

Silicone Flexible Led Strip Light Datasheet

6 products in this range. Specifications as published on wellking-led.com.

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Silicone-encapsulated LED strip designed for wall washing, underwater, and architectural contour lighting where a continuous, uniform light line is required without visible LED dots. The strip uses dedicated optics and a fully sealed silicone body to deliver glare-free, durable performance in wet, humid, or outdoor environments. Available in top view, side view, 360-degree, and underwater configurations, with DC 12V or 24V operation and DMX512 addressable control for dynamic effects. Custom LED density and run lengths are supported.

Silicone Flexible Wall Washing Strip – 16*16mm 48pcs Led

A narrow-beam silicone flexible wall washing strip designed for even, glare-free illumination on vertical surfaces such as building facades, feature walls and exhibit panels. The 16x16mm profile with 48 SMD 2835 LEDs per metre delivers a 30-degree beam angle, concentrating light precisely on the wall without spill or hotspots. Fully encapsulated in UV-resistant silicone, it achieves IP67/IP68 sealing for reliable performance in indoor and outdoor environments. Operates on DC 24V for stable brightness over long runs, with pre-marked cut points and standard connectors enabling custom lengths and extensions. The strip is flexible enough to follow curved architectural contours without light leakage, making it suitable for both straight and gently curved installations.

Parameter	Value
Model number	WK-SP2835-48
LED type	2835 SMD
Housing material	Silicone
Size	16×16 mm (PCB width: 22 mm)
Input voltage	DC 24V
LED quantity	48 pcs/m
Power consumption	16W–18W/m
Colour temperature	1800–7000K, R/G/B
CRI (Ra)	>80 / 90
Beam angle	30°
Lumens per watt	>90 lm/W
IP grade	IP67 / IP68
Connectors	Standard, spliceable

Web page: <https://wellking-led.com/products/silicone-flexible-wall-washing-strip-1616mm-48pcs-led.html>

Underwater LED Silicone Strip Light

An underwater LED silicone strip light designed for continuous contour lighting in pools, fountains, aquariums and spas where long-term immersion is required. The full IP68 sealing prevents water ingress even under constant submersion, and the integrated injection-molded silicone housing provides a seamless, corrosion-resistant body. Flexible and bendable into complex shapes, the strip maintains its integrity in dynamic water environments. Powered by low-voltage DC 24V, it is safe for use in wet and humid zones. Available in 2835 SMD or 2012 SMD with colour temperature from 2700K to 6500K, or RGB, and CRI Ra above 80 or 90, with lumen output per watt above 90 lm/W.

Parameter	Value
LED type	2835 SMD / 2012 SMD
Model number	WK-SPxx-xx underwater
Housing material	Silicone

Size	16*15 mm
Input voltage	DC 24V
LED quantity / Power consumption	10W - 14.4W
Colour temperature	2700K - 6500K / R/G/B / RGB
CRI (Ra)	>80 / >90
Beam angle	Side view
Lumens per watt	>90 lm/W
IP grade	IP68
Minimum bending radius	Not specified
Dimming	Not specified

Web page: <https://wellking-led.com/products/underwater-led-silicone-strip-light.html>

Silicone LED Neon Flex Strip-DMX512 Control

A silicone encapsulated LED strip with built-in DMX512 control for dynamic lighting effects across multiple connected runs. The strip uses RGB SMD LEDs with a DMX512 IC that enables master-slave synchronization, allowing coordinated color and brightness changes across long or complex installations. The 20×20 mm profile is fully encapsulated in UV-resistant silicone, providing IP67/IP68 waterproofing and protection against dust, corrosion and mechanical stress. Designed for continuous runs with pre-marked cut points and spliceable connectors, it supports 12V or 24V DC input and delivers a beam angle from 180° to 360°, depending on installation orientation. Available in 60 or 120 LEDs per metre with power consumption of 10W or 20W respectively.

