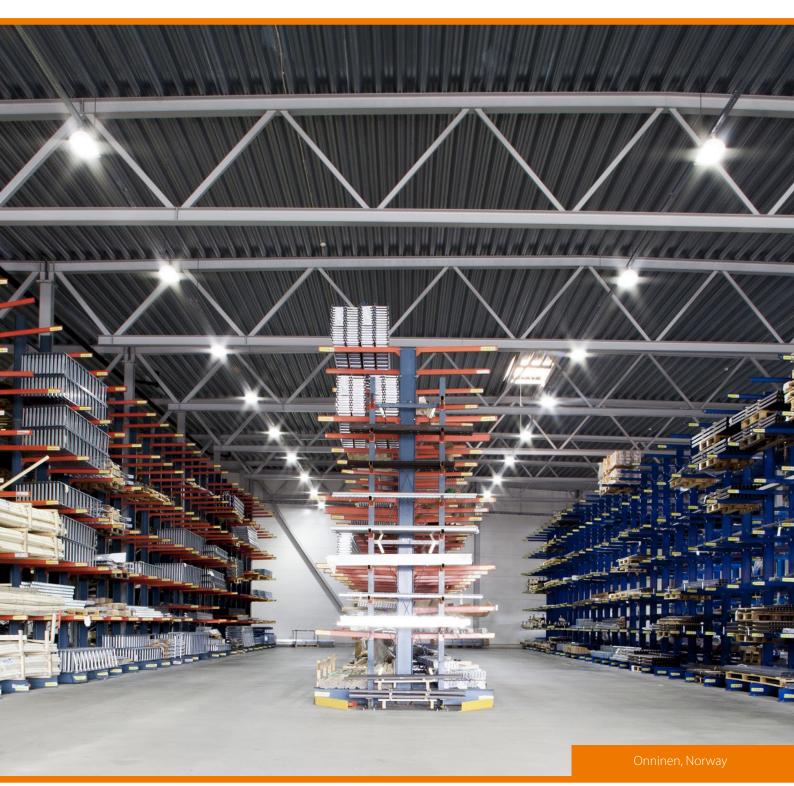
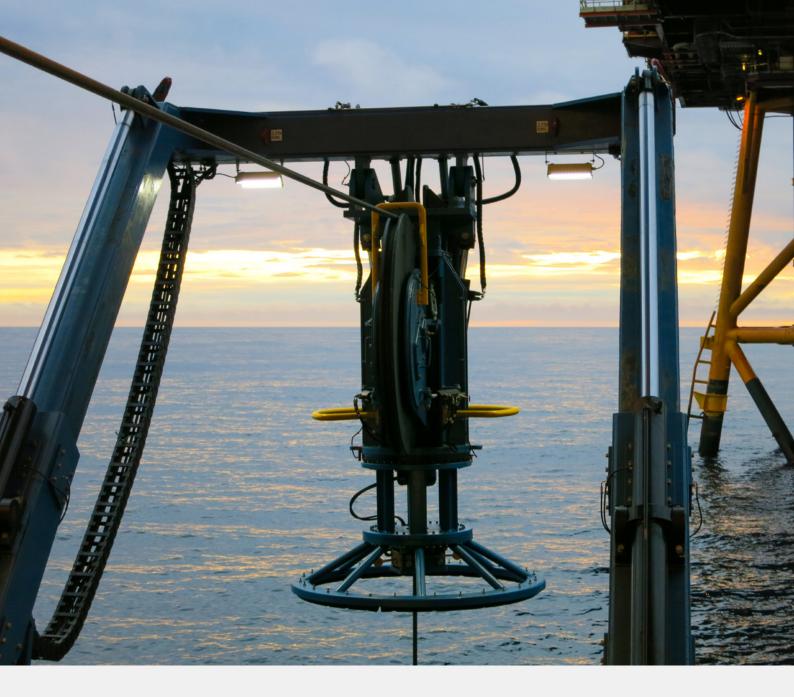
# **Product Catalog**



# LedlightGroup



Ledlight Group is an innovative company that designs, develops, manufactures and markets lamps based on LED technology for highend applications in the professional market, with particular focus on sport, storage, industrial and marine applications. Established in 2005, Ledlight Group encompasses industry knowledge and international experience in providing LED lighting solutions. Ledlight Group is owned by Agder Energi, which is one of the leading companies in the Norwegian renewable energy sector. The group's operations include the production, distribution and sale of energy and energy-related services, including Ledlight Group.

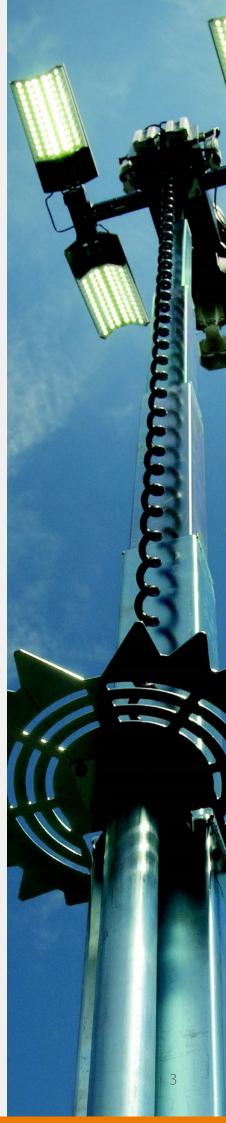
### LedlightGroup

Ole Deviks vei 6B, 0666 Oslo, Norway post@llg.no +47 40 00 63 26

www.ledlightgroup.com

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### CrystalLed<sup>™</sup> BASIC

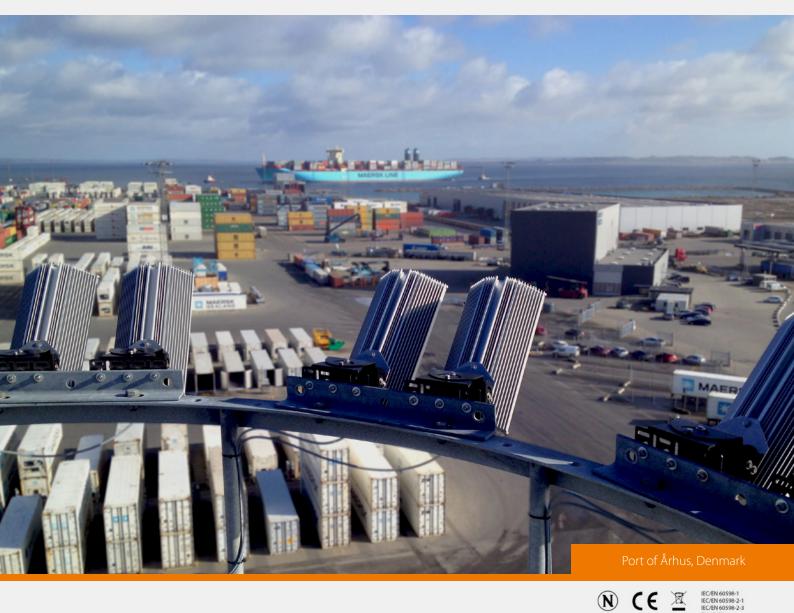


Ledlight Group provides LED light solutions to the professional market, with particular focus on sports, storage, high tower and industrial applications. The CrystalLed<sup>™</sup> series is designed to replace conventional lighting and offers unparalleled benefits to lower energy cost, reduce maintenance, and provide improved lighting performance.

The basic lamps consist of only the CrystalLed<sup>™</sup> light engine. See other products, brackets and housing for more options.

With LED, we are eliminating the unnecessary cost of replacing lamps, while also implementing an environmentally friendly solution that provides much better lighting. When we switched to CrystalLed<sup>™</sup> lamps, the energy costs dropped dramatically. We have never used as little kWh as we are using now.

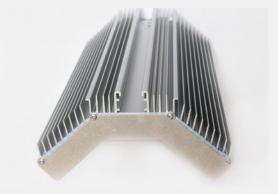
Arild Aamot, Operational and Technical Manager, Onninen.



