



## Tubular light fitting with LED

Series 6036/3

– Save for future use! –

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# 1 General information

## 1.1 Manufacturer

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Germany

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Internet: r-stahl.com  
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R. STAHL Schaltgeräte GmbH

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74638 Waldenburg  
Germany

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Fax: +49 7942 943-4333  
Internet: r-stahl.com  
E-mail: info@r-stahl.com

## 1.2 About these operating instructions

- ▶ Read these operating instructions, especially the safety notes, carefully before use.
- ▶ Observe all other applicable documents (see also chapter 1.3).
- ▶ Keep the operating instructions throughout the service life of the device.
- ▶ Make the operating instructions accessible to operating and maintenance staff at all times.
- ▶ Pass the operating instructions on to each subsequent owner or user of the device.
- ▶ Update the operating instructions every time R. STAHL issues an amendment.

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The original instructions are the German edition.  
They are legally binding in all legal affairs.

## 1.3 Further documents





- Data sheet
- For documents in other languages, see r-stahl.com.

## 1.4 Conformity with standards and regulations

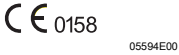



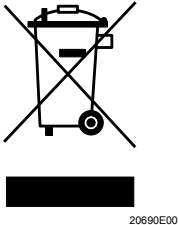
For certificates and the declaration of conformity, see r-stahl.com.

## 2 Explanation of symbols

### 2.1 Symbols used in these operating instructions

Symbol	Meaning
	Handy hint for making work easier
 <b>DANGER!</b>	Dangerous situation which can result in fatal or severe injuries causing permanent damage if the safety measures are not complied with.
 <b>WARNING!</b>	Dangerous situation which can result in severe injuries if the safety measures are not complied with.
 <b>CAUTION!</b>	Dangerous situation which can result in minor injuries if the safety measures are not complied with.
<b>NOTICE!</b>	Dangerous situation which can result in material damage if the safety measures are not complied with.

### 2.2 Symbols on the device

Symbol	Meaning
	CE marking according to the current applicable directive.
	UKCA marking according to the currently applicable directive.
	Device certified for hazardous areas according to the marking.
	Safety notes that must always be observed: The corresponding data and/or safety-related instructions contained in the operating instructions must be followed for devices with this symbol!
	Marking according to WEEE Directive 2012/19/EU

### 3 Safety

The device has been manufactured according to the state of the art of technology while observing recognised safety-related rules. When using the device, it is nevertheless possible for hazards to occur to life and limb of the user or third parties or for the device, environment or material assets to be compromised.

- ▶ Use the device only
  - if it is not damaged
  - in accordance with its intended use, taking into account safety and hazards
  - in accordance with these operating instructions

The system operator is responsible for ensuring the safety of the system, device and operating personnel involved. For this purpose, they must observe the relevant national laws, standards and regulations (such as IEC/EN 60079-14, IEC/EN 60079-17 and IEC/EN 60079-19).

#### 3.1 Intended use

The 6036/3 light fittings are for lighting surfaces, work areas and objects. The light fitting can be used indoors and outdoors and is intended for stationary mounting.

It is explosion-protected equipment approved for use in hazardous areas of Zones 1, 2, 21 and 22, in mines susceptible to firedamp, and in safe areas.

"Intended use" includes complying with these operating instructions and the other applicable documents, e.g. the data sheet. All other uses are only intended after being approved by R. STAHL.

#### 3.2 Personnel qualification

Qualified specialist personnel is required to perform the activities described in these operating instructions. This primarily applies to work in the following areas

- Mounting/dismounting the device
- Installation
- Commissioning
- Maintenance, repair, cleaning

**Specialists who perform these activities must have a level of knowledge that meets applicable national standards and regulations.**

**Additional knowledge is required for any activity in hazardous areas! R. STAHL recommends having a level of knowledge equal to that described in the following standards:**

- IEC/EN 60079-14 (Electrical installations design, selection and erection)
- IEC/EN 60079-17 (Electrical installations inspection and maintenance)
- IEC/EN 60079-19 (Equipment repair, overhaul and reclamation)

### 3.3 Residual risks

#### 3.3.1 Explosion hazard

To reduce the risk in hazardous areas, it is essential to note the following points.

- ▶ Perform all work steps in hazardous areas with the utmost care at all times!
- ▶ Transport, store, plan, mount and operate the device exclusively in compliance with the technical data (see the "Technical data" chapter).

Possible hazards ("residual risks") can be categorized according to the following causes:

##### **Mechanical damage**

The device may be damaged during transport, mounting or commissioning. This kind of damage may, for example, render the device's explosion protection partially or completely ineffective. This may result in explosions causing serious or even fatal injury.

- ▶ Transport the device only in its original packaging or in equivalent packaging.
- ▶ Do not damage the light fitting or cables when mounting them (e.g. when using a knife to unpack them).
- ▶ Check the packaging and the device for damage. Report any damage to R. STAHL immediately. Do not commission a damaged device.
- ▶ Transport and store the device in its original packaging in a dry place (with no condensation), and make sure that it is stable and protected against the effects of vibrations and knocks.

##### **Excessive heating or electrostatic charge**

Operation outside of approved conditions or improper cleaning can cause the device to heat up severely or to become electrostatically charged, causing it to produce sparks. This may result in explosions causing serious or even fatal injury.

- ▶ Operate the device within the prescribed operating conditions only (see the label on the device and the "Technical data" chapter).
- ▶ Install the device in such a way that it is always operated within the permissible temperature range.
- ▶ Do not use the device in environments with kerosene, ammonia or phosphorus vapours.
- ▶ Do not use the device in strong charge-generating environments.
- ▶ Avoid friction and flow of particle streams.
- ▶ Clean the device with a damp cloth only.

