



## NP Focus-4 1CH



DATENBLATT  
DATASHEET

# NP Focus-4 1CH

4400 Lumen, präzise auf den Punkt  
4400 lumen precisely to the point



12 m per feed-in (dimmed) | 4400 lm/m\*  
CRI > 90 | 2200 K-4000 K

Mit bis zu 4400 lm/m Lichtstrom und Präzisionslinsen über jeder HighPowerLED wird das **NauticProfil® Focus-4 1CH** den hohen Anforderungen an Helligkeit und Lichtverteilung gerecht. Die optimale Wahl auch für Beleuchtungen mit UGR-Vorgaben. 48VDC Betriebsspannung sorgen für hohe Effizienz und Lebensdauer und machen den Leuchteinsatz NP Focus-4 auch für Verkehrsprojekte und Installationsorte mit weiten Zuleitungen interessant. Das Dimmen der LEDs erfolgt per SPWM Signal. Eine technische Besonderheit von FLASHAAR®. Der NP Focus-4 1CH Leuchten-einsatz ist alternativ auch mit schwarzem oder transparentem PU-Verguss in der Schutzart IP65 lieferbar.



## Standardausführung

Aluminium eloxiert, inkl. IP65 Standardverguss transparent (PUTS)

## Standard version

Anodised aluminium, incl. IP65 standard encapsulation transparent (PUTS)

## Sonderausführung schwarz eloxiert

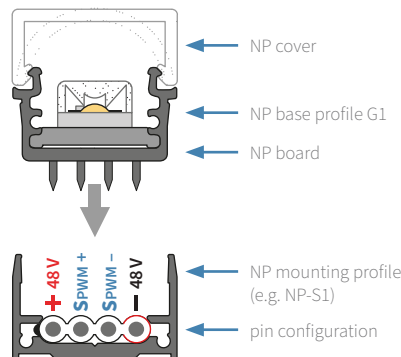
inkl. optionalen schwarzen Verguss (PUTB)

## special version black anodized

incl. optional black encapsulation (PUTB)

With a luminous flux of up to 400 lumen/m and precision lenses on each HighPowerLED, the **NauticProfil® Focus-4 1CH** light insert satisfies the high demands that are made on brightness and light distribution. It is therefore the optimum choice for lighting that must meet UGR specifications. The operating voltage of 48 V DC ensures high efficiency and long service life and also makes the NP Focus-4 luminaire insert interesting for traffic projects and installation locations with long supply lines. The LEDs are dimmed on the circuit board using an SPWM signal. A special feature of FLASHAAR®. The NP Focus-4 1CH light insert is also available with black or transparent PU-encapsulation, IP65 protection.

ALA (Standard)



characteristics



dimming



optional



mounting



\* Alle Angaben zum Lumenstrom beziehen sich auf das Leuchtmittel. In Kombination mit Cover/Linsen kommt es zu materialbedingtem Lichtverlust.  
All information about the luminous flux refers to the light source. In combination with covers/lenses it comes to material-related light loss.

**Bestellnummer**  
item number

NP/F1C/G1/26D

F1C/G1/ 0258

G1/ ALA

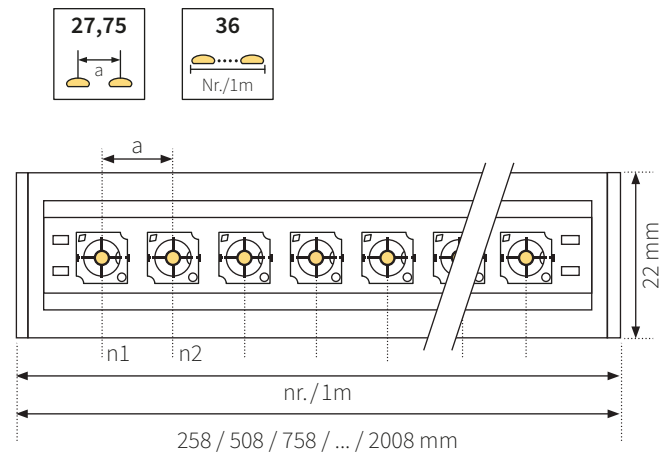
927

LSNT/10770

CST

**Technische Daten**  
technical data

nominal voltage: 48VDC (Range: 36 to 48VDC)  
 nominal wattage, white: 26W/m (220 mA)  
 photometric code: 822/339, 927/339, 930/339, 840/339  
 LED service life: L80/B10 > 54000 h  
 L90/B10 > 54000 h (350 mA)  
 dimmable: signal pulse width modulation (SPWM)  
 length dividing matrix: 250 mm  
 LED pitch: 27,75 mm, 36 LEDs/m  
 solder jumper: 220, 350, 500, 630 mA (standard 220 mA)  
 L(max) DIMMED = 12m (depending on light colour, max. 516W)  
 with separately infeeded PWM signal, according to cabling  
 scheme D/SPWM/1  
 PIN configuration: +48VDC | +SPWM | -SPWM | -48VDC  
 L(max) NOT DIMMED = 39m (depending on light colour,  
 max. 1920W). According to cabling scheme S/SPWM/1a.  
 PIN configuration: + - - + (48VDC)

