LED illuminated pushbutton for panel mounting

Series 8018 for ATEX/IECEx applications

- For installation in enclosure wall, enclosure cover, panels or control cabinets
- 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 **8018B**

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		•	•		•	•

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	269788	740 g
	2 NC	8018/3123-al-6	269789	740 g
	2 NO	8018/3133-al-6	269790	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	269791	740 g
	2 NC	8018/3223-al-6	269792	740 g
	2 NO	8018/3233-al-6	269793	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	⟨Ex⟩ II 2 G Ex db mb IIC T6 Gb	⟨Ex⟩ II 2 G Ex db mb ia IIC T6 Gb
ATEX dust explosion protection	⟨Ex⟩ II 2 D Ex tb IIIC T80 °C Db	⟨Ex⟩ II 2 D Ex tb IIIC T80 °C Db
Certificates	ATEX (PTB), China (CQST), IECEx (PTB)	ATEX (PTB), China (CQST), IECEx (PTB)
Declaration of Conformity	ATEX (EUK), China (CCC)	ATEX (EUK), China (CCC)
Notes	Product label may vary. Series devices are labelled with ATEX and IECEx.	

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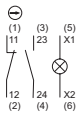
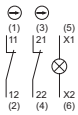
Technical Data

Variant	LED illuminated pushbutton Ex e	LED illuminated pushbutton Ex i
Electrical Data		
Rated operational voltage AC	270 V	
Rated operational voltage DC		30 V
Rated operational voltage, indicator lamp part	12 (-10%) to 254 (+6%) V AC/DC	U_i = 10.8 to 28 V DC
Rated operational current, indicator lamp part	0.014 A at 24 V DC	I_i = 150 mA
Frequency	0 to 60 Hz	
Electrical service life	10^5 lighting hours	10^5 lighting hours
Switching capacity AC-12	270 V / 6 A / max. 3000 VA	
Switching capacity AC-15	270 V / 6 A / max. 1250 VA	
Switching capacity DC-13	110 V / 1 A / max. 110 W	
Ambient Conditions		
Ambient temperature	-30 °C ... +60 °C	-30 °C ... +60 °C
Ambient temperature	-22 °F ... +140 °F	-22 °F ... +140 °F
Lighting Data		
Lamp	White LED	White LED
Luminous colour	White Red Green Blue Yellow	White Red Green Blue Yellow
Mechanical Data		
Degree of protection (IP) (IEC 60529)	IP65	IP65
Enclosure material	Polyamide	Polyamide
Silicone-free	Yes	Yes
Conductor length	6 m	6 m
Conductor length, inches	236 in	236 in
Depth of cut-out	104.5 mm	104.5 mm
Mounting 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 marking



Schematic 8018/3.23
The numbers in brackets correspond to the core marking

Schematic 8018/3.33
The numbers in brackets correspond to the core marking

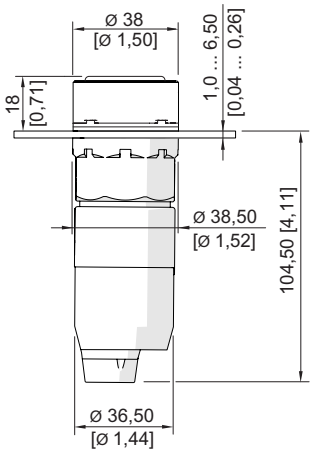
Accessories

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

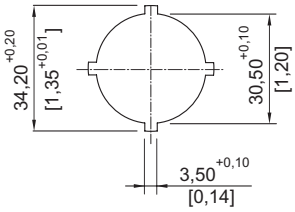
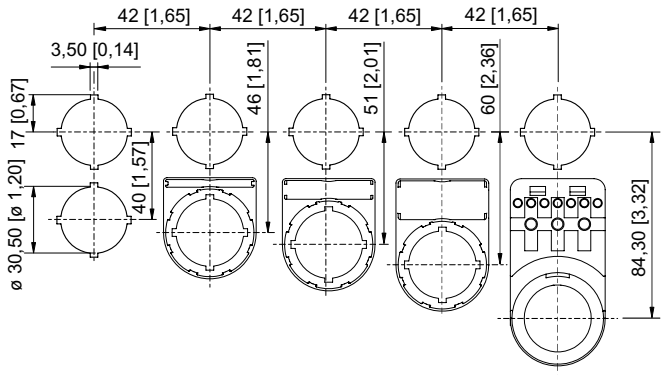
Spare Parts

Figure	Description	Art. No.	Weight
Colour filter			
	Colour filter for illuminated pushbutton 8018, all colours	155461	1 g
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			
	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



LED illuminated pushbutton



Punch pattern