

ALCOSWITCH PUSH BUTTON SWITCH IPE SERIES, LED HOLDERS AND CONTACT BLOCKS

INTRODUCTION

TE Connectivity (TE)'s ALCOSWITCH push button switch IPE series offers a versatile range of high-quality switches designed to meet the diverse needs of various industries. Available in both illuminated and non-illuminated versions, these switches are equipped with flush head and extended head.

FEATURES

- Available in illuminated/non-illuminated
- Snap mounting for compact contact blocks
- Stackable design for contact block
- Electrical life >500,000 and mechanical life >1,000,000 Cycles
- Inbuilt LVGP (Low Voltage Glow Protection)
- Passes surge test 2 kV & HV test of 1.5 kV
- IP 65 rated



APPLICATIONS

- Industrial control panels
- Automotive and transportation
- Aerospace and defense
- Medical equipment
- Consumer electronics
- Telecommunications
- Marine applications



APPROVALS

- RoHS directive 2002/95/E compliant
- REACH compliant and Pb free
- UL E303778

ALCOSWITCH PUSH BUTTON SWITCH IPE SERIES

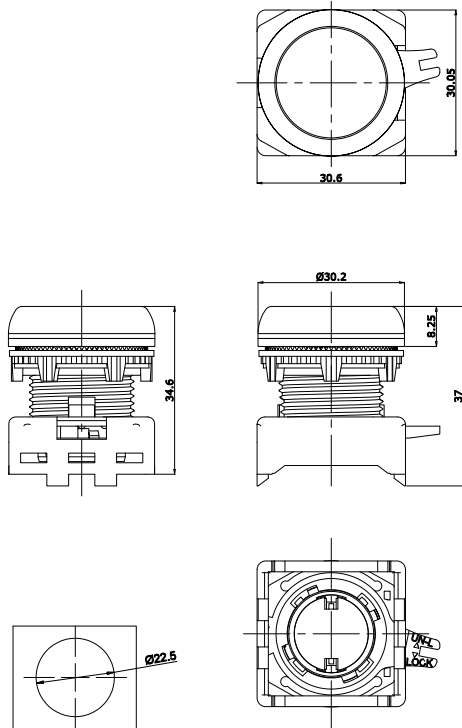
TYPICAL PERFORMANCE CHARACTERISTICS

	Flush Head (Non-illuminated)	Flush Head (illuminated)	Extended Head (Non-illuminated)	Extended Head (illuminated)
				
Function type	Push			
Degree of protection	IP65			
Actuating force	350 gmf			
Contact material	N/A			
Housing material	Polyamide/Nylon			
Collar	ABS			
Lens cap	PC (polycarbonate)			
Life expectancy	Min. 1 Million Cycles			

Compatible contact blocks/LED holders	
Contact blocks/LED holders	Ref. Page 5-8

DIMENSIONS (Unit:mm)

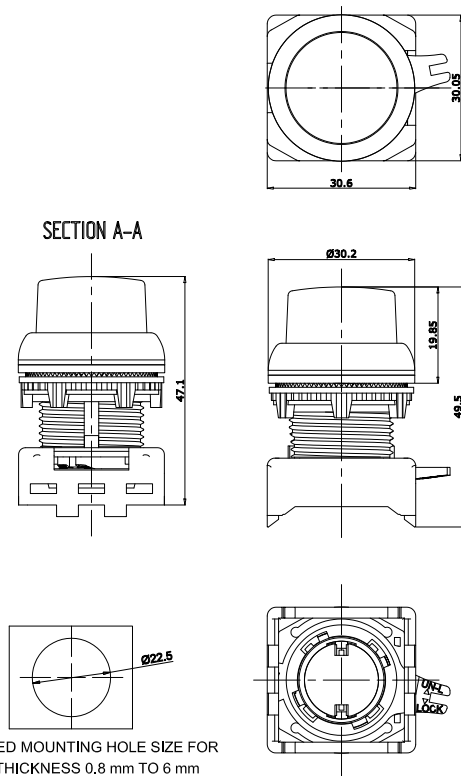
Flush Head (Illuminated/ Non-illuminated)



SUGGESTED MOUNTING HOLE SIZE FOR
PANEL THICKNESS 0.8 mm TO 6 mm

Tolerance: ± 0.5 mm

Extended Head (Illuminated/ Non-illuminated)