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### CrystalLed<sup>™</sup> BASIC





#### General technical data

With 4500K Cree Diodes

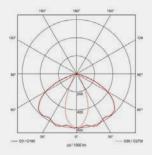
	CrystalLed <sup>™</sup> 24	CrystalLed <sup>™</sup> 48	CrystalLed <sup>™</sup> 72	CrystalLed <sup>™</sup> 72	CrystalLed <sup>™</sup> 96
Product number	108131	108133	108135	108137	108139
EL number	3507197	3507199	3507301	3508826	3508828
Driver	450mA	450mA	450mA	700mA	700mA
Power	40W	71W	104W	160W	208W
Total lumen output	4576Lm	8864Lm	13231Lm	18953Lm	23861Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67	65 / 67

#### With 6000K Cree Diodes

	CrystalLed <sup>™</sup> 24	CrystalLed <sup>™</sup> 48	CrystalLed <sup>™</sup> 72	CrystalLed <sup>™</sup> 72	CrystalLed <sup>™</sup> 96
Product number	108130	108132	108134	108136	108138
EL number	3507196	3507198	3507300	3508827	3508827
Driver	450mA	450mA	450mA	700mA	700mA
Power	40W	71W	104W	160W	208W
Total lumen output	4864Lm	9997Lm	13453Lm	20277Lm	26913Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67	65 / 67

2200K / 3000K Cree Diodes can be order on request.

60 degree standard lenses, 25 degree or mix lenses on request.



- High quality Cree XTE-HE diodes
- Light engine is made with Norwegian aluminium from Hydal.
- Driver from market-leading company Inventronics.
- Easily installed due to its low weight, flexible mounting options and easy click-on installation system.
- IP 65/6

### CrystalLed<sup>™</sup> HIGH TOWER



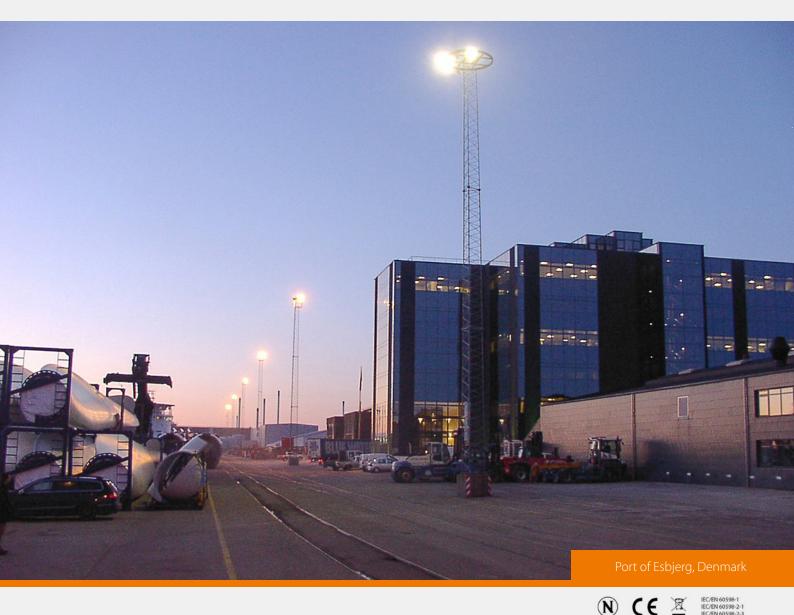
CrystalLed<sup>™</sup> lamps are ideal for hazardous and rough conditions, which makes it a great fit at docks, outdoor production locations and other industrial sites.

The outdoor LED lighting application can be positioned up to 35 meter height, providing precise light distribution in all types of weather. The robust lamp ensures stability, and the low weight allows for easy installation and management. This also contributes to a safer industrial environment.

Longevity is a key feature of CrystalLed<sup>™</sup> lamps and the expected life span is between 50.000 to 100.000 hours.

Reco uses the latest CrystalLed<sup>™</sup> lamps to ensure maximum light distribution from the high towers. We have experienced that this results in more light output than any other lamp currently available in the market.

Rob Reigwein, CEO, Reco

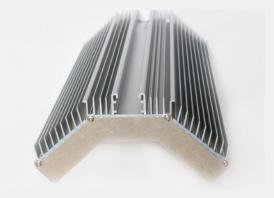


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### CrystalLed<sup>™</sup> HIGH TOWER





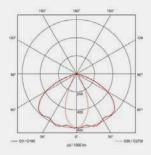
#### General technical data

With 4500K Cree Diodes

	CrystalLed™ Tower 48	CrystalLed™ Tower 72	CrystalLed™ Tower 96	CrystalLed™ Tower 96
Product number	108111	108114	108171	108171-1
EL number	3507343	3508820	3508822	-
Driver	700mA	700mA	700mA	1050mA
Power	109W	160W	208W	302W
Total lumen output	13298Lm	18953Lm	23861Lm	31106Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67

#### With 6000K Cree Diodes

	CrystalLed™ Tower 48	CrystalLed™ Tower 72	CrystalLed™ Tower 96	CrystalLed™ Tower 96
Product number	108087	108049	108170	108170-1
EL number	3507343	3508820	3508822	-
Driver	700mA	700mA	700mA	1050mA
Power	109W	160W	208W	302W
Total lumen output	14170Lm	20277Lm	26914Lm	34730Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67



- High quality Cree XTE-HE diodes
- Light engine is made with Norwegian aluminium from Hydal.
- Driver from market-leading company Inventronics.
- Easily installed due to its low weight, flexible mounting options and easy click-on installation system.
- IP 65/6

### CrystalLed<sup>™</sup> INDUSTRIAL & ID



CrystalLed<sup>™</sup> is designed to replace conventional lighting in a wide variety of indoor and outdoor applications. With world-leading diodes from Cree and an intelligently designed light engine, CrystalLed<sup>™</sup> lowers maintenance cost and saves energy, whilst also providing great improvement in lighting performance.

The ID system allows for drivers to be placed inside of the mounting bracket.

The lamp's robust profile, low weight and versatile mounting options makes it particularly suitable for industrial applications, including:

- Industrial sites e.g. production facilities
- Harbours, cranes, secure areas
- Parking, Bridges, tunnel, rail & street
- Airport structures
- Other buildings, infrastructure and general area lighting







### CrystalLed<sup>™</sup> INDUSTRIAL & ID

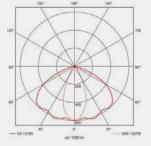
#### General technical data - Industrial | 60 degree standard lenses, 25 degree or mix lenses on request

With 4500K Cree Diodes	CrystalLed™ Industrial 24	CrystalLed™ Industrial 48	CrystalLed™ Industrial 72	CrystalLed™ Industrial 96
Product number	108165	108167	108169	108171
EL number	3508809	3508811	3508813	3507374
Driver	450mA	450mA	450mA	700mA
Power	40W	71W	104W	208W
Total lumen output	4576Lm	8864Lm	13231Lm	23861Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67

With 6000K Cree Diodes	CrystalLed™ Industrial 24	CrystalLed <sup>™</sup> Industrial 48	CrystalLed <sup>™</sup> Industrial 72	CrystalLed™ Industrial 96
Product number	108164	108166	108168	108170
EL number	3508809	3508811	3508813	3507374
Driver	450mA	450mA	450mA	700mA
Power	40W	71W	104W	208W
Total lumen output	4864Lm	9997Lm	13453Lm	26914Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67

#### General technical data - ID | 60 degree standard lenses, 25 degree or mix lenses on request

With 4500K Cree Diodes	CrystalLed™ ID 24	CrystalLed™ ID 48	CrystalLed™ ID 72
Product number	108101	108104	108107
EL number	3508815	3508817	3508819
Driver	450mA	450mA	450mA
Power	40W	71W	104W
Total lumen output	4576Lm	8864Lm	13231Lm
IP	65 / 67	65 / 67	65 / 67
With 6000K Cree Diodes	CrystalLed™ ID 24	CrystalLed™ ID 48	CrystalLed™ ID 72
With 6000K Cree Diodes Product number			
	ID 24	ID 48	ID 72
Product number	ID 24 108100	ID 48 108103	ID 72 108106
Product number EL number	ID 24 108100 3508815	ID 48 108103 3508817	ID 72 108106 3508819
Product number EL number Driver	ID 24 108100 3508815 450mA	ID 48 108103 3508817 450mA	ID 72 108106 3508819 450mA



- High quality Cree XTE-HE diodes.
- Light engine is made with Norwegian
   aluminium from Hydal.
- Driver from market-leading company Inventronics.
- Patented ID driver from Ledlight Group.
- Easily installed due to its low weight, flexible mounting options and easy click on installation system.
- Can be delivered with DALI dimming
- IP 65/67

