

X-LED MESH

Scope of supply:

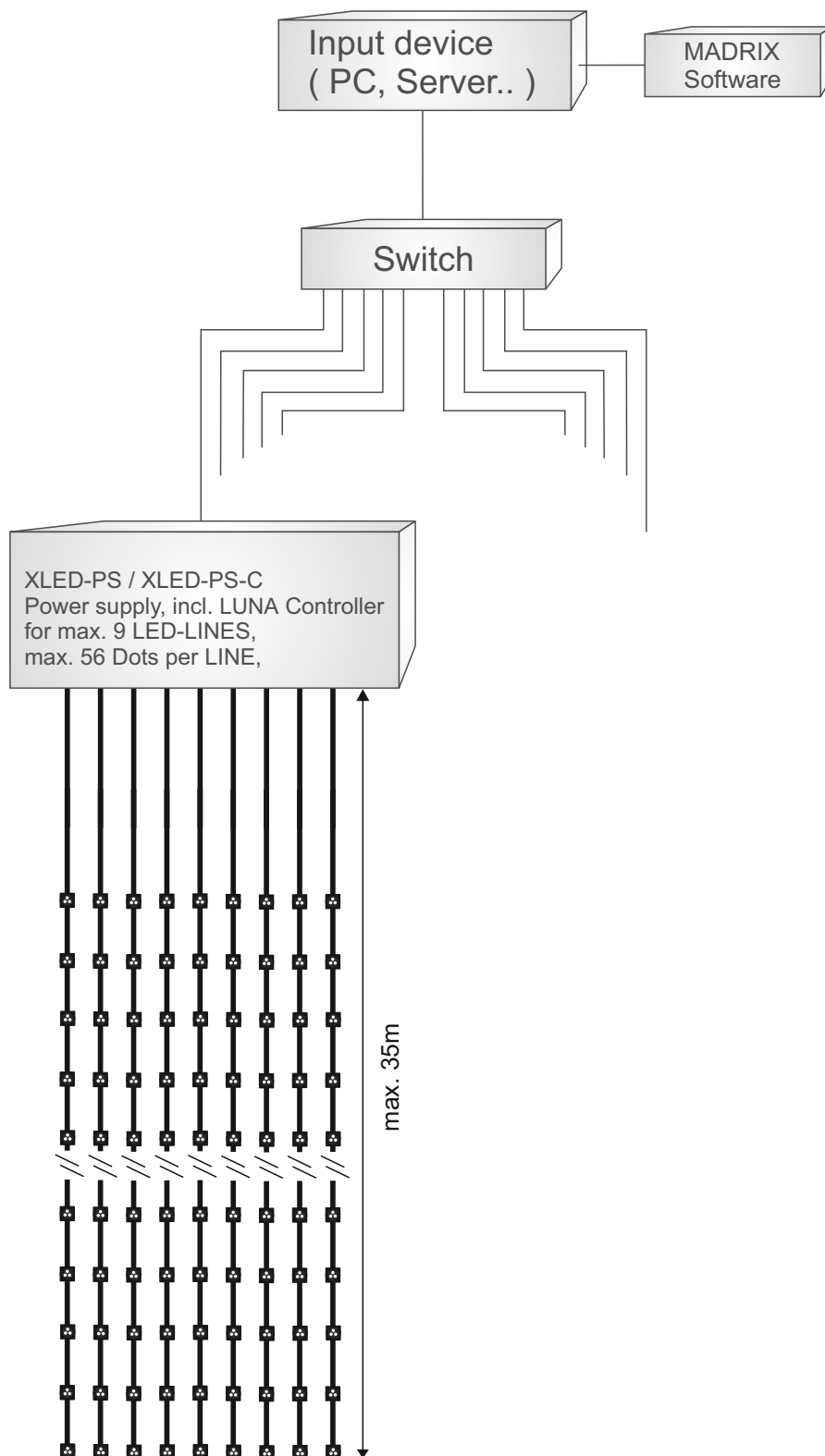
- Feasability study
- Preliminary Design / Engineering
- Planning / Development
- Static analysis
- LED components / Hardware / Software
- Substructure / Mounting
- Assembly / Supervision

