Safe measurement, indication and control of rotational speed

RHEIN TACHO

rolux hand-held stroboscope

Our tried and tested rolux hand-held stroboscope now with many additional features.

increased illuminance

increased focus

increased battery runtime

increased service life

extended mains operation

With rolux you're in control:
The intelligent device for better results.

increased illuminance

Good things come of small bulbs. Thanks to its extremely powerful lamp, *rolux* delivers a massive illuminance of about 1,200 Lux, giving you a brilliantly illuminated and sharply defined test image. This powerful technology, involving rapid machine cycles, enables you to carry out observations and to document findings easily on the "static image". When quality control checks are being carried out, sources of errors can be identified quickly and easily.

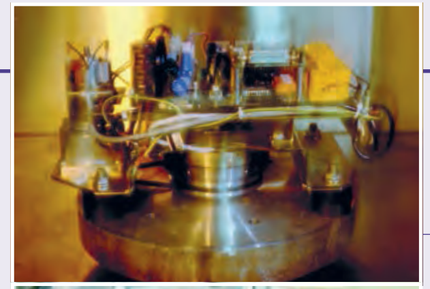
rolux cuts flash duration times by half.
The result: a really sharply defined image.

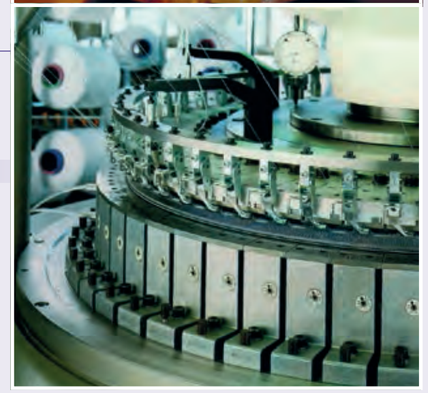
increased focus

The new generation of *rolux* has a flash frequency of 9 µ seconds (µs) which is more than twice as fast as the previous model (20 µs). Since quickly moving objects "cover" a shorter distance in 9 µs than in 20 µs, the result is a much sharper flash image, revealing every detail.

The fascinating rolux measurement principle:
The "frozen movement".

The *rolux* hand-held stroboscope is ideally suited for carrying out exact checks, observations, examinations and documentation of the behaviour of materials, systems and devices operating at high rotational speed or vibrating while they are actually in operation. Switch the device on and direct the flash at a rotating, vibrating or rapid cycling object. By moving the scroll wheel or using the external trigger function, you alter the flash frequency. As soon as you align the flash frequency and movement frequency, the rotating, vibrating or rapid cycling object suddenly "freezes". All the moving parts on the static image are now clearly visible even though they are moving.





Example of application:
Functional check of a circular knitting machine during running operation.

Using the scroll wheel you bring the flash frequency of your rolux into alignment with the movement frequency of the knitting machine. The excellent illumination of the measuring surface and the imaging, which slows down the sequence of movements, now allows you to check that guides, rollers and needles are working correctly.

Example of application:
Checking the vibration resistance of components on a vibrating table.

In order to detect their weak points at an early stage, electrical components, plug-in connections and mechanical components are tested on a vibrating table for their vibration resistance. The frequency of the vibrating table and the flash frequency are synchronised by means of the trigger input. Components that move at the set frequency appear static. Components that are now still moving are vibrating at a different frequency.

Operating rolux is simplicity itself, leaving you to concentrate on key tasks.

Using the intelligent scroll wheel, which reacts to your movements, you can adjust the exact flash frequency or change the frequency range rapidly and precisely. With just one hand. And the results are displayed with the accuracy of digital technology in the LCD (Liquid Crystal Display).

With rolux you do not have to work twice as long, but you could.

increased battery runtime

The astonishing power of this handy little device enables it to cope with all demands placed on it. But what is more astonishing is how long it can run on one charge. *rolux* is equipped with state of the art lithium-ion battery technology, which enables you to work almost twice as long as before on one charge. What's more, lithium-ion batteries last longer and are easy to charge. *rolux* is also available with a mains-power supply unit.