### CrystalLed<sup>™</sup> MARINE

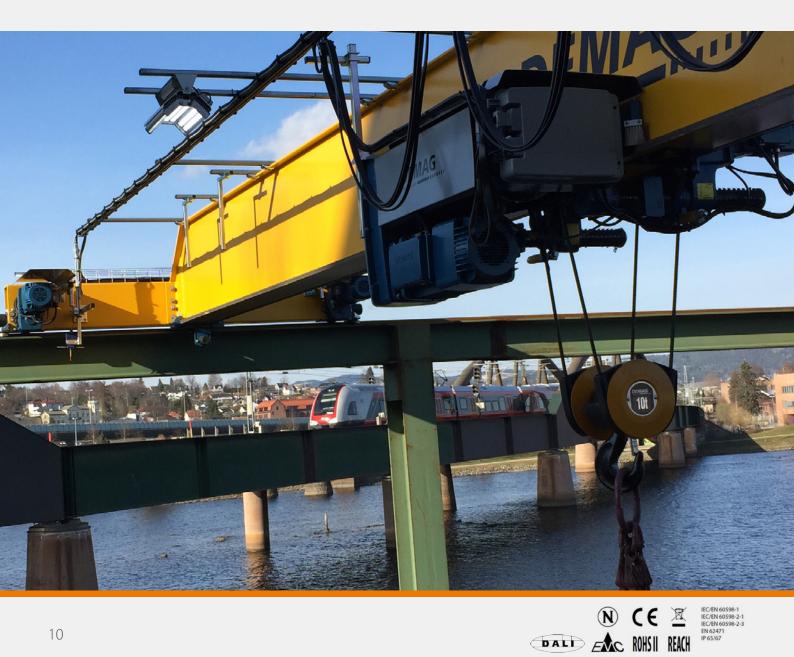


Ledlight Group has designed a tailored LED product to serve the maritime segment. CrystalLed™ Marine is especially designed for rough and hazardous conditions.

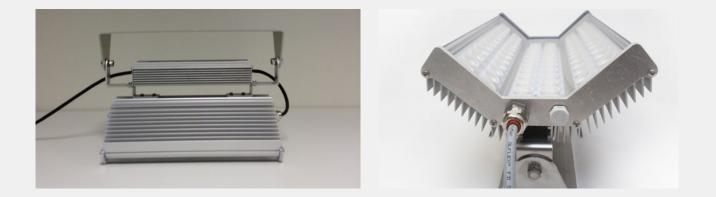
The lamps can be delivered with several different mounting options and in a range of different varieties suited to every environment.

Product features include:

- Salt water resistant; bracket and nipple in stainless steel.
- Reinforced bracket makes the lamp more resistant to rough conditions and ensures stability in all types of weather.
- Double isolated, oil resistant cable.
- The fixture is made of extruded aluminium.
- Supplied with cable and Hensel box.



### CrystalLed<sup>™</sup> MARINE



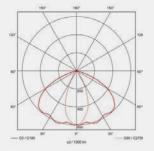
#### General technical data

With 4500K Cree Diodes

	CrystalLed™ Marine 24	CrystalLed™ Marine 48	CrystalLed™ Marine 72	CrystalLedTM Marine 96	CrystalLed™ Marine 48 Bracket with mounted driver	CrystalLed™ Marine 72 Bracket with mounted driver
Product number	108182-1	108156-1	108180-1	108181-1	-	-
EL number	-	3507339	3508841	-	3507339	3508841
Driver	450mA	450mA	450mA	700mA	450mA	450mA
Power	40W	71W	104W	208W	71W	104W
Total lumen output	4576Lm	8864Lm	13231Lm	23861Lm	8864Lm	13231Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67	65 / 67	65 / 67

#### With 6000K Cree Diodes

	CrystalLedTM Marine 24	CrystalLed™ Marine 48	CrystalLed™ Marine 72	CrystalLedTM Marine 96	CrystalLed™ Marine 48 Bracket with mounted driver	CrystalLed™ Marine 72 Bracket with mounted driver
Product number	108182	108156	108180	108181	-	-
EL number	3507338	3507339	3508841	3507340	-	-
Driver	450mA	450mA	450mA	700mA	450mA	450mA
Power	40W	71W	104W	208W	71W	104W
Total lumen output	4864Lm	9997Lm	13453Lm	26913Lm	9997Lm	13453Lm
IP	65 / 67	65 / 67	65 / 67	65 / 67	65 / 67	65 / 67



- High quality Cree XTE-HE diodes.
- Light engine is made with Norwegian aluminium from Hydal.
- Driver from market-leading company Inventronics.
- Easily installed due to its low weight, flexible mounting options and easy click-on installation system.
- Can be delivered with DALI dimming.
- IP 65/67

### CrystalLed<sup>™</sup> SPORTS



CrystalLed<sup>™</sup> lamps are ideal for situations where the light is crucial for performance.

With many installations in the sport segment, ranging from tennis courts and multi-purpose sports halls to swimming pools, CrystalLed<sup>™</sup> lamps have proven to provide better light output while keeping maintenance cost to a minimum.

A tailored CrystalLed<sup>™</sup> solution is highly energy- and cost efficient, environmentally friendly, and Dali dimming allows the sports venue to manage the light as needed.

I did thorough research when we decided to replace the lighting in the multi-purpose sports hall. I have previously been sceptical about LED lighting, but now the quality is better and there are many advantages of LED versus traditional lighting. Since installing CrystalLed<sup>™</sup> lamps, we have experienced huge savings. And the lighting is much better.

Bjørn Langjordet, Responsible for Electrical and Energy, Horten Municipality/Holtanhallen



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### CrystalLed<sup>™</sup> SPORTS





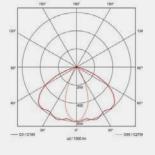
#### General technical data

With 4500K Cree Diodes

	CrystalLed <sup>™</sup> ARC 48	CrystalLed™ ARC 72	CrystalLed™ ARC 48 w/diffusor	CrystalLed™ ARC 72 w/diffusor
Product number	108118	108120	108129	108128
EL number	3508801	3508805	3508801	3508805
Driver	450mA	450mA	450mA	450mA
Power	71W	104W	71W	104W
Total lumen output	8864Lm	13231Lm	7737Lm	11157Lm
IP on driver	20	20	20	20
Product number w/dimming	108118-dim	108120-dim	108129-dim	108128-dim
Product number w/Dali	108118-dali	108120-dali	108129-dali	108128-dali

With 6000K Cree Diodes

	CrystalLed™ ARC 48	CrystalLed™ ARC 72	CrystalLed™ ARC 48 w/diffusor	CrystalLed <sup>™</sup> ARC 72 w/diffusor
Product number	108115	108119	108126	108125
EL number	3508801	3508805	3508801	3508805
Driver	450mA	450mA	450mA	450mA
Power	71W	104W	71W	104W
Total lumen output	9997Lm	13453Lm	8840Lm	12650Lm
IP on driver	20	20	20	20
Product number w/dimming	108115-dim	108119-dim	108126-dim	108125-dim
Product number w/Dali	108115-dali	108119-dali	108126-dali	108125-dali



- High quality Cree XTE-HE diodes.
- Light engine is made with Norwegian
- aluminium from Hydal.
- Driver from market-leading company Philips.
- Can be delivered with DALI or dimming
- Easily installed due to its low weight, flexible mounting options and easy click-on installation system.
- IP 20 on driver, IP 65/67 on light engine.
- Can be delivered with or without diffusor.

