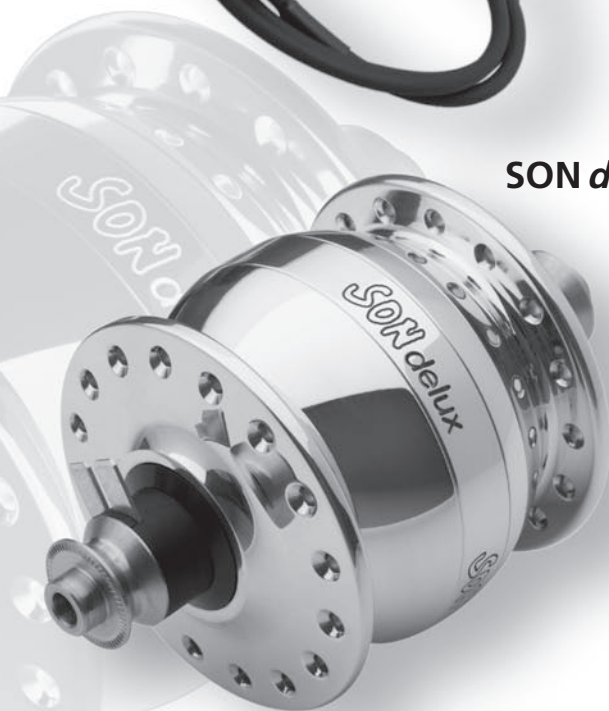


SON Schmidts Original Nabendynamo



Edelux



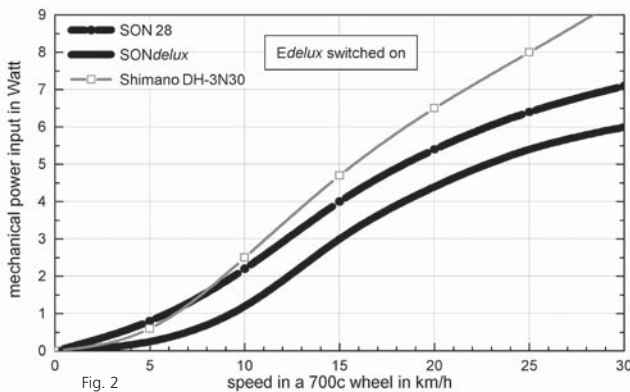
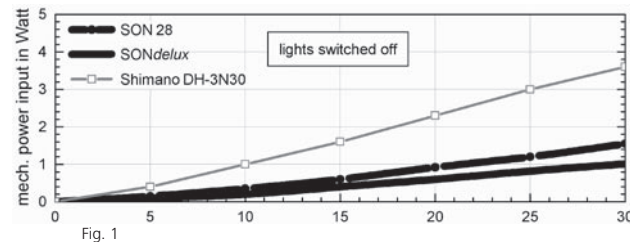
SONdelux

SONdelux

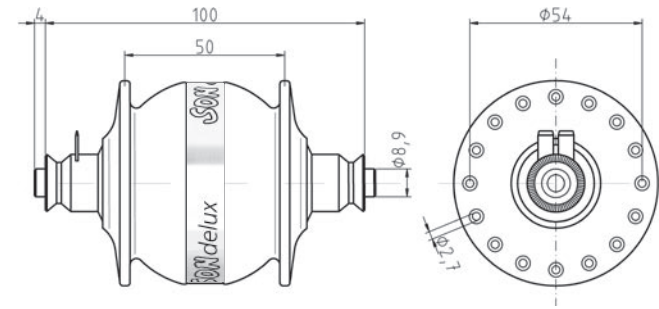
The SONdelux is the first hub dynamo generator that is specially designed to match with modern LED-headlights (such as Edelux and B&M Cyo). The advantages of an LED over a halogen bulb is that they are highly efficient at low power. This is why it is no longer necessary to build a dynamo in such a way for it to give its nominal wattage at the lowest possible speed already. The SONdelux is therefore smaller and lighter than a hub dynamo that is made for a halogen lighting system (SON 28).

The no-load losses decrease when compared with the SON 28 (the most smooth-running standard hub dynamo at present) by 30 to 35% (fig. 1). With lights switched on, using the SONdelux saves about 1 watt of drive power (fig. 2). You can still reach 80 lux with the Edelux at high speeds. However at 10 km/h the Edelux shines brighter than the best halogen headlights at the highest of speeds (fig. 3).

The SONdelux is as robust as the SON 28 with the same high-quality finish. Naturally there is a 5 year guarantee, as with all Schmidt products. It is available in bright polished aluminium, anodized black or red in many different spoke drilling options. The version for disc brakes has a center lock® mount.



