



80 years
of tradition

Product catalogue

2013/2014





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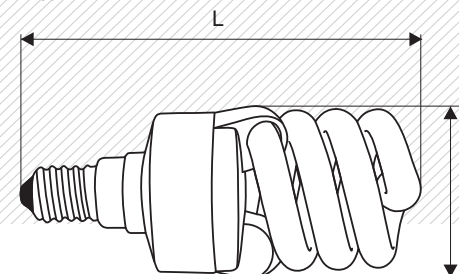
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Compact fluorescent lamps

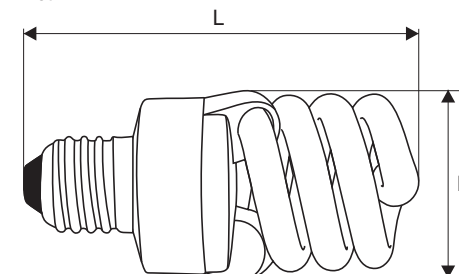


ECO compact fluorescent lamps

Pict. A



Pict. B

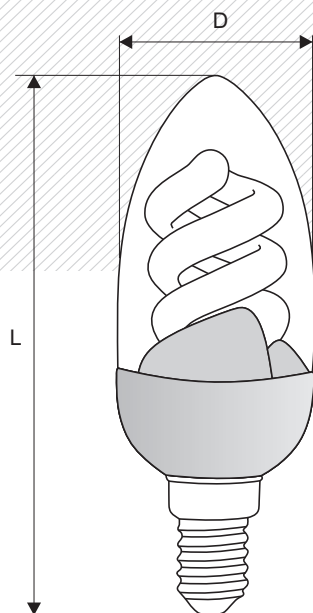


- energy efficiency label A
- stable wattage and luminous flux
- warm light colour
- long lifespan of 10 000 h
- 10 000 switch on/off times
- aesthetic design

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]					
CFL-2467	5907758824672	11	220-240	E14	SP	2700	650	10000	42	97	A	10
CFL-2468	5907758824689	15	220-240	E27	SP	2700	900	10000	42	105	B	10
CFL-2469	5907758824696	20	220-240	E27	SP	2700	1300	10000	55	108	B	10

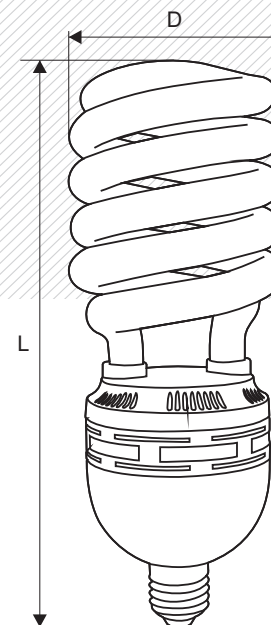


CANDLE compact fluorescent lamp



- energy efficiency label A
- stable wattage and luminous flux
- warm light colour
- long lifespan of 10 000 h
- 10 000 switch on/off times
- small dimensions - aesthetic design

High wattage compact fluorescent lamps



- high wattage CFLs are a very good replacement for high wattage 200 and 300 W incandescent bulbs
- available in warm (2700 K) and neutral (4000 K) colour temperature
- can be used with industrial-type incandescent bulb sockets, both E27 and E40
- in comparison with high wattage incandescent bulbs they consume 4-time less energy and their lifespan is up to 10-times longer

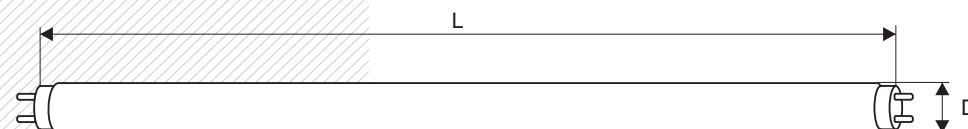
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		[W]	[V]			[K]	[lm]				
CFL-2367	5907758823675	7	230	E14	B35	2700	294	10000	37	101	50

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
CFL-2154	5907758821541	45	230	E27	SP16	2700	3100	10000	80	215	10
CFL-2157	5907758827734	45	230	E27	SP16	4000	3100	10000	80	215	10
CFL-2262	5907758822623	65	230	E27	SP16	2700	4715	8000	100	280	10
CFL-2158	5907758821589	65	230	E27	SP16	4000	4715	8000	100	280	10
CFL-0035	5907758827765	75	230	E27	SP16	2700	5600	8000	100	260	10
CFL-0030	5907758827604	75	230	E40	SP16	2700	5600	8000	100	278	10
CFL-0029	5907758827581	75	230	E40	SP16	4000	5600	8000	100	278	10

Three-band linear fluorescent lamps



Three-band linear fluorescent lamps T5

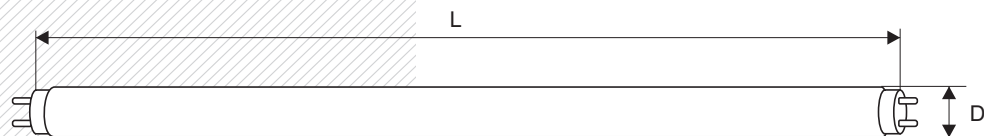


- energy efficiency label A
- high luminous efficiency: up to 98 lm/W
- very good colour rendering index: 82 Ra
- covered with highly efficient luminophore
- can be used with luminaires equipped with electronic starter circuits dedicated for T5 technology

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
LFL-2059	5907758820599	14	230	G5	T5	4000	1250	10000	16	549	40
LFL-2060	5907758820605	21	230	G5	T5	4000	2100	10000	16	849	100
LFL-2061	5907758820612	28	230	G5	T5	4000	2700	10000	16	1149	100
LFL-2062	5907758820629	35	230	G5	T5	4000	3400	10000	16	1449	100
LFL-2124	5907758821244	54	230	G5	T5	4000	4400	10000	16	1149	40
LFL-2206	5907758822067	35	230	G5	T5	3000	3650	10000	16	1149	40
LFL-2201	5907758822012	54	230	G5	T5	3000	4450	10000	16	1149	40
LFL-2202	5907758822029	80	230	G5	T5	3000	6150	10000	16	1449	40



Three-band linear fluorescent lamps T8



- energy efficiency label A
- high luminous efficiency: up to 91 lm/W
- very good colour rendering index: 82 Ra
- covered with highly efficient luminophore
- can be used with luminaires equipped with traditional or electronic starter circuits

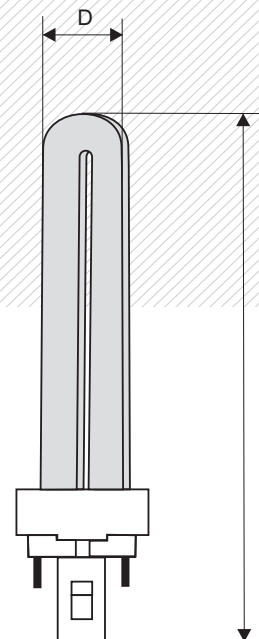
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
LFL-2280	5907758822807	18	230	G13	T8	4000	1300	15000	26	590	25
LFL-2281	5907758822814	30	230	G13	T8	4000	2350	15000	26	895	25
LFL-2282	5907758822821	36	230	G13	T8	4000	3250	15000	26	1197	25
LFL-2283	5907758822838	58	230	G13	T8	4000	5300	15000	26	1500	25
LFL-2349	5907758823491	18	230	G13	T8	6400	1300	15000	26	590	25
LFL-2350	5907758823507	36	230	G13	T8	6400	3250	15000	26	1197	25
LFL-2425	5907758824252	58	230	G13	T8	6400	5300	15000	26	1500	25



Non-integrated compact fluorescent lamps



Non-integrated 2 pin CFLs



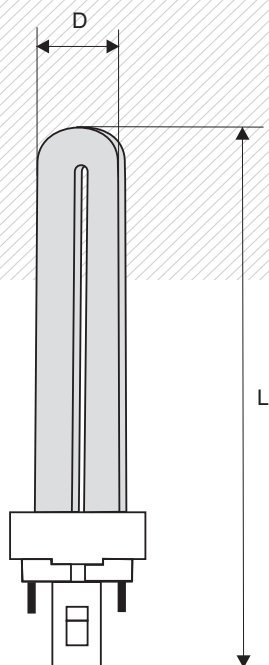
- stable luminous flux during whole lifespan
- high luminous efficiency: up to 69 lm/W
- very good colour rendering index: up to 80 Ra
- the lamp's casing incorporates a starter and a filter capacitor which diminishes interference on radio frequencies

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
NFL-2265	5907758822654	10	230	G24d-1	2U	4000	600	10000	27,5	117	50
NFL-2251	5907758822517	13	230	G24d-1	2U	4000	900	10000	27,5	147	50
NFL-2252	5907758822524	18	230	G24d-2	2U	4000	1200	10000	27,5	153	50
NFL-2208	5907758822081	18	230	G24d-2	2U	3000	1200	10000	27,5	153	50
NFL-2253	5907758822531	26	230	G24d-3	2U	4000	1700	10000	27,5	174	50
NFL-2209	5907758822098	26	230	G24d-3	2U	3000	1700	10000	27,5	174	50



Non-integrated 4 pin CFLs

Base types



- stable luminous flux during whole lifespan
- high luminous efficiency: up to 69 lm/W
- very good colour rendering index: up to 80 Ra
- an external electronic ballast is required

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
NFL-2267	5907758822678	10	230	G24q-1	2U	4000	600	10000	27,5	117	50
NFL-2254	5907758822548	18	230	G24q-2	2U	4000	1200	10000	27,5	153	50
NFL-2210	5907758822104	18	230	G24q-2	2U	3000	1200	10000	27,5	153	50
NFL-2255	5907758822555	26	230	G24q-3	2U	4000	1700	10000	27,5	174	50
NFL-2211	5907758822111	26	230	G24q-3	2U	3000	1700	10000	27,5	174	50

