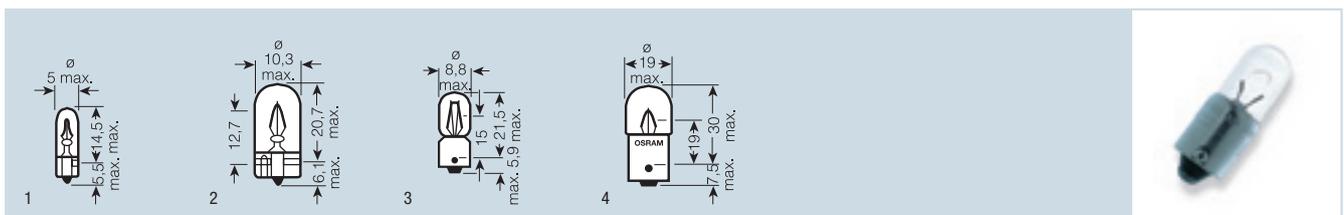
Product reference	Product number	ECE	V	W			No.
5627	4050300838335	R5W	24	5	BA15s	50	1
5637	4050300831459	R10W	24	10	BA15s	50	1
6423	4050300831435	C5W	24	5	SV8.5-8	50	2

Interior lighting and reading lamps



Product reference	Product number	ECE	V	W			
2840	4008321094698		24	2	W2.1x9.5d	50	1
3930	4050300838366	T4W	24	4	BA9s	50	2
5627	4050300838335	R5W	24	5	BA15s	50	3
5637	4050300831459	R10W	24	10	BA15s	50	3
6421	4008321090768		24	3	SV8.5-8	50	4
6423	4050300831435	C5W	24	5	SV8.5-8	50	5
6424	4050300891712		24	5	SV8.5-8	50	4
6429	4008321090836		24	10	SV8.5-8	50	4
6430	4008321094414		24	3	SV7-8	50	6

Instrument lighting and switches



Product reference	Product number	ECE	V	W			
2741	4050300838519		24	1.2	W2x4.6d	50	1
2840	4008321094698		24	2	W2.1x9.5d	50	2
2841	4008321094728	W3W	24	3	W2.1x9.5d	50	2
2845	4050300891552	W5W	24	5	W2.1x9.5d	50	2
3930	4050300838366	T4W	24	4	BA9s	50	3
5627	4050300838335	R5W	24	5	BA15s	50	4
5637	4050300831459	R10W	24	10	BA15s	50	4

Instrument lighting with holders for use in printed circuit boards



Product reference	Product number	V	W			
2741MF	4050300891606	24	1.2	B8.5d	50	1
2741MFX	4008321297211	24	1.2	BX8.5d	50	1

The suffix on the product reference indicates the board thickness:
 MF: 2.0 mm
 MFX: 1.5 mm



OSRAM SPECIAL OFF-ROAD LAMPS

Versatility from OSRAM.

Rally and HYPER lamps from OSRAM are ideal when the going gets tough. Even away from public roads, OSRAM can offer solutions for the most unusual requirements.



OSRAM special OFF-ROAD lamps.

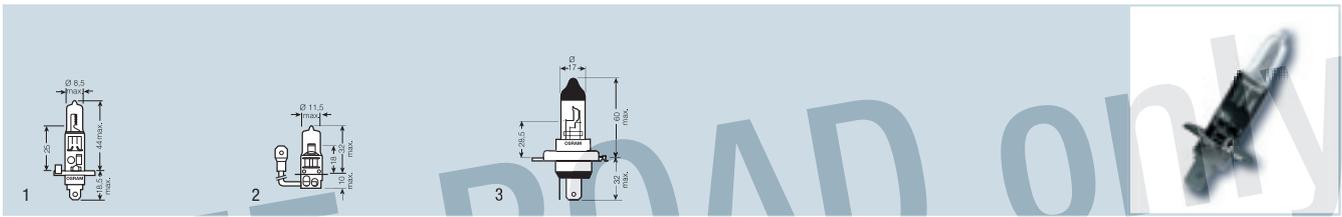
Stay flexible away from public roads. Rally lamps¹⁾ from OSRAM offer excellent reliability and brightness even on the most difficult terrain. For design-conscious OFF-ROAD drivers, OSRAM offers the 5,000 K COOL BLUE® HYPER lamps. These lamps are not approved for use on public roads however. Use on public roads leads to cancellation of the operating license and to loss of insurance coverage¹⁾. To make OFF-ROAD vehicles more versatile, OSRAM offers the NIGHT BREAKER® PLUS family of lamps or COOL BLUE® for bluish lamps as approved high-brightness alternatives.

High-performance halogen headlight lamps¹⁾ and their alternatives.

- Wide range of applications: rescue services, construction and transport work, agriculture and forestry
- For the design-conscious OFF-ROAD driver
- Not approved for use on public roads
- Approved alternatives: NIGHT BREAKER® PLUS and COOL BLUE® families of lamps in the 12V sector and OSRAM TRUCKSTAR® in the 24V sector

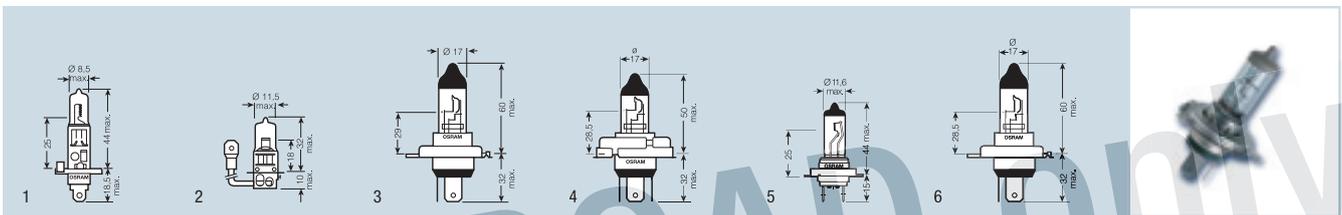
1) These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

High-performance headlight lamps for rallying and professional applications³⁾



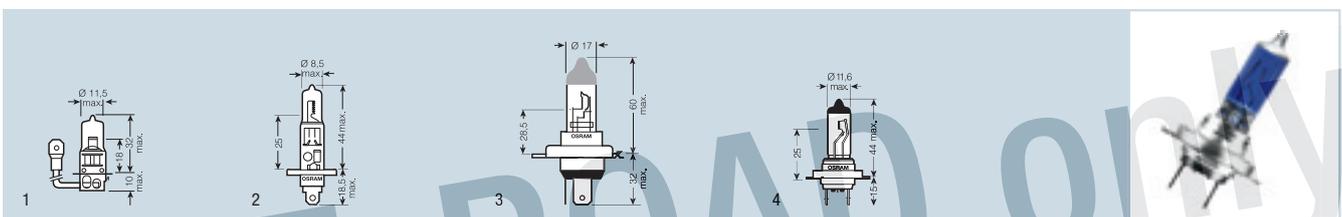
Product reference	Product number	V	W			No.
64152 ¹⁾	4050300222738	12	100	PX14.5s	100	1
64153 ²⁾	4050300222837	12	100	PKY22s	100	2
64194 ²⁾	4050300225852	12	100/80	PU43t	100	3

High-performance halogen headlight lamps for rallying and professional applications³⁾



Product reference	Product number	V	W			No.
62200	4050300247854	12	100	P14.5s	100	1
62201	4050300247939	12	100	PK22s	100	2
62203	4050300247960	12	100/80	P43t	100	3
64198	4050300222028	12	60/55	P45t	100	4
64199	4050300219899	24	75/70	P45t	100	4
64203	4050300239446	12	100/80	P45t	100	4
64217	4050300524399	12	65	PX26d	100	5
62203ALL	4050300528625	12	100/80	P43t	100	3
64206ALL	4050300453644	12	80/85	P43t	100	3
64152 ¹⁾	4050300222738	12	100	PX14.5s	100	1
64194 ²⁾	4050300225852	12	100/80	PU43t	100	6

OSRAM COOL BLUE® HYPER³⁾



Product reference	Product number	V	W			No.
62151CBH	4008321580511	12	70	PK22s	20	1
62150CBH	4008321276568	12	55	P14.5s	20	2
62193CBH	4008321276582	12	60/55	P43t	20	3
62210CBH	4008321276629	12	55	PX26d	20	4

1) 2600 lm | Generally on normal roads.

2) Generally on normal roads.

3) These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

Mobile lamp replacement: the spare lamp kit from OSRAM.

Defects on an automobile usually make themselves known on long journeys. The OSRAM spare lamp kit saves you the trouble of searching for a suitable workshop or retail outlet to purchase replacement lamps. It is like a first aid box for the automobile lights. You can therefore easily fix the problem yourself.



Always the right lamp at hand.

Safety is an absolute priority on the roads. The lights on a vehicle play a crucial role here. After all, if other drivers cannot see you and you cannot see them, you are simply an accident waiting to happen. In some countries, it is therefore a legal requirement to carry spare lamps. With a spare lamp kit from OSRAM, you will always have the right lamps for your vehicle. The label tells you what the kit contains, together with technical data. The picture on the back shows which lamp should go where. The MINIBOX has an ergonomic shape and exclusive design. It contains an assortment of lamps but is compact enough to be transported on a motorcycle for example.

Spare lamps – compulsory in many countries*:

Compulsory:

- Macedonia
- Montenegro
- Serbia
- Spain

Compulsory, except for xenon light and LEDs:

- Croatia
- Russia

Recommended:

- France
- Norway
- Portugal
- Slovenia
- Czech Republic
- Hungary

Perfectly equipped for people on the move.

- With the lamp kit, you will always have the right spare lamps at hand
- Easy replacement by the roadside
- Easy identification thanks to clear labeling and application picture
- The MINIBOX contains the same assortment of lamps but in a compact case

* Source: ADAC 03/2010



reddot design award
winner 2009



MINIBOX

Each spare lamp kit for cars and motorcycles contains the same set of the five most important lamps plus three fuses:

7506	P21W	Brake and taillight
7507	PY21W	Indicator light, orange
7528	P21/5W	Brake/taillight
5007	R5W	Taillight and number plate light
2825	W5W	Parking light
Fuses 15A, 20A, 30A		



The **H4 kit** contains one **H4** headlight lamp as well as the five lamps and three fuses listed above

Product no. (EAN)

4050300873398

64193	H4	Main halogen headlight lamp
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The **H7 kit** contains one **H7** headlight lamp as well as the five lamps and three fuses listed above

4050300876375

64210	H7	Main halogen headlight lamp
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The **H1 kit** contains one **H1** headlight lamp as well as the five lamps and three fuses listed above

4050300875217

64150	H1	Main halogen headlight lamp
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Spare lamp kits for trucks and buses.

Professional drivers in particular rely on spare lamp kits from OSRAM. Drivers who always have the right spare lamps with them will save themselves the trouble of taking their vehicles

into a garage for replacements or searching for the nearest retailer. The savings in time and money are considerable, especially on journeys abroad.

Each 24 V spare lamp kit contains two sets of the six most important lamps plus three fuses:

7511	P21W	Brake and taillight
7510LTS	PY21W	Indicator light, orange
7537	P21/5W	Brake/taillight
5627	R5W	Taillight and number plate light
5637	R10W	Parking light
3930	T4W	Park and position light
		Fuses 15A, 20A, 30A

			Product no. (EAN)
The H7 TRUCKSTAR® Box contains two H7 headlight lamps as well as the two sets of auxiliary lamps and flat fuses listed above			4008321 583239
64215LTS	H7	Main halogen headlight lamp	
The H7 Box contains two H7 headlight lamps as well as the two sets of auxiliary lamps and flat fuses listed above			4008321 583215
64215	H7	Main halogen headlight lamp	
The H4 Box contains two H4 headlight lamps as well as the two sets of auxiliary lamps and flat fuses listed above			4008321 583192
64196	H4	Main halogen headlight lamp	



Shelf rack – for the high-volume specialists.

- With drawers and labels
- Row of hooks for presenting blister packs, DUO BOXES, new products
- Ideal for workshops and filling stations, practical for everyday use
- High-quality material and eye-catching design, ideal OSRAM in-store placement

FULL OF IDEAS – THE RETAIL CABINET FOR AUTOMOTIVE LAMPS



Ready for the best:
the automotive lamp cabinet (ALC) from
OSRAM can be individually stocked.

Suggested stock 12V

Product reference	Reference	Stocking options/ No. of lamps
Chute system		
64150	H1	6/13
64150NBP	H1 NIGHT BREAKER® PLUS	6/13
64150ULT	H1 ULTRA LIFE	6/13
64151	H3	6/13
64193	H4 BILUX®	8/10
64193NBP	H4 BILUX® NIGHT BREAKER® PLUS	8/6
64193ULT	H4 BILUX® ULTRA LIFE	8/6
64210	H7	13/8
64210NBP	H7 NIGHT BREAKER® PLUS	13/8
64210ULT	H7 ULTRA LIFE	13/8
64183 ¹⁾	BILUX® AS® HALOROAD® R2	6
Internal doors		
7506	P21W	20
7507	PY21W	10
7507LDA	PY21W DIADEM®	5
7528	P21/5W	10
7528ULT	P21/5W ULTRA LIFE	10
7225	P21/4W	10
5007	R5W	20
5007ULT	R5W ULTRA LIFE	10
5008	R10W	20
5008ULT	R10W ULTRA LIFE	10
6418	C5W	10
6418ULT	C5W ULTRA LIFE	10
6411	Soffit 10 W	10
2825	W5W	10
2825ULT	W5W ULTRA LIFE	10
2827	WY5W	10
3893	T4W	20
3893ULT	T4W ULTRA LIFE	10
2721	Glass-base lamp 1.2W	20

Suggested stock 24V

Product reference	Reference	No. of lamps
Chute system		
64155	H1	13
64155LTS	H1 OSRAM TRUCKSTAR®	13
64156	H3	13
64156LTS	H3 OSRAM TRUCKSTAR®	13
64196	H4 BILUX®	16
64196LTS	H4 BILUX® OSRAM TRUCKSTAR®	12
64215	H7	8
64215LTS	H7 OSRAM TRUCKSTAR®	16
Internal doors		
7511	P21W	20
7511LTS	P21W OSRAM TRUCKSTAR®	15
7510 ²⁾	PY21W	10
7510LTS	PY21W OSRAM TRUCKSTAR®	10
7537	P21/5W	10
5627	R5W	20
5627LTS	R5W OSRAM TRUCKSTAR®	10
5637	R10W	20
5637LTS	R10W OSRAM TRUCKSTAR®	10
6423	C5W	20
6429	Soffit 10W	10
2841	W3W	10
2845	W5W	20
3930	T4W	20
3930LTS	T4W OSRAM TRUCKSTAR®	10
2741	Glass-base lamp 1.2W	20

Product reference	Product number Consumer unit	Content	Dimensions (W x H x D)	Product number Shipping unit	
MINIWATT® 12 V assortment box					
509961	4008321082169	180 pieces	240 x 43 x 190 mm	4008321082176	3
MINIWATT® 24 V assortment box					
509962	4008321082183	100 pieces	175 x 33 x 140 mm	4008321082190	3



1) Alternative to 7951 in halogen technology.