SUGGESTED MOUNTING HOLE SIZE FOR
PANEL THICKNESS 0.8 mm TO 6 mm

Tolerance: ± 0.5 mm

ALCOSWITCH PUSH BUTTON SWITCH IPE SERIES

PRODUCT CODE STRUCTURE

Product Key				
IPE	22	FL	IL	WH

Series

IPE	Push Button
-----	-------------

Panel cutout

22	22.5 mm
----	---------

Button Style

FL	Flush
EX	Extended

Illumination

iL	Illuminated
Blank	Non-Illuminated

Color

WH	White
RD	Red
YL	Yellow
GR	Green
BL	Blue
BK	Black
OR	Orange

ALCOSWITCH PUSH BUTTON SWITCH IPE SERIES

PRODUCT INFORMATION - FLUSH HEAD

Description	Illumination	Actuator Color	TE Smart Part Number	TE Part Number
Push button flush red	No	Red	IPE22FLRD	2492672-1
Push button flush green	No	Green	IPE22FLGR	2492672-2
Push button flush yellow	No	Yellow	IPE22FLYL	2492672-3
Push button flush blue	No	Blue	IPE22FLBL	2492672-4
Push button flush black	No	Black	IPE22FLBK	2492672-5
Push button flush white	No	White	IPE22FLWH	2492672-6
Push button flush orange	No	Orange	IPE22FLOR	2492672-7
Illuminated push button flush red	Yes	Red	IPE22FLILRD	2492672-8
Illuminated push button flush green	Yes	Green	IPE22FLILGR	2492672-9
Illuminated push button flush yellow	Yes	Yellow	IPE22FLILYL	1-2492672-0
Illuminated push button flush blue	Yes	Blue	IPE22FLILBL	1-2492672-1
Illuminated push button flush white	Yes	White	IPE22FLILWH	1-2492672-2
Illuminated push button flush orange	Yes	Orange	IPE22FLILOR	1-2492672-3

PRODUCT INFORMATION - EXTENDED HEAD

Description	Illumination	Actuator Color	TE Smart Part Number	TE Part Number
Push button extended red	No	Red	IPE22EXRD	2492673-1
Push button extended green	No	Green	IPE22EXGR	2492673-2
Push button extended yellow	No	Yellow	IPE22EXYL	2492673-3
Push button extended blue	No	Blue	IPE22EXBL	2492673-4
Push button extended black	No	Black	IPE22EXBK	2492673-5
Push button extended white	No	White	IPE22EXWH	2492673-6
Push button extended orange	No	Orange	IPE22EXOR	2492673-7
Illuminated push button extended red	Yes	Red	IPE22EXILRD	2492673-8
Illuminated push button extended green	Yes	Green	IPE22EXILGR	2492673-9
Illuminated push button extended yellow	Yes	Yellow	IPE22EXILYL	1-2492673-0
Illuminated push button extended blue	Yes	Blue	IPE22EXILBL	1-2492673-1
Illuminated push button extended white	Yes	White	IPE22EXILWH	1-2492673-2
Illuminated push button extended orange	Yes	Orange	IPE22EXILOR	1-2492673-3

ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

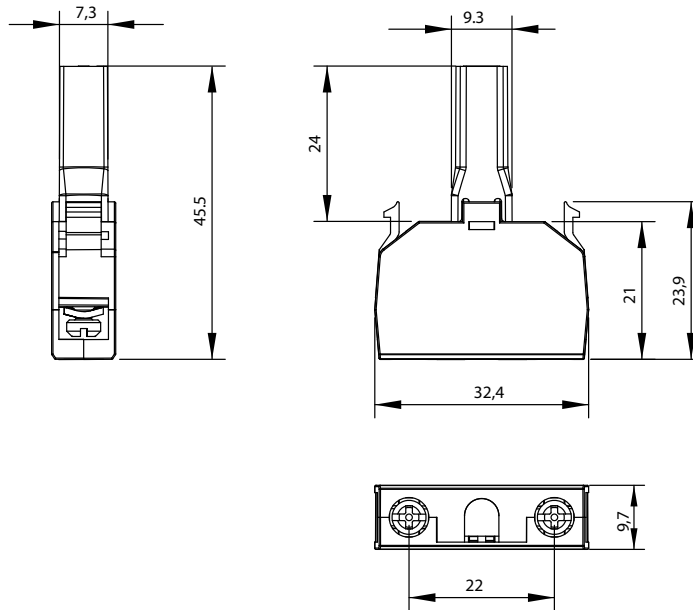
PERFORMANCE CHARACTERISTICS

		LED Holder	Contact Block- NO	Contact Block - NC
				
Rated voltage		12 V AC/DC, 24 V AC/DC, 240 V AC	230 V AC	
Rated current		-	AC15 - 6 A, AC12 - 10 A, (IEC60947-5-1)	
Operating voltage		-20% to +10% of rated voltage	-	
Rated insulation voltage		-	600 V AC	
Type of LED		Side View SMD LED's	-	
Available colors		Red / Green / Yellow / Orange / Blue / White	-	
Life cycle	Electrical	LED - 100,000 burning hours	@ Rated current 10 A, 500,000 Operations	
	Mechanical	-	1,000,000 Operations	
Operating frequency		50 / 60 Hz	50 / 60 Hz	
Actuating force		-	350 gmf	
Operating temperature		-25 °C - 65 °C	-30 °C - 60 °C	
Storage temperature		-30 °C - 70 °C	-25 °C - 70 °C	
Wire termination capacity		0.5mm ² , 1.5 - 2.5 mm ²	-	
Terminal torque		0.8 Nm	-	
LVGP (Low Voltage Glow Protection)		Available	-	
Surge test		2 KV	-	
mV drop @ 16A		-	200 mV max. (Initial value)	
Insulation resistance		-	100 MΩ min. (@500 VDC)	
Recommended tightening torque		-	0.8 Nm	
Terminals		-	Suitable for flexible or solid conductors from 1x0.5 sq.mm ~ 2x1.5 sq.mm or 1x2.5 sq.mm	
HV Test for 60 sec.		1.5 KV	1.5 KV (all terminals shorted together and body)	
Degree of protection		Above Panel : IP65, For Terminals : IP20	Terminals : IP20	
Contact material		Ag-Ni		
Terminal details		Terminal LH - Brass with silver plating Terminal RH - Brass with silver plating Screw washer type		
Polymer details (base material only)		Housing - polyamide/ nylon Housing cover - polyamide/ nylon Housing cap - PC (polycarbonate)	Housing - polyamide /nylon Cover - polyamide /nylon Slide - polyamide	

ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

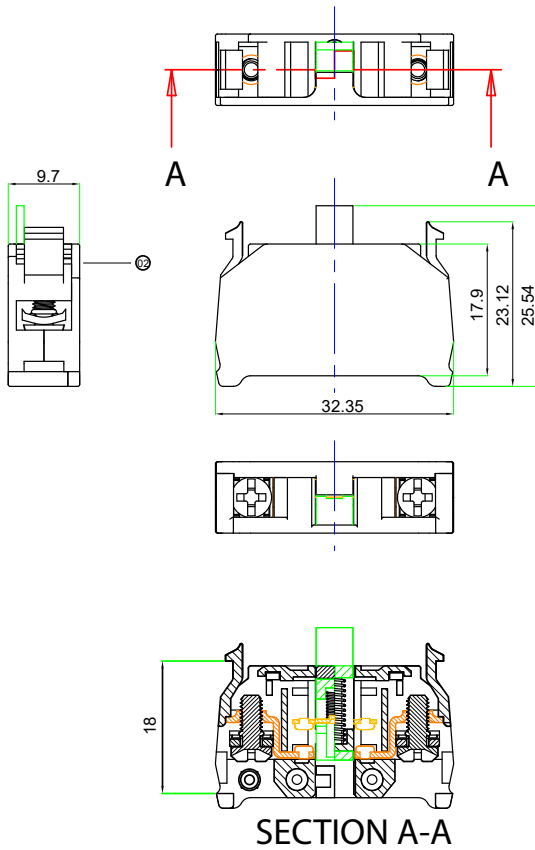
DIMENSIONS (Unit:mm)