Parameter	Value
LED type	RGB SMD
Model number	WK-SPxx-xx
Housing material	Silicone
Size	20×20 mm / customizable
Input voltage	DC 12V / 24V
LED quantity	60 pcs / 120 pcs per metre
Power consumption	10W / 20W per metre
Color temperature	RGB
CRI (Ra)	>80
Beam angle	180° to 360°
Efficacy	>80 lm/W
IP grade	IP67 / IP68
Control protocol	DMX512
Cuttable	At pre-marked intervals
Spliceable	With connectors

Web page: <https://wellking-led.com/products/silicone-led-neon-flex-strip-dmx512-control.html>

Silicone LED Neon Flex Strip-360° View

A fully encapsulated silicone LED strip with 360-degree light emission, designed for applications requiring uniform cylindrical glow without directional bias. The translucent silicone housing wraps the entire LED array, enabling even light output in all directions, eliminating dark spots or uneven brightness. Constructed from soft, high-quality silicone, it maintains flexibility and durability when bent, twisted or coiled into complex shapes. Rated IP67 or IP68, it resists water, dust and corrosion, making it suitable for both indoor and outdoor installations. Available in 12V or 24V DC, with LED

types including 2835, 5050, 3528, 2216 SMD or COB, and color options ranging from single-color white (1800K–7000K) to RGB and RGBW with dimming and color adjustment. Cuttable at pre-marked intervals and spliced with dedicated connectors, it supports custom lengths and configurations for diverse

Parameter	Value
LED type	2835 / 5050 / 3528 / 2216 SMD or COB
Model number	WK-SPxx-xx360°
Housing material	Silicone
Size	φ13 / φ15 / φ19 / φ22...
Input voltage	DC 12V / 24V
LED quantity	Customizable
Power consumption	Based on LED quantity
Colour temperature	1800-7000K, R/G/B, RGB, RGBW
CRI (Ra)	>80 / 90 / 95
Beam angle	360°
Efficacy	>90 lm/W
IP grade	IP67 / IP68
Cutting	Pre-marked intervals for clean separation
Splicing	Dedicated connectors for joining runs

Web page: <https://wellking-led.com/products/silicone-led-neon-flex-strip-360-view.html>

Silicone LED Neon Flex Strip- Top View (all Sizes)

A top-emitting silicone neon flex strip designed for ceiling coves, cornices, and recessed channels where light must go straight up and the fixture must remain invisible. The LED chips are mounted at 90 degrees to the strip surface, directing output into the ceiling plane instead of spilling sideways. Food-grade high-transparency silicone encapsulates the flexible FR-4 substrate, providing a continuous line without visible LED dots. Rated IP67, it withstands washdown areas, UV exposure, and corrosion near kitchens and pools. Available in 12V or 24V DC, with LED types 2835, 5050, 3528, 2216 SMD or COB, and colour options from 1800K to 7000K, RGB or RGBW, with LED quantity per metre customisable to match project brightness needs.

Parameter	Value
LED type	2835 / 5050 / 3528 / 2216 SMD or COB
Model number	WK-SPxx-xx
Housing material	Silicone
Input voltage	DC 12V / 24V
LED quantity	Customizable
Power consumption	Based on LED quantity
Colour temperature	1800-7000K, R/G/B, RGB, RGBW
CRI (Ra)	>80 / 90 / 95
Beam angle	120°
Efficacy	>90 lm/W
IP grade	IP67 / IP68
Minimum bending radius	≥10mm, single direction
Dimming	PWM ≥20kHz, 10% to 100%

Web page: <https://wellking-led.com/products/silicone-led-neon-flex-strip-top-view-all-sizes.html>

Silicone LED Neon Flex Strip- Side View (all Sizes)

A side-emitting silicone neon flex strip designed for wall washing, edge lighting, and illuminating vertical surfaces where the light must project horizontally. The LED chips are mounted perpendicular to the strip surface, directing output laterally instead of upward or downward. The food-grade, high-transparency silicone encapsulation provides IP67 waterproofing, UV and corrosion resistance, and acts as a diffusion layer to eliminate visible LED dots. Flexible FR-4 is fully wrapped in silicone, resulting in a slim profile that maintains structural stability while allowing bends with a minimum radius of 10mm in one direction. Available in 12V or 24V DC, with LED types 2835, 5050, 3528, 2216 SMD or COB, and colour options including warm white, natural white, cool white, RGB or RGBW, with CRI Ra above 80, 90 or 95. LED quantity per metre is customizable to match the required brightness and

Parameter	Value
LED type	2835 / 5050 / 3528 / 2216 SMD or COB
Model number	WK-SPxx-xx
Housing material	Silicone
Input voltage	DC 12V / 24V
LED quantity	Customizable
Power consumption	Based on LED quantity
Colour temperature	1800-7000K, R/G/B, RGB, RGBW
CRI (Ra)	>80 / 90 / 95
Beam angle	120° - 150°
Efficacy	>90 lm/W
IP grade	IP67 / IP68
Minimum bending radius	≥10mm, single direction
Dimming	PWM ≥20kHz, 10% to 100%

Web page: <https://wellking-led.com/products/silicone-led-neon-flex-strip-side-view-all-sizes.html>