2) Amber lamps for clear indicators.

OSRAM – a partner for retailers.

For consumers, the name of OSRAM has always stood for expertise in automotive lighting combined with an innovative range of lamps. OSRAM also supports retailers with effective marketing strategies and excellent sales logistics. Business partners therefore have the perfect basis for increasing their sales and customer satisfaction.

A unified approach.

As part of its holistic approach to marketing, OSRAM provides the trade sector, shops and workshops with a large number of tools to ensure the best possible support, attractive presentation and greater incentive to purchase. In addition, OSRAM makes use of continuous advertising campaigns, radio advertising and e-marketing activities in the end customer advertising sector.



OSRAM self-service range.

The new packaging for the self-service range is not only stylish, it is also consumer-friendly, informative and eco-friendly. Language-neutral pictograms provide consumers with information on product characteristics that is easy to understand.

Displays and secondary placement.

Customers can find precisely what they want here. The impressive, high-quality displays and secondary placements present products in a clear way with clear information. The counter displays take up little space but are eye-catching and practical. The floor display provides space for a wide range of products.

Perfect product presentation.

Your requirements in the sales room are as unique as our solutions. The “beamer rack” for example is an impressive way of showing customers the difference between OSRAM NIGHT BREAKER® PLUS, OSRAM COOL BLUE® and OSRAM ORIGINAL. There are also informative decoration materials such as wobblers and shelf stoppers that immediately catch the eye.

Automotive lamp cabinet and application list.

The automotive lamp cabinet from OSRAM is a practical lamp depot for retail outlets, filling stations and workshops. It can be stocked to suit its location. OSRAM provides an application list for workshops so the right lamps can be selected for each vehicle.



Individually tailored.

To give trade partners an opportunity to raise their profiles among workshops, OSRAM runs individual campaigns that address specific customer needs. OSRAM also supports its partners with end consumer activities and exclusive product campaigns. In this regard, OSRAM participates as the official partner in the nationwide German “Light Test” campaign run by the German Association for Motor Trades and Repairs.

A love of detail.

Additionally, OSRAM makes all article data available for electronic ordering under TecCom and TecDoc. We can set

up classic EDI networks on request. Our ordering system also supports the CAP message standard. For further information about OSRAM, go to www.osram.com or the e-business platform at www.myosram.com where you can also place orders easily and directly. Contact OSRAM for further information.

You can rely on us.

For OSRAM, being a partner for retailers is not an empty slogan, it is a genuine maxim backed by a wide range of activities and campaigns. In OSRAM, retailers have a partner they can rely on at all times.



Impulse buying in a very small space.

With these attractive displays, you can present top quality compactly, clearly and effectively. After all, customers buy with their eyes.

OSRAM counter display

The high-class seller.

This high-quality and eye-catching display makes decision-making quick and easy and promotes impulse buying.

Format (W x H x D):
30 x 34 x 31 cm.



OSRAM acrylic displays

Very high visual quality.

They can be stocked with blister packs, DUO BOXES or MINIBOXES – perfect on any counter.



Format (W x H x D):
31 x 29.5 x 29 cm.

OSRAM strip hanger

A clear winner.

The strip hangers are ideal where traffic is heaviest.

Format (W x H):
10 x 118 cm.



Format (W x H x D):
24 x 46.5 x 21 cm.



Format (W x H x D):
10 x 25 x 10 cm.



An eye-catcher for added value.

Designed to attract attention, providing clear product presentation and practical detailed information – this secondary placement from OSRAM will enhance your retail space.

OSRAM floor displays

So your customers can find what they want.

The most important headlight lamps from OSRAM are clearly arranged here – whether in blister packs, in DUO BOXES or MINIBOXES.

Format (W x H x D):

84.2 x 159 x 38.5 cm.



Perfect product presentation.

We support you with optimum product presentation and information in a highly attractive design. Make use of the wide variety of effective sales aids to breathe new life into your automotive lamp business.



Easy-to-understand product information promotes impulse buying.

OSRAM beamer rack

Experiencing quality live is your best sales argument. The beamer rack provides an impressive comparison of the intensities of OSRAM NIGHT BREAKER® PLUS, OSRAM COOL BLUE® and OSRAM ORIGINAL.

Format (W x H x D):
50 x 172.5 x 61 cm.



Active consumer communication via LCD displays.

Information, advice and entertainment at the point of sale. Combined with the high attention value of modern multimedia technology. Ideal for free-standing secondary placement.

The LCD monitor is available in two versions:

- A compact version for installation in shelving
- An eye-catching version for attaching to a ceiling



LCD monitor for installation in shelving

Format (W x H x D) 7 inch:
34.5 x 16.5 x 8.5 cm.

Format (W x H x D) 10.2 inch:
40 x 30.5 x 14 cm.

LCD monitor for attaching to a ceiling
Format (W x H x D):
43.5 x 61 x 4 cm.



Decisions are made at the POS – the full range in focus.

With the *polePOSition*® shelf system, you can present the entire range clearly, efficiently and informatively. Something that everyone will see.

OSRAM Automotive *polePOSition*® – the optimum presentation system: easily accessible, just grab and go. Clear design and precise communication ensure that customers find the information and products they require quickly and easily.

OSRAM *polePOSition*® AM shelf

Consumer-friendly, greater flexibility and higher profits.

The new OSRAM *polePOSition*® is a clearly structured, easily accessible and extremely convenient presentation system. It offers optimum customer orientation. Clear design and clear communication ensure that your customers find the information and lamps they require quickly and easily.

Test and buy.

The integrated beamer rack in the center of a shelf enables customers to test OSRAM NIGHT BREAKER® PLUS, OSRAM COOL BLUE® and OSRAM ORIGINAL lamps directly at the POS.

As you like it. Tailor-made shelf system.

Every shop is different and every site follows its own rules. With the OSRAM *polePOSition*® shelf system, OSRAM Automotive offers a professional solution that is highly versatile and can be adapted to suit your particular space requirements.

Ask your OSRAM representative for ordering information.



OSRAM SELF-SERVICE RANGE

OSRAM 12V self-service range

ECE	Product reference	Product number Consumer unit
OSRAM XENARC® COOL BLUE® INTENSE DUO BOX 12 V		
D2S	66240CBI-HCB	4008321588883
OSRAM NIGHT BREAKER® PLUS Blister Pack 12 V		
H1	64150NBP-01B	4008321546463
H3	64151NBP-01B	4008321546425
H4	64193NBP-01B	4008321550750
H7	64210NBP-01B	4008321548276
H11	64211NBP-01B	4008321546487
OSRAM NIGHT BREAKER® PLUS Double Blister Pack 12 V		
H1	64150NBP-02B	4008321546449
H4	64193NBP-02B	4008321550774
H7	64210NBP-02B	4008321548252
OSRAM NIGHT BREAKER® PLUS DUO BOXES 12 V		
H1	64150NBP-HCB	4008321544582
H4	64193NBP-HCB	4008321550798
H7	64210NBP-HCB	4008321548290
OSRAM COOL BLUE® Blister Pack 12 V		
H1	64150CB-01B	4050300925325
H4	64193CB-01B	4050300925189
H7	64210CB-01B	4050300925240
OSRAM COOL BLUE® Double Blister Pack 12 V		
H1	64150CB-02B	4008321326188
H4	64193CB-02B	4008321322869
H7	64210CB-02B	4008321323217
OSRAM COOL BLUE® DUO BOXES 12 V		
H1	64150CB-HCB	4008321144775
H4	64193CB-HCB	4008321144799
H7	64210CB-HCB	4008321144812
OSRAM COOL BLUE® Auxiliary Lamps – Double Blister Pack 12 V		
T4W	3893CB-02B	4050300925660
W5W	2825HCB-02B1	4050300925707
W5W	2825CB-02B	4050300925721
H6W	64132CB-02B	4050300925820
OSRAM ULTRA LIFE Blister Pack 12 V		
H1	64150ULT-01B	4008321416100
H4	64193ULT-01B	4008321416124
H7	64210ULT-01B	4008321416087
OSRAM ULTRA LIFE Double Blister Pack 12 V		
H1	64150ULT-02B	4008321416315
H4	64193ULT-02B	4008321416339
H6W	64132ULT-02B	4008321415325
H7	64210ULT-02B	4008321416292
OSRAM ULTRA LIFE DUO BOXES 12 V		
H1	64150ULT-HCB	4008321416162
H4	64193ULT-HCB	4008321416186
H7	64210ULT-HCB	4008321416148

ECE	Product reference	Product number Consumer unit
OSRAM ULTRA LIFE Auxiliary Lamps – Double Blister Pack 12 V		
P21W	7506ULT-02B	4008321415141
PY21W	7507ULT-02B	4008321415165
P21/5W	7528ULT-02B	4008321415288
R5W	5007ULT-02B	4008321415202
R10W	5008ULT-02B	4008321415226
W5W	2825ULT-02B	4008321415189
C5W	6418ULT-02B	4008321415240
OSRAM SILVERSTAR® Blister Pack 12 V		
H1	64150SVS-01B	4050300648354
H4	64193SVS-01B	4050300647661
H7	64210SVS-01B	4050300647623
OSRAM SILVERSTAR® Double Blister Pack 12 V		
H1	64150SVS-02B	4008321322678
H4	64193SVS-02B	4008321322821
H7	64210SVS-02B	4008321323194
OSRAM SILVERSTAR® DUO BOXES 12 V		
H1	64150SVS-HCB	4008321144614
H4	64193SVS-HCB	4008321144737
H7	64210SVS-HCB	4008321144751
OSRAM NIGHT RACER® Double Blister Pack 12 V		
H4	64193NR-02B	4008321395672
H7	64210NR-02B	4008321395658
OSRAM X-RACER® Double Blister Pack 12 V		
H4	64193XR-02B	4008321395719
H7	64210XR-02B	4008321395696
OSRAM ORIGINAL Headlight Lamp Blister Pack 12 V		
H1	64150-01B UV	4050300925264
H3	64151-01B UV	4050300925349
H4	64193-01B 60	4050300925127
H7	64210-01B 55	4050300925202
H11	64211-01B 55	4008321171252
HB3	9005-01B 60W	4008321171214
HB4	9006-01B 51W	4008321171238
R2	64183-01B 45	4050300925400
OSRAM ORIGINAL Auxiliary Lamps – Double Blister Pack 12 V		
P21W	7506-02B	4050300925448
PY21W	7507-02B	4050300925462
P21/5W	7528-02B	4050300925523
P21/4W	7225-02B	4050300925547
R5W	5007-02B	4050300925585
R10W	5008-02B	4050300925608
C5W	6418-02B	4050300925622
C10W	6411-02B	4050300925646
T4W	3893-02B	4050300647609
W5W	2825-02B	4050300925684
W3W	2821-02B	4050300925745
–	2721-02B	4050300925769
–	2722-02B	4050300925783
WY5W	2827-02B	4008321149411
–	64111-02B	4050300647258

OSRAM 24V self-service range

ECE	Product reference	Product number Consumer unit
OSRAM TRUCKSTAR® Headlight Lamp Blister Pack 24 V		
H1	64155LTS-01B	4008321142283
H3	64156LTS-01B	4008321142337
H4	64196LTS-01B	4008321155542
H7	64215LTS-01B	4008321141989
OSRAM TRUCKSTAR® Headlight Lamp DUO BOXES 24 V		
H1	64155LTS-HCB	4008321161079
H3	64156LTS-HCB	4008321004529
H4	64196LTS-HCB	4008321161277
H7	64215LTS-HCB	4008321161253
OSRAM TRUCKSTAR® Auxiliary Lamps – Double Blister Pack 24 V		
R5W	5627LTS-02B	4008321174017
R10W	5637LTS-02B	4008321174031
P21W	7511LTS-02B	4008321173973
PY21W	7510LTS-02B	4008321173997
T4W	3930LTS-02B	4008321174055
OSRAM STANDARD Headlight Lamp Blister Pack 24 V		
H1	64155-01B	4008321142290
H3	64156-01B	4050300565828
H4	64196-01B	4008321142849
H7	64215-01B	4008321141972
OSRAM STANDARD Auxiliary Lamps – Blister Pack 24 V		
P21W	7511-02B	4050300925929
P21/5W	7537-02B	4050300925943
R5W	5627-02B	4050300925967
R10W	5637-02B	4050300926049
C5W	6423-02B	4050300925981
T4W	3930-02B	4050300926001
W5W	2845-02B	4008321139962
–	2841-02B	4050300926025