**Improper mounting, installation, commissioning, maintenance operation or cleaning**

Basic work such as installation, commissioning, maintenance or cleaning of the device must be performed only in accordance with the applicable national regulations of the country of use and only by qualified persons. Otherwise, the explosion protection may be rendered ineffective. This may result in explosions causing serious or even fatal injury.

- ▶ Only have mounting, installation, commissioning and maintenance work performed by qualified and authorised persons (see chapter 3.2).
- ▶ Prior to commissioning, check the device is correctly mounted (see chapter 7).
- ▶ Only fit the device in the permitted assembly position (see chapter 5.1).
- ▶ Install the device on a level surface only.
- ▶ Do not damage the enclosure, cables, cable entry or cover cap with anti-fall mechanism during mounting.
- ▶ Do not remove or modify the cable entry.
- ▶ Only install the connection line if it is undamaged, and ensure it is mounted securely.
- ▶ Do not change or modify the device.
- ▶ Repair work on the device must be performed only by R. STAHL.
- ▶ Gently clean the device with a damp cloth only – do not use scratching, abrasive or aggressive cleaning agents or solutions.

### 3.3.2 Risk of injury

**Falling devices or components**

The heavy device or components can fall during transport and mounting, causing severe injury to persons in the form of bruises and contusions.

- ▶ Adhere to the operator's safety regulations, e.g. regarding the use of personal protective equipment (safety shoes).
- ▶ Use transporting and lifting equipment suitable for the size and weight of the device when transporting and mounting it.
- ▶ Observe the weight and the maximum load-bearing capacity of the device; see specifications on the shipping label or on the packaging.
- ▶ Use suitable mounting materials for mounting (see accessories) and optionally the anti-fall mechanism for the light fitting.

**Insufficient personal protective equipment when in direct contact with the device**

Anyone not using personal protective equipment when near the device may be injured due to optical radiation.

- ▶ Use personal protective equipment (safety goggles) during mounting, installation, commissioning, maintenance and repair.
- ▶ Never look directly into the light fitting during commissioning.
- ▶ Switch off the device before maintenance or cleaning.

### Electric shock

During operation and maintenance, the device has high voltage applied to it at times. Because of this, the device must be de-energised during mounting, installation, maintenance, cleaning and dismounting.

Persons coming into contact with cables carrying excessive voltage can suffer severe electric shocks and, consequently, injuries.

- ▶ Always disconnect the device from the power supply before mounting it.

### 3.3.3 Device damage

The device or individual components can be damaged so significantly as a result of unsuitable operating conditions or careless contact that it will not operate correctly or will fail completely.

- ▶ Ensure that the maximum ambient temperature is never exceeded.
- ▶ In an environment with a very high level of humidity, e.g. sewage treatment plants and rainwater retention basins, switch on the device for at least two hours every day. This will avoid moisture inside the device and prevent premature failure of the electronic elements.

## 4 Transport and storage

- ▶ Transport and store the device carefully and in accordance with the safety notes (see the "Safety" chapter).

## 5 Mounting and installation

### 5.1 Mounting/dismounting

- ▶ Mount the device carefully and only in accordance with the safety notes (see the "Safety" chapter).
- ▶ Read through the following installation conditions and assembly instructions carefully and follow them precisely.

#### 5.1.1 Mounting



The device is suitable for wall and ceiling mounting.

The device is delivered with a connection cable.

The mounting position with cable outlet upwards is prohibited in outdoor areas.

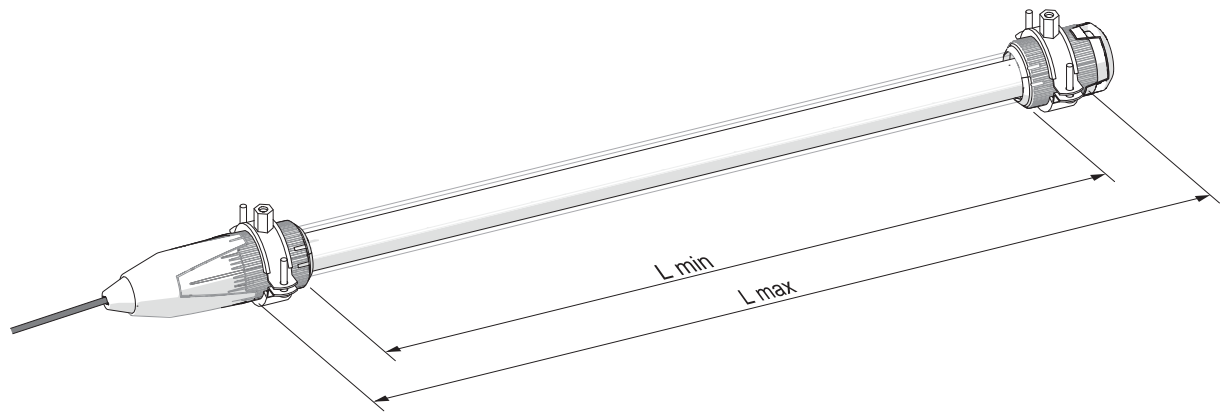


**DANGER! The connection cable poses a risk of strangulation injury!**

Non-compliance results in severe or fatal injuries.

- Securely attach the flexible cabling connected to this device to the wall if the cabling is within easy reach.

