

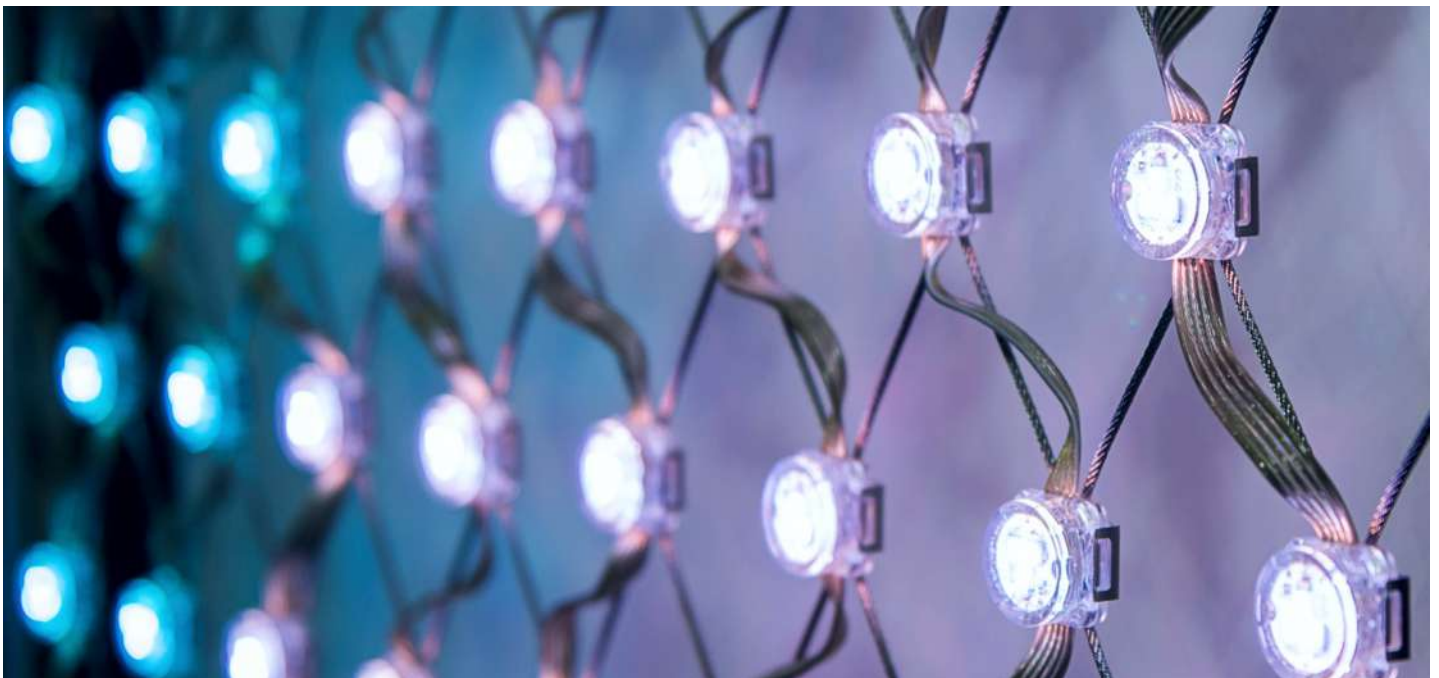
## TECHNICAL SUMMARY X-LED MESH

## SCOPE OF SUPPLY

- Feasibility study
- Preliminary Design / Engineering
- Planning / Development
- Static analysis
- LED components / Hardware / Software
- Substructure / Mounting
- Assembly / Supervision

## USP's

- low self-weight
- high transparency
- 3D-modeling
- no limit in size
- video compatible
- free definition of pixel size between 50 and 300mm
- high tensile strength of stainless steel wire mesh
- huge span width without intermediate connections
- easy material handling and installation