Spare lamp kits for cars and trucks

MINIBOX for Cars 12 V		
H1	CLKM H1	4050300875217
H4	CLKM H4	4050300873398
H7	CLKMH7	4050300876375
Spare Lamp Kits for Trucks and Buses 24 V		
H7	CLK H7LTS 24V	4008321583239
H7	CLK H7 24V	4008321583215
H4	CLK H4 24V	4008321583192

Self-service range for Special OFF-ROAD LAMPS ¹⁾

OSRAM Rally ¹⁾		
H1	62200-01B	4008321336231
H4	62203-01B	4008321185730
H7	64217-01B	4008321336255
OSRAM HYPER ¹⁾		
H1	62151CBH-HCB	4008321276575
H3	62151CBH-HCB	4008321580528
H4	62194CBH-HCB	4008321276599
H7	62210CBH-HCB	4008321276636

POS secondary placement

Product name	Product reference	Product number
OSRAM Floor Displays		
NIGHT BREAKER® PLUS floor display DUO BOX 40x H7, 32xH4, 8xH1 DUO BOX	510159	4008321578457
NIGHT BREAKER® PLUS floor display blister pack 72xH7, 32xH4	510158	4008321578440
NIGHT RACER®/X-RACER® blister pack	510131	4008321953247
MINIBOX	510111	4008321341983
OSRAM Acrylic Displays		
NIGHT BREAKER® PLUS acrylic display DUO BOX	510156	4008321578433
ULTRA LIFE - DUO BOX (with four hooks)	510133	4008321953643
ULTRA LIFE double blister pack (with four hooks)	510134	4008321953285
NIGHT RACER®	510128	4008321953261
MINIBOX (with four hooks)	510115	4008321940353
MINIBOX (demo display)	PRES ALB	auf Anfrage
OSRAM Counter Displays		
NIGHT BREAKER® PLUS counter display	510157	4008321575906
SILVERSTAR®	510034	4008321913470
ULTRA LIFE	510032	4008321953292
COOL BLUE®	510036	4008321913487
OSRAM Strip Hanger		
NIGHT BREAKER® PLUS H4 strip hanger	510154	4008321578426
NIGHT BREAKER® PLUS H7 strip hanger	510155	4008321575890
NIGHT RACER®	510129	4008321953278
MINIBOX	510135	4008321411464
OSRAM Light Performance Box		
Version automotive light (supplied without stand)	-/-	on request
Version motorcycle light (supplied without stand)	-/-	on request
Stand for free-standing installation	-/-	on request
OSRAM LCD Displays		
LCD monitor, large, for installation in shelving	-/-	on request
LCD monitor, small, for installation in shelving	-/-	on request
LCD monitor for ceiling mounting	-/-	on request
OSRAM LCD Displays		
OSRAM shelf rack	SHELF RACK EUROPE VS1	4008321211248

¹⁾ These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

Whether it's a blister pack, a double blister pack or a DUO BOX, the strong appearance of the new OSRAM designs has a twofold effect: eye-catching from a distance and persuasive information when seen up close.

The tried and tested blue background color offers a high level of brand recognition.

The ECE reference, voltage and wattage are shown boldly and clearly at the top left as important search criteria.

The name of the product family is shown boldly and clearly on the left-hand edge.

Product characteristics emphasize the added value of a particular lamp.

Bulb shape and base are clearly visible.

Protective effect – the blister offers excellent protection for the lamp.

Instant recognition of the product benefits.

Gleaming silver particles underline the high-quality design of our trademark-protected packaging.

Even more information at second glance.

Type and order reference.

Quality indicator – original spare part in OEM quality.

Reminder: "Always replace in pairs".

The added value of the lamp is explained in a pictogram.

Reminder: "Made in Germany".

Application notes and safety information.

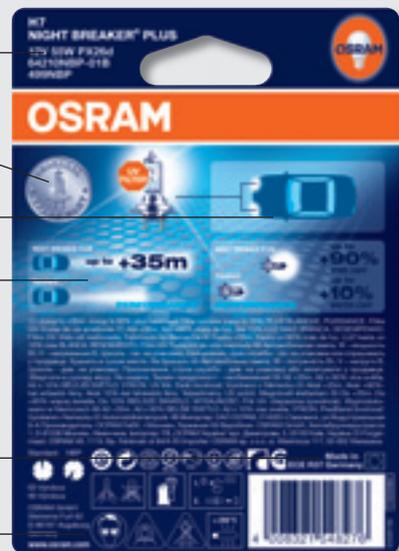
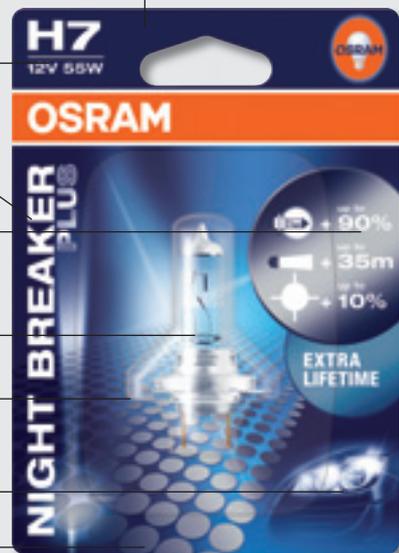
Prominent brand placement.

The picture logo.

One of the oldest trademarks in Germany stands for premium quality.

The band.

The orange band – as a seal of quality, it is placed prominently at the top of the packaging. It indicates the brand promise and ensures instant recognition.



Ordering by EAN code.

The EAN code defines a set of unique international product numbers and is managed by an independent organization. Thanks to its worldwide use and high level of acceptance, it is ideal for identifying products and makes ordering convenient. The product number is used to order a particular consumer unit, so it basically corresponds to the old order number.

  		OSRAM	
BILUX® H4			
12V · 60/55W · P43t			
64193			
pieces	Art.No.	4050300 001470	1
1	Multipack	4050300 212067	2
10 (10 x 1)	Shipping box	 4 050300 212074	3
100	(10 x 10)		
		 (02)04050300001470(37)100	
		 (93)A56941C0002	
Made in Germany		A 569 41C 00 02	
www.osram.com			
OSRAM GmbH Steinerne Furt 62 86167 Augsburg Germany			

- 1** Product number = 1 lamp in folded box or 1 blister
- 2** Multipack = 10 FBs (folded boxes)
- 3** Shipping box = 100 FBs (folded boxes)

How many lamps do you order with the product number?



Product number (consumer unit) corresponds to 1 folded box with 1 lamp



Product number (consumer unit) corresponds to 1 lamp (multipack contains 10 lamps)



Product number (consumer unit) corresponds to 1 blister with 1 lamp



Product number (consumer unit) corresponds to 1 blister with 2 lamps

Glossary of the most important lighting terms.

As with any technical or scientific discipline, lighting technology has its own special terms and concepts for defining the characteristics of lamps and luminaires and for standardizing the units of measurement.

The most important of these are described here.

Luminous flux Φ . Unit of measurement: Lumen [lm].

Luminous flux Φ is all the radiated power emitted by a light source evaluated with the spectral sensitivity of the eye and the photometric radiation equivalent k_m .

Luminous intensity I . Unit of measurement: Candela [cd].

Generally speaking, a light source emits its luminous flux Φ in different directions and at different intensities.

Luminous intensity is the luminous flux radiated in a particular direction (solid angle Ω).

Illuminance E . Unit of measurement: Lux [lx].

Illuminance E is the ratio between the luminous flux and the area being illuminated.

An illuminance of 1 lx occurs when a luminous flux of 1 lm is evenly distributed over an area of 1 m².

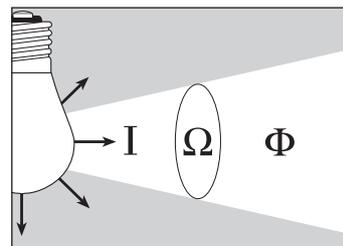
Luminance L . Unit of measurement:

candela per square meter [cd/m²].

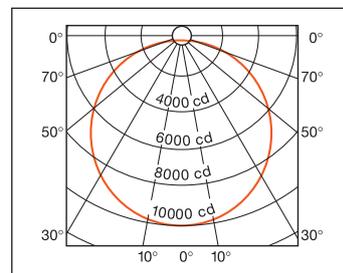
The luminance L of a light source or an illuminated area is a measure of the impression of brightness.

Light and radiation.

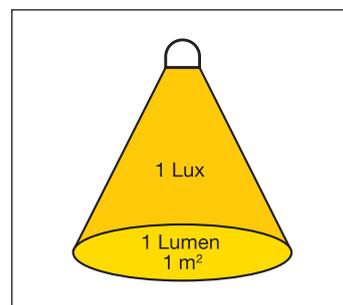
Light is taken to mean the electromagnetic radiation that the human eye perceives as brightness, in other words that part of the spectrum that can be seen. This is the radiation between 360 and 830 nm, a tiny fraction of the known spectrum of electromagnetic radiation.



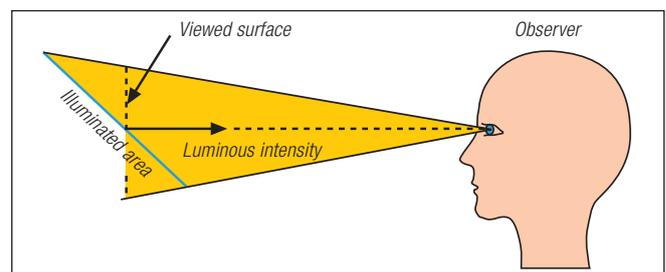
Luminous intensity I is a measure of the luminous flux Φ emitted in solid angle Ω .



Polar diagram.



Illuminance E .



Luminance L .

Luminous efficacy η .

Unit of measurement: Lumen per watt [lm/W].
Luminous efficacy η indicates the efficiency with which the electrical power consumed is converted into light.

Color temperature. Unit of measurement: Kelvin [K].

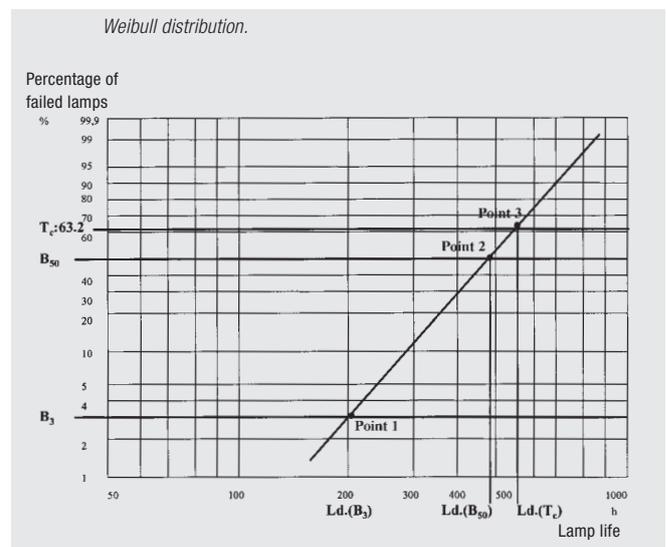
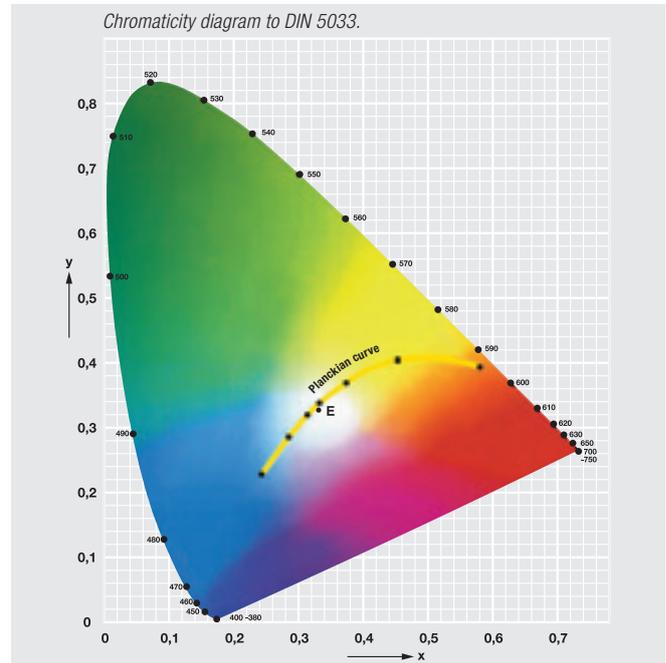
The color temperature of a light source is defined in comparison with a “black body radiator” and plotted on what is known as the “Planckian curve”. The higher the temperature of this “black body radiator”, the greater the blue component in the spectrum and the smaller the red component. An incandescent lamp with a warm white light, for example, has a color temperature of 2,700 K, whereas a daylight fluorescent lamp has a color temperature of 6,000 K.

Weibull data for lamp life.

Weibull distribution has become established as the standard method for analyzing the life of technical products. Endurance tests on products without technical faults produce failure curves which represent the proportion of products that fail in the course of use. Because of their special properties, these curves can be normalized for the purpose of comparison. This involves approximating the distributions to a straight line. To show this, a special coordinate system is needed (named after Dr. E. H. Wallodi Weibull, 1887 to 1979).

Service life distribution can now be accurately defined by specifying two points on the straight line, without having to refer to a failure curve. In accordance with IEC 810, the following failure rates have been defined as standard failure rates: The B_3 life value represents the premature failure rate of lamps. It means that 3% of all the tested lamps failed after this number of hours burned.

The T_c life value represents the failure rate of 63.2% of the lamps. B_3 and T_c are of particular interest in industry. The retail trade makes more use of the B_{50} value. This indicates the average life of the lamps (50%).

