

HAZARDOUS / EX-READY

HMI manufacturing for explosive atmospheres and harsh environments

MANUFACTURING DATA SHEET

This sheet summarizes the materials, high-durability finishes, and sealing features specifically engineered to support your Ex-ready assemblies and target protection requirements.

CNC PRECISION MACHINING

High-tolerance CNC milling in Aluminium 6082-T6 and AISI 316L Stainless Steel to ensure repeatable, vacuum-tight sealing surfaces.

SEALING INTERFACE INTEGRITY

Precision-machined gasket lands and mounting patterns designed to support strict IP65/67/69K and explosion-proof mechanical standards.

TACTILE FEEDBACK ENGINEERING

Advanced switch integration ensuring precise tactile response, specifically optimized for safe operation with heavy industrial gloves.

SURFACE & CHEMICAL RESISTANCE

Chemical-resistant polyesters and technical finishes (Anodizing, Bead Blasting, Brushing) for extended MTBF in corrosive atmospheres.

TECHNICAL SPECIFICATIONS OVERVIEW

Base Materials	Aluminium 6082-T6, Stainless Steel 316L, Galvanized Steel, Industrial Polyesters.
Machining Process	Multi-axis CNC milling, high-precision drilling, and exact housing execution.
Technical Finishes	Natural/Color Anodizing, Bead Blasting, Brushing, and Industrial Screen Printing.
Integrated Fasteners	CD Welded studs, Precision PEM® stud insertion, and thermal bonding.
Compliance	Build-to-print execution supporting ATEX, Ex-Ready, and IP65/67/69K targets.

Operational Note: Our manufacturing workflow is optimized for 100% traceability and strict adherence to the critical tolerances defined in your technical documentation.

Certification Disclaimer: Vermenton manufactures hardware strictly to customer CAD/BOM and specifications. While we ensure the mechanical integrity required for protected systems, the final certification (ATEX/IECEX/UL, etc.) remains the responsibility of the product owner and the corresponding notified body process.