## Features

- Enclosed switch complying with IP6K7
- Models available for operating temperature up to $120^{\circ} \mathrm{C}$
- Various contact materials available
- RoHS compliant
- Silicon-free version available
- Various aux actuators (can be retrofitted)
- Two mounting positions
- Mechanical life minimum 1,000,000 operations
- Rated for currents up to 10.1 A at 250 VAC


## Standard Parts ${ }^{1}$

| DC1C-A1AA | DC2C-A1AA | DC3C-A1AA |
| :--- | :--- | :--- |
| DC1C-A1LB | DC2C-A1LB | DC3C-A1LB |
| DC1C-A1RB | DC2C-A1RB | DC3C-A1RB |

${ }^{1}$ The part number configuration matrix below provides details to the part numbers above.
For configurable part numbers that are not listed above, not listed in your region, or for custom part numbers, contact the factory or your distributor.
Part Number Breakdown


Series
Contact Rating ${ }^{2}$

| 1 | 5 Amp |
| :---: | :---: |
| 2 | 10.1 Amp |
| 3 | 0.1 Amp |


| Configuration |  |
| :---: | :---: |
| $120^{\circ} \mathrm{C}$ |  |
| A | SPST NO |
| B | SPST NC |
| C | SPDT |
| $85^{\circ} \mathrm{C}$ |  |
| E | SPST NO |
| F | SPDT NC |
| G | SPDT |

Terminal Type millimeters (inches)

| A | Solder, short | Term config 1 <br> only |
| :---: | :---: | :---: |
| B | $0.5(0.02)$ leads, no UL | $105^{\circ} \mathrm{C}, \mathrm{DC} 3$ only |
| C | $0.75(0.03)$ leads, no UL | $105^{\circ} \mathrm{C}$ only |
| H | $1.2 \times 0.5(0.05 \times 0.02)$ PCB | Term configs 1 <br> only |
| K | $0.5 \times 0.5(0.02 \times 0.02)$ PCB | Term configs 1, <br> $6,7,9$ only |
| L | $2.8 \times 0.5(0.11 \times 0.02)$ QC | Term config 1 <br> only |
| N | Without leads (Type B) | Term configs 3,4 <br> only |
| P | Without leads (Type A) | Term configs 3,4 <br> only |
| Q | Without leads (No cutout) | DC 3 only |
|  | Non-European versions |  |
| D | Leads, 18 AWG (UL) | $105{ }^{\circ} \mathrm{C}$, term config <br> $5, ~ D C 1, ~ D C 3 ~ o n l y ~$ |
| E | Leads, 16 AWG (UL) | $105{ }^{\circ} \mathrm{C}$ only |
| M | Leads, 20 AWG (UL) | $105^{\circ} \mathrm{C}$, DC1, DC3 <br> only |

Terminal Configuration

| 1 | $30^{\circ}$ twisted |
| :---: | :---: |
| 3 | Leads on actuator side |
| 4 | Leads opposite actuator |
| 5 | Leads attached to <br> underside |
| 6 | PCB terms - right hand <br> side |
| 7 | PCB terms - left hand <br> side |
| 8 | PCB terms - right hand <br> side w/location pins |
| 9 | PCB terms - left hand <br> side w/location pins |


| Actuator Type |
| :--- |
| AA Spherical-head, no <br> auxiliary actuator <br> For others, see actuator table at  <br> http://switches-  <br> sensors.zf.com/us/  |

${ }^{2}$ UL current rating; see table below for complete details
Electrical Specifications - Contact Ratings

| Contact | EN61058/UL61058-1 |
| :--- | :---: |
| 1 | $6 \mathrm{~A}, 250 \mathrm{VAC}$ |
| 2 | $10(1.5) \mathrm{A}, 250 \mathrm{VAC}$ |
| 3 | $0.1 \mathrm{~A}, 250 \mathrm{VAC}$ |
| 4 | $3 \mathrm{~A}, 250 \mathrm{VAC}$ |

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www.switches-sensors.zf.com ZF Electronics Systems Pleasant Prairie, LLC ("ZF") acquired the rights to the CHERRY branded switches and sensors in 2008. Although ZF divested its interest in the CHERRY name in 2015, the switches and sensors remain unchanged and are now sold under the ZF brand.
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| Contact Gap |  | $<3 \mathrm{~mm}(\mu)$ |
| :--- | :---: | :---: |
| Operating Force |  | $50-340 \mathrm{cN}$ (model dependent, without actuator) |
| Total Travel (without actuator) | Operation Cycles |  |
| Operating life |  |  |
| Contact |  |  |

Material Specifications

| Base | PET (UL 94 V-0) |
| :--- | ---: |
| Cover | PBT (UL 94 V-0); PET (UL 94 V-0) |
| Actuator | PBT (UL 94 V-0) 120 ${ }^{\circ} \mathrm{C}, \mathrm{POM}$ (UL 94 HB) $85{ }^{\circ} \mathrm{C}$ |
| Contacts | $\mathrm{AgSnO} \mathrm{O}_{2}, \mathrm{AgNi} ,\mathrm{AuAgPt} \mathrm{(Crosspoint)}$ |
| Terminals | CuZn (silver-plated) |
| Auxiliary Actuator | Stainless Steel or plastic |
| Switching parameters | Complete chart available at http://switches-sensors.zf.com/us/ |


| Environmental Specifications |  |
| :--- | :--- |
| Ambient Temperature | $-40^{\circ} \mathrm{C}$ to $85 / 120^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185 / 248^{\circ} \mathrm{F}\right)$ without wire leads |
|  | $-40^{\circ} \mathrm{C}$ to $85 / 105^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185 / 221^{\circ} \mathrm{F}\right)$ without wire leads |
| Ingress Protection | IP67 |

## Dimensions mm and Terminal Options


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