LED Holder



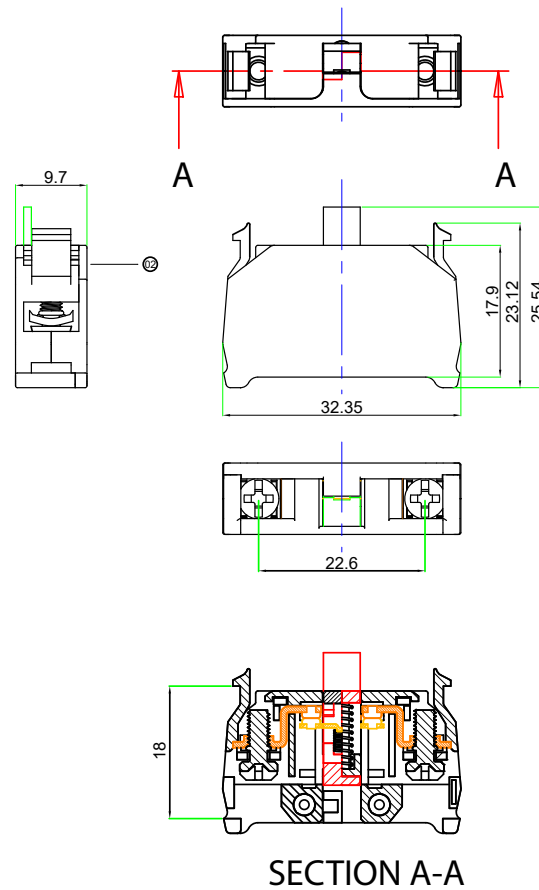
Tolerance: ± 0.5 mm

Contact Block - NO



Tolerance: ± 0.5 mm

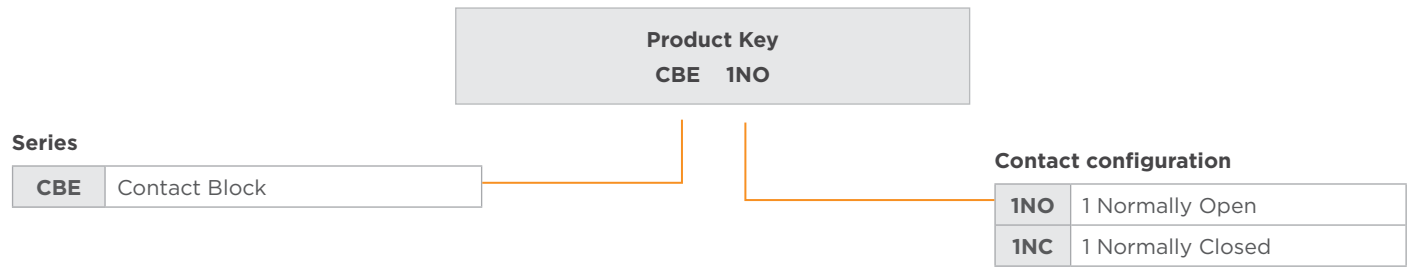
Contact Block - NC



Tolerance: ± 0.5 mm

ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

PRODUCT CODE STRUCTURE - CONTACT BLOCK

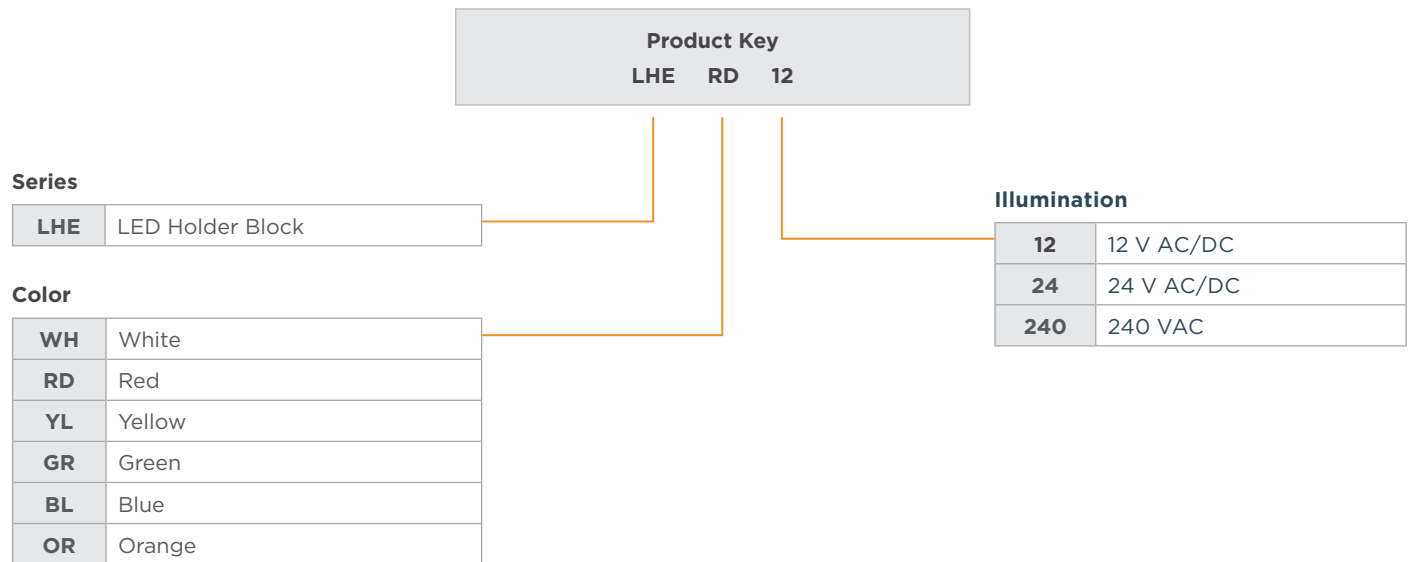


PRODUCT INFORMATION - CONTACT BLOCK

TE Smart Part Number	Description	TE Part Number
CBE1NO	1 NO contact block	2492669-1
CBE1NC	1 NC contact block	2492669-2

ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

PRODUCT CODE STRUCTURE - LED HOLDER

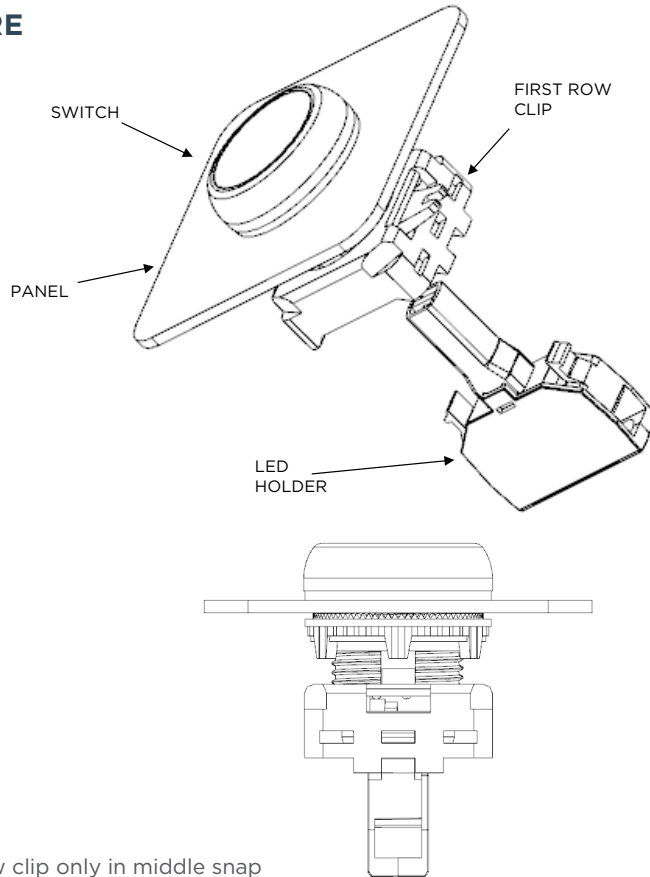


PRODUCT INFORMATION - LED HOLDER

TE Smart Part Number	Description	LED Color	TE Part Number
LHERD240	LED holder red 240 VAC	Red	2492721-1
LHEGR240	LED holder green 240 VAC	Green	2492721-2
LHEYL240	LED holder yellow 240 VAC	Yellow	2492721-3
LHEBL240	LED holder blue 240 VAC	Blue	2492721-4
LHEWH240	LED holder white 240 VAC	White	2492721-5
LHEOR240	LED holder orange 240 VAC	Orange	2492721-6
LHERD24	LED holder red 24 VAC/DC	Red	2492721-7
LHEGR24	LED holder green 24 VAC/DC	Green	2492721-8
LHEYL24	LED holder yellow 24 VAC/DC	Yellow	2492721-9
LHEBL24	LED holder blue 24 VAC/DC	Blue	1-2492721-0