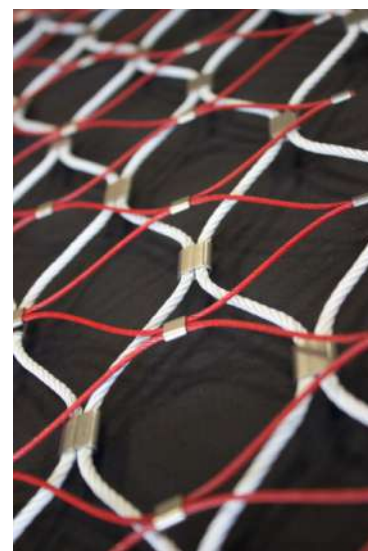
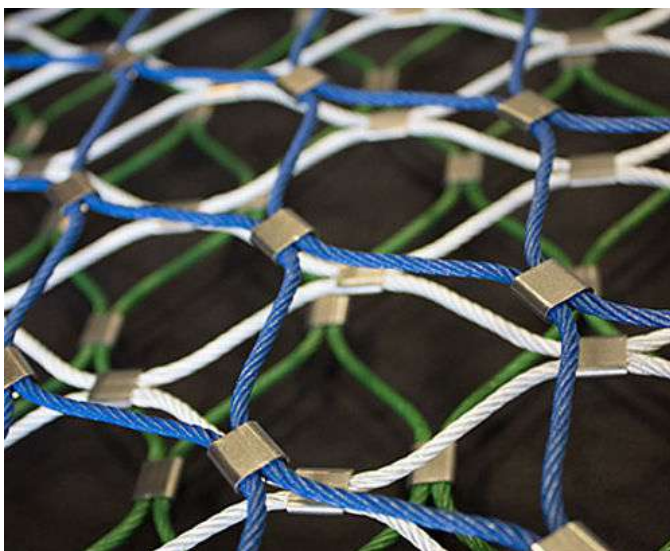
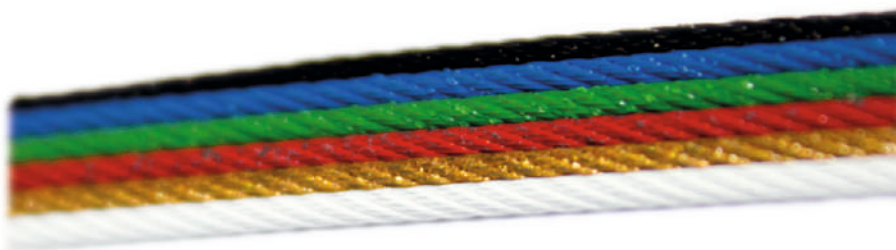


**COLOURFUL MESH**

X-TEND CXE with coloured stainless steel cables  
coloured with an emission-free polymer layer cable diameter  $\varnothing$  2 mm.  
The ferrules can be ordered with inox-finish or blackened.

**AVAILABLE COLOURS, RAL-COLOURS UPON REQUEST:**

black, blue, green, red, gold, white



## X-TEND CXE STEEL WIRE MESH

### Rope-Ø:

2,0mm

### Mesh width:

50mm - 300mm

### Material:

Stainless steel 1.4401 / AISI316

### Surface:

stainless steel finish or colored in black

### Corrosion characteristics:

For X-TEND mesh, corrosion examinations were conducted on trial devices according to DIN 50021:1988-06 and DIN 50021-SS.

The cable mesh is being classified to corrosion resistance class II, according to the general construction approval no. Z-30.3-6

### Maintenance:

Regular cleaning, as well as a control of status of installation (mechanical damages, etc. ) to be defined in function of the purpose of application and of environmental influences.

Further maintenance information is available from the relevant organizations, e.g. in Germany „Informationsstelle Edelstahl Rostfrei“, especially data sheet no. 965 - Cleaning and Care of stainless steel in construction, no. 829 - Stainless steel in contact with other material, as well as general construction approval no. Z-30.3-6 ( for download, pls refer to: [www.edelstahl-rostfrei.de](http://www.edelstahl-rostfrei.de) )

European platform ( in many languages ): [www.euro-inox.org](http://www.euro-inox.org)

### Tolerances:

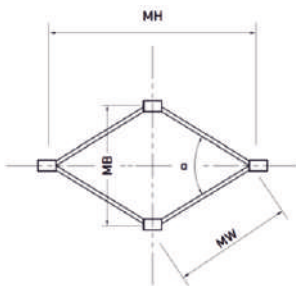
according to DIN ISO 2768-1, tolerance class „v“.