### CrystalLed<sup>™</sup> STORAGE

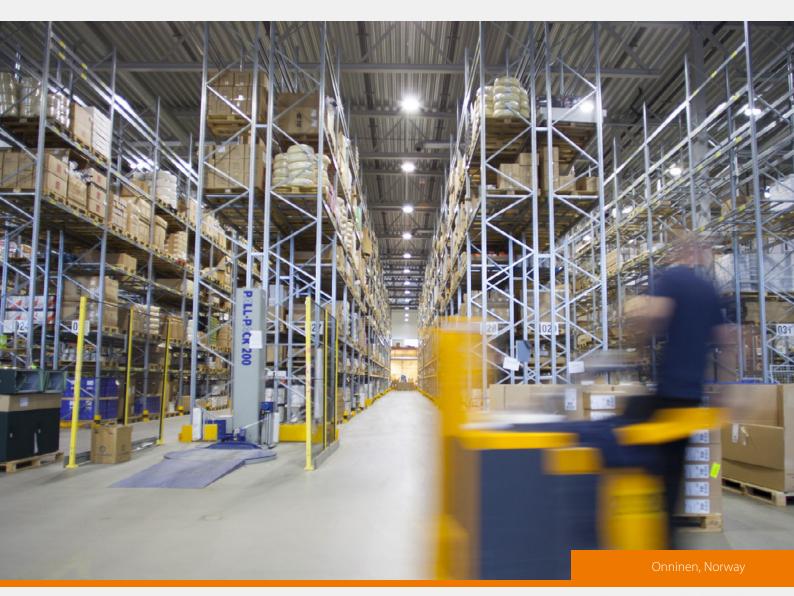


CrystalLed<sup>™</sup> lamps are ideal for environments where precise and strong light output is required.

With a customized Dali-dimming system, the management of lamps is easy and efficient. You are able to divide the storage into zones or dim the light as required. An additional advantage is that CrystalLed<sup>™</sup> heat sink ensures low surface heat, which minimizes fire risk and upholds safety.

The CrystalLed<sup>™</sup> lamp itself also withstand extreme temperatures, from -40C to +87C. Where there are lots of action, and both people and production at high pace – CrystalLed<sup>™</sup> is an obvious choice. It distributes the light evenly, resulting in better contrasts and contours that reduces risk of damaged goods and heightens employee safety.

Additionally, the robust and industrial lamp design suits a storage environment and blends nicely with the surroundings.





### CrystalLed<sup>™</sup> STORAGE



#### General technical data

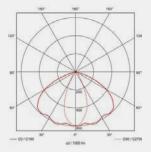
Delivered w/ ceiling bracket. Wire or gateway bracket on request. With 4500K Cree Diodes

	CrystalLed™ ARC 48	CrystalLed™ ARC 72	CrystalLed™ ARC 48 w/diffusor	CrystalLed™ ARC 72 w/diffusor
Product number	108118	108120	108129	108128
EL number	3508801	3508805	3508801	3508805
Driver	450mA	450mA	450mA	450mA
Power	71W	104W	71W	104W
Total lumen output	8864Lm	13231Lm	7737Lm	11157Lm
IP on driver	20	20	20	20
Product number w/dimming	108118-dim	108120-dim	108129-dim	108128-dim
Product number w/Dali	108118-dali	108120-dali	108129-dali	108128-dali

With 6000K Cree Diodes

	CrystalLed™ ARC 48	CrystalLed™ ARC 72	CrystalLed™ ARC 48 w/diffusor	CrystalLed™ ARC 72 w/diffusor
Product number	108115	108119	108126	108125
EL number	3508801	3508805	3508801	3508805
Driver	450mA	450mA	450mA	450mA
Power	71W	104W	71W	104W
Total lumen output	9997Lm	13453Lm	8840Lm	12650Lm
IP on driver	20	20	20	20
Product number w/dimming	108115-dim	108119-dim	108126-dim	108125-dim
Product number w/Dali	108115-dali	108119-dali	108126-dali	108125-dali

2200K / 3000K Cree Diodes can be order on request. Sealed diffusor is available for storage lamps, see specialized lamps.



- High guality Cree XTE-HE diodes
- Light engine is made with Norwegian aluminium from Hydal.
- Driver from market-leading company Philips.
- Can be delivered with DALI or dimming.
- Easily installed due to its low weight, flexible mounting options and easy click-on installation system.
- IP 20 on driver, IP 65/67 on light engine
- Can be delivered with or without diffusor.

### CrystalLed<sup>™</sup> SPECIALIZED

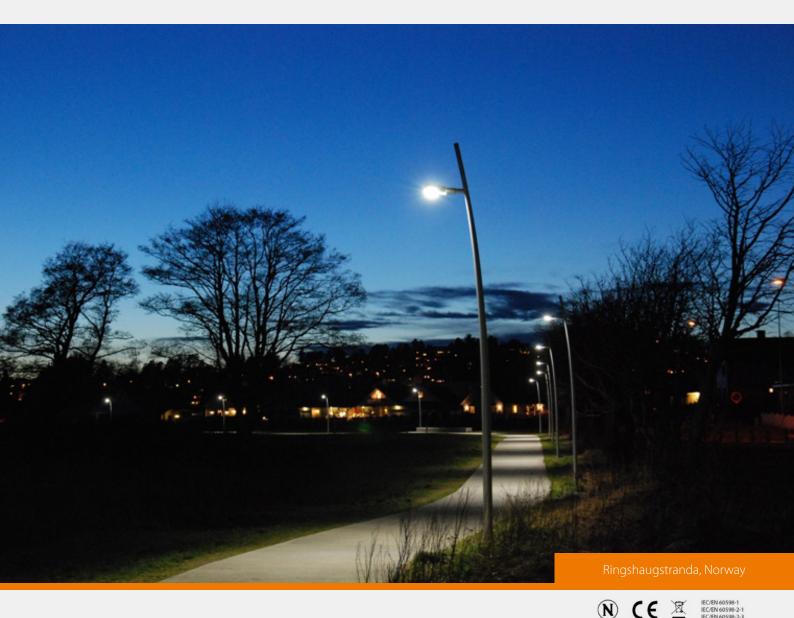


Ledlight Group aims to cater to all needs. The specialized CrystalLed lamps are developed closely with our customers, and ensures that we can offer high-quality LED lamps to all environments.

The specialized CrystalLed lamps have a variety of mounting options and can be delivered with a range off different accessories. If you are unable to find a product that suits your needs, please contact us

Ledlight Group was preferred over other suppliers as they provided ASKO Norge AS with a tailor-made solution with both LED- and emergency lighting incorporated. The CrystalLed<sup>™</sup> lamps have proven to considerably improve light output, and DALI dimming allows better user-control.

Lars Langøy, Manager of Operations, ASKO Norge AS



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### CrystalLed<sup>™</sup> SPECIALIZED



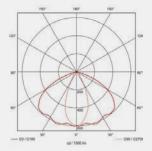
#### General technical data

With 4500K Cree Diodes

	CrystalLed™ Street 56	CrystalLed <sup>™</sup> 48 sealed w/diffusor	CrystalLed™ 72 sealed w/diffusor
Product number	108142		
EL number	3507336	3508801	3508805
Driver	450mA	450mA	450mA
Power	81W	71W	104W
Total lumen output	7462Lm	7737Lm	11827Lm
IP	65 / 67	20	20

#### With 6000K Cree Diodes

	CrystalLed™ Street 56	CrystalLed <sup>™</sup> 48 sealed w/diffusor	CrystalLed <sup>™</sup> 72 sealed w/diffusor
Product number	108140		
EL number	3507334	3508801	3508805
Driver	450mA	450mA	450mA
Power	81W	71W	104W
Total lumen output	7776Lm	8839Lm	11868Lm
IP	65 / 67	20	20



- High quality Cree XTE-HE diodes
- Light engine is made with Norwegian aluminium.
- Drivers from market-leading companies Inventronics.
- Easily installed due to its low weight, flexible mounting options and easy click-on installation system.
- Can be delivered with DALI dimming.