Hand or tripod operation, battery or mains:
rolux is extremely versatile.

extended mains operation

rolux can be operated continuously on the mains. The power supply unit is powerful enough to operate the device and charge the battery* at the same time. *rolux* has a multi-range power supply unit and the adapters provided make it compatible with mains power supplies throughout the world – from 100 to 240 watts. By mounting *rolux* on a tripod, you can create stable light conditions for photographs and long-term observation.

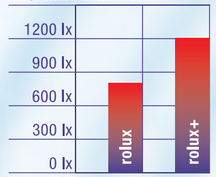
rolux doesn't just improve your working conditions.
It also reduces your operating costs.

increased service life

The improved *rolux* pocket strobe uses a high-performance xenon flash tube which delivers twice as many flashes as the previous model: at least 200 million instead of 100 million flashes. In other words: it lasts longer. It has been tested under laboratory conditions in continuous operation at 6,000 flashes per minute.

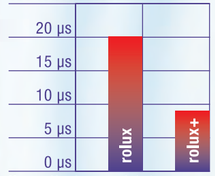
*Only available with rolux with battery and mains power supply units.

50 % more illuminance



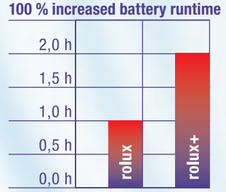
Measured in illuminance (lx)

100 % better focus



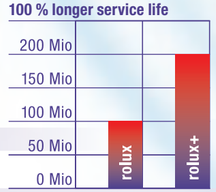
Measured in micro seconds (µs)

100 % increased battery runtime



Measured in hours (h)

100 % longer service life



Measured in millions of flashes

Technical data

General parameters	
Frequency range	30 … 12,500 FPM (flashes per minute)
Accuracy	+/- 0.01 % from display +/-1 digit
Resolution	+/-1 FPM
Repeatability	+/-1 FPM
Display	5 digit LCD
External trigger input	0 … 5 V DTL/TTL compatible 3.5 mm / 1/8" standard connector Uout = 7.2 V unregulated
Line power input	100 … 240 V, 50/60 Hz, incl. 4 area connector pins

Flash tube parameters	
Life cycle	200,000,000 flashes (@ 6,000 FPM)
Flash duration	< 9 µs
Light emission / range	1,200 Lux / 20 cm / 8" (@ 4,500 FPM)
Flash colour	6,000 … 6,500 K
Flash energy	Max. 170 mJ

Battery specifications *	
Battery rechargeable	Lithium-ion battery pack
Continuous use time	> 2 h @ 1,500 FPM on 23 °C / 73 °F
Battery protection	Yes
Recharging time	Approx. 5 h
Overload protection	Yes

Housing	
Material	ABS
Size	240 x 65 x 40 mm / 9.75 x 2.75 x 1.75"
Weight	415 g (300 g AC only, without battery pack)
Certifications	CE

Ambient conditions	
Ambient temperature	0 ... 40 °C (32 ... 114 °F)

* valid only for rolux with battery pack.

Scope of delivery

rolux hand-held stroboscope
for battery and mains operation*, carrying case with operating instructions and test certificate, battery charger with adapters for different countries, trigger signal plug.

*Also optionally available with a mains-only power supply unit.

Accessories

Belt bag with clip, replacement xenon flash tube, tripod.

RHEIN TACHO

YouTube XING www.rheintacho.com

The challenges of our industrial customers have always been the driving force behind our developments. With standardised and customised solutions, which are technically equal to the best solutions of their time, we are not just part of a solution but initiators of progress, too.

RHEINTACHO Messtechnik GmbH
Waltershofener Straße 1
79111 Freiburg · Germany
Tel: +49 (0)761 45 13 0
Fax: +49 (0)761 44 52 74
info@rheintacho.de
www.rheintacho.de

RHEINTACHO UK LTD
Enterprise Court, Pit Lane
Micklefield
Leeds, LS25 4BU
Tel: +44 (0)113 287 4411
Fax: +44 (0)113 287 4422
sales@rheintacho.co.uk
www.rheintacho.com

N0001.390A - Status November 2015