LHEWH24	LED holder white 24 VAC/DC	White	1-2492721-1
LHEOR24	LED holder orange 24 VAC/DC	Orange	1-2492721-2
LHERD12	LED holder red 12 VAC/DC	Red	1-2492721-3
LHEGR12	LED holder green 12 VAC/DC	Green	1-2492721-4
LHEYL12	LED holder yellow 12 VAC/DC	Yellow	1-2492721-5
LHEBL12	LED holder blue 12 VAC/DC	Blue	1-2492721-6
LHEWH12	LED holder white 12 VAC/DC	White	1-2492721-7
LHEOR12	LED holder orange 12 VAC/DC	Orange	1-2492721-8

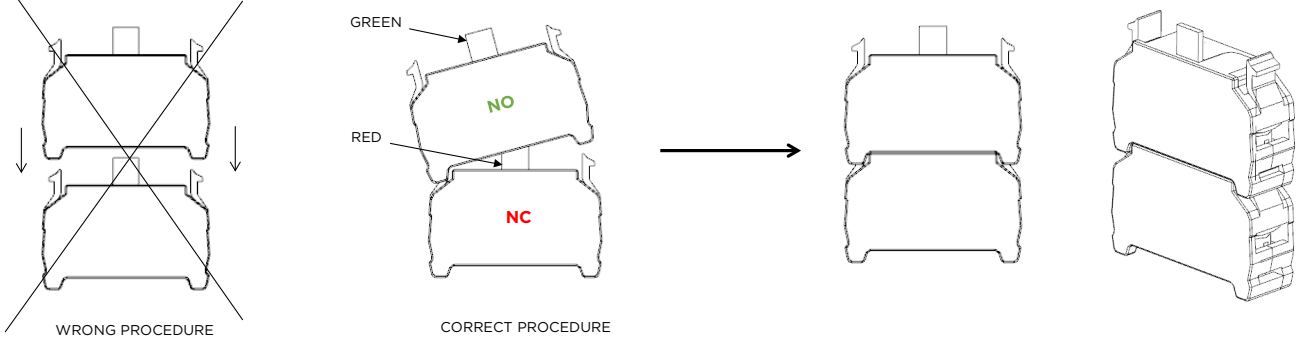
ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

MOUNTING PROCEDURE

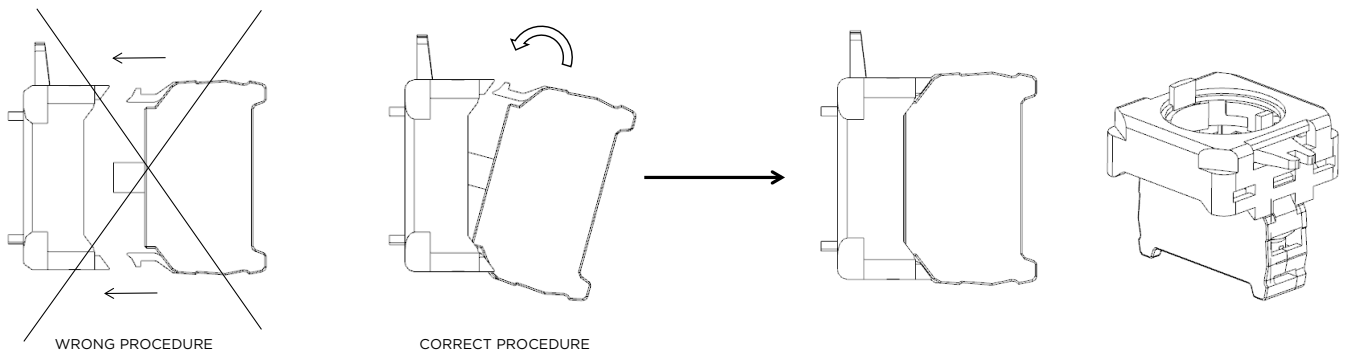


LED holder can lock with first row clip only in middle snap
Contact block snap with first row clip in both side of the LED holder.

