

### LED illuminated pushbutton for panel mounting Series 8018 for ATEX/IECEx and NEC®/CE Code applications





- For installation in enclosure wall, enclosure cover, panels or control
- Installation using a single dia. 30 mm hole
- Beneficial LED technology: Extremely long service life, high luminance, low heat build-up
- Reliable explosion protection thanks to flameproof contact elements and lighting elements

### MY R. STAHL 8018A



R. STAHL Series 8018 LED illuminated pushbuttons switch load, control and signal circuits and show command statuses via a light signal, the colour of which can be determined using the colour filter included in the delivery: Red, yellow, green, blue or white. The long-lasting LEDs ensure high luminance and minimal heat build-up. The buttons are supplied with a connection cable.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•		•	•

	NEC® 500 CE Code Appendix J Class I   Class II   Class III					
Division	1	2	1	2	1	2
Installation in		•				

	CE Code Section 18  NEC® 505 NEC® 506  Class I					
Zone	0	1	2	20	21	22
Installation in			•			

Selection Table				
Product variant	LED illuminated pushbutton Ex e			
Contact material	Contacts	Product Type	Art. No.	Weight
Silver-nickel	1 NC + 1 NO	8018/3113-al-6 UL	129769	740 g
	2 NC	8018/3123-al-6 UL	129777	740 g
	2 NO	8018/3133-al-6 UL	129784	740 g
Silver-nickel, gold-plated	1 NC + 1 NO	8018/3113-al-6 UL	278907	740 g
Product variant	LED illuminated pushbutton Ex i			
Contact material	Contacts	Product Type	Art. No.	Weight
Silver-nickel, gold-plated	1 NC + 1 NO	8018/3213-al-6 UL	210174	740 g
	2 NC	8018/3223-al-6 UL	210175	740 g
	2 NO	8018/3233-al-6 UL	210176	740 g

The red, yellow, green, blue and white colour filters are included in the packaging.

Technical Data		
Variant	LED illuminated pushbutton Ex e	LED illuminated pushbutton Ex i
Explosion Protection		
IECEx gas explosion protection	Ex db mb IIC T6 Gb	Ex db mb ia IIC T6 Gb
IECEx dust explosion protection	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db
ATEX gas explosion protection	II 2 G Ex db mb IIC T6 Gb	II 2 G Ex db mb ia IIC T6 Gb
ATEX dust explosion protection	II 2 D Ex tb IIIC T80 °C Db	
Certificates	ATEX (PTB), Canada (UL), China (CQST), IECEx (PTB), USA (UL)	ATEX (PTB), Canada (UL), China (CQST), IECEx (PTB), USA (UL)
Declaration of Conformity	ATEX (EUK), China (CCC)	ATEX (EUK), China (CCC)



# **LED illuminated pushbutton for panel mounting**Series 8018 for ATEX/IECEx and NEC®/CE Code applications

E4

Variant	LED illuminated pushbutton Ex e	LED illuminated pushbutton Ex i
Explosion Protection	•	· ·
otes	Product label may vary. Series devices are labelled w	vith ATEX, IECEx, NEC® and CE Code.
Electrical Data		
ated operational voltage AC	270 V	
ated operational voltage DC		30 V
ated operational voltage, indicator lamp part	12 (-10%) to 254 (+6%) V AC/DC	U <sub>i</sub> = 10.8 to 28 V DC
ated operational current, indicator lamp part	0.014 A at 24 V DC	I <sub>i</sub> = 150 mA
ated operational power	1 W	1 W
requency	0 to 60 Hz	
lectrical service life	10⁵ lighting hours	10⁵ lighting hours
witching capacity AC-12	500 V / 6 A / max. 3000 VA	
witching capacity AC-15	400 V / 6 A / max. 1250 VA	
witching capacity DC-13	110 V / 1 A / max. 110 W	
mbient Conditions		
mbient temperature	-30 °C +60 °C	-30 °C +60 °C
mbient temperature	-22 °F +140 °F	-22 °F +140 °F
mbient temperature NEC®	-30 °C +60 °C	-30 °C +60 °C
mbient temperature NEC®	-22 °F +140 °F	-22 °F +140 °F
ighting Data		
amp	White LED	White LED
uminous colour	White Blue Green Yellow Red	White Blue Green Yellow Red
Mechanical Data		
nclosure material	Polyamide	Polyamide
icone-free	Yes	Yes
onductor length	6 m	6 m
nductor length, inches	236 in	236 in
oth of cut-out	104.5 mm	104.5 mm
ounting depth, inches	4.11 in	4.11 in

#### **Technical Drawings – Subject to Alterations**



Schematic 8018/3.13

The numbers in brackets correspond to the core



Schematic 8018/3.23

The numbers in brackets correspond to the core



Schematic 8018/3.33

The numbers in brackets correspond to the core marking

Accessories			
Figure	Description	Art. No.	Weight
Actuator			
	for illuminated pushbutton (spring return)	155163	19 g

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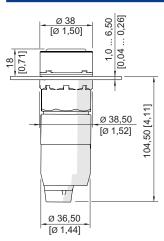
**CONTROL DEVICES** 04.02.2024 · PO·en

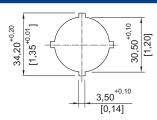
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Spare Parts			
Figure	Description	Art. No.	Weight
Closing part			
	8602C3-733-B for closing unused holes in cover, dia. 30.5 mm, NBR	244306	25 g
	8602C3-733-S for closing unused holes in cover, dia. 30.5 mm, silicone	244307	25 g
Colour filter			
	Colour filter for illuminated pushbutton 8018, all colours	155461	1 g
	for white illuminated pushbutton	155877	1 g
	for red illuminated pushbutton	155882	1 g
	for yellow illuminated pushbutton	155885	1 g
	for green illuminated pushbutton	155888	1 g
	for blue illuminated pushbutton	155891	1 g

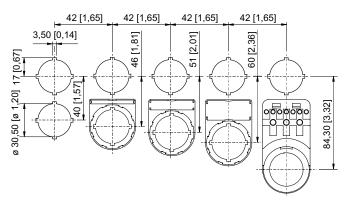
#### Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations





Punch pattern

LED illuminated pushbutton



Cut-out with/without additional designation plate