Technical Data



Electrical power output: 6V / 3W

Efficiency: 65% at 15 km/h in 700c wheel

No-load loss: 0.4 W at 15 km/h in 700c wheel

Magnet rotor: neodymium-iron-boron magnets, 26 poles

Connection: 4.8 mm tab connector, double-pole, potential-free

Axle: hollow axle, Ø 10 mm, aluminium 7075 T6

Axle ends: stainless steel

Bearings: deep groove ball-bearing 629-2RSH

Hub body: aluminium 6082 T6

Colours: silver polished, anodized black or red

Sealing: gap seal and sealing ring, pressure compensation system

Spoke drillings: 36, 32, 28, 24, 20 radial lacing permitted

Weight: 390 g

Disc brakes: SONdelux disc, center lock®

Guarantee: 5 years



Edelux

Optical System

The Edelux utilizes the offset mirror IQ-Tec by Busch & Müller. Unlike conventional optical systems for headlights it catches quite a large part of the emitted light and provides a wide, evenly and brightly lit road surface. The Edelux is 3 times as bright as the best halogen headlight.

Since the front edge of the light field is clearly defined glaring of oncoming cyclists is avoided. Little scattered light diffuses upwards, which means it hardly glares the rider indirectly under foggy weather conditions.

The black ring around the mirror protects the rider's night vision against direct blinding. The antireflective front glass is scratch resistant and lets through 6% more light than panes made of plastic would do.

By adjusting the LED precisely and testing each headlight we provide constant quality.

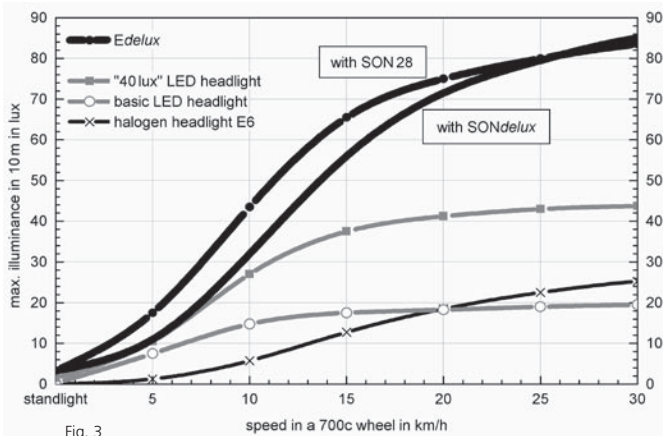
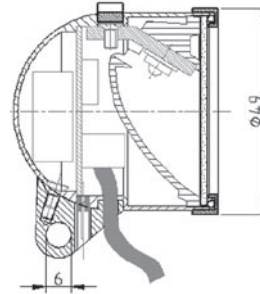


Fig. 3
Illuminance of a selection of headlights run with a SON 28 hub dynamo, rear light B&M DToplight connected

Edelux

Mechanics / Electrical system / Heat flow

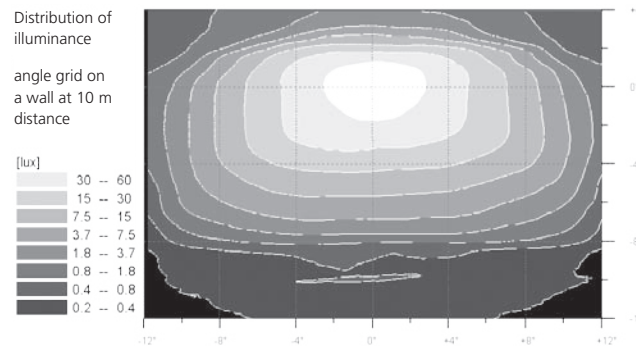
Efficiency and LED lifetime mainly depend on its cooling. This is why we placed the LED on a massive copper heat sink, which in turn conducts the heat to the aluminium housing, and then to the outside air. At high speed the good cooling allows for an increase of 20% luminous flux compared to usual LED headlamps, some of which can reach more than 100° Celsius (210° F).



The switching ring with its nose is undestructable and allows „blind“ switching even when wearing thick gloves. In sensor position the light turns on in the beginnings of darkness, uninfluenced by street lamps or car headlights.

The Edelux headlight is watertight. Its robust, low-loss coaxial cable resists even rough treatment.

The Edelux has a rear light connection, but can be used without a rear light as well.



Technical Data

Light source:	2.4 / 3 Watt high-performance LED (>100 lm/W)
German mark of conformity:	~ K 607
Feed cable:	coaxial cable, PVC-free, Ø 3 mm
Cable lengths:	60 cm, SON connectors fitted, alternatively, 140 cm with loose connectors
Connection for rear light:	blade connector 2.8 mm and 6 mm eyelet connector (enclosed)
Switch:	switch ring with magnet, reed-contact
Functions:	automatic light sensor and capacitor standlight
Seal:	O-ring
Housing:	aluminum 6082 T6
Colours:	silver polished, anodized black or red
weight:	85 g
Guarantee:	5 years