2 pin



G24d-1

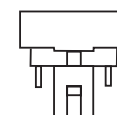


G24d-2

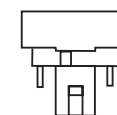


G24d-3

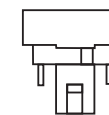
4 pin



G24q-1



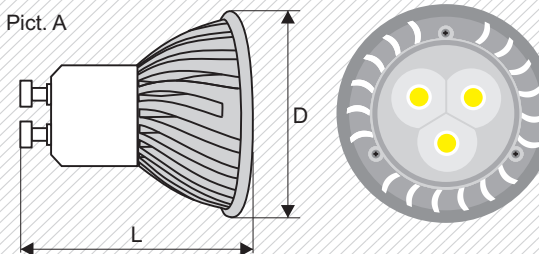
G24q-2



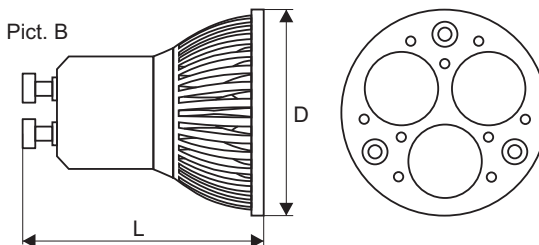
G24q-3

Reflector LED lamps

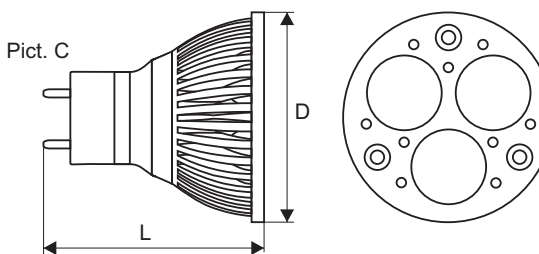
Pict. A



Pict. B



Pict. C



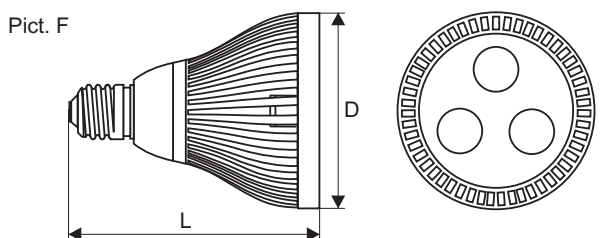
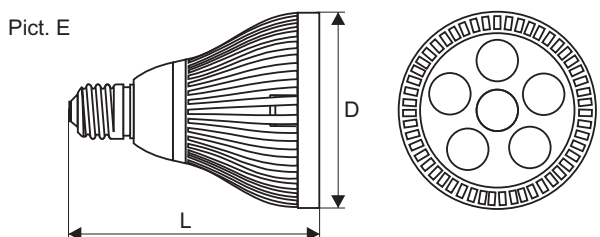
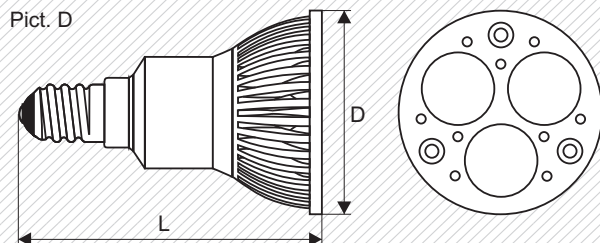
- ideal replacement for halogen lamps
- 25-times longer lifespan and at least 5-times lower power consumption compared to halogen lamps
- wide light beam angle: up to 65°
- very good colour rendering index: 80 Ra
- LED City lamps do not emit UV or IR radiation
- aesthetic, elegant design

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]		
LED-2426	5907758824269	4,5	230	Gu10	PAR16	3000	240	35000	50	50	A	60
LED-2187	5907758821879	6	230	Gu10	PAR16	3000	260	50000	49	55	B	10
LED-2191	5907758821916	6	12	Gu5,3	PAR16	3000	260	50000	49	46	C	10
LED-2192	5907758821923	6	12	Gu5,3	PAR16	6000	310	50000	49	46	C	10

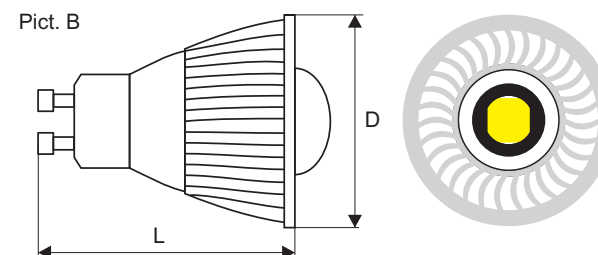
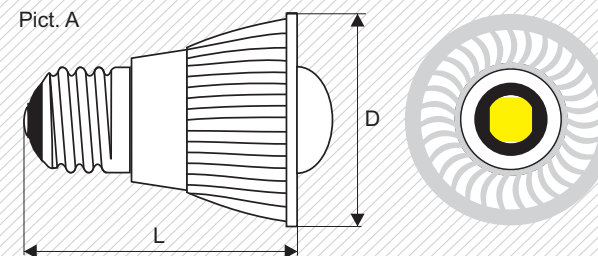


Reflector LED lamps

AC LED lamps



- ideal replacement for halogen lamps
- 25-times longer lifespan and at least 5-times lower power consumption compared to halogen lamps
- wide light beam angle: up to 65°
- very good colour rendering index: 80 Ra
- LED City lamps do not emit UV or IR radiation
- aesthetic, elegant design



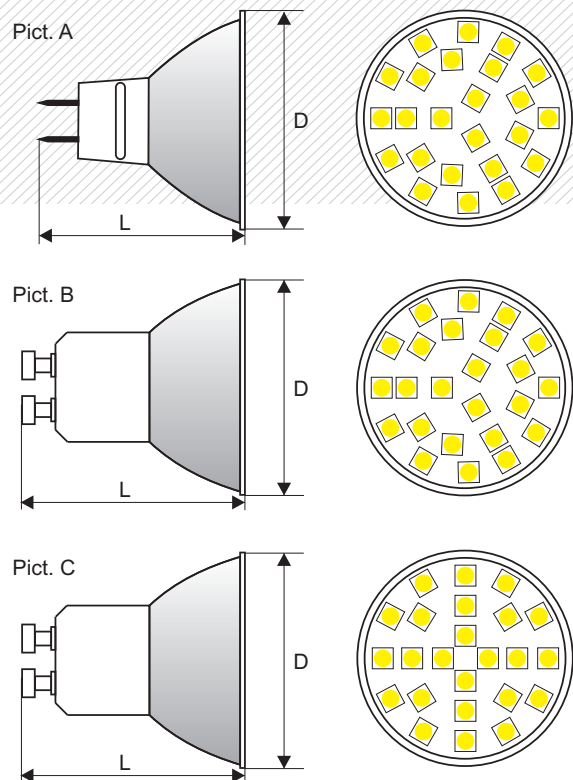
- ideal replacement for halogen lamps
- lamps are not equipped with a power supply which makes them less likely to fail and extends their lifespan
- lamps do not interfere with the power grid and the environment
- LED City lamps do not emit UV or IR radiation

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]					[pcs]
LED-2190	5907758821909	6	230	E14	PAR16	6000	310	50000	49	75	D	10
LED-2189	5907758821893	6	230	E14	PAR16	3000	260	50000	49	75	D	10
LED-2466	5907758824665	6	230	E27	PAR20	3000	260	35000	68	95	E	10
LED-2195	5907758821954	6	230	E27	PAR30	4000	500	50000	97	124	F	8

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]					[pcs]
LED-2360	5907758823606	4	230	E27	PAR16	3000	180	50000	50	69	A	32
LED-2361	5907758823613	4	230	Gu10	PAR16	3000	180	50000	50	59	B	32



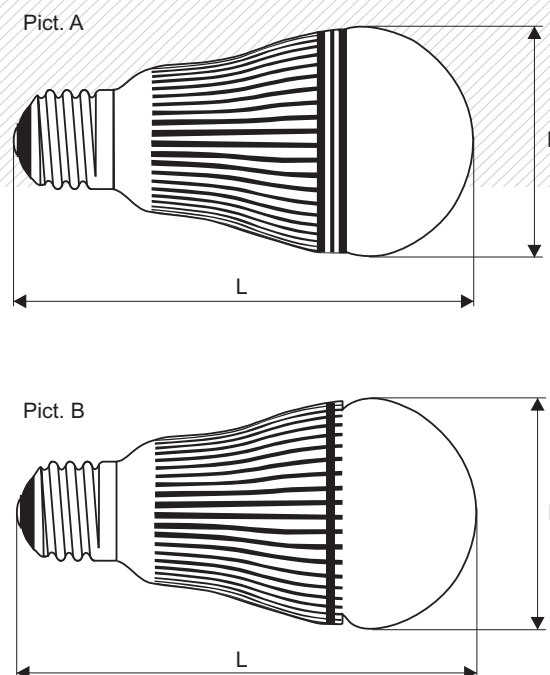
LED spot lamps



- replacement for halogen lamps
- 18-times longer lifespan and 16-times lower power consumption compared to halogen lamps
- wide light beam angle: up to 65°
- LED spot lamps do not emit UV or IR radiation
- lamps' chips are covered with a special insulating, UV and IR resistant paint

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]		[pcs]
LED-0021	5907758828236	3	230	Gu10	PAR16	3000	240	15000	50	56	C	10
LED-2483	5907758824832	3	230	Gu10	PAR16	3000	260	30000	50	54	B	20
LED-2484	5907758824849	3	230	Gu10	PAR16	6000	310	30000	50	54	B	20
LED-2485	5907758824856	3	12	Gu5,3	PAR16	3000	310	30000	50	46	A	20
LED-2486	5907758824863	3	12	Gu5,3	PAR16	6000	370	30000	50	46	A	20

Classic LED lamps



- ideal replacement for traditional bulbs - comparable luminous flux
- lamps consume far less energy than traditional bulbs
- light colour is consistent with man's day-time activity
- aesthetic bulb shape

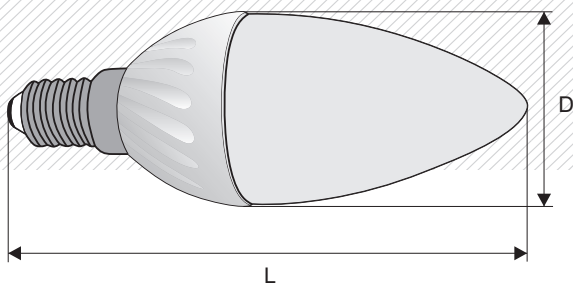
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]		[pcs]
LED-2465	5907758824658	9	230	E27	A70	3000	710	35000	70	130	A	10
LED-2701	5907758827222	12	230	E27	A60	3000	950	30000	63	125	B	18



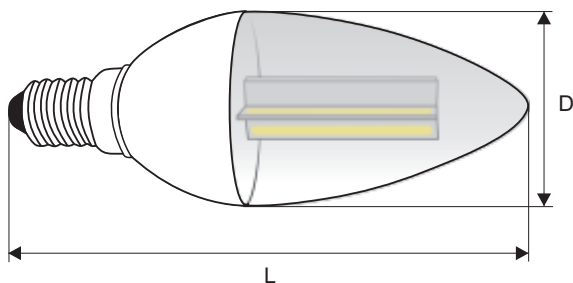
Candle LED lamps

G9 LED lamp

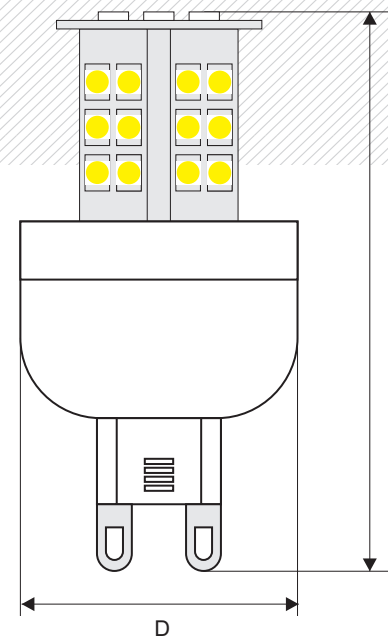
Pict. A



Pict. B



- ideal replacement for standard candle bulbs
- lamps consume less energy than incandescent lamps
- light colour resembles incandescent lamp
- built with efficient LEDs
- aesthetic bulb allows light scattering



