



## Semiconductor-produced "LSzR"-type source of light of safety & signal installations

A source of light constructed out of **LED diodes** is an ideal light-emitter device of signal & safety installations, because of its colour, luminosity & other parameters, because:

-its colour is <u>pure</u> (red 650nm  $\pm$ 20nm, yellow 590nm  $\pm$ 15nm, green 500nm  $\pm$ 10nm blue 470 nm  $\pm$ 10nm, white x=.31; y=.31 coord.)

-no <u>phantom-light</u>				
-it has intense & constant	<u>nt</u> luminosity			
-it operates <u>quickly</u>	$(F_{mod} > 1 MHertz)$			
-its lifetime is long				
-it is extremly <u>reliable</u>	(MTBF > 4 years)			
-it is robustly built	(> 10  g resistance to acceleration )			
-light-characteristic is nearly <u>at will</u> (it might be asymmetrical)				
-it works very efficientl	У			

and there is no need for any supplementary assembly, such as lens, colour filter, filament-lamp, nor maintenance is required.

It can be properly fitted to electronic signal sources & equipments.

It is light-technically qualified by the **Hungarian Electrotechnical Supervisior Institute**, it is safe-technically & railway-technically qualified by the **Technical University of Budapest**. Qualification is certified by **Certificate of Suitability**, based on **Nr. 485.005/1995**.

A short chart about currently produced types:

Nominal diameter of setting up-calibre	LSzR 40 Ø 40 mm	LSzR 150 Ø 150 mm	LSzR 200 Ø 200 mm
diameter of fitting-rim (nearly)	Ø 65 mm	Ø 165-170 mm	Ø 210-220 mm
luminosity (nearly)	25-60 candela	120-750 candela	150-1000 candela
colour	red, yellow, green, blue, white	red, yellow, green, blue, white	red, yellow, green, blue, white
nominal voltage of the basic type	24 V ±5% (D.C.) or 12V±5% (D.C.)	or 21 V $\pm$ 15% (DC or AC)	$\begin{array}{c} 10,5 \ V \pm \ 15 \ \% \ ({\rm DC \ or \ AC}) \\ or \ 21 \ V \pm \ 15\% \ ({\rm DC \ or \ AC}) \\ or \ 35 \ V \pm \ 15\% \ ({\rm DC \ or \ AC}) \end{array}$
max. nominal input- power	1,4 W without cooling, 3W with cooling	17 W	34 W

Further informations at the producer Company:

Percept Ltd	H1031. Budapest,	Drótos u. 12.,	Hungary
Phone, Fax.:	36-1-3884-810,		
E-mail:	percept@hu.inter.n	et	