### Fire Protection Classification:

A1, according to EN 13501-1:2007

### Installation:

The fixation of the mesh is done by mounting and tensioning onto a surrounding frame structure ( border cables, tubular frames, or rods ) by means of spiral lacing of the installation cable through loose ferrules

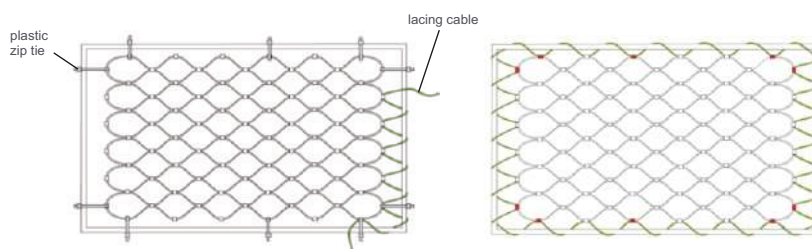


$\alpha$  = The standard mesh opening angle of  $60^\circ$  results in the ideal tension and is the mathematical basis for the quantity determination

MH = Mesh height

MW = Mesh width ( distance from centre to centre of ferrule )

MB = Mesh gauge



Please watch the installation video provided under following youtube link  
<https://www.youtube.com/watch?v=u2zUcEVYQ7A&feature=youtu.be>

**MOUNTING / INSTALLATION**



1. Place the cut-out on the backside of the clip over the mesh ferrule
2. Snap on the clip into the grooves at the side of the LED-Dot

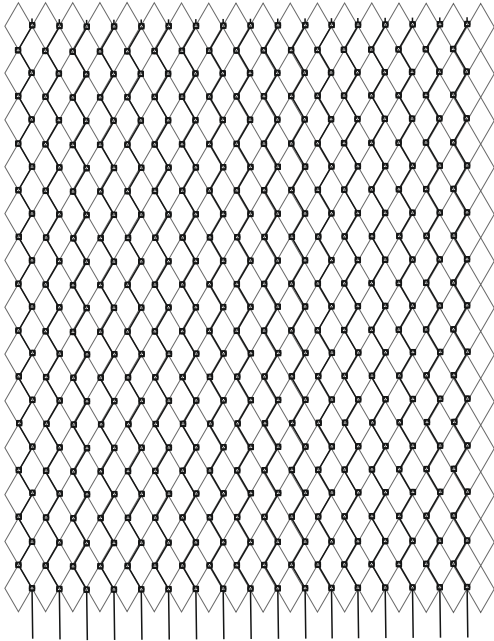


LED-Dots fixed by clamps on a stainless steel wire mesh.

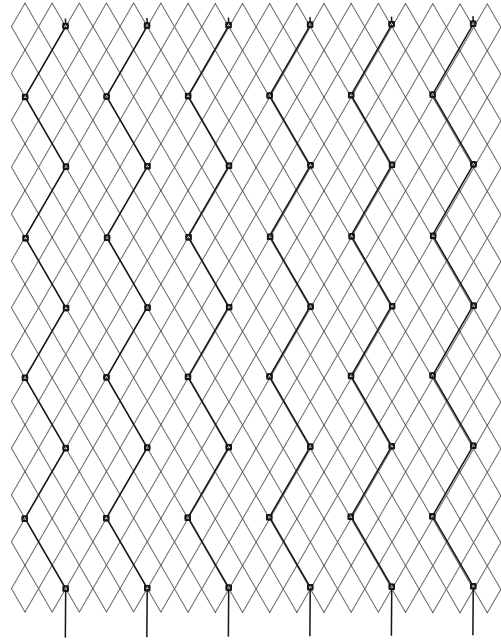
**Assembly process:**

- Installation of mesh framing structure ( edge ropes / tube frames ) on existing primary structure
- Assembly of mesh on framing structure
- Assembly of LED-Dots on installed mesh by fixing clamps
- wiring of LED-Lines to power supply units

