

NANO SHOWCASE LIGHTING 16

DE DEUTSCH
EN ENGLISH

XAL

AULIX lighting

návrhy osvětlení a prodej svítidel
inteligentní systémy, vypínače

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ONE-STOP LIGHTING SOLUTION

DE Eine optimale Präsentation von Waren und Ausstellungsstücken lenkt bewusst die Aufmerksamkeit des Betrachters und hebt das Besondere am jeweiligen Exponat hervor. Licht ist dabei einer der wichtigsten Einflussfaktoren. NANO+ und die verwandten Produktfamilien INEO, STADIO, PICO, PICO SUPPORT, MICRO und JUST wurden für den blendfreien Einsatz im Regal und der Vitrine entwickelt und sollen genau das leisten: Das Begehrens- und Bewundernswerte des Exponats sichtbar machen, es in seinem Detailreichtum zeigen, die Aufmerksamkeit darauf lenken. Die Vielfalt der Anforderungen erfordert dabei eine breite Auswahl an Instrumenten und die Relevanz der Aufgabe erfordert den Einsatz der besten Lichttechnologie.

EN The optimal presentation of products and exhibition pieces directs the viewer's attention in a targeted manner and highlights the special features of the item on display. Light is one of the most important factors in this context. NANO+ and the associated product families of INEO, STADIO, PICO, PICO SUPPORT, MICRO and JUST were developed for use in shelves and display cases and are intended to achieve exactly that: making all of the valuable and exquisite characteristics of the displayed item visible, presenting the item in all its glorious detail, and drawing the viewer's attention to it. The diverse requirements demand a wide range of tools, and the importance of the task requires the use of the finest lighting technology.



1

NANO+ TURN / JUST

page 8

DE Hochflexibles und variantenreiches Ein- und Aufbauleuchtenprofil zur Regalbeleuchtung.

EN Highly flexible and varied range of recessed and surface mounted lighting profiles for shelf lighting.

2

INEO

page 42

DE Einfaches Aufbauleuchtenprofil zur Regalbeleuchtung.

EN Simple surface mounted lighting profile for shelf lighting.

3

STADIO

page 48

DE Solitärstrahler zur Beleuchtung von Vitrinen, erhältlich in neun verschiedenen Varianten.

EN Solitary spotlight for illuminating display cases, available in nine different variants.



Uniform light colour

DE Ein LED-Hersteller, ein Binning, perfekte Homogenität: Für nahezu 100 % unseres Produktprogramms verwenden wir ausschließlich sorgfältigst ausgewählte LEDs eines einzigen LED-Herstellers. Das gibt unseren Kunden die Sicherheit, ein äußerst homogenes Erscheinungsbild auch in Projekten mit vielen verschiedenen Produktfamilien zu erreichen.

EN One LED manufacturer, one binning, perfect homogeneity: We use painstakingly selected LEDs from a single LED manufacturer for nearly 100 % of our product range. This ensures that our customers can achieve an extremely homogeneous appearance even in projects involving many different product families.

4

PICO

page 72

DE Dezentler Solitärstrahler in vier Ausführungen, bestens geeignet für Vitrinen.

EN Discreet single spotlight in four versions, optimally suitable for display cases.

5

PICO SUPPORT

page 80

DE Bügelleuchte in runder und eckiger Optik zur Beleuchtung tiefer Schaukästen.

EN Luminaire in round and rectangular profile styles for illuminating deeper showcases.

6

MICRO

page 92

DE Einbauspot in drei verschiedenen Ausführungen zur optimalen Nischenbeleuchtung.

EN Recessed spotlight in three different versions for optimal niche lighting.

7

JUST

page 102

DE Flexibler Aufbaustrahler ideal für Nischen und Regalbeleuchtung.

EN Flexible mounted luminaire, perfect for recessed areas and shelf lighting.

CLOSE TO NATURE

CRI 95 / R9 > 90

Authentisch. Natürlich.

DE Weil das Umgebungslicht Farben unterschiedlich reproduziert, wird als Referenz der so genannte Farbwiedergabeindex (CRI, Colour Rendering Index) herangezogen. Er gibt an, in welchem Verhältnis das angestrahlte Objekt oder der angestrahlte Bereich vom Maximalwert 100 (Tageslicht) abweicht. Das mit CRI 95 ausgezeichnete Produktsortiment beeindruckt mit seinem hohen CRI Wert. Es kommt damit natürlichem Licht sehr nahe und eignet sich für farbsensible Anwendungen wie Vitrinen oder Spezialausstellungsflächen. Zur Betonung des Werts von Verkaufs- oder Kunstgegenständen ist es wesentlich, ihre Materialqualität, Haptik und Farbauthentizität möglichst genau wiederzugeben. Die Produkte mit einem CRI von 95 eignen sich hervorragend für hochwertige Verkaufsflächen oder Kunst-Settings. Diese Beleuchtungskörper erzielen auch einen hervorragenden Rotwert von R9 > 90, eine revolutionäre Leistung, weil die Reproduktion von Rot alle Beleuchtungshersteller, nicht nur uns, vor große Herausforderungen stellt.

Farbwiedergabe

DE Eine Testlichtquelle wird mit einer Referenzlichtquelle derselben Farbtemperatur verglichen. Die Chromatizitätskoordinaten der Referenzlichtquelle liegen genau auf der Black-Body-Line (BBL), während die Testlichtquelle von der BBL abweichen kann. Die Folge ist ein schlechterer CRI.

Jede Testfarbe wird anhand des Reflexionsspektrums der 14 Referenztestfarben R1–R14 beurteilt. Je nach Referenzlichtquelle wird der höchstmögliche Wert von 100 bei einer entsprechend großen Abweichung erreicht. Auch negative Werte sind möglich.

Die Testlichtquelle kann nie besser abschneiden als die Referenzlichtquelle. Das arithmetische Mittel der Auswertung der ersten acht Testfarben (R1–R8) ergibt dann den Farbwiedergabeindex (CRI).

Die Testfarben R9–R14 dienen nur zu Informationszwecken, während die Unterschiede der Lichtqualität subjektiv besser mit diesen Testfarben beurteilt werden können. Konkret gilt der R9-Wert (gesättigtes Rot) als eine von Beleuchtungsdesignern bevorzugte Sonderreferenz.

Darstellen lässt sich die Lichtqualität am besten als Balkengrafik.

Authentic. Natural.

EN Because ambient light reproduces colours differently, the CRI (Colour Rendering Index) is used as a reference. It indicates in what ratio the irradiated object or area deviates from the maximum value of 100 (day light). The product range with CRI 95 impresses in that regard with its very high CRI performance. This is very close to natural light and therefore suitable for use in colour sensitive applications like display cases and specialty areas. It is essential to reproduce the materiality, haptic and colour authenticity of sales items or art objects as closely as possible to elevate their value. The fact that most products in this catalogue have a CRI value of 95 makes this system perfect for using it in premium sales areas or art scenes. NANO light fixtures also achieve a very good red value of R9 > 90 which is revolutionary because the reproduction of that colour has been a challenge for lighting manufacturers – not just for us.

Colour rendering

EN A test light source is compared with a reference light source of the same colour temperature. The chromaticity coordinates of the reference light source are located exactly on the Black Bodyline (BBL), the test light source may deviate from the BBL, resulting in a deterioration of the CRI.

Each test colour is evaluated based on the reflection spectrum of the 14 reference test colours R1–R14. In accordance with the reference light source, the highest possible value of 100 is reached at a correspondingly large deviation. Negative values result as well.

The test light source cannot be rated better than the reference light source. The arithmetic mean of the evaluation of the first 8 test colours (R1–R8) then results in the colour rendering index (CRI).

The test colours R9–R14 are for information only, but subjectively the differences in light quality can be better evaluated with these test colours. Specifically, the R9 value (saturated red) is considered a special reference preferred by lighting designers.

The bar chart is the best way to represent the quality of light.



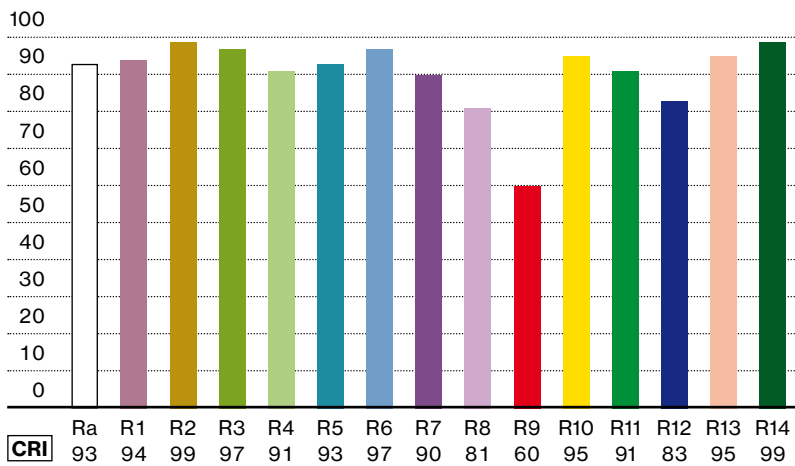
Competitor LED CRI 90



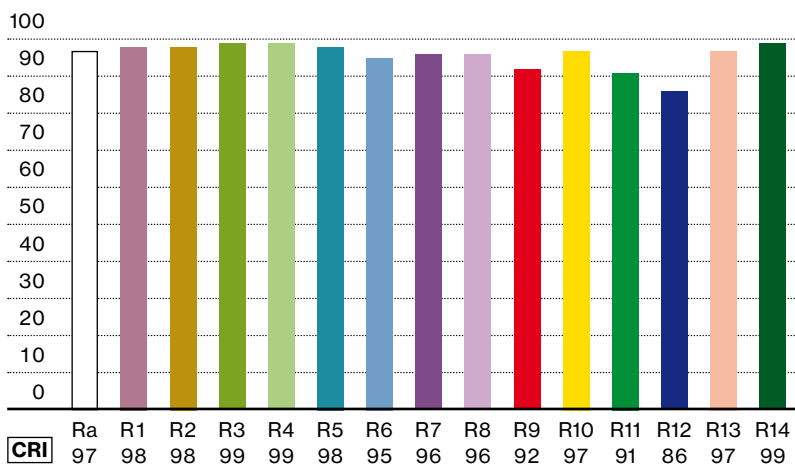
NANO+ LED CRI 95 (R9 > 90)

Vergleich / Comparison

COMPETITOR LED CRI 90



NANO+ LED CRI 95 (R9 > 90)



Testfarben / Test colour samples

DIN 6169

Ra	White
R1	Light greyish red
R2	Dark greyish yellow
R3	Strong yellow green
R4	Moderate yellowish green
R5	Light bluish green
R6	Light blue
R7	Light violet
R8	Light reddish purple
R9	Strong red
R10	Strong yellow
R11	Strong green
R12	Strong blue
R13	Light yellowish pink
R14	Moderate olive green (leaf)

FLEXIBILITY

DE Um auf wechselnde Anforderungen in Vitrinen und Shops reagieren zu können, haben wir großen Wert auf Variabilität gelegt. Viele Produkte in diesem Katalog sind flexibel an neue Situationen anpassbar. Sei es einfache Dreh- und Schwenkbarkeit, die Möglichkeit der variablen Fokussierung oder auch die Verfügbarkeit von wichtigem Zubehör wie Honeycomb-Louvers oder Snoots. Wir möchten, dass unsere Produkte Ihren Anforderungen in jeder Situation gerecht werden.

EN Because lighting tasks can change more or less quickly over time, we placed a great deal of emphasis on flexibility. Many products in this catalogue can be flexibly adapted to new situations. This is ensured by features such as the ability to easily tilt and swivel, the possibility to change the focus, and the availability of important accessories such as honeycomb louvers. We want our products to meet your needs in every situation.



Drehen und schwenken / Rotate and tilt

DE Passen Sie bei wechselnden Beleuchtungsaufgaben die Lichtaustrittsrichtung immer optimal an das jeweilige Objekt an – einfach, schnell und komfortabel mit unserem patentierten Schwenkmechanismus.

EN When your lighting tasks change, adjust the direction of light emission optimally to always match the corresponding object - quickly, easily and without tools with our patented tilt mechanism.

Optisches Zubehör / Optical accessories

DE Passen Sie mit dem optischen Zubehör, das außerdem für blendfreies Licht sorgt, Strahler an spezielle Aufgaben an und ändern Sie je nach Bedarf diese Adaptionen wieder mit einem Handgriff.

EN Adjust spotlights to match specific tasks with optical accessories and change the adjustment again as required at the touch of a handle.

Luminaire head

Colour filter

Sculpture foil

Honeycomb louver

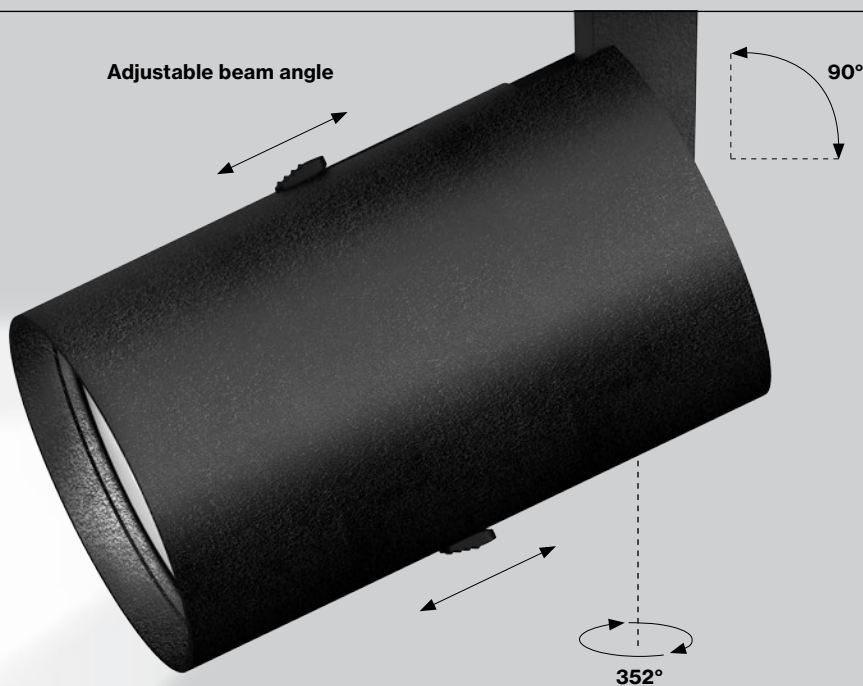
Snoot



Adjustable beam angle

90°

352°



Patentierte Fokussierung / Patented focusing

DE Bei allen FOCUS-Produkten in diesem Katalog ist der Lichtaustrittswinkel durch eine patentierte Verstelloptik für höchste Variabilität flexibel justierbar.

EN The beam angle of all the FOCUS products in this catalogue is infinitely alterable by patented adjustment optics for maximum flexibility.

NANO+

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OVERVIEW

NANO+

NANO+ CHANNELS

CHANNEL 90 bevel cut



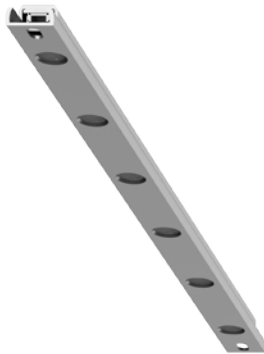
CHANNEL 90



CHANNEL 90+



NANO+ INSETS



Quickinfo

SYSTEM POWER
LUMINOUS FLUX 4000K
CURRENT FEED

TURN page 14

1,2W
92lm
700mA

JUST 22 page 16

1,2W
90lm
700mA

JUST 22 FOCUS page 18

1,2W
64lm
700mA

JUST 26 page 20

2,4W
160lm
700mA

BEAM ANGLE

20°, 30°, 40°, 65°

14°, 30°

Adjustable 12°–40°

14°, 30°

DIMENSIONS LENGTH

W 15mm
100/150/300/600mm

ø 22mm / H 35mm
L 150mm

ø 22mm / H 44mm
L 150mm

ø 26mm / H 40mm
H 150mm

FOR CHANNEL

90/60/45/11

90/60/45

90/60/45

90/60/45

**CHANNEL 90
frame**



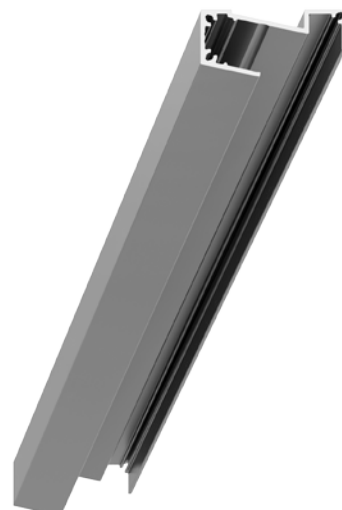
CHANNEL 60



CHANNEL 45



CHANNEL 11



JUST 26 POWER
page 22

3,4W
230lm
700mA

20°, 46°

ø 26 mm / H 40 mm
L 150 mm

90/60/45

JUST 26 FOCUS
page 24

2,4W
110lm
700mA

Adjustable 17°–43°

ø 26 mm / H 48 mm
L 0–150 mm

90/60/45

JUST 32
page 26

3,5W
330lm
700mA

19°, 27°, 42°

ø 32 mm / H 47 mm
L 150 mm

90/60/45

JUST 32 FOCUS
page 28

3,5W
240lm
700mA

Adjustable 17°–43°

ø 32 mm / H 53 mm
L 150 mm

90/60/45

LINE
page 30

6,9/13,7/20,6/27,5/34,3W
2209lm
700mA

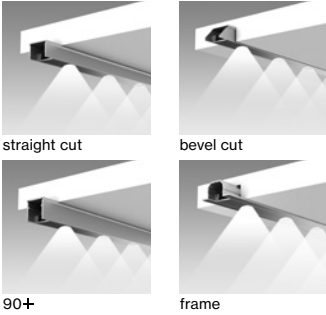
Opal cover

W 15 mm
L 300–1500 mm

90/60/45/11

CHANNELS

CHANNEL 90



DE Montagekanal für NANO+ Module zum Ein- oder Aufbau; zusätzlich in höherer Ausführung (90+) und mit Rand (90 frame); Ausführung mit geradem Schnitt oder Gehrungsschnitt; für Anwendungen mit Ausstrahlrichtung von 90° auf das untere Fach; Montageklebeband erhältlich

EN Mounting channel for NANO+ modules for recessed or surface mounting; also as higher variant (90+) and with rim (90 frame); variant with straight or mitre cut; for use with a beam angle of 90° onto the lower shelf; mounting tape available

Illuminance example



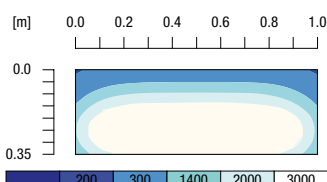
GENERAL

NANO+ TURN 18x1,2W e² LED
4000K CRI 95, R9>90 (typical)
Anodised aluminium
Flood 40°

PHYSICAL

Shelf 100x35 cm
Distance 35 cm
White surface

RESULT



CHANNEL 60



DE Montagekanal für NANO+ Module zum Ein- oder Aufbau; mit geradem Schnitt; für Anwendungen mit Ausstrahlrichtung von 60° auf das untere Fach; optimale Ausleuchtung von Fachnischen mit gleicher Fachhöhe und -tiefe; Montageklebeband erhältlich

EN Mounting channel for NANO+ modules for recessed or surface mounting; with straight cut; for use with a beam angle of 60° onto the lower shelf; optimum illumination of shelf niches with equal shelf height and depth; mounting tape available

Illuminance example



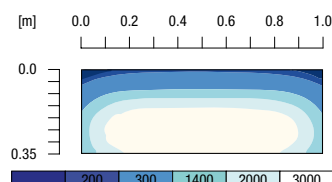
GENERAL

NANO+ TURN 18x1,2W e² LED
4000K CRI 95, R9>90 (typical)
Anodised aluminium
Flood 40°

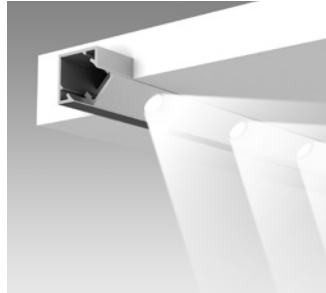
PHYSICAL

Shelf 100x35 cm
Distance 35 cm
White surface

RESULT



CHANNEL 45



DE Montagekanal für NANO+ Module zum Ein- oder Aufbau; für Anwendungen mit Ausstrahlrichtung von 45° auf das untere Fach; optimale Ausleuchtung von Fachnischen mit geringer Höhe; Verhältnis Fachhöhe zu -tiefe 1:2

EN Mounting channel for NANO+ modules for recessed or surface mounting; for use with a beam angle of 45° onto the lower shelf; optimum illumination of shelf niches with low height; shelf height to depth ratio of 1:2

Illuminance example



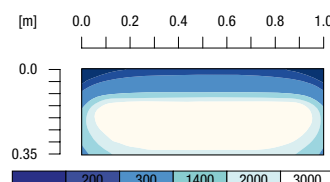
GENERAL

NANO+ TURN 18x1,2W e² LED
4000K CRI 95, R9>90 (typical)
Anodised aluminium
Wide flood 65°

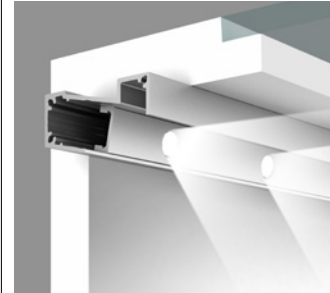
PHYSICAL

Shelf 100x35 cm
Distance 18 cm
White surface

RESULT



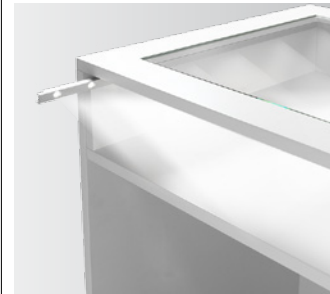
CHANNEL 11



DE Verdeckt montierbarer Montagekanal mit 11° Neigung für NANO+ TURN Module; für horizontale Montage in Pulten mit Glasausschnitten, Fachhöhe 12–18 cm

EN Mounting channel with 11° slant for NANO+ TURN modules that can be mounted invisibly; for horizontal mounting in desks with glass section, shelf height 12–18 cm

Illuminance example



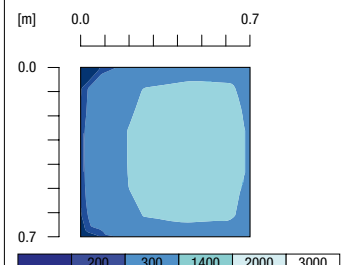
GENERAL

NANO+ TURN 12x1,2W e² LED
4000K CRI 95, R9>90 (typical)
Anodised aluminium
Spot 20°

PHYSICAL

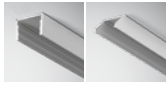
Counter 70x70 cm
Distance 15 cm
White surface

RESULT



Order options

TYPE	▲
straight cut	0
bevel cut	5



MATERIAL COLOUR	▣
anodised aluminium	6
anodised black	8



MOUNTING CHANNELS

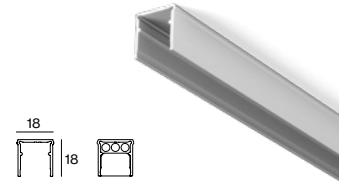
NANO CHANNEL 90

L (mm)	
300	007 - 1901▲4▣
600	007 - 1901▲6▣
900	007 - 1901▲7▣
1200	007 - 1901▲8▣
3000	007 - 190109▣
custom cut (straight cut)	E84500▣
end caps (pair)	007 - 190301▣



NANO CHANNEL 90+

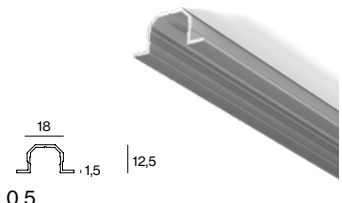
L (mm)	
300	007 - 190164▣
600	007 - 190166▣
900	007 - 190167▣
1200	007 - 190168▣
3000	007 - 190169▣
custom cut	E84510▣
end caps (pair)	007 - 191361▣



space for up to 3 pieces of power cable

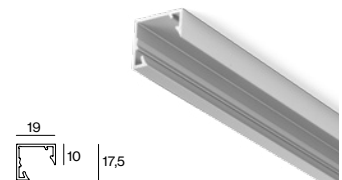
NANO CHANNEL 90 FRAME

L (mm)	
300	007 - 190194▣
600	007 - 190196▣
900	007 - 190197▣
1200	007 - 190198▣
3000	007 - 190199▣
custom cut	E84540▣
end caps (pair)	007 - 190391▣
mounting brackets set (5 pcs.)	007 - 1903940 . 05



NANO CHANNEL 60

L (mm)	
300	007 - 190114▣
600	007 - 190116▣
900	007 - 190117▣
1200	007 - 190118▣
3000	007 - 190119▣
custom cut	E84520▣
end caps (pair)	007 - 190311▣



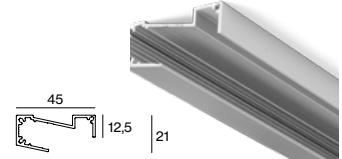
NANO CHANNEL 45

L (mm)	
300	007 - 190124▣
600	007 - 190126▣
900	007 - 190127▣
1200	007 - 190128▣
3000	007 - 190129▣
custom cut	E84530▣
end caps (pair)	007 - 190321▣



