

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

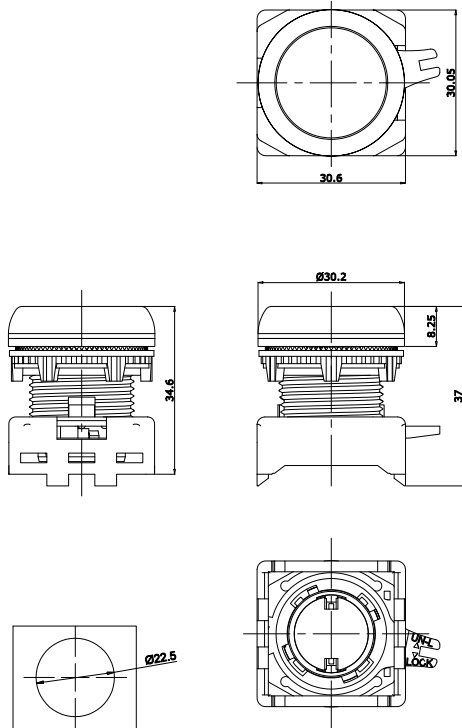
TYPICAL PERFORMANCE CHARACTERISTICS

| | 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)

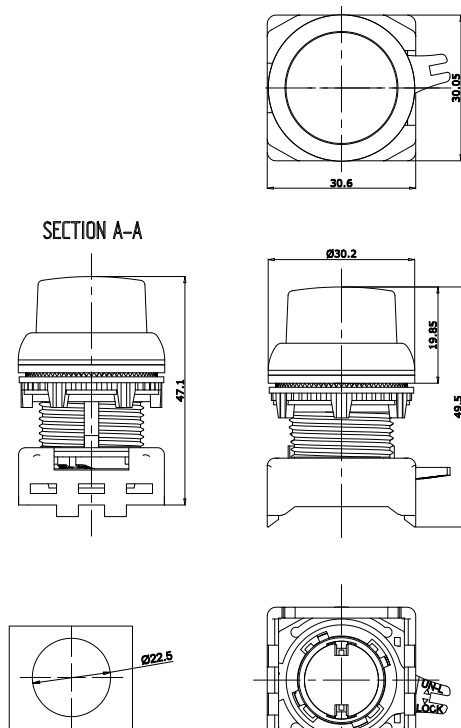
Flush Head (Illuminated/ Non-illuminated)



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

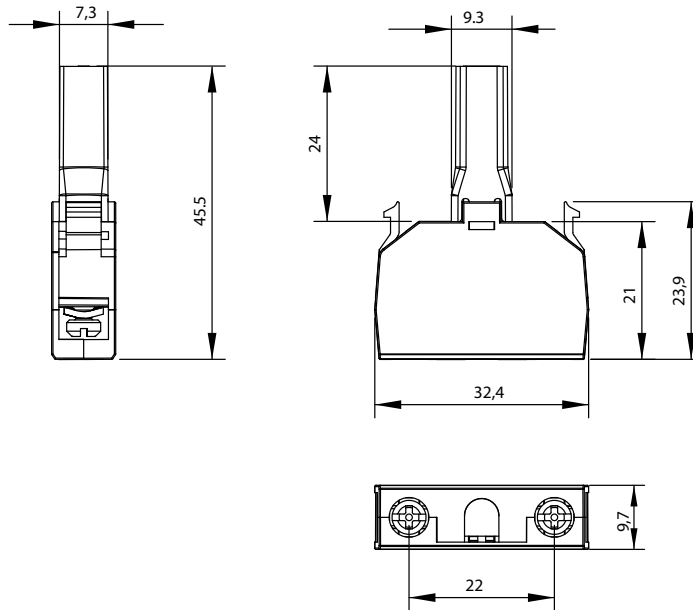
PERFORMANCE CHARACTERISTICS

| | | 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

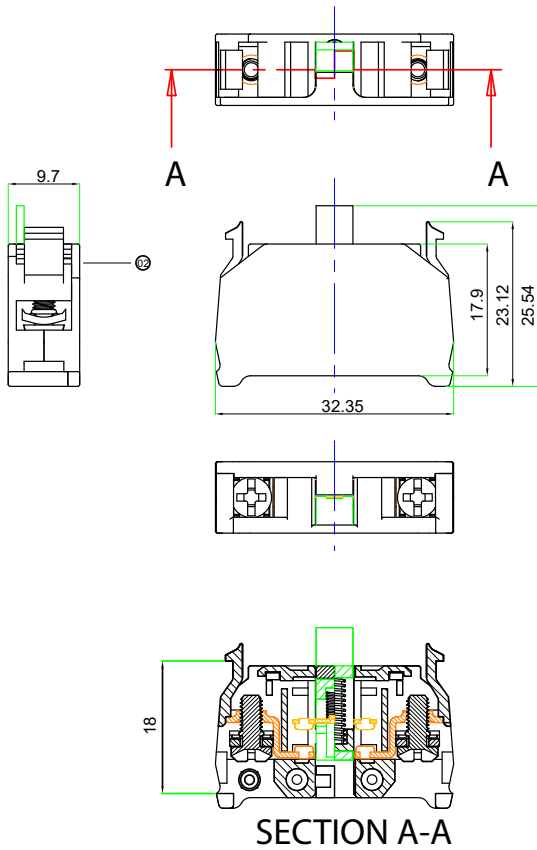
DIMENSIONS (Unit:mm)