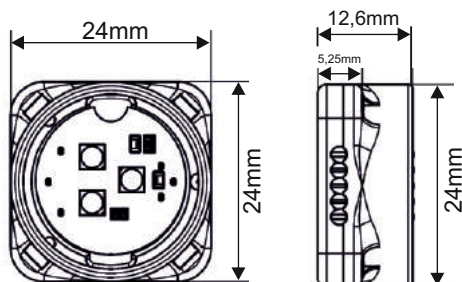
USP's:

- 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



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



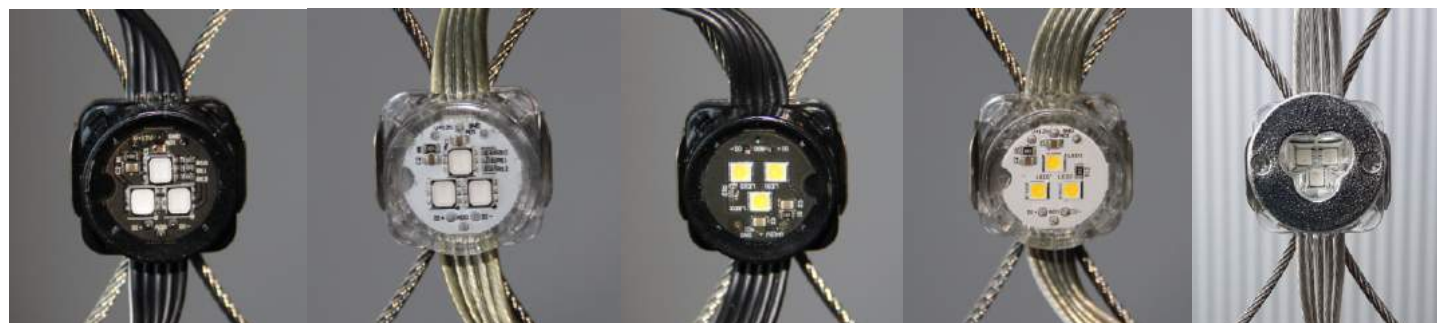


WIRING

- 1 GND
- 2 Data -
- 3 AADR
- 4 Data +
- 5 +12VDC (marked)



	RGB (3 SMDs)		White - 4000K(3 SMDs)		RGB (3 SMDs)		White - 4000K(3 SMDs)	
	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
Color of housing and ribbon cable	black	transparent	black	transparent	black	transparent	black	transparent
Light output per LED-Dot	11cd	11cd	24cd	24cd	42cd	42cd	53cd	53cd
Max. power consumption per LED-Dot	1,0W	1,0W	0,8W	0,8W	1,0W	1,0W	0,8W	0,8W
Operating Voltage	12 V	12 V	12 V	12 V	12 V	12 V	12 V	12 V
Beam angle	120°	120°	120°	120°	60°	60°	60°	60°
Max. number of LED-Dots per line	56							
Max. length of LED-LINE	35m							
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

