# TECHNICAL SUMMARY
## X-LED Catenary

## ROPE SYSTEM

836-1200-80

882-1200-220  838-1200  870-0800  874-0800

Rope-Ø 8mm

**Remark:**
For self-assembly
on site.

**Remark:**
Suitable anchors
by installer.
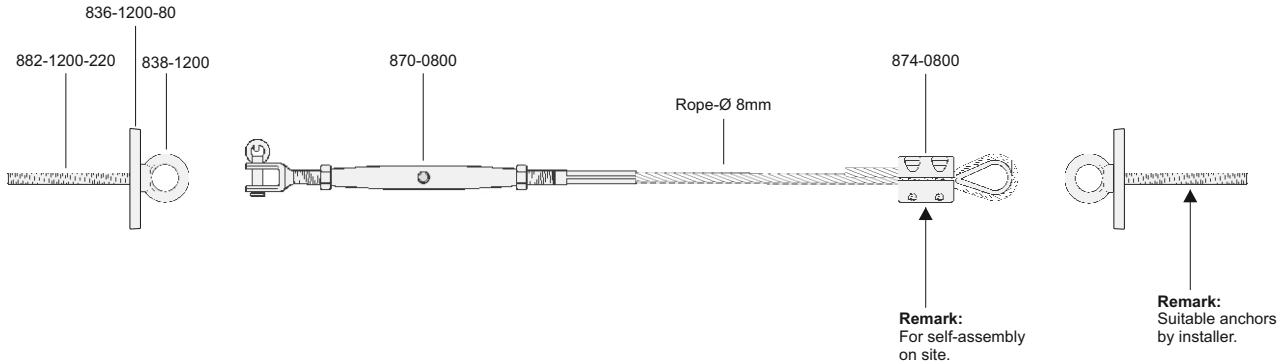
**SPANNSCHLOSS MIT GABEL, VERPRESST**_TURNBUCKLE WITH FORK, SWAGED
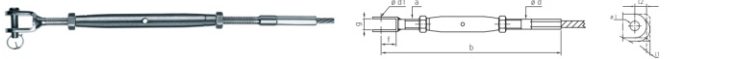
| Artikelnummer Part number | a | b | f | g | ø d | ø d1 | ø Seil ø rope | Spannweg Adjustment | kN | l1 | l2 | ø l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 870-0800 | M12 | 368 | 25 | 14 | 13 | 12 | 8 | +46 l ~70 | 49,4 | 13 | 20 | 12,5 |

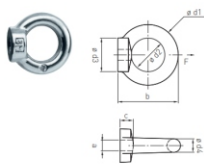**Werkstoff 1.4401 | kN = Bruchkraft**_Material AISI 316 | kN = breaking load

**SCHLAUFENVERSCHRAUBUNG, ZWEITEILIG, MIT KAUSCHE**_LOOP CLAMP RING WITH THIMBLE
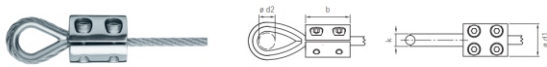
| Artikelnummer Part number | b | k | ø d1 | ø d2 | ø Seil ø rope | kN |
|---|---|---|---|---|---|---|
| 874-0800 | 42 | 12 | 28 | 17,5 | 8 | 13 |

**Werkstoff 1.4401 I Nicht geeignet für Spiralseile | kN = Bruchkraft**_Material AISI 316 I Not suitable for strands | kN = breaking load

**RINGMUTTER**_EYE NUT

| Artikelnummer Part number | a | b | c | ø d1 | ø d2 | ø d3 | ø d4 | MBK (kN) | F (kg) |
|---|---|---|---|---|---|---|---|---|---|
| 838-1200 | M12 | 53 | 11 | 54 | 30 | 30 | 12-15 | 20,0 | 340 |

**Werkstoff 1.4401 I DIN 582 | geschmiedet**
***Ähnlich DIN 582 | gegossen und poliert**
**MBK= Mindestbruchkraft**
**F = Tragfähigkeit**

Material AISI316 | DIN 582 | drop-forged
*casted and mirror polished
MBK= Breaking load
F = Working load limit

**ABDECKSCHEIBE MIT INNENGEWINDE ODER DURCHGANGSLOCH**_COVER DISK WITH INTERNAL THREAD OR THROUGH HOLE
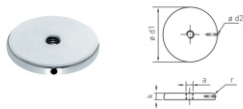
| Artikelnummer Rechtsgewinde Part number RH thread | a | ø d1 | ø d2 | r | k |
|---|---|---|---|---|---|
| 836-1200-80 | M12 | 80 | 3,5 | 3 | 6 |

**Werkstoff 1.4404**_Material AISI 316L

**GEWINDESTIFT**_THREADED ROD

| Artikelnummer Rechtsgewinde Part number RH thread | a | c |
|---|---|---|
| 882-1200-220 | M12 | 220 |