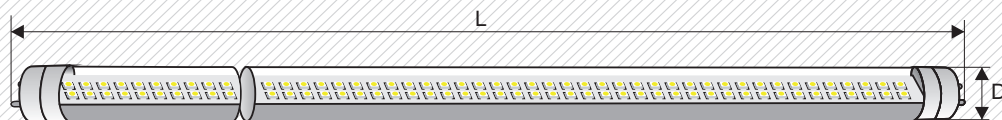
- replacement for halogen 50 W lamp
- 16-times lower power consumption compared to halogen lamps
- do not emit UV

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]		[pcs]
LED-0022	5907758828243	2,5	230	E14	C37	3000	230	15000	37	102	B	10
LED-0018	5907758827451	3,5	230	E14	B35	3000	250	50000	37	106	A	4

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]	
LED-2596	5907758826041	3	230	G9	tubular	3000	210	30000	31	65	20



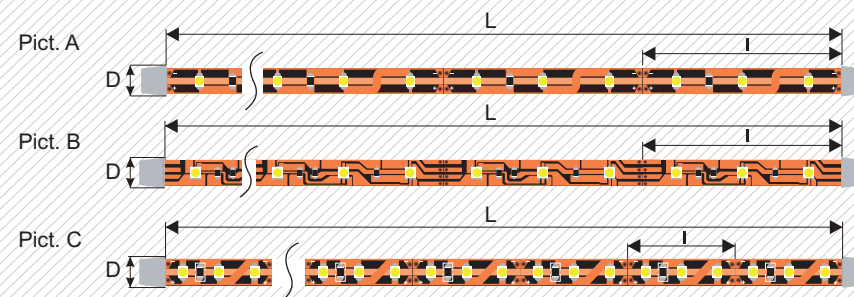
Linear T8 LED lamps



- replacement for linear fluorescent lamps
- lamps consume less energy than linear fluorescent lamps
- 3-times longer lifespan
- high luminous efficiency: up to 90 lm/W
- stable light guarantees better work comfort
- do not emit UV
- do not contain mercury - no need to utilize

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]	[pcs]
LED-2592	5907758825921	9	230	G13	T8	4000	800	35000	26	600	20
LED-2461	5907758824610	18	230	G13	T8	4000	1650	35000	26	1200	25

LED bars

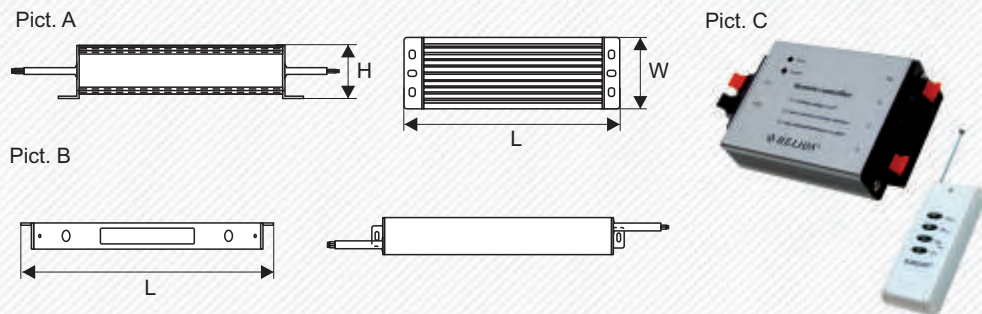


- available colours: warm white, white, blue, red, green and RGB
- two base types - white and amber
- 3M double-sided adhesive tape makes mounting fast and easy
- very low power consumption and high luminous efficiency
- IP65 protection class guarantees full protection against infiltration of dust and water
- silicone layer gives protection against sun rays and high temperatures
- may be used in low temperatures
- full palette of colours can be achieved with RGB bars

ID	EAN	wattage	voltage	number of LEDs	base	colour	protection class	D	L	I	picture	wholesale package
		[W]	[V]					[mm]	[mm]	[mm]		[pcs]
LED-2342	5907758823422	24	12	300	amber	white	IP65	8	5000	50	A	30
LED-2444	5907758824443	48	12	600	amber	white	IP55	8	5000	25	C	30
LED-2340	5907758823408	24	12	300	amber	warm white	IP65	8	5000	50	A	30
LED-2445	5907758824450	48	12	600	amber	warm white	IP55	8	5000	25	C	30
LED-2499	5907758824993	24	12	300	amber	yellow	IP65	8	5000	50	A	30
LED-2443	5907758824436	24	12	300	amber	green	IP65	8	5000	50	A	30
LED-2345	5907758823453	24	12	300	amber	red	IP65	8	5000	50	A	30
LED-2344	5907758823446	24	12	300	amber	blue	IP65	8	5000	50	A	30
LED-2347	5907758823477	72	12	300	amber	RGB	IP65	10	5000	50	B	30
LED-2603	5907758827123	72	12	300	white	RGB	IP65	10	5000	50	B	30



LED bar accessories



- can be used both indoors and outdoors
- the power supplies are high quality which extends the lifespan of LED bars
- the remote controller is used to set up RGB bars
- the controller's design ensures easier installation
- wireless system enables easy and convenient change of colours according to user's preferences
- the controller enables setting the LED bar to 11 function modes: automatic, sequential changing of 7 colours (red, green, blue, yellow, willow-green, pink, white), continuous change of 3 colours

ID	EAN	wattage	voltage	current	protection class	L	W	H	weight	picture	wholesale package
		[W]	[V]	[A]		[mm]	[mm]	[mm]	[g]		[pcs]
LED-2491	5907758824917	20	12	1,66	IP67	180	30	20	180	B	10
LED-2427	5907758824276	30	12	2,5	IP67	226	30	20	260	B	10
LED-2428	5907758824283	60	12	5	IP67	156	68	55	750	A	10
LED-2429	5907758824290	100	12	8,33	IP67	178	68	55	900	A	10
LED-2430	5907758824306	120	12	10	IP67	240	68	55	1200	A	10
LED-2492	5907758824924	150	12	12,5	IP67	240	68	55	1250	A	10
LED-2493	5907758824931	200	12	16,67	IP67	270	68	55	1350	A	10
LED-2371	5907758823712	180	12	-	IP67	85	36	17	144	C	1



LED bar accessories

Useful facts

- statistical LED's lifespan reaches 100 000 h in lab conditions
- LED's lifespan is shortened as a result of exposure to high temperatures, UV radiation or exceeding boundary control parameter values
- LEDs do not contain mercury which makes them much safer for natural environment than other technologies
- LED systems are much more power efficient than other technologies as they produce more light out of one watt of power
- LEDs can be dimmed either by pulse-width modulation or adjustment of LED current level

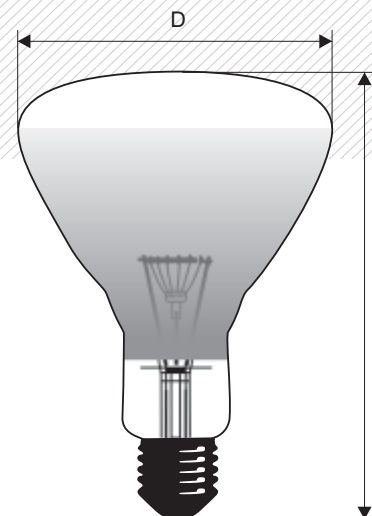
Choosing a power supply for a LED bar

The wattage of the power supply should be slightly higher than the maximum wattage of the LED bar.

Cutting method for LED bars

A LED bar should be cut at 10 cm intervals, in spots marked with white vertical strokes or in soldering points spaced every 50 cm. There are four soldering points in the cutting spots.

ECO infrared heat lamps - energy-efficient



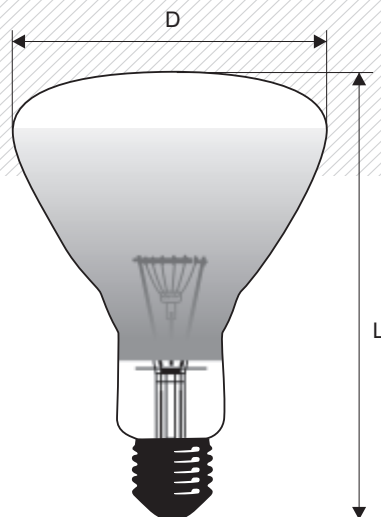
- due to lower power consumption 10% more energy is obtained
- thanks to double reflector lamps produce 15% more heat than standard heat lamps
- 50% longer lifespan (7 500 h) - the only ones on Polish market
- hard glass is more resistant to shock or splashing
- deep-working infrared radiation facilitates blood circulation, intensifies biochemical processes, metabolism, biological functions and tissue resistance

Infrared heat lamps

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]					[mm]	[mm]	
PRO-2388	5907758823880	130	230	E27	R123	clear	7500	123	170	20
PRO-2390	5907758823903	160	230	E27	R123	clear	7500	123	170	20
PRO-2337	5907758823378	225	230	E27	R123	clear	7500	123	170	20
PRO-2389	5907758823897	130	230	E27	R123	ruby	7500	123	170	20
PRO-2392	5907758823927	160	230	E27	R123	ruby	7500	123	170	20
PRO-2339	5907758823392	225	230	E27	R123	ruby	7500	123	170	20

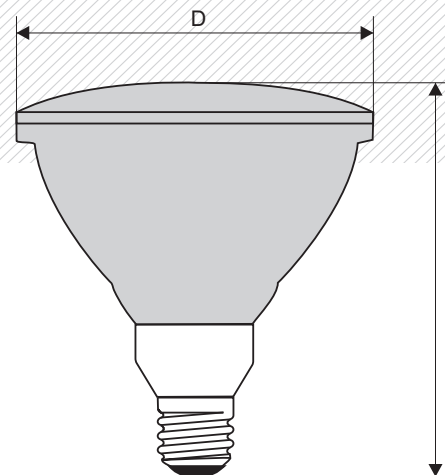


IR2 hard glass infrared heat lamps



- double reflectors enable more effective heating at the same power consumption level as standard lamps
- hard glass is more resistant to shock or splashing
- long lifespan: 5000 h
- deep-working infrared radiation facilitates blood circulation, intensifies biochemical processes, metabolism, biological functions and tissue resistance

PAR38 infrared heat lamps



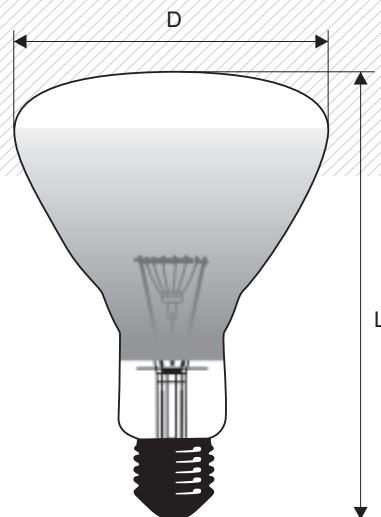
- thanks to the pressed glass technology the lamps are exceptionally resistant to mechanical damage or splashes of water
- strong connection between the base and the glass bulb
- deep-working infrared radiation facilitates blood circulation, intensifies biochemical processes, metabolism, biological functions and tissue resistance
- long lifespan: 5000 h