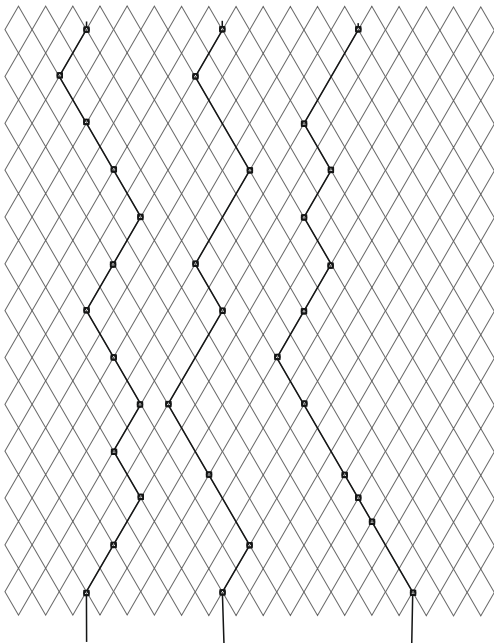
### X-LED MESH AND X-LED LINE CONFIGURATION



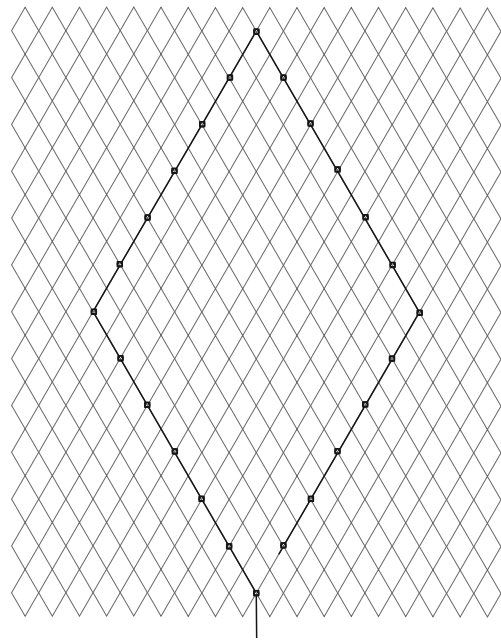
LED-Dots will be fixed on every mesh ferrules



LED-Dots will be fixed on every third mesh ferrules



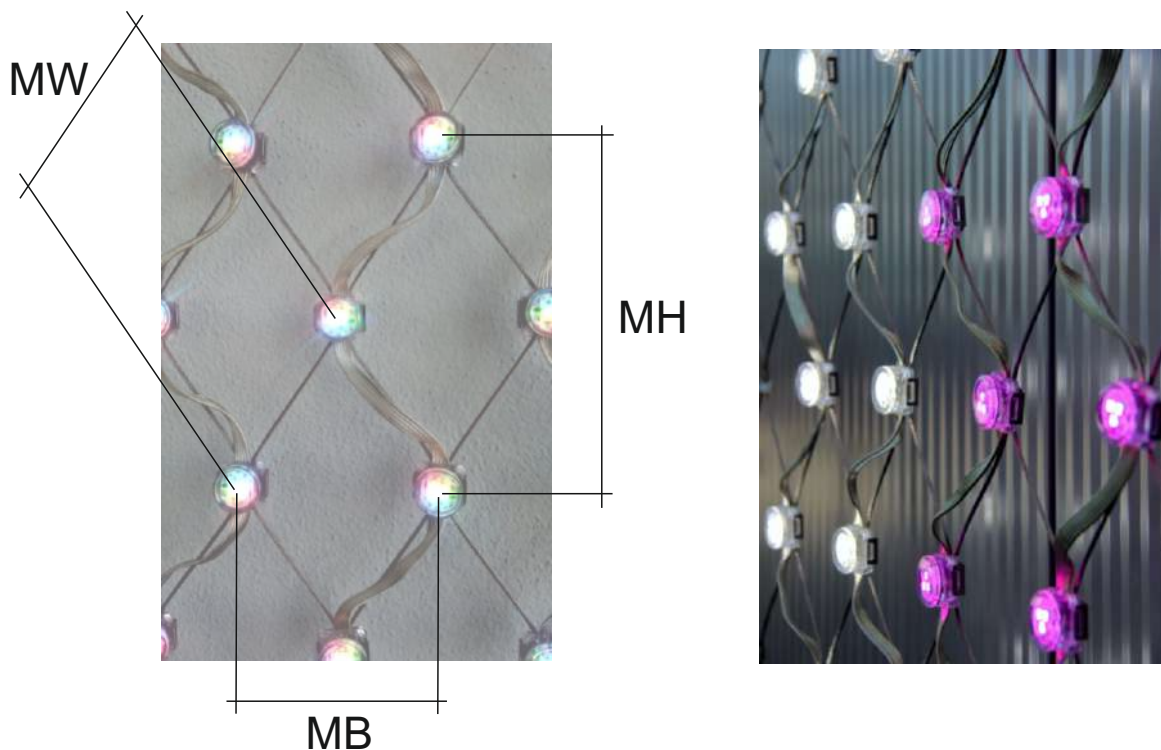
LED-Dots will be fixed on various mesh ferrules