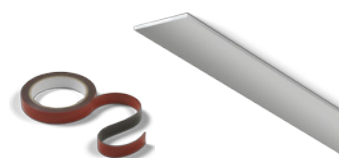
NANO CHANNEL 11

L (mm)	
300	007 - 191184▣
600	007 - 191186▣
900	007 - 191187▣
1200	007 - 191188▣
3000	007 - 191189▣
custom cut	E84570▣



ACCESSORIES

TYPE	
blind cover 150 mm	007 - 190281▣
blind cover 300 mm	007 - 190284▣
blind cover 600 mm	007 - 190286▣
tape L 3000mm / B 18 mm	007 - 1919190



NANO+ TURN

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45/11
Passive cooling
Indoor

LED

High-power LED
3000 K, 3500 K, 4000 K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 20°, 30°, 40°, 65°

ELECTRICAL

700 mA (2 LEDs parallel)

PHYSICAL

Anodised aluminium
Silver, black
+/- 15° tiltable
W 15 mm
L 100/150/300/600 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; +/- 15° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; Flexverbinder für mechanische und elektrische Verbindung verfügbar; verfügbar in 4 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; Variante mit 50 bzw. 75 mm Lichtpunktabstand; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; +/- 15° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; flexible connectors for mechanical and electrical connection available; available in 4 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; variant with 50 or 75 mm light point spacing; 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



+/- 15° tiltable
patented mechanism



+/- 90° tiltable, +/- 45°
rotatable; patented
mounting connector

Order options

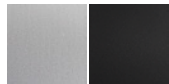
COLOUR TEMPERATURE ■

3000K	CRI 95	85lm*	5
3500K	CRI 95	85lm*	7
4000K	CRI 95	92lm*	6

*per LED | CRI 95, R9>90 (typ.) | 350mA | 60°C

MATERIAL COLOUR ■

anodised aluminium	6
anodised black	8

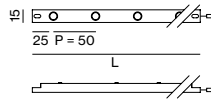
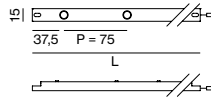


BEAM ANGLE FWHM ▲

spot 20°	S
medium 30°	M
flood 40°	F
wide flood 65°	W



NANO+ TURN



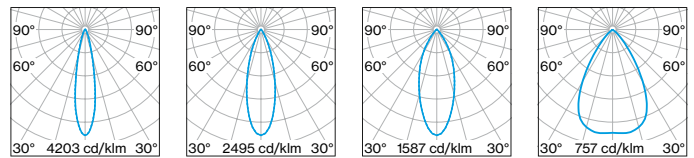
P = LED pitch

SYSTEM POWER / VOLTAGE	NO. OF LEDS	L P (mm)	ORDER CODE
2x1,2W / 3V	2	100 50	007 - 4010 ■ ▲
2x1,2W / 3V	2	150 75	007 - 4001 ■ ▲
4x1,2W / 6V	4	300 75	007 - 4003 ■ ▲
6x1,2W / 9V	6	300 50	007 - 4013 ■ ▲
8x1,2W / 12V	8	600 75	007 - 4006 ■ ▲
12x1,2W / 18V	12	600 50	007 - 4016 ■ ▲

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,2m		DISTANCE 0,35m	
		3x4x1,2W	3x6x1,2W	3x4x1,2W	3x6x1,2W
20°	3000K	10200	14600	5660	8380
	3500K	10200	14600	5660	8380
	4000K	11100	15900	6160	9120
30°	3000K	7750	11500	4330	6490
	3500K	7750	11500	4330	6490
	4000K	8430	12500	4710	7060
40°	3000K	6120	9140	3410	5100
	3500K	6120	9140	3410	5100
	4000K	6660	9940	3710	5550
65°	3000K	4340	6550	2390	3600
	3500K	4340	6550	2390	3600
	4000K	4720	7130	2600	3920

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x300mm



spot 20° LOR 87% medium 30° LOR 88% flood 40° LOR 88% wide flood 65° LOR 86%

Electrical accessories

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE	LEDS	CABLE (m)	L-W-H (mm)	ORDER CODE
8W / 2,5-12V non DIM	2-6	max.18	64-34-21	007 - 1953110
10W / 7-14V non DIM	6-8	max.5	95-53-25	007 - 1953210
20W / 10-28V non DIM	8-16	max.10	184-40-25	007 - 1953310
30W / 10-43V non DIM	8-24	max.11	127-67-28	007 - 1953410
40W / 20-57V non DIM	14-32	max.11	225-47-28	007 - 1953510
66W / 18-48V non DIM	2x14-2x24	max.2x18	148-77-33	007 - 1954410
20W / 10-28V DIM DALI	8-16	max.10	184-40-25	007 - 1953330
30W / 10-43V DIM DALI	8-24	max.11	127-67-28	007 - 1953430
40W / 20-57V DIM DALI	14-32	max.11	225-47-28	007 - 1953530
66W / 18-48V DIM DALI	2x14-2x24	max.2x18	148-77-33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 114 for wiring examples

Other accessories

TYPE	ORDER CODE
mounting connector: +/- 90° tiltable, +/- 45° rotatable	007 - 400000 ■
end feeder (pair): +/- 90° tiltable	007 - 400010 ■

NANO+ JUST 22

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45
Passive cooling
Indoor

LED

High-power LED
3000 K, 3500 K, 4000 K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 14°, 30°

ELECTRICAL

2x1,2W / 700 mA (2 LEDs parallel)

PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
ø 22 mm / H 35 mm
L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; verfügbar in 2 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90 % Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 75 mm Lichtpunktabstand; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; available in 2 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90 % luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 75 mm light point spacing; 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

Features



352° rotatable
90° tiltable



Optical accessories

Order options

COLOUR TEMPERATURE

3000K	CRI 95	83lm*	5
3500K	CRI 95	83lm*	7
4000K	CRI 95	90lm*	6

*per spot | CRI 95, R9>90 (typ.) | 350mA | 53°C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8

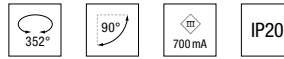


BEAM ANGLE FWHM

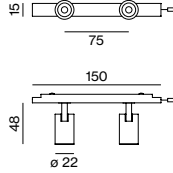
spot 14°	S
flood 30°	F



NANO+ JUST 22



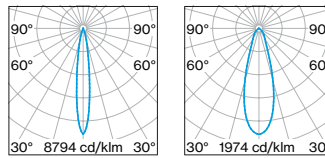
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
2x1,2W / 3V	2	150	007 - 4042::1



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m 3x2x1,2W	0,35m 3x2x1,2W
14°	3000K	16900	9630
	3500K	16900	9630
	4000K	18400	10500
30°	3000K	7680	3000
	3500K	7680	3000
	4000K	8350	3260

shelf 1000x350 mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150 mm



spot 14° LOR 84% flood 30° LOR 81%

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2 m + CONNECTION CABLE WITH PLUG 1 m, SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE		SPOTS	CABLE (m)	L·W·H (mm)	ORDER CODE
8 W / 2,5-12 V	non DIM	2-6	max.18	64·34·21	007 - 1953110
10 W / 7-14 V	non DIM	6-8	max.5	95·53·25	007 - 1953210
20 W / 10-28 V	non DIM	8-16	max.10	184·40·25	007 - 1953310
30 W / 10-43 V	non DIM	8-24	max.11	127·67·28	007 - 1953410
40 W / 20-57 V	non DIM	14-32	max.11	225·47·28	007 - 1953510
66 W / 18-48 V	non DIM	2x14-2x24	max.2x18	148·77·33	007 - 1954410
20 W / 10-28 V	DIM DALI	8-16	max.10	184·40·25	007 - 1953330
30 W / 10-43 V	DIM DALI	8-24	max.11	127·67·28	007 - 1953430
40 W / 20-57 V	DIM DALI	14-32	max.11	225·47·28	007 - 1953530
66 W / 18-48 V	DIM DALI	2x14-2x24	max.2x18	148·77·33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø·H (mm)	ORDER CODE
honeycomb louver	20·4	007 - 1965128
elliptical sculpture foil	20·4	007 - 1965220
snoot	20·9	007 - 1965328
colour filter (red, blue, green, etc.)	20·4	on request

NANO+ JUST 22 FOCUS

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45
Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Adjustable beam angle 12°–40°

ELECTRICAL

2x1,2W / 700 mA (2 LEDs parallel)

PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
ø 22 mm / H 44 mm
L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; einstellbarer Ausstrahlwinkel 12°–40°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 75 mm Lichtpunktabstand; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; adjustable beam angle 12°–40°; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 75 mm light point spacing; 700mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

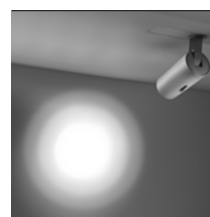
Features



352° rotatable
90° tiltable



Optical accessories



Adjustable beam
angle 12°–40°

Order options

COLOUR TEMPERATURE

3000K	CRI 95	59lm*	5
3500K	CRI 95	59lm*	7
4000K	CRI 95	64lm*	6

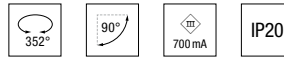
*per spot | CRI 95, R9>90 (typ.) | 350mA | 53°C

MATERIAL COLOUR

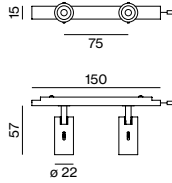
anodised aluminium	6
anodised black	8



NANO+ JUST 22 FOCUS



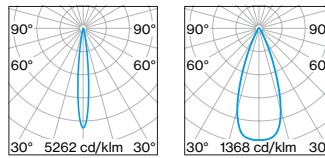
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
2x1,2W / 3V	2	150	007 - 4052 1 1



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m 3x2x1,2W	0,35m 3x2x1,2W
12°	3000K	7470	5340
	3500K	7470	5340
	4000K	8120	5810
40°	3000K	7140	2310
	3500K	7140	2310
	4000K	7760	2510

shelf 1000x350 mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150 mm



min. angle 12°
LOR 41 %

max. angle 40°
LOR 60 %

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2 m + CONNECTION CABLE WITH PLUG 1 m,
SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE		SPOTS	CABLE (m)	L·W·H (mm)	ORDER CODE
8 W / 2,5-12 V	non DIM	2-6	max.18	64·34·21	007 - 1953110
10 W / 7-14 V	non DIM	6-8	max.5	95·53·25	007 - 1953210
20 W / 10-28 V	non DIM	8-16	max.10	184·40·25	007 - 1953310
30 W / 10-43 V	non DIM	8-24	max.11	127·67·28	007 - 1953410
40 W / 20-57 V	non DIM	14-32	max.11	225·47·28	007 - 1953510
66 W / 18-48 V	non DIM	2x14-2x24	max.2x18	148·77·33	007 - 1954410
20 W / 10-28 V	DIM DALI	8-16	max.10	184·40·25	007 - 1953330
30 W / 10-43 V	DIM DALI	8-24	max.11	127·67·28	007 - 1953430
40 W / 20-57 V	DIM DALI	14-32	max.11	225·47·28	007 - 1953530
66 W / 18-48 V	DIM DALI	2x14-2x24	max.2x18	148·77·33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø·H (mm)	ORDER CODE
honeycomb louver	20·4	007 - 1965138
elliptical sculpture foil	20·4	007 - 1965230
snoot	20·9	007 - 1965338
colour filter (red, blue, green, etc.)	20·4	on request

NANO+ JUST 26

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45
Passive cooling
Indoor

LED

High-power LED
3000 K, 3500 K, 4000 K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 14°, 30°

ELECTRICAL

(2x) 2,4W / 700 mA (2 LEDs serial)

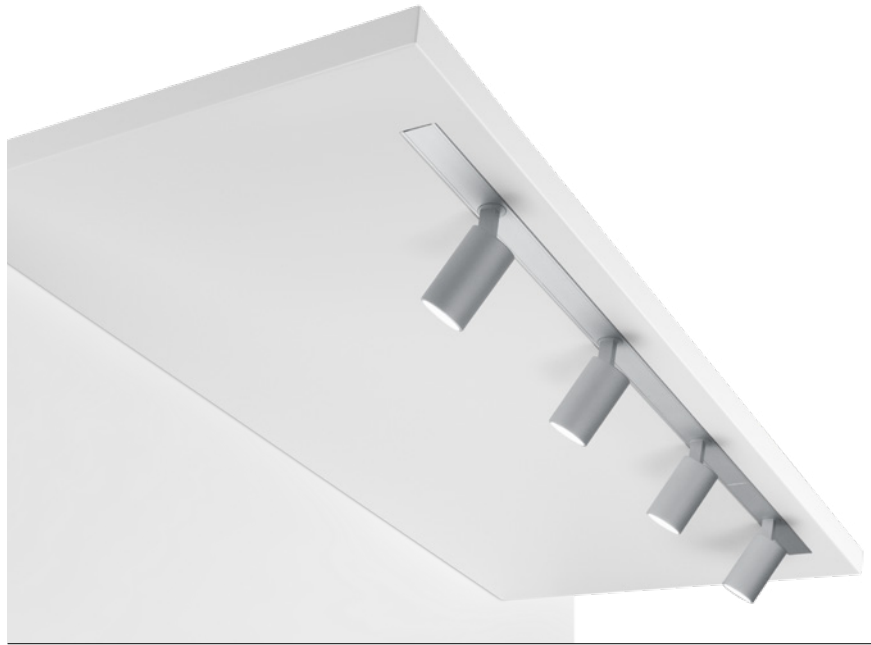
PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
ø 26 mm / H 40 mm
L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; verfügbar in 2 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90 % Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; available in 2 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90 % luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

Features



352° rotatable
90° tiltable



Optical accessories

Order options

COLOUR TEMPERATURE

3000K	CRI 95	150lm*	5
3500K	CRI 95	150lm*	7
4000K	CRI 95	160lm*	6

*per spot | CRI 95, R9>90 (typ.) | 700mA | 69°C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8

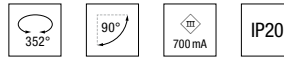


BEAM ANGLE FWHM

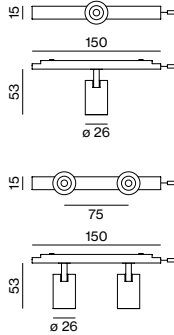
spot 14°	S
flood 30°	F



NANO+ JUST 26



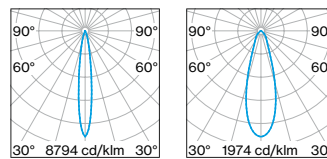
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
1x2,4W / 3V	1	150	007 - 406111
2x2,4W / 6V	2	150	007 - 406211



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,2m		DISTANCE 0,35m	
		3x1x2,4W	3x2x2,4W	3x1x2,4W	3x2x2,4W
14°	3000K	15500	31900	8720	17300
	3500K	15500	31900	8720	17300
	4000K	16900	34700	9480	18800
30°	3000K	8120	15500	2760	5420
	3500K	8120	15500	2760	5420
	4000K	8830	16900	3000	5900

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150mm



spot 14° LOR 84% flood 30° LOR 81%

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2 m + CONNECTION CABLE WITH PLUG 1 m, SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE	SPOTS	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-12 V non DIM	1-3	max.18	64-34-21	007 - 1953110
10 W / 7-14 V non DIM	3-4	max.5	95-53-25	007 - 1953210
20 W / 10-28 V non DIM	4-8	max.10	184-40-25	007 - 1953310
30 W / 10-43 V non DIM	4-12	max.11	127-67-28	007 - 1953410
40 W / 20-57 V non DIM	7-16	max.11	225-47-28	007 - 1953510
66 W / 18-48 V non DIM	2x7-2x12	max.2x18	148-77-33	007 - 1954410
20 W / 10-28 V DIM DALI	4-8	max. 10	184-40-25	007 - 1953330
30 W / 10-43 V DIM DALI	4-12	max.11	127-67-28	007 - 1953430
40 W / 20-57 V DIM DALI	7-16	max.11	225-47-28	007 - 1953530
66 W / 18-48 V DIM DALI	2x7-2x12	max.2x18	148-77-33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	007 - 1965148
elliptical sculpture foil	23-4	007 - 1965240
snoot	23-12	007 - 1965348
colour filter (red, blue, green, etc.)	23-4	on request

NANO+ JUST 26 POWER

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45
Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Triple lens
Beam angle 20°, 46°

ELECTRICAL

2x3,4W / 700mA (2x3 LEDs parallel)

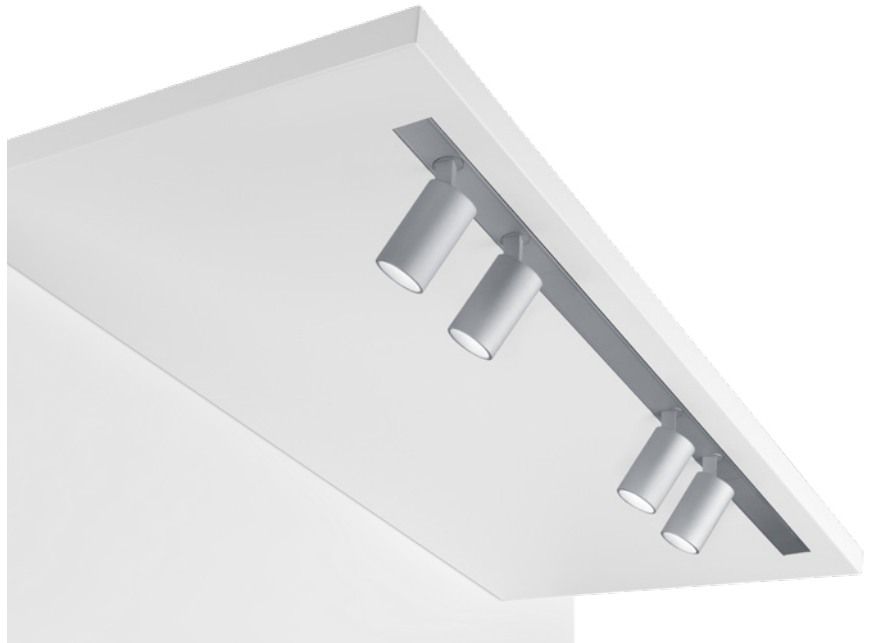
PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
ø 26 mm / H 40 mm
L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; verfügbar in 2 verschiedenen Ausstrahlwinkeln; 3 LEDs und 3-fach Linse für maximalen Lichtstrom; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; available in 2 beam angles; 3 LED and triple lens for maximum luminous flux; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

Features



352° rotatable
90° tiltable



Optical accessories

Order options

COLOUR TEMPERATURE

3000K	CRI 95	210lm*	5
3500K	CRI 95	210lm*	7
4000K	CRI 95	230lm*	6

*per spot | CRI 95, R9>90 (typ.) | 350 mA | 72°C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8



BEAM ANGLE FWHM

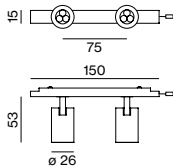
spot 20°	S
flood 46°	F



NANO+ JUST 26 POWER



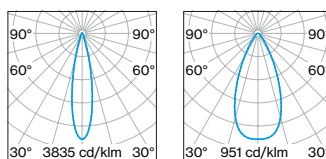
SYSTEM POWER / VOLTAGE	NO. OF LEDES	L (mm)	ORDER CODE
2x3,4W / 9V	2x3	150	007 - 4072::1



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m 3x2x3,4W	0,35m 3x2x3,4W
20°	3000K	34000	14700
	3500K	34000	14700
	4000K	37000	16000
46°	3000K	12900	4460
	3500K	12900	4460
	4000K	14000	4850

shelf 1000x350 mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150 mm



spot 20° LOR 73 % flood 46° LOR 66 %

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2 m + CONNECTION CABLE WITH PLUG 1 m,
SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE		SPOTS	CABLE (m)	L·W·H (mm)	ORDER CODE
10 W / 7-14 V	non DIM	2	max.18	95-53-25	007 - 1953210
20 W / 10-28 V	non DIM	4	max.18	184-40-25	007 - 1953310
30 W / 10-43 V	non DIM	4-6	max.18	127-67-28	007 - 1953410
40 W / 20-57 V	non DIM	4-10	max.18	225-47-28	007 - 1953510
66 W / 18-48 V	non DIM	2x4-2x8	max.2x18	148-77-33	007 - 1954410
20 W / 10-28 V	DIM DALI	4	max.18	184-40-25	007 - 1953330
30 W / 10-43 V	DIM DALI	4-6	max.18	127-67-28	007 - 1953430
40 W / 20-57 V	DIM DALI	4-10	max.18	225-47-28	007 - 1953530
66 W / 18-48 V	DIM DALI	2x4-2x8	max.2x18	148-77-33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø·H (mm)	ORDER CODE
honeycomb louver	23·4	007 - 1965148
elliptical sculpture foil	23·4	007 - 1965240
snoot	23·12	007 - 1965348
colour filter (red, blue, green, etc.)	23·4	on request

NANO+ JUST 26 FOCUS

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45

Passive cooling

Indoor

LED

High-power LED

3000K, 3500K, 4000K

CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Adjustable beam angle 17°–43°

ELECTRICAL

(2x) 2,4W / 700mA (2 LEDs serial)

PHYSICAL

Anodised aluminium

Silver, black

352° rotatable, 90° tiltable

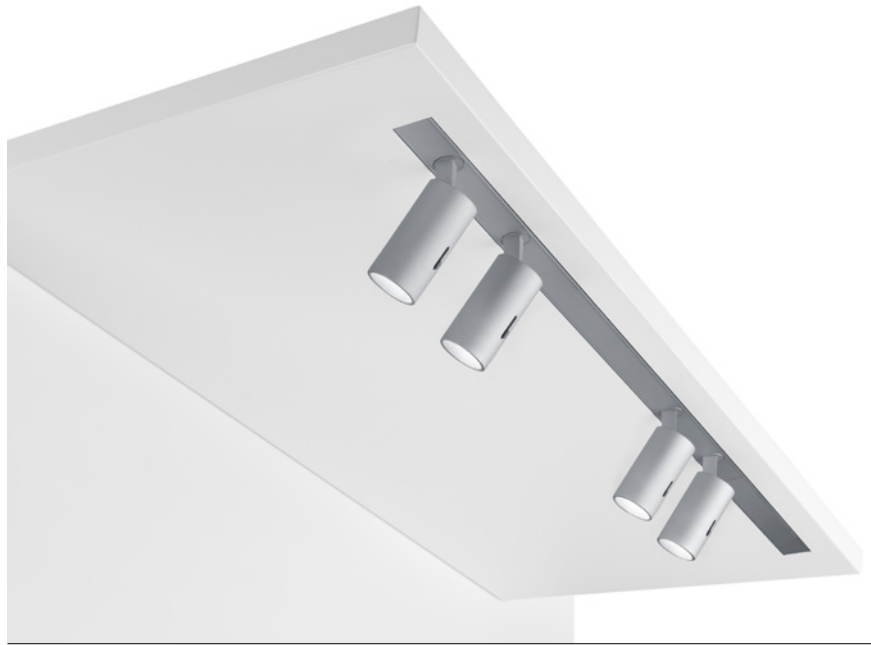
∅ 26 mm / H 48 mm

L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; einstellbarer Ausstrahlwinkel 17°–43°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 75 mm Lichtpunktabstand; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; adjustable beam angle 17°–43°; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 75 mm light point spacing; 700mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

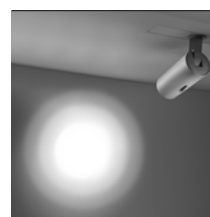
Features



352° rotatable
90° tiltable



Optical accessories



Adjustable beam
angle 17°–43°

Order options

COLOUR TEMPERATURE

3000K	CRI 95	110lm*	5
3500K	CRI 95	110lm*	7
4000K	CRI 95	120lm*	6

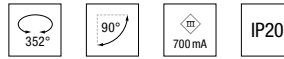
*per spot | CRI 95, R9>90 (typ.) | 700mA | 69°C

MATERIAL COLOUR

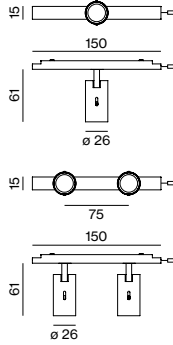
anodised aluminium	6
anodised black	8



NANO+ JUST 26 FOCUS



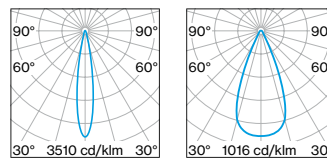
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
1x2,4W / 3V	1	150	007 - 403111
2x2,4W / 6V	2	150	007 - 403211



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,2m		DISTANCE 0,35m	
		3x1x2,4W	3x2x2,4W	3x1x2,4W	3x2x2,4W
17°	3000K	15400	7620	7630	3880
	3500K	15400	7620	7630	3880
	4000K	16700	8290	8300	4220
43°	3000K	9670	5100	3150	1610
	3500K	9670	5100	3150	1610
	4000K	10500	5550	3430	1750