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
PRO-2083	5907758820834	125	230	E27	R123	clear	5000	123	170	20
PRO-2084	5907758820841	150	230	E27	R123	clear	5000	123	170	20
PRO-2085	5907758820858	175	230	E27	R123	clear	5000	123	170	20
PRO-2086	5907758820865	250	230	E27	R123	clear	5000	123	170	20
PRO-1877	5907758818770	375	230	E27	R123	clear	5000	123	170	20
PRO-1881	5907758818817	375	230	E40	R123	clear	5000	123	170	20
PRO-2087	5907758820872	150	230	E27	R123	ruby	5000	123	170	20
PRO-2032	5907758820322	175	230	E27	R123	ruby	5000	123	170	20
PRO-2089	5907758820896	250	230	E27	R123	ruby	5000	123	170	20

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
PRO-2183	5907758821831	100	230	E27	PAR38	clear	5000	122	133	12
PRO-2185	5907758821855	175	230	E27	PAR38	clear	5000	122	133	12
PRO-2184	5907758821848	100	230	E27	PAR38	ruby	5000	122	133	12
PRO-2186	5907758821862	175	230	E27	PAR38	ruby	5000	122	133	12

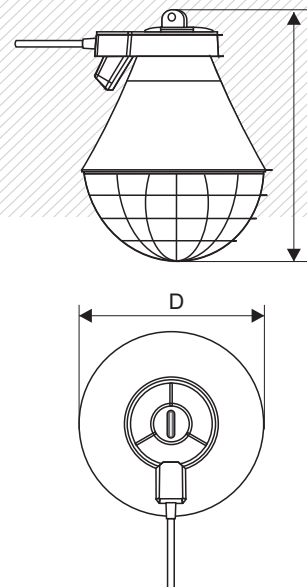


IR1 soft glass infrared heat lamps



- double reflectors enable more effective heating at the same power consumption level as standard lamps
- they provide sun-like thermal comfort
- excellent energy source in chicken or pig stockbreeding
- widely used in food processing industry, coating industry, printing or leather industry
- long lifespan: 5000 h

Luminaires for infrared heat lamps

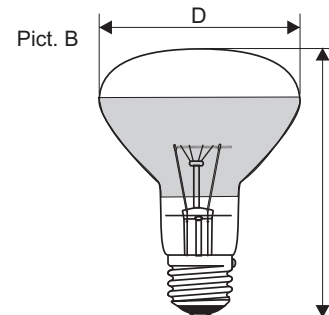
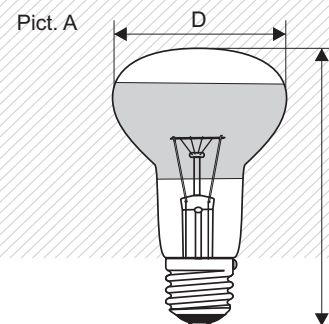


- designed to work continuously with infrared heat lamps of any wattage up to 250 W
- IPX4 class - positive opinion from the Electrotechnical Institute in Warsaw
- they protect animals against direct exposure to hot lamps
- the luminaires with a switch enables reducing the wattage of the heat lamp by 40%

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
PRO-2007	5907758820070	125	230	E27	R123	clear	5000	123	170	20
PRO-1862	5907758818626	150	230	E27	R123	clear	5000	123	170	20
PRO-1988	5907758819883	175	230	E27	R123	clear	5000	123	170	20
PRO-1384	5907758813843	250	230	E27	R123	clear	5000	123	170	20
PRO-1073	5907758810736	125	230	E27	R125	clear	3000	125	165	24
PRO-1137	5907758811375	150	230	E27	R125	clear	3000	125	165	24
PRO-1104	5907758811047	175	230	E27	R125	clear	3000	125	165	24
PRO-1190	5907758811900	250	230	E40	R125	clear	3000	125	165	24
PRO-1960	5907758819609	150	230	E27	R123	ruby	5000	123	170	20
PRO-1895	5907758818954	175	230	E27	R123	ruby	5000	123	170	20
PRO-2109	5907758820100	250	230	E27	R123	ruby	5000	123	170	20

ID	EAN	voltage	protection class	maximum heat lamp wattage	switch	D	L	weight
		[V]				[mm]	[mm]	[g]
OPR-2256	5907758822562	230	IPX4	250	-	217	315	700
OPR-2155	5907758821558	230	IPX4	250	+	217	315	700
OPR-2424	5907758824245	230	IPX4	250	-	217	315	800
OPR-2423	5907758824238	230	IPX4	250	+	217	315	800

Infrared heat lamps with small bulb diameter



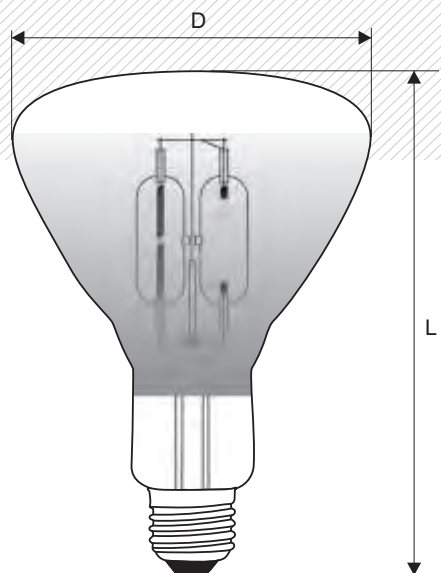
- indispensable in poultry breeding and terrarium keeping
- compact size enables its usage in small terrariums
- homogeneously coloured ruby glass
- guaranteed longevity of colour
- even distribution of IR radiation

ID	EAN	wattage	voltage	base	bulb	lifespan	D		L	picture	wholesale package
		[W]	[V]				[mm]	[mm]			
PRO-0578	5907758805787	50	230	E27	R63	clear	3000	63	102	A	20
PRO-1640	5907758816400	50	230	E27	R80	clear	3000	80	115	B	30
PRO-0406	5907758804063	75	230	E27	R80	clear	3000	80	115	B	30
PRO-1523	5907758815236	100	230	E27	R80	clear	3000	80	115	B	20
PRO-0580	5907758805800	50	230	E27	R63	ruby	3000	63	102	A	20
PRO-1132	5907758811320	50	230	E27	R80	ruby	3000	80	115	B	30
PRO-1466	5907758814666	75	230	E27	R80	ruby	3000	80	115	B	20
PRO-1465	5907758814659	100	230	E27	R80	ruby	3000	80	115	B	20
PRO-0694	5907758806944	150	230	E27	R95	ruby	3000	95	127	B	30

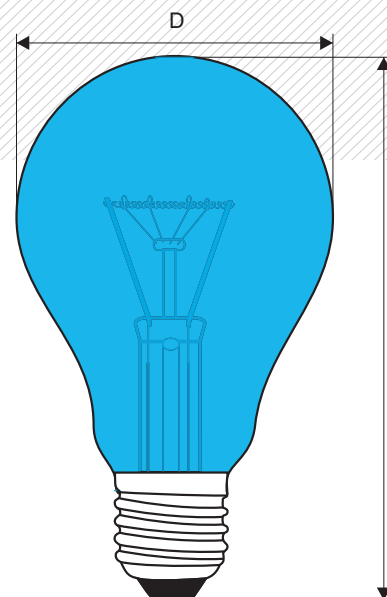


UV lamps

Daylight bulbs



- perfect imitation of sun rays' effect - "home artificial sun"
- high intensity of UVA and UVB radiation as well as IR radiation
- indispensable in professional and amateur terrarium keeping
- can be used in beauty salons and rehabilitation medicine
- long lifespan: up to 1000 h



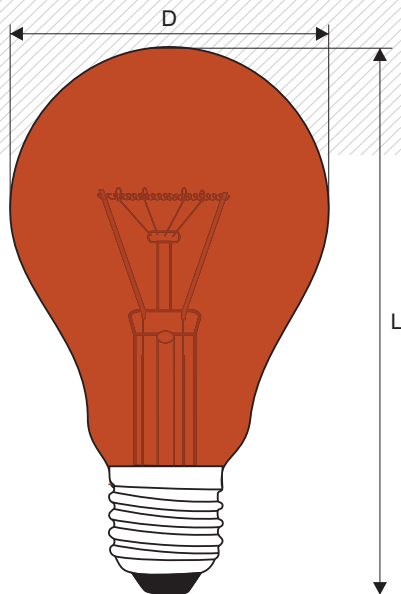
- used in breeding reptiles and amphibians, especially the diurnal species
- eye-friendly light colour
- recommended for reading rooms, libraries, archives and workplaces
- homogeneously coloured glass - guaranteed longevity of colour
- 3-times longer lifespan compared to standard bulb

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
PRO-2278	5907758822784	160	230	E27	R123	satin	3000	123	170	20

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
DZI-0754	5907758807545	40	230	E27	A60	blue	3000	60	105	20
DZI-0719	5907758804194	60	230	E27	A60	blue	3000	60	105	20
DZI-0728	5907758807286	100	230	E27	A60	blue	3000	60	105	20



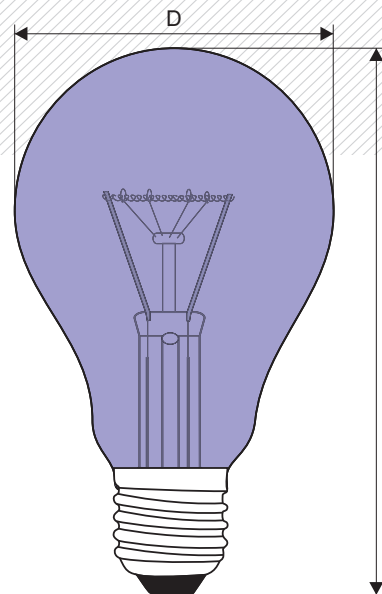
Night light bulbs



- used in breeding reptiles and amphibians, especially the nocturnal species
- homogeneously coloured glass - guaranteed longevity of colour
- brass base makes it easy to replace and is more resistant to the environment
- 3-times longer lifespan compared to standard bulb



Neodymium light bulbs



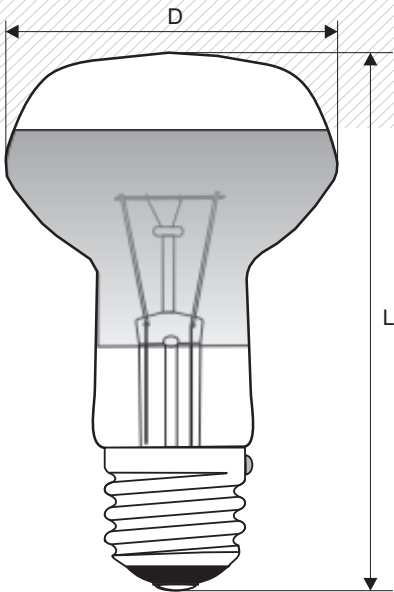
- light colour perfectly accentuates the intensity of plants' or exhibits' colours
- recommended for botanical gardens, zoos and garden conservatories
- homogeneously coloured glass - guaranteed longevity of colour

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
NOC-2029	5907758820292	40	230	E27	A60	ruby	3000	60	105	20
NOC-2030	5907758820308	60	230	E27	A60	ruby	3000	60	105	20
NOC-2031	5907758820315	100	230	E27	A68	ruby	3000	68	118	20

