

# EZ-LIGHT® Touch Gen 2 K30 FDA-Grade Illuminated Buttons



## Features

Lighted touch button with bipolar outputs



- FDA-grade materials; rated to IP67, IP68, and IP69K
- Laser-marked information withstands aggressive cleaning procedures
- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, cost-effective, and easy-to-install touch button with multicolor light
- Momentary versions remain activated as long as touch is present
- Latching versions start-up not activated and toggle between activated and not activated on successive touches
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; requires no physical force to operate
- Can be actuated with bare hands or gloves
- 12 V DC to 30 V DC operation

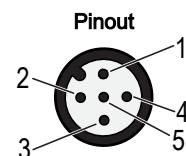
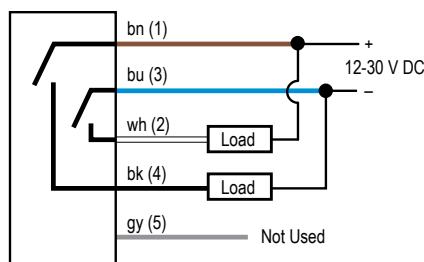
## Models

| Model <sup>(1)</sup> | Function  | Output        | Light (not activated) | Light (activated) | Connection   |
|----------------------|-----------|---------------|-----------------------|-------------------|--|
| K30ALBT2FXGHQP       | Latching  | Bipolar, N.O. | -                     | Green             | 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector |
| K30RLBT2FXGHQP       |           | Bipolar, N.C. |                       |                   |  |
| K30ABT2FXGHQP        | Momentary | Bipolar, N.O. | Green                 | Green             | 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector |
| K30RBT2FXGHQP        |           | Bipolar, N.C. |                       |                   |  |
| K30ALBT2FGGHQP       | Latching  | Bipolar, N.O. | Green                 | Green             | 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector |
| K30RLBT2FGGHQP       |           | Bipolar, N.C. |                       |                   |  |
| K30ABT2FGGHQP        | Momentary | Bipolar, N.O. | Red                   | Green             | 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector |
| K30RBT2FGGHQP        |           | Bipolar, N.C. |                       |                   |  |
| K30ALBT2FRGHQP       | Latching  | Bipolar, N.O. | Red                   | Green             | 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector |
| K30RLBT2FRGHQP       |           | Bipolar, N.C. |                       |                   |  |
| K30ABT2FRGHQP        | Momentary | Bipolar, N.O. | Red                   | Green             | 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector |
| K30RBT2FRGHQP        |           | Bipolar, N.C. |                       |                   |  |

## Wiring

Cabled wiring diagrams are shown. Quick disconnect wiring diagrams are functionally identical.

Diagram



## Specifications

### Supply Voltage

12 V DC to 30 V DC

### Supply Current

55 mA max current (exclusive of load)

### Supply Protection Circuitry

Protected against reverse polarity and transient voltages

### Power-Up Delay

300 milliseconds

Latching models start up in a 'not activated' state

### Connections

2 m (6.5 ft) integral PVC-jacketed cable, or 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector

### Environmental Rating

IP67, IP69K per ISO 20653

<sup>(1)</sup> To order the 2 m (6.5 ft) cable models, omit suffix **QP** from model number (example, **K30ALBT2FXGH**). A model with a quick-disconnect connector requires a mating cordset (see ).



**Operating Conditions**

–40 °C to +50 °C (–40 °F to +122 °F)  
90% at 50 °C maximum relative humidity (non-condensing)

**Storage**

–40 °C to +70 °C (–40 °F to +158 °F)

**Vibration and Mechanical Shock**

Vibration: 10 Hz to 55 Hz, 1.0 mm peak-to-peak amplitude per IEC 60068-2-6  
Shock: 30G 11 ms duration, half sine wave per IEC 60068-2-27

**Output Rating**

**Maximum Load:** 150 mA  
**ON-state saturation voltage:** < 2 V DC at 10 mA; < 2.5 V DC at 150 mA  
**OFF-state leakage current:** <10 µA at 30 V DC