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150mm



min. angle 17° LOR 45%
max. angle 43° LOR 62%

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE	SPOTS	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-12 V non DIM	1-3	max.18	64-34-21	007 - 1953110
10 W / 7-14 V non DIM	3-4	max.5	95-53-25	007 - 1953210
20 W / 10-28 V non DIM	4-8	max.10	184-40-25	007 - 1953310
30 W / 10-43 V non DIM	4-12	max.11	127-67-28	007 - 1953410
40 W / 20-57 V non DIM	7-16	max.11	225-47-28	007 - 1953510
66 W / 18-48 V non DIM	2x7-2x12	max.2x18	148-77-33	007 - 1954410
20 W / 10-28 V DIM DALI	4-8	max. 10	184-40-25	007 - 1953330
30 W / 10-43 V DIM DALI	4-12	max.11	127-67-28	007 - 1953430
40 W / 20-57 V DIM DALI	7-16	max.11	225-47-28	007 - 1953530
66 W / 18-48 V DIM DALI	2x7-2x12	max.2x18	148-77-33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	007 - 1965158
elliptical sculpture foil	23-4	007 - 1965250
snoot	23-12	007 - 1965358
colour filter (red, blue, green, etc.)	23-4	on request

NANO+ JUST 32

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45
Passive cooling
Indoor

LED

High-power LED
3000 K, 3500 K, 4000 K
CRI 90

ESTIMATED LED LIFETIME

L80 / 50.000h

OPTICAL

Beam angle 19°, 27°, 42°

ELECTRICAL

2x3,5W / 700mA (2 LEDs parallel)

PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
ø 32 mm / H 47 mm
L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; verfügbar in 3 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80 % Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 90; 75 mm Lichtpunktabstand; 700mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; available in 3 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 80 % luminous flux after 50,000 operating hours; colour rendering CRI 90; 75 mm light point spacing; 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

Features



352° rotatable
90° tiltable



Optical accessories

Order options

COLOUR TEMPERATURE ◆◆

3000K	CRI 90	300lm*	5
3500K	CRI 90	300lm*	7
4000K	CRI 90	330lm*	6

*per spot | CRI 90 | 350mA | 65°C

MATERIAL COLOUR ▣

anodised aluminium	6
anodised black	8

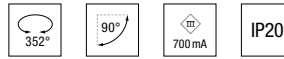


BEAM ANGLE FWHM ▲

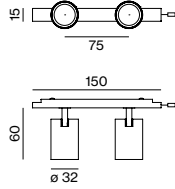
spot 19°	S
medium 27°	M
flood 42°	F



NANO+ JUST 32



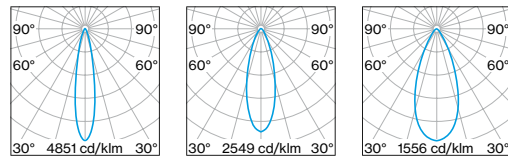
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
2x3,5W / 10V	2	150	007 - 4082:1▲▣



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m 3x2x3,5W	0,35m 3x2x3,5W
19°	3000K	42900	19800
	3500K	42900	19800
	4000K	46100	21300
27°	3000K	27200	11300
	3500K	27200	11300
	4000K	29200	12100
42°	3000K	20400	7630
	3500K	20400	7630
	4000K	21900	8200

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150mm



spot 19° LOR 85% medium 27° LOR 84% flood 42° LOR 91%

Electrical accessories

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	SPOTS	CABLE (m)	L-W-H (mm)	ORDER CODE
10W / 7-14V non DIM	2	max.18	95-53-25	007 - 1953210
20W / 10-28V non DIM	4	max.18	184-40-25	007 - 1953310
30W / 10-43V non DIM	4-8	max.10	127-67-28	007 - 1953410
40W / 20-57V non DIM	6-10	max.18	225-47-28	007 - 1953510
66W / 18-48V non DIM	2x4-2x8	max.2x18	148-77-33	007 - 1954410
20W / 10-28V DIM DALI	4	max.18	184-40-25	007 - 1953330
30W / 10-43V DIM DALI	4-8	max.10	127-67-28	007 - 1953430
40W / 20-57V DIM DALI	6-10	max.18	225-47-28	007 - 1953530
66W / 18-48V DIM DALI	2x4-2x8	max.2x18	148-77-33	007 - 1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961210
extension cable	1x socket / 1x plug	2000	007 - 1961410
extension cable	1x socket / 1x plug	4000	007 - 1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	30-4	007 - 1965168
elliptical sculpture foil	30-4	007 - 1965260
snoot	30-15	007 - 1965368
colour filter (red, blue, green, etc.)	30-4	on request

NANO+ JUST 32 FOCUS

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45
Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 90

ESTIMATED LED LIFETIME

L80 / 50.000h

OPTICAL

Adjustable beam angle 17°–43°

ELECTRICAL

2x3,5W / 700mA (2 LEDs parallel)

PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
ø 32 mm / H 53 mm
L 150 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem inklusive elektrischem Verbinder für werkzeuglose Montage; einstellbarer Ausstrahlwinkel 17°–43°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 90; 75 mm Lichtpunkt-Abstand; 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Midget luminaire profile made of extruded aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play through-plated electrical system with electrical connector for toolless mounting; adjustable beam angle 17°–43°; passively cooled high-power LED system; available in 3 light colours; min. 80% luminous flux after 50,000 operating hours; colour rendering CRI 90; 75 mm light point spacing; 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

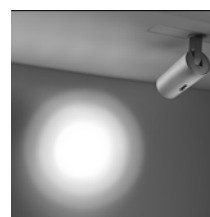
Features



352° rotatable
90° tiltable



Optical accessories



Adjustable beam
angle 17°–43°

Order options

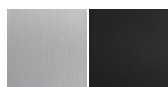
COLOUR TEMPERATURE

3000K	CRI 90	230lm*	5
3500K	CRI 90	230lm*	7
4000K	CRI 90	240lm*	6

*per spot | CRI 90 | 700mA | 65°C

MATERIAL COLOUR

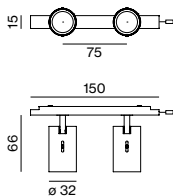
anodised aluminium	6
anodised black	8



NANO+ JUST 32 FOCUS



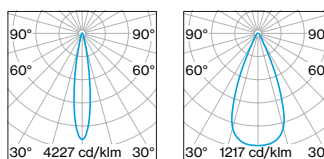
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
2x3,5W / 10V	2	150	007-4092:1



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m 3x2x7,1W	0,35m 3x2x7,1W
17°	3000K	34300	17000
	3500K	34300	17000
	4000K	36900	18300
43°	3000K	19800	6350
	3500K	19800	6350
	4000K	21300	6830

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 3x150mm



min. angle 17°
LOR 55 %

max. angle 43°
LOR 68 %

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2 m + CONNECTION CABLE WITH PLUG 1 m,
SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE		SPOTS	CABLE (m)	L-W-H (mm)	ORDER CODE
10W / 7-14V	non DIM	2	max.18	95-53-25	007-1953210
20W / 10-28V	non DIM	4	max.18	184-40-25	007-1953310
30W / 10-43V	non DIM	4-8	max.10	127-67-28	007-1953410
40W / 20-57V	non DIM	6-10	max.18	225-47-28	007-1953510
66W / 18-48V	non DIM	2x4-2x8	max.2x18	148-77-33	007-1954410
20W / 10-28V	DIM DALI	4	max.18	184-40-25	007-1953330
30W / 10-43V	DIM DALI	4-8	max.10	127-67-28	007-1953430
40W / 20-57V	DIM DALI	6-10	max.18	225-47-28	007-1953530
66W / 18-48V	DIM DALI	2x4-2x8	max.2x18	148-77-33	007-1954430

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007-1961210
extension cable	1x socket / 1x plug	2000	007-1961410
extension cable	1x socket / 1x plug	4000	007-1961610

See page 115 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	30-4	007-1965178
elliptical sculpture foil	30-4	007-1965270
snoot	30-15	007-1965378
colour filter (red, blue, green, etc.)	30-4	on request

NANO+ LINE

Quickinfo

GENERAL

Inset for CHANNEL 90/60/45/11
Passive cooling
Indoor

LED

Mid-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L80 / 50.000h

OPTICAL

Opal cover

ELECTRICAL

700mA (23W/m)

PHYSICAL

Anodised aluminium
W 15mm
L 300/600/900/1200/1500mm

CERTIFICATIONS



Description

DE Miniatur-Leuchtenprofil aus stranggepresstem Aluminium; homogen ausgeleuchtete Abdeckung aus satiniertem PMMA; durchkontaktiertes elektrisches Stecksystem für werkzeuglose Montage; passiv gekühltes LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 700mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

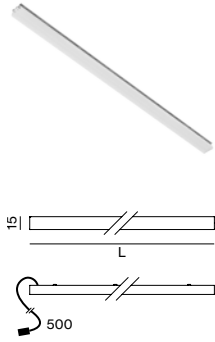
EN Midget luminaire profile made of extruded aluminium; uniformly illuminated satined PMMA cover; plug and play electrical connector system for toolless mounting; passively cooled LED system; available in 3 light colours; min. 80% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 700mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Order options

COLOUR TEMPERATURE 

3000K	CRI 95	1999lm*	5
3500K	CRI 95	1999lm*	7
4000K	CRI 95	2209lm*	6

*per meter | CRI 95, R9>90 | 700 mA | 74 °C



NANO+ LINE

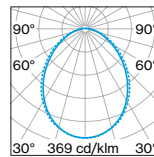


SYSTEM POWER / VOLTAGE	L (mm)	ORDER CODE
6,9 W / 10V	300	007 - 4 1 1 1 :: 160
13,7 W / 19V	600	007 - 4 1 1 2 :: 160
20,6 W / 29V	900	007 - 4 1 1 3 :: 160
27,5 W / 38V	1200	007 - 4 1 1 4 :: 160
34,3 W / 48V	1500	007 - 4 1 1 5 :: 160

ILLUMINANCE EXAMPLE (E_{max} in lux)

OPTICAL COVER	COLOUR TEMP.	DISTANCE 0,2m 1x20,6W	DISTANCE 0,35m 1x20,6W
opal	3000K	6050	2670
	3500K	6050	2670
	4000K	6690	2950

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 1x900mm



opal cover
LOR 88 %

Electrical accessories

LED CONVERTER 700 mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE	LENGTH (mm)	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-12 V non DIM	300	max.18	64-34-21	007 - 1 9 5 3 1 6 0
20 W / 10-28 V non DIM	600	max.18	184-40-25	007 - 1 9 5 3 3 6 0
30 W / 10-43 V non DIM	600-1200	max.10	127-67-28	007 - 1 9 5 3 4 6 0
40 W / 20-57 V non DIM	900-1500	max.18	225-47-28	007 - 1 9 5 3 5 6 0
66 W / 18-48 V non DIM	2x600-2x1200	max.2x18	148-77-33	007 - 1 9 5 4 4 6 0
20 W / 10-28 V DIM DALI	600	max.18	184-40-25	007 - 1 9 5 3 3 8 0
30 W / 10-43 V DIM DALI	600-1200	max.10	127-67-28	007 - 1 9 5 3 4 8 0
40 W / 20-57 V DIM DALI	900-1500	max.18	225-47-28	007 - 1 9 5 3 5 8 0
66 W / 18-48 V DIM DALI	2x600-2x1200	max.2x18	148-77-33	007 - 1 9 5 4 4 8 0

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 700mA + cable 500 mm	1x socket / 9x plug	85-50-10	007 - 1 9 5 9 3 1 0

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1 9 6 1 2 6 0
extension cable	1x socket / 1x plug	2000	007 - 1 9 6 1 4 6 0
extension cable	1x socket / 1x plug	4000	007 - 1 9 6 1 6 6 0

See page 118 for wiring examples

Inspiration

Jewellery Store Schullin
Graz

ARCHITECT
Robert Max Morianz
Graz

SOLUTION
CHANNEL 90
NANO+ TURN
3000K
wide flood 65°





Inspiration

Hessisches Landesmuseum
Darmstadt

ARCHITECT

KPW Papay Warnicke und
Partner Architekten
Hamburg

GENERAL PLANNER

Schiel Projektgesellschaft mbH
Berlin

LIGHTING DESIGN

Kardorff Ingenieure Lichtplanung
Berlin

SOLUTION

CHANNEL 60
CHANNEL 45
NANO+ TURN
3000 K
flood 40°





Inspiration

Fashion Store Marion Heinrich
Munich

ARCHITECT

Koubek & Hartinger
Munich

LIGHTING DESIGN

Koubek & Hartinger
Munich

SOLUTION

CHANNEL 60
NANO+ JUST 26
3000 K
flood 30°





Inspiration

Pachleitner Flagship Store
Schmuck und Brille & Design
Graz

ARCHITECT

GSarchitects ZT GmbH
Graz

SOLUTION

CHANNEL 90
NANO+ TURN
4000K
wide flood 65°





Inspiration

AUDI AG
Automobilausstellung 2011
Frankfurt/Main

ARCHITECT

Schmidhuber + Partner
Munich

LIGHTING DESIGN

FOUR TO ONE: scale design
Hürth

SOLUTION

CHANNEL 90
NANO+ TURN
3000K
wide flood 65°





INEO

INEO 9
INSPIRATIONS

page 44

page 46





INEO 9

Quickinfo

GENERAL

Passive cooling

Indoor

LED

Mid-power LED

3000K, 3500K, 4000K

CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L80 / 50.000h

OPTICAL

Opal cover

ELECTRICAL

500mA (16W/m)

PHYSICAL

Anodised aluminium

Silver, black

ø 9 mm

L 310/610/910/1210/1510 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

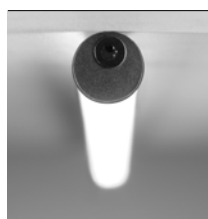
DE Leuchtenprofil mit nur 9 mm Durchmesser aus stranggepresstem Aluminium; homogen ausgeleuchtete Abdeckung aus satiniertem PMMA; durchkontaktiertes elektrisches Stecksystem für werkzeuglose Montage; passiv gekühltes LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80 % Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 500 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Luminaire profile with just 9 mm diameter made of extruded aluminium; uniformly illuminated satined PMMA cover; plug and play electrical connector system for toolless mounting; passively cooled LED system; available in 3 light colours; min. 80 % luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 500 mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



9 mm thinness



Detail from front

Order options

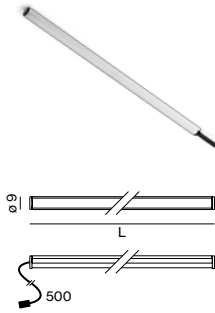
COLOUR TEMPERATURE

3000K	CRI 95	1481 lm*	5
3500K	CRI 95	1481 lm*	7
4000K	CRI 95	1636 lm*	6

*per meter | CRI 95, R9>90 | 500 mA | 62°C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8



INEO 9

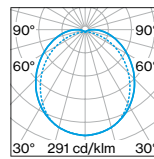


SYSTEM POWER / VOLTAGE	L (mm)	ORDER CODE
4,8 W / 10V	310	007 - 4 1 2 1 : 1 <input type="checkbox"/> O
9,7 W / 19V	610	007 - 4 1 2 2 : 1 <input type="checkbox"/> O
14,5 W / 29V	910	007 - 4 1 2 3 : 1 <input type="checkbox"/> O
19,4 W / 38V	1210	007 - 4 1 2 4 : 1 <input type="checkbox"/> O
24,2 W / 48V	1510	007 - 4 1 2 5 : 1 <input type="checkbox"/> O

ILLUMINANCE EXAMPLE (E_{max} in lux)

OPTICAL COVER	COLOUR TEMP.	DISTANCE 0,2m 1x14,5W	DISTANCE 0,35m 1x14,5W
opal	3000K	3240	1540
	3500K	3240	1540
	4000K	3580	1700

shelf 1000x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | inset 1x910mm



opal cover
LOR 90 %

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240 V AC, 50-60 Hz, ENEC APPROVED

TYPE	LENGTH (mm)	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 3-14 V non DIM	310	max.18	64-34-21	007 - 1 9 5 2 1 6 0
30 W / 10-60 V non DIM	610-1550	max.18	127-67-28	007 - 1 9 5 2 4 6 0
30 W / 10-60 V DIM DALI	610-1550	max.18	127-67-28	007 - 1 9 5 2 4 8 0

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1 9 5 9 2 1 0

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1 9 6 1 2 6 0
extension cable	1x socket / 1x plug	2000	007 - 1 9 6 1 4 6 0
extension cable	1x socket / 1x plug	4000	007 - 1 9 6 1 6 6 0

See page 119 for wiring examples

Inspiration

XAL Showroom
Graz

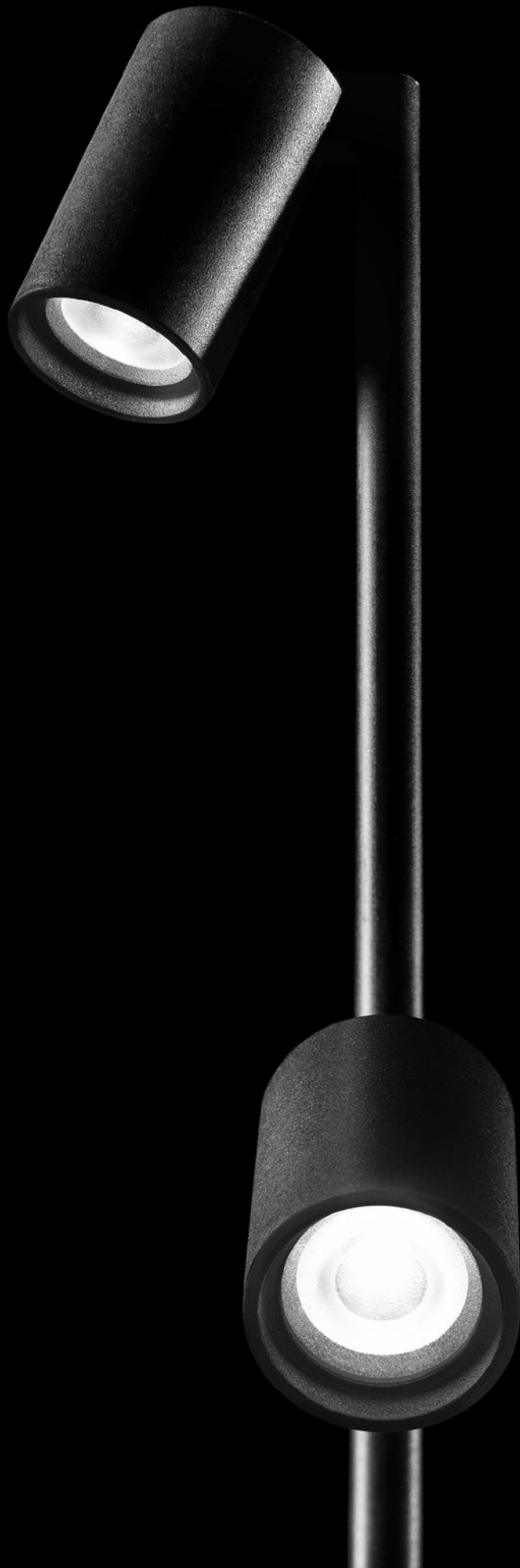
SOLUTION
INEO 9
4000K





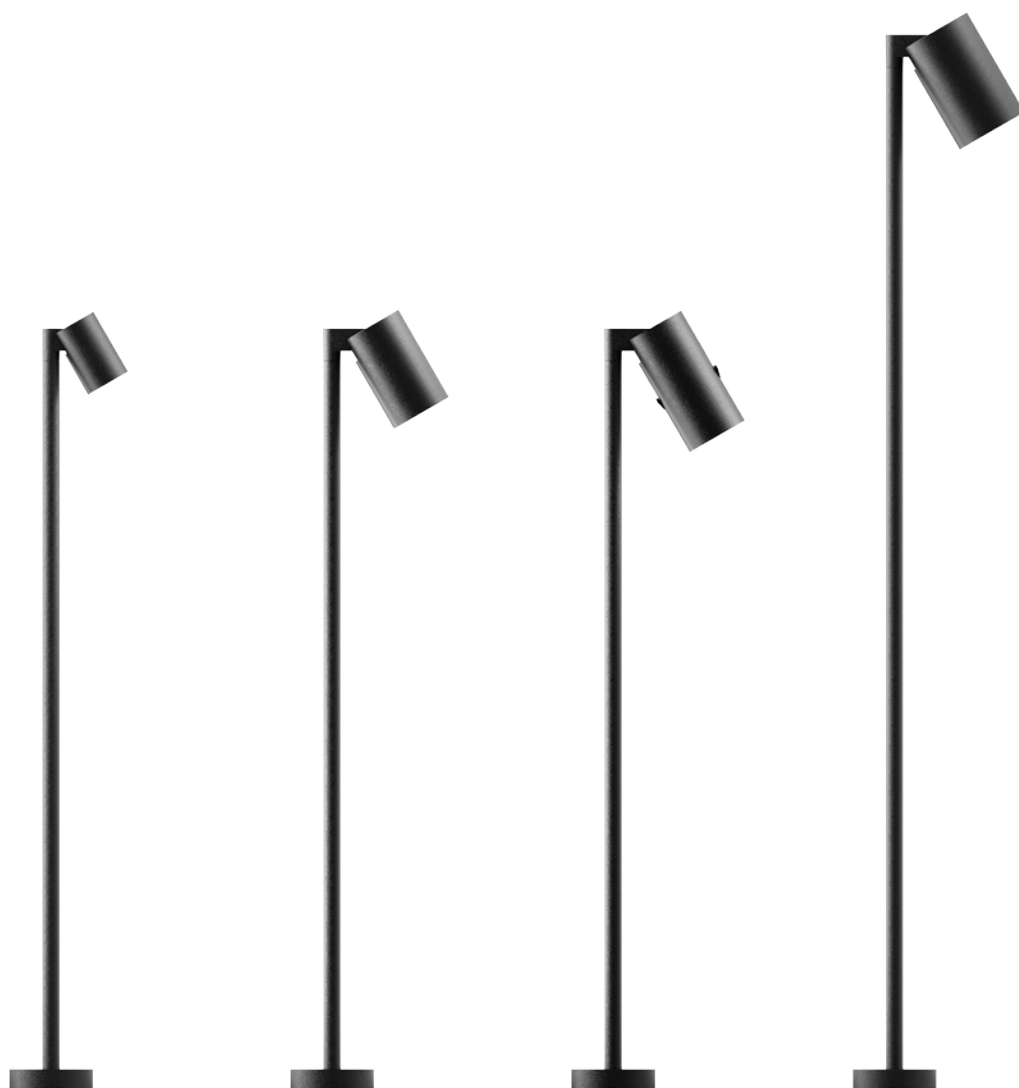
STADIO

STADIO JUST 16	page 52
STADIO JUST 22	page 54
STADIO JUST 22 FOCUS	page 56
STADIO JUST 26	page 58
STADIO JUST 26 DUO	page 60
STADIO JUST 26 POWER	page 62
STADIO JUST 26 FOCUS	page 64
STADIO JUST 32	page 66
STADIO JUST 32 FOCUS	page 68
INSPIRATIONS	page 70



OVERVIEW

STADIO



Quickinfo

JUST 16
page 52

JUST 22
page 54

JUST 22 FOCUS
page 56

JUST 26
page 58

SYSTEM POWER
LUMINOUS FLUX 4000K
CURRENT FEED

1,2W
94lm
350mA

1,2W / 1,7W
90lm / 120lm
350mA / 500mA

1,2W / 1,7W
64lm / 86lm
350mA / 500mA

1,7W / 2,4W
120lm / 160lm
500mA / 700mA

BEAM ANGLE

20°, 30°, 40°

14°, 30°

Adjustable 12°–40°

14°, 30°

HEAD DIMENSIONS
POLE HEIGHT

ø 16mm / H 24mm
H 0–250mm

ø 22mm / H 35mm
H 0–250mm

ø 22mm / H 44mm
H 0–250mm

ø 26mm / H 40mm
H 0–350mm



JUST 26 DUO
page 60

2x 1,7W / 2,4W
240lm / 320lm
500mA / 700mA

14°, 30°

ø 26 mm / H 40 mm
H 0-350mm

JUST 26 POWER
page 62

3,5W
240lm
350mA

20°, 46°

ø 26 mm / H 40 mm
H 0-350mm

JUST 26 FOCUS
page 64

1,7W / 2,4W
82lm / 110lm
500mA / 700mA

Adjustable 17°-43°

ø 26 mm / H 48 mm
H 0-350mm

JUST 32
page 66

5,2W / 7,5W
450lm / 570lm
500mA / 700mA

19°, 27°, 42°

ø 32 mm / H 67 mm
H 0-450mm

JUST 32 FOCUS
page 68

5,2W / 7,5W
330lm / 420lm
500mA / 700mA

Adjustable 17°-43°

ø 32 mm / H 73 mm
H 0-450mm

STADIO JUST 16

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 20°, 30°, 40°

ELECTRICAL

1,2W / 350mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 16mm / H 24mm
H 0-250mm
Cutout ø 12mm

CERTIFICATIONS



Description

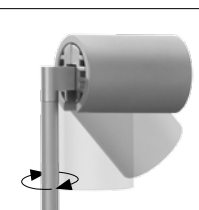
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinenboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); verfügbar in 3 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); available in 3 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



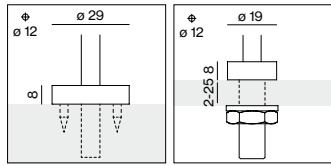
Top screw or bottom
counternut mounting



310° rotatable
90° tiltable

Order options

MOUNTING		♀
top screw		3
bottom counter nut		4



COLOUR TEMPERATURE		☼
3000K CRI 95	86lm*	5
3500K CRI 95	86lm*	7
4000K CRI 95	94lm*	6

*per fixture | CRI 95, R9>90 (typ.) | 350mA | 60°C

MATERIAL COLOUR		☑
anodised aluminium		6
anodised black		8



BEAM ANGLE FWHM		▲
spot 20°		S
medium 30°		M
flood 40°		F

STADIO JUST 16

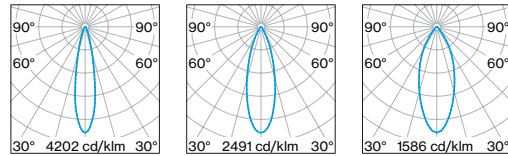


SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
1,2W / 3V	1	16	007 - 41 0 0 1 1 ▲