CONTACT BLOCK TO CONTACT BLOCK ASSEMBLY



CONTACT BLOCK TO SWITCH ASSEMBLY

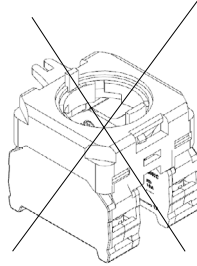


ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

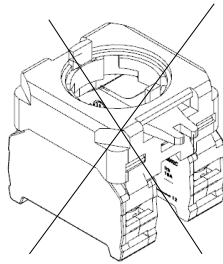
CONTACT BLOCK MOUNTING PROCEDURE

FRONT VIEW

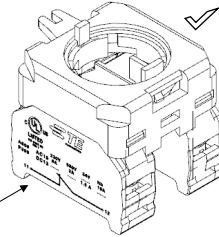
WRONG PROCEDURE



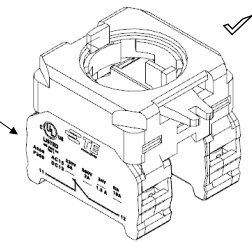
BACK VIEW



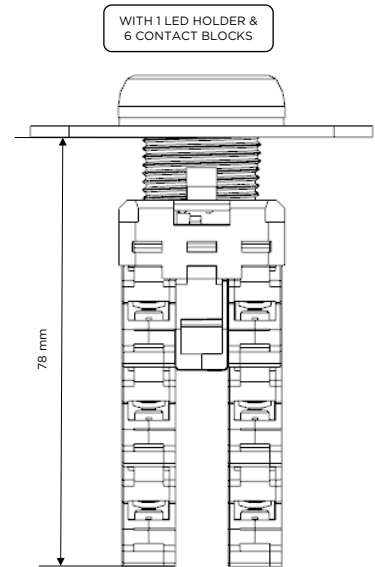
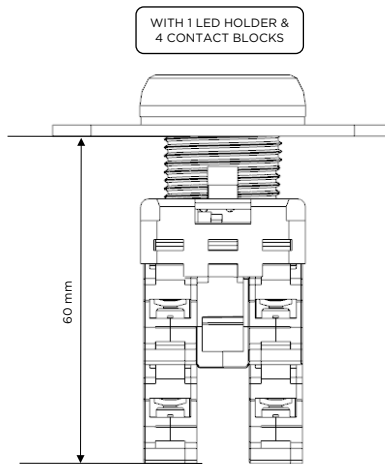
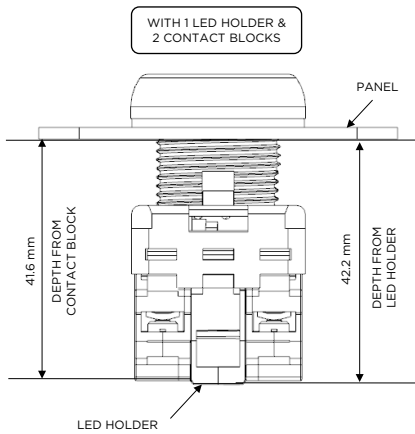
CORRECT PROCEDURE



PRINTING/ ENGRAVING/
LASER MARKING OF
CONTACT BLOCK
SHOULD ALWAYS FACE
AT **OUTER SIDE** OF THE
ASSEMBLY.