### CrystalLed<sup>™</sup> SPECIALIZED



With 4500K Cree Diodes

10823848LED-60° directconnect, driver and 1-axis tilt aliminium60 degrees450mA71W11388LmDriver mounted on tiltbrace10824672LED-60° directconnect, driver and 1-axis tilt aliminium60 degrees450mA169W27108LmDriver mounted on tiltbrace10825496LED-60° directconnect, driver and 1-axis tilt aliminium25 degrees450mA104W16682LmDriver mounted on tiltbrace10825072LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mA104W16682LmDriver mounted on tiltbrace10825696LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mA169W27108LmDriver mounted on tiltbrace10825696LED-60° directconnect, driver and 1-axis tilt aliminium25 degrees450mA104W16682LmDriver mounted on tiltbrace10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA71W11388LmConcernet10825696LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682LmConcernet10825448LED-60° 2-axis tilt aliminium bracket25 degrees450mA104W16682LmConcernet10825496LED-60° 2-axis tilt aliminium bracket25 degrees450mA104W16682LmConcernet10825496LED-55° 2-axis tilt aliminium bracket25 degrees450mA104W16682LmConcernet10826096LED-25° 2-axis tilt aliminium bracket25 degrees52mA104W1682LmConcernet <t< th=""><th>Product nr</th><th>Product Description 1-axis</th><th>Lenses</th><th>Driver</th><th>Watt</th><th>Lumens</th><th>Driver mounting</th></t<>	Product nr	Product Description 1-axis	Lenses	Driver	Watt	Lumens	Driver mounting
10825496LED-60° directconnect, driver and 1-axis till aliminium60 degrees450m169W27108LmDriver mounted on tillbrace10824248LED-25° directconnect, driver and 1-axis till aliminium25 degrees450m71W11388LmDriver mounted on tillbrace10825072LED-25° directconnect, driver and 1-axis till aliminium25 degrees450m169W27108LmDriver mounted on tillbrace10825696LED-25° directconnect, driver and 1-axis till aliminium25 degrees450m169W27108LmDriver mounted on tillbrace10824048LED-60° 2-axis till aliminium bracket60 degrees450m71W11388LmControl10824048LED-60° 2-axis till aliminium bracket60 degrees450m71W11388LmControl10824448LED-60° 2-axis till aliminium bracket60 degrees450m10W16682LmControl10825696LED-25° 2-axis till aliminium bracket25 degrees450m10W16682LmControl10826448LED-25° 2-axis till aliminium bracket25 degrees450m10W16682LmControl10826596LED-25° 2-axis till aliminium bracket25 degrees450m10W16682LmControl10826096LED-25° 2-axis till aliminium bracket25 degrees552m10W10B1LmDriver mounted on tillbrace10828448LED-55° directconnect, driver, 1-axis till and HighTemp Lenses55 degrees552m10W10913LmDriver mounted on tillbrace10828696LED-55° directconn	108238	48LED-60° directconnect, driver and 1-axis tilt aliminium	60 degrees	450mA	71W	11388Lm	Driver mounted on tiltbracket
10824248LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450m71W1138LmDriver mounted on tiltbrace10825072LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450m104W16682LmDriver mounted on tiltbrace10825696LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mA109W27108LmDriver mounted on tiltbrace10825696LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mA71W11388LmCenter10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA71W11388LmCenter10824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10825096LED-60° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826448LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10825272LED-26° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826448LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10827572LED-26° 2-axis tilt aliminium bracket25 degrees550mA104W16882Lm10828696LED-25° 2-axis tilt aliminium bracket55 degrees552mA104W15985Lm10828672LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses	108246	72LED-60° directconnect, driver and 1-axis tilt aliminium	60 degrees	450mA	104W	16682Lm	Driver mounted on tiltbracket
10825072LED-25° directconnect, driver and 1-axis tilt aliminium25 degree450mA104W16682LmDriver mounted on tiltbrace10825696LED-25° directconnect, driver and 1-axis tilt aliminium25 degree450mA169W27108LmDriver mounted on tiltbraceProduct nrProduct Description 2-axisLensesDriverWattLumensControl10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682LmControl10824810824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682LmControl10824810825696LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682LmControlControl10824810825272LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682LmControlCon	108254	96LED-60° directconnect, driver and 1-axis tilt aliminium	60 degrees	450mA	169W	27108Lm	Driver mounted on tiltbracket
10825696LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mA169W27108LmDriver mounted on tiltbractProduct nrProduct Description 2-axisLensesLensesDriverWattLumens10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10824996LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10824448LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10825096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-55° directconnect, driver, 1-axis tilt and HighTemp LensesDriverNumentNument10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbract10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbract10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbract10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA10WLumensLumens108288	108242	48LED-25° directconnect, driver and 1-axis tilt aliminium	25 degrees	450mA	71W	11388Lm	Driver mounted on tiltbracket
Product nrProduct Description 2-axisLensesDriverWatLumens10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA71W1388Lm10824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA169W27108Lm10825696LED-60° 2-axis tilt aliminium bracket60 degrees450mA11W1388Lm10824448LED-25° 2-axis tilt aliminium bracket25 degrees450mA10W16682Lm10825096LED-25° 2-axis tilt aliminium bracket25 degrees450mA10W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10826096LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA10W10913Lm10828172LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA10W15985LmDriver mounted on tiltbract10828648LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA10W10913LmCriver August10828848LED-55° diriver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA11W10913LmCriver August1082	108250	72LED-25° directconnect, driver and 1-axis tilt aliminium	25 degrees	450mA	104W	16682Lm	Driver mounted on tiltbracket
10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA71W1388Lm10824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10825696LED-60° 2-axis tilt aliminium bracket60 degrees450mA169W27108Lm10824448LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10825072LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16882Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16882Lm10826096LED-25° directconnect, driver, 1-axis tilt and HighTemp Lenses52 degrees52mA104W10913LmDriver mounted on tiltbracket10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA104W15985LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA104W15985LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA104W15985LmDriver mounted on tiltbracket10828648LED-55° direct, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA104W10913LmLenses108286	108256	96LED-25° directconnect, driver and 1-axis tilt aliminium	25 degrees	450mA	169W	27108Lm	Driver mounted on tiltbracket
10824048LED-60° 2-axis tilt aliminium bracket60 degrees450mA71W1388Lm10824872LED-60° 2-axis tilt aliminium bracket60 degrees450mA104W16682Lm10825696LED-60° 2-axis tilt aliminium bracket60 degrees450mA169W27108Lm10824448LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10825072LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16882Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16882Lm10826096LED-25° directconnect, driver, 1-axis tilt and HighTemp Lenses52 degrees52mA104W10913LmDriver mounted on tiltbracket10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA104W15985LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA104W15985LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA104W15985LmDriver mounted on tiltbracket10828648LED-55° direct, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA104W10913LmLenses108286							
10824872LED-60° 2-axis tilt aliminium bracket60 degres450m104W16682Lm10825696LED-60° 2-axis tilt aliminium bracket60 degres450m169W27108Lm10824448LED-25° 2-axis tilt aliminium bracket25 degrees450m71W11388Lm10825272LED-25° 2-axis tilt aliminium bracket25 degrees450m104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450m104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450m104W1040Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450m104W1040Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450m104W1040Lm10828196LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52m71W10913LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52m104W15985LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52m104W10913LmCreater of the transmounted on tiltbracket10828648LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52m104W10913LmCreater of the transmounted on tiltbracket10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52m104W10913LmCreater of the transmount	Product nr	Product Description 2-axis	Lenses	Driver	Watt	Lumens	
10825696LED-60° 2-axis tilt aliminium bracket60 degrees450m169W27108Lm10824448LED-25° 2-axis tilt aliminium bracket25 degrees450mA71W11388Lm10825272LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108Lm10828096LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W10913LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W25975LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA164W15985LmVerter mounted on tiltbrack10828648LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA164WLumensVerter mounted on tiltbrack10828648LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA164WLumensVerter mounted on tiltbrack10828648LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA164WLumensVerter mounted on tiltbrack10828021LED-55° driver, 2-axis tilt with driver and High	108240	48LED-60° 2-axis tilt aliminium bracket	60 degrees	450mA	71W	11388Lm	
10824448LED-25° 2-axis tilt aliminum bracket25 degree450m471W1388LmConstraint10825272LED-25° 2-axis tilt aliminum bracket25 degree450m416492708LmConstraint10826096LED-25° 2-axis tilt aliminum bracket25 degree450m4169W27108LmConstraintProduct nrProduct Description 1-axis HighTemp LensesLensesDriverVatLunesDiver mounted on tiltbracket10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degree52m4104W1993LmDiver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52m4104W1993LmDiver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp LenseS5 degrees52m4104W1993LmDiver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp LenseS5 degrees52m4104W1993LmDiver mounted on tiltbracket10828686LED-55° directconnect, driver, 1-axis tilt and HighTemp LenseLenseVatLensesLensesLenses10828684LED-55° directconnect, driver, 1-axis tilt and HighTemp LenseS1 degrees52mA104WLensesLenses10828684LED-55° driver, 2-axis tilt with driver and HighTemp LenseS1 degrees52mA104WLensesLenses10828792LED-55° driver, 2-axis tilt with driver and HighTemp LenseS1 degreesS1 degreesS1 degr	108248	72LED-60° 2-axis tilt aliminium bracket	60 degrees	450mA	104W	16682Lm	
10825272LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W16682Lm10826096LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W27108LmProduct NrProduct Description 1-axis HighTemp LensesLensesDriverWattLunensDriver mounted on tiltbrack10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W10913LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA164W15985LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA164W15985LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp LensesLensesDriverUmensLenses164W10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp LensesEnsesDriverUmensLensesLenses10828684LED-55° directconnect, driver, 1-axis tilt and HighTemp LensesEnsesDriverVattLensesLenses10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA10W10913LmLenses10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA10W10913LmLenses10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lense55 degrees552mA10W10913LmLenses<	108256	96LED-60° 2-axis tilt aliminium bracket	60 degrees	450mA	169W	27108Lm	
10826096LED-25° 2-axis tilt aliminium bracket25 degrees450m169W27108LmProduct nrProduct Description 1-axis HighTemp LensesLensesDriverWattLumensDriver mounting10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W10913LmDriver mounted on tiltbracket10828572LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA169W25975LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA169W25975LmDriver mounted on tiltbracket10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp LensesLensesDriverVenturLensesLenses10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104WLensesLenses10828648LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W10913LmLenses10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985LmLenses10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985LmLenses	108244	48LED-25° 2-axis tilt aliminium bracket	25 degrees	450mA	71W	11388Lm	
Product nrProduct Description 1-axis HighTemp LensesLensesDriverWattLumensDriver mounting10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W10913LmDriver mounted on tiltbract10828572LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbract10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W25975LmDriver mounted on tiltbract10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mA169W25975LmDriver mounted on tiltbract10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp LensesLensesVertLumensLensesProduct nrProduct Description 2-axis HighTemp LensesLensesDriverVertLumens10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA10W19913Lm10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA10W1993Lm	108252	72LED-25° 2-axis tilt aliminium bracket	25 degrees	450mA	104W	16682Lm	
10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W10913LmDriver mounted on tiltbrack10828572LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W25975LmDriver mounted on tiltbrackProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA104W15985LmControl10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA104W15985LmControl	108260	96LED-25° 2-axis tilt aliminium bracket	25 degrees	450mA	169W	27108Lm	
10828448LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W10913LmDriver mounted on tiltbrack10828572LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W25975LmDriver mounted on tiltbrackProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA104W15985LmControl10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees52mA104W15985LmControl							
10828572LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W15985LmDriver mounted on tiltbrack10828696LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W25975LmDriver mounted on tiltbrackProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W19913Lm10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985Lm	Product nr	Product Description 1-axis HighTemp Lenses	Lenses	Driver	Watt	Lumens	Driver mounting
10828696LED-55° direct connect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W25975LmDriver mounted on tiltbrackProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA10W10913Lm10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985Lm	108284	$48 \text{LED-} 55^\circ$ direct connect, driver, 1-axis tilt and HighTemp Lenses	55 degrees	552mA	71W	10913Lm	Driver mounted on tiltbracket
Product nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA71W10913Lm10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985Lm	108285	72LED-55° direct connect, driver, 1-axis tilt and HighTemp Lenses	55 degrees	552mA	104W	15985Lm	Driver mounted on tiltbracket
10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA71W10913Lm10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985Lm	108286	96LED-55° direct connect, driver, 1-axis tilt and HighTemp Lenses	55 degrees	552mA	169W	25975Lm	Driver mounted on tiltbracket
10828848LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA71W10913Lm10828972LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W15985Lm							
108289 72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses 55 degrees 552mA 104W 15985Lm	Product nr	Product Description 2-axis HighTemp Lenses	Lenses	Driver	Watt	Lumens	
	108288	48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses	55 degrees	552mA	71W	10913Lm	
	108289	72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses	55 degrees	552mA	104W	15985Lm	
10829096LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA169W25975Lm	108290	96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses	55 degrees	552mA	169W	25975Lm	
Product nr SAND Sealed Lenses Driver Watt Lumens Driver mounting	Product nr	SAND Sealed	Lenses	Driver	Watt	Lumens	Driver mounting
108135-SAND72LED-60° SAND 104W with driver and diffusor glass60 degrees450mA104W16682LmOptional							



