



M-Flex is Marlin's new family of off-the-shelf electronic controls designed for severe duty, outdoor mobile applications.

The M-Flex Product line are standard control components that are your quick-to-market option that provide flexibility in terms of software and hardware customization.



## M-FLEX CAN KEYPAD

This 12 pushbutton keypad is an outgrowth from Marlin's long history of developing custom keypads for customer's unique applications. It provides the same harsh environment ruggedness that customers have experienced with our custom keypads with the convenience of a standard design that can be integrated into applications without the typical customizing costs or long lead times. The keypad includes many features that make it easy to implement into a new or existing applications. The pushbuttons have solid tactile feedback and dimmable backlight capability for easy viewability. Keys can be activated with a bare finger or glove. Each key has an operating life that exceeds 1 million activations. The keys are laser etched with custom icons, numbers, or letters per customer requirements. Three Programmable amber LED indicator lights line the top of each key. The M-Flex Keypad is designed for the demanding construction, turf-care, agricultural, utility, marine, military, and outdoor power markets.

## Applications

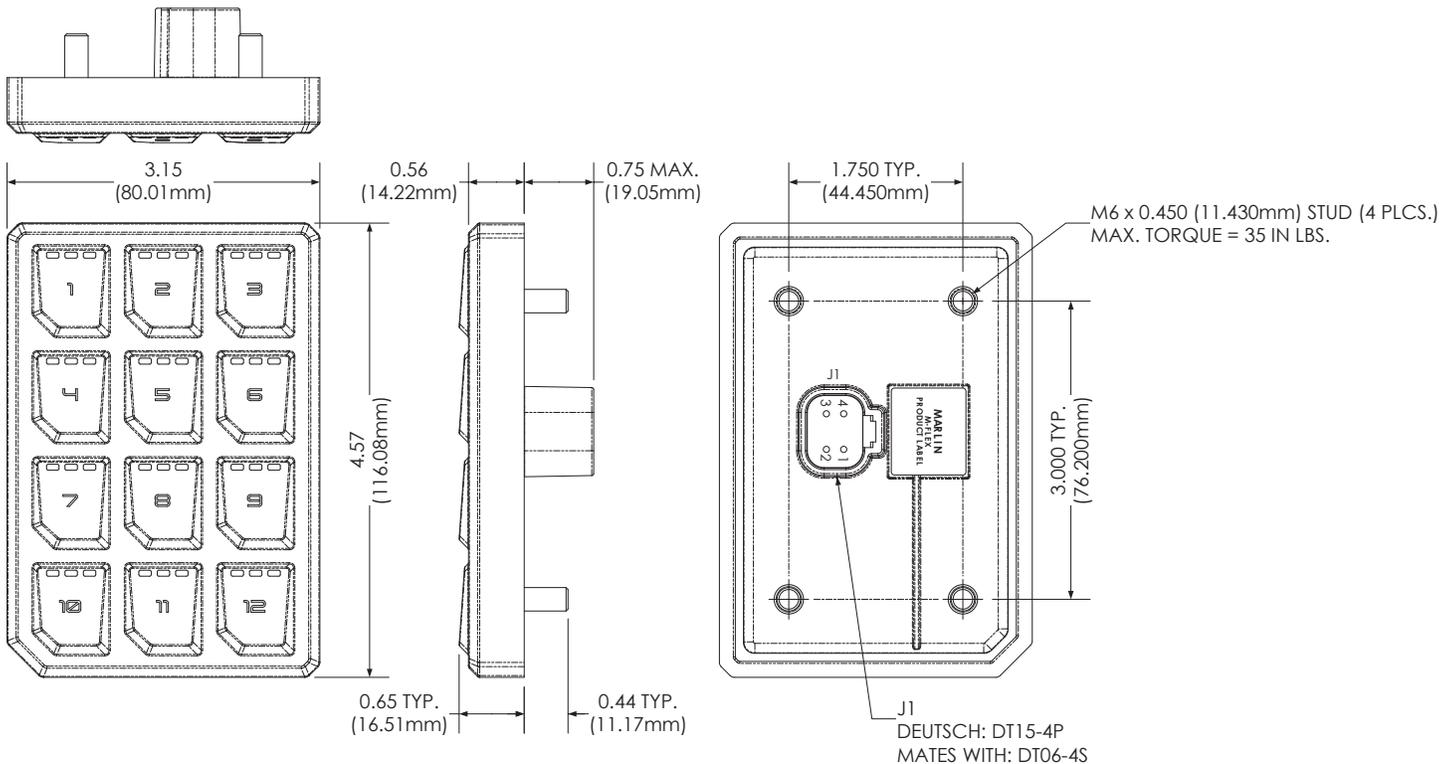


- Designed for severe duty, outdoor mobile applications.
- Wide operating voltage and temperature ranges (12V and 24V applications).
- UV resistant matte black silicone rubber.
- Deutsch DT style connector.
- Icons customized for customer's application.
- Tactile Feel Buttons provide user with actuation feedback.
- Three amber LED indicator lights per button (alternate colors available).
- Dimmable white LED backlight.
- Space Saving & Easy Installation.
- Long Life - over 1 million cycles per switch.
- 250/500 Kbps auto baud detect.
- IP67 and IP69K rated (with appropriate connector boots).
- RoHS and CE compliant.
- J1939 CAN protocol.
- Low power sleep mode – for applications requiring direct-to-battery connection. Wake on press of push button, CAN message or cycling power.

# Specifications

<b>Supply Voltage</b>	8 - 36VDC operating range, reverse polarity protected.
<b>Max Current</b>	650 mA with all LEDs on.
<b>Communication</b>	SAE J1939 CAN 2.0A and CAN 2.0B compliant.
<b>Operational Life</b>	Greater than 1,000,000 cycles per switch.
<b>Switch Backlighting</b>	Dimmable white LED legends on switches; Intensity controlled via CAN message.
<b>Indicators</b>	Three amber LED indicators located above each switch.
<b>Actuation</b>	Snap dome contacts operate at 340 grams of force.
<b>Connector</b>	Deutsch DT15-4P equivalent integrated into the back plate.
<b>Mounting</b>	Four M6 x 12mm studs.
<b>Seal Rating</b>	IP67, IP69K (with appropriate connector boots).
<b>Operating Temperature</b>	-40° to 85°C (-40° to 185°F).
<b>Storage Temperature</b>	-40° to 85°C (-40° to 185°F).
<b>Baud Rate</b>	Auto detection for 250/500 Kbps.

## Dimensions



## Customization Options

- Graphic icons.
- LED indicator colors.

**For a detailed specification: visit [www.marlintech.com/m-flex](http://www.marlintech.com/m-flex)**  
**Ordering Information: visit [www.marlintech.com](http://www.marlintech.com) or call 920-485-4463**