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,22m 1,2W / 350mA
20°	3000K	3720
	3500K	3720
	4000K	4050
30°	3000K	2140
	3500K	2140
	4000K	2330
40°	3000K	1370
	3500K	1370
	4000K	1490

surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



spot 20° LOR 87%	medium 30° LOR 86%	flood 40° LOR 88%
---------------------	-----------------------	----------------------

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7W / 2-21V non DIM	1-6	max. 10	64-34-21	007 - 1951160
21W / 10-60V non DIM	4-17	max. 18	127-67-28	007 - 1951360
21W / 10-60V DIM DALI	4-17	max. 18	127-67-28	007 - 1951380

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

STADIO JUST 22

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 14°, 30°

ELECTRICAL

1,2W / 350mA
1,7W / 500mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 22mm / H 35mm
H 0–250mm
Cutout ø 12mm

CERTIFICATIONS



Description

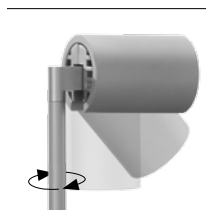
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinenboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); verfügbar in 2 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 bzw. 500 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); available in 2 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 or 500mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

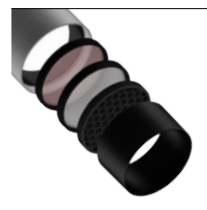
Features



Top screw or bottom counternut mounting



310° rotatable
90° tiltable



Optical accessories

STADIO JUST 22 FOCUS

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Adjustable beam angle 12°–40°

ELECTRICAL

1,2 W / 350 mA
1,7 W / 500 mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 22 mm / H 44 mm
H 0–250 mm
Cutout ø 12 mm

CERTIFICATIONS



Description

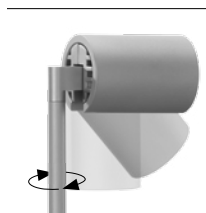
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinensboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); einstellbarer Ausstrahlwinkel 12°–40°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 bzw. 500 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); adjustable beam angle 12°–40°; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 or 500 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

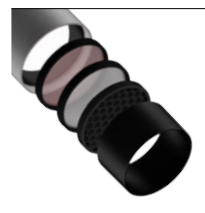
Features



Top screw or bottom counternut mounting



310° rotatable
90° tiltable



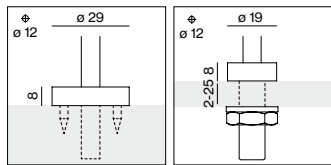
Optical accessories



Adjustable beam angle 12°–40°

Order options

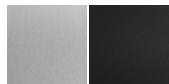
MOUNTING	
top screw	3
bottom counternut	4



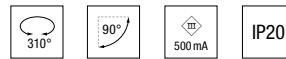
COLOUR TEMPERATURE	
3000K CRI 95 79lm*	5
3500K CRI 95 79lm*	7
4000K CRI 95 86lm*	6

*per fixture | CRI 95, R9>90 (typ.) | 500mA | 72°C

MATERIAL COLOUR	
anodised aluminium	6
anodised black	8



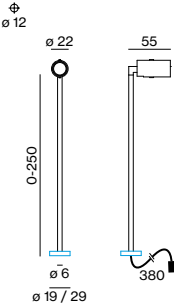
STADIO JUST 22 FOCUS



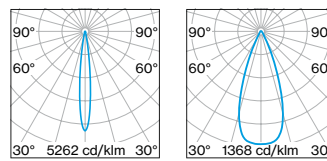
SYSTEM POWER / VOLTAGE	NO. OF LEADS	Ø (mm)	ORDER CODE
1,2 W / 1,7 W / 3 V	1	22	007 - 41 2 1

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,2m	
		1,2W / 350mA	1,7W / 500mA
12°	3000K	5180	6880
	3500K	5180	6880
	4000K	5630	7480
39°	3000K	1370	1820
	3500K	1370	1820
	4000K	1490	1980



surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



min. angle 12° max. angle 40°
LOR 41% LOR 60%

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-6	max. 10	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	4-17	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	4-17	max. 18	127-67-28	007 - 1951380

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-21 V non DIM	1-4	max. 10	68-34-21	007 - 1952160
30 W / 10-60 V non DIM	4-17	max. 18	127-67-28	007 - 1952460
30 W / 10-60 V DIM DALI	4-17	max. 18	127-67-28	007 - 1952480

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959110
splitter 500mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959210

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	20-4	007 - 1965138
elliptical sculpture foil	20-4	007 - 1965230
snoot	20-9	007 - 1965338
colour filter (red, blue, green, etc.)	20-4	on request

STADIO JUST 26

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 14°, 30°

ELECTRICAL

1,7 W / 500 mA
2,4 W / 700 mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 26 mm / H 40 mm
H 0–350 mm
Cutout ø 12 mm

CERTIFICATIONS



Description

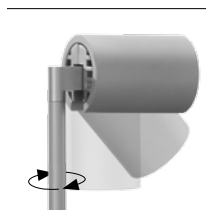
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinenboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); verfügbar in 2 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); available in 2 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 500 or 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

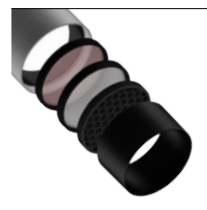
Features



Top screw or bottom counternut mounting



310° rotatable
90° tiltable

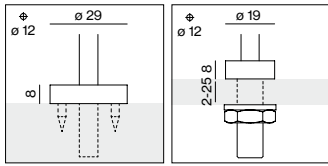


Optical accessories

Order options

MOUNTING

top screw	3
bottom counter nut	4



COLOUR TEMPERATURE

3000K CRI 95 150lm*	5
3500K CRI 95 150lm*	7
4000K CRI 95 160lm*	6

*per fixture | CRI 95, R9>90 (typ.) | 700mA | 69°C

MATERIAL COLOUR

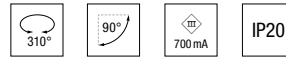
anodised aluminium	6
anodised black	8



BEAM ANGLE FWHM

spot 14°	S
flood 30°	F

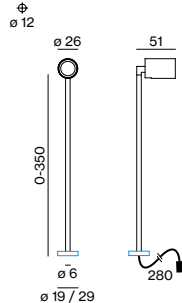
STADIO JUST 26



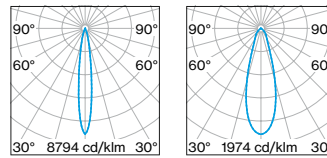
SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
1,7 W / 2,4 W / 3 V	1	26	0 0 7 - 4 1 2 3 1 1 4

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,3m	
		1,7W / 500mA	2,4W / 700mA
14°	3000K	6420	8380
	3500K	6420	8380
	4000K	6980	9120
30°	3000K	1650	2150
	3500K	1650	2150
	4000K	1790	2340



surface 300x300 mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



spot 14° LOR 84% flood 30° LOR 81%

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-14V non DIM	1-4	max.10	68-34-21	0 0 7 - 1 9 5 2 1 6 0
30 W / 10-60V non DIM	4-17	max.18	127-67-28	0 0 7 - 1 9 5 2 4 6 0
30 W / 10-60V DIM DALI	4-17	max.18	127-67-28	0 0 7 - 1 9 5 2 4 8 0

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-12V non DIM	1-3	max.18	64-34-21	0 0 7 - 1 9 5 3 1 6 0
20 W / 10-28V non DIM	4-8	max.10	184-40-25	0 0 7 - 1 9 5 3 3 6 0
30 W / 10-43V non DIM	4-12	max.11	127-67-28	0 0 7 - 1 9 5 3 4 6 0
66 W / 18-48V non DIM	2x7-2x13	max.2x18	148-77-33	0 0 7 - 1 9 5 4 4 6 0
20 W / 10-28V DIM DALI	4-8	max.10	184-40-25	0 0 7 - 1 9 5 3 3 8 0
30 W / 10-43V DIM DALI	4-12	max.11	127-67-28	0 0 7 - 1 9 5 3 4 8 0
66 W / 18-48V DIM DALI	2x7-2x13	max.2x18	148-77-33	0 0 7 - 1 9 5 4 4 8 0

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500 mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 2 1 0
splitter 700mA + cable 500 mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 3 1 0

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	0 0 7 - 1 9 6 1 2 6 0
extension cable	1x socket / 1x plug	2000	0 0 7 - 1 9 6 1 4 6 0
extension cable	1x socket / 1x plug	4000	0 0 7 - 1 9 6 1 6 6 0

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	0 0 7 - 1 9 6 5 1 4 8
elliptical sculpture foil	23-4	0 0 7 - 1 9 6 5 2 4 0
snoot	23-12	0 0 7 - 1 9 6 5 3 4 8
colour filter (red, blue, green, etc.)	23-4	on request

STADIO JUST 26 DUO

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 14°, 30°

ELECTRICAL

2x1,7W / 500mA
2x2,4W / 700mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 26 mm / H 40 mm
H 0–350 mm
Cutout ø 12 mm

CERTIFICATIONS



Description

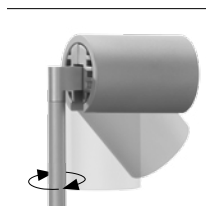
DE Solitärstrahler mit 2 Strahlerköpfen aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinenboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); verfügbar in 2 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp with 2 lamp heads made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); available in 2 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 500 or 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

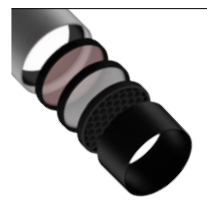
Features



Top screw or bottom counternut mounting



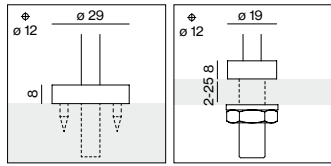
310° rotatable
90° tiltable



Optical accessories

Order options

MOUNTING	♀
top screw	3
bottom counter nut	4



COLOUR TEMPERATURE	••
3000K CRI 95 300lm*	5
3500K CRI 95 300lm*	7
4000K CRI 95 320lm*	6

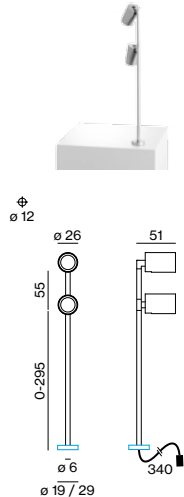
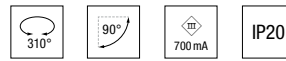
*per fixture | CRI 95, R9>90 (typ.) | 700mA | 69°C

MATERIAL COLOUR	☑
anodised aluminium	6
anodised black	8



BEAM ANGLE FWHM	▲
spot 14°	S
flood 30°	F

STADIO JUST 26 DUO

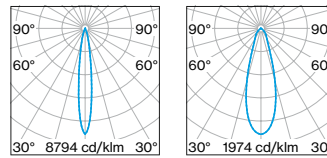


SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
2x1,7W / 2,4W / 6V	2	26	0 0 7 - 4 1 ♀ 4 : : 1 ▲

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,3m	
		1,7W / 500mA	2,4W / 700mA
14°	3000K	14200	18500
	3500K	14200	18500
	4000K	15400	20100
30°	3000K	3530	4610
	3500K	3530	4610
	4000K	3840	5020

surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



spot 14° LOR 84% flood 30° LOR 81%

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-14V non DIM	2	max.10	68-34-21	0 0 7 - 1 9 5 2 1 6 0
30 W / 10-60V non DIM	2-8	max.18	127-67-28	0 0 7 - 1 9 5 2 4 6 0
30 W / 10-60V DIM DALI	2-8	max.18	127-67-28	0 0 7 - 1 9 5 2 4 8 0

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-12V non DIM	1	max.18	64-34-21	0 0 7 - 1 9 5 3 1 6 0
20 W / 10-28V non DIM	2-4	max.10	184-40-25	0 0 7 - 1 9 5 3 3 6 0
30 W / 10-43V non DIM	2-6	max.18	127-67-28	0 0 7 - 1 9 5 3 4 6 0
40 W / 20-57V non DIM	4-8	max.18	225-47-28	0 0 7 - 1 9 5 3 5 6 0
66 W / 18-48V non DIM	2x4-2x6	max.2x18	148-77-33	0 0 7 - 1 9 5 4 4 6 0
20 W / 10-28V DIM DALI	2-4	max.10	184-40-25	0 0 7 - 1 9 5 3 3 8 0
30 W / 10-43V DIM DALI	2-6	max.18	127-67-28	0 0 7 - 1 9 5 3 4 8 0
40 W / 20-57V DIM DALI	4-8	max.18	225-47-28	0 0 7 - 1 9 5 3 5 8 0
66 W / 18-48V DIM DALI	2x4-2x6	max.2x18	148-77-33	0 0 7 - 1 9 5 4 4 8 0

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 2 1 0
splitter 700mA + cable 500mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 3 1 0

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	0 0 7 - 1 9 6 1 2 6 0
extension cable	1x socket / 1x plug	2000	0 0 7 - 1 9 6 1 4 6 0
extension cable	1x socket / 1x plug	4000	0 0 7 - 1 9 6 1 6 6 0

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	0 0 7 - 1 9 6 5 1 4 8
elliptical sculpture foil	23-4	0 0 7 - 1 9 6 5 2 4 0
snoot	23-12	0 0 7 - 1 9 6 5 3 4 8
colour filter (red, blue, green, etc.)	23-4	on request

STADIO JUST 26 POWER

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Triple lens
Beam angle 20°, 46°

ELECTRICAL

3,4 W / 350 mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 26 mm / H 40 mm
H 0–350 mm
Cutout ø 12 mm

CERTIFICATIONS



Description

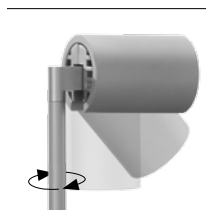
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinensboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); verfügbar in 2 verschiedenen Ausstrahlwinkeln; 3 LEDs und 3-fach Linse für maximalen Lichtstrom; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); available in 2 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

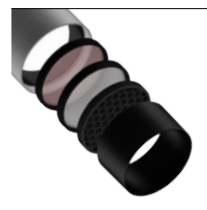
Features



Top screw or bottom counternut mounting



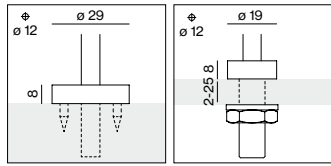
310° rotatable
90° tiltable



Optical accessories

Order options

MOUNTING		♀
top screw		3
bottom counter nut		4



COLOUR TEMPERATURE		••
3000K	CRI 95 210lm*	5
3500K	CRI 95 210lm*	7
4000K	CRI 95 230lm*	6

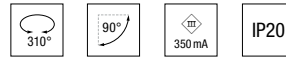
*per fixture | CRI 95, R9>90 (typ.) | 350mA | 60°C

MATERIAL COLOUR		■
anodised aluminium		6
anodised black		8



BEAM ANGLE FWHM		▲
spot 20°		S
flood 46°		F

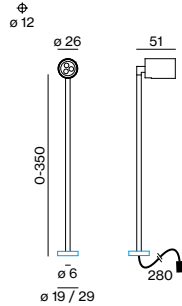
STADIO JUST 26 POWER



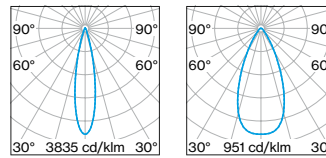
SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
3,4 W / 9V	1x3	26	007 - 41 5 1 1 1 ▲

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,3m 3,4W / 350mA
20°	3000K	6380
	3500K	6380
	4000K	6940
46°	3000K	1780
	3500K	1780
	4000K	1940



surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



spot 20° LOR 73% flood 46° LOR 66%

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-2	max. 12	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	2-5	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	2-5	max. 18	127-67-28	007 - 1951380

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	007 - 1965148
elliptical sculpture foil	23-4	007 - 1965240
snoot	23-12	007 - 1965348
colour filter (red, blue, green, etc.)	23-4	on request

STADIO JUST 26 FOCUS

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Adjustable beam angle 17°–43°

ELECTRICAL

1,7 W / 500 mA
2,4 W / 700 mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 26 mm / H 48 mm
H 0–350 mm
Cutout ø 12 mm

CERTIFICATIONS



Description

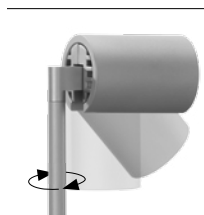
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinenboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); einstellbarer Ausstrahlwinkel 17°–43°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); adjustable beam angle 17°–43°; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 500 or 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

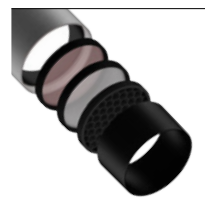
Features



Top screw or bottom counter nut mounting



310° rotatable
90° tiltable



Optical accessories

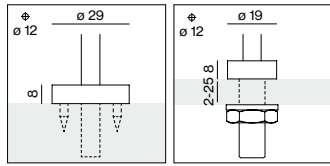


Adjustable beam angle 17°–43°

Order options

MOUNTING

top screw	3
bottom counter nut	4



COLOUR TEMPERATURE

3000K	CRI 95	98lm*	5
3500K	CRI 95	98lm*	7
4000K	CRI 95	110lm*	6

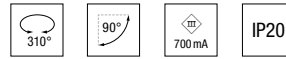
*per fixture | CRI 95, R9>90 (typ.) | 700mA | 69°C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8



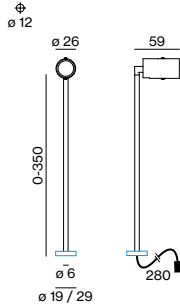
STADIO JUST 26 FOCUS



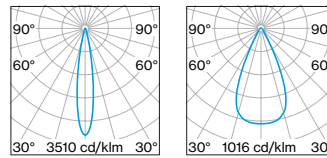
SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
1,7 W / 2,4 W / 3 V	1	26	007 - 41 06 1 1

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,3m	
		1,7W / 500mA	2,4W / 700mA
17°	3000K	2340	3060
	3500K	2340	3060
	4000K	2540	3330
43°	3000K	890	1160
	3500K	890	1160
	4000K	970	1260



surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



min. angle 17° LOR 45%
max. angle 43° LOR 56%

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-14V non DIM	1-4	max.10	68-34-21	007 - 1952160
30 W / 10-60V non DIM	4-17	max.18	127-67-28	007 - 1952460
30 W / 10-60V DIM DALI	4-17	max.18	127-67-28	007 - 1952480

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-12V non DIM	1-3	max.18	64-34-21	007 - 1953160
20 W / 10-28V non DIM	4-8	max.10	184-40-25	007 - 1953360
30 W / 10-43V non DIM	4-12	max.11	127-67-28	007 - 1953460
66 W / 18-48V non DIM	2x7-2x13	max.2x18	148-77-33	007 - 1954460
20 W / 10-28V DIM DALI	4-8	max.10	184-40-25	007 - 1953380
30 W / 10-43V DIM DALI	4-12	max.11	127-67-28	007 - 1953480
66 W / 18-48V DIM DALI	2x7-2x13	max.2x18	148-77-33	007 - 1954480

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959210
splitter 700mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959310

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	007 - 1965158
elliptical sculpture foil	23-4	007 - 1965250
snoot	23-12	007 - 1965358
colour filter (red, blue, green, etc.)	23-4	on request

STADIO JUST 32

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 90

ESTIMATED LED LIFETIME

L90 / 50.000h / 500mA
L80 / 50.000h / 700mA

OPTICAL

Beam angle 19°, 27°, 42°

ELECTRICAL

5,2W / 500mA
7,5W / 700mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 32mm / H 67mm
H 0-450mm
Cutout ø 12mm

CERTIFICATIONS



Description

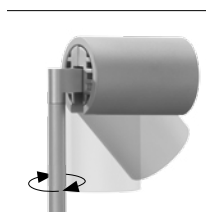
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinensboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); verfügbar in 3 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80/90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); available in 3 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 80/90% luminous flux after 50,000 operating hours; colour rendering CRI 90; 500 or 700mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

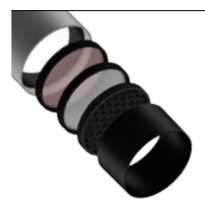
Features



Top screw or bottom counternut mounting



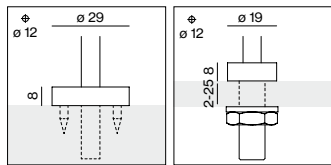
310° rotatable
90° tiltable



Optical accessories

Order options

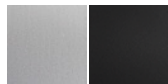
MOUNTING	♀
top screw	3
bottom counter nut	4



COLOUR TEMPERATURE	☹
3000K CRI 90 530lm*	5
3500K CRI 90 530lm*	7
4000K CRI 90 570lm*	6

*per fixture | CRI 90 | 700 mA | 72°C

MATERIAL COLOUR	☑
anodised aluminium	6
anodised black	8

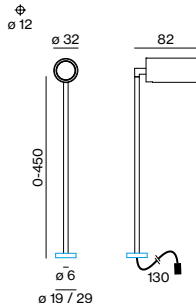


BEAM ANGLE FWHM	▲
spot 19°	S
medium 27°	M
flood 42°	F

STADIO JUST 32



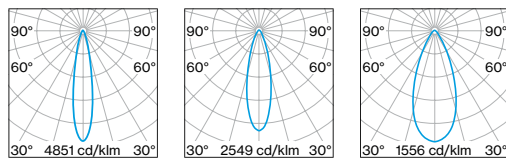
SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
5,2W / 7,5W / 11V	1	32	007 - 41 07 1 1 1



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,4m	
		5,2W / 500mA	7,5W / 700mA
19°	3000K	8980	11300
	3500K	8980	11300
	4000K	9650	12100
27°	3000K	4910	6220
	3500K	4910	6220
	4000K	5280	6690
42°	3000K	3250	4120
	3500K	3250	4120
	4000K	3490	4430

surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



spot 19° LOR 85 %	medium 27° LOR 84 %	flood 42° LOR 91 %
----------------------	------------------------	-----------------------

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8W / 2,5-14V non DIM	1	max.18	64-34-21	007 - 1952160
30W / 10-60V non DIM	2-5	max.18	127-67-28	007 - 1952460
30W / 10-60V DIM DALI	2-5	max.18	127-67-28	007 - 1952480

LED CONVERTER 700 mA INCL. POWER CABLE 2 m + CONNECTION CABLE WITH PLUG 1 m, SUPPLY 220-240 V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
10W / 7-14V non DIM	1	max.18	95-53-25	007 - 1953260
20W / 10-28V non DIM	2	max.18	184-40-25	007 - 1953360
30W / 10-43V non DIM	2-3	max.18	127-67-28	007 - 1953460
40W / 20-57V non DIM	3-4	max.18	225-47-28	007 - 1953560
66W / 18-48V non DIM	2x2-2x4	max.2x15	148-77-33	007 - 1954460
20W / 10-28V DIM DALI	2	max.18	184-40-25	007 - 1953380
30W / 10-43V DIM DALI	2-3	max.18	127-67-28	007 - 1953480
40W / 20-57V DIM DALI	3-4	max.18	225-47-28	007 - 1953580
66W / 18-48V DIM DALI	2x2-2x4	max.2x15	148-77-33	007 - 1954480

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500 mm	1x socket / 9x plug	85-50-10	007 - 1959210
splitter 700mA + cable 500 mm	1x socket / 9x plug	85-50-10	007 - 1959310

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	30-4	007 - 1965168
elliptical sculpture foil	30-4	007 - 1965260
snoot	30-15	007 - 1965368
colour filter (red, blue, green, etc.)	30-4	on request

STADIO JUST 32 FOCUS

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 90

ESTIMATED LED LIFETIME

L90 / 50.000h / 500mA
L80 / 50.000h / 700mA

OPTICAL

Adjustable beam angle 17°–43°

ELECTRICAL

5,2W / 500mA
7,5W / 700mA

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable, 90° tiltable
ø 32mm / H 73mm
H 0–450mm
Cutout ø 12mm

CERTIFICATIONS



Description

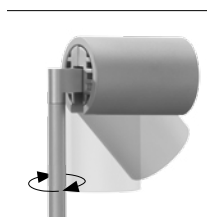
DE Solitärstrahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 310° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; Montage am Vitrinenboden mit Kontermutter (von unten fixiert) oder von oben (durch nicht sichtbare Schrauben); einstellbarer Ausstrahlwinkel 17°–43°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80/90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Solitary lamp made of aluminium; surface black or natural anodised; spot 310° rotatable and 90° tiltable; plug and play electrical connector system; can be adjusted to any height; installation on display base with counternut (fastened from below) or above (non-visible screws); adjustable beam angle 17°–43°; passively cooled high-power LED system; available in 3 light colours; min. 80/90% luminous flux after 50,000 operating hours; colour rendering CRI 90; 500 or 700mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