**Output Response Time**

150 milliseconds ON and OFF

**Construction**

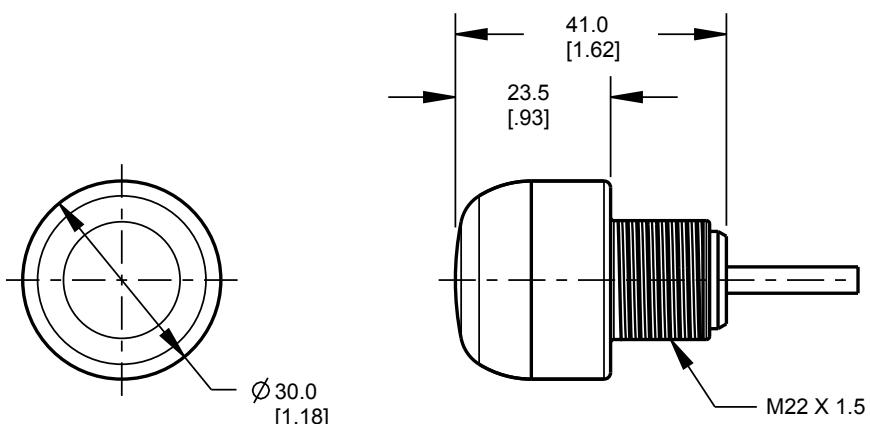
Base, dome, and nut: FDA-grade polycarbonate

**Mounting**

M22 × 1.5 Threaded base, max torque 2.25 Nm  
(20 in-lbf)

**Dimensions**

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

**Accessories****Cordsets**

| 5-Pin Single-Ended M12 Female Cordsets |                 |       |            |                 |
|--|-----------------|-------|------------|-----------------|
| Model                                  | Length          | Style | Dimensions | Pinout (Female) |
| MQDC1-501.5                            | 0.5 m (1.5 ft)  |       |            |                 |
| MQDC1-503                              | 0.9 m (2.9 ft)  |       |            |                 |
| MQDC1-506                              | 2 m (6.5 ft)    |       |            |                 |
| MQDC1-515                              | 5 m (16.4 ft)   |       |            |                 |
| MQDC1-530                              | 9 m (29.5 ft)   |       |            |                 |
| MQDC1-560                              | 18 m (59 ft)    |       |            |                 |
| MQDC1-5100                             | 31 m (101.7 ft) |       |            |                 |

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## 5-Pin Single-Ended M12 Female Cordsets

| Model       | Length         | Style       | Dimensions | Pinout (Female) |
|-------------|----------------|-------------|------------|-----------------|
| MQDC1-506RA | 2 m (6.5 ft)   | Right-Angle |            |                 |
| MQDC1-515RA | 5 m (16.4 ft)  |             |            |                 |
| MQDC1-530RA | 9 m (29.5 ft)  |             |            |                 |
| MQDC1-560RA | 19 m (62.3 ft) |             |            |                 |

## 5-Pin Single-Ended M12 Female Stainless Steel Washdown Cordsets

| Model          | Length        | Style    | Dimensions | Pinout (Female)   |
|----------------|---------------|----------|------------|---|
| MQDC-WDSS-0506 | 2 m (6.56 ft) | Straight |            | <br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>5 = Gray |
| MQDC-WDSS-0515 | 5 m (16.4 ft) |          |            |   |
| MQDC-WDSS-0530 | 9 m (29.5 ft) |          |            |   |

## 5-Pin Single-Ended M12 Female Washdown, Shielded Cordsets

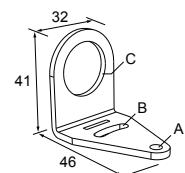
| Model      | Length        | Style    | Dimensions | Pinout (Female)   |
|------------|---------------|----------|------------|---|
| MQDCWD-506 | 2 m (6.56 ft) | Straight |            | <br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>5 = Gray |
| MQDCWD-530 | 9 m (29.5 ft) |          |            |   |

## Brackets

All measurements are listed in millimeters, unless noted otherwise. The measurements provided are subject to change.

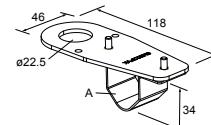
## SMB22A

- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor

**Hole center spacing:** A to B = 26.0**Hole size:** A = Ø 4.6, B = 4.6 x 16.9, C = 22.2

## SMB22FVK

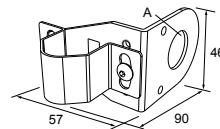
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

**Hole size:** A = Ø 22.5

**SMB22RAVK**

- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

**Hole size:** A =  $\varnothing$  22.5

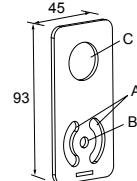


**SMBAMS22P**

- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

**Hole center spacing:** A = 26.0, A to B = 13.0

**Hole size:** A = 26.8 x 7.0, B =  $\varnothing$  6.5, C =  $\varnothing$  22.5

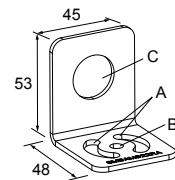


**SMBAMS22RA**

- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

**Hole center spacing:** A = 26.0, A to B = 13.0

**Hole size:** A = 26.8 x 7.0, B =  $\varnothing$  6.5, C =  $\varnothing$  22.5



**TC-K30-CL**

- Touch cover

**Diameter:** A = 40.7 mm

**Height:** B = 31 mm



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