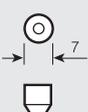
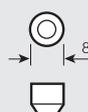
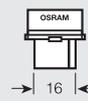
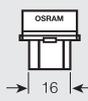


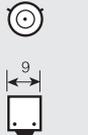
Glossary of the most important photometric formulae:

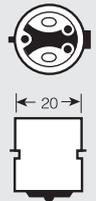
Luminous intensity [cd]	I	$\frac{\text{Luminous flux [lm]}}{\text{Solid angle } \Omega \text{ [sr]}}$
Illuminance [lx]	E	$\frac{\text{Luminous flux falling on area [lm]}}{\text{Illuminated area [m}^2\text{]}}$

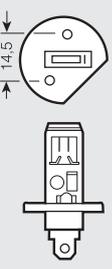
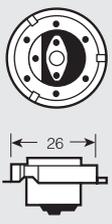
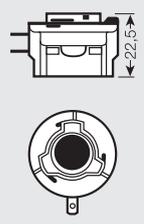
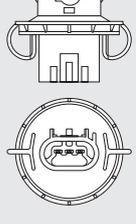
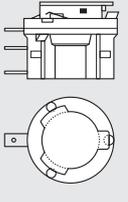
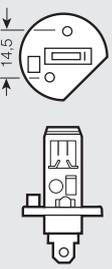
Luminance [cd/m ²]	L	$\frac{\text{Luminous intensity [cd]}}{\text{Viewed luminous area [m}^2\text{]}}$
Lum. efficacy [lm/W]	η	$\frac{\text{Generated luminous flux [lm]}}{\text{Electrical power consumed [W]}}$

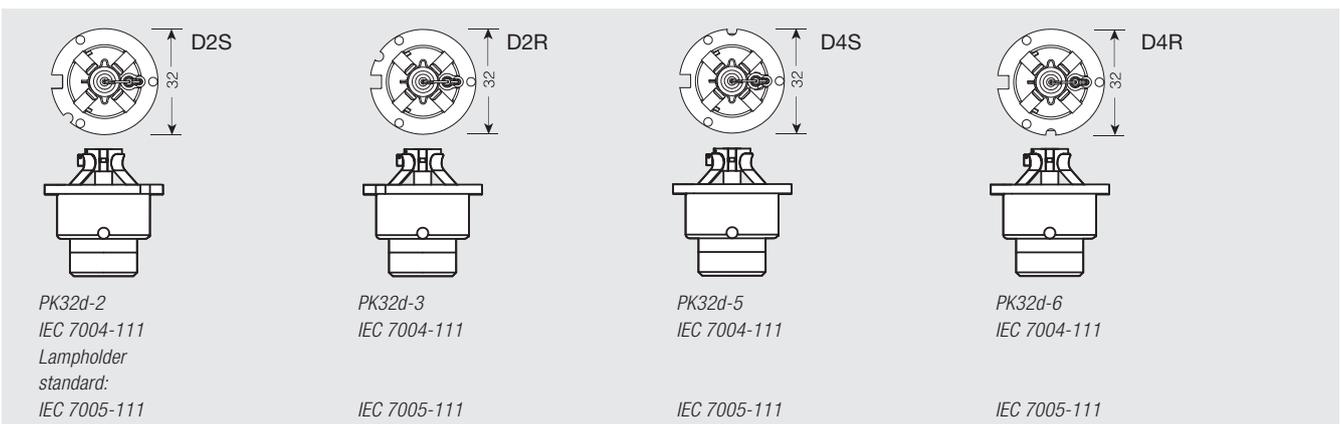
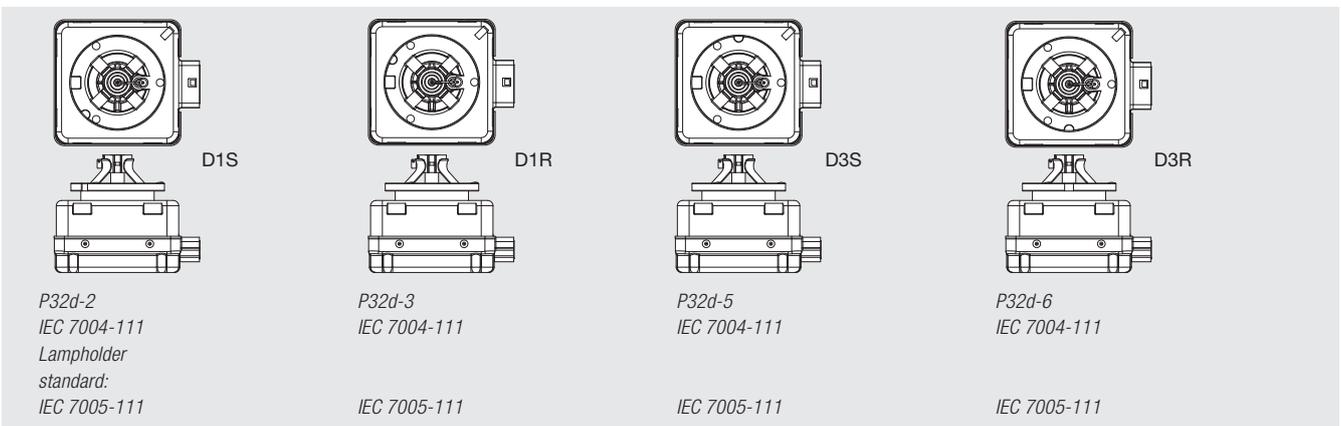
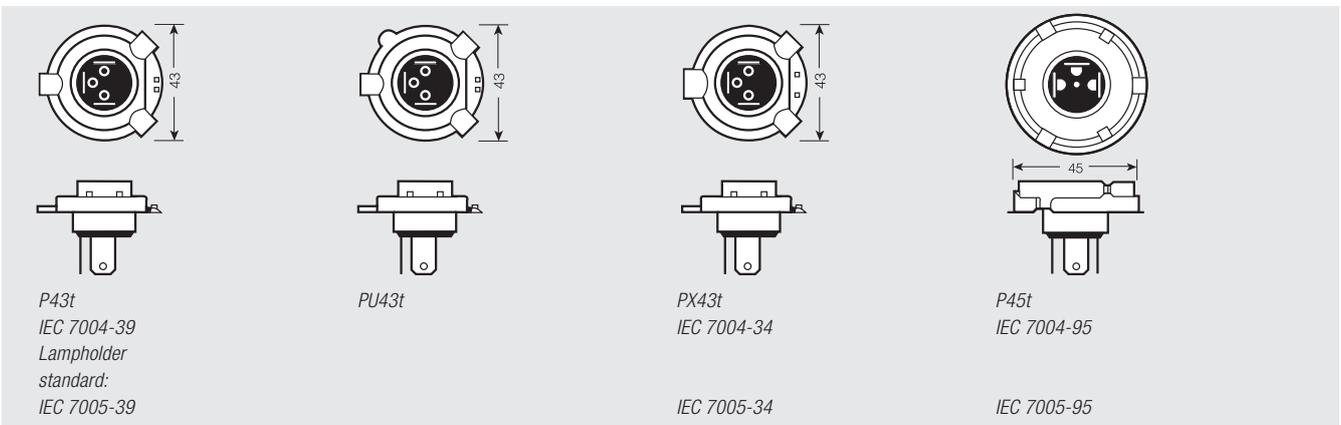
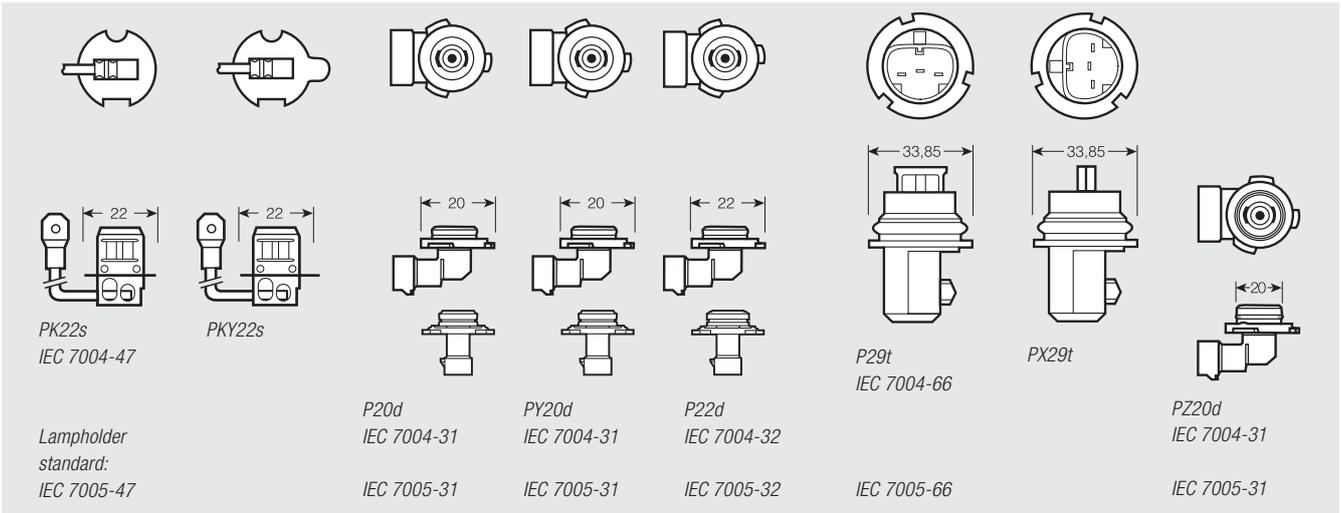
BASES IEC/EN 60061-1, LAMPHOLDERS IEC/EN 60061-2

					
SV7-8 IEC 7004-80 Lampholder standard: IEC 7005-80	SV8.5-8 IEC 7004-81 Lampholder standard: IEC 7005-80	W2x4.6d IEC 7004-94 Lampholder standard: IEC 7005-94	W2.1x9.5d IEC 7004-91 Lampholder standard: IEC 7005-91	W2.5x16d IEC 7004-104 Lampholder standard: IEC 7005-104	W2.5x16q IEC 7004-104 Lampholder standard: IEC 7005-104

				
BA9s IEC 7004-14 Lampholder standard: IEC 7005-12	BAY9s IEC 7004-9 Lampholder standard: IEC 7005-9	BAX9s IEC 7004-8 Lampholder standard: IEC 7005-8	B8.4-12.5 BX8.4-12.5 IEC 7004-140 IEC 7005-140	B8.5d BX8.5d IEC 7004-140 IEC 7005-140

				
BA15s IEC 7004-11A Lampholder standard: IEC 7005-13	BAU15s IEC 7004-19 Lampholder standard: IEC 7005-13	BAY15d IEC 7004-11 B Lampholder standard: IEC 7005-13	BAZ15d IEC 7004-11 C Lampholder standard: IEC 7005-13	BA20d IEC 7004-12 Lampholder standard: IEC 7005-14

					
P14.5s IEC 7004-46 Lampholder standard: IEC 7005-46	P26s IEC 7004-36 Lampholder standard: IEC 7005-36	PX13.5s IEC 7004-35 Lampholder standard: IEC 7005-35	PGJY19-2 PGJY19-5 PGJY19-1 IEC 7004-146 IEC 7005-146	PJ26.4t IEC 7004-128 IEC 7005-128	PGJ23t-1 IEC 7004-155 IEC 7005-155
			PGJ 19 PGJ 19-1 PGJ 19-2 PGJ 19-5 IEC 7004-110 IEC 7005-110		
PX14.5s	PX26d IEC 7004-5 IEC 7005-5				



Type overview by rated voltage.

Rated voltage V	Rated wattage W	Base	Product reference	See page
	35	PK32d-2	66144 ^{1) 10)}	11
	35	PK32d-2	66144CBI ^{1) 10)}	9
	35	PK32d-3	66154 ^{2) 10)}	11
	35	PK32d-3	66154CBI ^{1) 10)}	9
	35	P32d-2	66240 ^{1) 10)}	11
	35	P32d-2	66240CBI ^{1) 10)}	9
	35	P32d-3	66250 ^{2) 10)}	11
	35	P32d-3	66250CBI ^{2) 10)}	9
	35	PK32d-5	66340 ^{1) 10)}	11
	35	PK32d-6	66350 ^{2) 10)}	11
	35	P32d-5	66440 ^{1) 10)}	11
	35	P32d-6	66450 ^{2) 10)}	11
12	1.12	BX8.4d	2473MFX6	31
12	1.2	BX8.4d	2351MFX6	31
12	1.2	W2x4.6d	2721	31
12	1.2	B8.5d	2721MF	31
12	1.2	BX8.5d	2721MFX	31
12	1.3	BX8.4d	2431MFX6	31
12	1.5	BX8.4d	2452MFX6	31
12	1.5	B8.5d	2752MF	31
12	1.5	BX8.5d	2752MFX	31
12	2	BX8.4d	2352MFX6	31
12	2	W2x4.6d	2722	31
12	2	B8.5d	2722MF	31
12	2	BX8.5d	2722MFX	31
12	2	W2.1x9.5d	2820	31
12	2.3	W2x4.6d	2723	31
12	2.3	BX8.4d	2723MFX6	31
12	3	W2.1x9.5d	2821	31
12	3	SV7-8	6428	30
12	4	BA9s	3893	28, 29, 30, 31
12	5	W2.1x9.5d	2825	28, 29, 30
12	5	BA9s	3860	30, 31
12	5	BA15s	5007	29, 30
12	5	BA15s	5007ULT	19
12	5	SV8.5-8	6413	30
12	5	SV8.5-8	6418	29, 30
12	5	W2.1x9.5d	2825CB	17
12	5	W2.1x9.5d	2825HCB	17
12	5	W2.1x9.5d	2825ULT	19
12	5	W2.1x9.5d	2827 ³⁾	28
12	5	BA9s	64111 ⁴⁾	30
12	5	SV8.5-8	6418ULT	19
12	6	W2.1x9.5d	2886X	30
12	6	BAX9s	64132	28
12	6	BAX9s	64132CB	17
12	6	BAX9s	64132ULT	19
12	10	BA15s	5008	29, 30