**Werkstoff 1.4404**_Material AISI 316L

## SPECIFICATION LED DOT

24mm 12,6mm 5,25mm 24mm 24mm

**Wiring**

GND
Data -
AADR
Data +
+VDC
( marked in white )
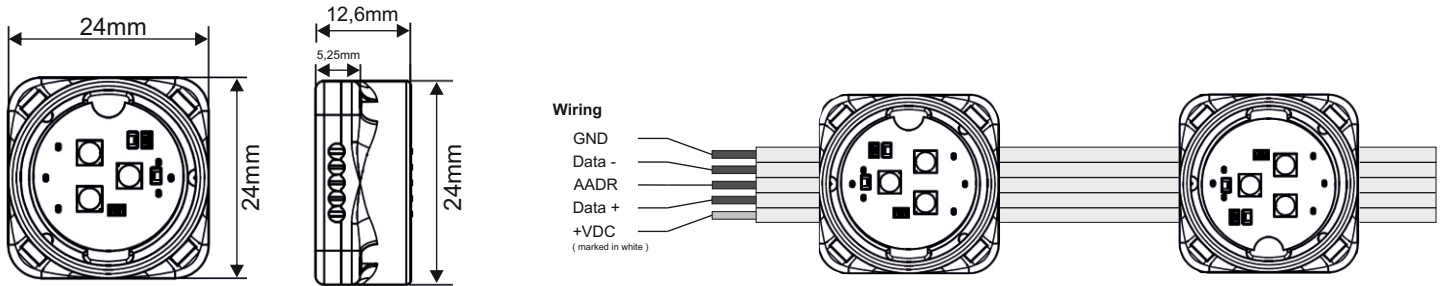
| | RGB | | RGB | | White - 4000K | | White - 4000K | | RGBW | |
|---|---|---|---|---|---|---|---|---|---|---|
| | XLED-DOT-B-RGB | XLED-DOT-T-RGB | XLED-DOT-B-RGB-REF | XLED-DOT-T-RGB-REF | XLED-DOT-B-W | XLED-DOT-T-W | XLED-DOT-B-W-REF | XLED-DOT-T-W-REF | XLED-DOT-B-RGBW | XLED-DOT-T-RGBW |
| Color of housing and ribbon cable | black | transparent | black | transparent | black | transparent | black | transparent | black | transparent |
| Light output per LED-Dot | 11cd | 11cd | 42cd | 42cd | 24cd | 24cd | 53cd | 53cd | 16cd | 16cd |
| Max. power consumption per LED-Dot | 1,0W | 1,0W | 1,0W | 1,0W | 0,8W | 0,8W | 0,8W | 0,8W | 1,3W | 1,3W |
| Operating Voltage | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V | 17 - 20 V |
| Beam angle | 120° | 120° | 60° | 60° | 120° | 120° | 60° | 60° | 120° | 120° |
| Max. number of LED-Dots per DMX UV | 168 | | | | | | | | 128 | |
| 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 | DMX512-A / ArtNet | | | | | | | | | |
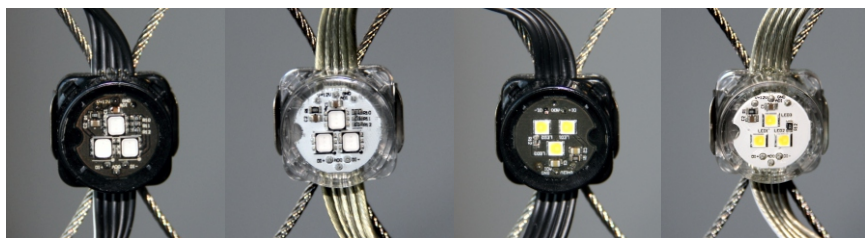
XLED-DOT-B-RGB          XLED-DOT-T-RGB          XLED-DOT-B-W          XLED-DOT-T-W

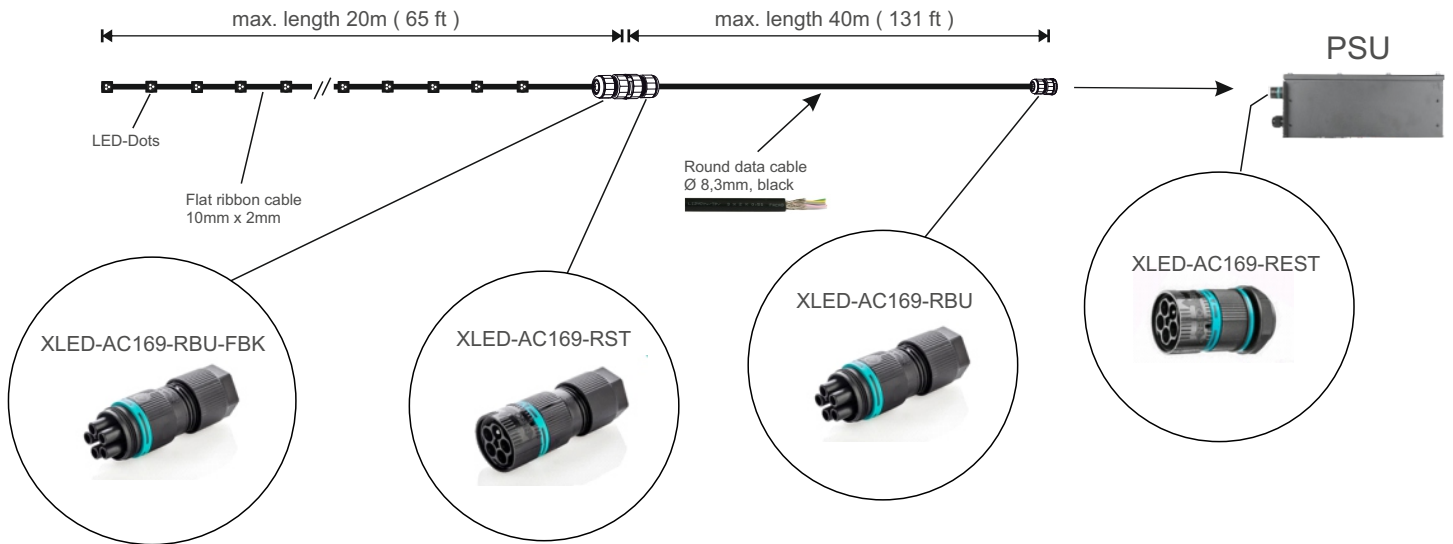XLED-DOT-B-RGB-REF      XLED-DOT-T-RGB-REF      XLED-DOT-B-RGBW       XLED-DOT-T-RGBW