ID	EAN	wattage	voltage	base	bulb		lifespan	D	L	wholesale package
		[W]	[V]				[h]	[mm]	[mm]	[pcs]
NEO-2104	5907758821046	40	230	E27	A60	neodymium	3000	60	106	20
NEO-2082	5907758820827	100	230	E27	A60	neodymium	3000	60	106	20



SPOT reflector light bulbs



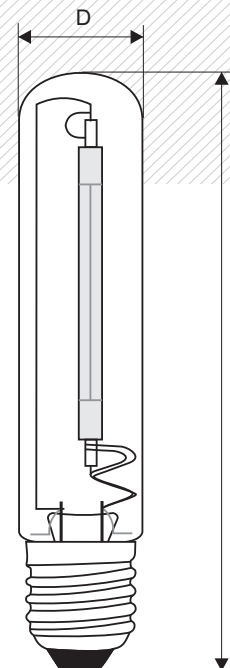
- very good colour rendering index: up to 100 Ra
- thanks to special bulb shape the reflector allows "double" reflection of the emitted light
- more effective, focused lighting of the terrarium

ID	EAN	wattage	voltage	base	bulb	luminous intensity	lifespan	D	L	wholesale package
		[W]	[V]			[Cd]				
REF-2102	5907758821022	60	230	E27	R63	550	1000	63	104	20
REF-2107	5907758821077	60	230	E27	R80	500	1000	80	116	20
REF-2106	5907758821060	75	230	E27	R80	900	1000	80	116	20
REF-2093	5907758820933	100	230	E27	R80	1200	1000	80	116	20



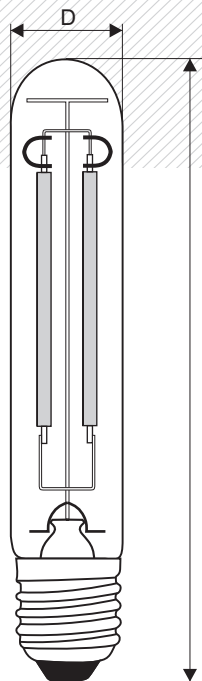


WLS City high performance HPS lamps



- thanks to their improved design WLS City lamps have 18% higher luminous flux than standard sodium lamps
- 15% longer lifespan compared to standard sodium lamps
- designed to operate in any position
- very good price-quality ratio
- can be re-started quicker than MTH and LRF lamps (about 1 minute)
- can only be used with luminaires of corresponding wattage containing electrical gear (series-parallel igniter 3,5-4,5 kV and electronic or magnetic ballast) dedicated to high-pressure sodium vapour lamps

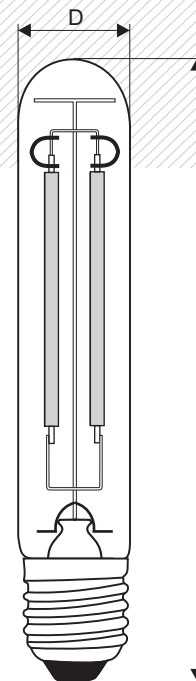
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]	[pcs]
WLS-2367	5907758825549	50	230	E27	T38	2000	4400	24000	39	156	12
WLS-2273	5907758822739	70	230	E27	T38	2000	6600	29000	39	156	12
WLS-2274	5907758822746	100	230	E40	T46	2000	10700	33000	47	210	12
WLS-2127	5907758821275	150	230	E40	T46	2000	17500	33000	47	210	12
WLS-2128	5907758821282	250	230	E40	T46	2000	33200	33000	47	257	12
WLS-2129	5907758821299	400	230	E40	T46	2000	56500	33000	47	285	12

WLS DJ City high performance
double-arc HPS lamps

- thanks to its double-arc the lamps' lifespan is 60% longer compared to standard sodium lamps
- designed to operate in any position
- can only be used with luminaires of corresponding wattage containing electrical gear (series-parallel igniter 3,5-4,5 kV and electronic or magnetic ballast) dedicated to high-pressure sodium vapour lamps



WLS DJ double-arc HPS lamps*

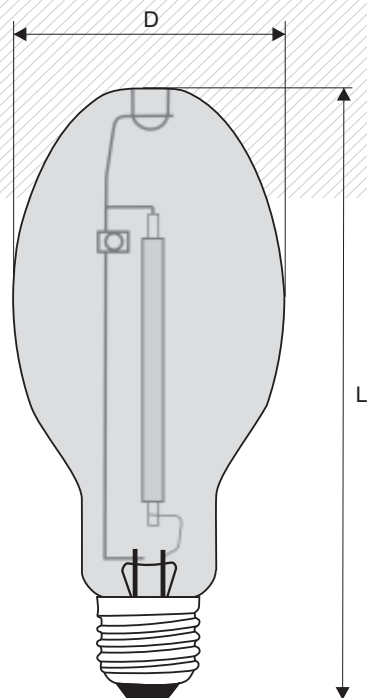


- thanks to its double-arc the lamps' lifespan is 60% longer compared to standard sodium lamps
- can be used with luminaires dedicated to standard sodium lamps
- designed to operate in any position
- very good price-quality ratio
- can only be used with luminaires of corresponding wattage containing electrical gear (series-parallel igniter 3,5-4,5 kV and electronic or magnetic ballast) dedicated to high-pressure sodium vapour lamps

* According to Stage IIa of Regulation (WE) No 245/2009 standard high-pressure sodium lamps and high-pressure double-arc sodium lamps are available only to oversold stocks.

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
WLS-0007	5907758827017	70	230	E27	T38	2000	6600	56000	39	156	12
WLS-0001	5907758827024	100	230	E40	T46	2000	10700	64000	47	210	12
WLS-0002	5907758827031	150	230	E40	T46	2000	17500	64000	47	210	12
WLS-0008	5907758827048	250	230	E40	T46	2000	33200	64000	47	257	12
WLS-0009	5907758827055	400	230	E40	T46	2000	56500	64000	47	285	12

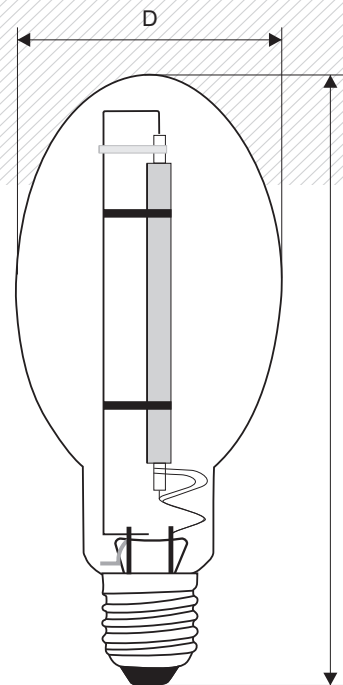
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
WLS-2362	5907758823620	70	230	E27	T38	2000	6000	45000	39	156	12
WLS-2366	5907758823668	400	230	E27	T46	2000	48000	45000	47	285	12

High-pressure sodium vapor lamps
with internal ignitor WLSP

- energy-saving replacement for traditional mercury vapor lamps
- better luminous flux and less power consumption than mercury vapor lamps
- thanks to the internal starter they can be used with luminaires dedicated to LRF lamps
- designed to operate in any position
- very good price-quality ratio



High-pressure sodium vapor lamps WLS*



- 15% more light with 40% less energy consumption
- designed to operate in any position
- very good price-quality ratio
- pleasantly warm white-golden light colour (2000 K)

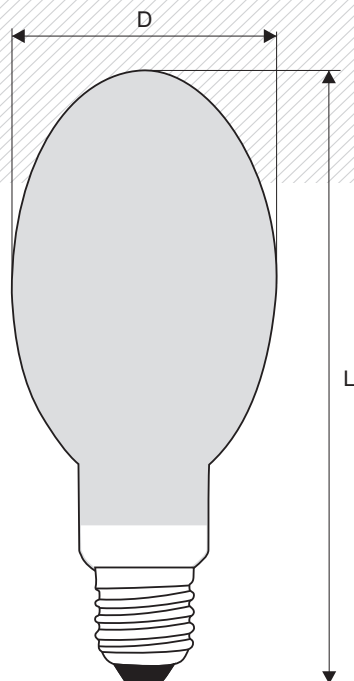
* According to Stage IIa of Regulation (WE) No 245/2009 standard high-pressure sodium lamps and high-pressure double-arc sodium lamps are available only to oversold stocks.

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
WLS-2218	5907758822180	70	230	E27	ED70	2000	5600	18000	71	155	24
WLS-2095	5907758820957	110	230	E27	ED75	2000	8000	9000	76	186	24
WLS-2096	5907758820964	210	230	E40	ED90	2000	18000	9000	91	227	12
WLS-2219	5907758822197	350	230	E40	ED120	2000	34000	11000	122	292	6

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
WLS-2019	5907758820193	70	230	E27	E70	2000	6000	25000	71	155	24

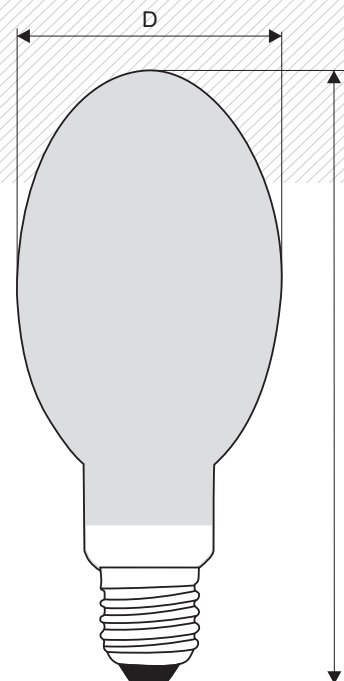


High-pressure mercury vapor lamps LRF



- short ignition time
- designed to operate in any position
- very good price-quality ratio

High-pressure blended-light mercury lamps MIX



- more energy-efficient than standard bulbs
- more efficient and durable than high wattage bulbs
- very good price-quality ratio

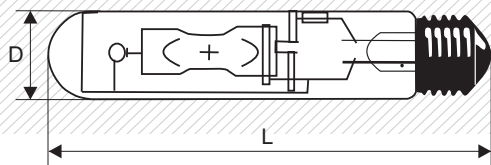
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
LRF-2553	5907758825532	80	230	E27	ED70	4000	3600	11000	71	155	24
LRF-2016	5907758820162	125	230	E27	ED75	4000	6700	11000	76	173	24
LRF-2017	5907758820179	250	230	E40	ED90	4000	13000	11000	91	230	12
LRF-2018	5907758820186	400	230	E40	ED120	4000	23000	11000	122	285	6

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				
MIX-2026	5907758820261	160	230	E27	ED75	3600	3200	11000	76	173	24
MIX-2027	5907758820278	250	230	E40	ED90	3600	5500	10000	91	230	12
MIX-2117	5907758821176	500	230	E40	ED120	3600	13000	10000	122	285	6