Rated voltage V	Rated wattage W	Base	Product reference	See page
12	10	BA15s	5008ULT	19
12	10	SV8.5-8	6411	30
12	10	SV8.5-8	6438	30
12	10	SV8.5-8	6461	30
12	10	BA9s	64113 ⁴⁾	30
12	15/55	PGJ23t-1	64176 ⁵⁾	25, 27
12	16	W2.1x9.5d	921	28, 29
12	20	BA9s	64115	30
12	21	WX3x16d	7504 ³⁾	28
12	21	W3x16d	7505	28
12	21	BA15s	7506	28, 29
12	21	BA15s	7506ULT	19
12	21	BAU15s	7507 ³⁾	28
12	21	BAU15s	7507LDA ³⁾	17
12	21	BAU15s	7507ULT ³⁾	19
12	21	BAW15s	7508LDR ⁶⁾	17
12	21	BAY9s	64136	28
12	21/4	BAZ15d	7225	28, 29
12	21/5	W3x16q	7515	28, 29
12	21/5	BAY15d	7528	28, 29
12	21/5	BAY15d	7528ULT	19
12	21/5	BAW15d	7538LDR ⁶⁾	17
12	27	PG13	880	25, 26
12	27	PGJ13	881	25, 26
12	27	W2.5x16d	3156	28, 29
12	27/7	W2.5x16q	3157	28, 29
12	35	PGJ19-1	64212 ^{5) 13)}	25
12	35	PGJY19-1	64242 ^{5) 13)}	25, 27
12	35		XENAELECTRON XT-D1/12V	12
12	35		XENAELECTRON XT5-2-D1/12V BH	12
12	35		XENAELECTRON XT5-2-D3/12V BH	12
12	35/35	PX43t	64185	25
12	35/55	PX43t	64185SVS	21
12	42	PY20d	9145 ⁵⁾	25, 26
12	45/40	P45t	64183 ⁷⁾	25
12	51	P22d	9006CB ⁸⁾	17
12	51	P22d	9006L ⁵⁾	25, 26
12	51	P22d	9006XS ⁵⁾	25, 26
12	55	P14.5s	62150CBH ¹⁴⁾	39
12	55	PX26d	62210CBH ¹⁴⁾	39
12	55	P14.5s	64150 ⁵⁾	25
12	55	P14.5s	64150CB ⁵⁾	17
12	55	P14.5s	64150NBP	15
12	55	P14.5s	64150SVS ⁵⁾	21
12	55	P14.5s	64150ULT ⁵⁾	19
12	55	PK22s	64151 ⁵⁾	25

Rated voltage V	Rated wattage W	Base	Product reference	See page
12	55	PK22s	64151CB ⁵⁾	17
12	55	PK22s	64151NBP	15
12	55	PX26d	64210 ⁵⁾	25
12	55	PX26d	64210CB ⁸⁾	17
12	55	PX26d	64210NBP	15
12	55	PX26d	64210NR-02B	23
12	55	PX26d	64210SVS ⁸⁾	21
12	55	PX26d	64210ULT ⁸⁾	19
12	55	PX26d	64210XR-02B	23
12	55	PGJ19-2	64211CB	17
12	55	PGJ19-2	64211 ⁵⁾	25
12	55	PGJ19-2	64211NBP	15
12	55	PGJY19-2	64241 ⁵⁾	25, 27
12	60	P20d	9005 ⁵⁾	25, 26
12	60	P20d	9005CB ⁵⁾	17
12	60	P20d	9005XS ⁵⁾	25, 26
12	60/55	P43t	62193CBH ¹⁴⁾	39
12	60/55	P43t	64193	25
12	60/55	P43t	64193CB ⁹⁾	17
12	60/55	P43t	64193NBP	15
12	60/55	P43t	64193NR-02B	23
12	60/55	P43t	64193SVS ⁹⁾	21
12	60/55	P43t	64193ULT ⁹⁾	19
12	60/55	P43t	64193XR-02B	23
12	60/55	P45t	64198 ¹⁴⁾	39
12	60/55	P43t	9003CB ⁸⁾	17
12	60/55	P43t	9003L ⁵⁾	25, 27
12	60/55	P26.4t	9008 ⁵⁾	25, 27
12	60/55	P43t	94193	26
12	65	PGJ19-5	64213 ⁵⁾	25
12	65	PX26d	64217 ¹⁴⁾	39
12	65	PGJY19-5	64243 ^{5) 13)}	25, 27
12	65/45	P29t	9004	27
12	65/55	PX29t	9007	27
12	70	PK22s	62151CBH ¹⁴⁾	39
12	80/85	P43t	64206ALL ¹⁴⁾	39
12	100	P14.5s	62200 ¹⁴⁾	39
12	100	PK22s	62201 ¹⁴⁾	39
12	100	PX14.5s	64152 ^{11) 14)}	39
12	100	PKY22s	64153 ^{12) 14)}	39
12	100/80	P43t	62203 ¹⁴⁾	39
12	100/80	P43t	62203ALL ¹⁴⁾	39
12	100/80	PU43t	64194 ^{12) 14)}	39

Rated voltage V	Rated wattage W	Base	Product reference	See page
12	100/80	P45t	64203 ¹⁴⁾	39
24	1.2	W2x4.6d	2741	37
24	1.2	B8.5d	2741MF	37
24	1.2	BX8.5d	2741MFX	37
24	2	W2.1x9.5d	2840	37
24	3	W2.1x9.5d	2841	37
24	3	SV8.5-8	6421	37
24	3	SV7-8	6430	37
24	4	BA9s	3930	35, 37
24	4	BA9s	3930LTS	33
24	5	W2.1x9.5d	2845	35, 37
24	5	BA15s	5627	35, 36, 37
24	5	BA15s	5627LTS	33
24	5	SV8.5-8	6423	36, 37
24	5	SV8.5-8	6424	37
24	10	BA15s	5637	36, 37
24	10	BA15s	5637LTS	33
24	10	SV8.5-8	6429	37
24	20/60	PGJ23t-1	64177	35
24	21	BAU15s	7510LTS	33
24	21	BA15s	7511	35, 36
24	21	BA15s	7511LTS	33
24	21	BAY9s	64138	35, 36
24	21/5	BAY15d	7537	36
24	35		XENAELECTRON XT5-1-D1/24V	12
24	35		XENAELECTRON XT5-3-D1/24V TAB	12
24	70	P14.5s	64155	35
24	70	P14.5s	64155LTS	33
24	70	PK22s	64156	35
24	70	PK22s	64156LTS	33
24	70	PX26d	64215	35
24	70	PX26d	64215LTS	33
24	75/70	P43t	64196	35
24	75/70	P43t	64196LTS	33
24	75/70	P45t	64199 ¹⁴⁾	39
24	75/70	P43t	94196	35
			V-J1D-240-J2A	13
			M-J1A-260-J2B VS40 OSRAM	13

- 1) Reduced UV emission | For projection headlights | ECE approval and DOT label.
- 2) Reduced UV emission | With anti-glare strip for reflection headlights | ECE approval and DOT label.
- 3) Amber lamps for clear indicators.
- 4) Also available with glass base (article reference 6411150 or 6411350).
- 5) Lamps comply with ECE R 37 and SAE (DOT) regulations.
- 6) Red lamp for clear reversing/brake lights.
- 7) Successor to the BILUX® AS® lamp (article reference 7951).
- 8) Lamps comply with ECE R 37 and SAE (DOT) regulations | With silver cap.
- 9) With silver cap.

- 10) To be operated only with approved electronic control gear.
- 11) 2600 lm | Generally on normal roads.
- 12) Generally on normal roads.
- 13) New development for simple lamp replacement and highly efficient headlights; supplied on request.
- 14) These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

Type overview by ECE/SAE category.

Internat. category reference	Rated voltage V	Rated wattage W	Base	Product reference	See page
C5W	12	5	SV8.5-8	6418	29, 30
C5W	12	5	SV8.5-8	6418ULT	19
C5W	24	5	SV8.5-8	6423	36, 37
D1R ⁽¹⁰⁾		35	PK32d-3	66154CBI ⁽¹⁾	9
D1R ⁽¹⁰⁾		35	PK32d-3	66154 ⁽²⁾	11
D1S ⁽¹⁰⁾		35	PK32d-2	66144CBI ⁽¹⁾	9
D1S ⁽¹⁰⁾		35	PK32d-2	66144 ⁽¹⁾	11
D1S & D1R	12	35		XENAELECTRON XT-D1/12V	12
D1S & D1R	12	35		XENAELECTRON XT5-2-D1/12V BH	12
D1S & D1R	24	35		XENAELECTRON XT5-1-D1/24V	12
D1S & D1R	24	35		XENAELECTRON XT5-3-D1/24V TAB	12
D2R ⁽¹⁰⁾		35	P32d-3	66250CBI ⁽²⁾	9
D2R ⁽¹⁰⁾		35	P32d-3	66250 ⁽²⁾	11
D2S ⁽¹⁰⁾		35	P32d-2	66240CBI ⁽¹⁾	9
D2S ⁽¹⁰⁾		35	P32d-2	66240 ⁽¹⁾	11
D3R ⁽¹⁰⁾		35	PK32d-6	66350 ⁽²⁾	11
D3S ⁽¹⁰⁾		35	PK32d-5	66340 ⁽¹⁾	11
D3S & D3R	12	35		XENAELECTRON XT5-2-D3/12V BH	12
D4R ⁽¹⁰⁾		35	P32d-6	66450 ⁽²⁾	11
D4S ⁽¹⁰⁾		35	P32d-5	66440 ⁽¹⁾	11
H1	12	55	P14.5s	64150 ⁽⁵⁾	25
H1	12	55	P14.5s	64150CB ⁽⁵⁾	17
H1	12	55	P14.5s	64150NBP	15
H1	12	55	P14.5s	64150SVS ⁽⁵⁾	21
H1	12	55	P14.5s	64150ULT ⁽⁵⁾	19
H1	24	70	P14.5s	64155	35
H1	24	70	P14.5s	64155LTS	33
H3	12	55	PK22s	64151 ⁽⁵⁾	25
H3	12	55	PK22s	64151CB ⁽⁵⁾	17
H3	12	55	PK22s	64151NBP	15
H3	24	70	PK22s	64156	35
H3	24	70	PK22s	64156LTS	33
H4	12	60/55	P43t	64193	25
H4	12	60/55	P43t	64193CB ⁽⁹⁾	17
H4	12	60/55	P43t	64193NBP	15
H4	12	60/55	P43t	64193NR-02B	23
H4	12	60/55	P43t	64193SVS ⁽⁹⁾	21
H4	12	60/55	P43t	64193ULT ⁽⁹⁾	19
H4	12	60/55	P43t	64193XR-02B	23
H4	12	60/55	P43t	94193	26
H4	24	75/70	P43t	64196	35
H4	24	75/70	P43t	64196LTS	33
H4	24	75/70	P43t	94196	35
H6W	12	6	BAX9s	64132	28

Internat. category reference	Rated voltage V	Rated wattage W	Base	Product reference	See page
H6W	12	6	BAX9s	64132CB	17
H6W	12	6	BAX9s	64132ULT	19
H7	12	55	PX26d	64210 ⁽⁵⁾	25
H7	12	55	PX26d	64210CB ⁽⁸⁾	17
H7	12	55	PX26d	64210NBP	15
H7	12	55	PX26d	64210NR-02B	23
H7	12	55	PX26d	64210SVS ⁽⁸⁾	21
H7	12	55	PX26d	64210ULT ⁽⁸⁾	19
H7	12	55	PX26d	64210XR-02B	23
H7	24	70	PX26d	64215	35
H7	24	70	PX26d	64215LTS	33
H8	12	35	PGJ19-1	64212 ⁽⁵⁾	25
H8B ⁽¹³⁾	12	35	PGJY19-1	64242 ⁽⁵⁾	25, 27
H9	12	65	PGJ19-5	64213 ⁽⁵⁾	25
H9B ⁽¹³⁾	12	65	PGJY19-5	64243 ⁽⁵⁾	25, 27
H10	12	42	PY20d	9145 ⁽⁵⁾	25, 26
H11	12	55	PGJ19-2	64211 ⁽⁵⁾	25
H11	12	55	PGJ19-2	64211CB	17
H11	12	55	PGJ19-2	64211NBP	15
H11B ⁽¹³⁾	12	55	PGJY19-2	64241 ⁽⁵⁾	25, 27
H13	12	60/55	P26.4t	9008 ⁽⁵⁾	25, 27
H15	12	15/55	PGJ23t-1	64176 ⁽⁵⁾	25, 27
H15	24	20/60	PGJ23t-1	64177	35
H21W	12	21	BAY9s	64136	28
H21W	24	21	BAY9s	64138	35, 36
H27/1	12	27	PG13	880	25, 26
H27/2	12	27	PGJ13	881	25, 26
HB2 ⁽¹⁴⁾	12	60/55	P43t	9003CB ⁽⁸⁾	17
HB2	12	60/55	P43t	9003L ⁽⁵⁾	25, 27
HB3	12	60	P20d	9005CB ⁽⁵⁾	17
HB3	12	60	P20d	9005 ⁽⁵⁾	25, 26
HB3A	12	60	P20d	9005XS ⁽⁵⁾	25, 26
HB4	12	51	P22d	9006CB ⁽⁸⁾	17
HB4	12	51	P22d	9006L ⁽⁵⁾	25, 26
HB4A	12	51	P22d	9006XS ⁽⁵⁾	25, 26
HS1	12	35/35	PX43t	64185	25
HS1	12	35/55	PX43t	64185SVS	21
P21/4W	12	21/4	BAZ15d	7225	28, 29
P21/5W	12	21/5	BAY15d	7528	28, 29
P21/5W	12	21/5	BAY15d	7528ULT	19
P21/5W	24	21/5	BAY15d	7537	36
P21W	12	21	BA15s	7506	28, 29
P21W	12	21	BA15s	7506ULT	19
P21W	24	21	BA15s	7511	35, 36
P21W	24	21	BA15s	7511LTS	33
P27W	12	27	W2.5x16d	3156	28, 29
P27/7W	12	27/7	W2.5x16q	3157	28, 29
PR21W	12	21	BAW15s	7508LDR ⁽⁸⁾	17