**Max. number of LED-Dots per LED-Line:**
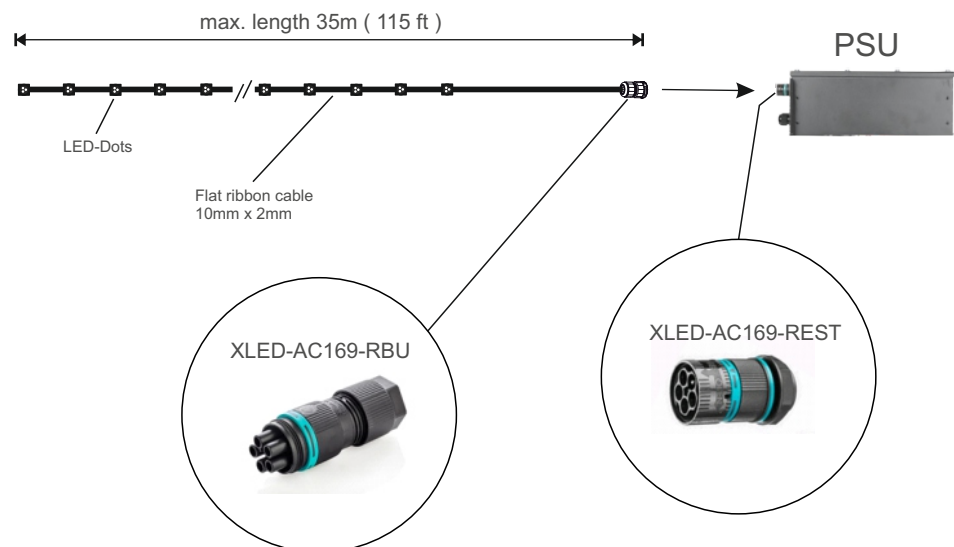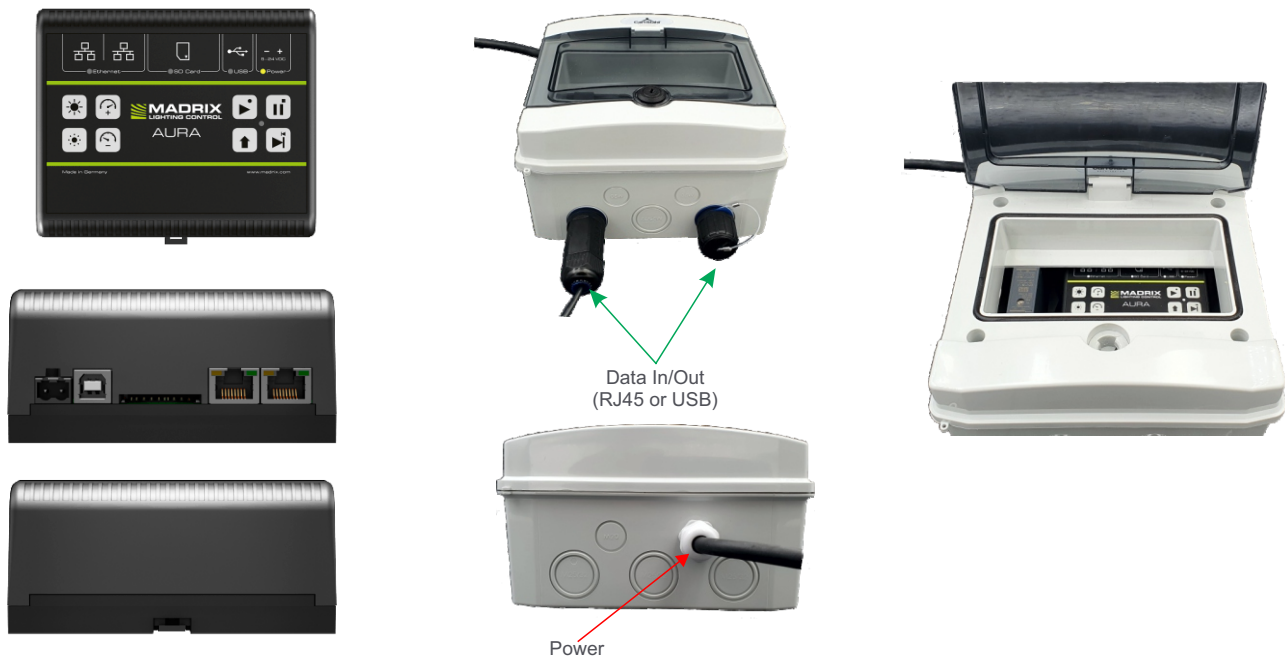RGB / pure white: 56 pc.
RGBW: 42 pc.

## SPECIFICATION LED LINE

## Option 1

max. length 20m ( 65 ft )    max. length 40m ( 131 ft )

PSU

LED-Dots

Flat ribbon cable
10mm x 2mm

Round data cable
Ø 8,3mm, black

XLED-AC169-REST

XLED-AC169-RBU-FBK

XLED-AC169-RST

XLED-AC169-RBU

## Option 2

max. length 35m ( 115 ft )

PSU

LED-Dots

Flat ribbon cable
10mm x 2mm

XLED-AC169-RBU

XLED-AC169-REST

## SPECIFICATION CONTROLLER / PSU

# Stand-alone playback unit



Data In/Out
(RJ45 or USB)

Power

**Stand-Alone Playback:**
Independently run the most sophisticated light shows from this energy-efficient playback unit via Art-Net or Streaming ACN.
Easily control up to **8** or **32 universes** per device.