10823948LED-60° directconnect. driver and 1-axis tilt allminium60 degree4000.1010111971.00Driver mounted on tiltbracket10824772LED-60° directconnect, driver and 1-axis tilt allminium60 degree450m.1609.28493.00Driver mounted on tiltbracket10825396LED-25° directconnect, driver and 1-axis tilt allminium25 degree450m.1700.17331.00Driver mounted on tiltbracket10825472LED-25° directconnect, driver and 1-axis tilt allminium25 degree450m.1700.17331.00Driver mounted on tiltbracket10825996LED-25° directconnect, driver and 1-axis tilt allminium25 degree450m.1700.17331.00Driver mounted on tiltbracket10825072LED-25° directconnect, driver and 1-axis tilt allminium25 degree450m.1700.17331.00Driver mounted on tiltbracket10825172LED-60° 2-axis tilt allminium bracket60 degree450m.1700.17331.00Centernet10825196LED-60° 2-axis tilt allminium bracket60 degree450m.1700.17331.00Centernet10825196LED-57° 2-axis tilt allminium bracket25 degree450m.1000.0017331.00Centernet10825196LED-57° 2-axis tilt allminium bracket25 degree450m.1700.0017971.0017971.0010825196LED-57° 2-axis tilt allminium bracket55 degree520m.1700.0017971.0017000.0010825197LED-55° directconnect, driver, 1-axis tilt adl HighTem Lens56 degree520m. <t< th=""><th>Product nr</th><th>Product Description 1-axis</th><th>Lenses</th><th>Driver</th><th>Watt</th><th>Lumens</th><th>Driver mounting</th></t<>	Product nr	Product Description 1-axis	Lenses	Driver	Watt	Lumens	Driver mounting
10825596LED-60' directconnect, driver and 1-axis tilt aliminium60 degrees400mk169W28493LmDriver mounted on tiltbracket10825172LED-25' directconnect, driver and 1-axis tilt aliminium25 degrees400mk104W1733LmDriver mounted on tiltbracket10825996LED-25' directconnect, driver and 1-axis tilt aliminium25 degrees400mk109W2499LmDriver mounted on tiltbracketProduct nrProduct Description 2-axisLensesDriverWattLumensLenses100W11971LmConcord on tiltbracket10824148LED-60' 2-axis tilt aliminium bracket60 degrees450mk160W1733LmConcord on tiltbracket10824148LED-60' 2-axis tilt aliminium bracket60 degrees450mk160W1733LmConcord on tiltbracket10825796LED-60' 2-axis tilt aliminium bracket60 degrees450mk160W1733LmConcord on tiltbracket10825372LED-25' 2-axis tilt aliminium bracket25 degrees450mk160W1733LmConcord on tiltbracket10825096LED-25' 2-axis tilt aliminium bracket25 degrees450mk160W1733LmConcord on tiltbracket10825172LED-25' 2-axis tilt aliminium bracket25 degrees450mk160W1733LmDriver mounted on tiltbracket10825172LED-25' 2-axis tilt aliminium bracket25 degrees51mk104W1733LmDriver mounted on tiltbracket10825196LED-25' directoonnect, driver, 1-axis tilt ald HighTemp Lense55 degrees <td< td=""><td>108239</td><td>48LED-60° directconnect, driver and 1-axis tilt aliminium</td><td>60 degrees</td><td>450mA</td><td>71W</td><td>11971Lm</td><td>Driver mounted on tiltbracket</td></td<>	108239	48LED-60° directconnect, driver and 1-axis tilt aliminium	60 degrees	450mA	71W	11971Lm	Driver mounted on tiltbracket
10824348LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mk71W11971 mDriver mounted on tiltbracket10825096LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mk164W1733LmDriver mounted on tiltbracket10827096LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mk166W2849LmDriver mounted on tiltbracketProduct mProduct Description 2-axisLensonDriverWattLumensLenson162W10824972LED-60° 2-axis tilt aliminium bracket60 degrees450mk16W1753LmConcentro	108247	72LED-60° directconnect, driver and 1-axis tilt aliminium	60 degrees	450mA	104W	17535Lm	Driver mounted on tiltbracket
10825172LED-25° directconnect, driver and 1-axis tilt aliminium25 degree450mk104W17535LmDriver mounted on tiltbracket10825996LED-25° directconnect, driver and 1-axis tilt aliminium25 degree450mk169W24495LmDriver mounted on tiltbracketProduct nrProduct Description 2-axisLensesDriverWattLumensLenses100011000110001100010824048LED-60° 2-axis tilt aliminium bracket60 degree450mk104W17535LmConcentration10825796LED-60° 2-axis tilt aliminium bracket60 degree450mk104W17535LmConcentration10825396LED-60° 2-axis tilt aliminium bracket60 degree450mk104W17535LmConcentration10825448LED-25° 2-axis tilt aliminium bracket25 degrees450mk104W17535LmConcentration10825196LED-25° 2-axis tilt aliminium bracket25 degrees450mk104W17535LmConcentration10825196LED-25° 2-axis tilt aliminium bracket25 degrees450mk104W17535LmConcentration10826196LED-25° 2-axis tilt aliminium bracket25 degrees512mk104W17535LmConcentration10826196LED-25° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mk104W16796LmConcentration10828791LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees52mk104W16796LmConcentration108287<	108255	96LED-60° directconnect, driver and 1-axis tilt aliminium	60 degrees	450mA	169W	28495Lm	Driver mounted on tiltbracket
18825996LED-25° directconnect, driver and 1-axis tilt aliminium25 degrees450mk169W2495LmDriver mounted on tiltbracketProduct nrPoduct Description 2-axisLensesDriverWattLumensLumens10824042LED-60° 2-axis tilt aliminium bracket60 degrees450mk104W1753Lm-10825796LED-60° 2-axis tilt aliminium bracket60 degrees450mk104W1753Lm-10825842LED-60° 2-axis tilt aliminium bracket60 degrees450mk104W1753Lm-10825996LED-25° 2-axis tilt aliminium bracket25 degrees450mk104W1753Lm-10826196LED-25° 2-axis tilt aliminium bracket25 degrees52mk104W1679LmNiver mounted on tiltbracket108261Product nonect, driver, 1-axis tilt and HighTemp Lenses51 degrees512mk104W1679LmNiver mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses51 degrees512mk104W1679LmNiver mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses51 degrees512mk104W1679Lm<	108243	48LED-25° directconnect, driver and 1-axis tilt aliminium	25 degrees	450mA	71W	11971Lm	Driver mounted on tiltbracket
Product nProduct Description 2-axisLensesDriverWatLumens10824148LED-60° 2-axis tilt alliminium bracket60 degrees450mA71W11971Lm10824972LED-60° 2-axis tilt alliminium bracket60 degrees450mA16W28495Lm10825796LED-60° 2-axis tilt alliminium bracket60 degrees450mA71W11971Lm10824548LED-25° 2-axis tilt alliminium bracket25 degrees450mA16W28495Lm10825796LED-25° 2-axis tilt alliminium bracket25 degrees450mA16W1753SLm10826196LED-25° 2-axis tilt alliminium bracket25 degrees450mA16W28495Lm10826372LED-25° 2-axis tilt alliminium bracket25 degrees450mA16W28495Lm10826496LED-25° 2-axis tilt alliminium bracket25 degrees55 mA16W28495Lm108267Product Description 1-axis HighTemp LensesLensesDriverWattLumens10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA16W2729LD10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA16W2729LmTorver mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA16W2729LmTorver mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA16W2729LmTorver mounted on	108251	72LED-25° directconnect, driver and 1-axis tilt aliminium	25 degrees	450mA	104W	17535Lm	Driver mounted on tiltbracket
10824148LED-60° 2-axis tilt aliminium bracket60 degrees450m71W11971Lm10824972LED-60° 2-axis tilt aliminium bracket60 degrees450m104W17535Lm10825796LED-60° 2-axis tilt aliminium bracket60 degrees450m104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535LmProduct Poscription 1-axis HighTemp LensesLensesDriverVattLunensDriver mounted on tiltbracket10826196LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LnDriver mounted on tiltbracket10826196LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LnDriver mounted on tiltbracket10826196LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LnDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LnLenseLense10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m104W16796LnLenseLense10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m	108259	96LED-25° directconnect, driver and 1-axis tilt aliminium	25 degrees	450mA	169W	28495Lm	Driver mounted on tiltbracket
10824972LED-60° 2-axis tilt aliminium bracket60 degrees450m104W17535Lm10825796LED-60° 2-axis tilt aliminium bracket60 degrees450m169W28495Lm10824548LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535Lm10825372LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535LmProduct Description 1-axis HighTemp LensesLensesDriverWattLunensDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmLonens10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m104W16796LmLonens10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m104W167	Product nr	Product Description 2-axis	Lenses	Driver	Watt	Lumens	
10825796LED-60° 2-axis tilt aliminium bracket60 de grees450m.A169W28495Lm10824548LED-25° 2-axis tilt aliminium bracket25 de grees450m.A7U11971Lm10825372LED-25° 2-axis tilt aliminium bracket25 de grees450m.A169W28495Lm10826196LED-25° 2-axis tilt aliminium bracket25 de grees450m.A169W28495LmProduct nrProduct Description 1-axis HighTemp LensesLensesDriverVattLumensDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m.A104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m.A104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m.A104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m.A104W16796LmLumens10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m.A11WLumensLumens10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m.A11WLumensLumens10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552m.A104W16796LmLumens108287 </td <td>108241</td> <td>48LED-60° 2-axis tilt aliminium bracket</td> <td>60 degrees</td> <td>450mA</td> <td>71W</td> <td>11971Lm</td> <td></td>	108241	48LED-60° 2-axis tilt aliminium bracket	60 degrees	450mA	71W	11971Lm	