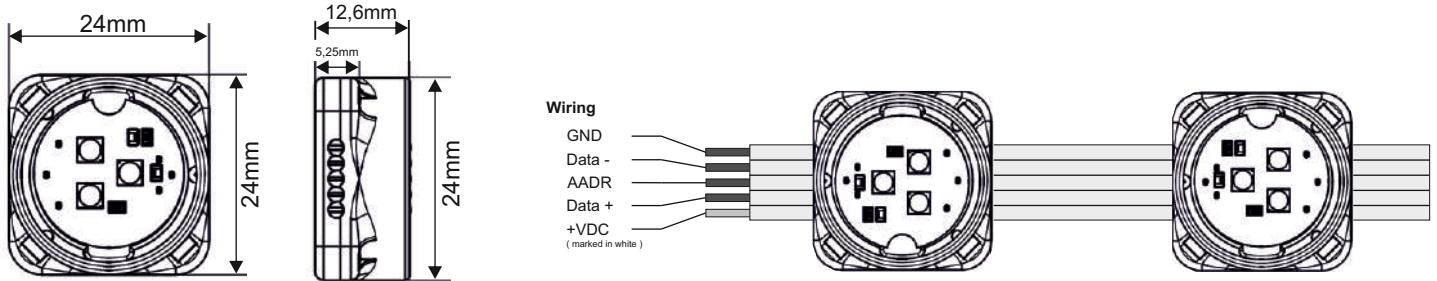
LED-Dots will be fixed according to a specific pattern on mesh ferrules

**X-LED MESH OVERVIEW**

MW / Pitch	No. of Dots pc./m <sup>2</sup>	Light intensity cd / m <sup>2</sup>				Weight kg/m <sup>2</sup>	Transparency	mesh size	
		RGB 120°	RGB 60°	White 120°	RGBW 120°			MW / MB	MH
50	448	4928	18816	10752	6720	5,23	65%	50	87
60	313	3443	13146	7512	4695	3,84	71%	60	104
70	224	2464	9408	5376	3360	2,89	76%	70	121
80	168	1848	7056	4032	2520	2,28	81%	80	139
90	143	1573	6006	3432	2145	2,00	84%	90	155
100	120	1320	5040	2880	1800	1,74	86%	100	173
120	80	880	3360	1920	1200	1,26	88%	120	208
140	56	616	2352	1344	840	0,96	90%	140	242
160	48	528	2016	1152	720	0,86	92%	160	277
180	36	396	1512	864	540	0,70	93%	180	312
200	30	330	1260	720	450	0,61	94%	200	346
220	27	297	1134	648	405	0,57	94%	220	381
240	22	242	924	528	330	0,49	95%	240	416
260	17	187	714	408	255	0,41	95%	260	450
280	15	165	630	360	225	0,38	96%	280	485
300	14	154	588	336	210	0,36	96%	300	520



## X-LINE/DOT OVERVIEW



	RGB		White - 4000K		RGB		White - 4000K		RGBW	
	XLED-DOT-B-RGB	XLED-DOT-T-RGB	XLED-DOT-B-W	XLED-DOT-T-W	XLED-DOT-B-RGB-REF	XLED-DOT-T-RGB-REF	XLED-DOT-B-W-REF	XLED-DOT-T-W-REF	XLED-DOT-B-RGBW	XLED-DOT-T-RGBW
Color of housing and ribbon cable	black	transparent	black	transparent	black	transparent	black	transparent	black	transparent
Light output per LED-Dot	11cd	11cd	24cd	24cd	42cd	42cd	53cd	53cd	16cd	16cd
Max. power consumption per LED-Dot	1,0W	1,0W	0,8W	0,8W	1,0W	1,0W	0,8W	0,8W	1,3W	1,3W
Operating Voltage	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC	17 -22 VDC
Beam angle	120°	120°	120°	120°	60°	60°	60°	60°	120°	120°
Max. number of LED-Dots per line	56								42	
Max. length of LED-LINE	20 - 60m									
Protection level	IP65									
Operation temperature	-30°C / +50°C									
Storage temperature	-20°C / +90°C									
Fire protection	UL 94 HB									
Control protocol	DMX / ArtNet									