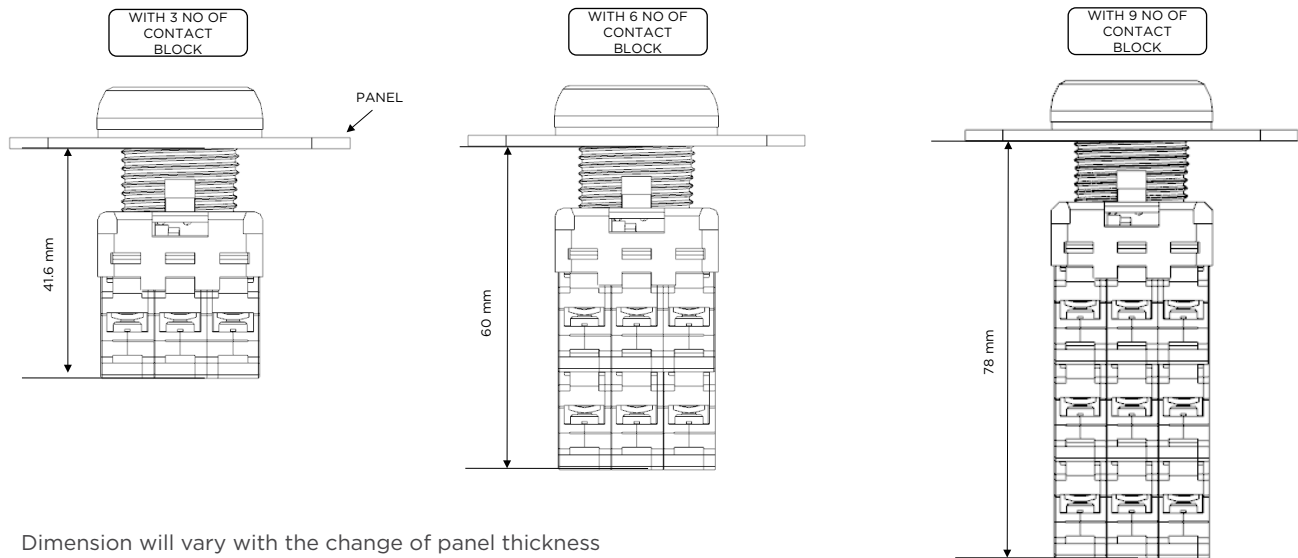


PANEL DEPTH INFORMATION



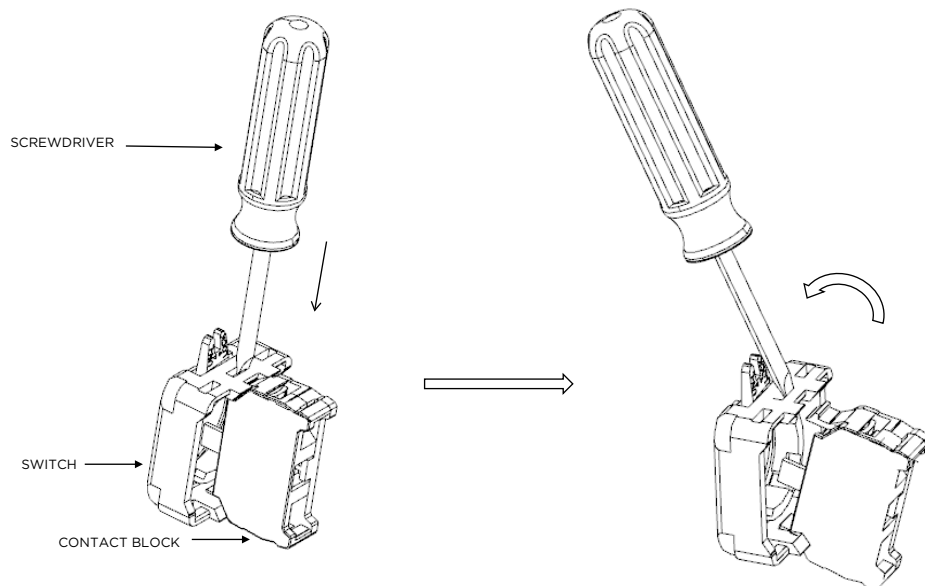
- Dimension will vary with the change of panel thickness
- Dimension will be same for push button and actuators

PANEL DEPTH INFORMATION



- Dimension will vary with the change of panel thickness
- Dimension will be same for push button and actuators

DISMANTLE PROCEDURE



- Process will be same for contact block to contact block & also applicable for led holder.

[te.com](https://www.te.com)

©2024 TE Connectivity Plc. All Rights Reserved.

ALCOSWITCH, TE Connectivity, TE connectivity (logo) and Every Connection Counts are trademarks owned or licensed by the TE Connectivity Plc. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any changes to the information contained herein without prior notice. TE Connectivity assumes only those obligations set forth in the terms and conditions for this product and shall in no event be liable for any incidental, indirect, or consequential damages arising out of the sale, resale, use, or misapplication of the product. TE expressly disclaims any implied warranties with respect to the information contained herein, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose. Dimensions, specifications and/or information contained herein are for reference purposes only and are subject to change without notice. Consult TE for the latest dimensions, specifications and/or information. Users of TE Connectivity products must make their own assessment as to whether the respective product is suitable for the respective desired application.

12/24 ED