Internat. category reference	Rated voltage V	Rated wattage W	Base	Product reference	See page
PR21/5W	12	21/5	BAW15d	7538LDR ⁶⁾	17
PY21W	12	21	BAU15s	7507 ³⁾	28
PY21W	12	21	BAU15s	7507LDA ³⁾	17
PY21W	12	21	BAU15s	7507ULT ³⁾	19
PY21W	24	21	BAU15s	7510LTS	33
R2	12	45/40	P45t	64183 ⁷⁾	25
R5W	12	5	BA15s	5007	29, 30
R5W	12	5	BA15s	5007ULT	19
R5W	24	5	BA15s	5627	35, 36, 37
R5W	24	5	BA15s	5627LTS	33
R10W	12	10	BA15s	5008	29, 30
R10W	12	10	BA15s	5008ULT	19
R10W	24	10	BA15s	5637	36, 37
R10W	24	10	BA15s	5637LTS	33
T4W	12	4	BA9s	3893	28, 29, 30, 31
T4W	24	4	BA9s	3930	35, 37
T4W	24	4	BA9s	3930LTS	33
W2.3W	12	2.3	W2x4.6d	2723	31
W16W	12	16	W2.1x9.5d	921	28, 29
W21W	12	21	W3x16d	7505	28
W21/5W	12	21/5	W3x16q	7515	28, 29
W3W	12	3	W2.1x9.5d	2821	31
W3W	24	3	W2.1x9.5d	2841	37
W5W	12	5	W2.1x9.5d	2825	28, 29, 30
W5W	12	5	W2.1x9.5d	2825CB	17
W5W	12	5	W2.1x9.5d	2825HCB	17
W5W	12	5	W2.1x9.5d	2825ULT	19
W5W	24	5	W2.1x9.5d	2845	35, 37
WY5W	12	5	W2.1x9.5d	2827 ³⁾	28
WY21W	12	21	WX3x16d	7504 ³⁾	28
	12	1.12	BX8.4d	2473MFX6	31
	12	1.2	W2x4.6d	2721	31
	12	1.2	B8.5d	2721MF	31
	12	1.2	BX8.4d	2351MFX6	31
	12	1.2	BX8.5d	2721MFX	31
	12	1.3	BX8.4d	2431MFX6	31
	12	1.5	BX8.4d	2452MFX6	31
	12	1.5	B8.5d	2752MF	31
	12	1.5	BX8.5d	2752MFX	31
	12	2	W2x4.6d	2722	31
	12	2	B8.5d	2722MF	31
	12	2	BX8.5d	2722MFX	31
	12	2	BX8.4d	2352MFX6	31

Internat. category reference	Rated voltage V	Rated wattage W	Base	Product reference	See page
	12	2	W2.1x9.5d	2820	31
	12	2.3	BX8.4d	2723MFX6	31
	12	3	SV7-8	6428	30
	12	5	BA9s	3860	30, 31
	12	5	BA9s	64111 ⁴⁾	30
	12	5	SV8.5-8	6413	30
	12	6	W2.1x9.5d	2886X	30
	12	10	SV8.5-8	6411	30
	12	10	SV8.5-8	6438	30
	12	10	SV8.5-8	6461	30
	12	10	BA9s	64113 ⁴⁾	30
	12	20	BA9s	64115	30
	12	55	P14.5s	62150CBH ¹⁵⁾	39
	12	55	PX26d	62210CBH ¹⁵⁾	39
	12	60/55	P43t	62193CBH ¹⁵⁾	39
	12	60/55	P45t	64198 ¹⁵⁾	39
	12	65	PX26d	64217 ¹⁵⁾	39
	12	65/45	P29t	9004	27
	12	65/55	PX29t	9007	27
	12	70	PK22s	62151CBH ¹⁵⁾	39
	12	80/85	P43t	64206ALL ¹⁵⁾	39
	12	100	PX14.5s	64152 ^{11) 15)}	39
	12	100	PKY22s	64153 ^{12) 15)}	39
	12	100	P14.5s	62200 ¹⁵⁾	39
	12	100	PK22s	62201 ¹⁵⁾	39
	12	100/80	P43t	62203 ¹⁵⁾	39
	12	100/80	P43t	62203ALL ¹⁵⁾	39
	12	100/80	PU43t	64194 ^{12) 15)}	39
	12	100/80	P45t	64203 ¹⁵⁾	39
	24	1.2	W2x4.6d	2741	37
	24	1.2	B8.5d	2741MF	37
	24	1.2	BX8.5d	2741MFX	37
	24	2	W2.1x9.5d	2840	37
	24	3	SV8.5-8	6421	37
	24	3	SV7-8	6430	37
	24	5	SV8.5-8	6424	37
	24	10	SV8.5-8	6429	37
	24	75/70	P45t	64199 ¹⁵⁾	39
				V-J1D-240-J2A	13
				M-J1A-260-J2B	13
				VS40 OSRAM	

- 1) Reduced UV emission | For projection headlights | ECE approval and DOT label.
- 2) Reduced UV emission | With anti-glare strip for reflection headlights | ECE approval and DOT label.
- 3) Amber lamps for clear indicators.
- 4) Also available with glass base (article reference 6411150 or 6411350).
- 5) Lamps comply with ECE R 37 and SAE (DOT) regulations.
- 6) Red lamp for clear reversing/brake lights.
- 7) Successor to the BILUX® AS® lamp (article reference 7951).
- 8) Lamps comply with ECE R 37 and SAE (DOT) regulations | With silver cap.
- 9) With silver cap.

- 10) To be operated only with approved electronic control gear.
- 11) 2600 lm | Generally on normal roads.
- 12) Generally on normal roads.
- 13) New development for simple lamp replacement and highly efficient headlights; supplied on request.
- 14) SAE category reference. H4 with strict geometrical tolerances.
- 15) These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

Type overview in numerical order of product reference with test data.

Product reference	ECE/SAE category	Rated voltage V	Rated wattage W	Base	Test voltage V	Power input W	Luminous flux lm	B ₃ /T _c	See page
880	H27/1	12	27	PG13	13.5	max. 31	477±15%	900 ¹⁵⁾	25, 26
881	H27/2	12	27	PGJ13	13.5	max. 31	477±15%	900 ¹⁵⁾	25, 26
921	W16W	12	16	W2.1x9.5d	13.5	19.4±10%	310±20%	1000 ¹⁵⁾	28, 29
2351MFX6		12	1.2	BX8.4d	13.5	1.32±10%	7.5±20%	600/3000	31
2352MFX6		12	2	BX8.4d	13.5	2.13±10%	11.8±20%	1500/6000	31
2431MFX6		12	1.3	BX8.4d	13.5	1.28±15%	6.5±20%	1300/6000	31
2452MFX6		12	1.5	BX8.4d	13.5	1.8±10%	6.5±20%	1700/6500	31
2473MFX6		12	1.12	BX8.4d	14.0	1.12±10%	3.6±25%	500/5000	31
2721		12	1.2	W2x4.6d	13.5	1.22±10%	7.5±20%	500/2000	31
2721MF		12	1.2	B8.5d	13.5	1.2±10%	6.4±25%	500/2000	31
2721MFX		12	1.2	BX8.5d	13.5	1.2±10%	6.4±25%	500/2000	31
2722		12	2	W2x4.6d	13.5	2±10%	12±25%	1300/4000	31
2722MF		12	2	B8.5d	13.5	2±10%	10.2±25%	1300/4000	31
2722MFX		12	2	BX8.5d	13.5	2±10%	10.2±25%	1300/4000	31
2723	W2.3W	12	2.3	W2x4.6d	13.5	2.3±10%	18.6±20%	350/1200	31
2723MFX6		12	2.3	BX8.4d	13.5	2.3±15%	17.3±20%	350/1200	31
2741		24	1.2	W2x4.6d	28.0	1.5±10%	7.5±25%	400/2000	37
2741MF		24	1.2	B8.5d	28.0	1.6±10%	6.4±25%	400/2000	37
2741MFX		24	1.2	BX8.5d	28.0	1.6±10%	6.4±25%	400/2000	37
2752MF		12	1.5	B8.5d	13.5	1.8±10%	6.0±20%	1000/6500	31
2752MFX		12	1.5	BX8.5d	13.5	1.8±10%	6.0±20%	1000/6500	31
2820		12	2	W2.1x9.5d	13.5	2.2±10%	13.5±25%	600/4000	31
2821	W3W	12	3	W2.1x9.5d	13.5	3±10%	22±30%	1300/4000	31
2825	W5W	12	5	W2.1x9.5d	13.5	5±10%	50±20%	350/1000	28, 29, 30
2825CB	W5W	12	5	W2.1x9.5d	13.5	5±10%	50±20%	200/500	17
2825HCB	W5W	12	5	W2.1x9.5d	13.5	5±20%	50±20%	800/2000	17
2825ULT	W5W	12	5	W2.1x9.5d	13.5	5±10%	50±20%	700/1500	19
2827 ³⁾	WY5W	12	5	W2.1x9.5d	13.5	5±10%	30±20%	350/1000	28
2840		24	2	W2.1x9.5d	28.0	2.6±15%	13±30%	500/5000	37
2841	W3W	24	3	W2.1x9.5d	28.0	4±15%	22±30%	500/5000	37
2845	W5W	24	5	W2.1x9.5d	28.0	7±10%	50±20%	800/3000	35, 37
2886X		12	6	W2.1x9.5d	13.5	6±10%	85±20%	400/1000	30
3156	P27W	12	27	W2.5x16d	13.5	29.2±10%	475±15%	600 ¹⁵⁾	28, 29
3157	P27/7W	12	27/7	W2.5x16q	13.5	29.2/ 7.7±10%	475/ 36±15%	600/5000 ¹⁵⁾	28, 29
3860		12	5	BA9s	13.5	5±15%	50±20%	400/1000	30, 31
3893	T4W	12	4	BA9s	13.5	4±10%	35±20%	600/1200	28, 29, 30, 31
3930	T4W	24	4	BA9s	28.0	5±10%	35±20%	550/1000	35, 37
3930LTS	T4W	24	4	BA9s	28.0	5±10%	35±20%	550/1000	33
5007	R5W	12	5	BA15s	13.5	5±10%	50±20%	350/800	29, 30
5007ULT	R5W	12	5	BA15s	13.5	5±10%	50±20%	600/1200	19
5008	R10W	12	10	BA15s	13.5	10±10%	125±20%	350/800	29, 30
5008ULT	R10W	12	10	BA15s	13.5	10±10%	125±20%	600/1200	19
5627	R5W	24	5	BA15s	28.0	7±10%	50±20%	500/1000	35, 36, 37
5627LTS	R5W	24	5	BA15s	28.0	7±10%	50±20%	500/1000	33
5637	R10W	24	10	BA15s	28.0	12.5±10%	125±20%	400/800	36, 37
5637LTS	R10W	24	10	BA15s	28.0	12.5±10%	125±20%	1000/2000	33
6411		12	10	SV8.5-8	13.5	10±10%	min. 100	500/1000	30
6413		12	5	SV8.5-8	13.5	5±10%	50±20%	1000/2000	30
6418	C5W	12	5	SV8.5-8	13.5	5±10%	45±20%	1000/2000	29, 30
6418ULT	C5W	12	5	SV8.5-8	13.5	5±10%	45±20%	1500/4000	19
6421		24	3	SV8.5-8	28.0	3±10%	17±20%	800/1500	37
6423	C5W	24	5	SV8.5-8	28.0	7±10%	45±20%	1500/4000	36, 37
6424		24	5	SV8.5-8	28.0	7±10%	62±20%	1000/2000	37
6428		12	3	SV7-8	13.5	3.5±10%	29±20%	600/1200	30
6429		24	10	SV8.5-8	28.0	10±10%	105±20%	300/600	37
6430		24	3	SV7-8	28.0	3±10%	min. 15	400/800	37