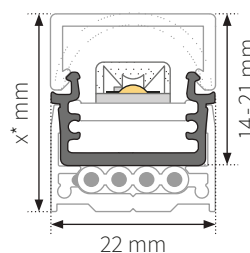


▲ Alle optischen und elektrischen Daten haben eine Toleranz von +/-10%  
 All optical and electrical data have a tolerance of +/-10%

**Basisprofil**  
base profile

Das Basisprofil G1 ist mit allen NP Montageprofilen von FLASHAAR® per Plug&Play kombinierbar. Es ist in den Farben Aluminium (ALA) und Schwarz (BA) eloxiert erhältlich.

The base profile G1 can be combined with all NP mounting profiles from FLASHAAR® by Plug & Play. It is available in the colours aluminium (ALA) and black (BA) anodised.



- G1/ALA (Standard)
- G1/BA

\*Leuchtenhöhe abhängig vom Montageprofil (21-168 mm), Maße ab S.8

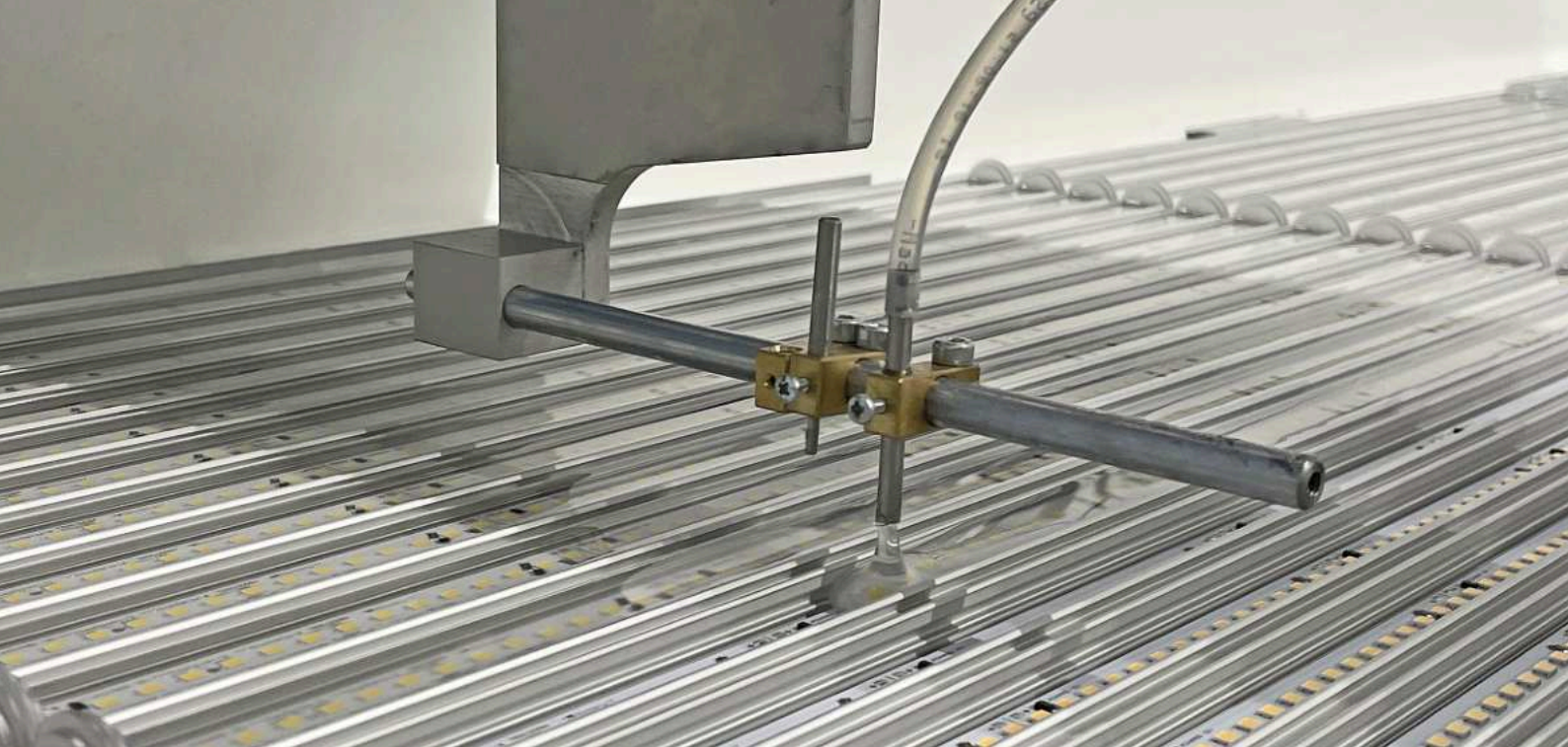
\*Luminaire height depending on mounting profile (21-168 mm), scale from p.8

