640 EVS

Life duration up to 50.000 hours

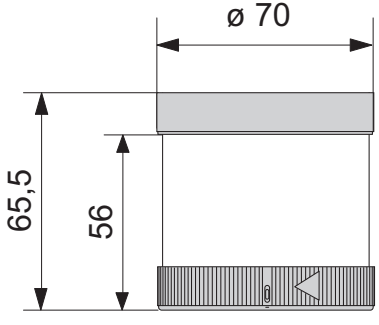
LED module with EVS system

New LED technology
Improved visibility system
Shock and Vibration resistance
Operating with PLC control system
Low power consumption
No maintenance
Interior and exterior application IP 65

CODE	VOLTAGE V	CURRENT mA	MAX. START UP CURRENT mA
644 □ 40 55	24 dc	200	< 500

▲ *Apply color code* 1 2 3 4 5

Dimensions (Height x Diameter): 65,5mm x 70mm
Construction: Polycarbonate transparent

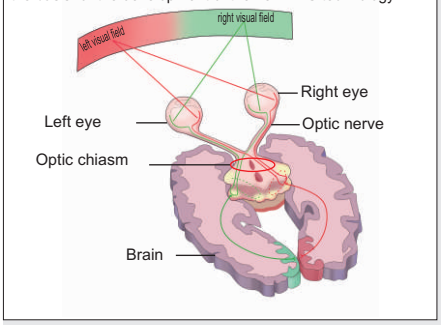


EVS - Enhanced Visibility System

A groundbreaking innovation in LED technology opens up a completely new dimension in optical signalling. Enhanced Visibility System, or the electronic improvement of visibility, for EVS short, is the name WERMA has given to this latest development which promises to bring about a revolution in signal technology.

EVS – ATTENTION-GRABBING LIGHT EFFECT ON NEUROBIOLOGICAL BASIS

Visual Pathways
The way in which the brain processes visual stimuli formed the basis for the development of the new EVS technology



The flickering of neon lamps and comparable lighting effects are highly effective at attracting our attention. The neurobiological basis of this phenomenon is explained by a university scientist as follows: Light signals are processed in the human brain, not directly in the eye. In order to be consciously registered there, incoming stimulus first have to pass through a form of filter. This filter has a “protective function”. During sleep it reduces disturbing stimuli to a minimum and assists in “overlooking” regular or continuous signals.

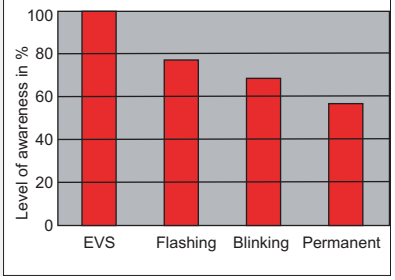
Irregular light impulses can circumvent the brain’s filter function.Random light signals fail to generate an acclimatisation effect and the brain is unable to escape the stimulus, even when the flickering continues for an extended period.

EVS – FLICKERING LIGHT WITHOUT ACCLIMATISATION EFFECT

On the basis of this understanding, WERMA’s R+D department set out to find a flickering light with a high degree of effectivity in attracting attention. In a multistage laboratory experiment 20 test candidates were asked to judge a series of different light signals and to determine the most eye-catching light. The result of the study was a stochastic flickering light with optimal attention-grabbing characteristics: EVS – Enhanced Visibility System! The light effect of this system is completely new and distinguishes it from all previous systems.

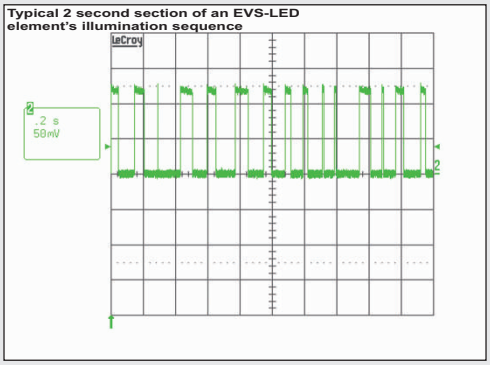
As a result of the extremely powerful signal effect, the EVS light is especially suited to signalling acute or highly important conditions. The EVS element can also be deployed in hazardous situations or in areas where immediate action is required.

Laboratory Test Results
Level of awareness generated by different light effects



EVS – UNIQUE LIGHT EFFECT VIA LED TECHNOLOGY

Typical 2 second section of an EVS-LED element’s illumination sequence



For the EVS system WERMA employs light emitting diodes. A microprocessor generates random light signals. This gives the light a very “agitated” character which proves highly effective in drawing the attention of those in its vicinity – even when seen out of the corner of the eye.

Up to now LED signal devices have confined themselves to imitating the light effects of light bulbs or Xenon flashes, EVS however utilises the strengths of light emitting diodes. LEDs are capable of generating the required high flickering frequency with ease, frequencies which Xenon flashes for example are incapable of generating.

There are a series of additional, classical advantage to LEDs – their resistance to vibration and shocks, their long life duration as well as their low energy consumption.