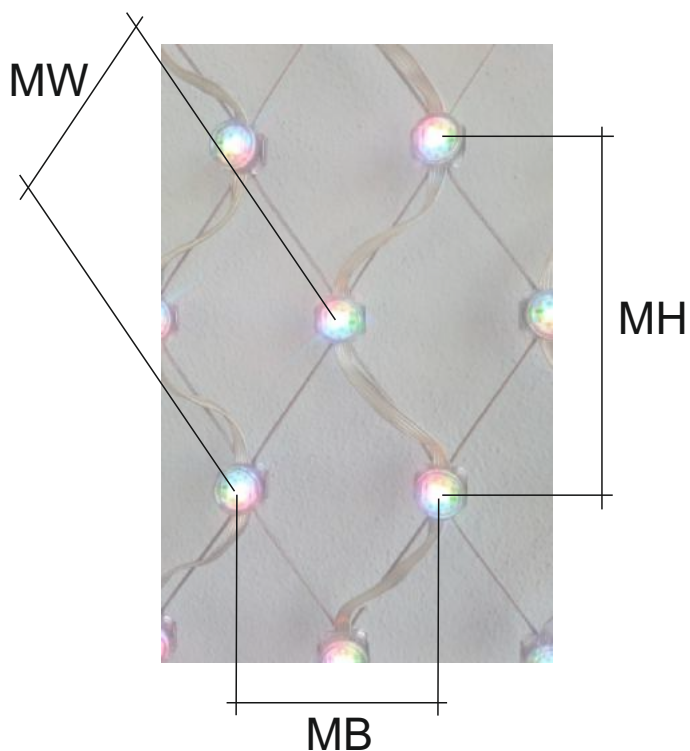
XLED-DOT-T-W

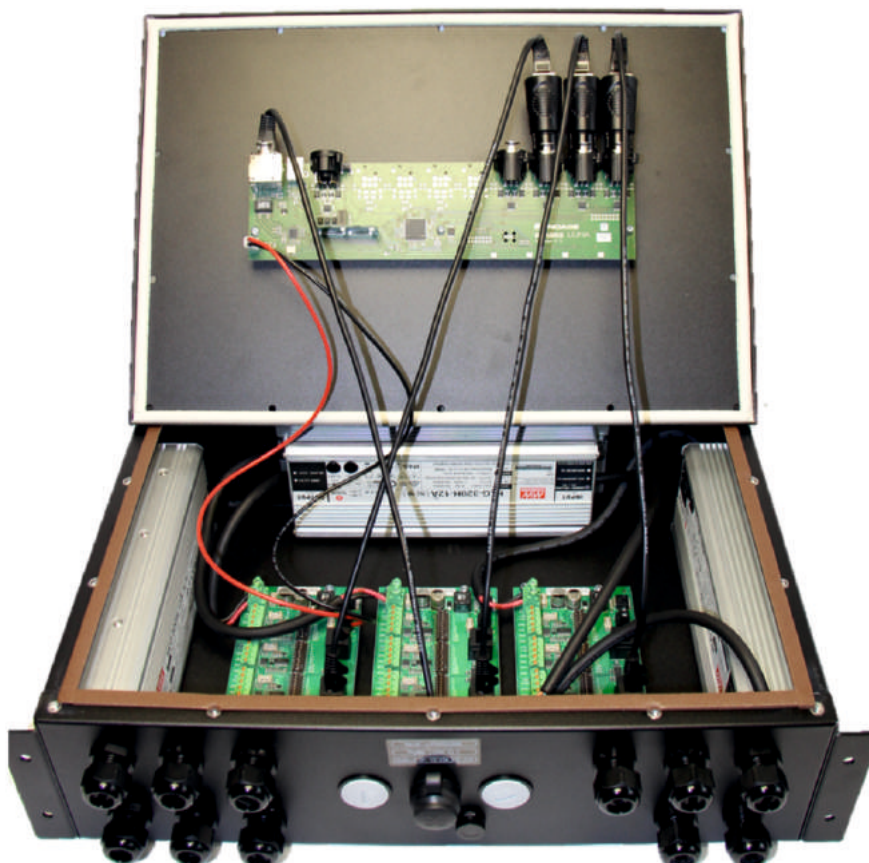
X-LED-DOT-T-RGB-REF

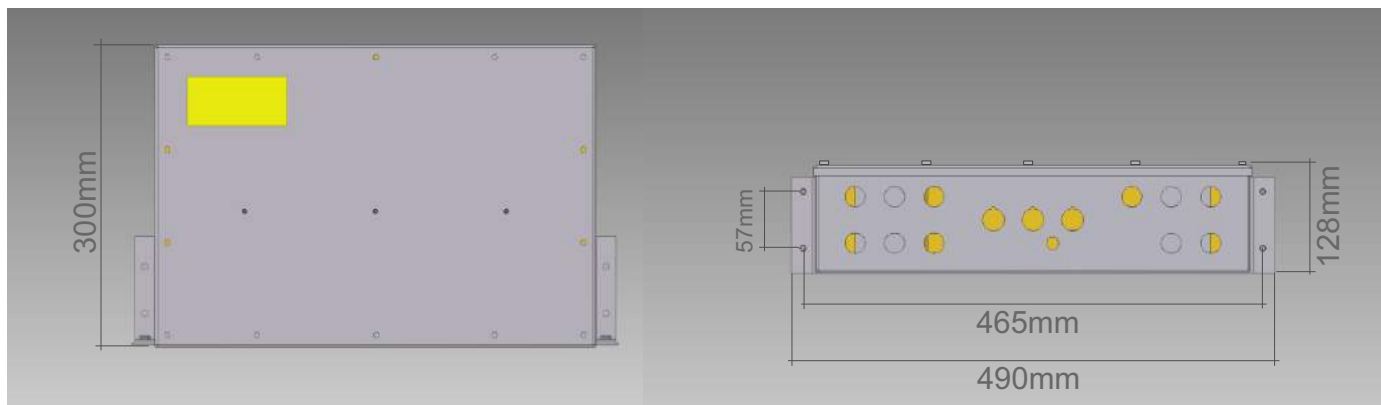


all LED-Dots are available
with a diffuser dome

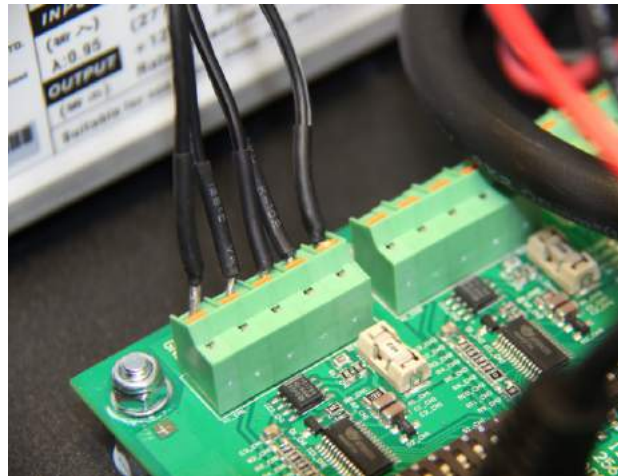
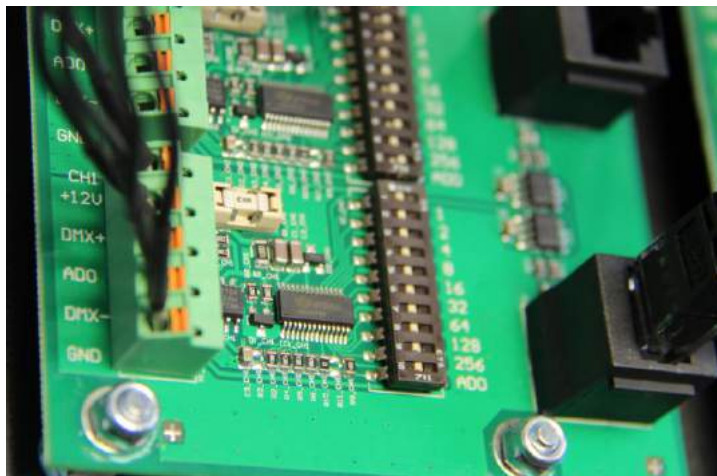
MW / Pitch	No. of Dots pc./m ²	Light intensity cd / m ²			Weight kg/m ²	Transparency	mesh size MW / MB
		RGB 120°	RGB 60°	White 120°			
50	448	4928	18816	10752	5,23	65%	50
60	313	3443	13146	7512	3,84	71%	60
70	224	2464	9408	5376	2,89	76%	70
80	168	1848	7056	4032	2,28	81%	80
90	143	1573	6006	3432	2,00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