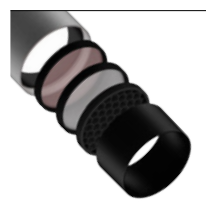
Features



Top screw or bottom counternut mounting



310° rotatable
90° tiltable



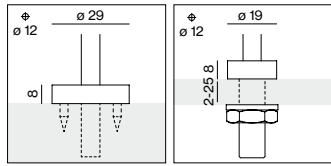
Optical accessories



Adjustable beam angle 17°–43°

Order options

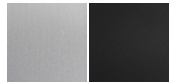
MOUNTING	
top screw	3
bottom counternut	4



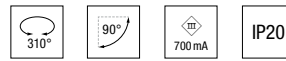
COLOUR TEMPERATURE	
3000K CRI 90 390lm*	5
3500K CRI 90 390lm*	7
4000K CRI 90 420lm*	6

*per fixture | CRI 90 | 700 mA | 72°C

MATERIAL COLOUR	
anodised aluminium	6
anodised black	8



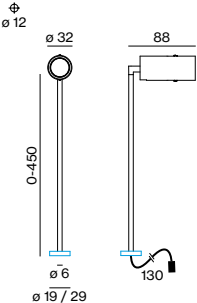
STADIO JUST 32 FOCUS



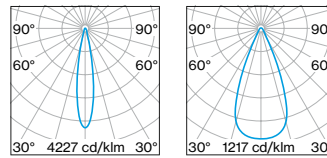
SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
5,2 W / 7,5 W / 11 V	1	32	007 - 41 2 8 :: 1

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,4m	
		5,2W / 500mA	7,5W / 700mA
17°	3000K	7810	9820
	3500K	7810	9820
	4000K	8390	10600
43°	3000K	2560	3240
	3500K	2560	3240
	4000K	2750	3480



surface 300x300mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



min. angle 17° max. angle 43°
LOR 55% LOR 68%

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-14V non DIM	1	max.18	64-34-21	007 - 1952160
30 W / 10-60V non DIM	2-5	max.18	127-67-28	007 - 1952460
30 W / 10-60V DIM DALI	2-5	max.18	127-67-28	007 - 1952480

LED CONVERTER 700 mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240 V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
10 W / 7-14 V non DIM	1	max.18	95-53-25	007 - 1953260
20 W / 10-28 V non DIM	2	max.18	184-40-25	007 - 1953360
30 W / 10-43 V non DIM	2-3	max.18	127-67-28	007 - 1953460
40 W / 20-57 V non DIM	3-4	max.18	225-47-28	007 - 1953560
66 W / 18-48 V non DIM	2x2-2x4	max.2x15	148-77-33	007 - 1954460
20 W / 10-28 V DIM DALI	2	max.18	184-40-25	007 - 1953380
30 W / 10-43 V DIM DALI	2-3	max.18	127-67-28	007 - 1953480
40 W / 20-57 V DIM DALI	3-4	max.18	225-47-28	007 - 1953580
66 W / 18-48 V DIM DALI	2x2-2x4	max.2x15	148-77-33	007 - 1954480

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959210
splitter 700mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959310

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	30-4	007 - 1965178
elliptical sculpture foil	30-4	007 - 1965270
snoot	30-15	007 - 1965378
colour filter (red, blue, green, etc.)	30-4	on request

Inspiration

XAL Showroom
Graz

SOLUTION
STADIO JUST 16
3500K
flood 40°





PICO

PICO
PICO TILT
INSPIRATIONS

page 74
page 76
page 78



PICO POWER / LINE

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h (POWER)
L80 / 50.000h (LINE)

OPTICAL

Beam angle 30° (POWER)
Beam angle 113° (LINE)

ELECTRICAL

3,4 W / 350 mA (POWER)
1,1 W / 350 mA (LINE)

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable
ø 7 mm
L 80–200/300 mm
Cutout ø 12 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Sehr schlanker Solitärstrahler (ø 7 mm) aus Aluminium; 310° drehbar; Oberfläche schwarz oder natureloxiert; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; POWER: für brillante Beleuchtung, Ausstrahlwinkel 30°; LINE: für homogene Beleuchtung, mit satiniertes PMMA Abdeckung, Ausstrahlwinkel 113°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80/90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Ultra slim solitary lamp (ø 7 mm) made of aluminium; 310° rotatable; surface black or natural anodised; plug and play electrical connector system; can be adjusted to any height; POWER: for brilliant illumination, beam angle 30°; LINE: for uniform illumination, with satined PMMA cover, beam angle 113°; passively cooled high-power LED system; available in 3 light colours; min. 80/90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



Top screw or bottom counternut mounting



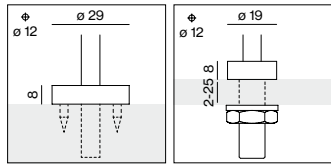
PICO POWER



PICO LINE

Order options

MOUNTING		
top screw		3
bottom counter nut		4



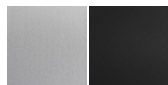
PICO POWER		
COLOUR TEMPERATURE		
3000K CRI 95 210lm*		5
3500K CRI 95 210lm*		7
4000K CRI 95 230lm*		6

* per fixture | CRI 95, R9>90 (typ.) | 350mA | 85°C

PICO LINE		
COLOUR TEMPERATURE		
3000K CRI 95 85lm*		5
3500K CRI 95 85lm*		7
4000K CRI 95 95lm*		6

* per fixture | CRI 95, R9>90 (typ.) | 350mA | 51°C

MATERIAL COLOUR		
anodised aluminium		6
anodised black		8



PICO POWER

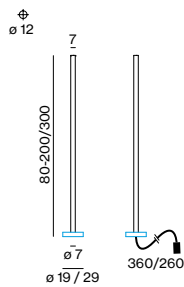


SYSTEM POWER / VOLTAGE	NO. OF LEDS	H (mm)	ORDER CODE
3,4 W / 9V	3	200	007 - 42 0 1 :: 1
3,4 W / 9V	3	300	007 - 42 0 2 :: 1

PICO LINE



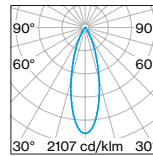
SYSTEM POWER / VOLT	NO. OF LEDS	H (mm)	ORDER CODE
1,1 W / 3V	18	200	007 - 42 0 6 :: 1
1,1 W / 3V	18	300	007 - 42 0 7 :: 1



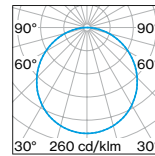
ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m H 200mm	0,3m H 300mm
30°	3000K	14200	14200
POWER	3500K	14200	14200
	4000K	15400	15400
113°	3000K	14200	1010
	3500K	14200	1010
LINE	4000K	15400	1120

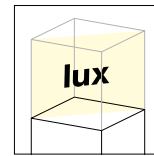
surface 300x300 mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



POWER 30°
LOR 74%



LINE 113°
LOR 76%



measurement surface

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-2* / 1-6**	max. 12	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	2-5* / 4-17**	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	2-5* / 4-17**	max. 18	127-67-28	007 - 1951380

* PICO POWER | **PICO LINE

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500 mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 117 for wiring examples

PICO TILT POWER / LINE

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h (POWER)
L80 / 50.000h (LINE)

OPTICAL

Beam angle 30° (POWER)
Beam angle 113° (LINE)

ELECTRICAL

3,4 W / 350 mA (POWER)
1,1 W / 350 mA (LINE)

PHYSICAL

Anodised aluminium
Silver, black
310° rotatable
ø 7 mm
L 80–200/300 mm
Cutout ø 12 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Sehr schlanker Solitärstrahler (ø 7 mm) aus Aluminium; 310° drehbar; 50° zur Vertikalen geneigt; Oberfläche schwarz oder natureloxiert; durchkontaktiertes elektrisches Stecksystem; stufenlos höhenverstellbar; POWER: für brillante Beleuchtung, Ausstrahlwinkel 30°; LINE: für homogene Beleuchtung, mit satiniertem PMMA Abdeckung, Ausstrahlwinkel 113°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80/90 % Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Ultra slim solitary lamp (ø 7 mm) made of aluminium; 310° rotatable; 50° vertically tilted; surface black or natural anodised; plug and play electrical connector system; can be adjusted to any height; POWER: for brilliant illumination, beam angle 30°; LINE: for uniform illumination, with satined PMMA cover, beam angle 113°; passively cooled high-power LED system; available in 3 light colours; min. 80/90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 mA converter plug and play; converter separately available; optionally dimmable via DALI signal

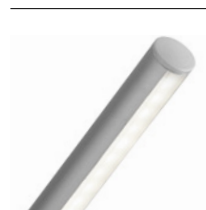
Features



Top screw or bottom counternut mounting



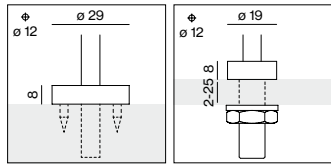
PICO TILT POWER



PICO TILT LINE

Order options

MOUNTING	
top screw	5
bottom counter nut	6



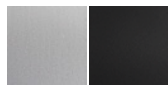
PICO TILT POWER	
COLOUR TEMPERATURE	
3000K CRI 95 210lm*	5
3500K CRI 95 210lm*	7
4000K CRI 95 230lm*	6

* per fixture | CRI 95, R9>90 (typ.) | 350mA | 85°C

PICO TILT LINE	
COLOUR TEMPERATURE	
3000K CRI 95 85lm*	5
3500K CRI 95 85lm*	7
4000K CRI 95 95lm*	6

* per fixture | CRI 95, R9>90 (typ.) | 350mA | 51°C

MATERIAL COLOUR	
anodised aluminium	6
anodised black	8



PICO TILT POWER

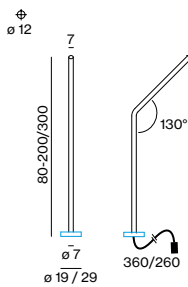


SYSTEM POWER / VOLTAGE	NO. OF LEDS	H (mm)	ORDER CODE
3,4 W / 9V	3	200	007 - 42 0 1 :: 1
3,4 W / 9V	3	300	007 - 42 0 2 :: 1

PICO TILT LINE



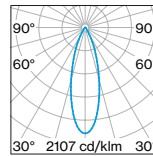
SYSTEM POWER / VOLT	NO. OF LEDS	H (mm)	ORDER CODE
1,1 W / 3V	18	200	007 - 42 0 6 :: 1
1,1 W / 3V	18	300	007 - 42 0 7 :: 1



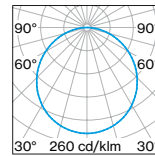
ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,2m H 200mm	0,3m H 300mm
30°	3000K	7080	3450
POWER	3500K	7080	3450
	4000K	7700	3750
113°	3000K	680	370
LINE	3500K	680	370
	4000K	760	410

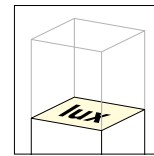
surface 300x300 mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1 luminaire



POWER 30°
LOR 74%



LINE 113°
LOR 76%



measurement surface

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-2* / 1-6**	max. 12	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	2-5* / 4-17**	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	2-5* / 4-17**	max. 18	127-67-28	007 - 1951380

* PICO TILT POWER | **PICO TILT LINE

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500 mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 117 for wiring examples

Inspiration

Jewellery Store Herzog & Loibner
Vaduz

ARCHITECT
id connect
Liechtenstein

SOLUTION
PICO TILT POWER
3000K
beam angle 30°



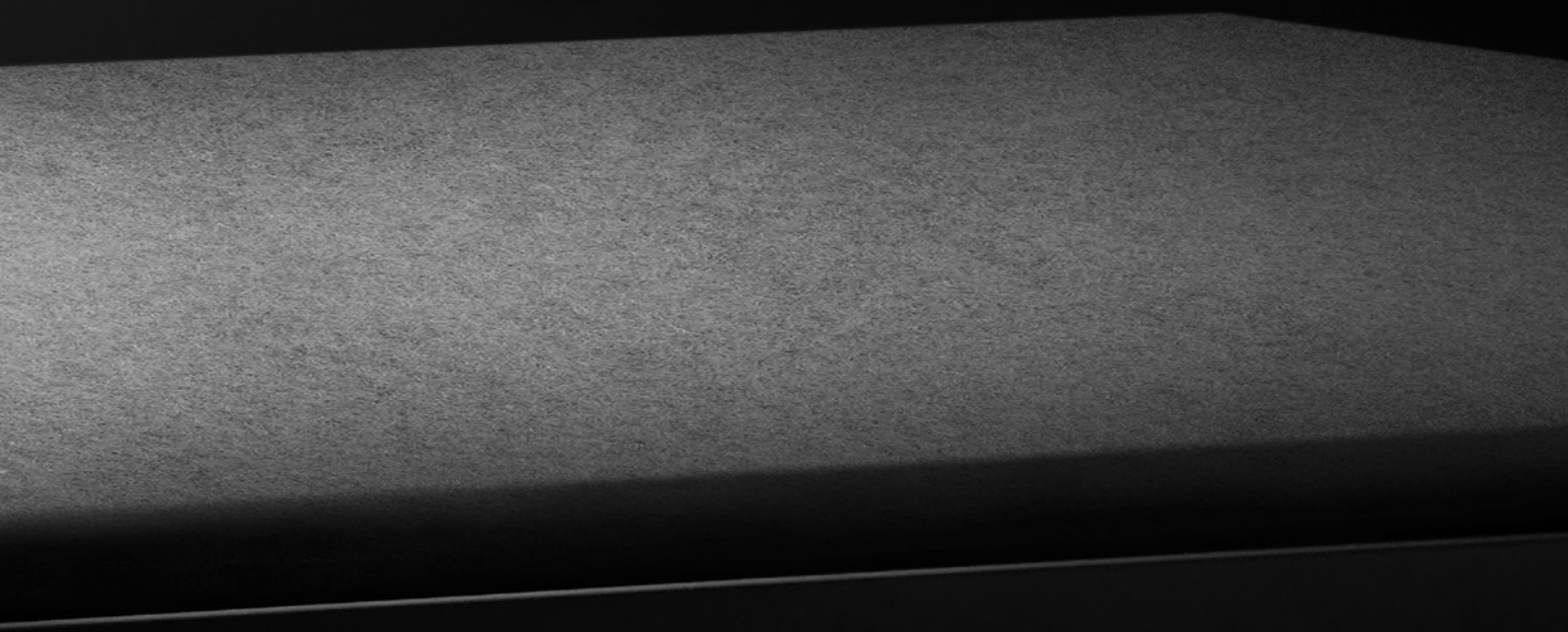


PICO SUPPORT

PICO SUPPORT ROUND
PICO SUPPORT SQUARE
INSPIRATIONS

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PICO SUPPORT ROUND

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 132°

ELECTRICAL

350mA (LEDs serial)

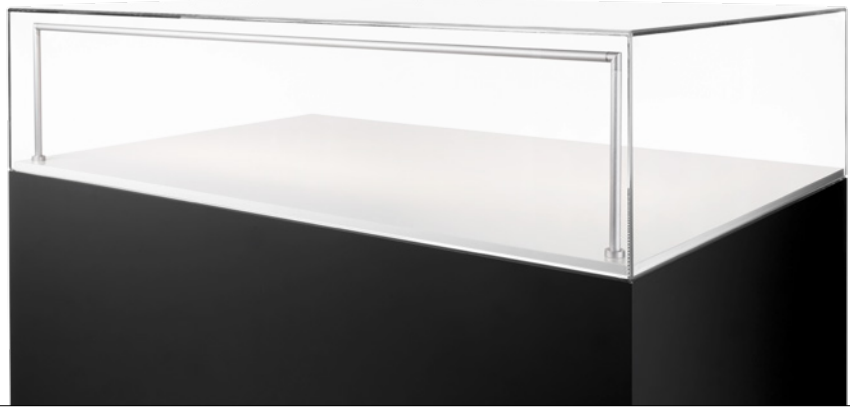
PHYSICAL

Anodised aluminium
Silver, black
+/- 10° tiltable
ø 10mm
H 180mm
L 290/580/880/1180mm
Cutout ø 2x13,5mm

CERTIFICATIONS



UL and CSA certified products only available in the U.S.A.



Description

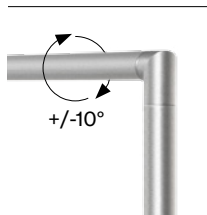
DE Runde, schlanke Bügelleuchte aus Aluminium; +/- 10° drehbar; Oberfläche schwarz oder natureloxiert; durchkontaktiertes elektrisches Stecksystem für werkzeuglose Montage; Ausstrahlwinkel 132°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Round, slim rectangular lamp made of aluminium; +/- 10° tiltable; surface black or natural anodised; plug and play electrical connector system for toolless mounting; beam angle 132°; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



10mm thickness



+/- 10° tiltable

Order options

COLOUR TEMPERATURE 

3000K	CRI 95	70lm*	5
3500K	CRI 95	76lm*	7
4000K	CRI 95	82lm*	6

*per LED | CRI 95, R9>90 (typ.) | 350mA | 53°C





MATERIAL COLOUR 

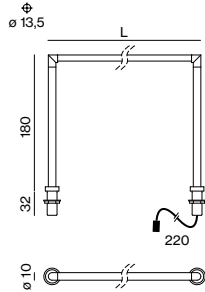
anodised aluminium	6
anodised black	8



PICO SUPPORT ROUND



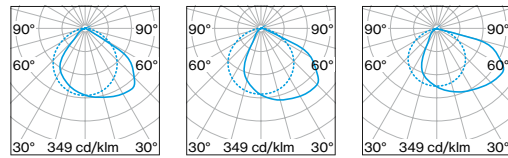
SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
3x1,1 W / 10V	3	290	007 - 4201::1 
6x1,1 W / 19V	6	580	007 - 4202::1 
9x1,1 W / 29V	9	880	007 - 4203::1 
12x1,1 W / 38V	12	1180	007 - 4204::1 



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,2m 9x1,1W
132°	3000K	2320
	3500K	2520
	4000K	2720

surface 600x900mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1x880mm



beam angle 132° tilt angle -10° LOR 77%
 beam angle 132° tilt angle 0° LOR 77%
 beam angle 132° tilt angle +10° LOR 77%

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	LEDS	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	3-6	max. 12	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	6-15	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	6-15	max. 18	127-67-28	007 - 1951380

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500 mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 119 for wiring examples

PICO SUPPORT SQUARE

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Beam angle 132°

ELECTRICAL

350mA (LEDs serial)

PHYSICAL

Anodised aluminium
Silver, black
+/- 10° tiltable
□ 8mm
H 180mm
L 290/580/880/1180mm
Cutout ø 2x13,5mm

CERTIFICATIONS



UL and CSA certified products only available in the U.S.A.



Description

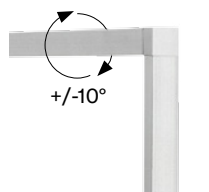
DE Quadratische, schlanke Bügelleuchte aus Aluminium; +/- 10° drehbar; Oberfläche schwarz oder natureloxiert; durchkontaktiertes elektrisches Stecksystem für werkzeu-lose Montage; Ausstrahlwinkel 132°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Square, slim rectangular lamp made of aluminium; +/- 10° tiltable; surface black or natural anodised; plug and play electrical connector system for toolless mounting; beam angle 132°; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



8mm thinness



+/- 10° tiltable

Order options

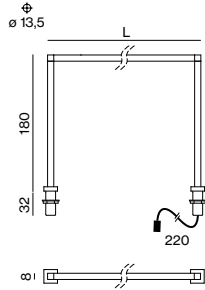
COLOUR TEMPERATURE ☐☐

3000K	CRI 95	70lm*	5
3500K	CRI 95	76lm*	7
4000K	CRI 95	82lm*	6

*per LED | CRI 95, R9>90 (typ.) | 350mA | 53°C

MATERIAL COLOUR ☐

anodised aluminium	6
anodised black	8



PICO SUPPORT SQUARE

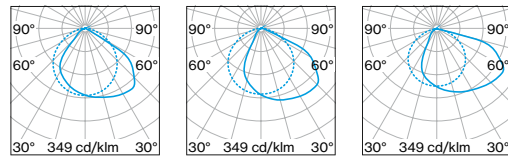


SYSTEM POWER / VOLTAGE	NO. OF LEDS	L (mm)	ORDER CODE
3x1,1W / 10V	3	290	007 - 42111☐☐1☐
6x1,1W / 19V	6	580	007 - 4212☐☐1☐
9x1,1W / 29V	9	880	007 - 4213☐☐1☐
12x1,1W / 38V	12	1180	007 - 4214☐☐1☐

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 0,2m 9x1,1W
132°	3000K	2320
	3500K	2520
	4000K	2720

surface 600x900mm | reflection factor 0,57/0,57/0,7 | maintenance factor 0,8 | 1x880mm



beam angle 132° tilt angle -10° LOR 77%
 beam angle 132° tilt angle 0° LOR 77%
 beam angle 132° tilt angle +10° LOR 77%

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	LEDS	CABLE (m)	L-W-H (mm)	ORDER CODE
7W / 2-21V non DIM	3-6	max. 12	68-35-21	007 - 1951160
21W / 10-60V non DIM	6-15	max. 18	127-67-28	007 - 1951360
21W / 10-60V DIM DALI	6-15	max. 18	127-67-28	007 - 1951380

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 119 for wiring examples

Inspiration

Museum Basel
Basel

EXHIBITION DESIGN

atelier gillmann + co gmbh
Basel

LIGHTING DESIGN

atelier deLuxe
Offenbach

SOLUTION

PICO SUPPORT
3000 K
beam angle 132°





Inspiration

G-Shock Jewellery Store
Paris

ARCHITECT

SEA Stirnberg-Estève Architectes
Paris

SOLUTION

PICO SUPPORT
3000 K
beam angle 132°





Inspiration

Stationery Store
Zurich

SOLUTION
PICO SUPPORT
3000K
beam angle 132°





MICRO

MICRO
MICRO OFFSET
MICRO FLEX
INSPIRATIONS

page 94
page 96
page 98
page 100





MICRO

Quickinfo

GENERAL

Passive cooling

Indoor

LED

High-power LED

3000K, 3500K, 4000K

CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Triple lens

Beam angle 20°, 46°

ELECTRICAL

3,4W / 350mA

PHYSICAL

Aluminium powder-coated

White, black

Spot ø 50mm

Cutout ø 45mm

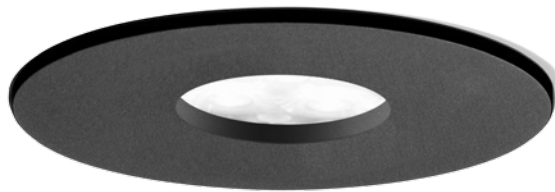
Mounting depth 30mm

Ceiling thickness 10mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

DE Starrer Einbaustrahler aus Aluminium; Oberfläche in schwarzem oder weißem Strukturlack; durchkontaktiertes elektrisches Stecksystem für werkzeuglose Montage; nur 30mm Einbautiefe; geeignet als Möbel-einbauelement; verfügbar in 2 verschiedenen Ausstrahlwinkeln; 3 LEDs und 3-fach Linse für maximalen Lichtstrom; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Fixed recessed spot made of aluminium; surface powder coated in either black or white; plug and play electrical connector system for toolless mounting; only 30mm mounting depth; suitable as furniture built-in element; available in 2 beam angles; 3 LED and triple lens for maximum luminous flux; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Order options

COLOUR TEMPERATURE

3000K	CRI 95	210lm*	5
3500K	CRI 95	210lm*	7
4000K	CRI 95	230lm*	6

*per fixture | CRI 95, R9>90 (typ.) | 350mA | 74°C

MATERIAL COLOUR

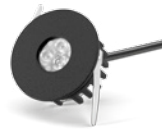
white	7
black	8



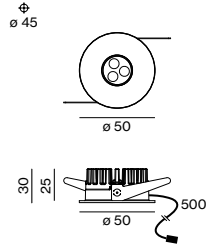
BEAM ANGLE FWHM

spot 20°	S
flood 46°	F

MICRO



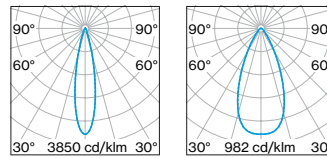
SYSTEM POWER / VOLTAGE	NO. OF LEDES	Ø (mm)	ORDER CODE
3,4 W / 9V	3	50	007 - 4150::1



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,5m	0,75m
20°	3000K	2680	1430
	3500K	2680	1430
	4000K	2910	1560
46°	3000K	940	440
	3500K	940	440
	4000K	1020	480

surface 500x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | 1 luminaire



spot 20° LOR 73% flood 46° LOR 68%

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-2	max. 12	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	2-5	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	2-5	max. 18	127-67-28	007 - 1951380

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 117 for wiring examples

MICRO OFFSET

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Triple lens
Beam angle 20°, 40°

ELECTRICAL

3,4W / 350mA

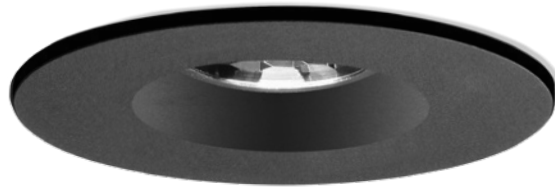
PHYSICAL

Aluminium powder-coated
White, black
Spot ø 50 mm
Cutout ø 45 mm
Mounting depth 35 mm
Ceiling thickness 10 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.