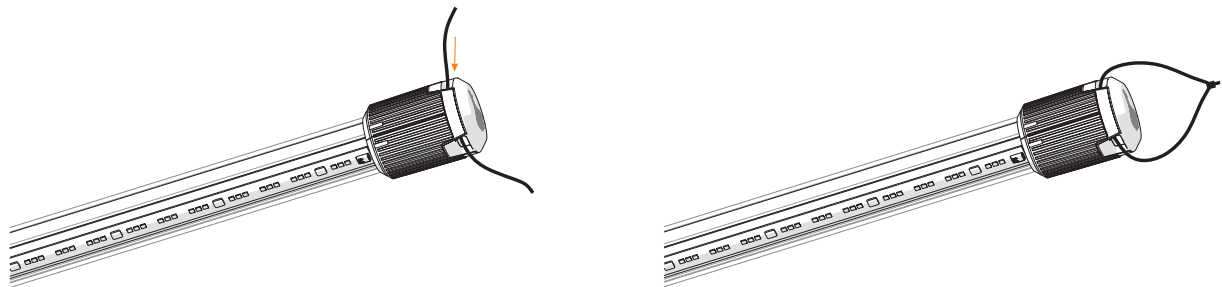




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Size	Lmin in mm [inches]	Lmax in mm [inches]
1	320 [12.6]	410 [16.1]
2	620 [24.4]	710 [28]
3	920 [36.2]	1010 [39.8]
4	1220 [48]	1310 [51.6]

- ▶ Use a clamping range between Lmin and Lmax for the installation accessories (dia. 54 mm).
- ▶ Fit suitable hanger bolts and pipe clamps (accessories).
- ▶ Screw the pipe clamps onto the hanger bolts.
- ▶ Mount the tubular light fitting inside the pipe clamps.



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- ▶ Use the ex-factory anti-fall mechanism.



### 5.1.2 Dismounting

- ▶ Disconnect the device from the power supply before dismounting.
- ▶ Remove the tubular light fitting from the pipe clamps.


## 5.2 Installation

### 5.2.1 Electrical connections

#### Mains connection

-  The device is delivered with a connection cable.
-  The connection to the power supply must be established using a terminal box or a plug.

#### Shortening the connection cable


-  **DANGER! Explosion hazard if the cable is shortened too much!**  
Non-compliance results in severe or fatal injuries.
  - Do not shorten the cable connected ex-factory to a length of < 1 m.

### 5.2.2 Light fittings with DALI connection

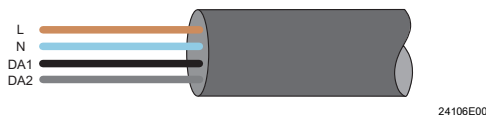
DALI-2 (according to IEC 62386):

- Device type 6 (LED driver)
- Device type 49 (integrated bus power supply ≤ 50 mA) – sizes 3 and 4 only on request
- Device type 51 (energy report)
- Device type 52 (diagnostics and maintenance)

The operating hours can be determined and the light fitting can be dimmed and switched via a DALI interface.

-  For size 3 and 4 light fittings, it is essential to consider the polarity (DA+, DA-) when connecting to an external DALI network.

Example: H07RN8-F, 4 x 1.5 mm<sup>2</sup>



- L (brown) = phase
- N (blue) = neutral conductor
- DA1 (black) = DALI+
- DA2 (grey) = DALI-

### 5.2.3 Light fittings with address module

#### Function

Address and switching module for R. STAHL emergency lighting systems according to VDE 0108:

The module is used for monitoring individual light fittings and for controlling mains and emergency luminaires together.

The module offers the following functions:

- Controlling the light fitting (ON/OFF) and calling up the function
- Up to 20 addresses can be configured for each electrical circuit by means of software
- Freely programmable type of connection (continuous light, stand-by light or switched light of the light fitting)
- Mixed operation within a circuit is possible

#### Addressing

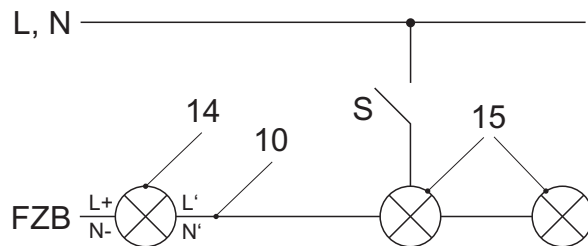
Each light fitting with an integrated address module also has a unique serial number.

This serial number is on the light fitting itself and can also be recorded with a QR code scanner. The light fitting address is assigned using the configuration software for the central battery unit or with a programming device available as an accessory.

#### Control input

Rated voltage: 220 to 230 V AC/DC, 50 Hz

The address module provides the opportunity to connect a control line for switching the light fitting together with the general lighting.



L, N	Power supply network	10	Control line
FZB	Battery system	14	Emergency lighting
S	General lighting switch	15	General lighting

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Example: H07RN8-F, 4 x 1.5 mm<sup>2</sup>



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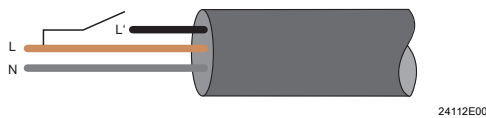
L (brown)	= phase
N (blue)	= neutral conductor
L' (black)	= control line
N' (grey)	= control line

### 5.2.4 Light fittings with L' function (switchable light reduction)

To reduce the luminous intensity, the light fitting can optionally be equipped with a switching phase.