**Live Recording:**
Record any Art-Net or Streaming ACN network stream onto the inserted memory card.
Unlike any other solution, recording a beautiful light show with MADRIX 5 is as easy as pressing record and play.

**Central Hub:**
Simply connect compatible MADRIX hardware interfaces or third-party nodes to provide the correct output for your lighting fixtures.

**Time-Controlled Shows:**
Run scenes automatically with the help of the internal clock as well as the available sunrise and sunset timers.

**Master-Slave Synchronization & Scalability:**
Manage large projects simply by connecting several units.
The entire group is automatically synchronized across all DMX universes for flawless and uninterrupted playback.

**Web Configuration:**
Use the built-in web configuration page to access and change specific device settings,
such as the important IP address, subnet mask, playlist settings, and much more.
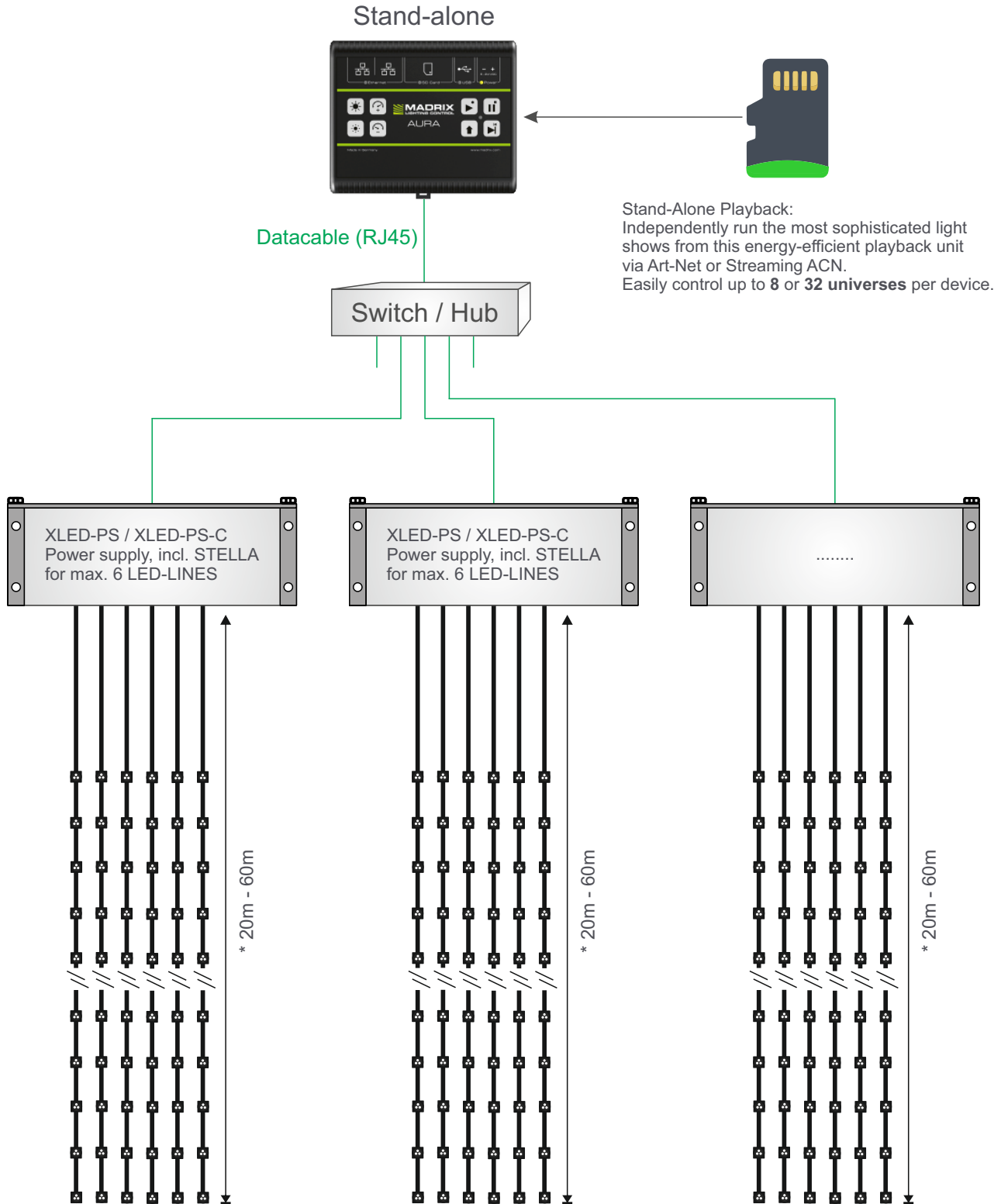
**Live Control:**
Encased in a non-conductive design for DIN rails or wall mounting, 8 on-device buttons allow for quick playback and recording control.
You can also directly adjust the overall speed and intensity.