**Farbtemperatur und Lumenstrom**  
colour temperature and luminous flux

|   | WW 2200 K | WW 2700 K | WW 3000 K | NW 4000 K | Red       | Green     | Blue     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| Farbtemperatur<br>colour temperature                              | WW 2200 K | WW 2700 K | WW 3000 K | NW 4000 K | Red       | Green     | Blue     |
| CRI typ.  | 85        | 93        | 93        | 84        |           |           |          |
| Lumenstrom* 220 mA (Standard)<br>luminous flux* 220 mA (standard) | 1688 lm/m | 1856 lm/m | 2730 lm/m | 2864 lm/m | 1300 lm/m | 2300 lm/m | 500 lm/m |
| Lumenstrom* 350 mA<br>luminous flux* 350 mA                       | 2492 lm/m | 2740 lm/m | 3616 lm/m | 4228 lm/m | 2012 lm/m | 3632 lm/m | 751 lm/m |
|   | 822       | 827       | 830       | 840       | XXR       | XXG       | XXB      |

▲ Achten Sie bitte beim Betrieb der Focus-4 1CH im NP-S1, NP-S2 **auf ausreichend Kühlung!** Im Standard 220 mA auch im NP-S1 und NP-S2 verwendbar.  
 While operating the Focus-4 1CH in the NP-S1, NP-S2, **ensure there is sufficient cooling!** In standard 220 mA also usable in NP-S1 and NP-S2.

\* Alle Angaben zum Lumenstrom beziehen sich auf das Leuchtmittel. In Kombination mit Cover/Linsen kommt es zu materialbedingtem Lichtverlust.  
 All information about the luminous flux refers to the light source. In combination with covers/lenses it comes to material-related light loss.



## Übersicht Standardlängen & Wattagen overview standard lengths & wattages

| IP40,IP65                         |   |               |               |
|-----------------------------------|---|---------------|---------------|
| Product-Nr.                       | L (mm)*   | Watt (220 mA) | Watt (350 mA) |
| NP/F1C/G1/26D/F1C/G1/0258/###/... | 0258  | 6,20 W        | 10,60 W       |
| NP/F1C/G1/26D/F1C/G1/0508/###/... | 0508  | 12,40 W       | 21,20 W       |
| NP/F1C/G1/26D/F1C/G1/0758/###/... | 0758  | 18,60 W       | 31,80 W       |
| NP/F1C/G1/26D/F1C/G1/1008/###/... | 1008  | 24,80 W       | 42,40 W       |
| NP/F1C/G1/26D/F1C/G1/1258/###/... | Piercing beidseitig / double-side piercing ⚠ 1258 | 31,00 W       | 53,00 W       |
| NP/F1C/G1/26D/F1C/G1/1508/###/... | Piercing beidseitig / double-side piercing ⚠ 1508 | 37,20 W       | 63,60 W       |
| NP/F1C/G1/26D/F1C/G1/1758/###/... | Piercing beidseitig / double-side piercing ⚠ 1758 | 43,40 W       | 74,20 W       |
| NP/F1C/G1/26D/F1C/G1/2008/###/... | Piercing beidseitig / double-side piercing ⚠ 2008 | 49,60 W       | 84,80 W       |

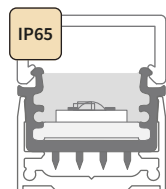
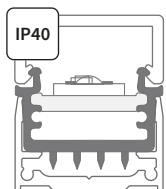
\* Länge der Leuchteneinsätze im Innenbereich von 258 mm (10,6W) bis max. 2008 mm (84,8W). Im Außenbereich (IP65) Länge von 258mm (10,6W) bis max. 1008 mm (42,4W). LED-Teilungsraster ist 250mm. Bei einer Länge von 1258 mm bis 2008 mm sind Piercings in beiden Stirnseiten erforderlich.

\* Light inserts for indoor use from 258 mm (10,6W) up to a maximum length of 2008 mm (84,8W). Outdoor (IP65) length from 256 mm (10,6W) to max. 1008 mm (42,4W). The grid uses 250mm increments. With a length of 1258 to 2008 mm piercings are needed on both ends.

