COMPACT LED WORK LAMP

Goby Mini

Shown: Goby Mini, 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

2,300 lumens in 112 × 70 × 60 millimetres, at 1.1 kilograms. The Goby Mini is for machines, vehicles and mounting positions that have no room for a luminaire and still have to be lit to an industrial standard.

LUMINOUS FLUX	POWER	WEIGHT
2,300 lm	18 W	1.1 kg
SUPPLY	**INGRESS**	**IMPACT**
9–32 VDC	IP69K	IK10

Values apply at 6500 K, Ta 25 °C, including lens losses. The full JEL optic set is available, which is what decides whether a small lamp is usable at three metres or only at one.

WHY IT IS SPECIFIED

It fits where nothing else does. At 112 × 70 × 60 mm and 1.1 kg the Goby Mini goes into positions that are otherwise fitted with a consumer grade lamp or left dark. The size is the specification.

Full industrial class in the smallest housing. IK10 with the polycarbonate cover, IP69K, corrosion class C5 and the same 316L bracket as the rest of the range.

The same optic set as the large floodlights. 14°, 38°, 69° and 14° × 46°. On a small lamp the optic matters more than the lumen package, because the distance is what it is.

WHERE IT IS USED

- Compact machinery and vehicle positions
- Mobile crane booms, on the Crane Light Director
- OEM integration on equipment
- Service points and maintenance zones
- Forklifts, reach trucks and small plant
- Machine interiors and tool areas
- Ladder, hatch and step positions
- Small pump and valve stations
- Ship lockers, berths and store rooms
- Instrument and gauge positions
- Marker and orientation lighting
- Retrofit of small halogen work lamps

VERSIONS

	Goby Mini
Article base code	GODC02
Luminous flux	2,300 lm
Power	18 W
Efficacy	128 lm/W
Supply	9–32 VDC, 12 and 24 V nominal
Dimensions	112 × 70 × 60 mm
Weight incl. bracket	1.1 kg

There is one version. For more output in a slightly larger housing see the **Goby** at 4,600 to 8,200 lm, for a punished position the **Piranha**, and for glare control the **DarkLicht Mini**.

Light output and optics

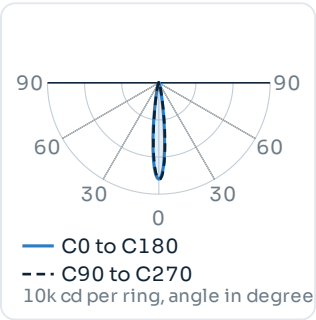
Values apply to the standard configuration at Ta 25 °C and include lens losses and driver consumption. Photometry is measured in house to IES LM-79 and the files are downloadable per optic from the product page.

BEAM CHARACTERISTICS

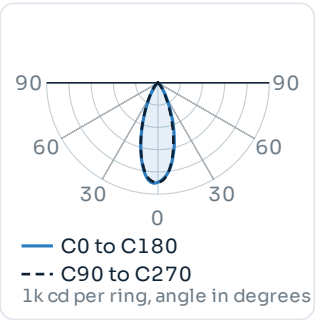
Lens	Distribution	Beam angle 50 % of peak	Field angle 10 % of peak	Typical use
14°	Spot, symmetric	13°	27°	Long throw from a machine or a boom onto a distant work point
38°	Medium, symmetric	37°	69°	The general purpose choice: machine areas, decks, platforms
69°	Wide, symmetric	72°	103°	Close range over 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 lamp this size the optic is the whole specification: 2,300 lumens through a 14° spot reaches a target at twenty metres, and the same 2,300 lumens through a 69° wide lights a hatch at arm's length. Both are the same article with a different suffix.

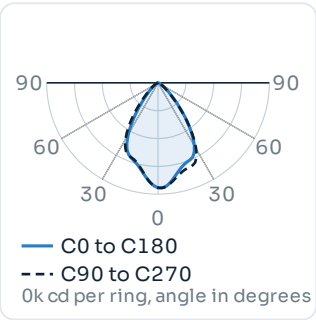
LIGHT DISTRIBUTION



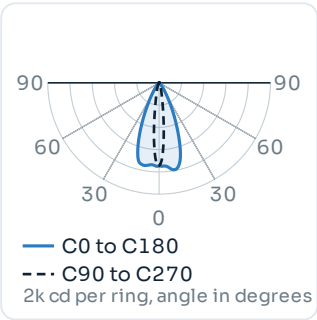
14° spot



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.

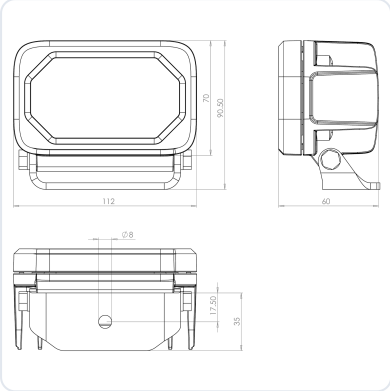
	Goby Mini
PERFORMANCE	
Luminous flux	2,300 lm
Power consumption	18 W
Efficacy	128 lm/W
ELECTRICAL	
Supply voltage range	9–32 VDC
Nominal voltage	12 and 24 V
Current draw	0.8 A at 24 V · 1.5 A at 12 V
Driver	DC drivers on board, no external box
Reverse polarity and surge	Protected
Dimming	On request
CONSTRUCTION	
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	112 × 70 × 60 mm including bracket
Weight	1.1 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. There is no high temperature and no 316L version of the Goby Mini; see the Goby HT and the Piranha SS.

Mechanics, mounting and driver

All drawings are to scale and dimensioned in millimetres. DXF and STEP models are available on request.

BRACKET AND ROTATION



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

TERMINATION

Connector	Deutsch DTP04, two pole, fitted in the housing
Cable	None. There is no tail
Why	On an OEM machine there is nothing to route, gland or shorten
Mating connector	Available as an accessory, not supplied as standard
Same on	Goby 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
More output	Goby, 4,600 to 8,200 lm in the same style
Glare control	DarkLicht Mini, 4,800 lm with a full cut off reflector

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
AC version	Not available

One component instead of three. With the drivers on board and the connector in the housing, an OEM fits a Goby Mini 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 Mini on the system	2,300 lm per tilting module, the lightest option
Other luminaires	Goby, Piranha, DarkLicht S and Marlin
Control	From the cabin, over a LoRa controller or a cabin switch

Ordering, standards and documents

ORDER CODE

Example **GODC02-65K.38**

Goby Mini, 6500 K, 38° optic

GODC02	Goby Mini, DC, 9–32 VDC, drivers on board
65K · 50K · 40K · 27K · 22K	6500 K · 5000 K · 4000 K · 2700 K · amber 2200 K
BIC	Bi-colour 4000 K with amber 2200 K
.14 · .38 · .69 · .14x46 · .NOP	Optic suffix, .NOP is supplied without optics
Mating connector	Ordered separately as an accessory

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	Standard
Glass front, IK09	Possible
AC supply	Not available
High temperature	Not available, see the Goby HT

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 · IEC 60533 marine, bridge and open deck	TÜV
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-mini

WHERE IT EARNS ITS PLACE

The Goby Mini earns its place in the positions a lighting design never reaches. Machine interiors, hatches, small platforms and tight mounting points get whatever fits, and whatever fits is usually not built for the environment. This brings those positions inside the same specification as the rest of the machine.

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.