**Remote Control:**
Trigger MADRIX AURA via HTTP commands and the built-in web server or use Art-Net/sACN.
You can even add MADRIX ORION for interactive installations.
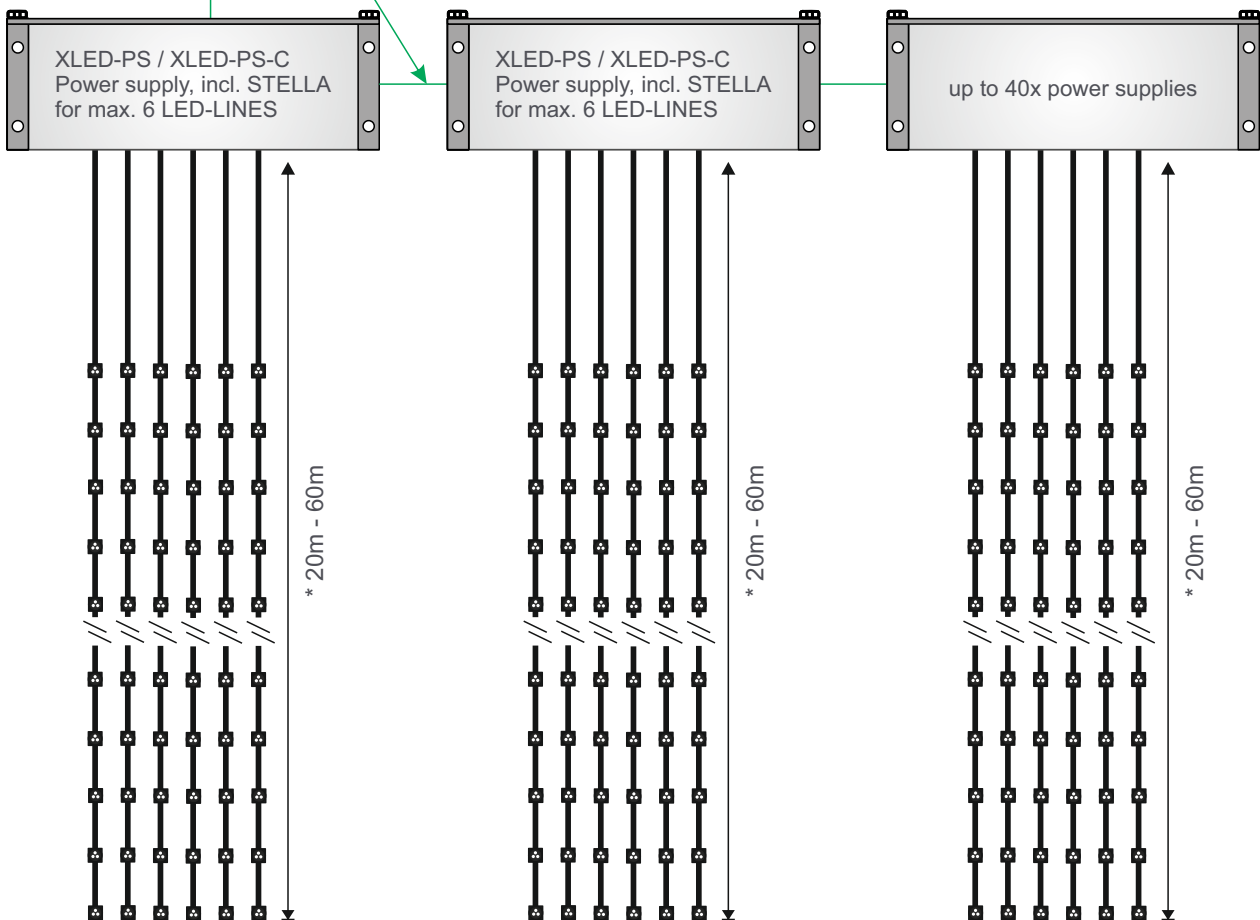
# X-LED
X-LED Catenary

Stand-alone

Datacable (RJ45)

Switch / Hub

Stand-Alone Playback:
Independently run the most sophisticated light shows from this energy-efficient playback unit via Art-Net or Streaming ACN.
Easily control up to **8** or **32 universes** per device.

XLED-PS / XLED-PS-C
Power supply, incl. STELLA
for max. 6 LED-LINES

XLED-PS / XLED-PS-C
Power supply, incl. STELLA
for max. 6 LED-LINES

........

* 20m - 60m

* 20m - 60m

* 20m - 60m

* LED Line configuration, please see X-LED LINE - Technical summary.

## SPECIFICATION CONTROLLER / PSU

### Stand-alone

Stand-Alone Playback:
Independently run the most sophisticated light shows from this energy-efficient playback unit via Art-Net or Streaming ACN.
Easily control up to **8** or **32 universes** per device.

Daisy-Chain Network connection

Datacable (RJ45)

| XLED-PS / XLED-PS-C Power supply, incl. STELLA for max. 6 LED-LINES | XLED-PS / XLED-PS-C Power supply, incl. STELLA for max. 6 LED-LINES | up to 40x power supplies |

\* 20m - 60m

\* LED Line configuration, please see X-LED LINE - Technical summary.

# X-LED

X-LED Catenary

| | |
|---|---|
| Connector groups | 2 x 3 groups |
| Connector secondary | max. 168 Dots per DMX Universe |
| Fuses | 5 fuses (per DMX-splitter) |
| Voltage range | 90 - 305 VAC (L/N/PE max. 4mm² )<br>127 - 431 VDC (L/N/PE max. 4mm² ) |
| Rated power | 2x 300 Watt |
| Rated current | 2x 15 A |
| Frequency | 50-60 Hz |
| PF | > 0,94 |
| Voltage adj. range | max. 20 VDC (per DMX-splitter / Group) |
| Current adj. range | 7.5 A - 15 A (per DMX-splitter / Group) |
| Inrush current | COLD START 2x 70 A at 230 VAC |
| Operating temperature | -20°C to +50°C |
| Protection level | IP65 - outdoor rated |
| Size | W: 260mm (230mm) D: 360mm H: 125mm |
| Network connection | Art-Net, Daisy-Chain Support |
| Control | 2 x DMX512A |
| Housing | Aluminum, black or grey powder coated |
| Operating features | Temperature monitoring (only with Controller)<br><br>Power In / Power Out |
| Mounting options | Wall mounting, horizontal, vertical |