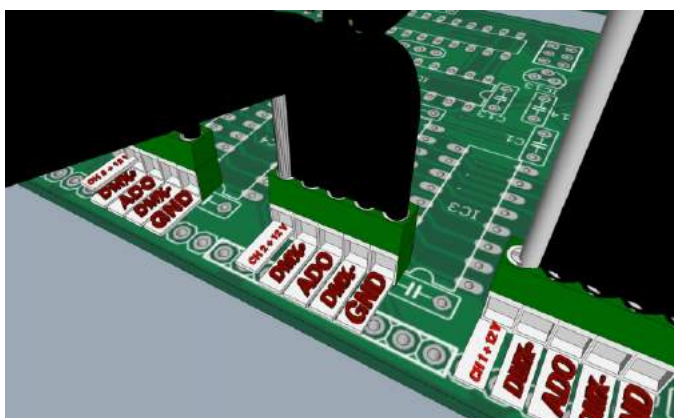
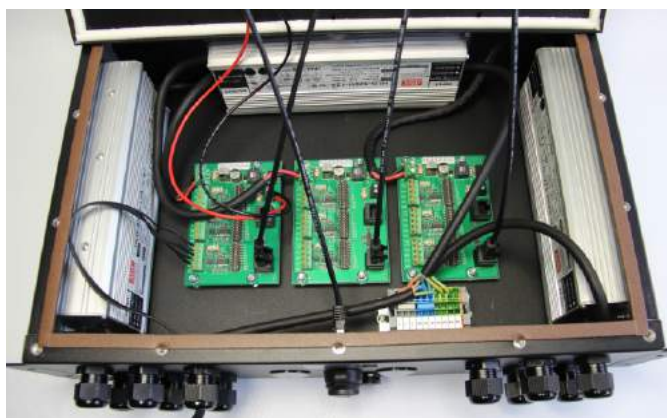
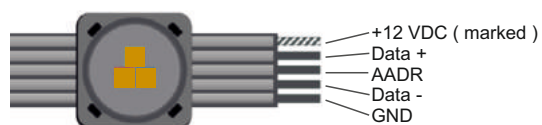




Connector groups	3 x 3 groups
Connector secondary	max. 56 Dots per group
Group fuses	3 fuses per group
Main power	110-264 VAC (L/N/PE max. 4mm ²)
Power input	max. 792 Watt
Frequency	50-60 Hz
PF	> 0,94
Output voltage	12 V
Inrush	max. 210A
Operating temperature	-20°C to +50°C
Protection level	Ip65 - outdoor
Size	490x300x128mm
Weight	7,8 kg
Control	3 x DMX512A
Housing	Aluminum, RAL9005 powder coated



white stripe



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)

European platform (in many languages): www.euro-inox.org

Tolerances:

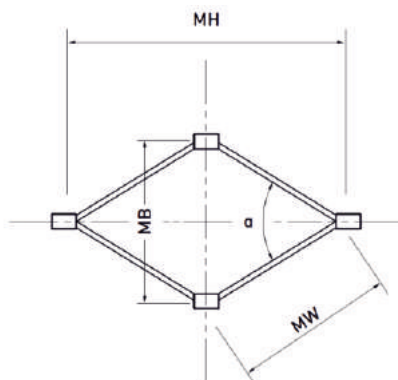
according to DIN ISO 2768-1, tolerance class „v“.

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

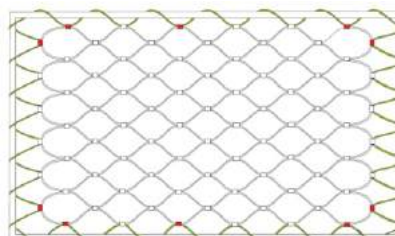
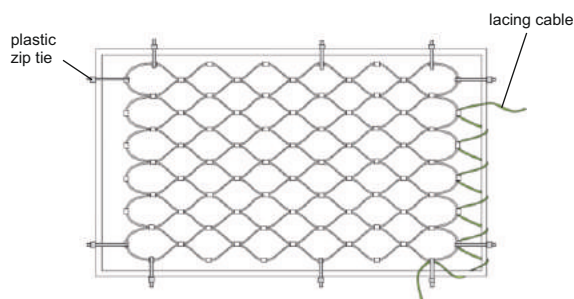