Product reference	ECE/SAE category	Rated voltage V	Rated wattage W	Base	Test voltage V	Power input W	Luminous flux lm	B ₃ /T _c	See page
6438		12	10	SV8.5-8	13.5	10±10%	120±25%	500/1000	30
6461		12	10	SV8.5-8	13.5	10±10%	105±20%	600/1200	30
7225	P21/4W	12	21/4	BAZ15d	13.5	25±6%/5±10%	440±15%/15±20%	180//290//1250//4000	28, 29
7504 ³⁾	WY21W	12	21	WX3x16d	13.5	25±6%	280±20%	400/600	28
7505	W21W	12	21	W3x16d	13.5	25±6%	460±15%	400/600	28
7506	P21W	12	21	BA15s	13.5	25±6%	460±15%	224/480	28, 29
7506ULT	P21W	12	21	BA15s	13.5	25±6%	460±15%	500/1000	19
7507 ³⁾	PY21W	12	21	BAU15s	13.5	25±6%	280±20%	250/400	28
7507LDA ³⁾	PY21W	12	21	BAU15s	13.5	25±6%	280±20%	500/1000	17
7507ULT ³⁾	PY21W	12	21	BAU15s	13.5	25±6%	280±20%	500/1000	19
7508LDR ⁶⁾	PR21W	12	21	BAW15s	13.5	25±6%	110	375/750	17
7510LTS	PY21W	24	21	BAU15s	28.0	28±6%	280±20%	250/500	33
7511	P21W	24	21	BA15s	28.0	28±5%	460±15%	200/400	35, 36
7511LTS	P21W	24	21	BA15s	28.0	28±6%	460±15%	250/500	33
7515	W21/5W	12	21/5	W3x16q	13.5	25±6%/6±10%	440±15%/35±20%	400//600//> 3000//> 3000	28, 29
7528	P21/5W	12	21/5	BAY15d	13.5	25±6%/6±10%	440±15%/35±20%	180//290//1250//4000	28, 29
7528ULT	P21/5W	12	21/5	BAY15d	13.5	25±6%	440±15%/35±20%	300//800//3000//6000	19
7538LDR ⁶⁾	PR21/5W	12	21/5	BAW15d	13.5	25±6%/6±10%	105±20%/8±25%	225//600//3000//6000	17
7537	P21/5W	24	21/5	BAY15d	28.0	28±6%/10±10%	440±15%/40±20%	150/1500	36
9003CB ⁸⁾	HB2 ¹⁴⁾	12	60/55	P43t	13.2	max. 75/68	1650/1000±15%	50//100//150//300	17
9003L ⁵⁾	HB2	12	60/55	P43t	12.8	max. 72/65	1500/910±15%	160//765//230//1110	25, 27
9004		12	65/45	P29t	12.8	max. 70/50	1200/700±10%	150/320 (14.0V) ¹⁵⁾	27
9005 ³⁾	HB3	12	60	P20d	13.2	max. 73	1860±12%	280/550	25, 26
9005CB ⁵⁾	HB3	12	60	P20d	13.2	max. 73	1860±12%	70/135	17
9005XS ⁵⁾	HB3A	12	60	P20d	13.2	max. 73	1860±12%	280/550	25, 26
9006CB ⁸⁾	HB4	12	51	P22d	13.2	max. 62	1095±15%	200/410	17
9006L ⁵⁾	HB4	12	51	P22d	12.8	max. 62	1095±15%	1095/2200	25, 26
9006XS ⁵⁾	HB4A	12	51	P22d	13.2	max. 62	1095±15%	860/1720	25, 26
9007		12	65/55	PX29t	12.8	max. 70/60	1350/1000±10%	250/500 (14.0V) ¹⁵⁾	27
9008 ³⁾	H13	12	60/55	P26.4t	13.2	max. 75/68	1700/1100±15%	170//1290//350//2590	25, 27
9145 ³⁾	H10	12	42	PY20d	13.2	max. 50	850±15%	860/1720	25, 26
62150CBH ¹⁸⁾		12	55	P14.5s	13.2	max. 68			39
62151CBH ¹⁸⁾		12	70	PK22s	13.2	max. 75			39
62200 ¹⁸⁾		12	100	P14.5s	13.2	max. 100			39
62201 ¹⁸⁾		12	100	PK22s	13.2	max. 100			39
62203 ¹⁸⁾		12	100/80	P43t	13.2	max. 103/80			39
62203ALL ¹⁸⁾		12	100/80	P43t	13.2	max. 103/80			39
62210CBH ¹⁸⁾		12	55	PX26d	13.2	max. 58			39
62193CBH ¹⁸⁾		12	60/55	P43t	13.2	max. 75/68			39
64111 ⁴⁾		12	5	BA9s	13.5	5±7.5%	80±15%	150/500	30
64113 ⁴⁾		12	10	BA9s	13.5	10.3±7.5%	200±15%	150/400	30
64115		12	20	BA9s	13.5	22.5±7.5%	450±15%	150/500	30
64132	H6W	12	6	BAX9s	13.5	7±5%	125±12%	350/700	28
64132CB	H6W	12	6	BAX9s	13.5	7±5%	125±12%	200/400	17
64132ULT	H6W	12	6	BAX9s	13.5	7±5%	125±12%	600/1000	19
64136	H21W	12	21	BAY9s	13.5	25±5%	600±12%	300/600	28
64138	H21W	24	21	BAY9s	28.0	28±5%	600±12%	150/400	35, 36
64150 ⁵⁾	H1	12	55	P14.5s	13.2	max. 68	1550±15%	400/650	25

Product reference	ECE/SAE category	Rated voltage V	Rated wattage W	Base	Test voltage V	Power input W	Luminous flux lm	B _y /T _c	See page
64150CB ⁵⁾	H1	12	55	P14.5s	13.2	max. 68	1550±15%	150/250	17
64150NBP	H1	12	55	P14.5s	13.2	max. 68	1550±15%	150/300	15
64150SVS ⁵⁾	H1	12	55	P14.5s	13.2	max. 68	1730±3%	150/350	21
64150ULT ⁵⁾	H1	12	55	P14.5s	13.2	max. 68	1550±15%	1200/2000	19
64151 ⁵⁾	H3	12	55	PK22s	13.2	max. 68	1450±15%	400/650	25
64151CB ⁵⁾	H3	12	55	PK22s	13.2	max. 68	1450±15%	150/250	17
64151NBP	H3	12	55	PK22s	13.2	max. 68	1450±15%	150/300	15
64152 ^{11) 18)}		12	100	PX14.5s	13.2	93±5%	2600±10%	50 ¹⁵⁾	39
64153 ^{12) 18)}		12	100	PKY22s	13.2	85±5%	2300±10%	50 ¹⁵⁾	39
64155	H1	24	70	P14.5s	28.0	max. 84	1900±15%	400/650	35
64155LTS	H1	24	70	P14.5s	28.0	max. 84	1900±15%	600/1200	33
64156	H3	24	70	PK22s	28.0	max. 84	1750±15%	400/650	35
64156LTS	H3	24	70	PK22s	28.0	max. 84	1750±15%	600/1200	33
64177	H15	24	20/60	PGJ23t-1	28.0	max. 24/73	300/ 1500±10%	200//1500/ 400//3000	35
64176 ⁵⁾	H15	12	15/55	PGJ23t-1	13.2	max. 19/64	260/ 1350±10%	2000//4000/ 250//300	25, 27
64183 ⁷⁾	R2	12	45/40	P45t	13.2	48.5/ 46.5±6%	1030/740 +12%/+5% -15%	250//400/ 500//1200	25
64185	HS1	12	35/35	PX43t	13.2	max. 36.8/ 36.8	825/ 525±15%	150//150/ 300//300	25
64185SVS	HS1	12	35/55	PX43t	13.2	max. 36.8/ 36.8	875/545 +7.5%/+10%	75//120/ 120//240	21
64193	H4	12	60/55	P43t	13.2	max. 75/68	1650/1000 ±12%/±15%	250//400/ 500//900	25
64193CB ⁹⁾	H4	12	60/55	P43t	13.2	max. 75/68	1650/1000 ±15%	50//100/ 150//350	17
64193NBP	H4	12	60/55	P43t	13.2	max. 75/68	1650/1000 ±15%	80//260/ 160//400	15
64193NR-02B	H4	12	60/55	P43t	13.2	max. 75/68	1650/1000 ±15%	40//130/ 80//200	23
64193SVS ⁹⁾	H4	12	60/55	P43t	13.2	max. 75/68	1700/1075 ±10%/±7%	150//150/ 350//350	21
64193ULT ⁹⁾	H4	12	60/55	P43t	13.2	max. 75/68	1650/1000 ±15%	250//1200/ 500//3000	19
64193XR-02B	H4	12	60/55	P43t	13.2	max. 75/68	1650/1000 ±15%	50//100/ 150//350	23
64194 ^{12) 18)}		12	100/80	PU43t	13.2	max. 109/85	2900/1500 ±15%	75/150	39
64196	H4	24	75/70	P43t	28.0	max. 85/80	1900/1200 ±15%	170//350/ 400//800	35
64196LTS	H4	24	75/70	P43t	28.0	max. 85/80	1900/1200 ±15%	200//400/ 750//1400	33
64198 ¹⁸⁾		12	60/55	P45t	13.2	max. 73/63			39
64199 ¹⁸⁾		24	75/70	P45t	28.0	max. 85/80			39
64203 ¹⁸⁾		12	100/80	P45t	13.2	max. 103/80			39
64206ALL ¹⁸⁾		12	80/85	P43t	13.2	max. 85/80			39
64210 ⁵⁾	H7	12	55	PX26d	13.2	max. 58	1500±10%	330/550	25
64210CB ⁹⁾	H7	12	55	PX26d	13.2	max. 58	1500±10%	100/200	17
64210NBP	H7	12	55	PX26d	13.2	max. 58	1350±10%	150/250	15
64210NR-02B	H7	12	55	PX26d	13.2	max. 58	1350±10%	100/200	23
64210SVS ⁸⁾	H7	12	55	PX26d	13.2	max. 58	1500±10%	150/220	21
64210ULT ⁸⁾	H7	12	55	PX26d	13.5	max. 58	1350±10%	1000/2000	19
64210XR-02B	H7	12	55	PX26d	13.2	max. 58	1350±10%	100/200	23
64211CB	H11	12	55	PGJ19-2	13.2	max. 62	1350±10%	160/290	17
64211 ⁵⁾	H11	12	55	PGJ19-2	13.2	max. 62	1350±10%	1000/2000	25
64211NBP	H11	12	55	PGJ19-2	13.5	max. 65	1350±10%	150/250	15
64212 ⁵⁾	H8	12	35	PGJ19-1	13.2	max. 43	800±15%	400/800	25
64213 ⁵⁾	H9	12	65	PGJ19-5	13.2	max. 73	2100±10%	250/500	25

Product reference	ECE/SAE category	Rated voltage V	Rated wattage W	Base	Test voltage V	Power input W	Luminous flux lm	B ₃ /T _c	See page
64215	H7	24	70	PX26d	28.0	max. 75	1750±10%	220/500	35
64215LTS	H7	24	70	PX26d	28.0	max. 80	1750±10%	500/1000	33
64217 ¹⁸⁾		12	65	PX26d	13.2				39
64241 ⁵⁾	H11B ¹³⁾	12	55	PGJY19-2	13.2	max. 62	1350±10%	350/440	25, 27
64242 ⁵⁾	H8B ¹³⁾	12	35	PGJY19-1	13.2	max. 43	800±15%	400/620	25, 27
64243 ⁵⁾	H9B ¹³⁾	12	65	PGJY19-5	13.2	max. 73	2100±10%	250/400	25, 27
66144 ¹⁾	D1S ¹⁰⁾	¹⁰⁾	35	PK32d-2	13.5	35±3%	3200±450	2000/3000	11
66144CBI ¹⁾	D1S ¹⁰⁾	¹⁰⁾	35	PK32d-2	13.5	35±3%	3200±450	1500/3000	9
66154 ²⁾	D1R ¹⁰⁾	¹⁰⁾	35	PK32d-3	13.5	35±3%	2800±450	2000/3000	11
66154CBI ¹⁾	D1R ¹⁰⁾	¹⁰⁾	35	PK32d-3	13.5	35±3%	2800±450	1500/3000	9
66240 ¹⁾	D2S ¹⁰⁾	¹⁰⁾	35	P32d-2	13.5	35±3%	3200±450	2000/3000	11
66240CBI ¹⁾	D2S ¹⁰⁾	¹⁰⁾	35	P32d-2	13.5	35±3%	3200±450	1500/3000	9
66250 ²⁾	D2R ¹⁰⁾	¹⁰⁾	35	P32d-3	13.5	35±3%	2800±450	2000/3000	11
66250CBI ²⁾	D2R ¹⁰⁾	¹⁰⁾	35	P32d-3	13.5	35±3%	2800±450	1500/3000	9
66340 ¹⁾	D3S ¹⁰⁾	¹⁰⁾	35	PK32d-5	13.5	35±3%	3200±450	1800/3000	11
66350 ²⁾	D3R ¹⁰⁾	¹⁰⁾	35	PK32d-6	13.5	35±3%	2800±450	1800/3000	11
66440 ¹⁾	D4S ¹⁰⁾	¹⁰⁾	35	P32d-5	13.5	35±3%	3200±450	1800/3000	11
66450 ²⁾	D4R ¹⁰⁾	¹⁰⁾	35	P32d-6	13.5	35±3%	2800±450	1800/3000	11
94193	H4	12	60/55	P43t	13.2	max. 75/68	1650±12%/1000±15%	300//1100/500//2400	26
94196	H4	24	75/70	P43t	28.0	max. 85/80	1900/1200/±15%	170//500/400/1500	35
XENAELECTRON XT5-1-D1/24V	D1S & D1R	24	35		13.5	ca. 41 ¹⁶⁾		> 3000	12
XENAELECTRON XT5-2-D1/12V BH	D1S & D1R	12	35		13.5	ca. 41 ¹⁶⁾		> 3000	12
XENAELECTRON XT5-2-D3/12V BH	D3S & D3R	12	35		13.5	ca. 41 ¹⁷⁾		> 3000	12
XENAELECTRON XT5-3-D1/24V TAB	D1S & D1R	24	35		13.5	ca. 41 ¹⁶⁾		> 3000	12
XENAELECTRON XT-D1/12V	D1S & D1R	12	35		13.5	ca. 41 ¹⁶⁾		> 3000	12
12M-J1A-260-J2B VS40 OSRAM									13
V-J1D-240-J2A									13

Explanation: 1-filament lamp e.g. 100/300

2-filament lamp e.g. 100//300/500//100

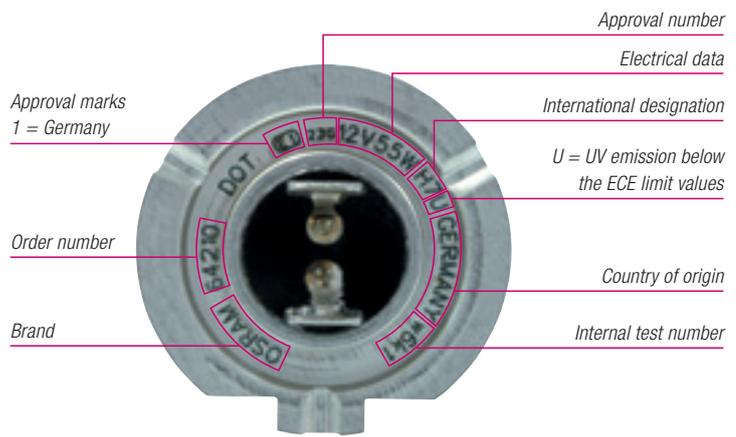
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- 1) Reduced UV emission | For projection headlights | ECE approval and DOT label.
- 2) Reduced UV emission | With anti-glare strip for reflection headlights | ECE approval and DOT label.
- 3) Amber lamps for clear indicators.
- 4) Also available with glass base (article reference 6411150 or 6411350).
- 5) Lamps comply with ECE R 37 and SAE (DOT) regulations.
- 6) Red lamp for clear reversing/brake lights.
- 7) Successor to the BILUX® AS® lamp (article reference 7951).
- 8) Lamps comply with ECE R 37 and SAE (DOT) regulations | With silver cap.
- 9) With silver cap.
- 10) To be operated only with approved electronic control gear.
- 11) 2600 lm | Generally on normal roads.
- 12) Generally on normal roads.
- 13) New development for simple lamp replacement and highly efficient headlights; supplied on request.
- 14) SAE category reference. H4 with strict geometrical tolerances.
- 15) B₅₀ = average lifespan.
Explanation: 1-filament lamp e.g. 100
2-filament lamp e.g. 100/300
- 16) For operating an OSRAM D1 XENARC® electronic 35 W gas discharge lamp.
- 17) For operating an OSRAM D3 XENARC® electronic 35 W gas discharge lamp.
- 18) These products do not have ECE approval. This means that they cannot be fitted in "normal" headlights or additional headlights if the vehicle is to be used on public highways. | OFF-ROAD only. | Not for use on public roads.