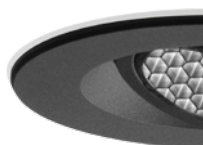


Description

DE Starrer Einbaustrahler aus Aluminium; Oberfläche in schwarzem oder weißem Strukturlack; nur 35 mm Einbautiefe; geeignet als Möbeleinbauelement; Entblendung durch zurückversetzte Linse inkl. Wabenraster; durchkontaktiertes elektrisches Stecksystem für werkzeuglose Montage; verfügbar in 2 verschiedenen Ausstrahlwinkeln; 3 LEDs und 3-fach Linse für maximalen Lichtstrom; passiv gekühltes High-Power-LED System; erhältlich in 2 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal

EN Fixed recessed spot made of aluminium; surface powder coated in either black or white; only 35 mm mounting depth; suitable as furniture built-in element; glare reduction thanks to recessed lens and honeycomb louver; plug and play electrical connector system for toolless mounting; available in 2 beam angles; 3 LED and triple lens for maximum luminous flux; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 mA converter plug and play; converter separately available; optionally dimmable via DALI signal

Features



Honeycomb louver included

Order options

COLOUR TEMPERATURE

3000K	CRI 95	140lm*	5
3500K	CRI 95	140lm*	7
4000K	CRI 95	150lm*	6

*per fixture | CRI 95, R9>90 (typ.) | 350mA | 74°C

MATERIAL COLOUR

white	7
black	8



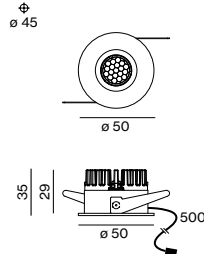
BEAM ANGLE FWHM

spot 20°	S
flood 40°	F

MICRO OFFSET



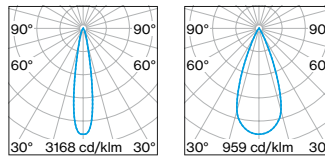
SYSTEM POWER / VOLTAGE	NO. OF LEADS	Ø (mm)	ORDER CODE
3,4 W / 9 V	3	50	007 - 415111



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,5m	0,75m
20°	3000K	2120	1210
	3500K	2120	1210
	4000K	2310	1320
40°	3000K	890	410
	3500K	890	410
	4000K	960	450

surface 500x350mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | 1 luminaire



spot 20° LOR 47 % flood 40° LOR 42 %

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-2	max. 12	68-35-21	007 - 1951160
21 W / 10-60 V non DIM	2-5	max. 18	127-67-28	007 - 1951360
21 W / 10-60 V DIM DALI	2-5	max. 18	127-67-28	007 - 1951380

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959110

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 117 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
elliptical sculpture foil	23-4	007 - 1965230
snoot	23-4	007 - 1965338

MICRO FLEX

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 95, R9 > 90 (typical)

ESTIMATED LED LIFETIME

L90 / 50.000h

OPTICAL

Triple lens
Beam angle 20°, 46°

ELECTRICAL

3,4W / 350mA

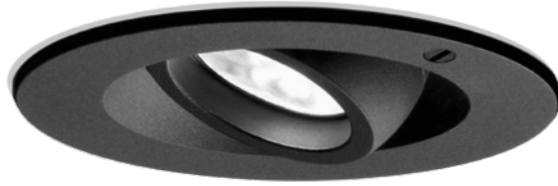
PHYSICAL

Aluminium powder-coated
White, black
360° rotatable, +/- 20° tiltable
Spot ø 56 mm
Cutout ø 50 mm
Mounting depth 30 mm
Ceiling thickness 10 mm

CERTIFICATIONS



UL certified products only available in the U.S.A.



Description

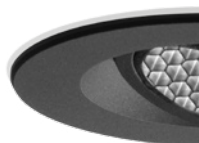
DE Einbaustrahler aus Aluminium; Oberfläche in schwarzem oder weißem Strukturlack; 360° drehbar und +/- 20° schwenkbar (mit Wurmschraube fixierbar); durchkontaktiertes elektrisches Stecksystem für werkzeuglose Montage; nur 30 mm Einbautiefe; geeignet als Möbeleinbauelement; verfügbar in 2 verschiedenen Ausstrahlwinkeln; 3 LEDs und 3-fach Linse für maximalen Lichtstrom; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 95, R9 > 90; 350 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; Wabenraster als Zubehör erhältlich

EN Recessed spotlight made of aluminium; surface powder coated in either black or white; 360° rotatable and +/- 20° tiltable (fixable by fine adjustment screw); plug and play electrical connector system for toolless mounting; only 30 mm mounting depth; suitable as furniture built-in element; available in 2 beam angles; 3 LED and triple lens for maximum luminous flux; passively cooled high-power LED system; available in 3 light colours; min. 90% luminous flux after 50,000 operating hours; colour rendering CRI 95, R9 > 90; 350 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; honeycomb louver available as accessory

Features



+/- 20° tiltable
360° rotatable



Honeycomb louver
optional

Order options

COLOUR TEMPERATURE ◆◆

3000K	CRI 95	210lm*	5
3500K	CRI 95	210lm*	7
4000K	CRI 95	230lm*	6

*per fixture | CRI 95, R9>90 (typ.) | 350mA | 74°C

MATERIAL COLOUR ▣

white	7
black	8



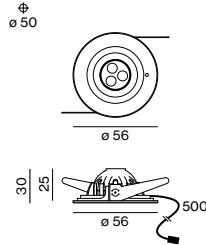
BEAM ANGLE FWHM ▲

spot 20°	S
flood 46°	F

MICRO FLEX



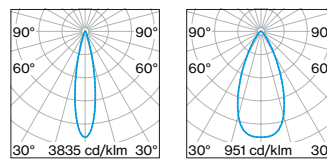
SYSTEM POWER / VOLTAGE	NO. OF LEDES	Ø (mm)	ORDER CODE
3,4 W / 9 V	3	56	0 0 7 - 4 1 5 2 : : 1 ▣ ▲



ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE	
		0,5m	0,75m
20°	3000K	2670	1430
	3500K	2670	1430
	4000K	2900	1560
46°	3000K	910	430
	3500K	910	430
	4000K	990	470

surface 500x350 mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | 1 luminaire



spot 20° LOR 73 % flood 46° LOR 66 %

Electrical accessories

LED CONVERTER 350mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
7 W / 2-21 V non DIM	1-2	max. 12	68-35-21	0 0 7 - 1 9 5 1 1 6 0
21 W / 10-60 V non DIM	2-5	max. 18	127-67-28	0 0 7 - 1 9 5 1 3 6 0
21 W / 10-60 V DIM DALI	2-5	max. 18	127-67-28	0 0 7 - 1 9 5 1 3 8 0

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 350mA + cable 500 mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 1 1 0

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	0 0 7 - 1 9 6 1 2 6 0
extension cable	1x socket / 1x plug	2000	0 0 7 - 1 9 6 1 4 6 0
extension cable	1x socket / 1x plug	4000	0 0 7 - 1 9 6 1 6 6 0

See page 117 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	23-4	0 0 7 - 1 9 6 5 1 3 8
elliptical sculpture foil	23-4	0 0 7 - 1 9 6 5 2 3 0
snoot	23-4	0 0 7 - 1 9 6 5 3 3 8

Inspiration

OMG! Shoe Store
Linz

ARCHITECT

Design und Bauabteilung
Leder & Schuh AG
Graz

LIGHTING DESIGN

Vedder.Lichtmanagement
Munich

SOLUTION

MICRO
3000K
flood 46°



JUST

JUST 32
JUST 32 FOCUS

page 104
page 106





JUST 32

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 90

ESTIMATED LED LIFETIME

L90 / 50.000h / 500mA
L80 / 50.000h / 700mA

OPTICAL

Beam angle 19°, 27°, 42°

ELECTRICAL

5,2W / 500mA
7,5W / 700mA

PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
Spot ø 32 mm / H 67 mm
Cutout ø 45 mm
Mounting depth 50 mm
Ceiling thickness 2–25 mm

CERTIFICATIONS



Description

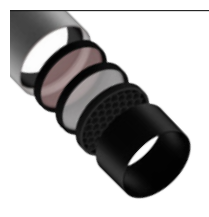
DE Strahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; lieferbar als Einbau- oder Aufbauvariante; verfügbar in 3 verschiedenen Ausstrahlwinkeln; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80/90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Spot made of aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play electrical connector system; available as recessed or surface-mounted variant; available in 3 beam angles; passively cooled high-power LED system; available in 3 light colours; min. 80/90% luminous flux after 50,000 operating hours; colour rendering CRI 90; 500 or 700mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

Features



352° rotatable
90° tiltable



Optical accessories

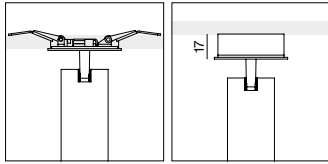


Ceiling recessed clip,
surface housing

Order options

MOUNTING

ceiling recessed clip	6
surface housing	8



COLOUR TEMPERATURE

3000K CRI 90 530lm*	5
3500K CRI 90 530lm*	7
4000K CRI 90 570lm*	6

* per fixture | CRI 90 | 700 mA | 72 °C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8

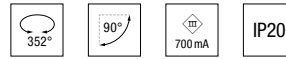


BEAM ANGLE FWHM

spot 19°	S
medium 27°	M
flood 42°	F



JUST 32

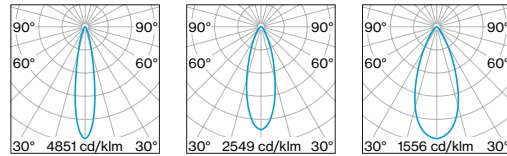


SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
5,2 W / 7,5 W / 11 V	1	32	0 0 7 - 4 1 8 7 :: 1 ▣ ▲

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 1,0m	
		5,2W / 500mA	7,5W / 700mA
19°	3000K	3380	4270
	3500K	3380	4270
	4000K	3630	4590
27°	3000K	2290	2890
	3500K	2290	2890
	4000K	2460	3110
42°	3000K	1780	2250
	3500K	1780	2250
	4000K	1910	2420

surface 800x500mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | 3 luminaires



spot 19°
LOR 85 %

medium 27°
LOR 84 %

flood 42°
LOR 91 %

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-14 V non DIM	1	max.18	64-34-21	0 0 7 - 1 9 5 2 1 6 0
30 W / 10-60 V non DIM	2-5	max.18	127-67-28	0 0 7 - 1 9 5 2 4 6 0
30 W / 10-60 V DIM DALI	2-5	max.18	127-67-28	0 0 7 - 1 9 5 2 4 8 0

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m, SUPPLY 220-240 V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
10 W / 7-14 V non DIM	1	max.18	95-53-25	0 0 7 - 1 9 5 3 2 6 0
20 W / 10-28 V non DIM	2	max.18	184-40-25	0 0 7 - 1 9 5 3 3 6 0
30 W / 10-43 V non DIM	2-3	max.18	127-67-28	0 0 7 - 1 9 5 3 4 6 0
40 W / 20-57 V non DIM	3-4	max.18	225-47-28	0 0 7 - 1 9 5 3 5 6 0
66 W / 18-48 V non DIM	2x2-2x4	max.2x15	148-77-33	0 0 7 - 1 9 5 4 4 6 0
20 W / 10-28 V DIM DALI	2	max.18	184-40-25	0 0 7 - 1 9 5 3 3 8 0
30 W / 10-43 V DIM DALI	2-3	max.18	127-67-28	0 0 7 - 1 9 5 3 4 8 0
40 W / 20-57 V DIM DALI	3-4	max.18	225-47-28	0 0 7 - 1 9 5 3 5 8 0
66 W / 18-48 V DIM DALI	2x2-2x4	max.2x15	148-77-33	0 0 7 - 1 9 5 4 4 8 0

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500 mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 2 1 0
splitter 700mA + cable 500 mm	1x socket / 9x plug	85-50-10	0 0 7 - 1 9 5 9 3 1 0

EXTENSION CABLE

TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	0 0 7 - 1 9 6 1 2 6 0
extension cable	1x socket / 1x plug	2000	0 0 7 - 1 9 6 1 4 6 0
extension cable	1x socket / 1x plug	4000	0 0 7 - 1 9 6 1 6 6 0

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	30-4	0 0 7 - 1 9 6 5 1 6 8
elliptical sculpture foil	30-4	0 0 7 - 1 9 6 5 2 6 0
snoot	30-15	0 0 7 - 1 9 6 5 3 6 8
colour filter (red, blue, green, etc.)	30-4	on request

JUST 32 FOCUS

Quickinfo

GENERAL

Passive cooling
Indoor

LED

High-power LED
3000K, 3500K, 4000K
CRI 90

ESTIMATED LED LIFETIME

L90 / 50.000h / 500mA
L80 / 50.000h / 700mA

OPTICAL

Adjustable beam angle 17°–43°

ELECTRICAL

5,2W / 500mA
7,5W / 700mA

PHYSICAL

Anodised aluminium
Silver, black
352° rotatable, 90° tiltable
Spot ø 32 mm / H 73 mm
Cutout ø 45 mm
Mounting depth 50 mm
Ceiling thickness 2–25 mm

CERTIFICATIONS



Description

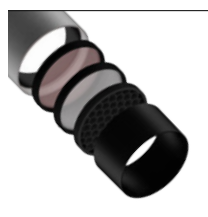
DE Strahler aus Aluminium; Oberfläche schwarz oder natureloxiert; Strahler 352° dreh- und 90° schwenkbar; durchkontaktiertes elektrisches Stecksystem; lieferbar als Einbau- oder Aufbauvariante; einstellbarer Ausstrahlwinkel 17°–43°; passiv gekühltes High-Power-LED System; erhältlich in 3 verschiedenen Lichtfarben; mind. 80/90% Lichtstrom nach 50.000 Betriebsstunden; Farbwiedergabe CRI 90; 500 bzw. 700 mA Konverter steckerfertig vorkonfektioniert; Konverter ist separat zu bestellen; optional dimmbar mit DALI Signal; optisches Zubehör erhältlich

EN Spot made of aluminium; surface black or natural anodised; spot 352° rotatable and 90° tiltable; plug and play electrical connector system; available as recessed or surface-mounted variant; adjustable beam angle 17°–43°; passively cooled high-power LED system; available in 3 light colours; min. 80/90% luminous flux after 50,000 operating hours; colour rendering CRI 90; 500 or 700 mA converter plug and play; converter separately available; optionally dimmable via DALI signal; optical accessories available

Features



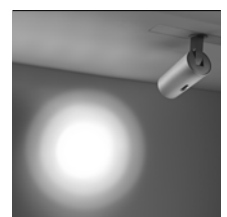
352° rotatable
90° tiltable



Optical accessories



Ceiling recessed clip,
surface housing

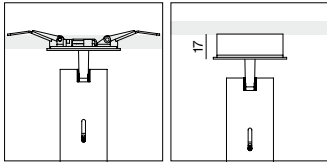


Adjustable beam
angle 17°–43°

Order options

MOUNTING

ceiling recessed clip	6
surface housing	8



COLOUR TEMPERATURE

3000K CRI 90 390lm*	5
3500K CRI 90 390lm*	7
4000K CRI 90 420lm*	6

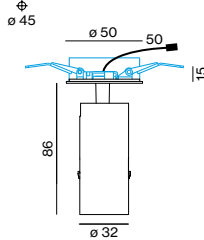
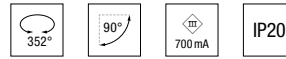
* per fixture | CRI 90 | 700 mA | 72 °C

MATERIAL COLOUR

anodised aluminium	6
anodised black	8



JUST 32 FOCUS

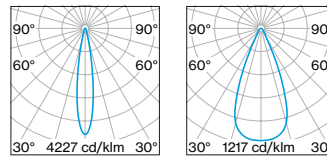


SYSTEM POWER / VOLTAGE	NO. OF LEDS	Ø (mm)	ORDER CODE
5,2 W / 7,5 W / 11 V	1	32	007 - 41 8 1

ILLUMINANCE EXAMPLE (E_{max} in lux)

BEAM ANGLE	COLOUR TEMP.	DISTANCE 1,0m	
		5,2W / 500mA	7,5W / 700mA
17°	3000K	2560	3230
	3500K	2560	3230
	4000K	2750	3470
43°	3000K	1490	1880
	3500K	1490	1880
	4000K	1600	2020

surface 800x500mm | reflection factor 0,7/0,7/0,7 | maintenance factor 0,8 | 3 luminaires



min. angle 17°
LOR 55 %

max. angle 43°
LOR 68 %

Electrical accessories

LED CONVERTER 500mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m,
SUPPLY 220-240V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
8 W / 2,5-14 V non DIM	1	max.18	64-34-21	007 - 1952160
30 W / 10-60 V non DIM	2-5	max.18	127-67-28	007 - 1952460
30 W / 10-60 V DIM DALI	2-5	max.18	127-67-28	007 - 1952480

LED CONVERTER 700mA INCL. POWER CABLE 2m + CONNECTION CABLE WITH PLUG 1m,
SUPPLY 220-240 V AC, 50-60Hz, ENEC APPROVED

TYPE	FIXTURES	CABLE (m)	L-W-H (mm)	ORDER CODE
10 W / 7-14 V non DIM	1	max.18	95-53-25	007 - 1953260
20 W / 10-28 V non DIM	2	max.18	184-40-25	007 - 1953360
30 W / 10-43 V non DIM	2-3	max.18	127-67-28	007 - 1953460
40 W / 20-57 V non DIM	3-4	max.18	225-47-28	007 - 1953560
66 W / 18-48 V non DIM	2x2-2x4	max.2x15	148-77-33	007 - 1954460
20 W / 10-28 V DIM DALI	2	max.18	184-40-25	007 - 1953380
30 W / 10-43 V DIM DALI	2-3	max.18	127-67-28	007 - 1953480
40 W / 20-57 V DIM DALI	3-4	max.18	225-47-28	007 - 1953580
66 W / 18-48 V DIM DALI	2x2-2x4	max.2x15	148-77-33	007 - 1954480

SPLITTER SERIAL, AWG22

TYPE	INPUT / OUTPUT	L-W-H (mm)	ORDER CODE
splitter 500mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959210
splitter 700mA + cable 500mm	1x socket / 9x plug	85-50-10	007 - 1959310

EXTENSION CABLE

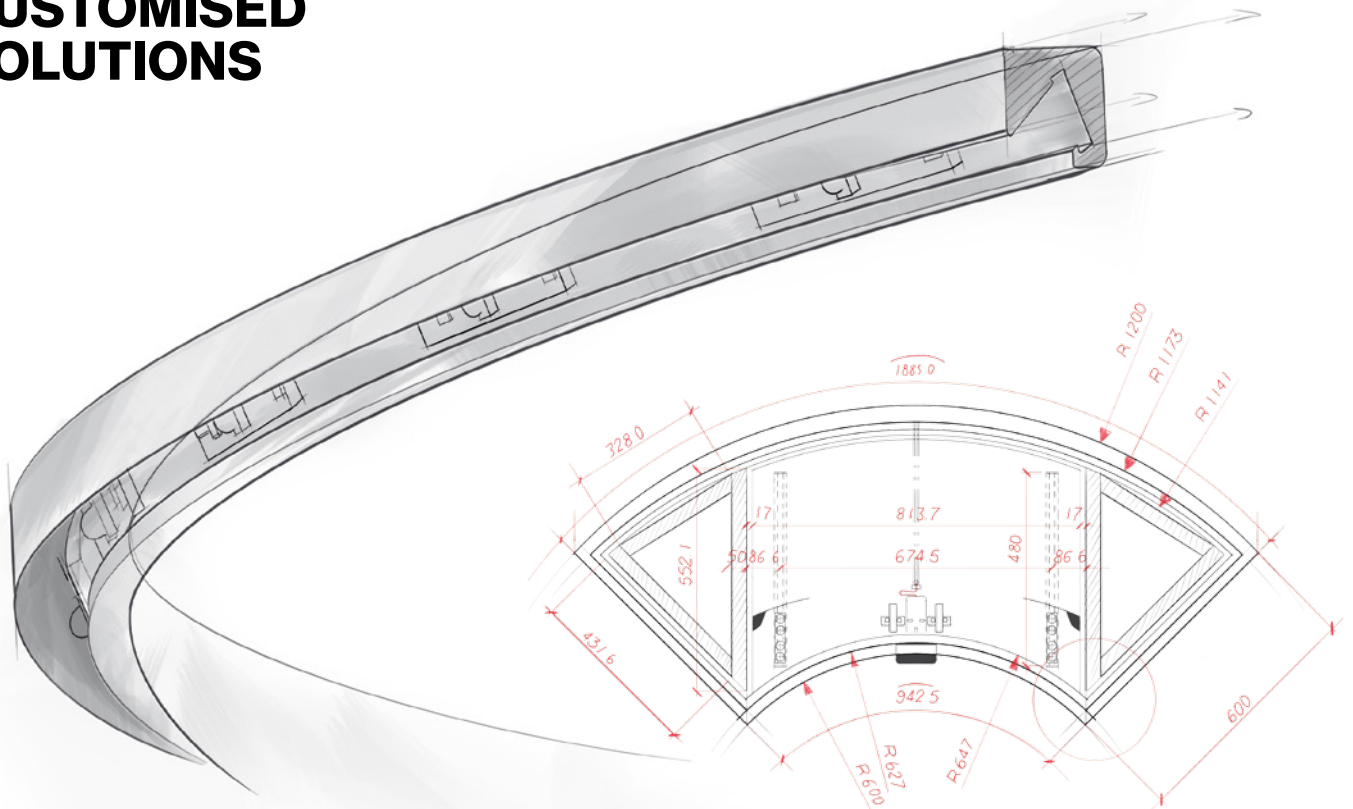
TYPE	INPUT / OUTPUT	L (mm)	ORDER CODE
extension cable	1x socket / 1x plug	1000	007 - 1961260
extension cable	1x socket / 1x plug	2000	007 - 1961460
extension cable	1x socket / 1x plug	4000	007 - 1961660

See page 116 for wiring examples

Optical accessories

TYPE	Ø-H (mm)	ORDER CODE
honeycomb louver	30-4	007 - 1965178
elliptical sculpture foil	30-4	007 - 1965270
snoot	30-15	007 - 1965378
colour filter (red, blue, green, etc.)	30-4	on request

CUSTOMISED SOLUTIONS



DE Wir wissen, dass trotz des umfangreichen Produktprogramms in diesem Katalog manche Projekte noch darüber hinausgehende Anforderungen haben. In solchen Fällen sind wir aufgrund unserer hohen Expertise und Flexibilität in Planung, Produktentwicklung und Fertigung in der Lage, auch ausgefallene Kundenwünsche mit angemessenem Aufwand zu realisieren. Sprechen Sie mit uns.

EN We know that despite the extensive line-up of products in this catalogue, some projects have requirements that go beyond this. In such cases, we are able to accommodate even atypical customer requests without an unreasonable amount of effort due to our high level of expertise and flexibility in planning, product development, and production. Please do not hesitate to contact us.





Visualisation

TECHNOLOGY

LED

Allgemein

DE Die Dynamik der Entwicklung der LED-Technologie bringt es mit sich, dass die Eigenschaften von auf den ersten Blick vergleichbaren Produkten durch die Qualität der eingesetzten LED und durch die Art des Einsatzes der LED in einer Leuchte massiv voneinander abweichen können. Die wesentlichen Einflussfaktoren sind dabei das Binning, die Farbwiedergabeeigenschaften, die Bestromung der LED und das damit zusammenhängende Temperaturverhalten, die Farbortverschiebung und die die Lebensdauer definierende Lichtstromdegradation. Diese Einflussfaktoren stehen in starker Abhängigkeit voneinander. Nur eine optimale Auswahl der Parameter und eine auf das Gesamtsystem Leuchte gerichtete Produktentwicklung gewährleistet ein qualitativ hochwertiges und nachhaltig den ursprünglichen Anforderungen entsprechendes Ergebnis.

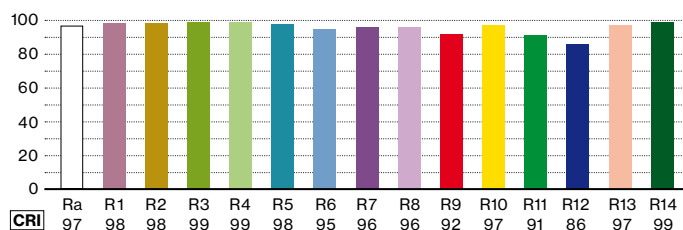
Binning

DE Binning ist im Wesentlichen ein Verfahren zur Farbklassenbildung bei LEDs. Jede einzelne LED unterscheidet sich im Farbort des von ihr emittierten Lichts aufgrund des Produktionsprozesses zwangsläufig mehr oder weniger von allen anderen LEDs – auch innerhalb derselben Produktionscharge. Wie gering diese Abweichungen im Farbort bei mehreren LEDs sind, ist ein wesentliches Qualitätsmerkmal von LEDs.

Das bestgeeignete Instrument zur Messung dieser Abweichungen sind sogenannte MacAdam-Ellipsen, die die absolute Farbabweichung in Zusammenhang mit den Möglichkeiten der menschlichen Farbwahrnehmung bringen. Alle Farborte innerhalb einer sogenannten 1-Step-MacAdam-Ellipse sind für den Menschen unter keinen Umständen unterscheidbar. XAL verwendet ein Binning, das nur geringfügig über dieser Schwelle liegt: Die Farborte unserer LEDs befinden sich bei Auslieferung innerhalb einer 3-Step-MacAdam-Ellipse um den angegebenen Farbort. Damit ist sichergestellt, dass alle unsere Produkte hinsichtlich des Farbortes extrem hohe Homogenität aufweisen.