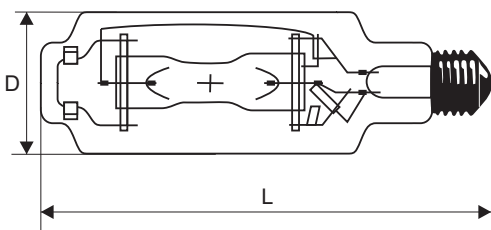


High-pressure metal halide lamps MTH

Pict. A



Pict. B



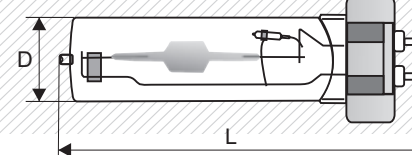
- emit natural white light which enables very good colour distinction
- very high luminous efficacy in comparison with LRF lamps
- it has to be remembered that operating position influences on the colour of emitted light and the lifespan of lamps
- very good price-quality ratio
- can only be used with luminaires of corresponding wattage containing electrical gear (series-parallel igniter 3,5-4,5 kV and electronic or magnetic ballast) dedicated to high-pressure metal halide lamps

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]					[pcs]
MTH-2284	5907758822845	70	230	E27	T38	4000	6000	16000	39	175	A	12
MTH-2285	5907758822852	100	230	E27	T38	4000	9000	16000	39	175	A	12
MTH-2286	5907758822869	150	230	E27	T38	4000	13500	16000	39	175	A	12
MTH-2249	5907758822494	150	230	E40	T46	4000	13500	16000	47	211	A	12
MTH-2287	5907758822876	250	230	E40	T46	4000	21000	16000	47	255	A	12
MTH-2288	5907758822883	400	230	E40	T46	4000	36000	16000	47	285	A	12
MTH-2120	5907758821206	150	230	E27	T38	4000	14000	10000	38	180	A	12
MTH-2338	5907758823385	1000	230	E40	TT76	4000	80000	12000	77	340	B	6

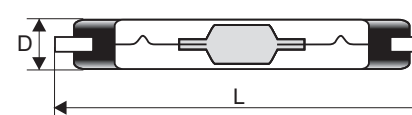


High-pressure ceramic metal halide lamps CLMT

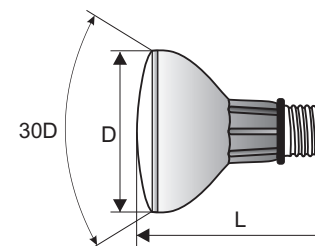
Pict. A



Pict. B



Pict. C

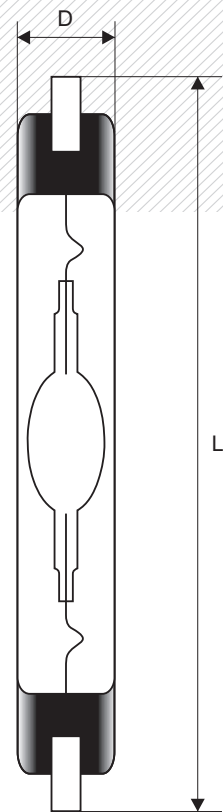


- emit natural white light which enables very good colour distinction
- very high luminous efficiency
- small dimensions
- better stability and repeatability of light colour in comparison with quartz lamps (there's only minimal reaction of the ceramic arc-tube with the glass)
- 20% better luminous efficacy in comparison with quartz metal halide lamps
- ceramic glass guarantees better shield from the harmful UV radiation
- luminous flux is up to 20% higher than quartz lamps and 80% of the flux is upheld throughout the lamp's lifespan
- very good price-quality ratio
- can only be used with luminaires of corresponding wattage containing electrical gear (series-parallel igniter 3,5-4,5 kV and electronic or magnetic ballast) dedicated to high-pressure metal halide lamps

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	luminous intensity	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[Cd]					[pcs]
CLM-2212	5907758822128	35	230	G12	T20	3000	3300	-	12000	19	100	A	12
CLM-2213	5907758822135	70	230	G12	T20	3000	6600	-	12000	19	102	A	12
CLM-2214	5907758822142	70	230	G12	T20	4000	6600	-	12000	19	102	A	12
CLM-2270	5907758822708	150	230	G12	T20	4000	13100	-	12000	19	105	A	12
CLM-2356	5907758823569	70	230	Rx7s	T19CL	4000	6500	-	15000	19	117,5	B	40
CLM-2357	5907758823576	150	230	Rx7s	T23CL	4000	14000	-	15000	23	135,5	B	40
CLM-2126	5907758821268	35	230	E27	PAR20	4000	-	5000	12000	64	92	C	12
CLM-2215	5907758822159	35	230	E27	PAR20	3000	-	5000	12000	64	92	C	12
CLM-2271	5907758822715	70	230	E27	PAR30	3000	-	13500	12000	95	120	C	12
CLM-2272	5907758822722	70	230	E27	PAR30	4000	-	13000	12000	95	120	C	12



High-pressure quartz metal halide lamps CLMT

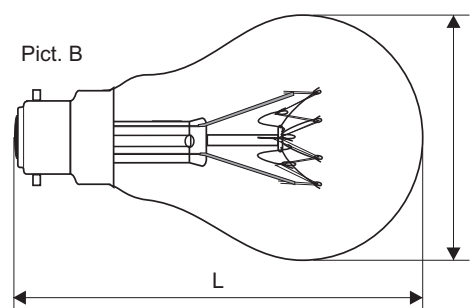
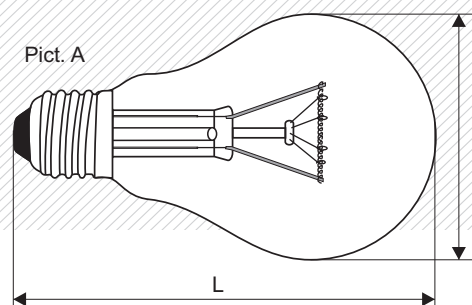


- emit natural white light which enables very good colour distinction
- very high luminous efficacy in comparison with LRF lamps
- it has to be remembered that operating position influences on the colour of emitted light and the lifespan of lamps
- very good price-quality ratio
- can only be used with luminaires of corresponding wattage containing electrical gear (series-parallel igniter 3,5-4,5 kV and electronic or magnetic ballast) dedicated to high-pressure metal halide lamps

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]				[pcs]
KLM-2457	5907758824573	70	230	R7s	T19CL	4000	5500	10000	19	117,5	40
KLM-2458	5907758824580	150	230	R7s	T23CL	4000	14500	10000	23	135,5	40



Shockproof light bulbs



- extremely shockproof thanks to reinforced filament
- can be used in extreme conditions
- thanks to increased number of filament supports (7 supports) ther lifespan reaches 2 500 h

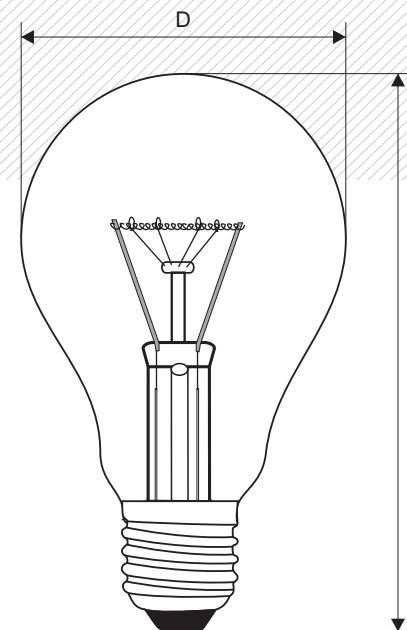
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]				[pcs]
WST-1544	5907758815441	40	230	E27	A60CL	2700	320	2500	60	105	A	100
WST-0657	5907758806579	75	230	E27	A60CL	2700	750	2500	60	105	A	100
WST-1231	5907758812310	100	230	E27	A60CL	2700	1025	2500	60	105	A	100
WST-2099	5907758820995	150	230	E27	A65CL	2700	1760	2000	66	115	A	96
WST-0351	5907758803516	200	230	E27	A80CL	2700	2500	2500	81	140	A	50
WST-0480	5907758804803	40	230	B22	A60CL	2700	320	2500	60	105	B	100
WST-1592	5907758815922	60	230	B22	A60CL	2700	510	2500	60	105	B	100
WST-2114	5907758821145	75	230	B22	A60CL	2700	750	2500	60	105	B	100
WST-1230	5907758812303	100	230	B22	A60CL	2700	1025	2500	60	105	B	100



Shockproof light bulbs

Corridor light bulbs

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]		[mm]	[mm]		[pcs]
WST-1602	5907758816028	40	230	E27	A60MT	2700	320	2500	60	105	A	100
WST-1189	5907758811894	60	230	E27	A60MT	2700	510	2500	60	105	A	100
WST-2248	5907758822487	75	230	E27	A60MT	2700	750	2500	60	105	A	100
WST-0882	5907758808825	100	230	E27	A60MT	2700	1025	2500	60	105	A	100
WST-1083	5907758810835	60	240	E27	A60CL	2700	500	2500	60	105	A	100
WST-2282	5907758804704	40	110	E27	A60CL	2700	350	2500	60	105	A	100
WST-2283	5907758827147	40	110	B22	A60CL	2700	350	1000	60	105	B	100
WST-2284	5907758827154	60	110	E27	A60CL	2700	540	2500	60	105	A	100
WST-1930	5907758819302	75	110	E27	A60CL	2700	850	2500	60	105	A	100
WST-0478	5907758804780	100	110	E27	A60CL	2700	1100	2500	60	105	A	100
WST-2600	5907758826003	40	127	E27	A60CL	2700	335	2500	60	105	A	100
WST-2601	5907758826010	60	127	E27	A60CL	2700	530	2500	60	105	A	100
WST-2602	5907758826027	75	127	E27	A60CL	2700	840	2500	60	105	A	100
WST-2603	5907758826034	100	127	E27	A60CL	2700	1090	2500	60	105	A	100
WST-0474	5907758804742	60	150	E27	A60CL	2700	475	2500	60	105	A	100
WST-0476	5907758804766	60	150	B22	A60CL	2700	475	2500	60	105	B	100
WST-0566	5907758805664	75	150	E27	A60CL	2700	800	2500	60	105	A	100
WST-0477	5907758804773	100	150	E27	A60CL	2700	1050	2500	60	105	A	100
WST-0494	5907758804940	40	280	E27	A60CL	2700	240	1000	60	105	A	100
WST-0498	5907758804988	60	280	E27	A60CL	2700	440	1000	60	105	A	100
WST-0501	5907758805015	100	280	E27	A60CL	2700	1100	1000	60	105	A	100
WST-0496	5907758804964	40	280	B22	A60CL	2700	240	1000	60	105	B	100
WST-0500	5907758805008	60	280	B22	A60CL	2700	440	1000	60	105	B	100
WST-0502	5907758805022	100	280	B22	A60CL	2700	1100	1000	60	105	B	100



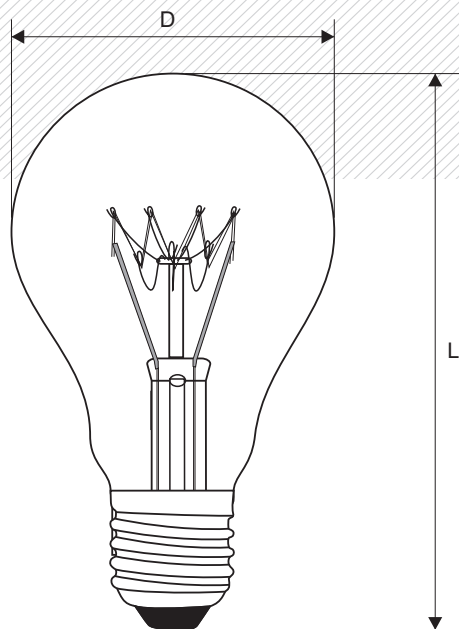
- 4-times longer lifespan than standard bulbs ensures optimized maintenance costs
- easy to mount in all kinds of luminaires
- designed to operate in any position

ID	EAN	wattage	voltage	base*	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]		[mm]	[mm]	
SCH-1561	5907758815618	25	230	E27	A60CL	2700	180	4000	60	105	100
SCH-1560	5907758815601	40	230	E27	A60CL	2700	300	4000	60	105	100

* It is possible to produce bulbs with base type B22.