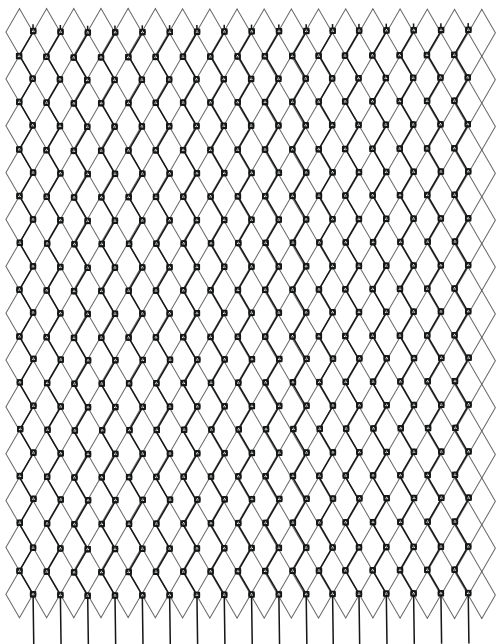
α = The standard mesh opening angle of 60° results in the ideal tension and is the mathematical basis for the quantity determination

MH = Mesh height

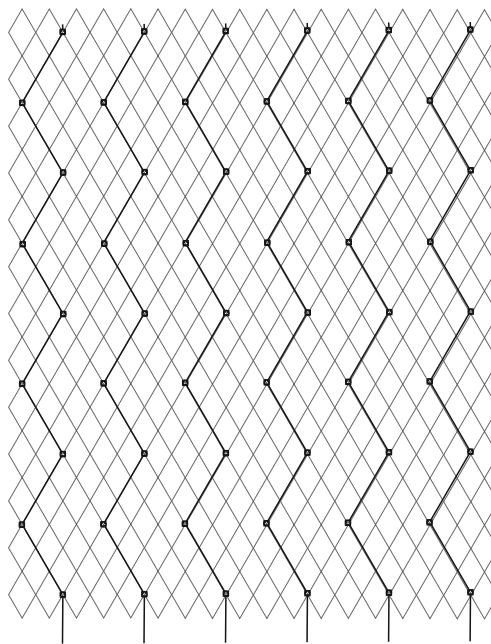
MW = Mesh width (distance from centre to centre of ferrule)

MB = Mesh gauge

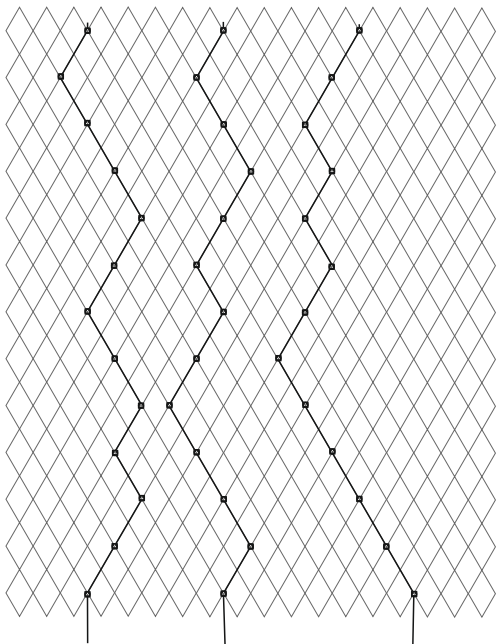




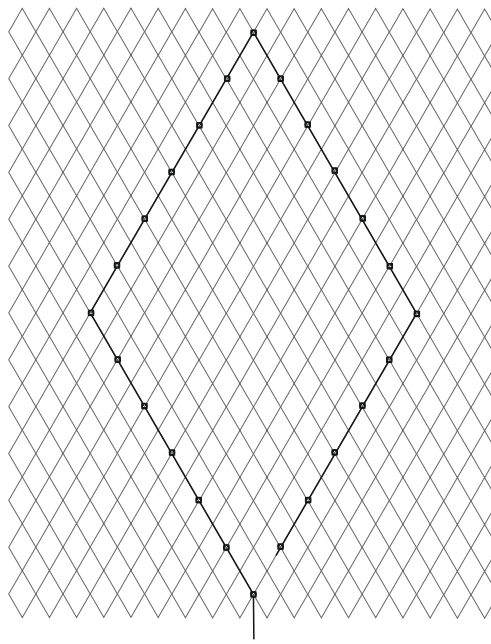
LED-Dots will be fixed on every mesh ferrules