10824548LED-25° 2-axis tilt aliminium bracket25 degrees450m71W11971Lm10825372LED-25° 2-axis tilt aliminium bracket25 degrees450m104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m169W28495Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450m169W28495LmProduct Description 1-axis HighTemp LensesLensesDriverWattLumensDriver mounted on tiltbracket48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m169W27293LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552m104W16796LmCentertortortortortortortortortortortortortor	108249	72LED-60° 2-axis tilt aliminium bracket	60 degrees	450mA	104W	17535Lm	
10825372LED-25° 2-axis tilt aliminium bracket25 degrees450mA104W17535Lm10826196LED-25° 2-axis tilt aliminium bracket25 degrees450mA169W24895LmProduct Description 1-axis HighTemp Lenses48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W11466LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W1466LmCreater mounted on tiltbracket108288796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W1466LmCreater mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W1466LmCreater mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1466LmCreater mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1476LmCreater mounted on tiltbracket10828796LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1272	108257	96LED-60° 2-axis tilt aliminium bracket	60 degrees	450mA	169W	28495Lm	
10826196LED-25° 2-axis till aliminium bracket25 degrees450mA169W28495LmProduct nrProduct Description 1-axis HighTemp LensesLensesDriverWattLumensDriver mounted on tillbracket48LED-55° directconnect, driver, 1-axis till and HighTemp Lenses55 degrees552mA71W11466LmDriver mounted on tillbracket10828796LED-55° directconnect, driver, 1-axis till and HighTemp Lenses55 degrees552mA104W16796LmDriver mounted on tillbracket10828796LED-55° directconnect, driver, 1-axis till and HighTemp Lenses55 degrees552mA169W27293LmDriver mounted on tillbracket10828796LED-55° directconnect, driver, 1-axis till and HighTemp Lenses55 degrees552mA169W27293LmDriver mounted on tillbracket108287Product Description 2-axis HighTemp Lenses55 degrees552mA169W27293LmDriver mounted on tillbracketProduct nrProduct Description 2-axis till with driver and HighTemp Lenses55 degrees552mA104W1466Lm-21ED-55° driver, 2-axis till with driver and HighTemp Lenses55 degrees552mA104W16796Lm21ED-55° driver, 2-axis till with driver and HighTemp Lenses55 degrees512mA169W1269CLm21ED-55° driver, 2-axis till with driver and HighTemp Lenses55 degrees512mA104W16796Lm21ED-55° driver, 2-axis till with driver and HighTemp Lenses55 degrees512mA164W16796Lm<	108245	48LED-25° 2-axis tilt aliminium bracket	25 degrees	450mA	71W	11971Lm	
Product nr       Product Description 1-axis HighTemp Lenses       Lenses       Driver       Watt       Lumens       Driver mounting         48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses       55 degrees       552mA       71W       11466Lm       Driver mounted on tiltbracket         108287       96LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses       55 degrees       552mA       169W       27293Lm       Driver mounted on tiltbracket         Product nr       Product Description 2-axis HighTemp Lenses       Lenses       Driver       Watt       Lumens       Jean         48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses       55 degrees       552mA       169W       27293Lm       Driver mounted on tiltbracket         108287       96LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses       55 degrees       552mA       169W       27293Lm       Driver mounted on tiltbracket         Product nr       Product Description 2-axis HighTemp Lenses       Lenses       Driver       Watt       Lumens       Lenses       Lumens       Lenses       Lenses       104W       16796Lm       Lenses       104W       16796Lm       Lense       104W       16796Lm       Lenses       Lenses       Lenses       Driver       Lumens       Lenses       Lumens       Lumens       L	108253	72LED-25° 2-axis tilt aliminium bracket	25 degrees	450mA	104W	17535Lm	
48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W11466LmDriver mounted on tiltbracket72LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W27293LmDriver mounted on tiltbracketProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1466Lm72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1466Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm970duct Description SAND SealedLensesDriverWattLumensDriver mounting	108261	96LED-25° 2-axis tilt aliminium bracket	25 degrees	450mA	169W	28495Lm	
48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA71W11466LmDriver mounted on tiltbracket72LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W16796LmDriver mounted on tiltbracket10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W27293LmDriver mounted on tiltbracketProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1466Lm72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W1466Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm970duct Description SAND SealedLensesDriverWattLumensDriver mounting							
72LED-55° direct connect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA104W16796LmDriver mounted on tiltbracket10828796LED-55° direct connect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mA169W27293LmDriver mounted on tiltbracketProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumens48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA104W16796Lm96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mA169W27293LmProduct nrProduct Description SAND SealedLensesDriverWattLumensDriver mounting	Product nr	Product Description 1-axis HighTemp Lenses	Lenses	Driver	Watt	Lumens	Driver mounting
10828796LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses55 degrees552mk169W27293LmDirver mounted on tiltbracketProduct nrProduct Description 2-axis HighTemp LensesLensesDriverWattLumensLenses48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mk104W1466Lm-72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mk169W27293Lm-96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mk169W27293Lm-96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mk169W27293Lm-96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses55 degrees552mk169W27293Lm-Product nrProduct Description SAND SealedLensesDriverWattLumensDriver mounting		48LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses	55 degrees	552mA	71W	11466Lm	Driver mounted on tiltbracket
Product nr       Product Description 2-axis HighTemp Lenses       Lenses       Driver       Watt       Lumens         48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       71W       11466Lm         72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       104W       16796Lm         96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       169W       27293Lm		72LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses	55 degrees	552mA	104W	16796Lm	Driver mounted on tiltbracket
48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       71W       11466Lm         72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       104W       16796Lm         96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       169W       27293Lm         Product nr       Product Description SAND Sealed       Lenses       Driver       Watt       Lumens       Driver mounting	108287	96LED-55° directconnect, driver, 1-axis tilt and HighTemp Lenses	55 degrees	552mA	169W	27293Lm	Driver mounted on tiltbracket
48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       71W       11466Lm         72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       104W       16796Lm         96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       169W       27293Lm         Product nr       Product Description SAND Sealed       Lenses       Driver       Watt       Lumens       Driver mounting							
72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       104W       16796Lm         96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses       55 degrees       552mA       169W       27293Lm         Product nr       Product Description SAND Sealed       Lenses       Driver       Watt       Lumens       Driver mounting	Product nr	Product Description 2-axis HighTemp Lenses	Lenses	Driver	Watt	Lumens	
96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses     55 degrees     552mA     169W     27293Lm       Product nr     Product Description SAND Sealed     Lenses     Driver     Watt     Lumens     Driver mounting		48LED-55° driver, 2-axis tilt with driver and HighTemp Lenses	55 degrees	552mA	71W	11466Lm	
Product nr Product Description SAND Sealed Lenses Driver Watt Lumens Driver mounting		72LED-55° driver, 2-axis tilt with driver and HighTemp Lenses	55 degrees	552mA	104W	16796Lm	
		96LED-55° driver, 2-axis tilt with driver and HighTemp Lenses	55 degrees	552mA	169W	27293Lm	
108135-SAND-172LED-60° SAND 104W with driver and diffusor glass60 degrees450mA104W17535LmOptional	Product nr	Product Description SAND Sealed	Lenses	Driver	Watt	Lumens	Driver mounting
	108135-SAND-1	72LED-60° SAND 104W with driver and diffusor glass	60 degrees	450mA	104W	17535Lm	Optional