Elevator light bulbs



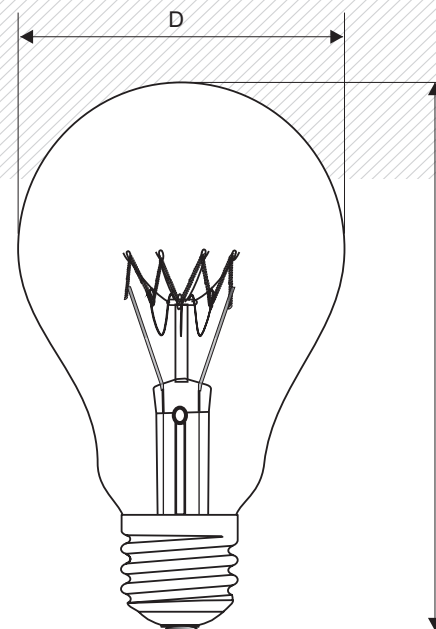
- 8-times longer lifespan than standard lamps allows limiting the number of maintenance replacements
- they ensure longevity and reliability of lighting in all kinds of elevators

ID	EAN	wattage	voltage	base*	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]	[pcs]
DZW-1562	5907758815625	25	230	E27	A60CL	2700	150	4000	60	105	100
DZW-1548	5907758815489	40	230	E27	A60CL	2700	170	8000	60	105	100
DZW-1563	5907758815632	60	230	E27	A60CL	2700	340	8000	60	105	100

* It is possible to produce bulbs with base type B22.



Standard traffic signal light bulbs

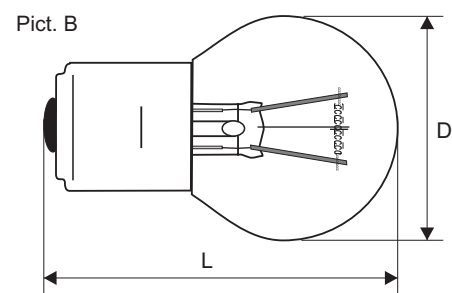
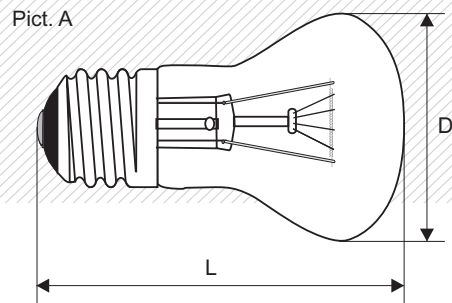


- can be used with traffic signal devices equipped with fitting for E27 base
- thanks to reinforced filament with 7 supports they ensure reliable functioning on intersections where intensive vibrations occur

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]	[pcs]
ULI-0655	5907758806555	60	230	E27	A60CL	2700	500	3000	60	105	100
ULI-1420	5907758814208	75	230	E27	A60CL	2700	700	3000	60	105	100
ULI-1233	5907758812334	100	230	E27	A60CL	2700	1000	3000	60	105	100
ULI-0429	5907758804292	60	235	E27	A60CL	2700	400	8000	60	105	100
ULI-0491	5907758804919	75	235	E27	A60CL	2700	510	8000	60	105	100
ULI-1417	5907758814178	100	235	E27	A60CL	2700	750	8000	60	105	100



High-performance traffic signal light bulbs

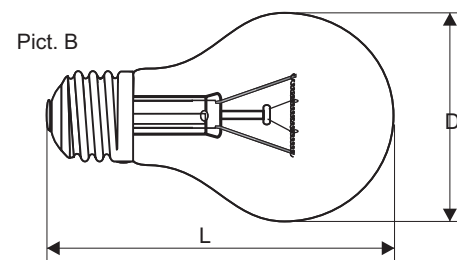
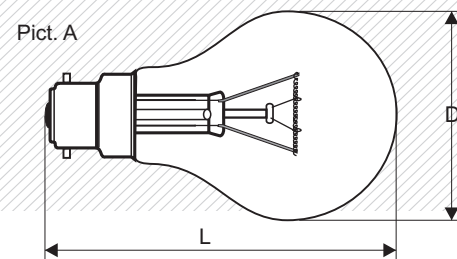


- thanks to reinforced filament and krypton filling their lifespan is 25% longer
- thanks to reinforced filament with 7 supports they ensure reliable functioning on intersections where intensive vibrations occur
- can be used with traffic signal devices equipped with fitting for E27 or B22s base

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]					[pcs]
ULI-1600	5907758816004	60	235	E27	E50CL	2700	400	8000	50	88	A	200
ULI-0005	5907758827550	40	235	E27	E55CL	2700	240	10000	55	88	A	192
ULI-0006	5907758827567	60	235	E27	E55CL	2700	430	10000	55	88	A	192
ULI-0003	5907758827499	75	235	E27	E55CL	2700	600	10000	55	88	A	192
ULI-0004	5907758827505	100	235	E27	E55CL	2700	780	10000	55	88	A	192
ULI-1431	5907758814314	20	10	Ba20s	A35CL	2700	270	8000	35	67	B	180
ULI-1432	5907758814321	30	10	Ba20s	A35CL	2700	400	8000	35	67	B	180



Standardized light bulbs*



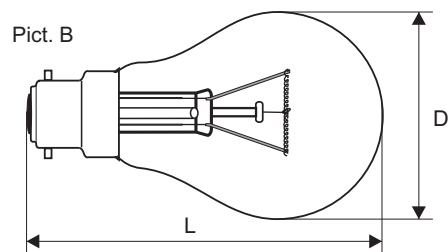
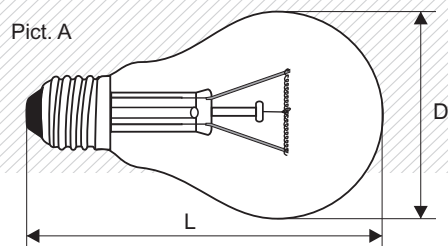
- for industrial use or for custom electrical circuits
- available in 3 voltage versions and 2 base types
- designed to operate in any position

*Bulbs available only until stocks are exhausted. After that they will only be offered in shockproof version.

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]					[pcs]
GLS-0328	5907758803288	25	230	B22	A60CL	2700	230	1000	60	106	A	100
GLS-0333	5907758803332	40	230	B22	A60CL	2700	415	1000	60	106	A	100
GLS-0345	5907758803455	75	230	B22	A60CL	2700	940	1000	60	106	A	100
GLS-0348	5907758803486	100	230	B22	A60CL	2700	1340	1000	60	106	A	100
GLS-1085	5907758810859	25	110	B22	A60CL	2700	225	1000	60	106	A	100
GLS-0418	5907758804186	40	110	B22	A60CL	2700	445	1000	60	106	A	100
GLS-0420	5907758804209	60	110	B22	A60CL	2700	770	1000	60	106	A	100
GLS-0417	5907758804179	25	110	E27	A60CL	2700	225	1000	60	106	B	100
GLS-0425	5907758804254	100	110	E27	A60CL	2700	1420	1000	60	106	B	100
GLS-0407	5907758804070	25	127	E27	A60CL	2700	220	1000	60	106	B	100
GLS-0414	5907758804148	40	127	E27	A60CL	2700	435	1000	60	106	B	100
GLS-0413	5907758804131	60	127	E27	A60CL	2700	760	1000	60	106	B	100
GLS-0408	5907758804087	75	127	E27	A60CL	2700	1070	1000	60	106	B	100



Low-voltage light bulbs

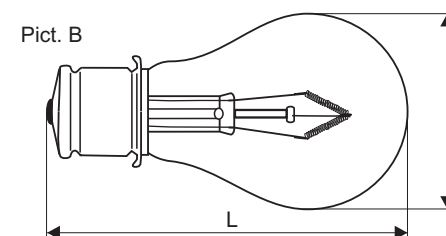
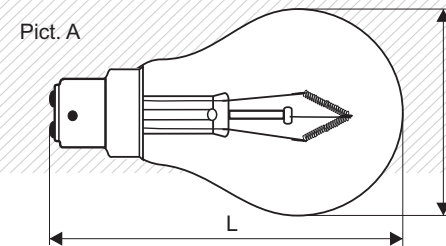


- can be used in places where safe voltage is required
- very good quality of product - made in Poland
- thanks to reinforced filament the bulb is shockproof

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]		[pcs]
NIS-1715	5907758817155	25	24	E27	A60CL	2700	335	1000	60	105	A	100
NIS-1606	5907758816066	40	24	E27	A60CL	2700	580	1000	60	105	A	100
NIS-1605	5907758816059	60	24	E27	A60CL	2700	1000	1000	60	105	A	100
NIS-2052	5907758820520	75	24	E27	A60CL	2700	1300	1000	60	105	A	100
NIS-1627	5907758816271	100	24	E27	A60CL	2700	1820	1000	60	105	A	100
NIS-1928	5907758819289	25	24	B22	A60CL	2700	335	1000	60	105	B	100
NIS-0533	5907758805336	40	24	B22	A60CL	2700	580	1000	60	105	B	100
NIS-0536	5907758805367	60	24	B22	A60CL	2700	1000	1000	60	105	B	100
NIS-0543	5907758805435	100	24	B22	A60CL	2700	1820	1000	60	105	B	100
NIS-0549	5907758805497	40	42	E27	A60CL	2700	550	1000	60	105	A	100
NIS-0550	5907758805503	60	42	E27	A60CL	2700	950	1000	60	105	A	100
NIS-0553	5907758805534	100	42	E27	A60CL	2700	1780	1000	60	105	A	96
NIS-0548	5907758805480	40	42	B22	A60CL	2700	550	1000	60	105	B	100
NIS-0560	5907758805602	60	60	E27	A60CL	2700	750	1000	60	105	A	50