### IP Schutzarten IP protection types

Je nach Anwendung, gibt es verschiedene Schutzarten für unsere LED Leuchteneinsätze. Als Standard bieten wir unsere Leuchten in **IP40** an. Für die Schutzart **IP65** vergießen wir unsere Leuchten mit einem hochwertigen transparenten Polyurethan-Verguss (PU-Verguss), frei von störenden Mikroblasen.

Depending on the application, there are different protection types for our LED light inserts. As standard, we offer the luminaires in **IP40**. For protection type **IP65**, we cast our luminaires with a high-quality transparent polyurethane encapsulation (PU encapsulation) free of disruptive micro-bubbles.



### Vergussarten potting types

Unser hochwertiger LED-Verguss mit Polyurethan ist in unterschiedlichen Vergussfarben und Härtegrade, von soft, medium bis hin zu glashart lieferbar.


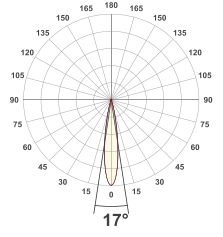

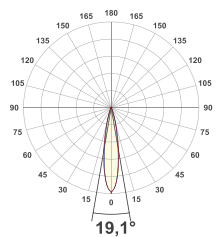

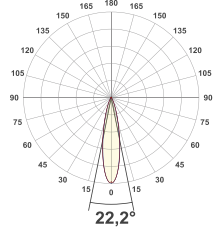

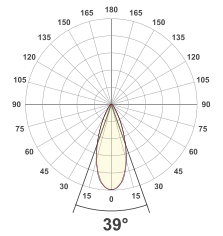

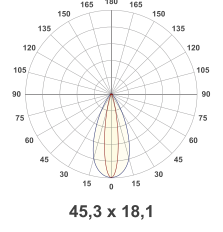
Our high-quality LED encapsulation with polyurethane is available in different encapsulation colours and degrees of hardness, from soft and medium to glass-hard.

**Standard PU-Verguss:** PUTS = transparent (T), soft (S)  
Vergussarten/potting types: soft (S), medium (M), glass-hard (H),  
Vergussfarben/potting colours: transparent (T), white (W), black (B)

PUTS = PU transparent, soft,  
PUTM = PU transparent, medium,  
PUTH = PU transparent, glass-hard  
PUWS = PU white, soft  
PUWM = PU white, medium  
PUWH = PU white, glass-hard  
PUBT = PU black, soft  
PUBM = PU black, medium  
PUBH = PU black, glass-hard

**Lichtverteilungskurven NP/F1C/G1/26D**  
light distribution curves NP/F1C/G1/26D

(Standard) 220 mA

| Lichtfarbe/ -strom<br>luminous colour / flux | Linse<br>lenses   | Lichtverteilungskurve<br>light distribution curve  |   |
|--|---|--|---|
| WW 3000 K<br>2108 lm/m<br>CRI 93,3           | <b>930</b><br> <b>LSNT/10770</b><br>precision lens<br>symmetric<br>narrow transparent<br>16°       | <br>17°           | Der Leuchteneinsatz NP Focus-4 1CH ist alternativ auch mit schwarzem oder transparentem PU-Verguss in der Schutzart IP65 lieferbar.<br>The light insert NP Focus-4 1CH is also available with black or transparent PU-encapsulation, IP65 protection.   |
| WW 3000 K<br>2352 lm/m<br>CRI 92,9           | <b>930</b><br> <b>LSNF/10771</b><br>precision lens<br>symmetric<br>narrow frosted<br>18°           | <br>19,1°         |   |
| WW 3000 K<br>2092 lm/m<br>CRI 93,3           | <b>930</b><br> <b>LSMF/10772</b><br>precision lens<br>symmetric<br>medium frosted<br>22°          | <br>22,2°        | Alle Werte in der Tabelle gemessen bei 3000 K mit Cover square transparent. Messwerte unterliegen den typischen Toleranzen.<br>Andere Konfigurationen erhalten Sie auf Anfrage.<br>All values in the table measured at 3000 K with cover square transparent. Measured values are subject to the typical tolerances.<br>Other configurations are available on request.         |
| WW 3000 K<br>1912 lm/m<br>CRI 93,5           | <b>930</b><br> <b>LSLF/10773</b><br>precision lens<br>symmetric<br>large frosted<br>40°          | <br>39°         | Alle lichttechnischen Daten – vermessen im FLASHAAR® Lichtlabor – finden Sie unter flashaar.de im Download-Bereich. Alle optischen und elektrischen Daten haben eine Toleranz von +/- 10%.<br>All photometric data – measured in FLASHAAR's light laboratory – available at flashaar.de/en in the download area. All optical and electrical data have a tolerance of +/- 10%. |
| WW 3000 K<br>2140 lm/m<br>CRI 93,3           | <b>930</b><br> <b>LSOT/10774</b><br>precision lens<br>symmetric oval<br>transparent<br>42° x 18° | <br>45,3 x 18,1 | <b>Messdaten für IP65 auf Anfrage.</b><br>Measurement data for IP65 on request.   |