	Switch closed	Switch open
Luminous intensity	100%	50%

Example: H07RN8-F, 3 x 1.5 mm<sup>2</sup>



L' (black) = switching phase  
 L (brown) = phase  
 N (grey) = neutral conductor

## 6 Commissioning

Before commissioning, carry out the following checks:

- ▶ Check the mounting and installation.
- ▶ Check the device for damage.
- ▶ Remove any foreign objects.
- ▶ Check whether the light fitting is securely installed.
- ▶ Check whether the line voltage and the rated operational voltage are the same.
- ▶ Check whether the light fitting in the hazardous area is being operated with both of the original cover caps fitted.
- ▶ Check whether the connection cable is undamaged and is attached correctly and securely.
- ▶ Put the device into operation according to the applicable national regulations and the safety notes in these operating instructions ("Safety" chapter).

## 7 Maintenance, overhaul, repair

- ▶ Observe the relevant national standards and regulations in the country of use, e.g. IEC/EN 60079-14, IEC/EN 60079-17, IEC/EN 60079-19.

### 7.1 Maintenance

Check the following points in addition to the national regulations:

- Whether the device has cracks or other visible signs of damage
- Whether the interior and exterior of the device are clean
- Whether the cables and electrical lines show signs of ageing and damage
- Whether the device is used as intended and functions properly

## 7.2 Maintenance

- ▶ Perform overhaul of the device according to the applicable national regulations and the safety notes in these operating instructions ("Safety" chapter).

## 7.3 Repair

- ▶ Repair work on the device must be performed only by R. STAHL.

## 8 Operation

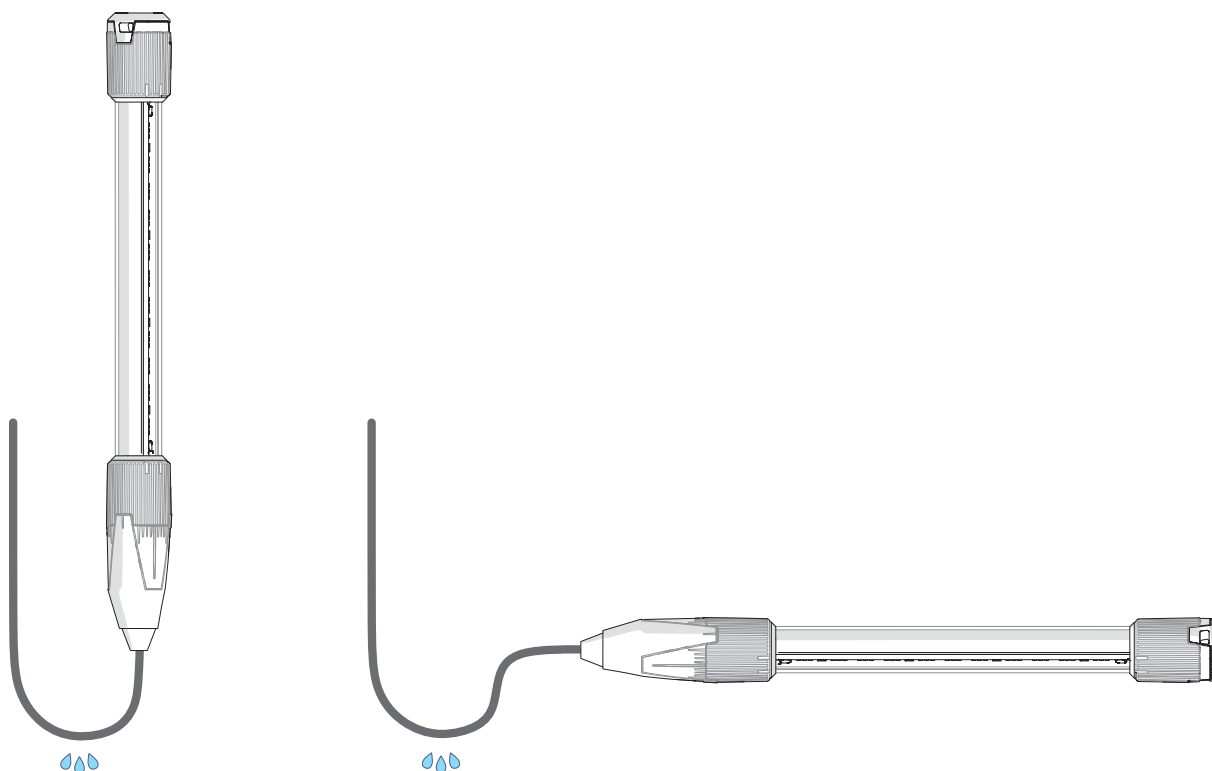
The functionality and safety of the device must be ensured at all times during operation.



**DANGER! Explosion hazard due to short circuit caused by moisture ingress!**

Non-compliance results in severe or fatal injuries.

- ▶ Ensure that cable entries are only located on the side or underside of the device (not on the top).



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## 9 Returning the device

- ▶ Only return or package the devices after consulting R. STAHL!  
Contact the responsible representative from R. STAHL.

R. STAHL's customer service is available to handle returns if repair or service is required.

- ▶ Contact customer service personally.

or

- ▶ Go to the r-stahl.com website.
- ▶ Under "Support" > "RMA" > select "RMA-REQUEST".
- ▶ Fill out the form and send it.  
You will automatically receive an RMA form via email. Please print this file off.
- ▶ Send the device along with the RMA form in the packaging to  
R. STAHL Schaltgeräte GmbH (refer to chapter 1.1 for the address).

## 10 Cleaning

- ▶ Switch off the device before cleaning it.
- ▶ Check the device for damage before and after cleaning it.  
Decommission damaged devices immediately.
- ▶ Devices located in hazardous areas may only be cleaned with a damp cloth to avoid electrostatic charge.
- ▶ When cleaning with a damp cloth, use water or mild, non-abrasive, non-scratching cleaning agents.
- ▶ Do not use abrasive cleaning agents or solvents.