XLED-DOT-B-RGB

XLED-DOT-T-RGB

XLED-DOT-B-W

XLED-DOT-T-W

XLED-DOT-T-RGB-REF

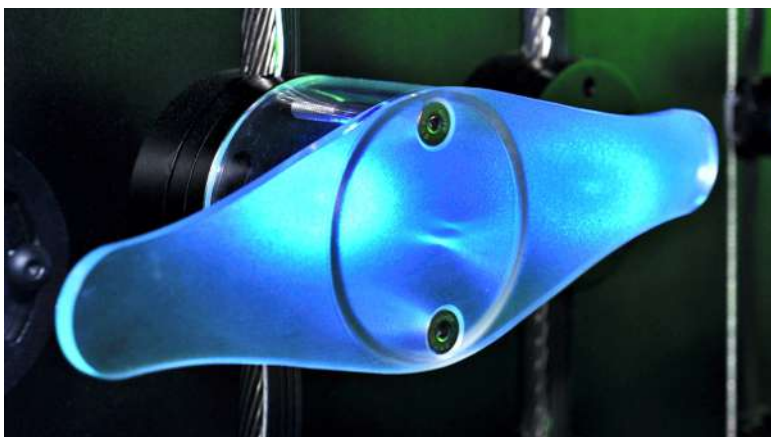
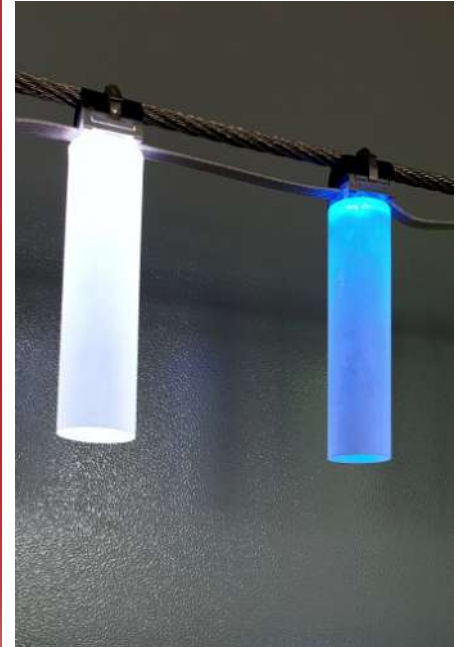
XLED-DOT-B-RGBW

XLED-DOT-T-RGBW



DIFFUSER ELEMENTS

The single LED-Dots can be combined with various diffuser elements



## SERVICING AND MAINTENANCE

Clean device from dirt and residue regularly. Use solvent-free cleaning agents only and do not employ aggressive chemicals or high pressure, cleaner. Operate device only after complete drying.

## CUSTOMER SERVICE



Please check all trouble-shooting measures given in this operating manual.  
For any further questions please contact our hotline.

**Tel: +49 (0) 7162/948 150 300 | Fax: +49 (0) 7162/948 150 305**

## CONFORMITY

Our devices are certified according to the following European and American Standards



**NOTE:**

This equipment has been tested and found to comply with the limits for a class a digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of these equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

„This Class (A) digital apparatus complies with Canadian ICES-003“

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**WARRANTY:**

We provide for our LED-Dots ( XLED-DOT-...-...), LED-Lines ( XLED-LINE-...-... ) and power supply units ( XLED-PS-...-... ) a warranty of 5 years. Any other system related products (e.g. products from other manufacturers) are covered by their standard warranty.

Within the warranty period a failure rate of 3 % could occur. This failure rate is no claim for warranty.

