

## F50 Series – Rugged Trackball Module, Quadrature Output, 3 Switches



**Figure 1:** CCL F-Series Trackball module

### 1 DESCRIPTION

The F50 Series trackball module is a high specification human interface device designed to operate in extremely demanding environments where reliability and robustness are essential.

The module is supplied with three integrated switches which can be configured as per the user's requirements – all three switch outputs are available on the 6-way connector provided. Alternatively, the number and position of the switches can be selected as part of a custom solution.

The unique aluminium construction provides excellent impact strength, electrical shielding, and environmental protection, making the trackball an all-round robust solution for the most demanding of military, marine and aerospace applications.

High-grade stainless steel shafts and bearings ensure a solid and precise pointer control.

The trackball module also includes the Cursor Controls Ltd patent protected anti-vibration technology which ensures that only intended ball movements are transmitted to the host system (i.e. when the user's hand is in contact with the surface of the ball). This feature eliminates any unwanted cursor motion resulting from ball movement caused by external shocks or vibrations.

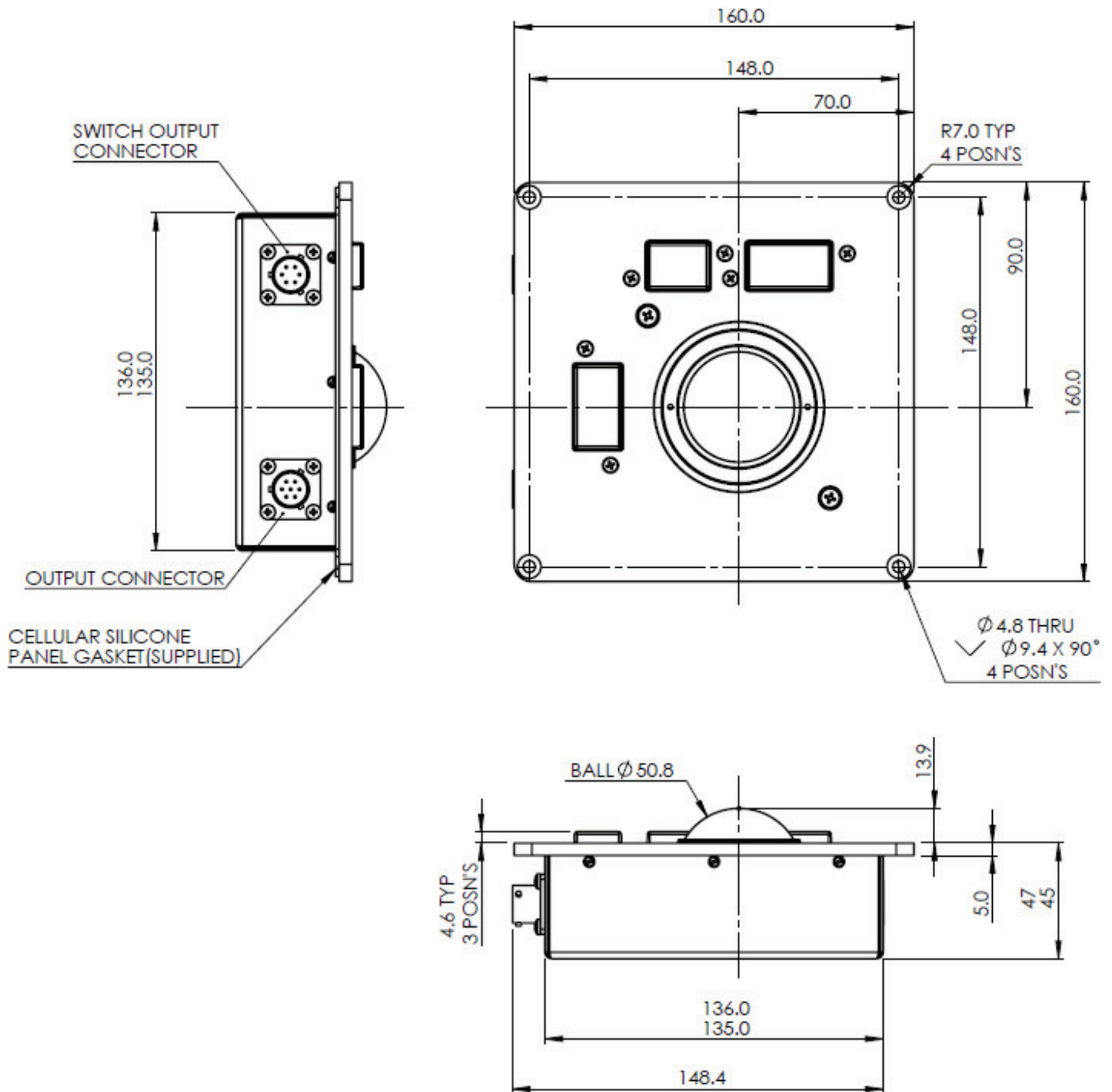
The F50 Series trackball module can also be configured with various top plate styles providing options on ball tracking force and illumination for use in low light environments.

The trackball module has been designed to be front of panel mounted as part of a rugged keyboard/console.