## 11 Disposal

- ▶ Observe national, local and statutory regulations regarding disposal.
- ▶ Separate materials for recycling.
- ▶ Ensure environmentally friendly disposal of all components according to statutory regulations.

## 12 Accessories and spare parts

**NOTICE! Malfunction or damage to the device due to the use of non-original components.**  
Non-compliance can result in material damage.

- ▶ Use only original accessories and spare parts from R. STAHL Schaltgeräte GmbH  
(see data sheet).

## 13 Appendix A

### 13.1 Technical data

#### Explosion protection

##### Global (IECEX)

Gas, dust and mining	IECEX EPS 13.0027 Ex db op is IIC T* Gb Ex tb IIIC T* °C Db Ex db op is I Mb * For temperature classes and surface temperatures, see the technical data
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##### Europe (ATEX, UKEX)

Gas, dust and mining	EPS 13 ATEX 1 597, EPS 22UKEX 1400 ⊕ II 2 G Ex db op is IIC T* Gb ⊕ II 2 D Ex tb IIIC T* °C Db ⊕ I M 2 Ex db op is I Mb * For temperature classes and surface temperatures, see the technical data
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#### Certifications and certificates

Certifications	IECEX, ATEX, UKEX; for other certificates, see r-stahl.com
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#### Technical data

##### Electrical data

Rated operational voltage	<b>Standard + DALI</b>	<b>with address module</b>			
	<b>Size 1, size 2, size 3, size 4</b>	<b>Size 1, size 2, size 3, size 4</b>			
	100 to 277 V AC, 50 to 60 Hz	220 to 240 V AC, 50 Hz			
	190 to 250 V DC	194 to 250 V DC			
Rated operational current		<b>Size 1</b>	<b>Size 2</b>	<b>Size 3</b>	<b>Size 4</b>
	230 V; 50 Hz	60 mA	110 mA	170 mA	220 mA
	110 V; 60 Hz	120 mA	240 mA	360 mA	510 mA
	277 V; 60 Hz	60 mA	100 mA	160 mA	210 mA
Start-up current	$I_{\text{peak}} = 0.33 \text{ A}; \Delta t = 11 \text{ ms}$				
	Maximum number of light fittings per miniature circuit breaker <sup>1)</sup>				
	<b>Type</b>	<b>10 A</b>	<b>16 A</b>	<b>20 A</b>	<b>25 A</b>
	<b>B, C, K</b>	26	42	53	66

<sup>1)</sup> Typical values for 1-pole miniature circuit breaker at +25 °C and nominal voltage 230 V AC; the exact number depends on the miniature circuit breaker used

**Technical data**

Power factor		Size 1	Size 2	Size 3	Size 4
	230 V; 50 Hz	≥ 0.88	≥ 0.95	≥ 0.90	≥ 0.92
	110 V; 60 Hz	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
	277 V; 60 Hz	≥ 0.84	≥ 0.92	≥ 0.81	≥ 0.86
Typical power consumption	White tones				
		Size 1	Size 2	Size 3	Size 4
	230 V; 50 Hz	13 W	25 W	36 W	48 W
Class	II				
	THD	Size 1	Size 2	Size 3	Size 4
	230 V; 50 Hz	≤ 39%	≤ 12%	≤ 12%	≤ 12%
	110 V; 50 Hz	≤ 16%	≤ 10%	≤ 10%	≤ 10%
	277 V; 60 Hz	≤ 40%	≤ 15%	≤ 15%	≤ 15%



## Technical data

### Luminous characteristics

Colour rendering	2700 K, 4000 K and 6500 K: $R_a \geq 90$ 5000 K: $R_a \geq 80$			
Colour temperature	Depending on the variant, 2,700 K (warm white), 4,000 K (warm neutral white), 5,000 K (standard light colour, neutral white) or 6,500 K (daylight white)			
Luminous flux	<b>Size 1</b>	<b>Size 2</b>	<b>Size 3</b>	<b>Size 4</b>
	with diffuser			
	with 20° optics			
<b>Colour temperature</b>				
2700 K				
Luminous flux [lm]	1260	2530	3790	5060
Luminaire efficacy [lm/W]	96	105	105	108
4000 K				
Luminous flux [lm]	1350	2700	4050	5400
Luminaire efficacy [lm/W]	104	113	113	115
5000 K				
Luminous flux [lm]	1510	3050	4620	6040
Luminaire efficacy [lm/W]	116	127	128	128
6500 K				
Luminous flux [lm]	1350	2700	4050	5400
Luminaire efficacy [lm/W]	104	113	113	115
PC yellow				
Luminous flux [lm]	1210	2430	3720	4950
Luminaire efficacy [lm/W]	93	101	103	105
Monochromatic yellow				
Luminous flux [lm]	350	710	1070	1430
Luminaire efficacy [lm/W]	35	37	38	39
Green				
Luminous flux [lm]	1110	2240	3370	4490
Luminaire efficacy [lm/W]	85	93	94	96
Red				
Luminous flux [lm]	430	860	1290	1720
Luminaire efficacy [lm/W]	43	48	48	49
Blue				
Luminous flux [lm]	510	1020	1530	2040
Luminaire efficacy [lm/W]	39	43	44	44

Values apply to  $T_a = +25^\circ\text{C}$ .