## SPECIFICATION FIXTURE

### XLED-AR120-S

Material:
AISI316 /
1.4404

Ø 45mm

Rope-Ø 8mm

110mm

Acrylic rod Ø 40mm,
frosted surface

35mm

### XLED-AR30-S

Material:
AISI316 /
1.4404

Ø 45mm

Rope-Ø 8mm

21mm

Ø 40mm

35mm
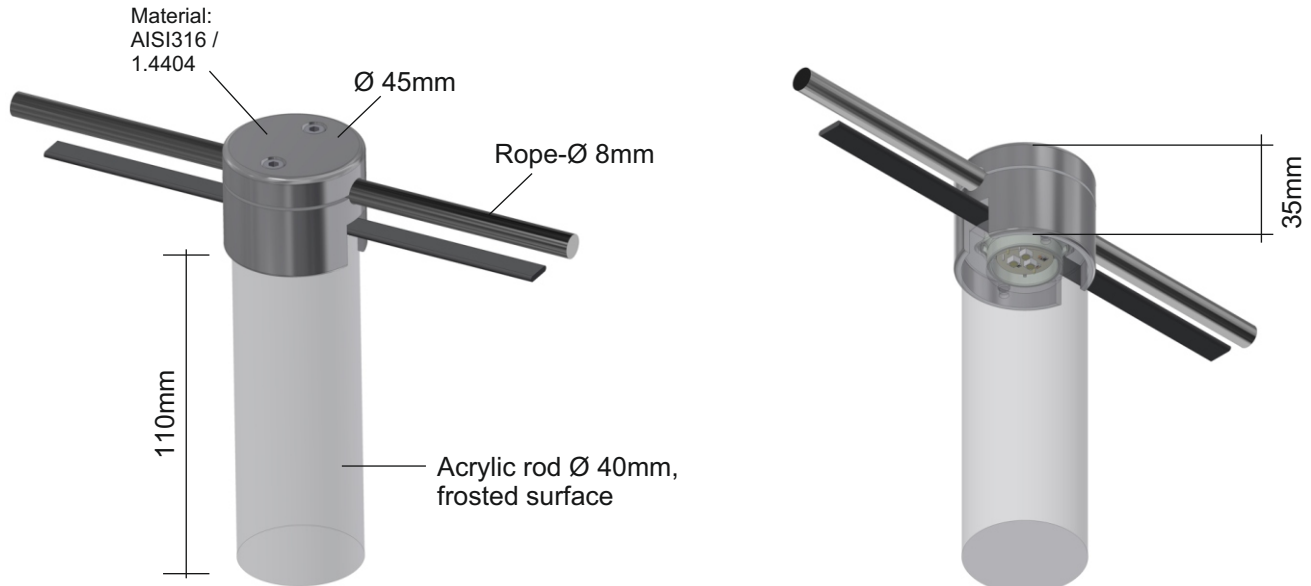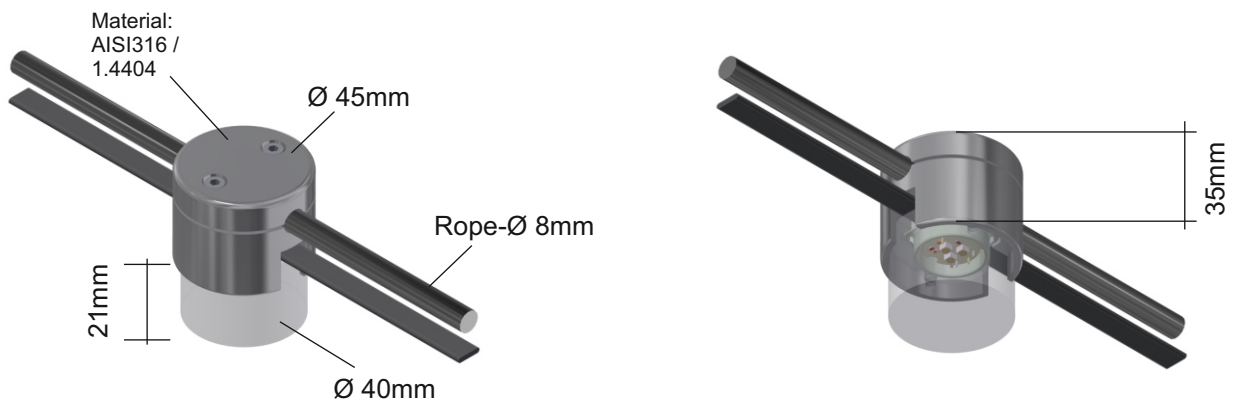
* Further length of Acrylic rods on request based on a minimum quantity of 200pc.

