PROFESSIONAL LED WORK LAMP

Goby



Shown: Goby Ultra, titanium-based e-coating, 14° lens, high tensile 316L bracket.

CE | IP69K | IK10 | Class II | C5 ISO 9223 | Ta −45 … +50 °C | 9–32 VDC | 12 and 24 V | Deutsch DTP04 in housing | Vibration 6 G | Crane Light Director | 5-year warranty

The versatile professional work lamp of the range. Four output levels from 4,600 to 8,200 lumens on 9 to 32 volts DC, in a 1.8 kg housing rated IP69K and IK10, with the Deutsch connector fitted in the housing so there is no cable tail to route or damage.

LUMINOUS FLUX	POWER	WEIGHT
8,200 lm	65 W	1.8 kg
SUPPLY	**INGRESS**	**IMPACT**
9–32 VDC	IP69K	IK10

Values apply to the Ultra at 6500 K, Ta 25 °C, including lens losses. All four output levels share the same housing, bracket, connector and dimensions.

WHY IT IS SPECIFIED

Four output levels on one 1.8 kg housing. The Ultra, the Pro, the 9 and the 6 differ in lumen package and in price, not in mounting, connector, bracket or dimensions. One spare covers the fleet.

9 to 32 V DC on one part number. A 12 volt vehicle and a 24 volt machine take the same lamp, with the Deutsch DTP04 connector fitted in the housing and no cable to gland or shorten.

A European work lamp, built to the range standard. IP69K, IK10, corrosion class C5 and a 316L bracket. The Goby is the versatile one; where the position is punished, the Piranha is the rugged one.

WHERE IT IS USED

- Machine and vehicle integration on 12 and 24 V DC
- Mobile crane booms, on the Crane Light Director
- Service and maintenance vehicles
- Excavators, loaders and forklifts
- Workstation and inspection positions
- Engine rooms, pump rooms and switch rooms
- Ship accommodation and working alleyways
- Access platforms, ladders and stairs
- Conveyor and transfer point lighting
- Loading dock and shelter lighting
- Agricultural and forestry machines
- OEM integration on equipment

VERSIONS

	Ultra	Pro	9	6
Code	GODC07	GODC06	GODC05	GODC03
Flux	8,200 lm	7,200 lm	6,300 lm	4,600 lm
Power	65 W	55 W	55 W	35 W
Efficacy	126 lm/W	131 lm/W	115 lm/W	131 lm/W
Supply	20–32 V	9–32 V	9–32 V	9–32 V

The Pro and the 9 use different LEDs at the same wattage: the Pro is the preferred build, the 9 is there for a budget that can accept slightly less light. All four have the same size and weight, the HT version included.

Light output and optics

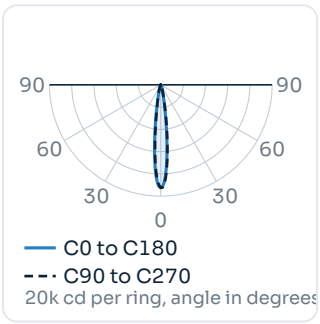
Values apply to the standard configuration at Ta 25 °C and include lens losses and driver consumption. Photometry is measured in house to IES LM-79 and the files are downloadable per optic from the product page.

BEAM CHARACTERISTICS

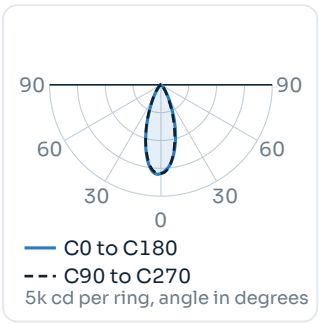
Lens	Distribution	Beam angle 50 % of peak	Field angle 10 % of peak	Typical use
14°	Spot, symmetric	13°	27°	Long throw from a machine or a boom onto a distant work point
38°	Medium, symmetric	37°	69°	The general purpose choice: machine areas, decks, platforms
69°	Wide, symmetric	72°	103°	Close range over a wide field: cabs, walkways, engine rooms
14° × 46°	Flare, asymmetric	13° × 45°	30° × 70°	Throws far forward and stays wide across: haul roads, gangways
No lens (.NOP)	Very wide, symmetric	136°	168°	Very close range, machine interiors and confined spaces

The beam angle is the full angle between the two directions where the intensity has fallen to 50 % of the peak. The field angle uses 10 %. On a work lamp the optic decides usability far more than the lumen package does: a 14° spot and a 69° wide from the same 8,200 lm housing are two different products in practice. Diagrams are shown for the Ultra; the other output levels have the same distribution.