Application example: Lighting of work areas

## Technical data

Luminous flux	Size 1	Size 2	Size 3	Size 4
	with batwing optics			
<b>Colour temperature</b>				
2700 K				
Luminous flux [lm]	1200	2410	3610	4820
Luminaire efficacy [lm/W]	92	100	100	103
4000 K				
Luminous flux [lm]	1290	2580	3870	5160
Luminaire efficacy [lm/W]	99	108	108	110
5000 K				
Luminous flux [lm]	1450	2940	4400	5760
Luminaire efficacy [lm/W]	112	123	122	123
6500 K				
Luminous flux [lm]	1290	2580	3870	5160
Luminaire efficacy [lm/W]	99	108	108	110
PC yellow				
Luminous flux [lm]	1160	2330	3560	4750
Luminaire efficacy [lm/W]	89	97	99	101
Monochromatic yellow				
Luminous flux [lm]	330	680	1030	1360
Luminaire efficacy [lm/W]	33	36	37	37
Green				
Luminous flux [lm]	1070	2140	3210	4280
Luminaire efficacy [lm/W]	82	89	89	91
Red				
Luminous flux [lm]	410	820	1230	1640
Luminaire efficacy [lm/W]	41	46	46	47
Blue				
Luminous flux [lm]	480	970	1450	1940
Luminaire efficacy [lm/W]	37	40	41	42

Values apply to  $T_a = +25\text{ °C}$ .

Application example: Lighting of work areas

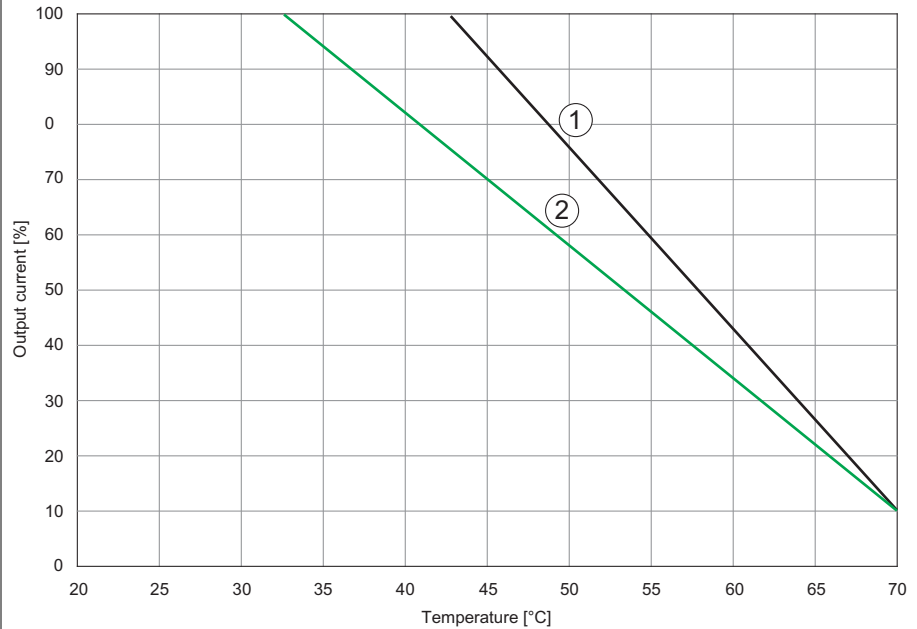
**Technical data**

Energy efficiency class of the light source

The device contains a light source in energy efficiency class F (according to the Regulation with regard to energy labelling of light sources)

Luminous flux decline

- during DC operation to 50%
- at ambient temperature



- 1: All white tones, size 1 to 4  
 2: All colours, size 1 to 4

**Ambient conditions**

Temperature class, max. surface temperature

Variant	Temperature class	Surface temperature
6036/3 T4	T4	100 °C
6036/3 T6	T6	80 °C

## Technical data

Functional ambient temperature range	Cable	Variant T4	Variant T6
	H07RN8-F; 2 x 1.5 mm <sup>2</sup>	-55 to +70 °C	-55 to +50 °C
	H07RN8-F; 3 x 1.5 mm <sup>2</sup> (for L')	-55 to +70 °C	-55 to +50 °C
	H07RN8-F; 4 x 1.5 mm <sup>2</sup> (for DALI or address module)	-55 to +70 °C	-55 to +50 °C
	HXSLHXÖ; 2 x 1.5 mm <sup>2</sup>	-40 to +70 °C	-40 to +50 °C
	RCO 52261; 2 x 1.5 mm <sup>2</sup>	-55 to +70 °C	-55 to +50 °C
	BFOU P5-P12; 2 x 1.5 mm <sup>2</sup>	-52 to +70 °C	-52 to +50 °C
	(N)SSHÖU; 2 x 1.5 mm <sup>2</sup>	-45 to +70 °C	-45 to +50 °C
	RADOX, MFH-S B; 2 x 1.5 mm <sup>2</sup>	-50 to +70 °C (-40 °C for use in mines susceptible to firedamp)	-50 to +50 °C

Data applies to fixed cables.

The light fitting must be switched on above -40 °C.