## SPECIFICATION FIXTURE

### XLED-KL-D-S

105mm

40mm

Stainless steel
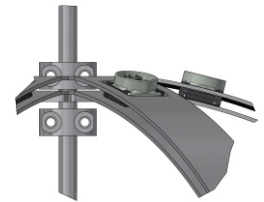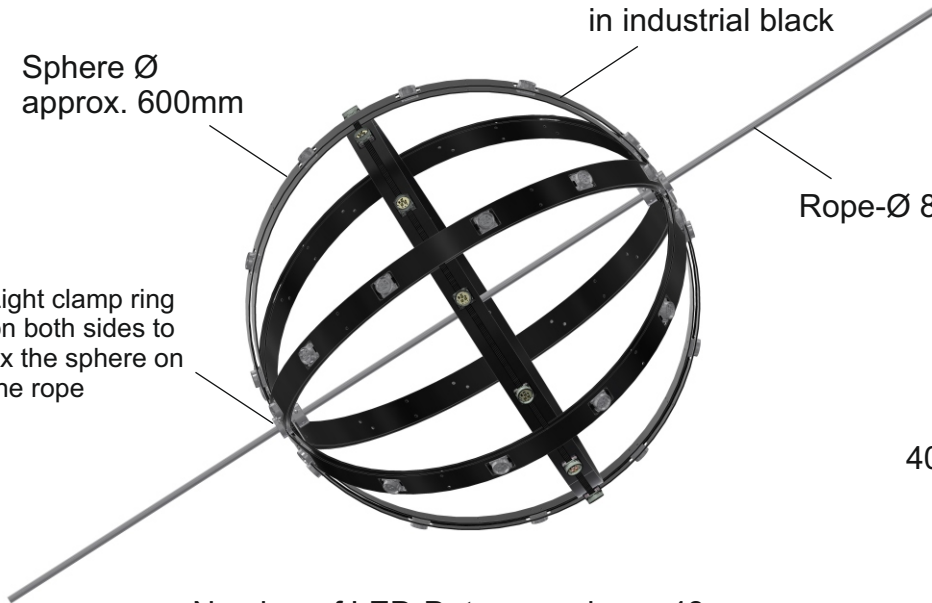1.4310

Rope-Ø 8mm

Diffusor Dome
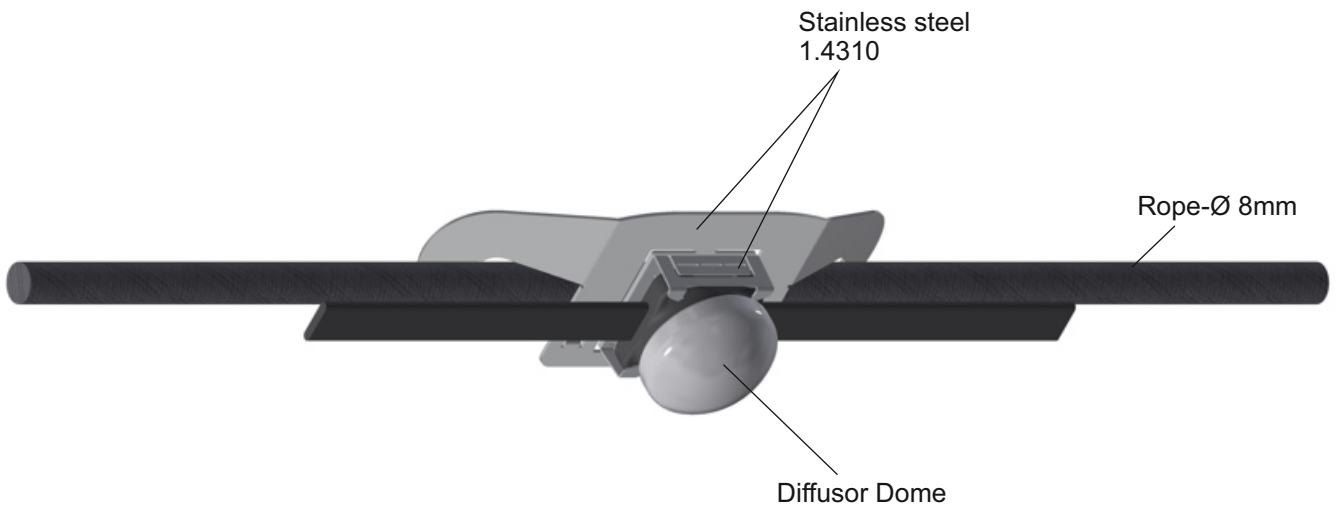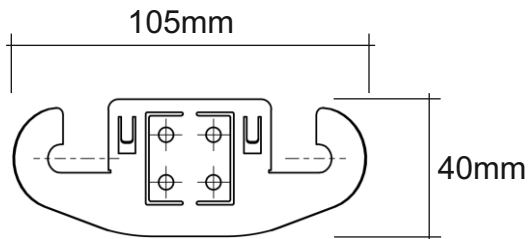
## SPECIFICATION FIXTURE

### XLED-SPH-600-48

Stainless steel
AISI316 colored
in industrial black

Sphere Ø
approx. 600mm

Rope-Ø 8mm

Light clamp ring
on both sides to
fix the sphere on
the rope

40mm
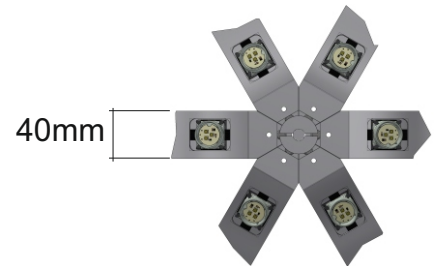
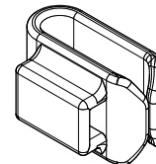Number of LED-Dots per sphere: 48 pc.
Pitch approx. 160mm

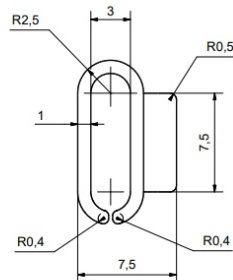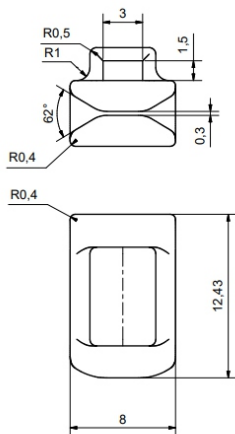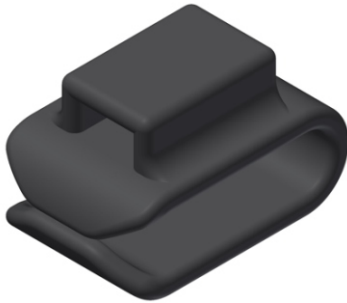\* Further diameter of the sphere on request based on a minimum quantity of 20 pc. each size.