— 0/180°  
— 90/270°

EPREL Daten:




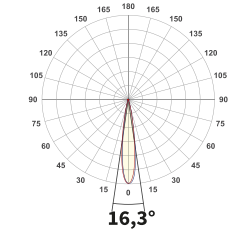

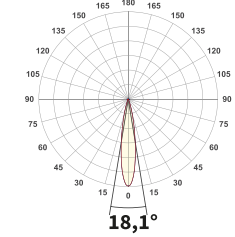

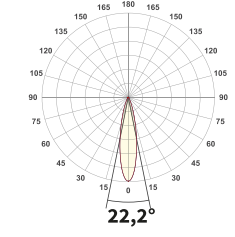

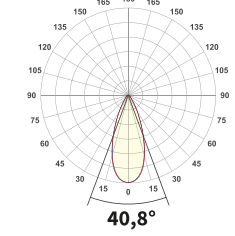

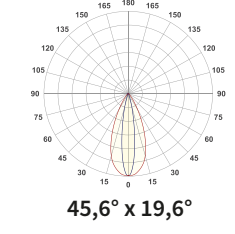
2700 K



3000 K



4000 K

| Lichtfarbe/ -strom<br>luminous colour / flux | Linse<br>lenses   | Lichtverteilungskurve<br>light distribution curve   |   |
|--|---|---|---|
| WW 2700 K<br>3024 lm/m<br>CRI 92,9           | <b>927</b><br> <b>LSNT/10770</b><br>precision lens<br>symmetric<br>narrow transparent<br>16°       | <br><b>16,3°</b>           | Der Leuchteneinsatz NP Focus-4 1CH ist alternativ auch mit schwarzem oder transparentem PU-Verguss in der Schutzart IP65 lieferbar.<br>The light insert NP Focus-4 1CH is also available with black or transparent PU-encapsulation, IP65 protection.   |
| WW 2700 K<br>2960 lm/m<br>CRI 92,7           | <b>927</b><br> <b>LSNF/10771</b><br>precision lens<br>symmetric<br>narrow frosted<br>18°           | <br><b>18,1°</b>           |   |
| WW 2700 K<br>2864 lm/m<br>CRI 93,1           | <b>927</b><br> <b>LSMF/10772</b><br>precision lens<br>symmetric<br>medium frosted<br>22°          | <br><b>22,2°</b>          | Alle Werte in der Tabelle gemessen bei 2700 K mit Cover square transparent. Messwerte unterliegen den typischen Toleranzen.<br>Andere Konfigurationen erhalten Sie auf Anfrage.<br>All values in the table measured at 2700 K with cover square transparent. Measured values are subject to the typical tolerances.<br>Other configurations are available on request.         |
| WW 2700 K<br>2652 lm/m<br>CRI 93,4           | <b>927</b><br> <b>LSLF/10773</b><br>precision lens<br>symmetric<br>large frosted<br>40°          | <br><b>40,8°</b>         | Alle lichttechnischen Daten – vermessen im FLASHAAR® Lichtlabor – finden Sie unter flashaar.de im Download-Bereich. Alle optischen und elektrischen Daten haben eine Toleranz von +/- 10%.<br>All photometric data – measured in FLASHAAR's light laboratory – available at flashaar.de/en in the download area. All optical and electrical data have a tolerance of +/- 10%. |
| WW 2700 K<br>2844 lm/m<br>CRI 93,2           | <b>927</b><br> <b>LSOT/10774</b><br>precision lens<br>symmetric oval<br>transparent<br>42° x 18° | <br><b>45,6° x 19,6°</b> | <b>Messdaten für IP65 auf Anfrage.</b><br>Measurement data for IP65 on request.   |

— 0/180°  
— 90/270°

EPREL Daten:



2700 K








3000 K








4000 K

# Linsen lenses

|   |   |   |   |   |
|---|---|---|---|---|
|  <b>LSNT/10770</b><br>precision lens<br>symmetric<br>narrow transparent<br>16° |  <b>LSNF/10771</b><br>precision lens<br>symmetric<br>narrow frosted<br>18° |  <b>LSMF/10772</b><br>precision lens<br>symmetric<br>medium frosted<br>22° |  <b>LSLF/10773</b><br>precision lens<br>symmetric<br>large frosted<br>40° |  <b>LSOT/10774</b><br>precision lens<br>symmetric oval<br>transparent<br>42° x 18° |
|---|---|---|---|---|