Farbwiedergabe

DE Weil das Umgebungslicht Farben unterschiedlich reproduziert, wird als Referenz der so genannte Farbwiedergabeindex (CRI, Colour Rendering Index) herangezogen. Er gibt an, in welchem Verhältnis das angestrahlte Objekt oder der angestrahlte Bereich vom Maximalwert 100 (Tageslicht) abweicht. Der CRI wird als arithmetisches Mittel der Ergebnisse zu acht Testfarben berechnet (R1 bis R8). Fast alle Produkte in diesem Katalog beeindrucken diesbezüglich mit ihrem sehr hohen CRI von 95, mit dem sie natürlichem Tageslicht sehr nahe kommen. Zusätzlich werden immer auch sechs weitere Farben (R9 bis R14) getestet, deren Ergebnisse jedoch keinen Einfluss auf den CRI haben. Sie sind sehr wichtig, um die Qualität der Lichtquelle zu bestimmen. Vor allem R9 (gesättigtes Rot) ist von enormer Bedeutung für hochwertige Beleuchtungslösungen. Nahezu alle Produkte in diesem Katalog erreichen einen geradezu revolutionären Wert von $R9 > 90$.



Typical XAL colour rendering index

General

EN The dynamic development of LED technology means that the characteristics of products which appear to be similar at first glance can be drastically different based on the quality of the LED that is used and the way the LED is used in a luminaire. The key parameters in this context are the binning, the colour rendering characteristics, the current feed of the LED and the associated thermal behaviour, the colour location shift, and the luminous flux degradation, which determines the lifespan of the LED. These parameters are highly inter-related. A high-quality result that meets the original requirements on a long-term basis can only be guaranteed through the optimal selection of the parameters and a product development process that is geared towards the luminaire as a complete system.

Binning

EN Binning is essentially a process for defining colour groups for LEDs. Due to the production process, each individual LED differs from basically any other LED in terms of the colour location of the light it emits – even within a single production batch. How small these differences in the colour location are among multiple LEDs is a decisive factor in the quality of LEDs.

The best tool for measuring these differences is the so-called MacAdam ellipse, which shows the absolute colour difference in relation to the ability of the human eye to perceive colour. All colour locations within a so-called 1-step MacAdam ellipse are indistinguishable to the human eye under all conditions. The binning used by XAL is only slightly higher than this threshold: Upon delivery, the colour location of our LEDs is within a 3-step MacAdam ellipse around the specified colour location. This ensures that all of our products are extremely homogeneous in terms of colour location.

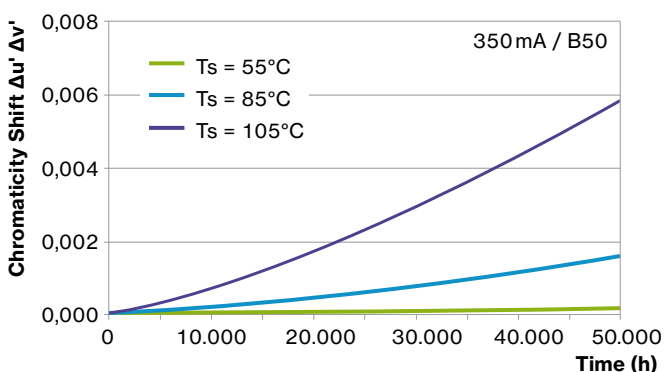
Colour rendering

EN Because ambient light reproduces colours differently, the CRI (Colour Rendering Index) is used as a reference. It indicates in what ratio the irradiated object or area deviates from the maximum value of 100 (day light). The CRI is calculated as the arithmetic mean of the results for eight test colours (R1 to R8). Almost all products in this catalogue impress in that regard with their very high performance of CRI 95, which is very close to natural day light. In addition, six more colours (R9 to R14) are always tested, but their results do not influence the CRI. Nonetheless, they are very important to determine the quality of the light source. Especially R9 (saturated red) is of huge importance for high-end lighting solutions. Nearly all products in this catalogue achieve a revolutionary $R9 > 90$.

Bestromung und Temperatur

DE LEDs verändern ihre Eigenschaften über ihre Lebensdauer. Die wesentlichen Einflussgrößen dabei sind die Bestromung der LED und das Temperaturmanagement. Je höher die Betriebstemperatur der LED ist, desto stärker ergeben sich Verschiebungen des Farborts und eine Abnahme des Lichtstroms über die Nutzungsdauer. Die Wahl der Bestromung der LED hat über die proportional dazu in Wärme umgesetzte Verlustleistung und die damit verbundene Temperaturerhöhung der LED massiven Einfluss auf Farbortverschiebung und Lichtstromdegradation.

Die Produkte in diesem Katalog werden daher meist nur mit rund dem halben vom Hersteller empfohlenen Strom betrieben, im Regelfall mit 350 mA. Damit gelingt es uns zusammen mit ausgereiftem Thermomanagement eine Betriebstemperatur unserer LEDs je nach Produkt von zwischen nur 53°C und 85°C bei normaler Umgebungstemperatur zu gewährleisten. Dies führt zu nachhaltig geringer Farbortverschiebung und geringer Lichtstromdegradation.



Beispiele für Bestromungs- und Temperaturabhängigkeit der Farbortverschiebung und der Lichtstromdegradation

Farbortverschiebung

DE LEDs unterliegen einer Farbortverschiebung innerhalb der ersten 1.000 Betriebsstunden (Einbrennphase) einer 2-Step-MacAdam-Ellipse (siehe BINNING). Aufgrund des niedrigen Betriebsstroms erhöht sich die Farbortverschiebung über die Lebensdauer unserer LEDs ausgehend vom gelieferten Binning-Feld danach lediglich auf eine 3-Step-MacAdams-Ellipse. Diese Angabe beruht auf der TM21 Interpolation nach 10.000 Stunden Messungen und kann keine Garantie darstellen.

Lichtstromdegradation

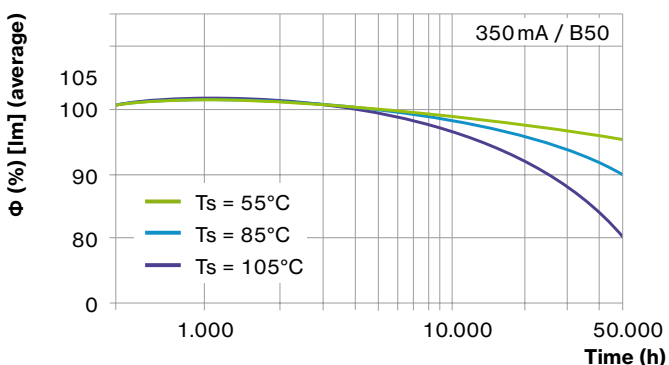
DE LEDs unterliegen einem Lichtstromrückgang über die Zeit. Dieser Lichtstromrückgang wird über drei Werte gemessen: L-Wert, B-Wert und Betriebsdauer in Stunden. Der L-Wert gibt den Wert des Lichtstroms in Prozent des Anfangslichtstroms bei Erreichen der Betriebsdauer in Stunden an, der B-Wert jenen Prozentsatz der LED, dessen Lichtstrom den L-Wert bei Erreichen der Betriebsdauer in Stunden unterschreiten darf. Wird kein B-Wert angegeben, gilt B50.

Für unsere LEDs gilt eine Lebensdauer von L80 bzw. L90/B50 nach 50.000 Stunden. Das bedeutet, dass zumindest 50% der LED nach einer Betriebsdauer von 50.000 Stunden noch 80 bzw. 90% des Ausgangslichtstroms aufweisen. Aufgrund von Berechnungen der LED-Hersteller zum Langfristverhalten der LEDs und unserer vorteilhaften Betriebsumgebung mit niedriger Bestromung gehen wir mit hoher Wahrscheinlichkeit davon aus, dass die im Großteil der Produkte in diesem Katalog verbaute LED auch die Anforderungen von L90/B10 nach 50.000 Stunden erreichen und somit bloß 20% der LEDs nach 50.000 Betriebsstunden unter 80 bzw. 90% des Ausgangslichtstroms fallen würden, können dies aber nicht mit hinreichender Sicherheit bestätigen. Ausgangspunkt für unsere Angaben ist der individuelle Ausgangslichtstrom der LED, der stets in einem engen Toleranzbereich um den angegebenen Lichtstromwert liegt.

Current feed and temperature

EN The characteristics of LEDs change over the lifespan of the LEDs. The key parameters in this context are the current feed of the LED and the thermal management. As the operating temperature of the LED increases, so does the extent of the colour location shift and the luminous flux degradation over the lifespan of the LED. The selection of the current feed of the LED has a significant influence on colour location shift and luminous flux degradation due to the conversion of energy loss into heat, which is proportional to the current feed, and the associated temperature increase.

With this in mind, the products in this catalogue are usually operated at roughly half of the current recommended by the manufacturer, generally at 350 mA. In combination with sophisticated thermal management, this allows us to ensure an operating temperature between 53°C and 85°C for our LEDs at normal ambient temperatures, depending on the product. This leads to a low level of colour location shift and luminous flux degradation over the long term.



Examples for impact of current feed and temperature on colour location shift and luminous flux degradation

Colour point shift

EN During the first 1,000 hours of operation (burn-in phase), LEDs are subject to a colour location shift of one 2-step MacAdam ellipse (see BINNING). Due to the low operating current, the colour location shift of our LEDs over their lifespan after the burn-in phase only increases to one 3-step MacAdam ellipse based on the delivered binning group. This information is based on calculations following 10,000 hours of measurement and does not constitute a guarantee.

Luminous flux degradation

EN LEDs are subject to luminous flux degradation over time. Luminous flux degradation is measured using three values: the L value, the B value, and the operating life in hours. The L value represents the luminous flux value as a percentage of the initial luminous flux when the operating life in hours is reached. The B value represents the percentage of the LEDs whose luminous flux may be below the L value upon reaching the operating life in hours. B50 applies to all products for which no B value is specified.

Our LEDs have a lifespan of L80 or L90/B50 after 50,000 hours. This means that at least 50% of the LEDs still exhibit 80 or 90% of the initial luminous flux after an operating life of 50,000 hours. Based on calculations by the LED manufacturer regarding the long-term behaviour of the LEDs and our favourable operating environment with a low current feed, we assume that the LEDs installed in the majority of the products in this catalogue achieve a standard of L90/B10 after 50,000 hours, which means that only 20% of the LEDs would fall below 80 or 90% of the initial luminous flux after 50,000 hours of operation, but we cannot confirm this with a sufficient level of certainty. The starting point for our statements pertaining to luminous flux degradation is the initial luminous flux of the individual LEDs, which is always within a narrow tolerance range of the specified luminous flux value.

TECHNOLOGY

OTHER TECHNICAL INFORMATION

Erläuterungen zu technischen Angaben

DE LICHTSTROM

Die Angaben zum Lichtstrom in diesem Katalog betreffen den typischen Leuchtenlichtstrom bei der angegebenen Temperatur der LEDs und unter den angegebenen elektrischen Bedingungen.

DE LEISTUNGS-AUFNAHME

Die Angaben in diesem Katalog zu Leistungsaufnahmen der LEDs beinhalten die Leistungsaufnahme der Treiberelektronik und des Betriebsgeräts.

DE ENEC

Die ENEC-Zertifizierung der Produkte in diesem Katalog ist zum Zeitpunkt der Drucklegung eingeleitet und wird voraussichtlich Ende 2015 abgeschlossen sein.

DE BELEUCHTUNGSSTÄRKENTABELLEN

Unter den bei jedem Produkt angeführten Beleuchtungsstärkentabellen befinden sich die für die jeweilige Berechnung verwendeten Daten. Zusätzlich zu diesen Daten sind für die Berechnung folgende Regeln verwendet worden: (1) Gemessen wurde die höchste Beleuchtungsstärke auf dem Regal- oder Vitrinenboden. (2) Die Ausrichtung der Leuchten erfolgte auf die Mitte des Regal- oder Vitrinenbodens. (3) Bei Settings mit mehreren Strahlern wurden je zwei Strahler auf einen gemeinsamen Punkt im Regal oder in der Vitrine gerichtet. (4) Bei PICO POWER und PICO LINE wurde die Beleuchtungsstärke auf einer raumdiagonalen Ebene durch die Vitrinenmitte berechnet. (5) Produkte mit FOCUS-Funktion wurden mit Spot-Einstellung berechnet. (6) JUST und JUST FOCUS wurden mit jeweils drei senkrecht nach unten gerichteten Strahlern berechnet. (7) PICO SUPPORT wurde in 0°-Stellung berechnet.

Abkürzungen

DE lm (Lumen)

Lumen ist die Einheit des Lichtstroms. Der Lichtstrom beschreibt die von einer Lichtquelle in alle Richtungen abgestrahlte Leistung im sichtbaren Bereich.

DE lx (Lux)

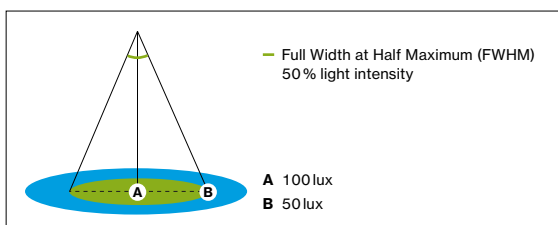
Lux ist die Einheit der Beleuchtungsstärke. Die Beleuchtungsstärke beschreibt den Lichtstrom, der auf eine bestimmte Fläche trifft.

DE LOR (Light Output Ratio)

Die LOR ist das Verhältnis von Lichtstrom einer Leuchte zum Lichtstrom der in ihr verwendeten Lichtquelle und somit ein Maß für die Effizienz einer Leuchte.

DE FWHM (Full Width at Half Maximum)

FWHM bezeichnet jenen vollen Abstrahlwinkel einer Lichtquelle, der sich durch die beiden Geraden ergibt, die ausgehend von der Lichtquelle jene beiden Punkte in einer Lichtverteilungskurve schneiden, bei denen die Beleuchtungsstärke exakt 50% der Maximal-Beleuchtungsstärke beträgt.



Full Width at Half Maximum

Notes on technical information

EN LUMINOUS FLUX

The information in this catalogue regarding luminous flux refers to the typical luminous flux of a luminaire at the specified temperature of the LEDs and under the specified electrical conditions.

EN POWER CONSUMPTION

The information in this catalogue regarding the power consumption of the LEDs includes the power consumption of the driver electronics and the controller.

EN ENEC

ENEC certification had been initiated for the products in this catalogue at the time of printing and is expected to be completed at the end of 2015.

EN ILLUMINANCE CHARTS

The data used for the respective calculation are listed below the illuminance charts provided for each product. In addition to this data, the following rules were used for the calculation: (1) The highest illuminance on the floor of the shelf or display case was measured. (2) The luminaires were directed at the centre of the floor of the shelf or display case. (3) In settings with multiple spots, groups of two spots were each directed at the same point in the shelf or in the display case. (4) For PICO POWER and PICO LINE, the illuminance on a space diagonal through the centre of the display case was measured. (5) Products with a FOCUS function were calculated using the spot setting. (6) JUST and JUST FOCUS were each calculated with three spots pointing straight down. (7) PICO SUPPORT was calculated in a position of 0°.

Abbreviations

EN lm (lumen)

The lumen is the unit of luminous flux. Luminous flux describes the light energy in the visible band radiated from a light source in all directions.

EN lx (lux)

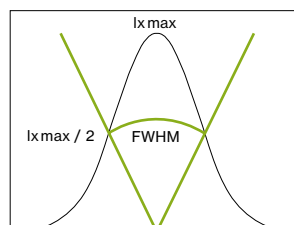
The lux is the unit of light intensity. It describes the total luminous flux incident on a given surface.

EN LOR (Light Output Ratio)

The LOR is the ratio of the luminous flux of a luminaire to the luminous flux of the light source used in it and thus represents a measure of the efficiency of a luminaire.

EN FWHM (Full Width at Half Maximum)

FWHM refers to the full beam angle of a light source defined by the two lines that start at the light source and intersect the two points in a light distribution curve at which the light intensity equals exactly 50% of the maximum light intensity.



Symbole



DE Mit der CE-Kennzeichnung erklärt ein Hersteller, dass das Produkt den innerhalb der Europäischen Union geltenden Anforderungen an sein Produkt genügt.



DE Das CB-Verfahren ist ein international anerkanntes Prüfprogramm, unter anderem für Leuchten. Das CB-Zertifikat und meist geringe länderspezifische Dokumentation sind die Basis für den unkomplizierten Erwerb vieler nationaler Prüfzeichen ohne weitere Prüfungen.



DE Das ENEC-Zeichen dokumentiert die Konformität von ENEC-zertifizierten Erzeugnissen mit europäischen Sicherheitsnormen. Die ENEC-Zertifizierung der Produkte in diesem Katalog ist zum Zeitpunkt der Drucklegung eingeleitet und wird voraussichtlich Ende 2015 abgeschlossen sein.



DE Die UL- sowie CSA-Zertifizierungen diverser Produkte in diesem Katalog wurden eingeleitet und werden voraussichtlich bis Ende 2015 abgeschlossen sein. Diese Zertifizierungen gelten ausschließlich für Artikel, die in den U.S.A. erhältlich sind. Das UL-Listing-Prüfzeichen bzw. das CSA-Prüfzeichen geben an, dass UL bzw. CSA repräsentative Muster des entsprechenden Produkts geprüft und deren Übereinstimmung mit den geltenden Sicherheitsanforderungen von UL bzw. CSA bestätigen.



DE Leuchten mit Schutzklasse IP20 sind für Innenräume geeignet und weisen keinen besonderen Schutz gegen Wasser auf.



DE Leuchten der Schutzklasse III sind zum Betrieb mit Sicherheitskleinspannung gebaute Leuchten, die weder innere noch äußere Stromkreise haben, die mit einer anderen als der Sicherheitskleinspannung arbeiten.

Symbols



EN The CE mark on a product represents the manufacturer's declaration that the product complies with the requirements that apply to the product within the European Union.



EN The CB Scheme is an internationally recognised testing programme, including for luminaires. The CB certificate and a generally minimal amount of country-specific documentation serve as the basis for easily obtaining many national certification marks without further testing.



EN The ENEC mark documents the compliance of ENEC-certified products with European safety standards. ENEC certification had been initiated for the products in this catalogue at the time of printing and is expected to be completed at the end of 2015.



EN The UL and CSA certifications for various products in this catalogue have been initiated and will likely be completed by the end of 2015. These certifications are valid only for products available in the US. The UL listing certification mark and the CSA certification mark indicate that UL and CSA have tested representative samples of the product in question and that they confirm conformity with applicable safety requirements of UL and CSA.



EN Luminaires with a protection rating of IP20 are suitable for indoor use and do not have any special protection against water.



EN Appliance class III luminaires are designed to be operated with safety extra-low voltage and do not have internal or external circuits that function with any voltage other than safety extra-low voltage.

5 YEARS LED WARRANTY FOR NANO 5 YEARS LED WARRANTY

DE XAL garantiert dem originären Erwerber von Produkten aus diesem Katalog für einen Zeitraum von 5 Jahren ab Rechnungsdatum, dass diese Produkte hinsichtlich der LEDs folgenden Qualitätskriterien entsprechen:

- Binning:** Zum Zeitpunkt der Auslieferung befindet sich der Farbort einer LED innerhalb einer 3-Step-McAdam-Ellipse um den angegebenen Farbort.
- Farbwiedergabe:** Generell CRI 95 und R9 > 90; JUST 32 Produkte CRI 90.
- Lichtstromdegradation:** Generell maximal durchschnittlich 10% des Ausgangslichtstroms innerhalb von 5 Jahren; JUST 32 Produkte, LINE-Produkte und INEO maximal durchschnittlich 20%.

Die Garantie verfällt, wenn die Produkte nicht bestimmungsgemäß verwendet und/oder nicht mit den in diesem Katalog jeweils spezifizierten Konvertern betrieben wurden. Produkte, die nicht den angegebenen Qualitätskriterien entsprechen, werden von XAL im Austausch gegen die defekten Produkte kostenlos ersetzt; damit beginnt keine neue Garantiefrist zu laufen. Darüber hinausgehende Kosten sind von dieser Garantie nicht umfasst.

EN XAL guarantees the original buyer of products featured in this catalogue for a period of five years from the invoice date that these products will meet the following quality criteria with regard to the LEDs:

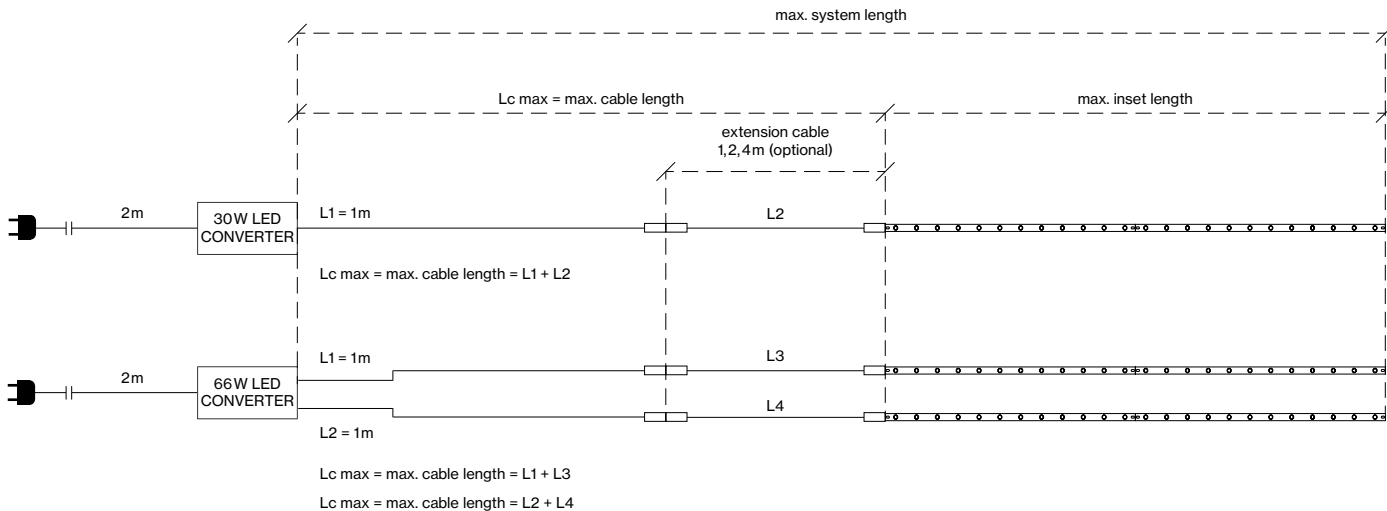
- Binning:** At the time of delivery, the colour location of an LED is within a 3-step MacAdam ellipse around the specified colour location.
- Colour rendering:** Generally CRI 95 and R9 > 90; CRI 90 for JUST 32 products.
- Luminous flux degradation:** Generally at most 10% on average of the initial luminous flux over a period of 5 years; JUST 32 products, LINE products and INEO at most 20% on average.

Warranty is void if products are not used as intended and/or not operated with the appropriate converters specified in this catalogue. Defective products that do not meet the specified quality criteria will be replaced by XAL free of charge; no new guarantee period will start at this point in time. Any costs beyond this are not covered by this guarantee.

