

LIGHTING IN LED TECHNOLOGY



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Lighting in a livestock building significantly impacts on the welfare of kept animals and on the achieved production results. A properly lit building creates favourable conditions for the development of animals, the course of metabolism in the body, increases oxygen consumption, and consequently improves the functioning of the digestive and respiratory system.



LED FW tube

ADVANTAGES

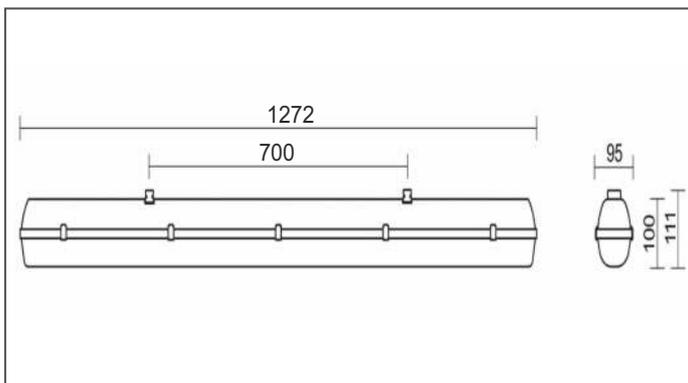
- specially designed for livestock buildings,
- ability to program lighting control in 24-hour cycles with a freely adjustable light output and adjustable brightening and dimming time,
- 3000 K colour temperature provides warm white light similar to natural,
- hermetic luminaire with IP66 protection,
- materials used for the production of the luminaire (ABS and acrylic) guarantee high resistance to UV radiation, gases, dust, temperature and water,
- LED FW tubes are equipped with an aluminium body (aluminium radiator) guaranteeing excellent heat dissipation from the light source and a high-quality power supply with current stabilization, which extends lamp life,
- 120 diodes spread over the whole length of the tube ensure proper dispersion of the emitted light along the entire length of the lamp,
- a diffuser (shade) of milk colour eliminates unlit zones on the surface of the bedding (no effects of black bars),
- in poultry houses, we use LED FWK lamps with adjustable brightness of light, while in pig farms, we use LED FWT lamps without regulation.

Specification	
Rated power	18 W
LED FW flux luminous	1980 lm
Light efficacy	110 lm/W
Power supply voltage	230 V AC
Frequency	50 Hz
Colour temperature	3000 K
Nominal durability period	50 000 h
Light beam angle	120'
Colour rendering index	≥ 80
Degree of leakage	IP 66
Protection class	I
Regulation of brightness	0-100%
Luminaire material	ABS
Shade material	AC
Handle and hooks material	stal nierdzewna
Luminaire dimensions	1272 x 95 x 111 mm

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luminaire for LED FW lamp



luminaire dimensions

INSTALLATION RECOMMENDATIONS:

- supplying power to the LED FW lamps with the OMY 3 x 1.5 mm² cable for one line,
- wiring installation (from the lamp to the lamp) without the need to use electrical boxes,
- LED FWK dimmable phase-controlled lamps from 0-100%,
- in poultry houses, it is possible to connect to the devices with a light control option,
- in poultry houses, it is possible to connect to a separate lighting control device - a programmable timer,
- in pig farms, it is possible to connect a non-dimmable FWT LED lamp to a standard lighting switch,

CALCULATION OF EXPLOIT COSTS	traditional fluorescent lamp in the IP65 luminaire	LED lamp FW IP 66
number of items	50	50
power of one piece	36 W	18 W
lamp life	15 000 h	50 000 h
assembly of lamps at height	3,5m	
achieving light intensity on the ground	70 Lux	
price per 1Kwh	0,20 euro	
number of hours of lighting per day	12	
number of lighting years	1	
total power	1 800 W	900 W
energy consumption in the year	7 884 kWh	3 942 kWh
energy cost per year	1576,8 euro	788,4 euro
saving on energy costs in a year	788,4 euro	