# Abdeckung / Farbe cover / colour

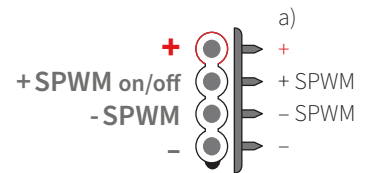
|  |  |   |  |  |
|--|--|---|--|--|
|  <b>CRT</b><br>cover round<br>transparent |  <b>CRF</b><br>cover round<br>frosted |  <b>CST</b><br>cover square<br>transparent |  <b>CSF</b><br>cover square<br>frosted |  <b>CSG</b><br>cover square<br>grey |
|--|--|---|--|--|

# Verdrahtungsschemata wiring diagrams

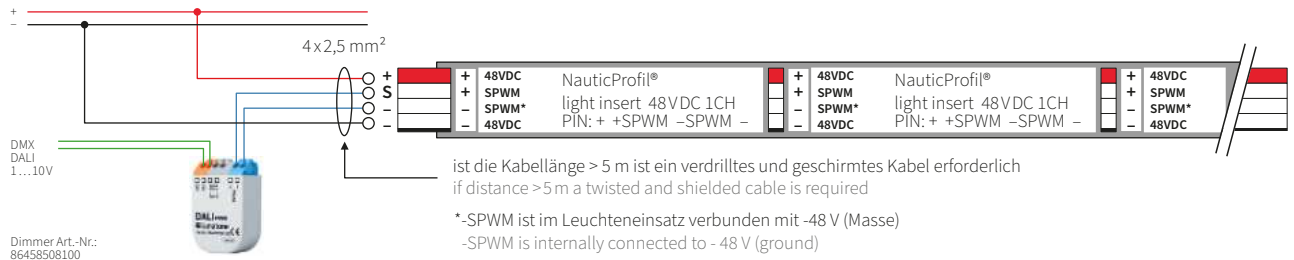
Beispiel für max. Länge mit einer elektrischen Einspeisung.\*  
 Example for max. length with one electrical feed.\*

## D/SPWM/1a (1x1CH)

Dimmbar über SPWM, System mit 1 Kanal, 48VDC /  
 1CH Leuchteneinsatz / Dimmart: Steuerungs-PWM (SPWM)  
 dimmable via SPWM, 48VDC single channel system /  
 1CH light insert (monochrome) / dimming: Signal-PWM  
 +SPWM short to: -SPWM / -48 V / GND=ON; +SPWM open or short to +48V=OFF

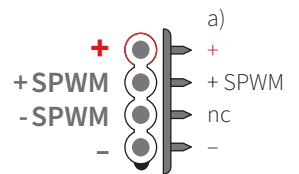


### 48 VDC

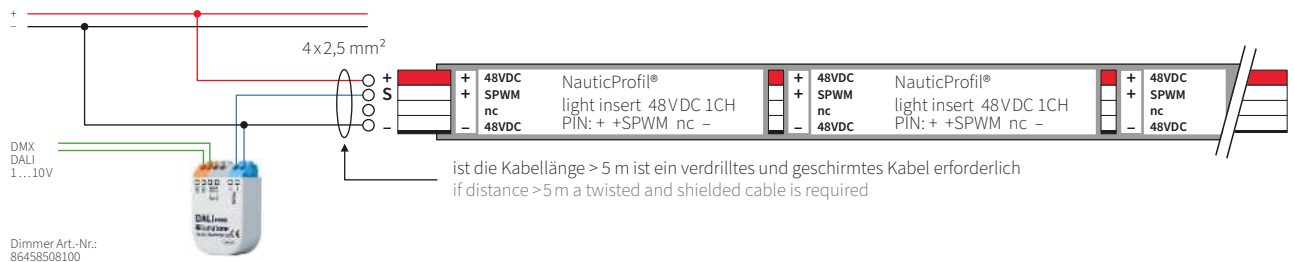


## D/SPWM/1b (1x1CH)

Dimmbar über SPWM, System mit 1 Kanal, 48VDC /  
 1CH Leuchteneinsatz / Dimmart: Steuerungs-PWM (SPWM)  
 dimmable via SPWM, 48VDC single channel system /  
 1CH light insert (monochrome) / dimming: Signal-PWM  
 +SPWM short to: -SPWM / -48 V / GND=ON; +SPWM open or short to +48V=OFF