**Storage**  
-40 to +70 °C  
(max. storage duration 12 months)

**Service life**

LED	White tones, red	PC yellow	Mono-chromatic yellow	Green	Blue
L <sub>90</sub> B <sub>50</sub> at T <sub>a</sub> max	> 100,000 h	> 33,000 h	> 43,000 h	> 30,000 h	> 86,000 h

L<sub>x</sub>B<sub>y</sub>  
At the end of the service life:

- Luminous flux declines to "x" percent
- Up to "y" percent of all luminaires do not reach "x"

**Control gear**

	T <sub>a</sub> ≤ 70 °C
C <sub>10</sub>	≥ 100,000 h

C<sub>10</sub> = failure rate 10%

**Technical data****Mechanical data**

Degree of protection	IP66/IP67 IP68 (10 m/1 h) acc. to IEC 60598
Impact strength (IK code)	IK10 (IEC 62262)
Material	
Enclosure tube	Polycarbonate
Enclosure caps	Polycarbonate/TPE

**Mounting/installation**

Connection cable

**The connection cable must be laid securely.****Designation**H07RN8-F, dia. 8.6 to 9.6 mm, 2 x 1.5 mm<sup>2</sup>HXSLHXÖ, dia. 7.0 to 7.6 mm, 2 x 1.5 mm<sup>2</sup>RCO 52261, dia. 10 to 12 mm, 2 x 1.5 mm<sup>2</sup>BFOU P5-P12, dia. 12.2 to 13.8 mm, 2 x 1.5 mm<sup>2</sup>(N)SSHÖU, dia. 8.7 to 9 mm, 2 x 1.5 mm<sup>2</sup>RADOX, MFH-S B, dia. 6 to 7 mm, 2 x 1.5 mm<sup>2</sup>

Cable entry

- CMP-20sA2F KLE MsNi M20 (installed ex-factory) or  
- CMP-25sA2F KLE MsNi M25 (installed ex-factory)

Mounting

**Fastening options:**

Pipe clamp:

Rubber-coated, clamping range dia. 54 mm

Double pipe clamp:

Made from plastic for mounting on pipes with a diameter of 54 mm  
(screws and nuts made from stainless steel V2A)

**Application**

Standard, environment with a very high level of humidity, mixed water, groundwater, seawater, suitable for open-pit mines, certified for use in hazardous areas

Increased flame resistance, halogen-free, acid-resistant

Special applications, shielded cable

Increased flame resistance, offshore, slurry, drilling and cleaning fluids

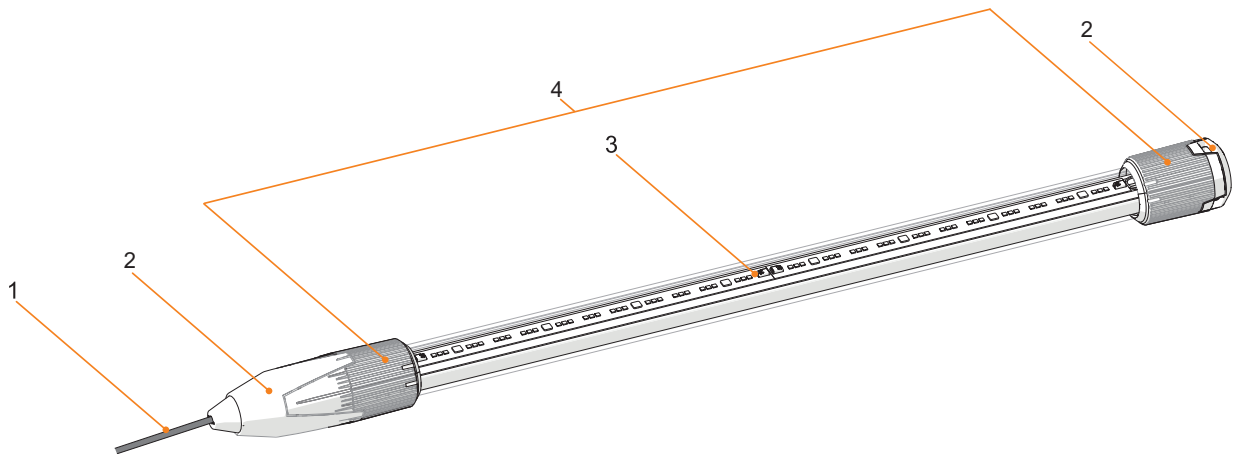
Voltage-proof up to 1 kV, mining

Offshore, marine, halogen-free

For further technical data, see [r-stahl.com](http://r-stahl.com).

## 14 Appendix B

### 14.1 Device design

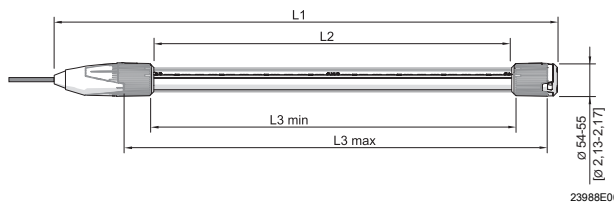


23993E00

#	Device element
1	Connection cable
2	Cover caps
3	Polycarbonate tube with LED insert
4	Mounting surfaces

### 14.2 Dimensions/fastening dimensions

Dimensional drawings (all dimensions in mm [inch]) – Subject to change



	L1	L2	L3min	L3max
Size 1	550 [21.65]	305 [12.00]	320 [12.60]	410 [16.10]
Size 2	850 [33.46]	605 [23.82]	620 [24.40]	710 [28.00]
Size 3	1150 [45.28]	905 [35.63]	920 [36.20]	1010 [39.80]
Size 4	1450 [57.09]	1205 [47.44]	1220 [48.00]	1310 [51.60]

**EU Konformitätserklärung**  
*EU Declaration of Conformity*  
*Déclaration de Conformité UE*





**R. STAHL Schaltgeräte GmbH • Am Bahnhof 30 • 74638 Waldenburg, Germany**  
 erklärt in alleiniger Verantwortung / declares in its sole responsibility / déclare sous sa seule responsabilité,

**dass das Produkt:** **Rohrleuchte**  
*that the product:* *Tubular light fitting*  
*que le produit:* *Appareil d'éclairage tubulaire*