Locomotive headlight light bulbs

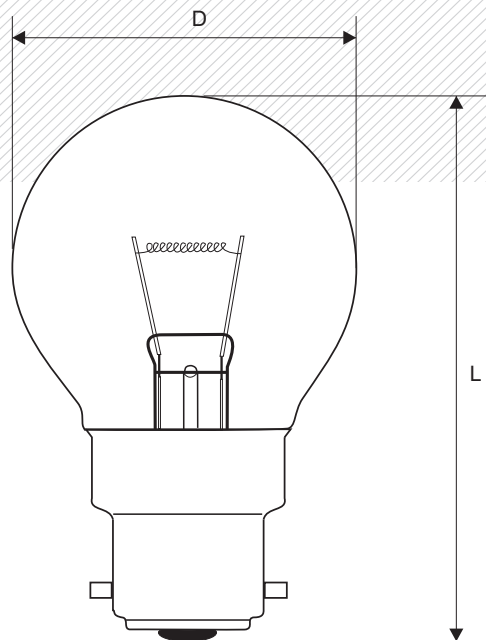


- shockproof filament guarantees longer lifespan
- made in compliance with Polish State Railways requirements

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]	[mm]	[mm]		[pcs]
TRA-0599	5907758805992	100	110	B22	A60CL	2700	1215	500	60	105	A	100
TRA-0684	5907758806845	100	110	P28	A60CL	2700	1215	500	60	105	B	100
SYG-2058	5907758827871	100	24	P28	A60CL	2700	1820	1000	60	105	B	100



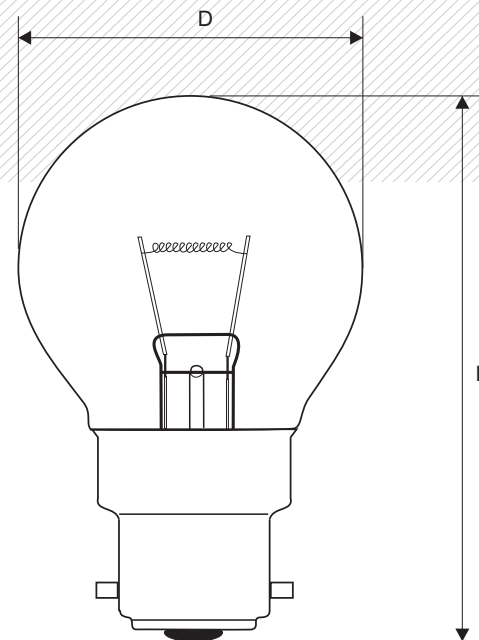
Low-wattage railway light bulbs



- can be used as auxiliary lighting in railway carriages and locomotives
- made in compliance with Polish State Railways requirements



Signal railway light bulbs



- can be used in railway signal devices
- shockproof filament guarantees longer lifespan
- made in compliance with Polish State Railways requirements

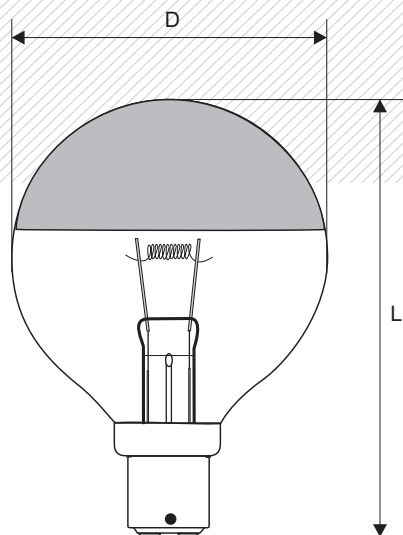
ID	EAN	wattage	voltage	base*	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
TRA-0592	5907758805923	15	24	B22d	A45CL	2700	140	1000	45	73	200
TRA-0593	5907758805930	24	24	B22d	A45CL	2700	305	1000	45	73	200
TRA-0594	5907758805947	40	24	B22d	A45CL	2700	405	1000	45	73	200
TRA-0596	5907758805961	25	60	B22d	A45CL	2700	200	1000	45	73	200

* It is possible to produce light bulbs with B22 base type. Minimum order quantity: 1000 pcs.

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
KOL-0774	5907758807743	12	12	B22d	A45CL	2700	110	3000	45	73	200
KOL-1701	5907758817018	24	12	B22d	A45CL	2700	260	10000	45	73	200
KOL-0650	5907758806500	24	12	B22d	A45CL	2700	340	2000	45	73	200
KOL-1716	5907758817162	2x24	12	B22d	A45CL	2700	260	6000	45	73	200



Shadowless light bulbs

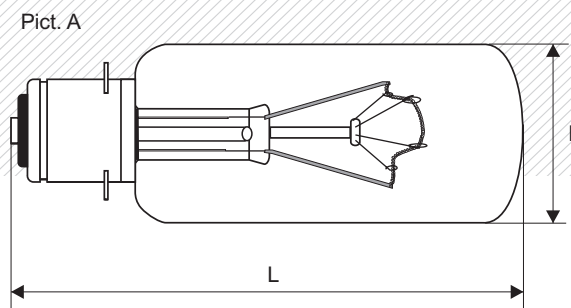


- can be used in specialist lamps eliminating shadow effect to light the operating area in surgery rooms and dentist's surgerier

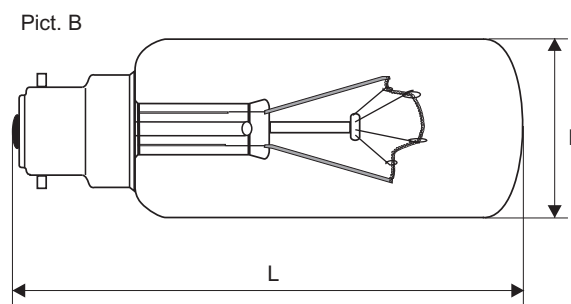
ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
BEZ-0667	5907758806678	35	12	Ba15d	A45	2700	430	500	46	70	40
BEZ-0668	5907758806685	40	24	Ba15d	A45	2700	380	1000	46	70	40



Navigation light bulbs



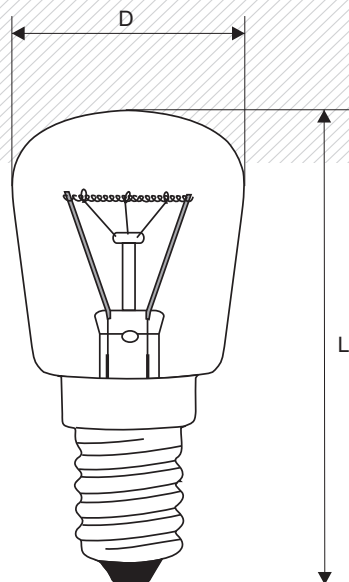
- can be used in navigation lamps, harbour signalling devices as well as on inland and sea vessels



ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	picture	wholesale package
		[W]	[V]			[K]	[lm]	[h]				[pcs]
NAW-2176	5907758821763	80	230	P28s	T38	2700	65	1000	39	105	A	100
NAW-2177	5907758821770	80	230	B22	T38	2700	65	1000	39	105	B	100



Panel and household light bulbs

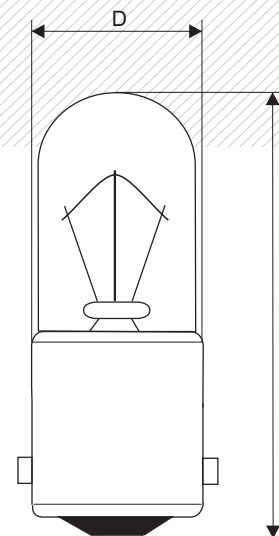


- can be used in signal devices
- can be used in household appliances: refrigerators, ovens, cooker hoods etc.

ID	EAN	wattage	voltage	base	bulb	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[W]	[V]			[K]	[lm]	[h]			
TAB-0005	5907758827543	15	230	E14	S25	2700	77	1000	25	57	100
TAB-0003	5907758827598	25	230	E14	S25	2700	160	1000	25	57	100



Signal light bulb with Ba7s base

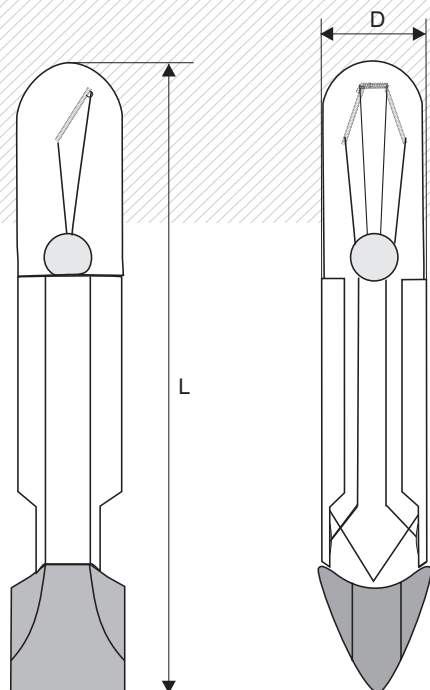


- for signal lights in vehicles and machines

ID	EAN	current	voltage	base	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[mA]	[V]		[K]	[lm]	[h]			
SYG-0639	5907758806395	50	12	Ba7s	2700	1,2	1500	6,8	23,5	200

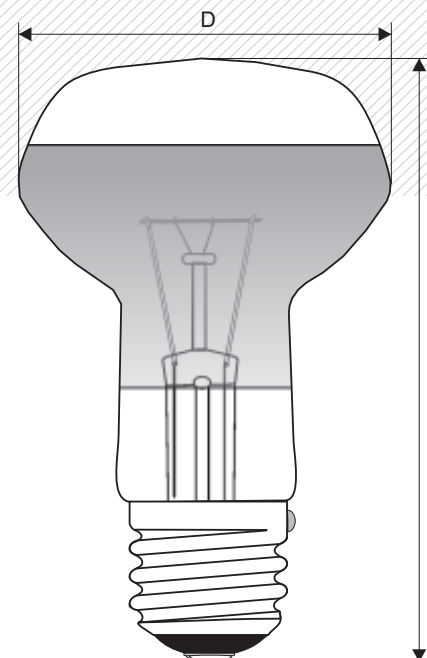


Telephone light bulbs



- can be used in telephone exchanges and other signalling systems

SPOT reflector light bulbs



- very good colour rendering index: up to 100 Ra
- thanks to special bulb shape the reflector allows "double" reflection of the emitted light
- more effective, focused lighting of the exhibited item

ID	EAN	current	voltage	base	colour temperature	luminous flux	lifespan	D	L	wholesale package
		[mA]	[V]		[K]	[lm]	[h]	[mm]	[mm]	[pcs]
TEL-1582	5907758815823	20	24	T5,5	2700	1	3000	5,1	31	100
TEL-1464	5907758814642	50	24	T5,5	2700	1	1500	5,1	31	100
TEL-1958	5907758819586	50	12	T6,8	2700	1	1500	6,6	45	100
TEL-1461	5907758814611	50	24	T6,8	2700	4	3000	6,6	45	100
TEL-1470	5907758814703	50	36	T6,8	2700	4	3000	6,6	45	100
TEL-0622	5907758806227	50	48	T6,8	2700	6	3000	6,6	45	100
TEL-1459	5907758814598	50	60	T6,8	2700	10	3000	6,6	45	100

ID	EAN	wattage	voltage	base	bulb	światłość	trwałość	D	L	wholesale package
		[W]	[V]			[Cd]	[h]	[mm]	[mm]	[pcs]
REF-2076	5907758820766	60	230	E27	R80	500	1000	80	116	20
REF-2077	5907758820773	75	230	E27	R80	900	1000	80	116	20
REF-1992	5907758819920	100	230	E27	R80	1200	1000	80	116	20

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