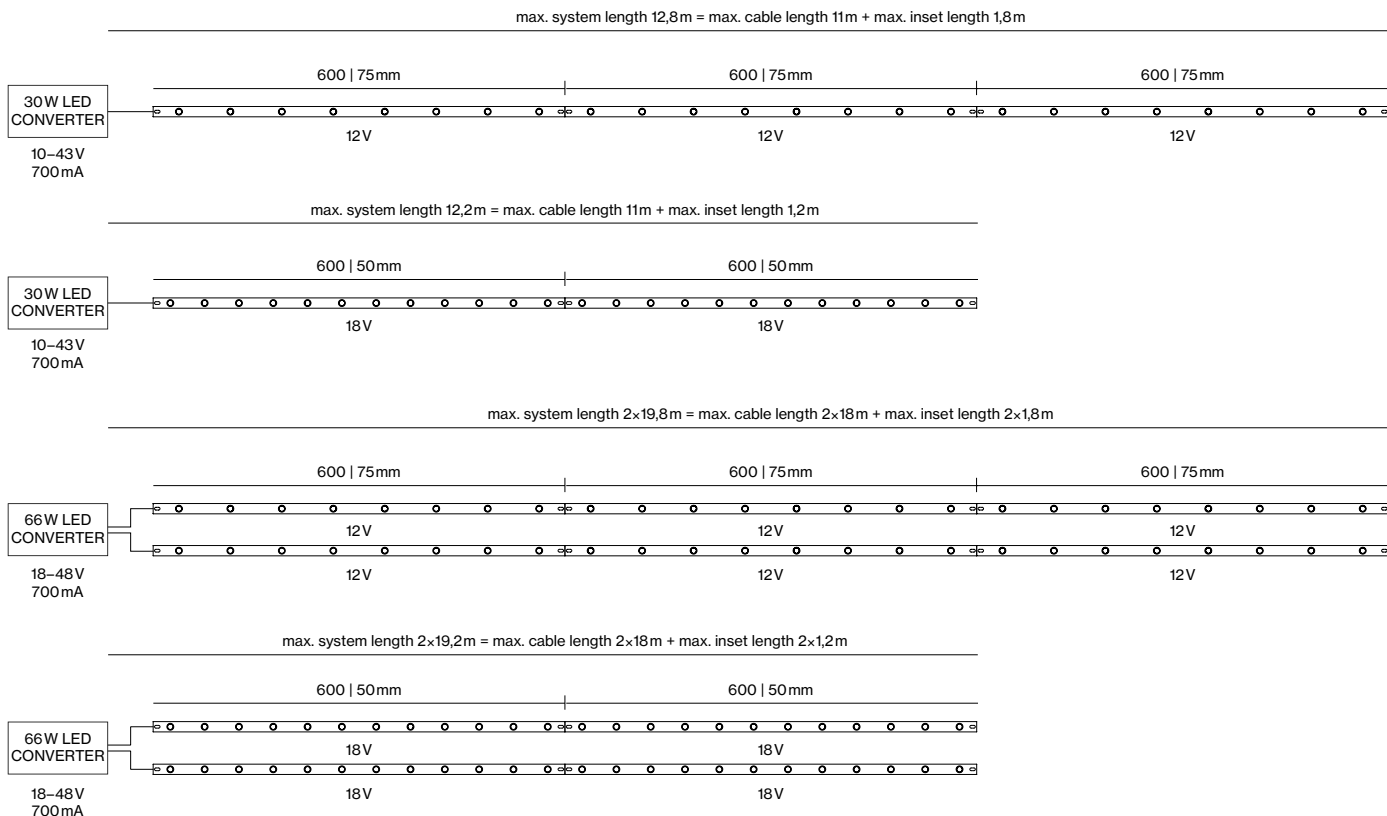
WIRING EXAMPLES

NANO+ TURN | JUST

GENERAL



NANO+ TURN

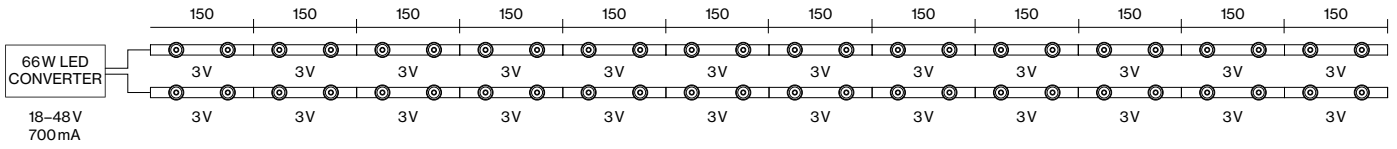


NANO+ TURN

CONVERTER 700mA		LEDs	Lc max (m)	LED distance 50 mm (inset length)		LED distance 75 mm (inset length)	
				min.	max.	min.	max.
8W / 2,5-12V	non DIM	2-6	18	100	300	150	450
10W / 7-14V	non DIM	6-8	5	300	400	450	600
20W / 10-28V	non DIM / DIM DALI	8-16	10	400	800	600	1200
30W / 10-43V	non DIM / DIM DALI	8-24	11	400	1200	600	1800
40W / 20-57V	non DIM / DIM DALI	14-32	11	700	1600	1050	2400
66W / 18-48V	non DIM / DIM DALI	2x14-2x24	2x18	2x700	2x1200	2x1050	2x1800

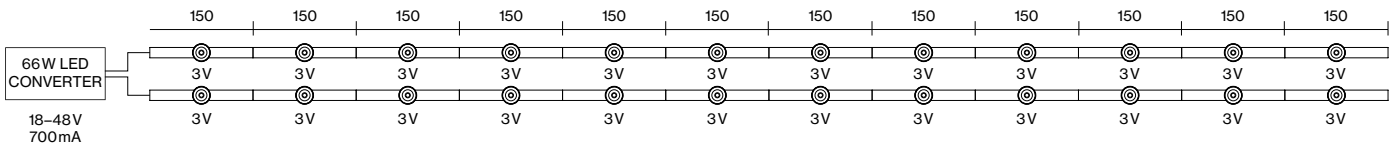
NANO+ JUST 22 | 22 FOCUS

max. system length 2x19,8m = max. wiring length 2x18m + max. inset length 2x1,8m

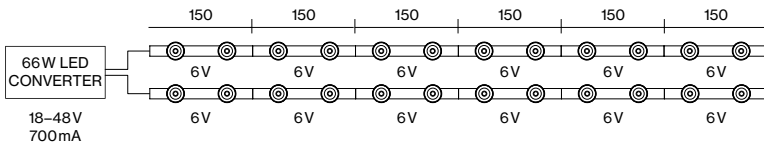


NANO+ JUST 26 | 26 FOCUS

max. system length 2x19,8m = max. cable length 2x18m + max. inset length 2x1,8m

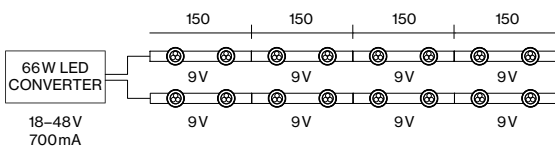


max. system length 2x18,9m = max. cable length 2x18m + max. inset length 2x0,9m



NANO+ JUST 26 POWER

max. system length 2x18,6m =
max. cable length 2x18m + max. inset length 2x0,6m



NANO+ JUST 22 | 22 FOCUS

NANO+ JUST 26 | 26 FOCUS

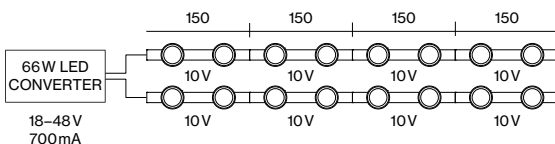
NANO+ JUST 26 POWER

CONVERTER 700mA

	Spots	Lc max (m)	Spots	Lc max (m)	Spots	Lc max (m)
8W / 2,5-12V non DIM	2-6	18	1-3	18	-	-
10W / 7-14V non DIM	6-8	5	3-4	5	2	18
20W / 10-28V non DIM / DIM DALI	8-16	10	4-8	10	4	18
30W / 10-43V non DIM / DIM DALI	8-24	11	4-12	11	4-6	18
40W / 20-57V non DIM / DIM DALI	14-32	11	7-16	11	4-10	18
66W / 18-48V non DIM / DIM DALI	2x14-2x24	2x18	2x7-2x12	2x18	2x4-2x8	2x18

NANO+ JUST 32 | 32 FOCUS

max. system length 2x18,6m =
max. cable length 2x18m + max. inset length 2x0,6m



NANO+ JUST 32 | 32 FOCUS

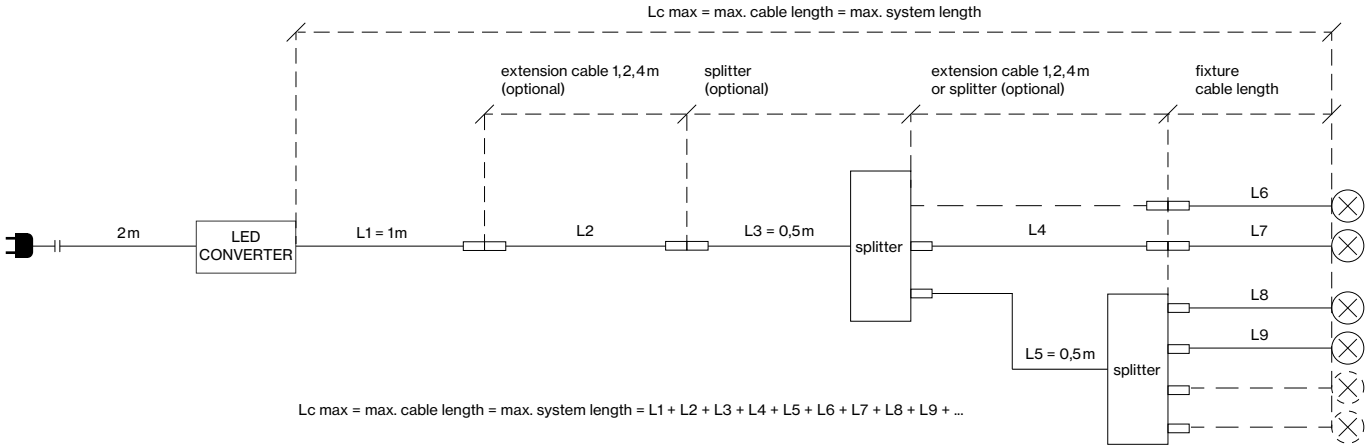
CONVERTER 700mA

	Spots	Lc max (m)
10W / 7-14V non DIM	2	18
20W / 10-28V non DIM / DIM DALI	4	18
30W / 10-43V non DIM / DIM DALI	4-8	10
40W / 20-57V non DIM / DIM DALI	6-10	18
66W / 18-48V non DIM / DIM DALI	2x4-2x8	2x18

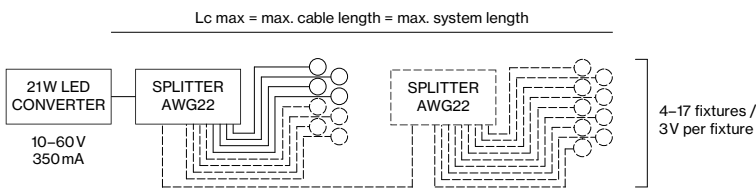
WIRING EXAMPLES

STADIO JUST | JUST | PICO | MICRO

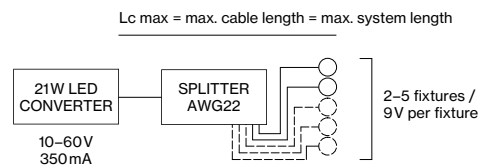
GENERAL



STADIO JUST 16 | 22 | 22 FOCUS



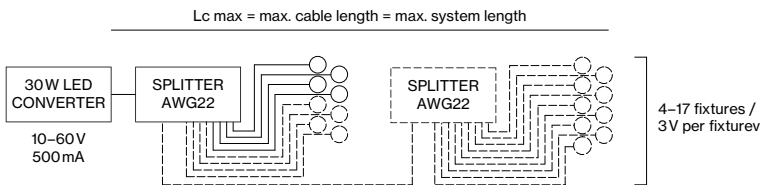
STADIO JUST 26 POWER



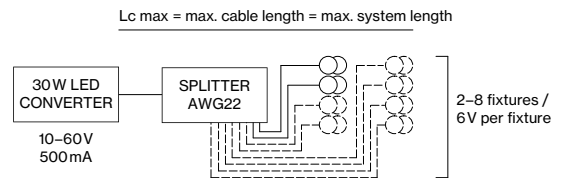
STADIO JUST 16
STADIO JUST 22 | 22 FOCUS
STADIO JUST 26 POWER

CONVERTER 350mA		Fixtures	Lc max (m)	Fixtures	Lc max (m)
7 W / 2-21 V	non DIM	1-6	10	1-2	12
21 W / 10-60 V	non DIM / DIM DALI	4-17	18	2-5	18

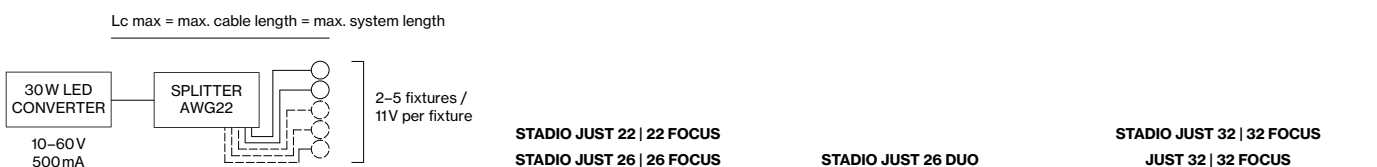
STADIO JUST 22 | 22 FOCUS | 26 | 26 FOCUS



STADIO JUST 26 DUO



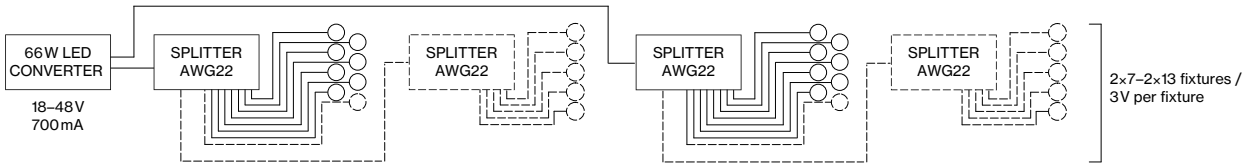
STADIO JUST 32 | 32 FOCUS | JUST 32 | 32 FOCUS



CONVERTER 500mA		Fixtures	Lc max (m)	Fixtures	Lc max (m)	Fixtures	Lc max (m)
8 W / 3-14 V	non DIM	1-4	10	2	10	1	18
30 W / 10-60 V	non DIM / DIM DALI	4-17	18	2-8	18	2-5	18

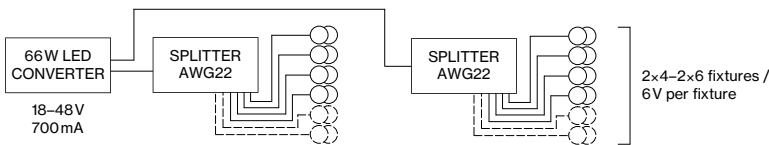
STADIO JUST 26 | 26 FOCUS

Lc max = max. cable length = max. system length



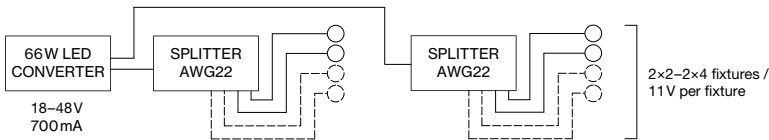
STADIO JUST 26 DUO

Lc max = max. cable length = max. system length



STADIO JUST 32 | 32 FOCUS | JUST 32 | 32 FOCUS

Lc max = max. cable length = max. system length



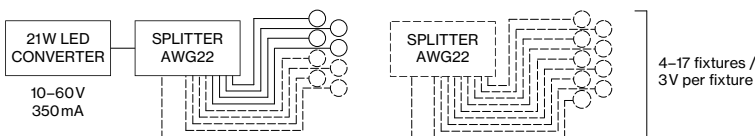
STADIO JUST 26 | 26 FOCUS STADIO JUST 26 DUO STADIO JUST 32 | 32 FOCUS
JUST 32 | 32 FOCUS

CONVERTER 700mA

	Fixtures	Lc max (m)	Fixtures	Lc max (m)	Fixtures	Lc max (m)
8 W / 2,5-12 V non DIM	1-3	18	1	18	-	-
10 W / 7-14 V non DIM	-	-	-	-	1	18
20 W / 10-28 V non DIM / DIM DALI	4-8	10	2-4	10	2	18
30 W / 10-43 V non DIM / DIM DALI	4-12	11	2-6	18	2-3	18
40 W / 20-57 V non DIM / DIM DALI	-	-	4-8	18	3-4	18
66 W / 18-48 V non DIM / DIM DALI	2x7-2x13	2x18	2x4-2x6	2x18	2x2-2x4	2x15

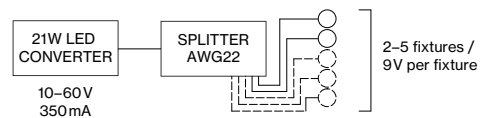
PICO LINE | TILT LINE

Lc max = max. cable length = max. system length



PICO POWER | TILT POWER | MICRO

Lc max = max. cable length = max. system length



PICO LINE PICO POWER MICRO | MICRO OFFSET
PICO TILT LINE PICO TILT POWER MICRO FLEX

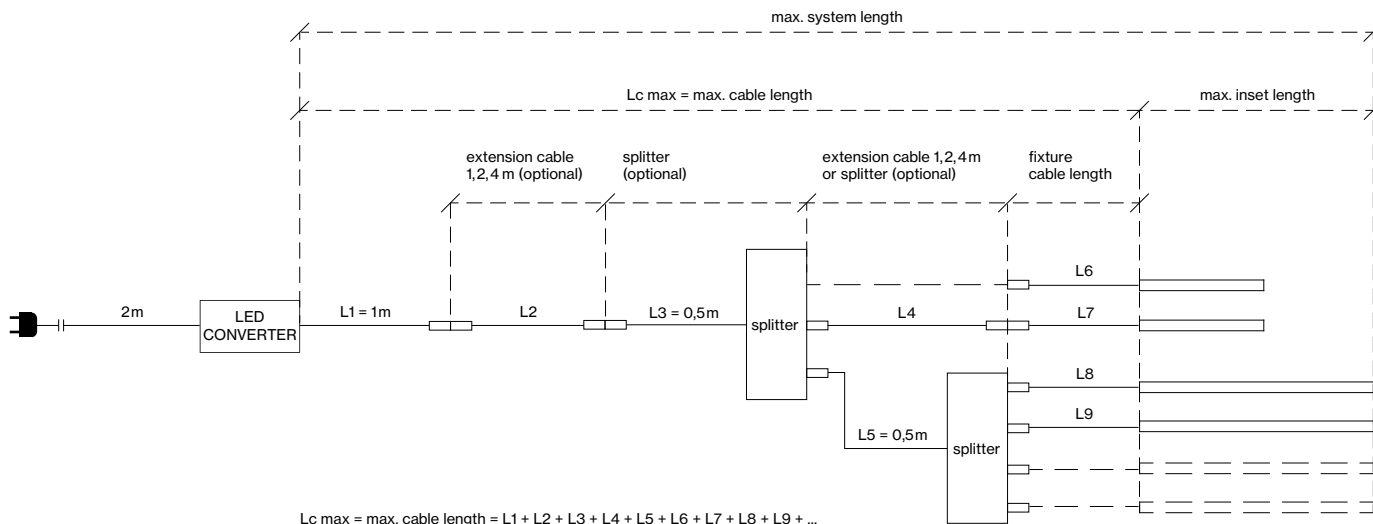
CONVERTER 350mA

	Fixtures	Lc max (m)	Fixtures	Lc max (m)	Fixtures	Lc max (m)
7 W / 2-21 V non DIM	1-6	12	1-2	12	1-2	12
21 W / 10-60 V non DIM / DIM DALI	4-17	18	2-5	18	2-5	18

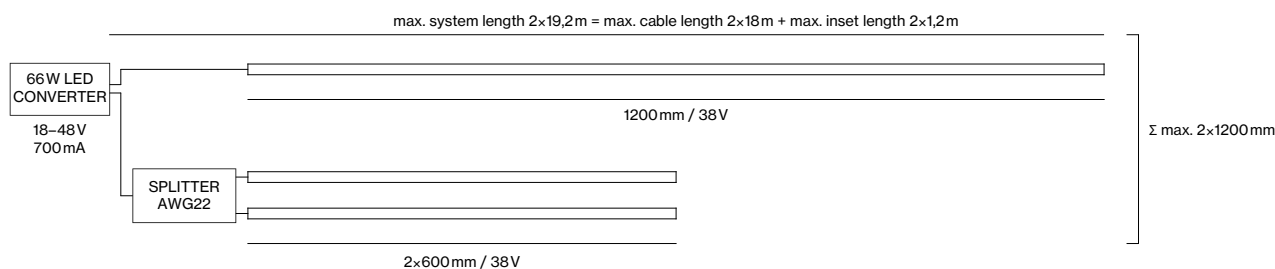
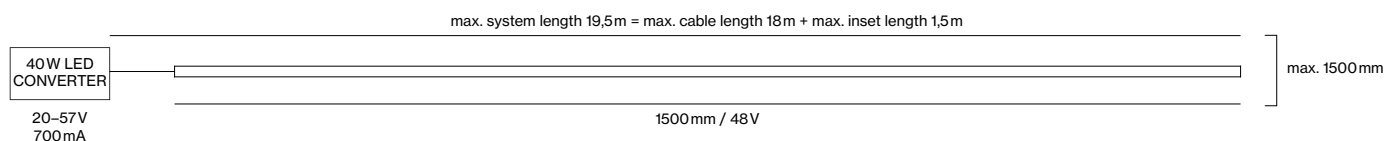
WIRING EXAMPLES

NANO+ LINE | INEO | PICO SUPPORT

GENERAL



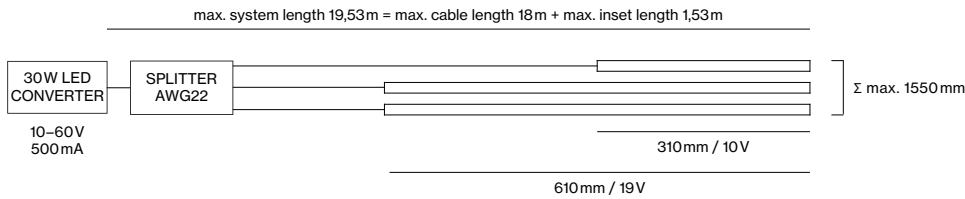
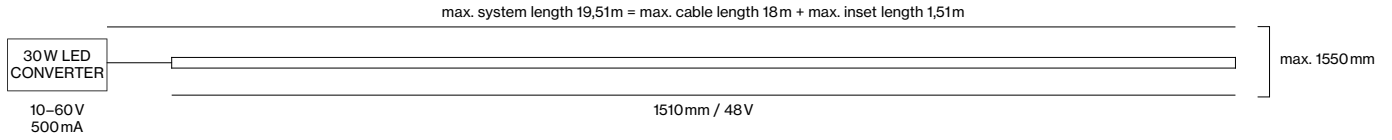
NANO+ LINE



NANO+ LINE

CONVERTER 700mA		Max. inset length (mm)		Lc max (m)
		min.	max.	
8W / 2,5-12V	non DIM	300	300	18
20W / 10-28V	non DIM / DIM DALI	600	600	18
30W / 10-43V	non DIM / DIM DALI	600	1200	10
40W / 20-57V	non DIM / DIM DALI	900	1500	18
66W / 18-48V	non DIM / DIM DALI	2x600	2x1200	2x18

INEO 9

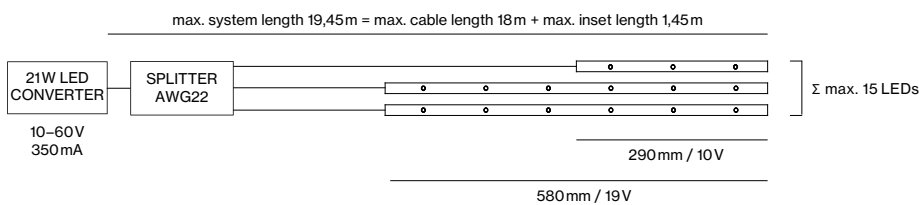
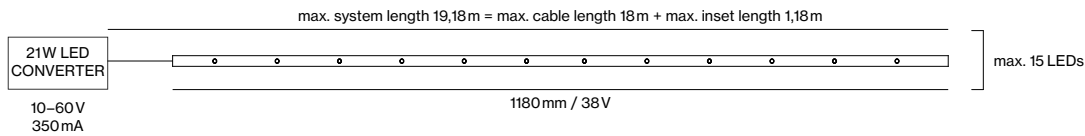


INEO 9

CONVERTER 500mA

		Max. inset length (mm)	Lc max (m)
8 W / 2,5-14 V	non DIM	310	18
30 W / 10-60 V	non DIM / DIM DALI	610-1550	18

PICO SUPPORT ROUND | SQUARE



PICO SUPPORT ROUND PICO SUPPORT SQUARE

CONVERTER 350mA

		LEDs	Lc max (m)
7 W / 2-21 V	non DIM	3-6	12
21 W / 10-60 V	non DIM / DIM DALI	6-15	18

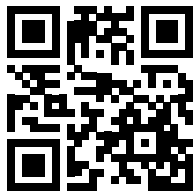
FURTHER SERVICES



RELUX und DIALux / RELUX and DIALux

DE Wir stellen Ihnen die photometrischen Daten zu unseren Leuchten auf www.xal.com zur Verfügung. Diese können mit der Beleuchtungssoftware RELUX oder DIALux genutzt werden.

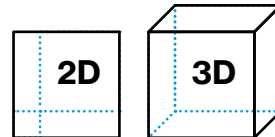
EN The photometric data for our luminaires is available at www.xal.com. This data can be used with the light planning software RELUX or DIALux.



NANO System Konfigurator / NANO system configurator

DE Komplexere Nano Systeme bedürfen einer sorgfältigen Planung; trotzdem würden Sie gerne rasch sehen, wie Ihre Ideen technisch umsetzbar sind? Der XAL NANO Konfigurator als praktisches Online-Tool assistiert Ihnen dabei und generiert außerdem auf Knopfdruck eine komplette Bestellliste. Das bedeutet für Sie maximalen Komfort für maximalen Output mit minimalem Zeitaufwand. nano.xal.com

EN More complex nano systems require careful planning. Even so, wouldn't you like to take a quick look and see how your ideas can be converted into technical solutions? The XAL nano configurator is a practical online tool which will help you in the process. It generates a complete order list at the touch of a button. What that means for you is maximum convenience and maximum output in the minimum of time. nano.xal.com



2D und 3D Daten / 2D and 3D data

DE Um Ihre Lichtplanung noch einfacher zu machen, stellen wir Ihnen als Kundenservice 2D und 3D Daten unserer Produkte auf www.xal.com zur Verfügung.

EN In order to make your light planning even easier, we provide 2D and 3D data for our products at www.xal.com as a customer service.



5 Jahre Garantie / 5 years warranty

DE XAL Produkte stehen für höchste Qualität für viele Jahre. Kommen Sie in den Genuss der von uns zugesicherten vollen 5-Jahres-Garantie, indem Sie sich auf www.xal.com/garantie registrieren.

EN XAL products stand for the highest level of quality for many years. Enjoy all the benefits of our five-years guarantee by registering at www.xal.com/guarantees

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