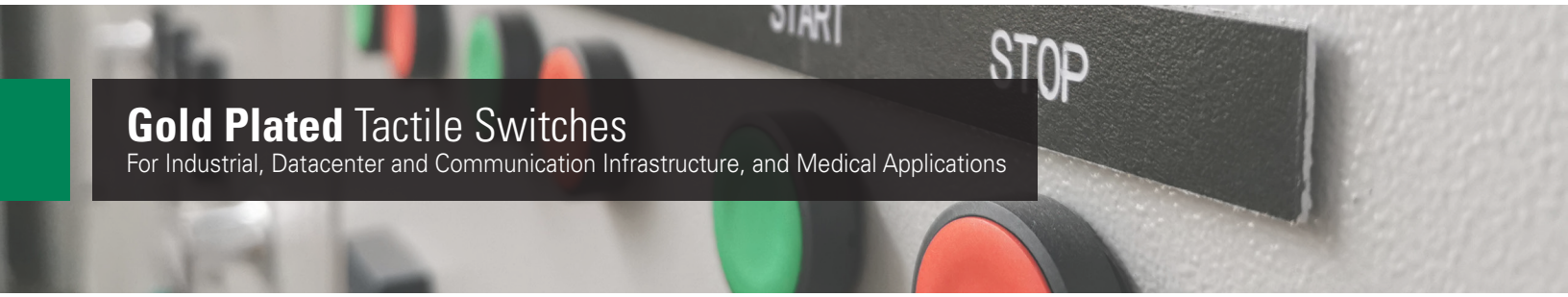

Gold Plated Tactile Switches

For Industrial, Datacenter and Communication Infrastructure, and Medical Applications

Tactile Switches–Benefits of Gold Plating

Littelfuse Tactile Switches are available with an option to select silver or gold for electrical contacts and terminals and tin plating for terminals. The gold-plated tactile switches are exclusively manufactured in-house, in an ISO14001 and ISO50001 certified environment to ensure environmental control, energy efficiency and enhanced product quality, and are designed to offer a longer-lasting, more reliable, and higher-performing switch experience compared to non-gold-plated alternatives:

- **Resistance to Corrosion and Oxidation:** Gold-plated tactile switches are ideal for maintaining reliable electrical connections over time, even in environments where moisture or other contaminants might be present. Unlike other metals that may tarnish or degrade when exposed to environmental factors, gold remains stable, ensuring consistent electrical contact. Gold-plated terminals do not oxidize or corrode easily and provide protection from harsh environments before the soldering process, allowing long idle storage. These gold-plated tactiles switches are ideal for use in industrial, medical, or outdoor applications where long-term reliability and resistance to environmental factors are critical.
- **Enhanced Durability:** Gold-plated tactile switches can have an extended lifespan. This approach is essential for applications that require long time life expectancy, especially in harsh environments.
- **Improved Performance in Low-Current Applications:** Gold terminals are particularly beneficial in low-current or low-voltage applications where contact resistance or oxidation could significantly affect the small amounts of energy involved.
- **Resistance to Temperature:** Gold-plated tactile switches improve the upper limit of the temperature range. The typical operating temperature range extends up to +125 °C for gold-plated versions, compared to +85 °C for silver-plated versions (model-dependent).
- **Reduced Contact Bounce:** Gold's smooth and consistent surface reduces the electrical bouncing that can occur on very low force switches. Using gold leads to more stable signal transmission and can reduce the need for additional debouncing circuitry in the design.

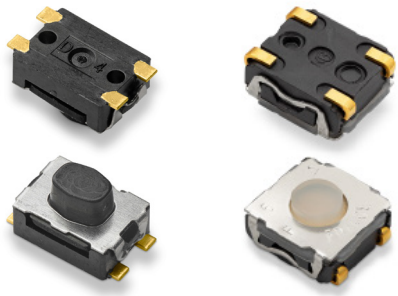

Figure 1: Gold Plated KMR723NG LFG and KSC253G SP DELTA LFG Tactile Switches

- **High conductivity and reliability:** Ensure consistent operation with gold-plated tactile switches in sensitive conditions.
- **Resistance to Whiskers:** Gold plating is naturally whiskers-free, allowing long usage within an inert application (vibration free).
- **Easier and More Reliable Soldering Process:** Gold plating creates a smooth, consistent surface that wets well with solder.
- **Premium Feel:** Gold plating is often associated with high-end products. Using gold-plated switches can give the product a more premium quality, in terms of performance and perception. Their use reinforces both the technical reliability and the perceived quality of the final product, making them a preferred choice for mission-critical or premium-grade designs. However, in less environmentally demanding applications, silver-plated contacts may be sufficient, offering a cost-effective alternative without compromising essential performance.

Focus Applications

- Industrial
- Servers and Telecom
- Medical
- Outdoor applications

Applications