Symbols

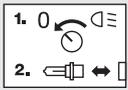
	Int. category label ECE
	Connector code (lamp side)
	Connector code (ECG side)
	Rated wattage in watts
	Voltage in volts
	Luminous flux in lumen
	Color temperature in K
	Temperature range
	Base
	Fig. no.
	Width b in mm
	Height h in mm
	Length l in mm
	Shipping unit

Base stamp



The most important data on an OSRAM H7 lamp.

Notes on product labeling

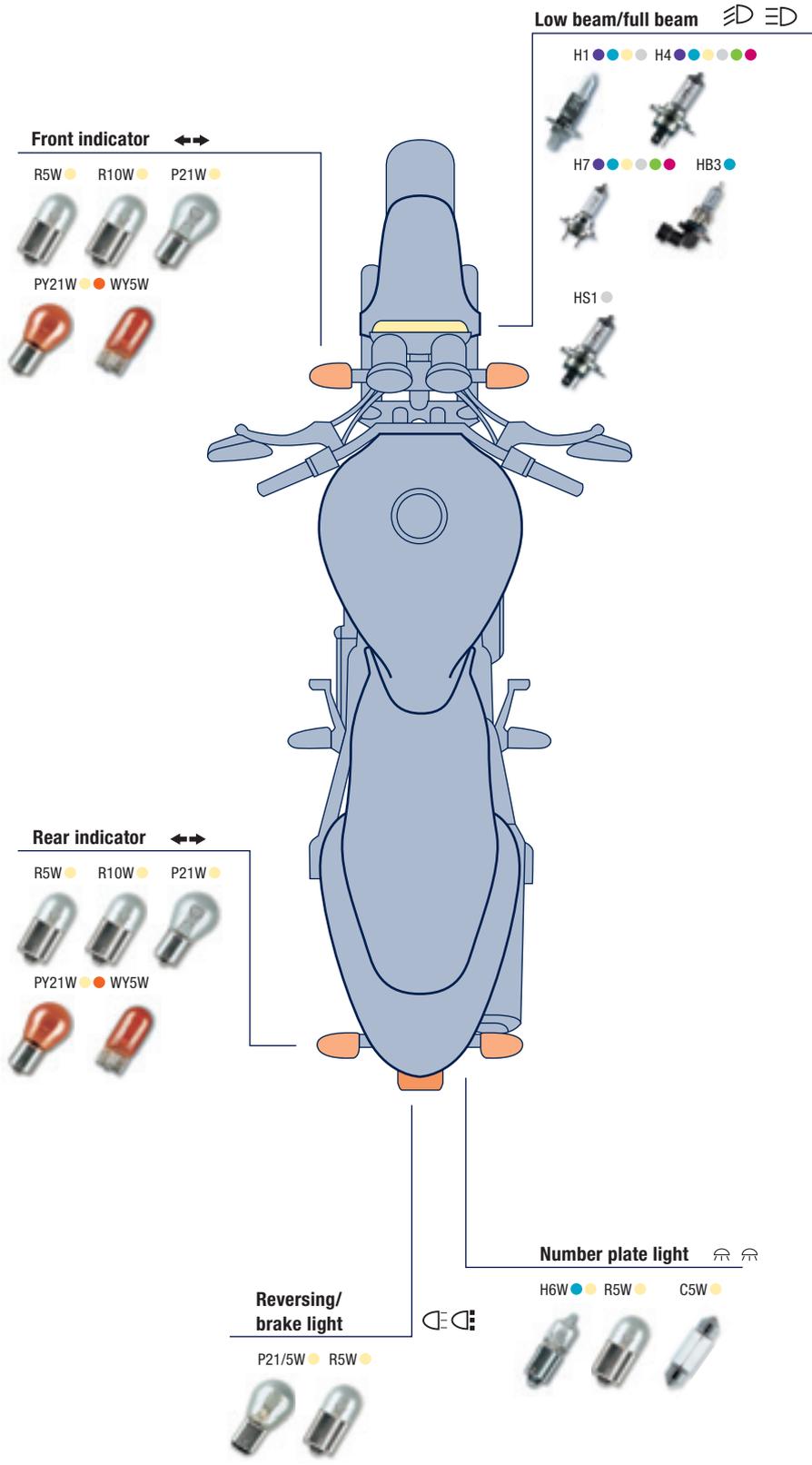
	Do not touch the glass bulb; hold the base when inserting		Do not throw away with household waste
	High levels of UV radiation		Switch off lights before replacing lamp
	Electronic control gear should be installed and maintained only by qualified specialists		Ignition procedure for lamps with external igniter
	Caution: hot		Lamp cannot be dimmed
	Dangerous voltage		Wear suitable gloves when fitting or removing
	Do not use the lamp if the glass bulb is scratched or damaged		Protect against splashes
	Wear suitable goggles when fitting or removing		Operate only in shielded luminaires
	Not for residential lighting		

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www.osram.com



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- OSRAM NIGHT BREAKER® PLUS**

 - Up to 90 % more light on the road¹⁾ for better visibility and much longer reaction time
 - Up to 35 m longer beam of light¹⁾
 - Up to 10 % whiter light¹⁾ for comfortable, fatigue-free driving
 - Up to 50 % longer life²⁾ (Extra Lifetime)
- OSRAM COOL BLUE®**

 - Modern bright bluish-white light (up to 4,000 K, similar to light from xenon lamps)
 - Up to 20 % brighter than standard lamps³⁾
 - High-contrast illumination of the road
- OSRAM SILVERSTAR®**

 - Up to 50 % more light on the road ahead¹⁾ for greater safety
 - Up to 20 m longer beam¹⁾
- OSRAM ULTRA LIFE**

 - Lasts up to three times longer than a conventional automotive lamp
 - 3-year guarantee
 - Unique reliability
 - Suitable for all vehicle types
- OSRAM DIADEM®**

 - Only yellow when it flashes
 - Opalescent appearance when not in use
 - Ideal for all modern clear-glass indicators
 - Twice the life¹⁾
- OSRAM NIGHT RACER®**

 - Up to 90 % more light on the road ahead¹⁾ for maximum safety
 - Up to 35 m longer beam of light¹⁾
 - Up to 10% whiter light¹⁾ for comfortable, fatigue-free driving
- OSRAM X-RACER®**

 - Modern, bright bluish-white light (up to 4,000 K, similar to light from xenon lamps)
 - Up to 20 % brighter¹⁾³⁾
 - Brighter and therefore easier on the eyes
- OSRAM TRUCKSTAR®**

 - Up to 100 % more light on the road¹⁾ thanks to patented single-coil technology (SC)
 - More than twice the life of conventional 24V lamps
 - Greater safety thanks to better illumination of the road

1) Compared with standard lamps.
 2) Compared with the first NIGHT BREAKER® generation.
 3) Subjective impression.

Low beam/full beam 

Fog light 



Parking/marker light



Indicator, brake, rear fog and reversing light lamps



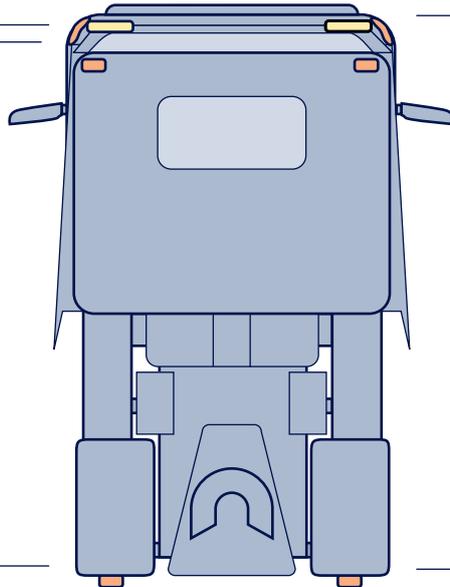
Number plate light  



Side-marker light



Number plate light  



Indicator 



Parking/marker light 



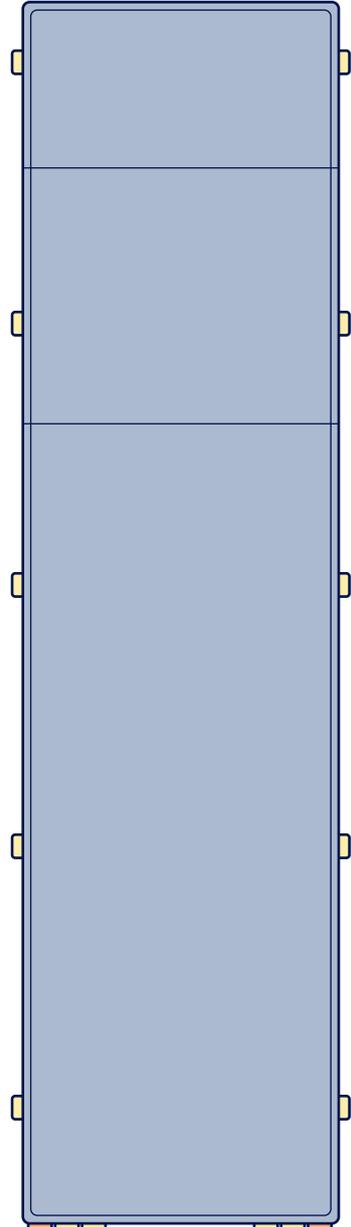
Side-marker light



Parking/marketing light 



Indicator, brake, rear fog and reversing light lamps



SUMMARY OF TYPES AND APPLICATIONS OF AUTOMOTIVE LAMPS

Low beam/full beam



Front indicator



Side indicator



Brake light



Brake light/taillight



Taillight



Reversing light



Fog light



Parking/marker light



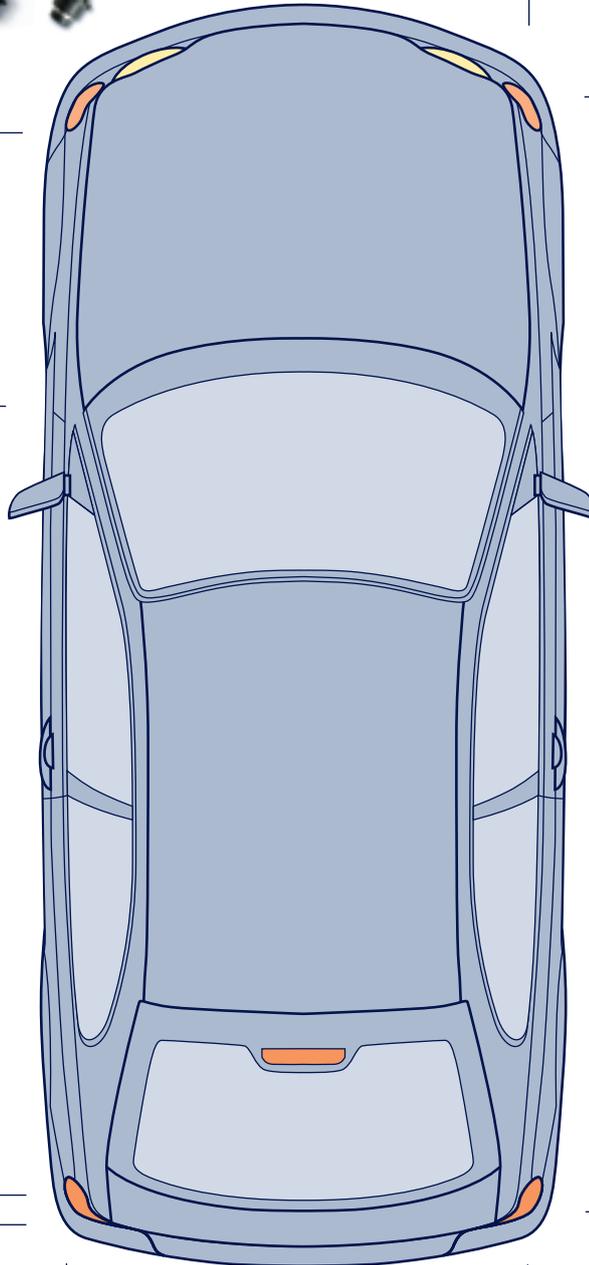
Rear indicator



Rear fog light



Number plate light



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