LED Holder



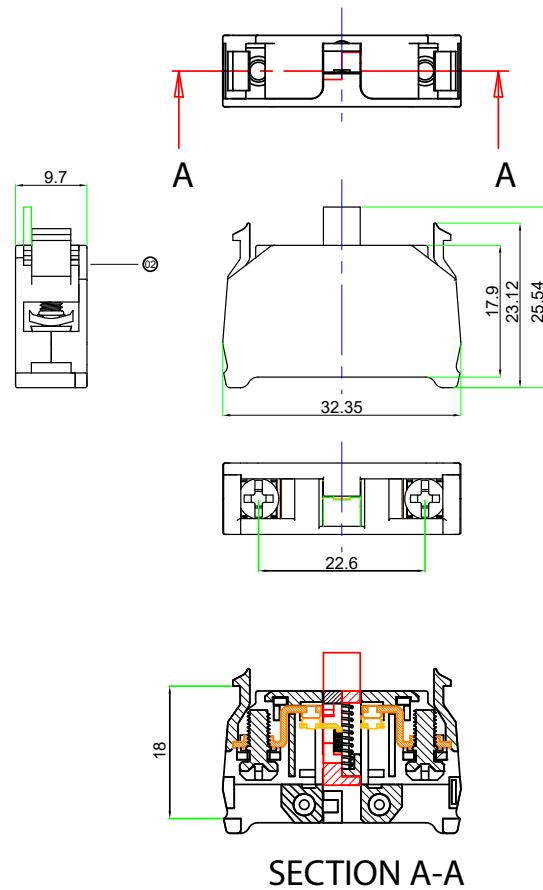
Tolerance: ± 0.5 mm

Contact Block - NO



Tolerance: ± 0.5 mm

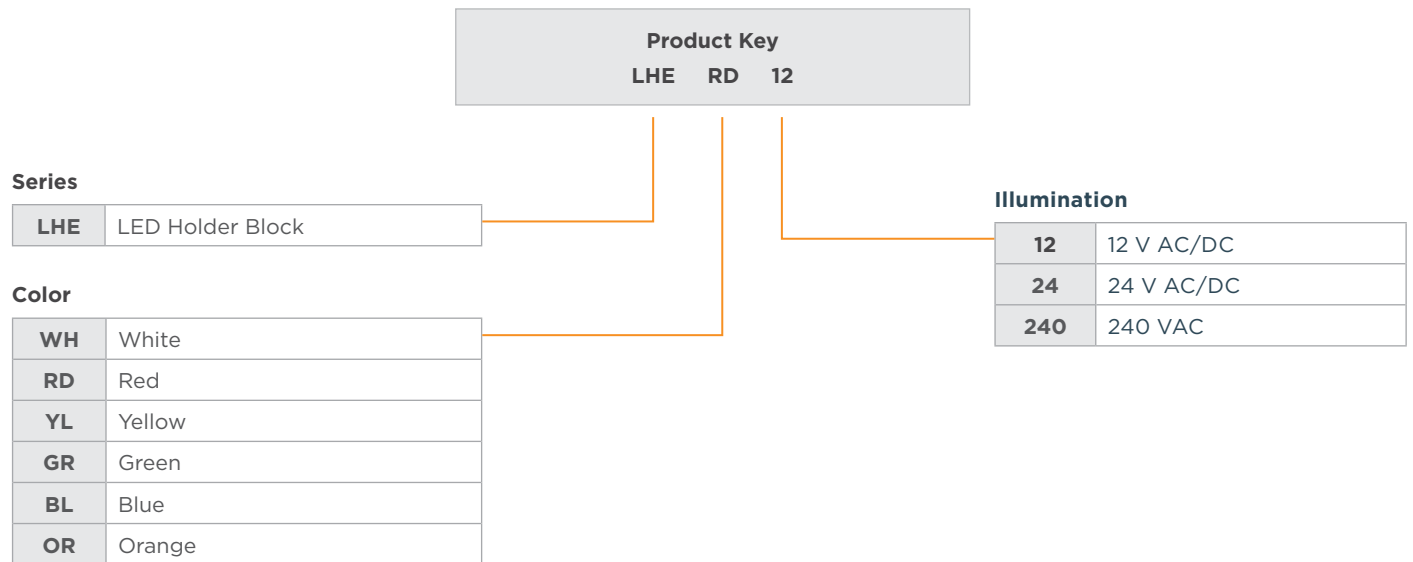
Contact Block - NC



Tolerance: ± 0.5 mm

ALCOSWITCH LED HOLDERS AND CONTACT BLOCKS

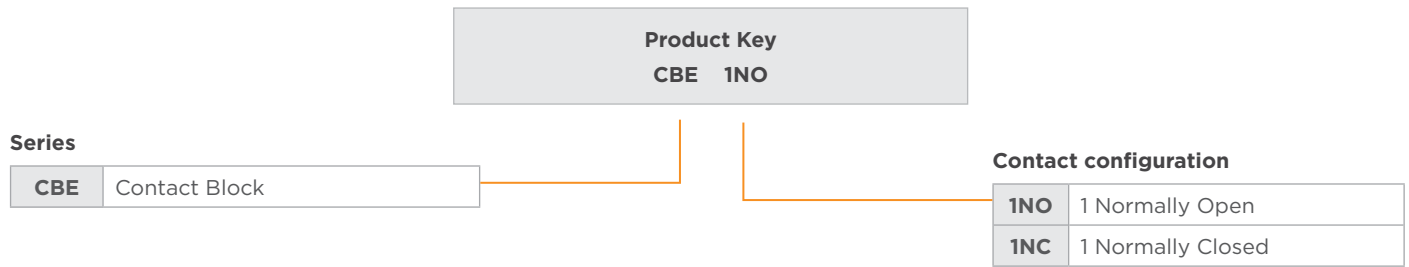
PRODUCT CODE STRUCTURE - LED HOLDER



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 |

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 |

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