

## Theme: The Fusion of Form and Functionality

### Introduction

Introducing the FM-K002B, a masterpiece from [Shieldon Manufacturing & Trading Combo](http://www.shieldon.net), where functionality meets sophisticated design. This Out-The-Front (O.T.F.) knife is the epitome of precision engineering, crafted for those who demand reliability and performance in their tools. With its compact size and robust build, the FM-K002B is not just a knife; it's a testament to our commitment to excellence and innovation in knife manufacturing.



## Product Overview

The FM-K002B combines cutting-edge technology with traditional craftsmanship to deliver a versatile tool suitable for a range of applications. From outdoor enthusiasts to professional tradespeople, this knife is designed to meet the diverse needs of its users. Its sleek profile and lightweight design make it an ideal everyday carry (EDC), while the sturdy construction ensures it can handle more demanding tasks with ease.

## Material Specifications

### Blade Material: D2 Tool Steel

The FM-K002B features a blade crafted from D2 tool steel, renowned for its hardness and excellent edge retention. With a Rockwell Hardness (HRC) of 58-60, this blade is engineered to withstand rigorous use without compromising sharpness. D2 steel provides superior wear resistance, making it ideal for tasks that require durability and precision.

### Handle Material: Anodized Aluminum

The handle is constructed from anodized aluminum, offering a lightweight yet robust frame that enhances the knife's overall durability and aesthetics. The anodization process not only



fortifies the aluminum against corrosion and wear but also provides a sleek, modern finish. The ergonomic design ensures a comfortable grip, allowing for precision and control during use.

## Design Features

### Blade Design

- **Style:** Drop Point  
The drop point blade style of the FM-K002B is versatile and functional, making it suitable for a variety of cutting tasks. The curved belly allows for excellent slicing capabilities, while the strong tip offers reliable piercing performance.
- **Thickness and Length:**  
At 0.098 inches (2.5mm) thick and 2.01 inches (51mm) long, the blade provides a perfect balance of strength and maneuverability. This ensures precision in detailed tasks while offering robustness for heavier cutting needs.
- **Finish:** Black Titanium Coating + Stonewash  
The blade's black titanium coating paired with a stonewash finish gives it a distinctive appearance and enhances its resistance to wear and corrosion, ensuring long-lasting performance.

### Handle Design

- **Thickness:** 0.63 inches (16mm)  
The handle's thickness is optimized for a comfortable and secure grip, ensuring ease of use in various conditions.
- **Color:** Black (with various anodized color options available)  
The classic black finish offers a sleek and understated elegance, while the availability of other anodized colors allows for customization to suit personal or brand preferences.





## Functional Features

- **Pocket Clip:** Tip-Down  
The tip-down pocket clip ensures secure carrying and quick access. Designed for practicality, this feature allows the knife to be carried discreetly, always ready for action.
- **Open Way:** Thumb Slide  
The thumb slide mechanism provides smooth and effortless blade deployment, making it an ideal choice for situations requiring quick and efficient use.

## Practical Applications

The FM-K002B is a versatile tool suitable for a wide range of users:

- **Outdoor Enthusiasts:** Perfect for hiking, camping, or fishing, this knife is a reliable companion for survival and utility tasks in the great outdoors.
- **Everyday Carry (EDC):** With its compact and lightweight design, the FM-K002B is ideal for daily tasks such as opening packages, cutting cords, or food preparation.
- **Professional Use:** Whether for tradespeople or anyone needing a dependable cutting tool, this knife delivers robust performance suitable for demanding professional applications.

## Procurement Details

Shieldon Manufacturing & Trading Combo offers the FM-K002B with a regular minimum order quantity (MOQ) of 300 units. This allows businesses to efficiently integrate this high-quality knife into their product lines, ensuring they meet customer demands with ease.

## Customization and Personalization

The FM-K002B comes standard with a black anodized handle. However, we offer customization with various anodized color options, enabling businesses to tailor the knives to their brand or market preferences. This level of personalization enhances product appeal and customer satisfaction.





## Conclusion

The FM-K002B from Sheldon Manufacturing & Trading Combo exemplifies the fusion of form and functionality. With its superior materials, thoughtful design, and practical features, this knife is an exceptional choice for anyone in need of a reliable cutting tool. Its versatility and durability make it a trusted companion across various contexts and industries.

For procurement inquiries or further customization details, our team at Shieldon is ready to assist you in bringing this outstanding knife to your customers. Elevate your product offerings with the FM-K002B, a knife that stands out in both performance and design.

## Understanding the Structure of O.T.F. Knives

Out-The-Front (O.T.F.) knives are a fascinating subset of automatic knives, known for their unique mechanism that allows the blade to extend and retract through a slot in the handle. This straightforward yet ingenious design sets O.T.F. knives apart from traditional folding knives, making them popular for both tactical and everyday use. To appreciate these knives fully, it's essential to understand their structure and how each component contributes to their functionality.



## Basic Structure of O.T.F. Knives

The structure of an O.T.F. knife can be broken down into several key components:

- **Handle:**
  - **Material and Design:** The handle of an O.T.F. knife is typically crafted from durable materials such as anodized aluminum or high-grade polymers. This ensures a lightweight yet sturdy frame that can withstand the forces exerted during blade deployment and retraction. The handle often features an ergonomic design for a comfortable grip, enhancing control during use.



- **Internal Chambers:** Inside the handle are chambers that house the blade, springs, and the deployment mechanism. These chambers guide the blade as it moves in and out, ensuring smooth operation.
- **Blade:**
  - **Material and Shape:** The blade is often made from high-quality steel, such as D2 or stainless steel, known for their hardness and edge retention. O.T.F. blades can come in various shapes, with the drop point and tanto being popular choices due to their versatility and strength.
  - **Deployment Path:** The blade travels along a linear path within the handle, guided by the internal chambers. This path allows the blade to extend out of the front of the handle, distinguishing O.T.F. knives from other types.
- **Deployment Mechanism:**
  - **Thumb Slide or Button:** Most O.T.F. knives feature a thumb slide or button on the handle's exterior. This component is crucial for blade deployment, allowing the user to engage the internal mechanism with a simple push.
  - **Spring System:** The heart of the deployment mechanism is the spring system. In a double-action O.T.F. knife, the springs are designed to both extend and retract the blade with ease. When the thumb slide is engaged, the springs release their stored energy, propelling the blade forward. Pulling back the slide retracts the blade while resetting the springs for the next use.
- **Locking Mechanism:**
  - **Secure Engagement:** Once deployed, the blade is held in place by a locking mechanism, ensuring it remains extended during use. This mechanism prevents accidental retraction, providing safety and stability.
  - **Release for Retraction:** To retract the blade, the locking mechanism must be disengaged, usually by reversing the action of the thumb slide or button. This allows the springs to pull the blade back into the handle safely.

- **Pocket Clip:**
  - **Carrying Convenience:** Many O.T.F. knives include a pocket clip, often in a tip-down position, for convenient and secure carrying. The clip ensures the knife is easily accessible while being discreetly stored when not in use.



## Conclusion

The structure of an [O.T.F. knife](#) is a marvel of engineering, combining precision components to deliver quick, reliable blade deployment and retraction. Each part, from the handle to the blade, is meticulously designed to provide the user with a seamless experience, whether for everyday tasks or tactical applications. Understanding this structure not only enhances appreciation for these knives but also informs responsible ownership and use. By knowing how each

component functions, users can maintain their O.T.F. knives effectively, ensuring longevity and optimal performance.