## Safety Switch Wiring

These switches are rated to handle 3 amps @ 110Vac, $2 \mathrm{amps} @ 230 \mathrm{Vac}$, and $1 \mathrm{amp} @ 24 \mathrm{Vdc}$ We recommend wiring them on 110 Vac or 24 Vdc .
An external fuse is recommended. Refer to the external fuse specs below.
Wire into a magnetic motor starter, power relay, or safety relay. Insure safe operation of the machine afterwards. The spindle should not re-start when the guard is closed. In some cases, a reset or run button will need to be installed.

## You will wire in the red and blue wires ( $\mathrm{N} / \mathrm{O}$ ) to make the switch function with the machine.

1 Normally Open Contact + 1 Normally Closed Contact


The N/O Contact on the switch is open when the actuator is away from the switch. When the actuator is within the specified operating distance the N/O contact will close and the N/C contact will open.

| Technical Specifications | MS6-11-AC-06M |
| :--- | :--- |
| Contacts | $1 \mathrm{NO}+1 \mathrm{NC}$ |
| Safety Contact Rating | $230 \mathrm{Vac} / 2 \mathrm{Amps}, 110 \mathrm{Vac} / 3 \mathrm{Amps}$ or 24Vdc / 1 Amp |
| Safety Contact Switching | 10 mm ON (MIN) / 28mm OFF (Max) |
| Auxiliary Contact Rating | $24 \mathrm{Vdc} / 300 \mathrm{~mA}$ |
| Auxiliary Contact Switching | 11 mm OFF (Min) / 21mm ON (Max) |
| Internal Fuse | $230 \mathrm{Vac}-2$ Amps / 110Vac - 3.5Amps / 24Vdc - 1 Amp |
| External Fuse (Customer Sup- <br> plied) | $230 \mathrm{Vac}-1.6 \mathrm{Amps} / 110 \mathrm{Vac}-3.0 \mathrm{Amps}$ <br> $24 \mathrm{Vdc}-800 \mathrm{~mA}$ |
| Construction | RED ABS, or 316 Grade Stainless Steel |
| IP Rating | IP67 / IP69K |
| Operating Temperature | $-25^{\circ} \mathrm{C}$ to +55 ${ }^{\circ} \mathrm{C}$ (High Temp -25 ${ }^{\circ} \mathrm{C}$ to +125 ${ }^{\circ} \mathrm{C}$ ) |
| Fixing | M4 Torx security screws (Tightening Torque 1.0NM) |
| Connection | Pre-wired or M12 Quick Disconnect |
| Vibration | $10-50 \mathrm{~Hz}$ IEC 68-2-6 |
| Shock | $30 \mathrm{~g}, 11 \mathrm{~ms}$ IEC 68-2-27 |



| Safety Related Data |  |  | $2,000,000$ |
| :--- | :--- | :--- | :--- |
| B10d | $>20$ Years | PFH | $6.52 \times 10^{-8}$ |
| TM (Mission Time) | $99 \%$ | SFF | $4.3 \times 10^{-8}$ See Note 1 |
| DC | High > 100 Years (Based on usage rate of 360 Days/Year, 24 Hours/Day, 10 Operations/Hour) |  |  |
| MTTFd | Note 1: Based on dual channel wiring according to CAT 4. Diagnostic coverage provided by downstream control logic. DC - medium, MTTFd = 100 Years. <br> Suitable for performance level applications PLe according to ISO 13849-1. (SIL 3 or SIL 2 according to IEC 62061) |  |  |