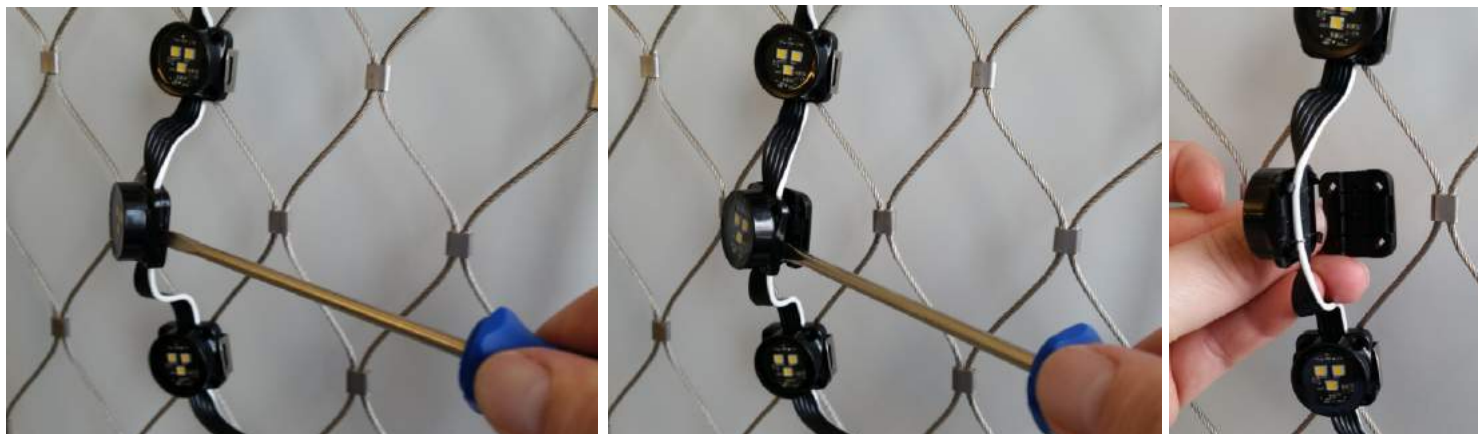
LED-Dots will be fixed on every third mesh ferrules



LED-Dots will be fixed on various mesh ferrules



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



Single LED-Dots can be changed easily, no need to change a complete line in case of a single failure.

Warranty period of 5 years on functionality and designated use for all components delivered by Carl Stahl ARC GmbH. Within the warranty period 1 % of the LED-Dots, power supply units and control units (rounded up in absolute number) could fail. This failure is no claim for warranty. Requirement for warranty are the below mentioned specifications.

XLED-Line

The LED-lines have to be protected against mechanical impact at any time. The permitted operating temperature is -30°C to $+50^{\circ}\text{C}$. Protection rating of the lines is IP65. Do not guide the ribbon cable over sharp edges. Minimum bending radius of the ribbon cable 40mm. Don't knot, buckle or squeeze the ribbon cable. Ribbon cable has to be guided without tension forces (use strain reliefs). Avoid any contact to aggressive substance or solvent.

Power supply unit:

Special attention to the right configuration of the single wires of ribbon cable to power supply according to page 4. Protection against electric shock. No covering of power supply housing by thermal insulation. Spacing / gap between the power supply units min. 15mm. Power supply units have to be protected against mechanical impact at any time. Make sure flawless electrical connectivity is provided. Do not cross primary and secondary lines. Do not interconnect secondary lines to power supply blocks. The device must only be powered up with LED-line connected.