### 48 VDC



# Übersicht Abmessungen und Einbaumaße mit dem Basisprofil G1

overview dimensions and installation dimensions with base profile G1

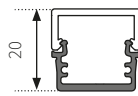
covers and lenses ▶



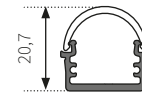
NP mounting profiles



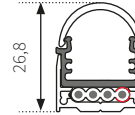
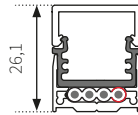
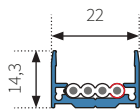
cover CS



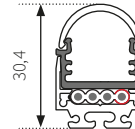
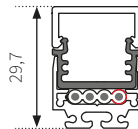
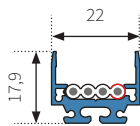
cover CR



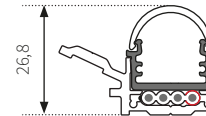
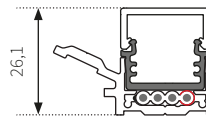
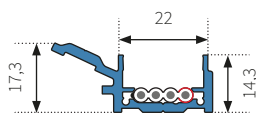
NP S1



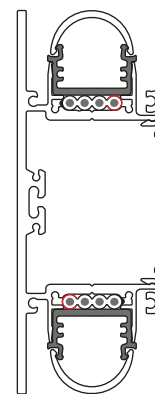
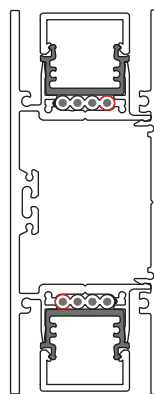
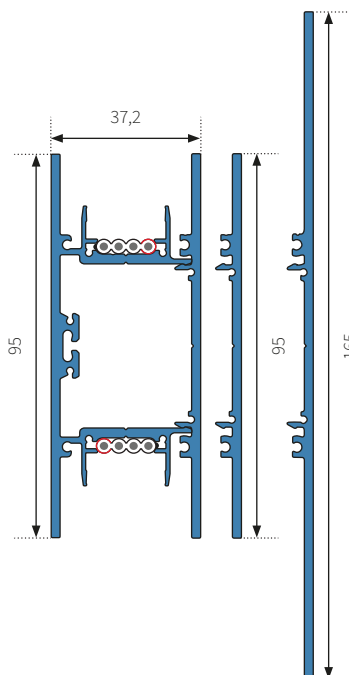
NP S2



NP S3



NP H1/H2





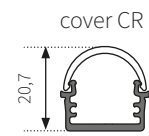
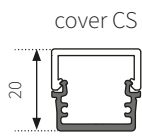
# Übersicht Abmessungen und Einbaumaße mit dem Basisprofil G1

overview dimensions and installation dimensions with base profile G1

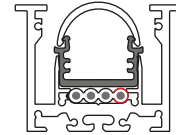
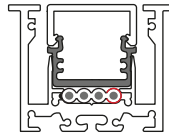
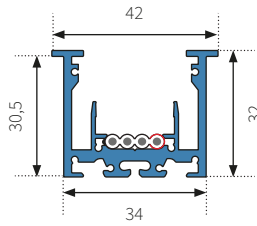
covers and lenses ▶



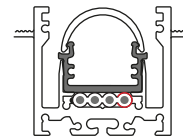
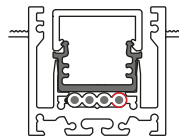
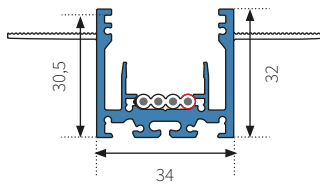
NP mounting profiles



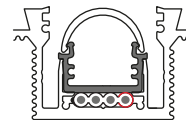
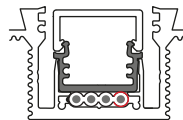
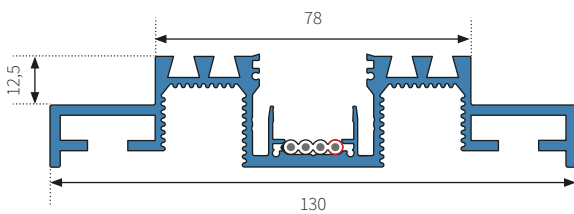
NP R1



NP R2/R4



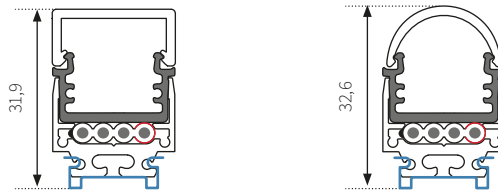
NP R3



**Übersicht Abmessungen und Einbaumaße NP S2 mit Montageclips mit dem Basisprofil G1**  
 overview dimensions and installation dimensions NP S2 with mounting clips with base profile G1