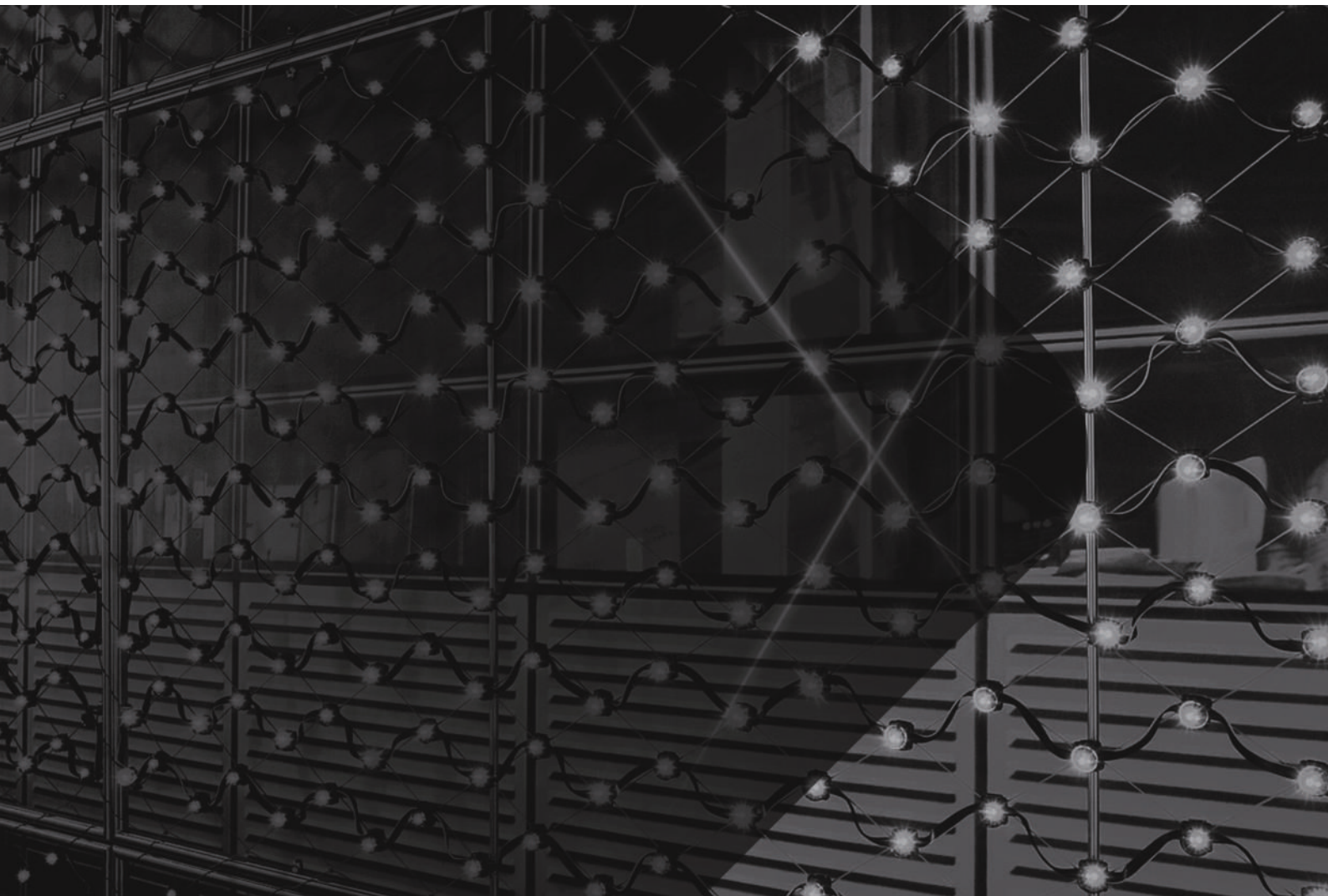
Any visual changes due tu UV, salt or other enviromantal impacts, which doesn't effect the functional behavior of the product, aren't covered in this warranty.

We advise to order a corresponding number of spare parts. For professional replacement we provide a training by our specialists.

Requirement for our warranty is the compliance with our installation and maintenance guidelines.

Due to side and application conditions problems can occur, which are not covered by the warranty, except they were named specifically by the client in advance. The installation has to be made by trained and skilled workers.

For all further conditions and claims our General Sales and Planning Terms are valid. They are available for Download on our website.



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