**Typ(en), type(s), type(s):** **6036/.**

**mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.**  
*is in conformity with the requirements of the following directives and standards.*  
*est conforme aux exigences des directives et des normes suivantes.*

Richtlinie(n) / Directive(s) / Directive(s)		Norm(en) / Standard(s) / Norme(s)
2014/34/EU	<b>ATEX-Richtlinie</b>	EN IEC 60079-0:2018
2014/34/EU	<i>ATEX Directive</i>	EN 60079-1:2014
2014/34/UE	<i>Directive ATEX</i>	EN 60079-28:2015
(OJ L 96, 29/03/2014, p. 309–356)		EN 60079-31:2014
<b>Kennzeichnung, marking, marquage:</b>		 <b>II 2 G Ex db op is IIC T6/T4 Gb</b> <b>II 2 D Ex tb IIIC T80 °C/T100 °C Db</b> <b>I M2 Ex db op is I Mb</b>  <b>0158</b>
<b>EU Baumusterprüfbescheinigung:</b>		<b>EPS 13 ATEX 1597</b>
<i>EU Type Examination Certificate:</i>		(Bureau Veritas Consumer Products Services Germany GmbH,
<i>Attestation d'examen UE de type:</i>		Businesspark A96, 86842 Tuerkheim, Gemany, NB 2004)
<b>Produktnormen nach Niederspannungsrichtlinie:</b>		EN IEC 60598-1:2021+A11:2022
<i>Product standards according to Low Voltage Directive:</i>		EN IEC 60598-2-22:2022
<i>Normes des produit pour la Directive Basse Tension:</i>		EN 62471:2008
2014/30/EU	<b>EMV-Richtlinie</b>	EN 61547:2009
2014/30/EU	<i>EMC Directive</i>	EN IEC 55015:2019+A11:2020
2014/30/UE	<i>Directive CEM</i>	EN 61000-3-2:2014
(OJ L 96, 29/03/2014, p. 79–106)		EN 61000-3-3:2013
<b>2011/65/EU &amp; (EU) 2015/863 RoHS-Richtlinien</b>		EN IEC 63000:2018
<i>2011/65/EU &amp; (EU) 2015/863 RoHS Directives</i>		
<i>2011/65/UE &amp; (UE) 2015/863 Directives RoHS</i>		
(OJ L 174, 1/07/2011, p. 88–110 & OJ L 137, 04/06/2015, p. 10-12)		

Unterzeichnet für und im Namen von: / signed for and on behalf of: / signé pour et au nom de:

**R. STAHL Schaltgeräte GmbH**

Waldenburg, 2023-09-06

**Ort und Datum**  
*Place and date*  
*Lieu et date*

**Steffen Holtz**  
**Leiter Entwicklung Leuchten und Signalgeräte**  
*Director R&D Lighting and Signalling*  
*Directeur R&D Eclairage & Appareils de signalisation*

**Daniel Groth**  
**Leiter Qualitätsmanagement Systeme**  
*Director Quality Management Systems*  
*Directeur Systèmes de Management de la Qualité*

# UK Declaration of Conformity

## UK-Konformitätserklärung



**R. STAHL Schaltgeräte GmbH • Am Bahnhof 30 • 74638 Waldenburg, Germany**

represented locally by, lokal vertreten durch

**R. STAHL LTD. • 2nd Floor, Bromwich Court, Gorse Lane, Coleshill • Birmingham B46 1JU, UK**  
declares in its sole responsibility, erklärt in alleiniger Verantwortung,



that the product: **Tubular light fitting**  
dass das Produkt: **Rohrleuchte**

Type(s), Typ(en): **6036/.**

is in conformity with the requirements of the following regulations and standards.  
mit den Anforderungen der folgenden Verordnungen und Normen übereinstimmt.

Regulation(s) / Verordnung(en)	Standard(s) / Norm(en)
<b>S.I. 2016/1107 Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations</b> <i>S.I. 2016/1107 Verordnung für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen</i>	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-28:2015 EN 60079-31:2014

Marking, Kennzeichnung:

 II 2 G Ex db op is IIC T6/T4 Gb  
 II 2 D Ex tb IIIC T80 °C/T100 °C Db   
 I M2 Ex db op is I Mb

UK Type Examination Certificate:  
UK-Baumusterprüfbescheinigung:

**EPS 23 UKEX 1400**  
(Bureau Veritas Consumer Products Services UK Ltd, 31 Kingsland Grange, Woolston, Warrington, WA1 4RW, UK, AB8507)

<b>Product standards according to S.I. 2016/1101 Electrical Equipment (Safety) Regulation</b> <i>Produktnormen nach S.I. 2016/1101 (Sicherheits-) Verordnung für elektronische Geräte</i>	EN IEC 60598-1:2021+A11:2022 EN IEC 60598-2-22:2022 EN 62471:2008
<b>S.I. 2016/1091 EMC Regulations</b> <i>S.I. 2016/1091 EMV-Verordnung</i>	EN 61547:2009 EN IEC 55015:2019+A11:2020 EN 61000-3-2:2014 EN 61000-3-3:2013
<b>S.I. 2012/3032 RoHS Regulations</b> <i>S.I. 2012/3032 RoHS-Verordnung</i>	EN IEC 63000:2018

Waldenburg, 2023-09-05

Place and date  
Ort und Datum

i.V.   
**S. Holtz**  
 Head of R&D - BU Lighting & Signalling  
 Leiter Entwicklung Leuchten und Signalgerät

i.V.   
**D. Groth**  
 Director Quality Management Systems  
 Leiter Qualitätsmanagementsysteme