## Brackets

Standard brackets are normally included in the price of the lamp, but must be ordered separetly. Tailormade brackets are availible for special projects, and the price is agreed seperately and delivery times varies. Please note that pole size must be defined. There are optional pole sizes; 60mm and 76mm. See below for standard brackets that are in the pricelist, including wire bracet (product number on request). These brackets will normally be held in stock and will be shipped according to standard delivery times.



Wall Bracket (Product number: 106455)

Ceiling Bracket (Product number on request)



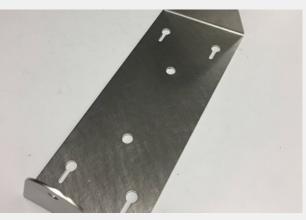
Pole Bracket (Product number: 108225)



Tower Bracket (Product number on request)



Tilt Bracket (Product number on request)



## Housing

CrystalLed lamps are suitable for a range of different housing options. Standard housing is ARC with or without diffusor and Roof. Cube can be ordered upon request.



ARC Housing w/ diffusor

Roof Housing



### ARC Housing without diffusor



Cube Housing



\* 8 - 12 weeks delivery time.

# Dali

Light control systems offers significant benefits in terms of supporting user-control, light experience, and visual needs. There are a number of ways to implement intelligent light solutions, which reduces energy consumption, saves operational costs, upholds industry standards and are environmentally friendly:

- Scheduled automatic shutoff
- Scheduled dimming of daylight aperture and working hours
- Management of different cable-zones, which allows the light to function only where needed

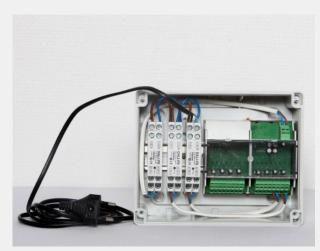
#### What is DALI?

In any light control system, the ballasts and controllers must be able to speak and hear the same language. In the case of digital dimming systems, this language is either proprietary or an open standard. The Digital Addressable Lighting Interface (DALI) is an open standard. DALI as the communication standard therefore enables the digital components to communicate.

#### What do you need?

- DALI card
- DALI operator panel (Standard: 5-button panel)
- DALI operator panel (DALI PMU dimmer)
- DALI operator panel (key panel)
- USB-cable
- DALI Distribution Box (only for more than 64 units)
- DALI-PS power supply (only one, if less than 64 units)
- Configurator





### Why DALI?

- DALI is a recognized international standard for lighting control systems.
- DALI has proven its reliability for many years, and will continue to develop and support the growing demands for professional lighting.
- The digital simplicity and flexibility that DALI provides enables customers to create solutions that are easy-to-use, robust, interoperable and affordable.
- The compatibility and interchangeability of different control modules from different manufacturers are reliable when using the DALI standard.
- The DALI system allows the customer to control light automatically or regulate it for its intended purpose.

## SmartGrid

Ledlight Group works with Smart Grid Norway to provide customers with leading technology. Smart Grid Norway tailor solutions for most industries where they provide custom software and dashboards.



#### **INDUSTRIAL & COMMERCIAL**

Energy management system solutions enabling customers to:

- Optimize energy use
- Streamline operations
- Increase property value

#### UTILITIES

Management systems, ICT communication infrastructure and PLC solutions enabling customers to:

- Make substations intelligent
- Reduce "Big Data" to "Less Data"
- Reduce operating costs

#### TELECOM

- Broadcast and mobile network management
- Reduce operating and maintenance costs
- Reduce downtime with intelligent recover functions
- Automatic & manual remote control of transmitter stations
- Communication portfolio that covers Layer 1 to Layer 7

#### SOFTWARE DEVELOPMENT

- Applications for monitoring and control
- One common SW platform independent of application needs
- Open and future proof technology
- Development projects
- UX design Development projects



# LedlightGroup

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