## 2 FEATURES

- Electrical Output: TTL Quadrature
- Three integrated switches providing left, middle and right button functionality
- Smooth operation in rugged environments
- Excellent environmental protection
  - IPX5 sealing rating
  - Sand and dust protection
  - High level of corrosion resistance
  - High impact strength
- Patented anti-vibration technology for use in environments where vibration/shock is commonplace
- Various top plate configurations are available;
  - Removable ring/ball to allow for ease of servicing, available in the following styles
    - Quick release bayonet locking ring
    - Threaded locking ring
  - Non removable ring/ball
- For use in military, marine, and aerospace keyboards and consoles
- Manufactured to ISO 9001 quality system
- Please see product selector document DS50073 for further configuration options including;
  - Additional top plate configurations
  - "HALO" LED illumination around the top ring/ball for use in low level light environments

6 OUTLINE DRAWING



Dimensional drawing specifies factory default orientation.

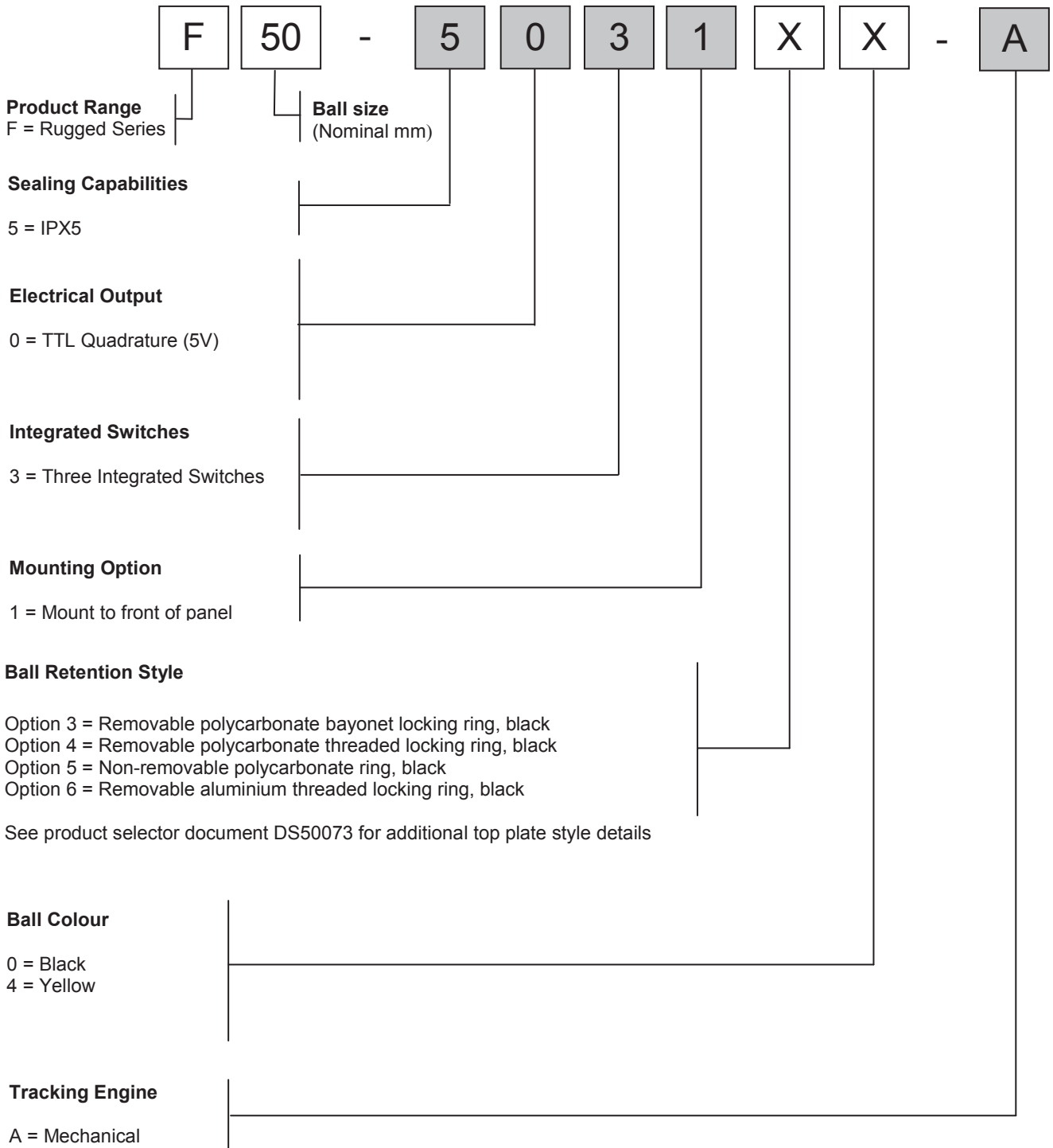
All dimensions are in mm unless otherwise stated.

Tolerances +/- 0.2mm unless otherwise stated

Please note that an IGES model is available on request. Please contact your local sales office for more information.

**8 PRODUCT ORDERING CODE SYSTEM**

Please construct your standard product ordering code by selecting the numbers and letters to suit your specification:



For further options on ball colours and top plate styles please contact your local sales representative

**8.1 Ordering Example**

**F50-503130-A:** F50 Rugged Series, IPX5, Quadrature, 3 integrated switches, mount to front of panel, removable polycarbonate bayonet locking ring, and black ball.