

# Martec Hermetic USB Connector

## M-USB Series

Developed for instrumentation and control applications, our high performance glass-to-metal sealed USB connector system provides robust and secure hermetic sealing through, low profile and compact dimensions, while retaining all of the universally accepted functionality of the generic USB interface.

## FEATURES

- Explosion proof (subject to approvals)
- Hermetically sealed pressure rated housing
- High performance materials
- Through connector shield continuity
- Panel mounting options
- Available in a USB-A or USB-B variant with matching cordset
- Fully tethered plug protection cover
- Industry Standard ½ -14 NPT or ¾ - 14NPT mounting options



The Martec sealed USB connector system has been developed as a reliable alternative to low-performance transversally sealed receptacles that rely on potting materials for their sealing. At the heart of the Martec solution is our established glass to metal hermetic sealing for reliable and secure gas-tight protection. Every assembly is 100% Helium leak-rate tested to less than  $1 \times 10^{-8}$  cc/sec at our purpose-built design and manufacturing facility.

## Environmental/Mechanical Specification

Pressure Rating	6,000 psi	(410 Bar)
Temperature Rating	-13 to 176°F	-25 to 80 °C
Helium leak rate	< $1 \times 10^{-8}$ cc/sec @ 1atm	
Installation thread options	1) ½" - 14 NPT	2) ¾" - 14 NPT

## Electrical Specification

Connector style	USB 2.0
Insulation Resistance @ 20°C	> 1GΩ @ 50Vdc
Dielectric Strength @ 20°C	750V @ 1mA leakage
Max current per pin	1.5A
Contact resistance	20mΩ

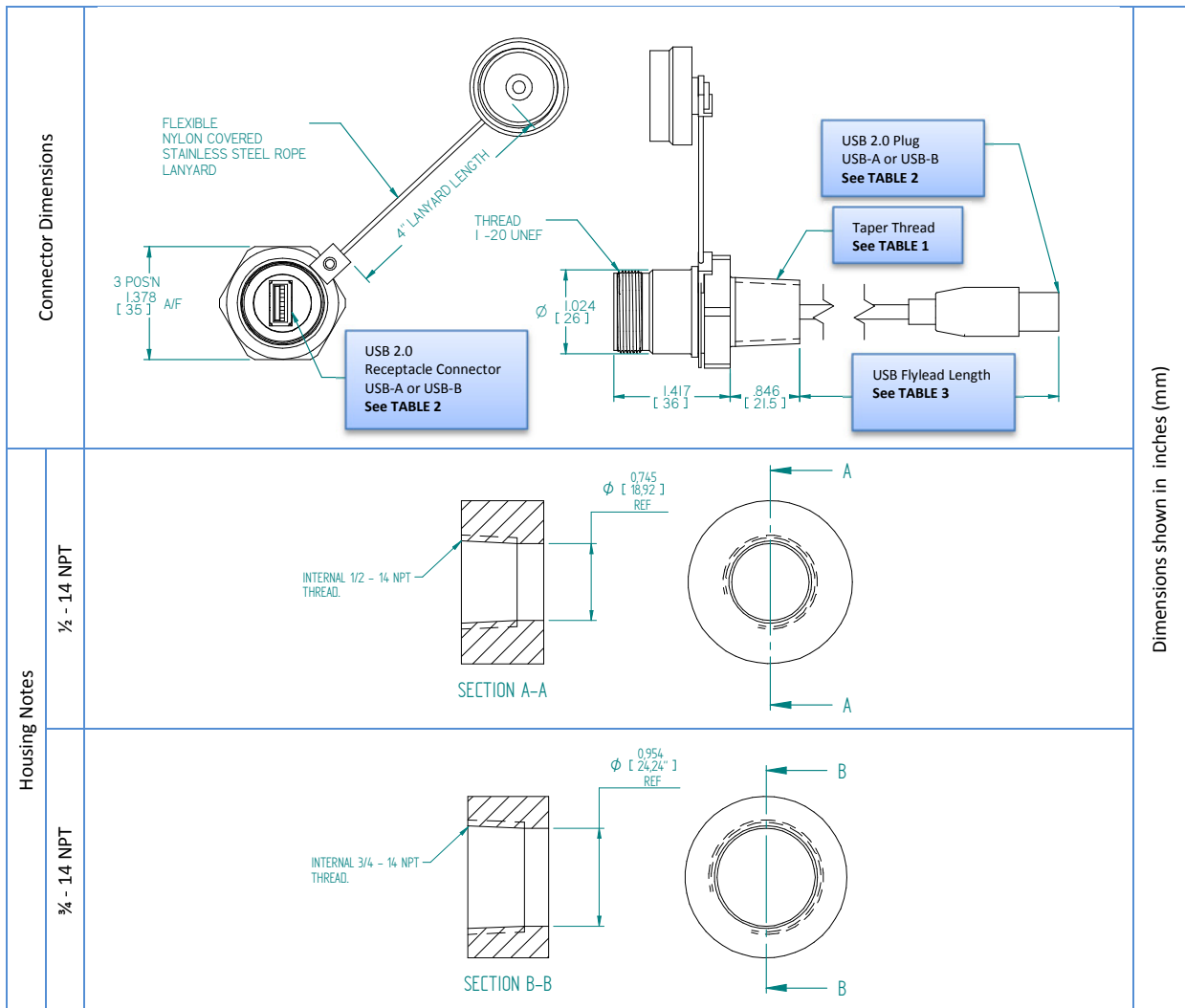
## Material Specification

<b>Connector</b>	
Main Body <sup>a</sup>	Stainless Steel 316L
Insulation	Fused glass inserts
Back Potting	Black Epoxy
<b>Plug Protection Cover</b>	
Body	Stainless Steel 303
Gasket	Elastomeric
Lanyard	Nylon covered Stainless Steel 303 Rope

<sup>a</sup> alternative material options available, please contact factory

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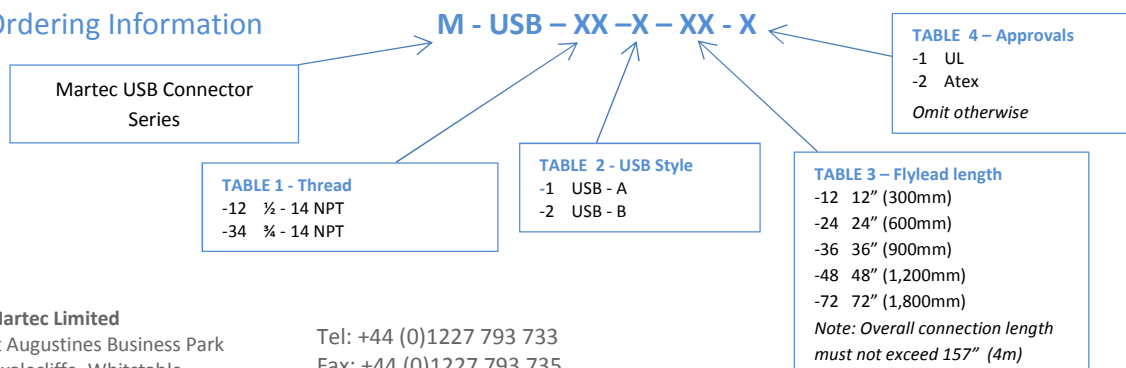
## Dimensional Specification



## Housing Installation

The M-USB connector is screw thread installed by wrench into a suitable ANSI standard NPT taper threaded housing as shown above. Please contact the factory for recommended torque values.

## Ordering Information



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