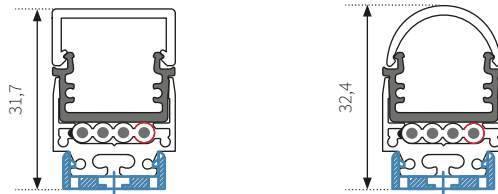
**FL/SCLIP-0/0**

Federclip 0°  
 spring clip 0°



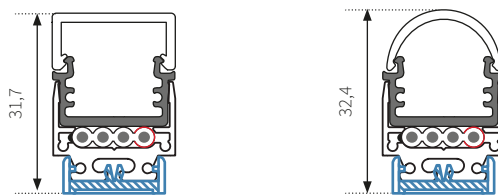
**FL/CLIP-0/0**

Montageclip 0°, ohne Zapfen gegen Gleiten  
 mounting clip 0°, without stud to prevent sliding



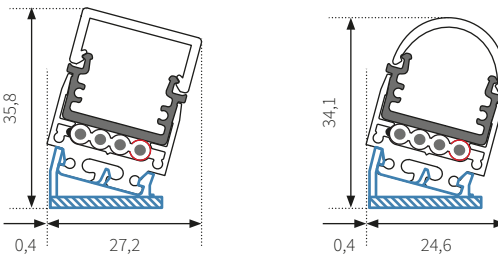
**FL/CLIP-1/0**

Montageclip 0°, mit Zapfen gegen Gleiten  
 mounting clip 0°, with stud to prevent sliding



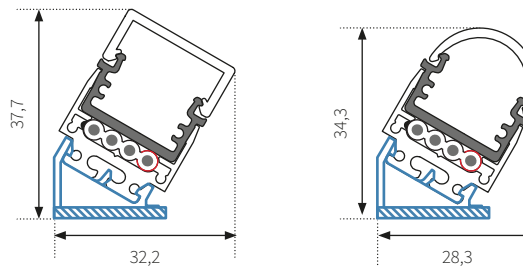
**FL/CLIP-1/15**

Montageclip 15°, mit Zapfen gegen Gleiten  
 mounting clip 15°, with stud to prevent sliding



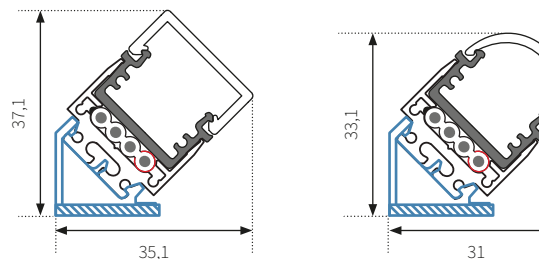
**FL/CLIP-1/30**

Montageclip 30°, mit Zapfen gegen Gleiten  
 mounting clip 30°, with stud to prevent sliding



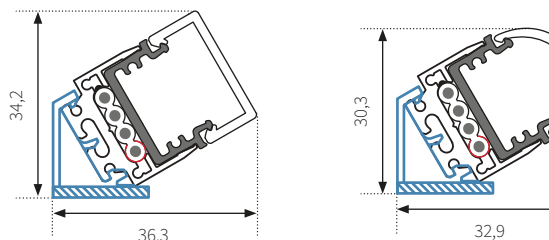
**FL/CLIP-1/45**

Montageclip 45°, mit Zapfen gegen Gleiten  
 mounting clip 45°, with stud to prevent sliding



**FL/CLIP-1/60**

Montageclip 60°, mit Zapfen gegen Gleiten  
 mounting clip 60°, with stud to prevent sliding





## Allgemeine Geschäftsbedingungen

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<https://flashaar.de/agb/>

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<https://flashaar.de/en/conditions/>

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## delivery information

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- Produktname
- Vollständige Artikelnummer (inklusive den zu ergänzenden Angaben z. B. Lichtfarbe, Cover- oder Linsentyp usw.)
- gewünschte Lieferzeit
- Lieferadresse

### information required on your order

- product name
- complete item number (including specification codes e.g. light colour, cover or lens type etc.)
- required delivery period
- delivery address

### Bestelladresse

FLASHAAR LEDLight GmbH & Co. KG  
Gaustraße 13–15  
55411 Bingen am Rhein  
Deutschland  
FON +49 6721 9195-0  
FAX +49 6721 9195-91  
[bestellung@ledlight.flashaar.com](mailto:bestellung@ledlight.flashaar.com)  
<https://flashaar.de>

### ordering address

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FAX +49 6721 9195-91  
[order@ledlight.flashaar.com](mailto:order@ledlight.flashaar.com)  
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### indicative value of shipping costs

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## Ausgabe

## edition

### Stand: KW 31, 2024

Druckfehler, Irrtum und technische Änderungen sind vorbehalten.

### last status: week 31, 2024

Technical changes, errors and printing mistakes are reserved.