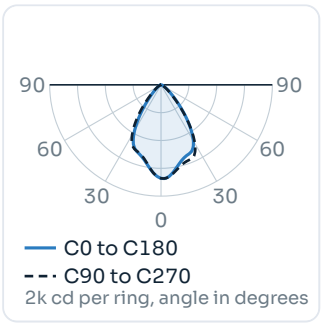
LIGHT DISTRIBUTION



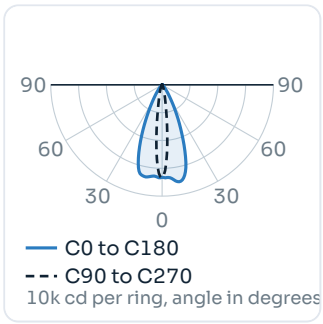
14° spot



38° medium



69° wide



14° × 46° flare

OBTRUSIVE LIGHT

ULOR at 0° tilt	**0 %**
Amber 2200 K	Available on every optic, for light sensitive surroundings
Bi-colour 4000 K with amber 2200 K	Switchable in operation, for fog, dust and night regimes

Nothing is emitted above the horizontal at 0° tilt. That is the figure a permitting authority asks for when a site borders a residential area or a protected zone, and it is the starting point for any assessment against NEN-EN 12464-2 and the NSVV guidance on obtrusive light. Where the site condition demands a cut off optic rather than a controlled floodlight, see the DarkLicht range.

COLOUR AND CONSISTENCY

Colour temperatures	6500 K, 5000 K, 4000 K, 2700 K, amber 2200 K
Flux at 6500 K	Identical to 4000 K
Bi-colour	4000 K with amber 2200 K, switchable in operation
Colour rendering	Ra > 70 standard, optionally 80 or 90
Colour consistency	MacAdam step 3 or better
LED service life	TM-21 L90B05 > 360,000 h at 50 °C

Full specification

All values apply to the standard configuration at 25 °C ambient, including lens losses and driver consumption. A hyphen means the entry does not apply to that version.

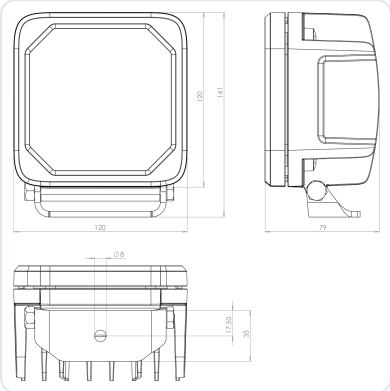
	Goby Ultra	Pro	9	6
PERFORMANCE				
Luminous flux	8,200 lm	7,200 lm	6,300 lm	4,600 lm
Power consumption	65 W	55 W	55 W	35 W
Efficacy	126 lm/W	131 lm/W	115 lm/W	131 lm/W
ELECTRICAL				
Supply voltage range	20–32 VDC	9–32 VDC	9–32 VDC	9–32 VDC
Nominal voltage	24 V	12 and 24 V	12 and 24 V	12 and 24 V
Current draw	2.7 A at 24 V	2.3 A at 24 V · 4.6 A at 12 V	2.3 A at 24 V · 4.6 A at 12 V	1.5 A at 24 V · 2.9 A at 12 V
Driver	DC drivers on board, no external box			
Reverse polarity and surge	Protected			
Dimming	On request			
CONSTRUCTION				
Housing	Cast aluminium, less than 0.08 % copper			
Surface finish	Conversion layer plus 2-layer titanium-based e-coating			
Colour	Titanium Black			
Bracket	High tensile 316L stainless steel, unlimited rotation from -60° to +30°			
Front	Polycarbonate IK10 as standard, chemically hardened glass IK09 on request			
Protection class	Class II			
Ingress protection	IP66, IP67, IP68 and IP69K, each class tested separately			
Impact resistance	IK10 with polycarbonate, IK09 with glass (IEC 62262)			
Corrosion class	C5 industrial and marine (ISO 9223)			
Vibration and shock	6 G at resonant frequency (IEC 60068-2-6), shock tested to IEC 60068-2-27			
DURABILITY AND DIMENSIONS				
Ambient temperature	−45 to +50 °C			
LED service life	TM-21 L90B05 > 360,000 h at 50 °C			
Termination	Deutsch DTP04 two pole connector fitted in the housing. There is no cable			
Mating connector	Available as an accessory, not supplied as standard			
Dimensions	120 × 141 × 79 mm including bracket			
Weight	1.8 kg incl. bracket			
Warranty	5 years on the complete luminaire			

DC versions run at a fixed constant current, so a different power level is a custom build. A high temperature version to +120 °C is available and is covered by the Goby HT datasheet.

