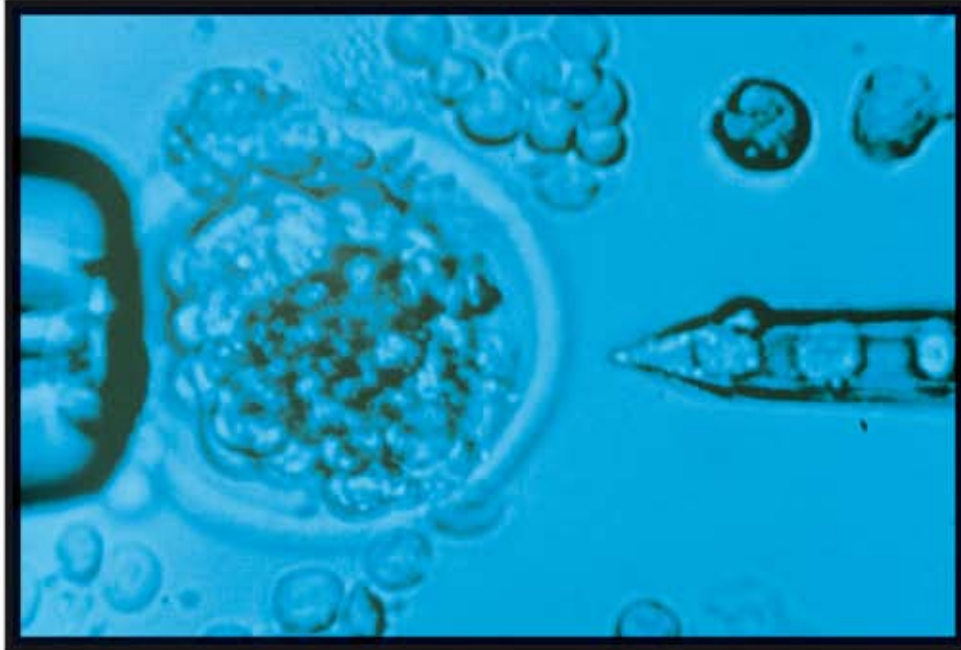


Drelloscopie®



Powerful illumination under a microscope

PRECISION DOWN TO THE POINT.

The compact flashlight stroboscope DRELLOSCOP 3244 consists of a supply/control unit with digital measuring value display, integrated into a 2/3 19" desktop case, and contains the point flash light with optical adapter for the connection of a light transmitter.

The flash sequence is controlled either internally by manual adjustment, or externally by electric pulses from 500 mV upwards, or by optional pulse generators.

In case of external control the flash sequence can be triggered with a delay - function "PHASE" - with digital display of the delay angle.

In addition to the function "PHASE" (image shift-ing) a slow-motion display of the object movement is provided by the function "SLOW MOTION". Under this function the duration of a movement cycle is displayed digitally. The system is supplied from the mains power supply system.

High illumination power.

Fast measuring value collection with high degree of precision and resolution by 16 bit microcontroller.

Five-digit measuring value display.

Solid, shielded design.

Mains powered design with galvanic separation.

Two years warranty (except flashtubes).

POINT FLASH STROBOSCOPE FOR MICROSCOPIC AND ENDOSCOPIC APPLICATIONS.

The point flash stroboscope DRELLOSCOP 3244 was developed for concentrated powerful illumination of small areas, in order to observe periodic and quasi-periodic rotation and vibration movements as if they stood virtually still.

Various light transmitters that can be connected to the stroboscope permit stroboscopic analysis, single-image recording as well as rotation speed measurements of fast movements in tight or narrow passages or cases, like on pumps and turbines.

The light transmitters can also be used as cold-light sources for observations in explosion-prone areas.

Applications:

Research, development, and university applications

Mechanical engineering

Ship building: cavitation studies

FOR ALL THOSE WHO NEED TO KNOW THE DETAILS.

Technical specification.

■ Flash sequence control: *internal by microcontroller; adjustment by rotary knob; external either by positive pulses from 0.5 V ... 30 V_{pp}, pulse-interval ratio * 1:1, by sine voltage from 1 V ... 60 V_{pp} by reflex light barrier, proximity switches, and closing contact; in addition: control via photocoupler; electronic phase shifter for image shifting from 0 ... 360°. In case of internal and external control: object movement either as if it stood virtually still, or continuously revolving (slow motion) with adjustable revolution time*

■ Flash sequence range: *for internal and external control 30 ... 25,000 min⁻¹ or 0.5 ... 416 s⁻¹*

■ Measuring value display: *5 decades, 7 segment LEDs, 12 mm high, red, floating decimal point, display for internal and external control either in min⁻¹, s⁻¹, or degrees*

■ Resolution: *five digits, angle display better than 0.1°*

■ Precision of measuring basis: *0.001% (quartz time basis)*

■ Flashtube: *white shining xenon flashtube with almost point shaped discharge gap, plug-in type with optical adapter, light gain approx. 5:1, connection for light transmitter*

■ Flash energy: *either automatic adaptation to different flash sequences, or manual adjustment in four stages. Min. 0.15 joule/flash, continuous operation up to 25,000 min⁻¹ or 416 s⁻¹, max 2 joule/flash, continuous operation up to 1,000 min⁻¹ or 16.6 s⁻¹*

■ Flash half-intensity width: *min. approx. 1 µs (at 0.15 joule/flash), max. approx. 5 µs (at 2 joules/flash)*

■ Supply voltage: *design 01: 230 V (+10%/-15%); 40-60 Hz; design 02: 115 V (+10%/-15%), 40-60 Hz*

■ Power consumption: *max. 70 VA*

■ Fuses: *safety fuse; in addition: thermal excess-current release*

■ Admissible ambient temperature: *(operation): 0°C ... +50°C*

■ Admissible storage temperature: *-20°C ... +70°C*

■ Case: *light-metal, service-friendly half-shell design with handles, 2/3 19" standard case*

■ Dimensions/weight: *width=313 mm, height=133 mm, length=240 mm/approx. 7 kg*

■ Recommended accessories: *spare flashtube*
 ■ Options: *reflex light barrier LS 5016/8-L, proximity switches NJ2/8-L and NJ5/8-L; light transmitters: various light transmitters specially for microscopic and endoscopic applications or for use in explosion-prone areas*



www.drello.de

Dimensional drawings and additional technical specification data are available on request. Subject to technical changes due to design evolution and improvement.



Light transmitter for object illumination



Point flash stroboscope DRELLOSCOP 3244

Options specifically tailored to your preferences.

■ RS 232 interface,
 ■ Divider for external synchronization.

■ External synchronization and flash sequence range for internal and

external control can be modified according to customer's preferences.

■ Analog output port 0.1 ... 10 V for plotter connection.