## CUSTOM DESIGN OPTIONS

## ACCESSORIES







| | | RAL 9005 | |
|---|---|---|---|
| | XKD-KC-00007 | | - |
| | Artikelnummer / Bauteilnummer | | Revision |

| | Name | Datum | Kabelclip V7 | | |
|---|---|---|---|---|---|
| Freigegeben | HOK590 | 20.07.2021 | Artikelbezeichnung | | |
| Geprüft | HOK590 | 20.07.2021 | | | |
| Gezeichnet | HOK590 | 11.05.2021 | | | |

Artikelbeschreibung / Ausführung

Carl Stahl ARC GmbH
Siemensstrasse 2
73079 Suessen
Phone: +49 (0) 7162 / 94 81 50 100
Fax: +49 (0) 7162 / 94 81 50 105
E-Mail: architektur@carlstahl.com
www.carlstahl-architektur.com

Material (DIN): PA6
Behandlung:
Oberfläche:
Ursprung:

M 5 : 1

Dok.-Nr.: ENG-2051226.idw   A3

**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 residental 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"

**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.
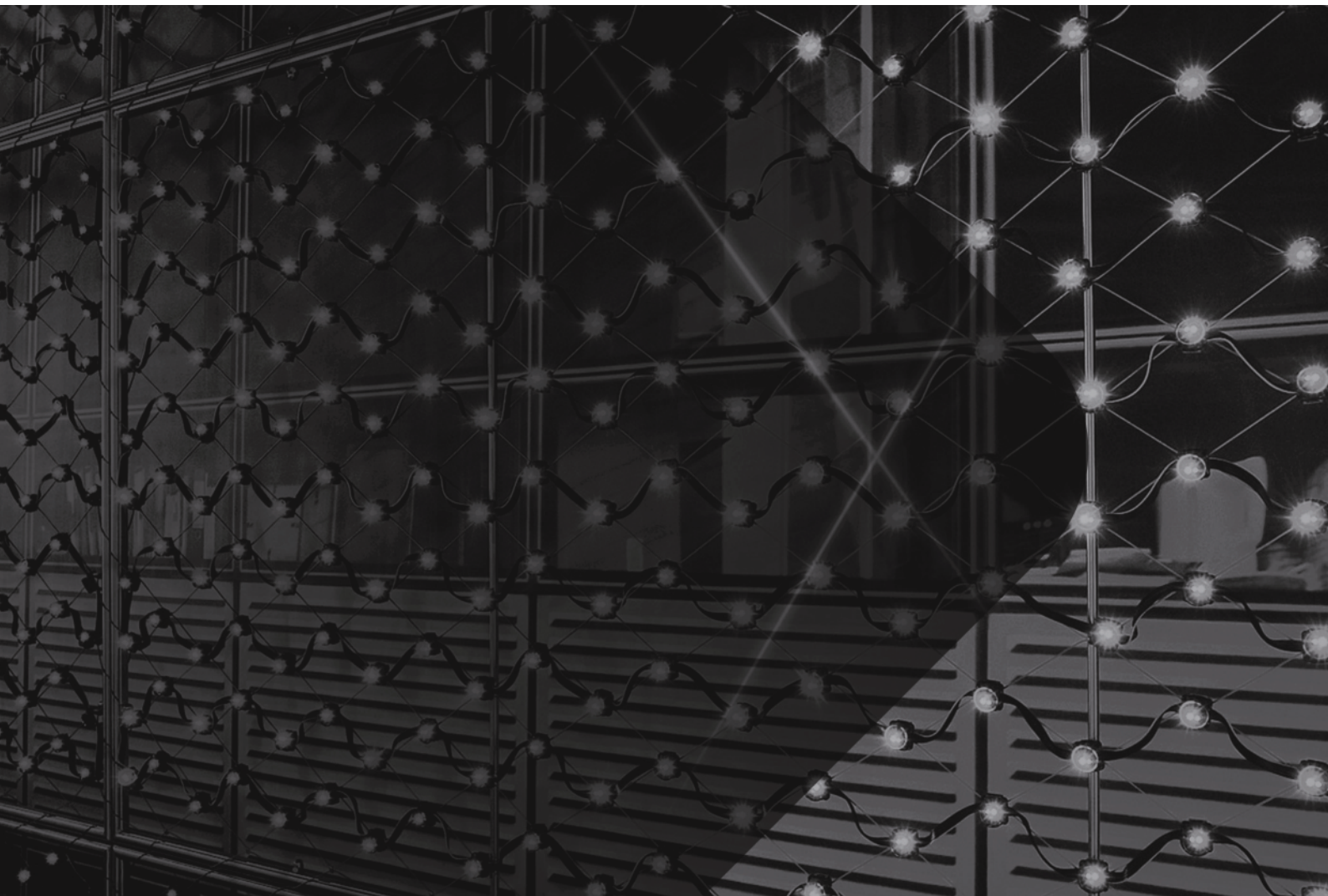Any visual changes due tu UV, salt or other enviromantal impacts, which doesn´t effect the functional behavior of the product,
aren´t covered in this warranty.

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.

![Carl Stahl Architektur logo]