Mechanics, mounting and driver

All drawings are to scale and dimensioned in millimetres. DXF and STEP models are available on request. All four output levels share these dimensions.

BRACKET AND ROTATION



Incl. bracket	120 × 141 × 79 mm
Weight	1.8 kg with bracket
Material	High tensile 316L stainless steel
Rotation	Unlimited from -60° to +30°
Mounting	One person, one hand, single fixing
Smaller version	Goby Mini, 112 × 70 × 60 mm, 90.5 mm high over the bracket, 1.1 kg

TERMINATION

Connector	Deutsch DTP04, two pole, fitted in the housing
Cable	None. There is no tail
Why	Nothing to route, nothing to shorten and nothing to damage on a machine
Mating connector	Available as an accessory, not supplied as standard
Same on	Goby Mini and DarkLicht Mini

MOUNTING AND ACCESSORIES

Standard bracket	High tensile 316L, supplied as standard
Mating connector	Deutsch DTP04, available as an accessory
Crane Light Director	Steerable boom system for mobile cranes. Separate datasheet
Glass front	Chemically hardened glass instead of polycarbonate, IK09
Goby HT	High temperature version to +120 °C. Separate datasheet
Rugged alternative	Piranha, for positions with handling damage

DRIVERS ON BOARD

Type	DC drivers on the board inside the housing
External box	None
Reverse polarity	Protected
Surge	Protected
Supply range	9 to 32 V DC, or 20 to 32 V on the Ultra
AC version	Only in the HT build, see the Goby HT

One component instead of three. With the drivers on board and the connector in the housing, a machine builder fits a Goby with one plug. There is no external driver, no gland and no junction box.

CRANE LIGHT DIRECTOR



What it is	Steerable boom lighting for mobile cranes, fitted as a retrofit
Goby on the system	8,200 lm per tilting module
Other luminaires	Goby Mini, Piranha, DarkLicht S and Marlin
Control	From the cabin, over a LoRa controller or a cabin switch

Ordering, standards and documents

ORDER CODE

Example **GODC07-65K.38**

Goby Ultra, 6500 K, 38° optic

GODC07 · GODC06	Ultra 8,200 lm · Pro 7,200 lm
GODC05 · GODC03	9 at 6,300 lm · 6 at 4,600 lm
GOHT01 · GOHT02	High temperature, AC and DC
65K · 50K · 40K · 27K · 22K	6500 K · 5000 K · 4000 K · 2700 K · amber 2200 K
.14 · .38 · .69 · .14x46 · .NOP	Optic suffix, .NOP is supplied without optics

The optic suffix follows the colour temperature. Front material and the mating connector are confirmed at order and are not part of the code.

COMBINATIONS

Amber 2200 K with any optic	Possible
Bi-colour 4000 K with 2200 K	Possible
Crane Light Director	All DC versions
Glass front, IK09	Any version
AC supply	Only in the HT build
316L housing	Not available, see the Piranha SS

STANDARDS AND VERIFICATION

Subject	Standard	Verification
Luminaire safety	IEC/EN 60598-1, -2-5	In-house test
EMC emission and immunity	EN 55015, EN 61547	Third party test
Ingress	IEC 60529 and ISO 20653. IP66, IP67, IP68, IP69K	In-house test
Impact and vibration	IEC 62262 IK10 with polycarbonate · IEC 60068-2-6 at 6 G	In-house test
Shock and corrosion	IEC 60068-2-27 · ISO 9223 class C5, industrial and marine	In-house test
Photometry	IES LM-79, IES files per optic	In-house test
Substances	RoHS, REACH	Self-declaration

BEFORE YOU ORDER

A sample luminaire to hang before you commit to a project quantity.

Five years warranty on the complete luminaire.

A DIALux calculation from our engineers, on your site drawing.

PRODUCT PAGE

IES files and revision history, DXF and STEP on request, and project references.
jelproducts.nl/en/products/goby

WHERE IT EARNS ITS PLACE

The Goby earns its place at the working position. Most of the light a person actually works under is not the floodlight on the mast, it is the lamp two metres from the task, on the machine, in the engine room or over the bench. That position needs the right amount of light, a supply the machine already has, and a housing that lasts as long as the machine it serves.

Notes. Values are for the standard configuration. The AC version always delivers more light than the DC version of the same product. Power is a driver setting on AC and is ordered as a suffix; DC versions run at a fixed constant current. North American models on request. The JEL range is not ATEX or Ex certified.